Aid, Incentives, and Sustainability

An Institutional Analysis of Development Cooperation

MAIN REPORT

Elinor Ostrom, team leader Clark Gibson Sujai Shivakumar Krister Andersson

Workshop in Political Theory and Policy Analysis, Indiana University



Sida Studies in Evaluation 02/01

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Authors: Elinor Ostrom (team leader), Clark Gibson, Sujai Shiyakumar, Krister Andersson.

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SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Address: S-105 25 Stockholm, Sweden. Office: Sveavägen 20, Stockholm

Telephone: +46 (0)8-698 50 00. Telefax: +46 (0)8-20 88 64

Telegram: sida stockholm. Postgiro: 1 56 34-9

E-mail: info@sida.se.

Website: http://www.sida.se

Foreword

– Does 'aid' itself create incentives that undermine sustainability? This is the provoking question underlying the present study, which explores how the incentives that arise in the system of development co-operation affect sustainable outcomes.

The point of departure is the view that many development problems in countries where foreign 'donors' operate are caused by weak or so-called perverse incentives for local actors to engage in collective action for their common good. In turn these perverse incentives are to a large extent rooted in unfavourable institutional circumstances. Sustainable solutions to development problems require institutional conditions that shape incentives for collective action, and development co-operation may promote the creation of such favourable institutions. However, it may also create or reinforce perverse incentives that prevent sustainable outcomes. In order to better understand any such 'donor'-imposed constraints to development, Sida's Department for Evaluation and Internal Audit, which is an independent department reporting directly to Sida's Board of Directors, commissioned the present study. It was conducted by a research team from the Workshop in Political Theory and Policy Analysis at Indiana University, headed by the internationally acknowledged political scientist Professor Elinor Ostrom.

The contribution of the study is manifold: First of all, it introduces an institutional perspective on development and development co-operation that is partly novel to Sida and the rest of the 'aid' community. This perspective highlights the importance of incentives and increases our understanding of incentive problems within developing-country contexts as well as within the system of 'aid' itself. Secondly, the study provides a method and tools for institutional analysis and evaluation of the relationship between 'aid', incentives and sustainability. It illustrates theoretically how these tools can be used to analyse incentives within the complex system of 'aid', associated e.g. with 'donor-recipient' negotiations and with different 'aid' modalities. Finally, the study applies the method empirically, by initiating an analysis and evaluation of the incentive structure and its causes within Sida and five Sida-supported projects in India and Zambia. The analysis is based on interviews of more than 175 persons within Sida and Sida-supported activities and a thorough literature survey. The study concludes by drawing lessons and recommending Sida an agenda for action.

A central argument of the study is that Sida can contribute to more sustainable outcomes, through 1) a more explicit and systematic understanding of incentive problems and their institutional causes in the local development contexts as well as those created by the very system of development co-operation; 2) the creation of incentives within Sida that encourage individual and organisational learning about sustainability; and 3) the devolution of ownership to the actual target population.

In addition to a comprehensive main report, the contents, findings and recommendations of the study are briefed in a summary report.

Stockholm, May 2002

Eva Lithman Director Department for Evaluation and Internal Audit Sida

Preface

This work is the product of nearly two years of work by a team of researchers who were, until June of 2001, all associated with the Workshop in Political Theory and Policy Analysis at Indiana University. The team responded to a request for proposal set out in November of 1999 by the Department of Evaluations and Internal Audit (UTV) of the Swedish International Development Cooperation Agency (Sida). A contract between Sida and Indiana University went into effect in February of 2000.

The Terms of Reference (TOR) of this contract (see Appendix D) identified three broad purposes of the study. The first purpose was to review "the state-of-the-art as regards the existing knowledge about incentives and aid" (Sida, 1999g: 1). In our preliminary draft report submitted on August 15, 2000, we included a specific literature review (Chapter 2) and drew on our wide review of the literature throughout the draft report as well. In response to the comments received on our initial report, we have integrated our understanding of the "state-of-the-art" regarding "existing knowledge about incentives and aid" throughout Parts I and II of this main report, rather than isolate it in a separate chapter.

The second purpose of the study was to identify areas, in regard to the relationship between aid, incentives, and sustainability, that are relevant to Sida so as "to increase its knowledge in order to improve the organisation and management of its aid" (Sida, 1999g: 1). Throughout this report, we identify multiple relationships between aid, incentives, and sustainability that are relevant to Sida. Further, in our last chapter, we make specific suggestions regarding approaches that Sida can adopt to increase its knowledge and improve the organization of its aid activities.

The third purpose of the study was to suggest an approach as to how to evaluate the relationship between aid, incentives, and sustainability – which we do in Chapters 1 through 6 and then apply in Chapters 7 through 10.

In addition to the three broad purposes of the study, we were also asked to complete several specific tasks:

- To answer the following questions in regard to the literature on how aid, incentives, and sustainability may be related:
- What do we know about incentives and aid?
- What do we specifically know about how aid, incentives, and sustainability are related?
- What theoretical models and empirical methods have been employed in these analyses and what are the experiences?

Chapter 1 introduces key concepts involved in the linkage between aid, incentives, and sustainability. We use these concepts throughout the rest of the report to analyze how aid affects the incentives of each of the multiple participants involved in development assistance. We have included an extensive bibliography derived from our literature review that includes references produced by staff members at Sida, by Swedish scholars, and by scholars elsewhere interested in incentives, and development assistance more generally, or in regard to Sida in particular.

To review key Sida documents with respect to incentives and project/program sustainability and assess to what degree the role of incentives is discussed, and to interview Sida staff to assess the concern and consciousness of the issue of incentives and sustainability.

During multiple visits to Sida headquarters, the Workshop team reviewed more than 100 documents to assess the degree to which the role of incentives is discussed. In Stockholm, we conducted 111 interviews including Sida staff members at all levels, public officials at two Ministries, and consultants familiar with Sida projects. In India and Zambia we conducted an additional 66 interviews with Sida staff members, recipient government officials, and project organizations associated with the five projects chosen in India and Zambia (see Appendix C. These interviews are identified in the text of Chapters 7, 8, 9, and 10 by the number we have assigned to each interviewee to assure them the anonymity that we promised them at the time of our interviews.) From these interviews, we gained information on the perceptions of Sida staff and others working closely with Sida regarding incentives and their concerns and consciousness of how incentives are related to sustainability.

3. In light of 1 and 2, to suggest areas where it would be most relevant to carry out reviews or evaluations on how aid, incentives, and sustainability are related in order to improve the organization and management of aid activities at Sida.

We have done this in our last chapter.

4. To explain how incentive analysis becomes a useful tool in aid evaluation in general, and for Sida in particular.

We have addressed this task throughout this report.

- 5. We were then asked to design a short-term study to examine how incentives promote or hamper the sustainability of aid-financed activities and to cover four specific issues.
- First, we were to identify "incentives facing staff at Sida and assess how these
 incentives promote or hamper the sustainability of aid financed activities"
 (ibid.: 2).
- Second, we were to identify the incentives facing officials in recipient countries.
- Third, we were to describe "how the nature of cooperation between the donor and recipient create and/or affect existing incentives, which hamper or promote the sustainability of aid financed activities. Specifically, the evaluators are to assess how the organization and management of Swedish aid administration create and/or affect incentives that are faced by recipient government officials" (ibid.).
- And finally, we were to assess to what extent perverse incentives explain the "lack of sustainability in relation to other factors affecting sustainability in Sida-financed activities" (ibid.).

The TOR also made several references to possible field trips, to searching archival materials, to conducting a review of Sida documents, and to other methods that should be considered in carrying out the research.

Needless to say, such requirements made for an ambitious short-term study. We finished our last fieldwork in Stockholm and then in Zambia in November of 2000 and submitted the first draft of our main report in March of 2001 and this final draft in December of 2001.

Why Do This Study?

Some colleagues at Indiana University have asked why we were willing to undertake a demanding short-term study like this, and why we have allocated financial resources to this project beyond those provided by Sida in their contract.

Our basic answer is that this study is important given the long history of ineffective efforts to enhance the political and economic viability of many of the poorest countries in the world. In our prior "ground up studies," we had observed a number of instances in which local efforts to create not-for-profit or for-profit organizations providing needed goods and services had been stymied by donor-funded projects of their own national government (E. Ostrom, Lam, and Lee, 1994; Sowerwine et al., 1994; Shivakoti et al., 1997). Further, we were already engaged in a number of studies of national-level policy making and its impacts on development processes (Gibson and Lehoucq, 2000), and were beginning work on the impact of international assistance in the area of humanitarian aid (Shivakumar, 1999; McGinnis, 1999d).

The opportunity to work with one of the world's leading development assistance agencies – Sida – to examine how incentives could lead well-intentioned individuals to produce results that at times were unintended and counterproductive, also appealed to us. Sida, by simply issuing this TOR, signaled that it was willing to consider some of the most perplexing problems facing international development assistance today. Further, Sida and other closely related agencies in Sweden had already undertaken some path-breaking studies of how institutional structures lead to the potential for perverse incentives (Sida, 1999b; Catterson and Lindahl, 1999; Bräutigam, 2000; Eriksson Skoog, 1998). Indeed, it was important to us that our work on this difficult topic – in regard to theoretical developments, empirical findings, and policy recommendations – would be taken seriously by the agency requesting the study.

We have benefited greatly by the opportunity to work with one of the world's leading development assistance agencies — Sida — to examine how incentives could lead well-intentioned individuals to produce results that at times were unintended and counterproductive. The questions being asked here are of relevance to all who are interested in how to enhance development processes. When individuals trying to do good find themselves hampered in these efforts by the incentives they face, it is quite important that one steps back to examine what these incentives are and how they can induce behavior that slows down development rather than enhancing it.

We are deeply indebted to all of the individuals who gave us substantial time when we talked with them or helped to dig out documents, data, and archival materials. We interviewed over 100 Sida staff members, consultants working for Sida, and officials at the Swedish ministries of finance and foreign affairs.

We are also appreciative of the welcome we have received in Stockholm on multiple

occasions from Anders Berlin, Gun Eriksson Skoog, and Ann Marie Fallenius of UTV and of the extensive help offered to us by Malin Karlsson, Stefan Engström, and Wendy Fryer. We thank the many individuals throughout Sida who took the time to talk to us and who have given us extensive comments on our report.

For the India case studies, we appreciate the help of Anita Ingevall and Farhad Irani, Lars Lagging, and Elisabeth Ekelund at Sida in Stockholm. We are indebted to Sida's office at the Embassy of Sweden in New Delhi for many kind courtesies extended. Owe Andersson, Jonas Lövkrona, and Ramesh Mukalla were generous with their time and their wisdom in discussing a range of issues relating to incentives and ownership. Also, in New Delhi, Rita Acharya, at the Indian Ministry of Finance and Jagmohan Bajaj, formerly Finance Secretary to the Government of India, took time to inform us on the conduct of bilateral aid.

For the Orissa project, we thank the Orissa Forest Department, in particular P. R. Mohanty and S. C. Mohanty. Neera Singh of *Vasundara* helped us to understand many of the complex issues involved in Orissa forestry. N. C. Saxena was, as always, courteous and knowledgeable. For the Maharashtra project, we appreciate the kind help of Carl-Göte Carlsson of ABB-India, Pramod Deo of the Maharashtra Secretariat, and V. S. Patnai of the Maharashtra State Electricity Board.

The Workshop team that traveled to Zambia received crucial help from both Sida staff and Zambian officials. Ambassador Kristina Svensson allowed her embassy staff the time to help us with both the logistics of this study and to lend their considerable expertise to our work; we would like to especially thank embassy staffers Göran Hedebro, Marie Holmlund, Mulenga Muleba, and Torsten Andersson. In addition to Sida staff, the number of individuals who gave us some of their valuable time and insights include: Peter Aamodt (Zambia Chamber of Commerce and Industry), Peter Agaard (CFU), Kuwana Akapelwa (ZESCO), Cyprian Chitundu (ZESCO), Ian Fraser (Zambian Privatization Agency), Dutch Gibson (CFU), Andrew Kamanga (ERB), Namukolo Mukutu (GART), Teddy Mwale (ZESCO), Jacob Mwanza (Bank of Zambia), J. Mwenechanya, Olle Otteby (Sida consultant), Matthew Phiri (ZESCO), Raphael Salasini (formerly of ERB), Shatis Vlahakis and team (CFU), J. Zyambo (ZNFU), and Moses Zama (ERB). To these individuals, as well as the other 40 people we interviewed in Zambia, we extend our deep thanks.

At the Workshop, we have benefited greatly by interactions with our larger team including Professors Matt Auer, Roy Gardner, Michael McGinnis, and Christopher Waller (from the University of Kentucky). Matt Auer not only helped interview Sida staff and contractors at Sida Headquarters in Stockholm, but he also joined Krister Andersson in co-authoring Chapter 8 ("Incentives for Contractors in Sida-Supported Activities"). We thank Eduardo Araral, Shaun McMahon, Esther Mwangi, Amy Poteete, and Enrico Schaar for their useful input. Without Patty Zielinski, we could not have survived the fact that we are now separated and located on the opposite coasts of the United States and needing to exchange text via extensive emails and contorted files. Her editorial skills are famous, as is her patience.

Elinor Ostrom
Principal Investigator

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List of Abbreviations

AAPAM African Association for Public Administration and

Management

ABB Asea Brown Boveri AC Alternating Current

ACF Agricultural Consultative Forum ADM Department for Administration (Sida)

AFRA Africa Department (Sida) ASIEN Asia Department (Sida)

ASIP Agricultural Sector Investment Program

BHEL Bharat Heavy Electrical Limited

BITS Swedish Agency for International Technical and

Economic Co-operation

CERDI Centre d'Etudes et de Recherches sur le Développement

International

CFLC Conservation Farming Liaison Committee

CFM Community Forest Management CFU Conservation Farming Unit (Zambia)

CGIAR Consultative Group for International Agricultural Research

CIRAD Centre de Cooperation Internationale en

Recherche Agronomique pour le Developpement

CLUSA Co-operative League of the USA

CNRS Centre National de la Recherche Scientifique
DAC Development Assistance Committee of the OECD

DAPP Development Aid from People to People

DC Direct Current

DEA Department of Economic Affairs, Ministry of Finance,

Government of India

DESO Department for Democracy and Social Development (Sida)
ECAZ Environment and Conservation Association of Zambia
ECDPM European Centre for Development Policy Management
EGDI Expert Group on Development Issues, Ministry of Foreign

Affairs, Government of Sweden

ERB Energy Regulation Board, Government of Zambia

ERC Energy Regulation Act
ESI Energy Supply Industry

EVU Department for Finance and Corporate Development FINNIDA Department for International Development Cooperation

(Finland)

GART Golden Valley Agricultural Research Trust

GoI Government of India

GoM Government of Maharashtra

ix

GRZ Government of Zambia HVDC High Voltage Direct Current

IAD Institutional Analysis and Development

IAS Indian Administrative Service

IBRD International Bank for Reconstruction and Development

IDA International Development Agency

IFS Indian Forest Service

HED International Institute for Environment and Development

IIMI International Irrigation Management Institute

IMF International Monetary Fund

INEC Department for Infrastructure and Economic

Cooperation (Sida)

INFO Information Department (Sida) JFM Joint Forest Management

KGS Kafue Gorge Hydropower Station

Kafue Gorge Hydropower Station Rehabilitation Project **KGRP**

Contract Financed Technical Cooperation (Sida) **KTS** MAFF Ministry of Agriculture, Food, and Fisheries Maharashtra Electricity Regulation Commission **MERC** Ministry of Foreign Affairs, Government of Sweden **MFA**

MSEB Maharashtra State Electricity Board

NATUR Department for Natural Resources and the

Environment (Sida)

National Bureau of Economic Research **NBER**

National Energy Policy NEP

NGO Nongovernmental Organization

Norwegian Agency for Development Cooperation **NORAD**

NTFP Nontimber Forest Products

NTPC National Thermal Power Corporation of India

ODA British Overseas Development Agency ODI Overseas Development Institute

ECDPM European Centre for Development Policy Management OECD Organisation for Economic Co-operation and Development

PEO Human Resources Department **PFC** Power Finance Corporation

POL Department for Policy and Cooperation Development (Sida)

REGEU Division for EU-questions PRP Power Rehabilitation Program **RELA** Department for Latin America

SAREC Department for Research Cooperation (Sida)

Secretariat for the Analysis of Swedish Development SASDA

Assistance

SEB State Electricity Board

SEKA Department for Cooperation with NGOs and

Humanitarian Assistance (Sida)

SIDA Swedish International Development Authority Sida Swedish International Development Cooperation Agency

Sida-East Department for Central and Eastern Europe

SMPP Second Maharashtra Power Project SPS Sector Programme Support (Sida)

SWAP Sector Wide Approach TOR Terms of Reference UN United Nations

UNCED United Nations Conference on Environment and

Development

USGAO United States General Accounting Office

NSIAD National Security and International Affairs Division

USAID US Agency for International Development

UTV Department for Evaluation and Internal Audit (Sida)
WCED World Commission on Environment and Development

WHO World Health Organization

ZESCO Zambia Electricity Supply Corporation ZNFU Zambia National Farmers Union

Executive Summary

1. Background to the Report

Despite tremendous efforts and good intentions, aid often produces disappointing results. Sida, along with other bilateral and multilateral aid agencies, has indicated that the lack of proper incentives generated by aid itself may be an important factor undermining its sustainability (Sida, 1999g). This study explores how the incentives that arise in the system of development assistance affect the goal of sustainable development.

In the Terms of Reference (TOR) for this study (see Appendix D), Sida's Department for Evaluation and Internal Audit (UTV) notes that although incentives are often cited as factors affecting aid sustainability, knowledge on this issue "is scattered and possibly limited, and the methods for a systematic pre- and post-analysis remain poorly developed." In January of 2000, UTV asked the Workshop in Political Theory and Policy Analysis at Indiana University to address some of these observed shortcomings by undertaking a study of how "aid, incentives and sustainability are related." The study you hold in your hands is the result of nearly two years of intensive work. It represents the team's efforts to assist Sida in addressing incentive problems in the interactions with Sida's partners of development cooperation. The core argument of the study is that by taking steps to allay aid's perverse incentives, Sida will contribute to its effectiveness and sustainability.

Responding to the TOR, the study starts out with a review of theories and perspectives regarding the sources of perverse incentives in development aid and in development. It then develops and employs the Institutional Analysis and Development (IAD) framework to analyze the system of aid, and presents findings from four empirical studies. Finally, it recommends strategies to mitigate some of the perverse incentives often found in development assistance systems.

In carrying out this study, the research team interviewed over 175 people involved with Sida activities at Sida headquarters, other Swedish government organizations and agencies, consultancy firms, NGOs, Swedish Embassies in India and Zambia, government agencies and ministries in India and Zambia, as well as beneficiary groups in these countries. From these interviews, we gained information on the perceptions of Sida staff and others involved in development assistance activities, regarding incentives and their concerns and consciousness of how incentives are related to sustainability. In addition, the team reviewed more than 100 documents to assess the degree to which the role of incentives is discussed.

The study is presented in three parts. Part I reviews the existing literature and develops the analytical tools needed to do incentive evaluations of aid initiatives. Part II identifies incentives facing Sida staff and its recipient country counterparts. It also describes, through brief case study analyses, how interactions between aid donors and recipients affect incentive structures. Part III summarizes the lessons of the report and suggests an agenda for action.

2. Foundational Concepts

The report identifies *collective-action* problems as a major obstacle to sustainable development outcomes. Development assistance attempts to alleviate the consequences of collective-action problems that have not been solved by individuals living in developing countries or their governments. To be sustainable, development assistance thus involves tackling underlying collective-action problems themselves.

- A collective-action situation occurs whenever two or more individuals associate to produce something of value together, when it would be difficult to produce it alone.
- Collective-action problems occur when a lack of motivation, and/or missing or asymmetric information, generates incentives that prevent individuals from satisfactorily resolving a collective-action situation.

A successful approach to the problem of development must focus on how to generate appropriate incentives so that the time, skill, knowledge, and genuine effort of multiple individuals are channeled in ways that produce jointly valued outcomes.

Incentives, both material and nonmaterial, are generated within institutions – the rules of the games of life and productive coexistence. As a society forms more robust complexes of institutions that help individuals resolve their collective-action problems, it displays the economic and human development characteristics of a rich society. Given that challenges facing any society are apt to change, solutions to collective-action problems must remain adaptive; a demand for institutions that can match contributions with rewards always exists. This is especially true in developing countries, where the institutional environment is usually less robust and, thus, less able to overcome motivation and information problems. Leaders in such environments also face motivation and information problems in the forms of rent-seeking, fiscal illusion, corruption, and in translating citizen preferences accurately.

International development assistance is intended to help the people living in less-developed countries overcome poverty resulting from the wide diversity of often-unresolved or poorly resolved collective-action problems. Unless development aid properly addresses the incentives of underlying collective-action problems, it will likely be ineffective or, worse, even counterproductive.

Several of the key concepts employed in this report have multiple meanings associated with them. We clarify our use of these terms in this report:

- Institutions are defined as formal and informal rules that are, in fact, followed by most affected individuals. Such rules structure incentives in human exchange, whether political, social, or economic.
- Incentives include the rewards and punishments that are perceived by individuals to be related to their actions and those of others.
- Development and development cooperation refer to improving the material conditions of individuals, often through processes of deliberate intervention.
- Sustainability pertains to the longevity of development cooperation's benefits, rather than particular projects or activities themselves.
- Ownership of a development assistance project or program has four dimensions: (1) enunciating demand, (2) making a tangible contribution, (3) obtaining benefits, and (4) sharing responsibility for long-term continuation or noncontinuation of a project.

Chapters 2, 3, 4, and 5 present our framework and theories derived from an institutional perspective on development assistance. Chapter 6 describes the incentives generated by different kinds of aid. In Chapters 7 and 8, we delineate the incentives confronting Sida staff and contractors. Case studies of Sida-sponsored activities in India and Zambia are explored in Chapters 9 and 10. In Chapter 11, we present our recommendations.

3. Innovating Evaluation Methodologies

The TOR requests that analytical tools be developed to aid Sida in future pre- and post-incentive evaluations. The study develops a set of innovative tools that Sida staff members can use to:

- 1. Identify critical collective-action situations in the interactions between partners in the development cooperation network;
- 2. Diagnose prevailing incentive problems in such situations; and
- 3. Assess how incentive problems in one part of the development cooperation network can affect outcomes in other parts.

The first two tasks are carried out with analytical guidance from the IAD framework, while the use of the Octangle of Development Cooperation (the

Octangle) can help with the third. Both these analytical tools are described below.

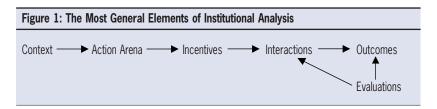
The Institutional Analysis and Development (IAD) Framework

The IAD framework, developed at the Workshop, is particularly well suited for analyzing the multifaceted contexts of development for the following reasons: it is multidisciplinary, it deals with multiple levels of analysis, and it allows for the investigation of complex and interdependent systems.

General Elements of the IAD Framework

At the most basic level, as shown in Figure 2.1, we need to analyze:

- The arena that is of direct relevance to the problem being examined;
- The context that frames and affects that arena (including other relevant arenas.) The context provides the initial conditions or "the environment" that structures the efforts to achieve outcomes. It is within that context that an analyst can identify an action arena and its incentives;
- The behavioral interactions and outcomes that are likely to emerge. Actors
 act and interact based on perceived incentives, with their activities, in aggregate, generating patterns of outcomes;
- The *evaluation* of the interactions and outcomes using multiple criteria made by participants and by external analysts.



Decomposing the Elements

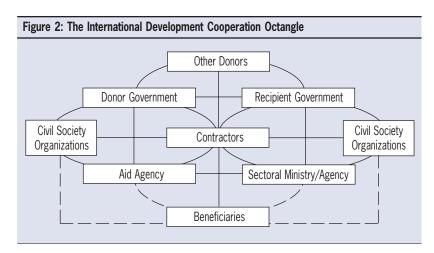
When conducting a specific analysis, all of these elements are decomposed into finer categories of analysis.

- The context includes physical conditions, rules-in-use, and the attributes of a community.
- The *action arena* is a complex conceptual unit containing one set of variables about an *action situation* and a second set of variables about an *actor*.
- An *actor* can be either a single individual or a group of individuals who have a regularized way of making decisions, such as a firm or a government.

All of these processes can occur at any of three levels of analysis: the constitutional level, the policy making (or collective-choice) level, and the operational level.

The Octangle

Development cooperation is a process involving eight major actors. These are the donor government, the donor agency, other donors, the recipient government, the recipient sectoral agency, the contractor, interest groups in the donor and recipient country polities, and, finally, the beneficiaries themselves. Each of these actors function within diverse action situations, and these action situations are, in turn, interconnected within a system. In Chapter 4, we derive a representation of this system, which we name the International Development Cooperation Octangle. Further, we show how particular aid modalities link various action situations within this system.



A "system" can have error-correcting capabilities so that each part supports and compensates for weaknesses of other parts. This, for example, is the logic behind a federal system of government. We find that the aid system lacks important error-correcting mechanisms. Rather, incentive problems in one part of the system can propagate and inflame those in other parts. As we demonstrate in Chapters 4, 5, and 6 of the study, use of the Octangle in combination with the IAD framework can help the analyst make the causal linkages between interactions in one part of the network and observed outcomes in other parts.

Incentive problems within the system of interactions can be broken down into two main categories. On the one hand, there are problems associated with the motivation of actors to engage in collective action, and on the other hand, there are information problems. Because of their central importance in explaining many of the failures of collective action in general, and in development cooperation in particular, these basic incentive problems need further clarification and discussion.

Motivation and Information Problems

Basic incentive problems, which we call motivation and information problems, result from both the nature of the goods and services involved in development assistance as well as the relationship between actors. Motivation and information problems exist at the operational, collective choice, and constitutional levels. We first focus on motivation and information problems at the operational level. These basic problems need to be solved if the goals of development assistance are to be achieved. Problems of motivation include those involved with public goods, common-pool resources, and the Samaritan's Dilemma.

- Public good problems occur when an individual's consumption of a good is not affected by his or her contribution to producing the good. In such situations, an individual has an incentive to free-ride to enjoy the good without contribution. Consumption of the good by one individual, however, does not exclude others from consuming the good as well. National defense is considered the epitome of a public good problem, but donors often help to provide other public goods such as environmental protection and education.
- COMMON-POOL RESOURCES share the difficulty of exclusion with public goods. Unlike public goods, however, one person's use does subtract from the resources available to others. Thus, the problem concerning common-pool resources is that without effective institutions, too many users overharvest. Many natural resources are common-pool goods, but other goods with which donors are frequently involved have common-pool attributes, like the electricity grid of a country.
- The Samaritan's Dilemma occurs when an actor who is deeply concerned about the well being of others confronts situations in which other actors are in serious need of help. The Samaritan is faced with choosing to help or not. The recipient, on the other hand, decides how much effort to expend on his or her own behalf. If the Samaritan extends help and the recipient exerts high effort, the Samaritan will be benefited substantially as will the recipient. The recipient, however, would be even better off if they expend low effort. Samaritans are faced with the puzzling problem that their best strategy is always to extend help, but reciprocating with high effort is not the best strategy for the recipient. This dilemma is clearly relevant to development assistance, especially the upkeep of infrastructure.

Missing or Asymmetric Information

Missing and asymmetric information also plagues development assistance by creating incentives that do not facilitate successful outcomes. With missing information, actors do not know the complete structure of the situation they face. They may be missing information about some of the actions they could take, about the linkages of actions to outcomes, and about material or intrinsic payoffs. This can occur in development assistance, for example, if local

knowledge is not included in the design and implementation of a project or program. Asymmetric information also generates poor incentives including those of principal-agent problems, moral hazard, and adverse selection problems.

- PRINCIPAL-AGENT PROBLEMS exist in all hierarchies, where subordinates
 know more about what they do than their superiors. The goals of the subordinate and superior differ. This combination of asymmetric preferences
 and asymmetric information about a subordinate's actions gives rise to inefficient outcomes that increase with the layers of a hierarchy (like all
 IDAs and governments). Employees will not necessarily choose the means
 or the ends that their managers prefer.
- MORAL HAZARD PROBLEMS exist in a wide variety of settings where individuals are guaranteed a benefit or protected against loss once an initial contract has been entered, regardless of whether they take the proper level of effort to realize the benefit or avoid the loss. Governments (or communities) receiving donor financial aid may make solemn promises to reform their own institutions, but may avoid following through. The availability of aid creates a moral hazard, since the aid helps to ensure incompetent governments from the results of their actions, thus weakening their incentive to find alternative revenue sources or better policies.
- Adverse Selection Problems also occur when information is hidden, leading to the selection of the worst individuals or components. For example, if donors do not demand repayment of loans, recipient governments will not work hard to select projects that generate high returns in order to ensure they can repay future loans. Bad projects can begin to replace good projects.

Overcoming Motivational and Informational Problems

Overcoming motivational and informational problems at the operational level is not easy. Individuals living in donor countries frequently enjoy more favorable institutional conditions to self-organize and to solve motivational and informational problems than individuals living in many recipient countries. In most developed countries, entrepreneurial individuals can solve many collective-action problems within a well-developed property-rights system backed up by effective courts and governance systems at multiple levels. By relying on family, kin, and friends, individuals in developing countries are able to undertake a wide variety of small-scale activities that enhance their economic well-being. These arrangements are often limited to the "informal sector" and to relatively small-scale enterprises.

Achieving increasing economic productivity and poverty reduction requires helping those involved and their political leaders change the structure of the situations they face so that the problems of motivation and information are effectively counteracted.

4. Empirical Studies

While Part I of the report develops the tools of analysis, Part II illustrates their use through studies of incentives in the real world of development cooperation. Chapter 7 examines incentive structures that emerge from the structure of Sida's organization. We find that while Sida has managed to overcome many of the perverse institutional incentives associated with public hierarchies, we also identify incentive problems related to information flows within Sida. We pay particular attention to the role of individual and organization learning as remedies against these incentive problems.

Chapter 8 studies incentives related to contractors and consultants. Chapters 9 and 10 contain five brief field studies of Sida-supported development projects to demonstrate the use of our analytical tool. These incentive studies have, in turn, further sharpened our study's main findings.

We selected projects in the Natural Resources and Infrastructure sectors in India and Zambia based on our early perceptions of their illustrative use for incentive studies of this kind. These studies reveal, among other details, how power asymmetries in the aid recipient's action situations affect incentive structures and hence prospects for aid sustainability. Our empirical analysis presents a palpable account of basic incentive issues in development and how these affect project effectiveness and sustainability. We summarize the main findings of our theoretical and empirical work in the next section.

5. Main Findings of Our Incentive Studies

Ownership and Sustainability

Sida rightly stresses recipient ownership and sustainability as central themes of its philosophy of development cooperation. Underlying Sida's approach is a general recognition that allowing a beneficiary to participate in ownership processes may help to align the incentives of the donor and recipient and may make better use of local knowledge and customs.

Applying the concept of ownership and sustainability in practice, however, is quite difficult, given the complexity of aid. For example, vesting ownership in a government agency in a recipient country may exacerbate local power asymmetries. The result of this tangle of relationships is that many individuals are responsible for ensuring the effectiveness and sustainability of aid, but no one is really held accountable.

Ownership in development aid, as generally practiced, does not contain the four conditions of ownership we argue are necessary for sustainable outcomes:

- 1. Beneficiary owners need to enunciate a demand for aid;
- 2. Beneficiary owners need to exercise some control over the resources made available;
- Beneficiary owners need to allocate at least some of their own assets to the project or program so that they have a real stake in the way their own and other actors' assets are used;
- 4. Beneficiary owners need to have clear assignments of responsibility and be able to participate in decisions regarding continuance or noncontinuance of a project.

Constructing programs that meet these criteria is a formidable task. Genuine devolution of ownership may mean less control for Sida and its agent/contractor. While less control is not without its attendant risks, we argue that it is necessary to achieve more sustainable results.

Less control, however, does not mean less Sida involvement in ongoing activities in partner countries. In fact, we find that Sida staff can play a crucial facilitative role to ensure that ownership of activities is anchored primarily with beneficiaries, and not taken over by consultants or individuals within recipient organizations. The incentive structures that emerge in each Sida-supported undertaking are greatly influenced by Sida's interventions, or lack thereof.

Our analysis suggests that Sida would benefit from revisiting the issue of beneficiary ownership of supported activities. Such an exercise would serve to clarify for the organization's employees how the critical issues of responsibility and accountability are addressed in various stages of the development process.

Incentive Structures within Sida

The Sida Desk Officer and the intended beneficiary are separated by many intermediary actors, leach one with an incentive to select and transmit only the information that is likely to benefit him or her privately. The information asymmetries in this multilayered arena make it very difficult for the Sida Desk Officer to appreciate the reality on the ground. Perverse incentives thrive under such asymmetries of information.

Sida has taken important steps to address the information asymmetry problem. We were particularly pleased to learn about the encouraging results of Sida's pilot efforts to decentralize a wide range of management responsibilities to selected embassies.² The experiment may serve to reduce the number

¹ Desk Officers rely primarily on the input of embassy colleagues, consultants, and national government officials. These intermediary actors, however, seldom have direct contact with the ultimate beneficiaries of the development cooperation and also have to rely on secondary sources for beneficiary-level information.

² Dar es Salaam, Hanoi, and Managua.

of intermediary layers in Sweden's development cooperation program. While such structural modifications might improve the possibilities for decision makers to acquire essential beneficiary-level information, it will hardly be sufficient to generate stronger incentives for Sida officers to actively seek out information about sustainability issues in ongoing field activities. As suggested by the evidence in Chapter 7, Sida can improve the conditions for learning about sustainability by addressing current constraints in both organizational and individual learning.

Our overall assessment is that many aspects of Sida's organizational structure and personnel policies encourage a learning environment, but we did not find many inducements to engage in individual or organizational-level learning about sustainability as such. We believe that one of the important challenges for Sida is to create the conditions that enable their staff members to maintain close contacts with the actors involved at the operational level and encourage staff to actively seek out essential information from field activities. Given Sida's recognized achievement in creating a working environment in which its staff members are very motivated to contribute to the organization's objectives, we believe that Sida is better equipped than most other donor agencies to take on this challenge.

Incentives for Individual Learning about Sustainability

If an organization composed of several levels of principal-agent relationships had created incentives for individual learning about sustainability, one would expect to find (1) long-term assignments of staff to overseas positions; (2) careful efforts to ensure that individual staff, who were shifted to other assignments, were able to obtain continuing information about projects with which they had an earlier association; (3) a resistance to hiring temporary staff and a strong effort to retain younger staff; and (4) career advancement criteria based to some extent on past participation in projects that had proven to be sustainable – particularly for managerial staff. The research team's personal interviews with a significant number of randomly selected Sida staff suggest that there are several obstacles for staff to learn about sustainability of Sida-supported activities in partner countries. We find that:

(1) Sida staff members typically rotate relatively rapidly among different assignments

Rapid movement from assignment to assignment may promote greater integration among staff and exposure to a variety of experiences. It also fosters the development of generalists rather than professionals with deep knowledge of the particular circumstances and culture of recipients and beneficiaries. Based on our sample, the average length of time in an assignment in the field or at headquarters is only four years. Moreover, 75 percent of Sida staff members feel that the rapid turnover of assignments has had a negative impact on performance. Only 16 percent thought that turnover brought positive results due to the introduction of new skills and insights, while 8 percent thought it had no impact.

Staff returning from the field possess valuable insights about the partner country context, actors, and the prospects for sustainability of Sida-supported activities. However, staff who replace them underutilize this knowledge. Of the interviewed staff who had worked on multiple projects, 47 percent responded that they had no contact at all with the projects on which they had worked earlier. Only 33 percent indicated a limited level of contact (around once a year), and 19 percent indicated a fair amount of contact (around one to three discussions per year). A clear majority of Sida staff members responding to Sida's own internal survey³ indicated that they do not think the organization incorporates field knowledge or follows up significantly on its activities.

(3) The growing proportion of temporary staff negatively affects learning about sustainability

The proportion of temporary staff to permanent staff has shifted from 11.7 percent in 1995 to 15.1 percent in 1999. During the team's visit to Sida in March of 2000, there was a very large proportion of the Desk Officer positions in the Regional Departments holding temporary contracts. In the Latin American Department, 4 out of 6 Desk Officers held temporary contracts; in the Africa Department, 8 out of 12 Desk Officers were temporary, and in the Asia Department, 1 out of 6 Desk Officers had a temporary contract. While these individuals may have considerable knowledge and skills, such contracts inhibit staff from engaging in repeated interactions with key actors as a way of absorbing detailed knowledge about the societies in which their projects are to be applied. Such repeated interactions are necessary for constructing sufficient trust that will enable the sharing of essential, but often implicit and hidden, information in the field context.

(4) Sida's career advancement criteria is unrelated to performance of past projects

Success or failure in the initiatives taken in development cooperation has little perceived bearing on the careers of involved Sida staff. Among our interviewees, only 2 percent indicated that promotions are based on the performance of the projects on which individuals have worked in the past. Sixty percent thought that promotions are *not at all related* to the past project performance, while only 32 percent thought that perhaps some aspects of past project performance were taken into account indirectly.⁴

³ Sida. 2001. Sida's Organisationsmätning 2000. Stockholm: Sida, p. 3.

⁴ Several plausible explanations for this were advanced, among them the fact that there are so many factors that go into the success or failure of a particular project that it is difficult to clearly see what difference the involved Sida official made.

Incentives for Organizational Learning about Sustainability

Learning about sustainability also takes place on the organizational level. Ideally, if an organization had created positive incentives to learn about factors leading to sustainable development assistance, one would expect to find (1) a formal evaluation process that takes place prior to the completion of a project; (2) the beneficiaries would be involved in the evaluation of projects so that learning would occur for the beneficiaries as well as the donors, recipient organizations, and contractors; (3) considerable stress would be placed on examining the characteristics and level of ownership and discuss its impact on sustainability; (4) the establishment of arrangements to ensure that evaluations were read, discussed, and affected future planning in all departments; and (5) the staff should feel that formal evaluations were useful and that serious attention was paid to them.

We do not find many of these processes in use in Sida. Instead, few formal evaluations contribute to new knowledge that can benefit the prospects for sustainability because they rarely include significant stakeholders and come too late in the project cycle to affect activity decisions and outcomes. More than four out of five of the Sida staff we interviewed considered evaluations largely ineffective. To them, evaluations are onerous administrative chores and are completed much as a required exercise. Many staff members perceive a lack of agreed-upon criteria within Sida for project success.

In a different, more informal survey, selected representatives from eleven departments within Sida reported a wide array of approaches for addressing sustainability, rather than a systematic and organized approach to the topic. Most said that the issue of sustainability permeates the entire work program and that discussions of the topic are frequent whenever discussing specific project activities or potential Sida-supported activities. Most discussions on sustainability, however, appear to be associated with the screening of projects. Only one department mentioned sustainability being discussed in relationship to evaluations. No department reported on efforts to learn about sustainability from ongoing projects.

Incentives Created by Sida's Budget Process

As much of development assistance activities focus on spending money, it is also important to analyze the institutions that surround Sida's budgetary activities. One of the major incentives relates to ensuring that the allocated budget is spent. The incentive to "move the money" tends to become even more important when the size of the staff is small relative to the size of the budget it administers, or if the demands on the staff for many kinds of projects are very high.

All government agencies tend to face considerable pressure to disburse their funds within the budgetary year in which they are appropriated. This tends to lead toward a bias for larger projects that enable staff "to move the money" as rapidly as possible. Sida is not immune from this tendency.

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If an organization had created positive incentives to resist this budgetary strategy, one would expect to find that (1) few staff would mention the pressure to disburse as a regular part of their work experience and (2) various informal, as well as formal, strategies would be in place to try to discourage this strong motivation to take over budgetary decisions.

Empirical evidence suggests that Sida Desk Officers feel strong pressure to disburse allocated budgets efficiently. Two-thirds of the interviewees at Sida indicated that disbursement rates (at Sida headquarters or in the recipient country) were actively monitored by their Heads of Department or Division in the day-to-day business. The pressure is perceived to be the highest at the end of the budget year. Sida's annual disbursement figures confirm this, as in three out of the last four years, the fourth quarter has seen the largest amount of disbursement.

The push to disburse draws from a combination of constraints at the constitutional and policy levels. First, the aid allocation process is supply-driven. Sweden's commitment to increase aid allocations to reach 1 percent of GNP and the growing Swedish economy have increased Sida's total resources. Second, in spite of increases in Sida's overall budget, there has been a relative decline in resources for personnel and administration. Third, while there is pressure from the public and their representatives in the Parliament to spend these resources in a responsible manner, Sida is also under pressure to demonstrate that it is indeed able to use up the allocated funds. We found no examples of Sida having objected to receiving more funds because it compromised prospects for sustainability.

Expenditure ceilings, as have been imposed recently on Sida, favor rigid patterns of disbursement that may not foster sustainability. The effort to realize sustainable development outcomes requires budgetary flexibility. In order to enhance their success and sustainability, aid projects need to fine-tune the decision making to dynamic local processes. This successive process means that disbursement timetables have to be adaptable. To be effective, Sida must continuously monitor the recipient's actions and accordingly adjust its support. Strict budget ceilings, without the flexibility of reserve funds, foster a resource-focused, rather than content- and quality-driven, management of Sida's initiatives.

The Incentives for Sida's Contractors

The International Development Cooperation Octangle reveals the central position of contractors within the system of Swedish bilateral aid. Interactions among Sida, contractors, recipient organizations, and beneficiaries form the crucial action arenas in most development interventions. Sida often relies on consultants to provide expert advice and to design, implement, and evaluate projects. Consultants often monitor and follow up on field activities as well. In many cases, contractors – rather than Sida staff – have the closest

and most regular contact with aid recipients, which has important implications for aid sustainability.

Sida policy urges that recipient organizations take ownership of projects. Where this policy is applied, recipient owners would make key project decisions and serve as principal to the contractors. Instead, we found that consultants and recipients often perceive Sida Desk Officers as the *de facto* principal.

Consultants often face incentives to maximize their efforts on tasks they think will please Sida. Given that consulting firms tend to seek long-term relationships with Sida, they strive hard to maintain their reputation and relationship with Sida.

Some of the consultants we interviewed indicated that one of their primary goals was to secure well-paying work for their firm. They assume that by performing well on current Sida tasks, additional – and perhaps larger and more lucrative – Sida contracts might be obtained in the future. In this regard, however, consultants also indicated that profit-orientation of their business is only one motivator for doing good work, and is not even necessarily the most important one. This is a salient finding for Sida as it encourages contractors to perform well as Sida searches for low-cost alternatives to motivate them. Interviewees stress the importance of being able to develop meaningful, productive partnerships with counterparts overseas. Consultants also express a desire to receive public praise for their work – a source of pride and also a means for advertising their skills and experience.

Contractors' Incentives, Ownership, and Sustainability

In sum, contractors' incentives to perform depend on (1) the importance of the donor to the portfolio of the contractor, (2) the nature of the good being contracted (which determines the profit margins), and (3) the extent to which the aid is tied and the extent of competition in the donor country.

While Sida retains a great deal of effective aid ownership by making the crucial decisions, including those related to the amount of funding and the start and termination of projects, consultants can also have strong incentives to exercise ownership over a project. Contractor ownership is enhanced where particular asymmetries of information and/or power exist.

A consultant concerned with possible future contracts with Sida is likely to maximize his or her control over a project, and not pass along control to the intended beneficiaries. Passing along such ownership to the beneficiaries is risky. Beneficiaries do not have the same incentives as contractors. Thus, beneficiaries may not act in the ways that Sida wants. It is rational for contractors to reduce this uncertainty by retaining control.

As consultants frequently have greater knowledge of what has worked or not worked in the past, it is important to design ways of drawing more effectively on that knowledge while encouraging more recipient ownership. In particular, assigning a greater role to beneficiary organizations (e.g., local user groups) in the hiring, monitoring, and releasing of consultants may be an important step toward combining the local knowledge of beneficiaries with the technical expertise possessed by consultants.

Development of Knowledge in Recipient Countries

While the learning components of most foreign aid are project/program specific, the process of development is itself complex and broad-based. Local capacity is needed to integrate learning across donor projects with knowledge of indigenous institutions. Sida can help recipient countries increase their incountry ability to create and analyze alternative forms of development and institution building, based on analyses of incentive structures. Such an enterprise may be most useful in Africa, where educational opportunities for such training are highly constrained.

We suggest that Sida fund a program that (1) identifies scholars in several major African universities interested in development and institutions; (2) fund said scholars for at least one year at competitive salaries; (3) train them in institutional analysis and development, using both African and non-African academics as source persons; (4) help them develop a syllabus for such courses at their own institutions; (5) help them to create materials for such a course; (6) support their teaching of this course to undergraduates, graduates, and interested policymakers; and (7) bring these scholars together annually to create better courses based on their ongoing research and experience. Such a program would be innovative and on the cutting edge of development: a direct effort to give recipients the tools to evaluate the development assistance they receive.

Chapter 1 The Problems of Aid, Incentives, and Sustainability

Summary

Recent studies of development assistance programs conclude that despite tremendous efforts and good intentions, aid has produced generally disappointing results. Sida, along with other bilateral and multilateral aid agencies, has observed that the lack of proper incentives generated by aid itself may be an important factor undermining its sustainability. As commissioned by Sida's UTV, this report explores how the incentives that arise in the system of development assistance affect the goal of sustainable development.

This report highlights four major contexts where perverse incentives operate. First, perverse incentives are found in many day-to-day situations facing citizens in all countries of the world. Second, the policy processes in recipient countries frequently do not lead public officials to search out better ways of improving institutional arrangements facing their citizens in their everyday economic, social, and political lives. Third, the international development assistance system itself is a complex tangle of relationships. Aid sustainability hinges critically on how this system, and the incentives created with it, interacts with the operational and policy-making contexts in the recipient country. Finally, incentives exist within most donor agencies themselves, as well as between these agencies and contractors and other donor country organizations. Few incentives may exist here to vigorously pursue strategies of individual and organizational learning about how to achieve sustainable learning development initiatives.

This chapter sets out basic definitions and concepts used throughout this report. *Institutions* are defined as formal and informal rules that are generally followed by individuals. Such rules structure incentives in human exchange, whether political, social, or economic. *Incentives* refer to the rewards and punishments perceived by individuals to be related to their actions and those of others. *Development* and *development cooperation* involve improving the material conditions of individuals, often through processes of deliberate intervention. By *sustainability*, we mean the longevity of development cooperation's effects, rather than particular projects or activities themselves. Finally, *ownership* of a development assistance project or program is identified with four

dimensions: enunciating demand, making a tangible contribution, obtaining benefits, and sharing responsibility for long-term continuation or noncontinuation of a project.

1.1 Perverse Incentives and Sustainability of Development Assistance

Prompted by the generally disappointing performance of so many development projects, multiple studies of development assistance programs have been undertaken during the past decade. Despite notable achievements – several of which are the result of Swedish aid efforts – few development programs or projects have been evaluated as achieving long-term sustainable results. These findings led members of the Department for Evaluation and Internal Audit (UTV) of the Swedish International Development Agency (Sida) to posit that one of the key factors behind these repeated findings "... is likely to be the perverse incentives generated by aid itself" (Sida, 1999g: 1). Further, they concluded:

If perverse incentives are a problem of significant importance for achieving sustainable projects, it is imperative to weaken these incentives and enhance the 'proper' incentives in order to promote the effectiveness of aid. This requires that knowledge about the problem is taken into consideration in Sida's design and implementation of activities. (Sida, 1999g: 1)

The conclusion that perverse incentives adversely affect the capabilities of recipient countries to utilize donor aid to achieve sustainable improvements in the life prospects of their citizens, led UTV to issue a call for proposals to examine the incentives in development assistance (see Terms of Reference in Appendix D). Given our own extensive studies of institutions and incentives, we were pleased when the Workshop in Political Theory and Policy Analysis at Indiana University was awarded the contract to undertake this study in the spring of 2000. In light of the research we have subsequently conducted for this study, we agree with UTV's assessment that perverse incentives are at the heart of the difficulty in achieving sustainable development assistance programs.

Perverse incentives are a source of difficulties in *all* countries of the world. They are responsible for gross inefficiencies and maldistribution of resources. Perverse incentives motivate some to engage in violence and even warfare against others. This much is evident. Yet, the identification of perverse incentives – as a key factor associated with unsustainable international assistance – by itself, does not make it easy to find solutions to these difficult problems.

¹ See, for example, Adam and O'Connell, 1998; Tsikata, 1998; Lancaster, 1999a, 1999b; Mosley, 1991; Martens, et al., forthcoming; van de Walle and Johnston, 1996; World Bank, 1996a, 1996b; Birdsall and Londoño, 1997.

² Edgren, 1995; White, 1992, 1998, 1999; Elgström, 1992; Catterson and Lindahl, 1999.

Why is it so difficult to design international aid programs that avoid perverse incentives and are sustainable over time? Why are perverse incentives more pervasive in recipient countries than in donor countries? We address these central questions in this report. To do so, we must first grasp the processes at work in recipient countries as well as the processes at work in the development assistance processes. The difficulties in finding sustainable solutions to problems in development are due in part because these processes operate in a complex and interrelated manner. To recommend how to overcome the problems of unsustainable development assistance, one must first identify where and why the perverse incentives exist. We consequently identify four major types of settings where perverse incentives operate.

1.1.1 Four Contexts for Perverse Incentives in Development Assistance

First, perverse incentives are found in many day-to-day situations facing citizens in *all* countries in the world. In donor countries, many potentially negative incentives have been changed by designing institutions that alter incentives so as to structure situations of daily life leading to mutually productive, rather than mutually unproductive, outcomes. In recipient countries, citizens continue to face incentives that make it difficult to invest in economic activities, to provide public goods, to improve common-pool resources, and generally to arrive at mutually productive day-to-day arrangements. We discuss incentives that lead to unproductive operational situations in Chapter 2.

Second, the policy processes in recipient countries frequently do not lead public officials to search out better ways of improving the institutional arrangements facing their citizens in everyday economic, social, and political life. Perverse incentives unfortunately exist at the policy level as well as in the day-to-day operational level. In Chapter 3, we discuss how these incentives obstruct institutional reforms needed to achieve economic and potential growth.

Third, the international development assistance system itself is a complex system of relationships that might enhance the likelihood of overcoming perverse incentives at an operational or policy level in recipient countries. Unfortunately, few self-correcting mechanisms are to be found when one examines aid processes at a systemic level. As Deborah Bräutigam (2000: 1) stresses: "Large amounts of aid delivered over long periods, create incentives for governments and donors that have the potential to undermine good governance and the quality of state institutions." We focus on the development assistance process itself in Chapters 4, 5, and 6.

Fourth, few incentives exist within most international development agencies, and between these agencies and the contractors they employ, to vigorously pursue strategies of individual and organization learning about how to achieve sustainable development initiatives. We discuss the lack of incentives to learn about what makes development assistance programs or projects sustainable in Chapters 7 and 8.

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We illustrate the theoretical arguments made in this report with examples drawn from the literature on development assistance processes, with knowledge acquired by extensive interviews of Sida staff members, contractors, recipient government officials, and beneficiaries. Our case studies of Sida projects in India and Zambia help to illustrate the general lack of institutions to counteract the many perverse incentives likely to occur at all of the above levels.

One cannot understand the lack of sustainability of development assistance without understanding the base problems that are an excessive burden on the energies, creativity, and productivity of the people living in developing countries. Without such an understanding, it is tragically possible to undermine progress that may be underway in fostering more effective institutions within a recipient country. In this report, we use a particular approach – institutional analysis – to examine the basic problems that are at the core of why economic and political "development" has not been achieved in a large number of countries in the world. We then use the same approach to examine the incentives in the overall development assistance process and within development assistance agencies and their relationships with contractors.

Before we turn to our more general analysis though, we will lay out our meaning of some of the key terms used throughout this entire report. We do so since these terms – including "institutions," "incentives," "development," and "sustainability" – are defined in so many different ways. We define and use these terms carefully to better communicate with our readers. We define these four core terms in Section 1.2 of this chapter.

In Section 1.3 of this chapter, we discuss the relationship of development cooperation to achieving more effective solutions to collective-action problems. When development assistance was initiated in the 1950s, the presumption was that the problem was "missing money." It was thought that less-developed countries were poor and lacked physical infrastructure. If developed countries would transfer funds and build roads, schools, health centers, and other infrastructure, this should enable poor countries to develop more rapidly than they would on their own. In more recent times, scholars and donors recognize that "missing institutions" are more at the core of the problems of development than missing money.

Another concept that has emerged in recent times as practitioners and scholars have tried to understand the lack of sustainability of international assistance is that of "ownership." In Section 1.4 of this chapter we discuss this concept in some depth. It is both an important aspect of the current Swedish policy related to development assistance as well as a concept that is generally accepted as being of considerable importance in the achievement of better and more sustainable outcomes.

1.2 Concepts Linking Institutions and Sustainability

Before we dig deeply into the linkage between institutions, incentives, and the sustainability of development assistance, let us devote a few pages to the definitions of four key terms: institutions, incentives, development, and sustainability. All of these terms are used in multiple ways by different authors. We want to clarify for the reader how we use these terms before we proceed further.

1.2.1 Institutions

Much of this report describes how institutions alter the incentives of individuals interacting in situations whose actions affect the productivity and sustainability of efforts in development cooperation. Like many other key terms defined in this and the next section, many authors use different definitions of institutions.

Douglass North has made us all aware of the importance of separating the concept of organizations from that of institutions. Organizations can be thought of as "groups of individuals bound by some common purpose to achieve objectives" (North, 1990: 5). Organizations are thus the teams of individuals engaged in collective action to produce jointly valued outcomes. Simple organizations can be analyzed as an individual action situation. Complex organizations are simultaneous and sequentially linked action situations. Action situations – as we discuss further in Chapter 2 – are the many structured interactions where individuals must make decisions about actions that affect them and others.

Central to many definitions of institutions is the notion of humanly designed constraints. By constraining behavior, institutions increase the predictability of human interactions and thus make possible some activities that would not otherwise be possible. Think for a minute about a modern highway system without rules of the road that are accepted and enforced. The potential chaos would be so great that few would venture to use such a system. Thus, the key aspect of all institutions are shared rules about what actions individuals must take, must not take, or are permitted to take in particular settings (Crawford and Ostrom, 1995).

Rules are predictably enforced by agents responsible to external authorities or to those directly involved (or both) for monitoring conduct and for imposing sanctions. These prescriptions are the rules of the game that coordinate human interaction, they "structure incentives in human exchange, whether political, social, or economic" (North, 1990: 3). We focus primarily on the rules-in-use in particular settings – i.e., the rules as they are understood, generally followed by participants, and enforced – rather than focusing only on formal rules written in legislation, contracts, or court decisions that may not be known to participants and affect their incentives and behavior.

Norms are shared and internalized understandings by those involved about the "do's and don'ts" involved in particular types of situations. In contrast to rules that are generally enforced, norms are usually not enforced in a regular way by designated agents. Individuals involved in situations with participants who do not follow group norms may gossip about each other and refuse to engage in reciprocity with those who break norms. When rules are accepted as norms in a community, someone who breaks a rule faces a high likelihood of receiving both formal sanctions as well as various forms of disapproval extended to them by others in the group.

Strategies are the plans for action that individuals make within a structure of incentives produced by rules, physical goods, and attributes of a community; the consequent expectations that an individual has of the likely behavior of others; and the perceptions of likely benefits or costs they may receive or pay in light of actions and outcomes.

1.2.2 Incentives

The dictionary definition of an incentive is "that which incites or encourages; a motive; a stimulus" (MacMillans Modern Dictionary). Thus, the concept implies both an external stimulus and an internal motivation. In institutional analysis, one uses the term to refer to rewards and punishments that are perceived by individuals to be related to their actions and those of others. The payments people receive or costs they have to pay, the respect they earn from others, the acquisition of new skills or knowledge are all external stimuli that may induce more of some kinds of behavior and less of other kinds. Donors use a variety of external stimuli in their effort to change behavior of officials and beneficiaries in recipient countries.

Perceived rewards and punishments can motivate individuals to take actions that are genuinely productive for all involved. The positive incentives within a well-structured, competitive market for private goods where private rights are well enforced, for example, lead most participants to invest in activities that help themselves while generating benefits for others. Incentives are considered perverse when they lead individuals to avoid engaging in mutually productive outcomes or to take actions that are generally harmful for others.

Many of the incentives involved in international assistance programs involve adding funds to government budgets so as to encourage more spending and activities in those domains that a donor perceives to be important. Additional training, supplemental technical assistance, overseas travel opportunities are all incentives used in aid processes. Major questions raised by an institutional analysis of these processes relate to whether apparent short-term changes are real, whether they are congruent with a donor's goals, whether positive changes in behavior occur, and whether they are sustainable.

1.2.3 Development and Development Cooperation

Individuals and groups working in the development field engage in heated discussions over the meaning of foundational concepts such as "develop-

ment" and "development cooperation." As discussed above, we generally view *development as a process* where individuals, through the design and use of institutions at many scales, help to solve more collective-action problems more effectively. Given that this is a report written for Sida, it is important to explore how the terms are being used in the Swedish context. We have paid special attention to how these terms are used in Sida documents and by Sida staff since these uses are most likely to influence their incentives and outcomes.

The concept of *development* itself is quite elastic. Although generally used to refer to the betterment of material conditions for individuals, development has been applied to other areas such as politics, culture, and religion. We will stick in this report with the concept of development as applying to the improvement of the material conditions for individuals; this occurs through improving the institutions they use to solve encountered problems of collective action.

In the case of Swedish development cooperation, Sweden's Parliament has set out six goals:

- economic growth,
- economic and social equality,
- · economic and political independence,
- · democratic development,
- care for the environment, and
- equality between women and men (Sida, 1997c: 9–10; hereafter referred to as Sida at Work).

Achieving these six goals is expected to produce the "overall goal" of Swedish development cooperation: *poverty reduction*. In this report, we assume that these seven goals provide the general definition of development that Sida follows. Development cooperation, in turn, refers to those actions taken by donors and recipients intended to further these seven goals.³

We also subscribe to these seven goals. Thus, we view our task in this report as sharing our best work with colleagues at Sida devoted to achieving the most important goals of the new millennium. This is an enormous task.

1.2.4 Sustainability

Since we have been asked to examine how the incentives derived from participation in development assistance processes affect sustainability, another key concept that we use in this report is *sustainability*. Arriving at a single definition for sustainability, however, is challenging. In a recent effort to examine the concept and measurement of sustainability, Bell and Morse (1999) argue that

³ Since the focus of this report is on the developing countries of Africa, Asia, and Latin America, we do not include the four different goals of Swedish development cooperation for Eastern and Central Europe.

the concept has been used in such a variety of contexts and with so many meanings that the concept ranges from being an empty slogan to a loaded normative term used primarily for political purposes.

Not only does the economics literature boast a variety of definitions,⁴ but, during the course of this consultancy, we also found that Sida documents and staff members employ different meanings of the term. For example, in Sida at Work, we read that development cooperation projects should be "socially, economically and environmentally sustainable, i.e., lead to results which live on after the support has been discontinued" (Sida at Work: 51, emphasis in original). This definition emphasizes that sustainability is related to the continuation of a project's results. In the "Analysis Guide" to Sida at Work, the questions a staff member should ask about a project include: "Is there policy and legislation in place which is judged to be able to guarantee the continuation of the project when Swedish support has been phased out?," "Is it realistic to count on management and institutional capacity and financial resources being available to run the project without development assistance?," and "Is the cooperation partner willing and prepared to take on responsibility/ownership of the activity in the long run?" (emphases added). Thus, three (out of five) questions, recommended as a way of determining sustainability, underscore the continued existence of a project or activity per se, not the results of a project.⁵ In Sida vid Sida, on the other hand, Sida's mission is stated as contributing to "endurable and sustainable effects" (see also Sida Director General Tham's preface to the 1989 Sida Annual Report).

The understanding of Sida staff, both in Sweden and in the field, reflected these multiple definitions of the concept of sustainability. Some thought that Sida's goal of sustainability referred to activities begun by projects, others to projects per se, and still others understood sustainability to mean the enduring results of a project. Several staff members listed all three as important. For this report, we refer to the goals laid out by the Swedish Parliament regarding development: clearly these seven goals refer to the endurance of results and not to projects or post-project activities alone. Thus, we understand sustainability to refer to the longevity of development cooperation's effects, rather than particular projects or activities.

Approaching sustainability in this manner frees one from a sense that every project should be continued indefinitely. This view of sustainability – which we share with many colleagues at Sida – is that projects, programs, and other modalities are only the means in the effort to achieve the long-term goals of

⁴ See, for example, Salmi (1996), who identifies nine major contexts within which the concept of sustainability is invoked, including allocative efficiency, intergenerational equity, resource substitutability, externalities, and property rights. In dealing with its Agenda 21, the United Nations has developed 132 Sustainability Indicators (S.I.s) measuring driving forces, states of the world, and responses. See discussion of the UN and other efforts to develop systematic S.I.s by Bell and Morse (1999), who present an in-depth treatment of the concept of sustainability and the grave problems of its measurement.
⁵ Catterson and Lindahl also define sustainability by project: Sustainability is "the capacity of an aid support project, institution, or programme to continue to function post-aid" (1999: 25).

development assistance. Because of their contribution to poverty reduction and the other goals, some projects should continue for a long time and thus be sustainable at the project level. Others may have made their contribution to development goals in their early years and continuing the project as such is not necessarily the optimal investment to achieve the broader goals.

1.3 Development, Development Cooperation, and Collective-Action Problems

How do the incentives facing Sida staff, recipient country officials, and others involved in development assistance affect a recipient country's potential for economic growth, economic and social equality, economic and political independence, democratic development, care for the environment, gender equality, and poverty reduction? Achieving broad goals such as these is a neverending challenge for all donors and recipients of aid. It is especially so for recipient countries who were the object of past colonial domination. Many of these countries had productive, indigenous institutions destroyed or suppressed by the colonial experience and further weakened by the authoritarian or centralized systems of rule that often replaced colonial rule.

Progress toward achieving the goals of development involves the provision of many kinds of public goods that are available to all individuals within a society, whether or not they contribute to their provision. To stimulate economic growth, for example, one must invest in physical, human, and social capital, including the creation of effective property-rights systems and ways of adjudicating disputes at relatively low costs. Once economic growth is stimulated, more substantial opportunities may become available to *all* who live in a regime regardless of their prior contributions. In particular, growth provides a better opportunity to address distributional inequities. While not all societies have taken full advantage of using growth to reduce inequities, without growth it is extremely difficult to reduce poverty significantly.

Working for economic and social equality and environmental improvement requires finding peaceful means of productively and equitably combining the efforts (and often the unevenly distributed social and economic assets) of individuals. The currently most powerful individuals in recipient countries—the autocratic leaders in particular—nearly always have the most to lose from changes leading to democratic development. They may forcibly resist such efforts. Achieving economic and political independence and democratic development requires substantial time and energy to be invested by a large number of individuals. Reducing poverty requires investing resources and hard work to create opportunities for the less advantaged.

1.3.1 Missing Money?

In the immediate post-colonial period, many researchers studying development, as well as public officials trying to improve economic performance, thought the core problem to be a lack of sufficient monetary resources needed to build necessary physical infrastructure and to enhance investment in local economies (see Rostow, 1960; Prebisch, 1970; Huntington and Weiner, 1987). In other words, the problem was identified as "missing money." The proposed solution was a simple and short-term one – send money. If this had actually been the core problem and the right solution, the billions of dollars that donor countries have allocated to developing countries over the last four decades should have gone a long way toward solving the problem of underdevelopment (for an extensive review, see van de Walle and Johnston, 1996). Many individual infrastructure, health, and educational projects have had notable successes (for examples, see Bosc and Hanak-Freud, 1995; Maipose, Somolekae, and Johnston, 1997). Sending money has, however, not substantially reduced the relative poverty levels of most recipient countries (Krueger, Michalopoulos, and Ruttan, 1989; Blomstrom and Lundahl, 1993). In fact, the problem of poverty in many African and Asian countries is in many ways more severe today, at the beginning of the twenty-first century, than it was half a century ago (Boone, 1996). Even in countries with growth, the plight of the poorest has worsened. "A small elite got richer and richer, but the mass of the people remained as poor as ever" (Elgström, 1992: 46).

1.3.2 Missing Institutions?

After decades of trying to understand the problems of development, it is now widely accepted that the core problem is "missing institutions" or "perverse institutions" instead of "missing money" (see, e.g., World Bank, 1998; North, 1990, 1994; Burnside and Dollar, 1997). Rather than emphasizing the lack of material or human resources, an increasing number of analysts now point to the ways in which the incentives facing people within their own country as well as those generated by development assistance lead to a general lack of productivity (Bates, 1998; Catterson and Lindahl, 1999; Killick, Gunatilaka, and Mar, 1998). Their work indicates that no matter how well-intentioned are those providing assistance, or how many resources are transferred, development will occur only if political and economic institutions generate incentives that facilitate individuals' achievement of development goals.

As discussed above, institutions are the rules used by individuals in a wide diversity of repeated situations that they confront in life. The rules that individuals adopt, along with other contextual factors discussed in Chapter 2, directly affect their incentives and consequently the likelihood that they will achieve higher levels of productivity in the many collective-action situations faced in everyday life. Thus, institutions help or hinder the efforts of individuals to be optimally productive in the activities they undertake with others.

1.3.3 Collective-Action Situations at the Core of Development

The most important situations affecting development are what we call collective-action situations. A *collective-action situation*, as we use the term in this report, occurs whenever the input of several individuals is required to achieve a

desirable joint outcome. Almost all productive relationships involve some form of collective action. For example, while one person can produce agricultural products from a single, small agricultural plot, the amount of agricultural product per inputs is greatly enhanced by creating diverse forms of teamwork through family, community, or corporate arrangements to increase the size of the enterprise. Similar benefits of increasing the number of participants who bring different skills and resources occur in almost all manufacturing or service activities.

Collective-action situations, given this broad definition, pervade both the public and private sectors of all countries. Collective-action *situations* become collective-action *problems* when actors in the situation choose actions that produce outcomes that are evaluated to be less desirable than others available to them. The classic example of a collective-action problem in the public sector is the provision of a public good such as a national highway network or the reduction of environmental harms (such as smog at a local level or global warming at a global level) (Olson, 1965). Analysts tend to focus on collective-action problems in the public sector. Yet, as Miller (1992) has clearly demonstrated, simply creating a public bureaucracy to tackle the provision of public goods or the protection of natural resources does not automatically solve the initial collective-action problem and may even stimulate still further problems.

The core questions facing the members of any team effort in the public or private sector are who should contribute what, when, and where? Who will coordinate their efforts? How will joint returns be distributed? Unless participants share clear and efficiency-enhancing rules and norms, some may shirk (free-ride) on the efforts of others or try to deflect joint returns primarily to themselves. Once participants hold back on their contributions to joint efforts or allocate considerable time to gaining more than their share of benefits, the level of productive outcomes achieved by their joint efforts starts to deteriorate. Unfortunately, such dynamic processes lead toward lower and lower levels of returns for all involved, and the perverse incentives tend to be self-reinforcing.

In the 1960s and 1970s, the theoretical presumption was that citizens themselves could not solve most collective-action problems that involved public goods or common-pool resources, and that a centralized government was necessary to impose solutions from the center (Olson, 1965; V. Ostrom, 1999). Now, in light of considerable theoretical and empirical research, most institutional analysts recognize that individuals are capable of crafting solutions to their own diverse problems of collective action. Yet, this requires a rich set of general and special institutional arrangements at local, regional, and national levels in both the private as well as public spheres of life (McGinnis, 1999a, 1999b; V. Ostrom, Feeny, and Picht, 1993; Scott, 1998; de Soto, 2000). The institutional arrangements that may facilitate the effective provision of natural resources, the construction and maintenance of effective physical infrastructure, the provision of education, the stimulation of technological innovation, and the creation of more equal economic and political powers in diverse arenas.

1.4 Ownership in Development

The essential quandary of development has been how to provide assistance that is successful and sustainable in terms of achieving the types of goals identified by the Swedish Parliament (listed above) or similar goals specified by almost all major donor organizations. In the first several decades of extensive development assistance, the presumption was that donors should take the lead in designing and implementing programs and projects (Morss, 1984). By the early 1990s, however, it was realized that the heavy donor voice in the planning of development assistance deprived recipients of "ownership" over the programs and projects designed for their benefit (van de Walle and Johnston, 1996; OECD/DAC, 1992; Johnson and Wasty, 1993; Brunetti and Weder, 1994; Wilson and Whitmore, 1995). Without such ownership, critics argued, recipients are unlikely to make the kind of commitments needed to ensure the realization of the intended long-term results of donor assistance. Thus, without institutional development to increase the ownership capabilities of the beneficiaries, development aid is thought to be unsustainable and empirical studies have demonstrated this relationship.⁶

For example, in their review of the sustainability of 12 development projects supported by Sida in Tanzania, Catterson and Lindahl (1999) repeatedly refer to problems of ownership involved in the projects that were not evaluated as sustainable. One example is the Folk Development Colleges (FDCs) that had been viewed as a problematic project early in its life and was finally phased out in 1996. The program was supported for 21 years and an estimated investment of SEK120 million made in these training schools. In trying to understand why support was maintained for more than two decades, Catterson and Lindahl (1999: 77) reflect that "there was a strong sense of Swedish ownership of the Programme, both influencing the pattern of support and the phase out problems. . . . The lack of Tanzanian ownership was reflected in the role of Linköping University, which, according to the 1996 evaluation, approached the TANDEM project as missionaries to advocate a purist approach to adult education as seen from a Swedish perspective" (emphasis in original, see also Rogers, Chadwick, and Oglesby, 1997).

In response to the growing awareness of the importance of ownership, Sida, as a leader among donor organizations, has formally adopted the idea of recipient ownership of development assistance and placed it at the center of its expressed philosophy of donor assistance. According to *Sida at Work*, a project's owner is "the party which requests support and which is responsible for the planning and implementation of the project, by having, for example, the organization and staff for the task. The project owner finances part, often

⁶ For a discussion of the importance of institutional development and *project* sustainability see Cernea (1987), who evaluated 25 World Bank projects that had originally been judged to be successful at the time of project completion and to have good prospects for long-term sustainability. Only 12 of the 25 projects actually achieved long-term sustainability. At the design stage, all of the sustainable projects involved very specific efforts to enhance the institutional capacities of beneficiaries (ibid.: 3).

a large part, of the costs of the project" (1997c: 15). In turn, Sida vests its partner in development cooperation with full rights to use the resources provided within the framework laid down in the project agreement. Sida understands that this "complete ownership" requires that political bodies, as well as target groups, support and participate in the decision-making process. Through these ideas and procedures, Sida hopes to have the recipient "own" its development processes (ibid.: 17). Further, in the same document, Sida stresses the importance of clear and mutually understood definitions of responsibilities among stakeholders.

1.4.1 Terminological Confusion

Ownership has thus become an important and fashionable concept within Sida and among most development assistance agencies in the world today. The leaders of recipient countries are also using the term in their efforts to examine critically the post-independence experience and learn how to do things differently.⁷ The theoretical conception of what ownership means is not entirely clear, however, from reading official documents or from talking with donor or recipient country officials. Moreover, it becomes even murkier when confronted with the reality of development ownership in the field. As Bräutigam (2000: 32) notes, the question of what "ownership" means in development assistance is not clearly answered either in the scholarly literature or by donor agencies.

Consider the relatively simple case of technical assistance: the core actors involved in this would be Sida-Stockholm, the Sida field office, the consultant, the recipient government ministries, and the target group. It is easy to imagine several of these actors "requesting support," and each bearing different types of "responsibility." Each is also likely to have a different interpretation of the distribution of ownership assignments, and the prerogatives and responsibilities that go along with them. This lack of common understanding of the concept of ownership and the resulting lack of clear responsibility for long-term results appears to lie at the heart of the incentive problem in development.⁸

Sida recognizes that the concept of ownership in development cooperation is often complex. Owners of development cooperation can vary "between different levels and areas, from government policy to different aspects of a project," as well as with different types of aid; ownership "can also lie with different groups of people" (Sida, 1997c: 18). Sida also promotes the idea of "popular ownership," which seems to mean that target groups might be allowed some role in the design or implementation of assistance (ibid.). Finally,

⁷ The President of South Africa, Thabo Mbeki, and other African leaders have developed the Millennium African Renaissance Programme in which they call for all African leaders to "take ownership and responsibility for the sustainable economic development of the continent" (reported in *The Economist*, February 24, 2001, p. 17).

⁸ This is illustrated in Chapters 8, 9, and 10 of this report.

Sida's staff is encouraged to develop a sense of ownership as "close as possible to the target group and other interested parties" (ibid.).

Tension exists among these different aspects of Sida's view of ownership. For example, the closer the ownership is to the target group for many projects particularly, large-scale infrastructure investments - the less likely it is that this group will have the finances to underwrite "a large part" of a project. While the target group may be organized for some purposes, it may not always have the staff or organization to implement many types of development projects and their concomitant accounting procedures. Also, because development cooperation requires approval by the recipient government, these governments will always have a share of the ownership, regardless of the level of the target group. Further, it is not clear what "popular ownership" means. Indeed, the fundamentals of the definition of ownership in Sida at Work appear to exclude popular ownership. "Popular ownership" in the Sida context appears far closer to "participation" than ownership per se. Finally, since Sida is the source of the aid, it must retain a great deal of control over the distribution of these resources - hence, the advice that Sida staff "has the task of finding a practical, feasible balance between promoting ownership and exercising control" (ibid.: 18).

1.4.2 Ownership and Collective Action

Can we, in resolving this problem of multiple definitions, refer to a clear meaning of ownership in the context of development assistance? In economics, ownership generally refers to the rights that individuals possess in relationship to one another with regard to an asset. Full ownership pertains to a bundle of rights in regard to an asset (Schlager and Ostrom, 1992). These include the rights of access and use, the rights to make management decisions, the rights to determine who else (if anyone) can become a joint owner, and the right to give up or transfer all of these rights (called the right to alienation).

A clear understanding of ownership and its consequence for aid sustainability must take into account collective-action problems in development. As we have seen, collective-action problems can occur when individuals receive benefits that are not tied directly to what they contribute to a combined effort. Individuals may hold back on their contribution for a variety of reasons, leading to a deterioration of the productive outcomes of their joint efforts. An individual's reluctance to contribute may stem from the fact that he or she does not perceive a collective activity to be legitimate. An individual may also feel that his or her contribution will have very little impact on the outcome. Such perceptions can be strengthened, especially if the individual was not consulted before beginning a project. Noncontribution to the joint effort, in such circumstances, may seem fair. Yet, because the individual hesitates to exercise ownership, the project is likely to fail.

1.4.3 Four Dimensions of Ownership

In our effort to understand collective-action problems as a reflection of inadequate realization of a sense of ownership in a joint project, we have identified four dimensions of ownership: (1) enunciating demand, (2) making a tangible contribution, (3) obtaining benefits, and (4) sharing responsibility for long-term continuation or noncontinuation of a project. Sometimes one or another of these aspects is stressed in official documents. It is important to clarify these components analytically.

Ownership can be viewed as incorporating the following processes:

- Participation in *provision* by articulating what asset, project, or program is needed and deciding how resources should be mobilized to provide for this need.
- 2. Participation in *production* by making tangible contributions. Time, effort, and other resources contributed to production are a costly signal that beneficiaries expect to derive benefits from a project.
- 3. Participation in *consumption* of the benefits if the project is successful and in a share of responsibility if the project fails.
- 4. Participation in decisions related to the *alienation* of the rights to a project (the decision to continue or not continue a project once it has been initiated).

When one is dealing with a strictly private asset, these decisions can be made by a single individual, family, or firm. In regard to the type of projects involved in development assistance, however, all of the above processes are collective in nature and are, further, shared by local beneficiaries, an implementing agency or agencies, national government officials, and the officials of a donor country. The relative mix of contributions by multiple parties varies.

In the early years of development assistance, local beneficiaries were expected to participate in the consumption of benefits but not much more. The recent focus on ownership stresses their role in the other three aspects of this concept.

In some development projects, ownership is enhanced by having beneficiaries more actively engage in both provision and production processes. By making investment in these processes, beneficiaries are not simply consumers of someone else's largesse. They have had to articulate their own preferences and allocate their own resources. Projects that require beneficiary participation in provision and production activities usually involve considerably more time and effort by the staff of an implementing agency. If a donor is willing to pay the full costs of a project, it is easier and faster for the implementing agency to design the project and arrange all aspects of production. Once the implementing agency has gone to the effort of designing and producing the project, however, it becomes more of an owner than the beneficiary (Catterson and Lindhahl, 1999).

In regard to a private good, the key attribute of ownership stressed in the analytical literature is the right to alienate (or give up) all rights to a good (Alchian and Demsetz, 1972; but see Larson and Bromley, 1990, who challenge this narrow view of ownership). At first glance, any of the actors could be seen as having a potential veto over continuation of any project. The donor country could withdraw funding, government officials cancel permits, and local people stop participating. (Note that the consultants and other implementing agencies that formally enter at the production stage – but may also play an unofficial role at the provision stage - have less control over alienation, since other actors could always be selected to implement a given provision decision.) This is where Sida's over-riding goal of sustainability becomes crucial. Projects may be sustainable if local (or government) participants can continue it even after Sida funding ends. At a deeper level, each project should enhance a society's capacity to sustain progress on the goals of economic growth, equity, etc. Since any particular aid project will have a limited duration, the expected situation at the end of the project should be a focus of its design in the first place.

Any one project should be terminated whenever its continuation detracts from the realization of any of the basic goals of a development assistance program. Does it foster an attitude of dependence? Does it further the career goals of staff members of a recipient or donor government (or of a contractor) rather than enhance local capacity? Deciding when and how to terminate projects turns out to be a critical issue, one that is highlighted by an emphasis on ownership and sustainability.

Complex institutional arrangements, tailored to the exigencies of particular situations, are required to increase the voice and role of the eventual beneficiaries in all aspects of ownership. It is relatively easy for the agency responsible for most of the funding to be heavily involved in the provision and alienation processes — while helping to choose the implementing agency that engages in production. If the eventual beneficiaries are not involved at all in provision, production, or alienation decisions, it is less likely that effective benefits will be generated for them to consume.

To be effective and sustainable, a donor's intervention has to help solve underlying collective-action problems – not just provide another project and the temporary infusion of funds and jobs associated with a project. This response, in turn, has to incorporate the local knowledge about the needs, preferences, and problems of target beneficiaries that only they themselves possess. Access to this localized knowledge requires active beneficiary ownership – meaning a role in all four aspects of ownership – rather than just the consumption of whatever is produced. As such, ownership is a necessary, though not sufficient, condition for aid sustainability. Consequently, we will focus on the issue of ownership throughout this report as involving major incentives related to development.

1.5 Overall Plan of the Report

In this report, we spend the next three chapters – as well as Appendices A and B – laying a conceptual and theoretical foundation for addressing this question of how incentives, aid, and development are related. A reader may ask why we present so much theory in this report – after all, this is a report going to an action agency, not a university research team interested in recent social science theory. We have two answers for this question. First, a major aspect of our Terms of Reference was to review "the state-of-the-art" regarding the relationship between incentives, aid, and sustainability. We took this task very seriously. Secondly, we share the deep commitment of our colleagues at Sida to the overall goals of poverty reduction, economic growth, economic and social equality, democratic development, care for the environment, and equality between women and men. These crucially important goals can be achieved only when development assistance is grounded on a solid scientific foundation. Thus, we feel it is essential for those of us interested in the overall goals of development to plan future work based on the best, empirically grounded theory available today. We submit this report in the spirit of working with an organization that has already shown its excellence in the field and devotion to achieving important goals. We have tried, thus, to summarize the best that is known about incentives and development assistance so that we are truly helpful in achieving these goals.

In Chapter 2, we first provide a brief overview of the basic method of analysis we are using in this report – the Institutional Analysis and Development (IAD) framework (see also Appendix A). We then examine a diversity of potentially unproductive operational situations found throughout history and in all countries of the world. These situations are so important to economic development and so numerous that considerable analytical work has been devoted to understanding their deeper structure. Many of these repetitive situations are poorly solved in countries receiving large quantities of development assistance. Thus, a core problem of development assistance is to understand the structure and incentives generated within these situations.

In all of these potentially unproductive situations, participants may be able to achieve productive outcomes if the incentives can be changed. Thus, in Chapter 3 we examine the incentives that may enhance or detract from the possibilities of effective reform. What happens when a donor enters these situations is addressed both at the end of Chapter 3 and again in a formal game-theoretic presentation in the Technical Appendix B.

In Chapter 4, we examine whether embedding these omnipresent situations in an international development assistance process, which we call the International Development Cooperation Octangle, enhances or detracts from the likelihood of individuals in these situations coming to better outcomes. In many cases, embedding these already delicate operational- and collective-choice-level situations in the international development assistance process does not improve their performance. In Chapter 5, we focus on a part of the

Octangle relating to the negotiation processes between donors and recipients. In Chapter 6, we examine the incentives that are derived from modalities used to arrange for development assistance.

In the second part of the report, we turn to four empirical chapters based on our fieldwork conducted for this study. While our own empirical fieldwork was conducted in a very limited timeframe, our findings are strengthened by their consistency with the research conducted by many others, including our own earlier research in developing countries. Chapter 7 focuses on Sida as an organization and the incentives related to sustainability within Sida. Chapter 8 then examines the incentives facing contractors working on development assistance projects undertaken by Sida. Chapters 9 and 10 examine the incentives related to sustainability found in Sida projects in India and Zambia.

Chapter 11 provides a series of recommendations based on the relevant theory; on what we have learned from our research in Stockholm, India, and Zambia; and from our own extensive, prior research. Some of the findings of this report will be familiar to those who study development cooperation in general, and Sida specifically, e.g., the supply side nature of development cooperation, the perverse incentives facing recipient government officials, consultants, and even the final beneficiaries of development assistance, the lack of sufficient field and central office staff, and the lack of effective monitoring and evaluation institutions. Our recommendations thus draw on many excellent prior studies complemented by our own theoretical analyses and empirical studies.

Chapter 2

Understanding Potentially Unproductive Operational Situations

Summary

Understanding the range of incentives related to collective-action problems that afflict both recipients and donors is key to a more scientific and sustainable approach to development assistance. The Institutional Analysis and Development (IAD) framework, already used as the theoretical foundation for a large number of empirical studies, serves as an appropriate tool for the study of development assistance and sustainability. It is multidisciplinary in approach, presents a practical method for dealing with multiple levels of analysis, and allows for the investigation of configural or interactive processes.

Individuals interact within multiple levels of rules. At the *operational* level, they engage in repetitive situations that may directly affect physical outcomes. The rules that structure these operational situations may themselves be designed or agreed upon within *policy-making* or collective-choice contexts. In turn, *constitutional* rules affect who will make policy decisions and how these policies and procedures will be adopted. This chapter provides an overview of motivational and informational problems at the operational level.

Basic operational-level problems within recipient countries need solutions if the goals of development assistance are to be achieved. Accordingly, we first focus on problems stemming primarily from inadequate motivation to contribute to the production of joint benefits, even when participants have complete information. These problems include those identified as Public Goods, Common-Pool Resources, the Samaritan's Dilemma, and Asymmetric Power. Second, we focus on those problems where missing or asymmetric information exists about the actions of actors or about the characteristics of these actors. Situations with inadequate or asymmetric information are called a variety of names, including Principal-Agent problems, the Moral Hazard problem, and the problem of Corruption.

2.1 Coming to Terms with Dysfunctional Situations

The vocabulary of contemporary institutional analysts is strewn with references to dysfunctional situations that generate counterintentional and counterproductive outcomes for the actors within them and/or for others affected by them. Discourses on free-riding, rent seeking, moral hazard, adverse selection, principal-agent problems, fiscal illusions, transaction costs, information asymmetry, corruption, lack of trust, and a wide variety of social dilemmas, including the Prisoners' Dilemma and the Samaritan's Dilemma, fill the best contemporary textbooks (see Bickers and Williams, 2001). At one time, economics was considered "the dismal science." Now, political scientists have joined economists in contributing to our understanding of how individuals, seeking their own good, can end up worse off than if they had pursued alternative feasible strategies.

In this chapter we will introduce readers to an institutional analysis of the most pervasive and potentially unproductive situations that may occur anywhere, but are frequently observed in developing-country contexts. Many factors potentially affect the incentives facing individuals within particular situations. The specific details and history of each situation vary substantially. When telling a story about a particular situation, one includes as many of these details as feasible so as to understand the richness of the factors surrounding a particular situation.

Policies related to aid and development, however, should be based on a more scientific approach than telling stories about specific problems facing particular individuals. The study of development policies requires a consistent theoretical approach that has considerable empirical support from a wide diversity of relevant settings. The IAD framework meets these requirements. It is the approach that we use in this report to analyze how aid, incentives, and sustainability are related.

This chapter is divided into five sections. Section 2.2 provides a basic overview of the IAD framework – its history and broad capabilities. Section 2.3 focuses on the core analytical construct we use in all analyses – the action arena composed of an action situation and actors that interact within it. We provide here a brief overview of the framework supplemented by a more thorough description in Appendix A. In the analysis of incentive problems, we will focus primarily on the motivation and information problems that tend to haunt many collective-action situations. In Section 2.4 we will focus on motivational problems at an operational level to include the analysis of public goods and free riding, common-pool resource problems, the Samaritan's Dilemma, and asymmetric power relationships. Section 2.5 is devoted to informational problems at an operational level including missing information, local knowledge, monitoring to establish trust, moral hazard, principal-agent problems, adverse selection, and signalling problems. In the last section, we will begin to address how these problems can be overcome as a bridge into Chapter 3 on "Changing Operational Rules in Policy Situations: What are the Incentives?"

2.2 An Overview of the Institutional Analysis and Development Framework

2.2.1 Background

Since its formation in 1973, Workshop scholars have developed a useful theoretical tool called the Institutional Analysis and Development (IAD) framework (Kiser and Ostrom, 1982; Oakerson, 1992; E. Ostrom, Gardner, and Walker, 1994). The IAD framework has been used as the theoretical foundation for a large number of empirical studies including those that (1) measured the impact of metropolitan-area governance structures on urban service delivery, (2) gauged how institutional incentives affect infrastructure sustainability in developing countries, (3) examined how diverse forms of organization affect irrigation system performance, and (4) explained how ecological conditions combined with institutional structure affect land-use change dynamics (particularly changes in forest cover, extent, and composition) (see McGinnis, 1999a, 1999b, 2000; Gibson, McKean, and Ostrom, 2000; Shivakoti and Ostrom, 2002). The IAD framework highlights the ways in which policy outcomes are jointly shaped by physical and material conditions, rules-in-use, and the attributes of community.

Why the IAD Framework is Relevant for Studying Development Assistance

The IAD framework serves as an appropriate tool to study development assistance and sustainability for several reasons. First, the IAD framework has a multidisciplinary origin. One cannot study development assistance processes drawing on one discipline alone. All of the social sciences — anthropology, economics, history, political science, and sociology — have developed important concepts and theories that are relevant for understanding why some development processes are sustainable while others wither away when external funds are no longer available. Sociologists are interested in value systems and how humans organize their relationships. Economists are concerned with the efficient use of resources. Anthropologists and historians have developed tools to analyze the context within which a situation is located. Political scientists tend to be focused on the power relationships among participants. IAD provides a more general language than the languages developed by any single social science discipline (but one compatible with all of them) needed to address development assistance puzzles.

Second, IAD presents a practical method for dealing with multiple levels of analysis. When individuals interact in repetitive settings that directly affect physical outcomes, they are in an *operational* situation. All production and consumption activities exist at an operational level of analysis. The construction and operation of a power plant or the planting of an agricultural field are examples of operational situations. The same tools that are used to analyze situations that directly affect production and consumption activities can be used to analyze other types of situations. The rules that affect the structure of an operational situations.

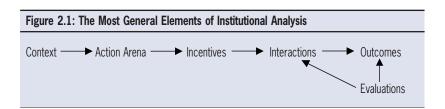
ational situation are themselves designed and agreed upon in *policy-making* situations (frequently called collective-choice situations). Elected officials in legislative or executive bodies in both donor and recipient countries make policy decisions about rules that affect the structure of many operational situations. These policies are themselves made within *constitutional* rules that affect who will make policy decisions using what type of rules and procedures. The design and agreement of these rules occur within a constitutional situation.

Third, IAD allows for investigation of configural or interactive processes. Configural processes are those where the relationship between two or more variables is dependent upon the values of at least one other variable. In other words, the outcome of a configural process is *not* a simple additive process. Many of the causal processes related to the study of incentives in development assistance are basically configural or interactive in nature. This is particularly the case with the rules that affect incentive structures. In order to predict and understand the effect of changing one rule, one must frequently know some of the other rules in effect.¹ The configural nature of rules makes institutional analysis a more difficult and complex enterprise than studies of phenomena that are strictly additive. IAD provides a framework for relating the complex configural processes found in development cooperation.

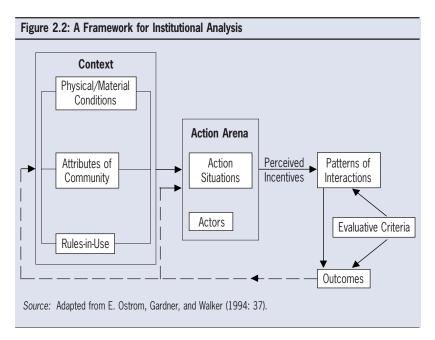
2.3 An Overview of the Working Parts of an Institutional Analysis

When conducting an institutional analysis, the analyst needs to identify the arena that is of direct relevance to the problem being examined, the context that frames and affects that arena (including other relevant arenas), and the behavioral interactions and outcomes that are likely. The context provides the initial conditions or "the environment" that structures the efforts to achieve outcomes (Ashby, 1960). It is within that context that an analyst can identify an action arena and its incentives. Actors facing these incentives interact and generate outcomes. The analyst may apply one or more evaluative criteria in addition to examining the likely set of outcomes that will be achieved. Sida has, for example, identified the evaluative criteria of *sustainability* as being of major interest in sponsoring this research effort and report. Other evaluative criteria that are frequently used in evaluating international assistance are efficiency, accountability, and equity (see E. Ostrom, Schroeder, and Wynne, 1993). At the broadest level, these elements of institutional analysis are related as shown in Figure 2.1.

¹ To predict the outcome of a voting process at a policy-making level considering a change in the rules affecting an operational situation, one needs to know about at least three rules: (1) the rule prescribing the proportion of individuals who must agree prior to changing a rule (e.g., 50 percent plus 1, 2/3, unanimity), (2) the quorum rule (e.g., how many must be present at the time of the vote), and (3) the reversion rule (e.g., what happens if agreement is not reached). The effect of changing one rule depends on the specific attributes of the other two rules.



When actually conducting a specific analysis, all of these elements are decomposed into finer and ever finer categories of analysis. The *context* includes physical conditions, attributes of a community, and rules-in-use. The *action arena* is a complex conceptual unit containing one set of variables about an *action situation* and a second set of variables about an *actor* (see Figure 2.2). An actor can be either a single individual or a group of individuals who have a regularized way of making decisions, such as a firm or a government.



The concept of an *action situation* helps the analyst isolate the immediate structure affecting a process so as to explain why particular outcomes tend to occur and potentially identify ways of reforming them. Situations are structured interactions among participants where individuals must make decisions about actions that affect them and others. Action situations at an operational level, analyzed in this chapter, include a wide variety of production, exchange, gift, and consumption activities that can be analyzed as independent situations. At the policy level, to be examined in Chapter 3, participants make decisions about the rules to be used in operational situations. In Chapter 4, we will examine how the many recurrent situations found in development assistance are linked across national and organizational boundaries.

Given the assigned task of reviewing perverse incentives in a large number of typical situations found in development assistance problems, it is not feasible to do a complete analysis of each situation discussed in this report. Rather, we have tried to provide a nontechnical overview of core concepts that are useful to those directly involved in trying to understand the basic structure of situations we describe so as to change and improve outcomes. In the analysis of action situations conducted in this report, we focus primarily on the actors involved, the actions available to them, how actions are linked to outcomes, the costs and benefits involved, and the information available to the participants. In Chapter 5, we illustrate the kinds of questions that an institutional analyst would use in starting to undertake an explanation of outcomes — in this case, focusing on the negotiation arena between a donor and recipient government.

When using the IAD framework in conducting empirical studies, one uses a broad theory of individual behavior and assumes that individuals are fallible learners who are also boundedly rational (Simon, 1972, 1985). In other words, individuals try to obtain the goals that are important to them, but ignorance and limited computational capabilities do not enable them to act as they would with full rationality. Individuals may also be affected by intrinsic values such as fairness and reciprocity.

The most important variables in the context of any situation relate to (1) the physical/material conditions (or, as this composite variable is frequently called – the nature of the goods), (2) the key attributes of the community involved, and (3) the rules used in that situation. Let us address each briefly.

Institutional analysts always start with the biophysical world involved in the situation that is being examined. The problems facing farmers exchanging commodities in a rural market differ substantially from the problems facing the same farmers learning how to improve the soil on which they grow crops (see discussion of Conservation Farming Unit in Chapter 10). Thus, analysts first examine whether the goods and services being exchanged can be characterized as private goods, common-pool resources, club goods, or public goods.

Private goods are individually consumed and can be easily excluded from potential beneficiaries – they are referred to as "private goods." Repeated analyses have shown that market institutions are the most efficient institutional arrangement for making provision, production, and allocation decisions related to strictly private goods. Of course, market institutions operate efficiently only in the context of effective laws giving individuals clear property rights to the relevant goods and services, of adequate policing, and of a fair and accessible court system.

Many of the goods involved in development assistance programs, however, are either public goods or common-pool resources. Both of these goods are more difficult to exclude from potential beneficiaries. Market institutions do not work well to generate efficient outcomes for these goods as we discuss in Section 2.4 below. Creating effective rules to achieve efficient and fair provi-

sion and production of these goods is always a challenge. Developed countries have solved this challenge to a greater extent than developing countries, and thus donors in their efforts to enhance development are frequently confronted with situations that involve public goods and common-pool resources.

The attributes of a community, including the number of people involved, their homogeneity, the level and distribution of their assets, their history, etc., are also important contextual variables. They tend to affect the time horizon of participants and their capacity to self-organize based on a history of past community action. This is particularly important when dealing with public goods and common-pool resources.

Donors are called upon to recommend and finance changes in the situations occurring in recipient countries in order to enhance the welfare of the citizens of recipient countries. Making productive changes is what development assistance is all about. It is usually difficult to change the characteristics of the goods or communities involved in situations, however. So if change is to occur, donors and recipient governments need to encourage a transformation of the rules that structure unproductive situations. To do this successfully, however, requires that both donors and recipient governments understand the basic problems that individuals are facing and how the attributes of their community affect the possibility that changes will be successful.

In Chapter 3, we will discuss the incentives that face policymakers at all scales, from a local community to international treaty-making arenas. When everyone in operational situations has an equal voice at a policy level and all are clearly better off with a change in rules, one can expect policy changes to occur that gradually make operational situations more productive. These conditions are not always met. Those who are advantaged by the status quo at an operational level are frequently allocated more voice and authority at a policy level. This enables those who are advantaged by a status quo to strongly resist changes that improve outcomes for others but not for themselves.

This brief overview provides an introduction to the tools we will use throughout the rest of the report. We have included a more detailed introduction to the IAD framework in Appendix A for those who would like a fuller introduction.

2.4 Motivational Problems at an Operational Level

2.4.1 Cataloguing Dysfunctional Situations

Entire textbooks are devoted to an analysis of incentive problems (see Campbell, 1995; Weimer and Vining, 1999). In this report, we can provide only a brief introduction to the core dysfunctional problems that are present in all countries, but characterize the political economies of developing countries to a much greater extent. We focus, first, on problems stemming primarily from inadequate motivation to contribute to the production of joint benefits, even when participants have complete information. These problems include pub-

lic goods, common-pool resources, and the Samaritan's Dilemma. Further, when the power relationships among actors are asymmetric, those who are the most powerful may resist changes that increase overall productivity due to their privileged payoffs in the status quo.

We focus, second, on those problems where there is missing information or asymmetric information about the *actions* being taken by actors or about the *characteristics* of these actors (or both). Both types of missing information create or exacerbate motivation problems (Arrow, 1985; Campbell, 1995). Situations with inadequate or asymmetric information about actions are called a variety of analytical names, including principal-agent problems, moral hazard problems, and problems of corruption. Situations with inadequate or asymmetric information about the characteristics of actors are referred to as adverse selection problems or signalling problems.

2.4.2 Public Goods and Free-Riding

Public goods (and services) are those that are consumed jointly by a community where it is difficult to exclude consumption by noncontributors, and one person's consumption does not subtract from the availability of the good to others. In a basic public goods problem, a set of actors, who are all in similar positions, must decide whether or not to take costly actions that generate a net loss for each individual but that produce a net benefit for the affected actors as a group. When the direct benefits to a person providing the public good are less than the benefit derived from it, private effort or investment in producing the good may not be forthcoming. Standard theory holds that public goods will therefore be underproduced. Mancur Olson, for example, pointed out that "unless the number of individuals is quite small, or unless there is coercion or some other device to make individuals act in their common interest, rational self-interested individuals will not act to achieve their common or group interests" (1965: 2, emphasis in original). Not contributing to a joint effort is referred to as "free-riding," as the noncontributor benefits from what others contribute. Of course, if no one contributes, there is no benefit on which to free ride!

When public goods problems are analyzed formally, the following assumptions are normally made:

- All participants have common knowledge about the costs of action and the distribution of benefits.
- Decisions about contributions are made independently frequently simultaneously.
- No external authority is present to enforce potential agreements among actors about their choices.

As shown in Appendix B by Gardner and Waller, when public goods situations are formalized as a game that is finitely repeated with complete information, each actor has a dominant strategy not to provide the public good. Thus, the

predicted outcome is that no one contributes and the public good is not produced (Roberts, 1979). This outcome would be repeated for all iterations. If uncertainty exists about the number of repetitions, formal analysis generates a very large number of potential outcomes including zero contributions as well as full contributions. Unless the participants themselves are able to find ways of reaching enforceable agreements, or external authorities create effective rules, one can expect, however, inefficient provision of most public goods.

National defense is considered the epitome of a public goods problem. The provision and production of order in a *local* community is also a needed public good that exists in all societies. Without effective rules allocating responsibility for provision of public order, no one has an incentive to prepare themselves to defend a local community. If no one provides defense, however, the goods and territory of one community will be taken over by another.

Prior to the creation of modern states in Africa, for example, order and public safety were provided primarily through kinship groups rather than by central public authorities. In traditional times, societies were organized into agegrades and young men were expected to serve as warriors. In other words, service to the community was not voluntary. Each person was expected to take on key activities for their family or for their community depending on their age and decisions made by the elders. Prior to initiation, young men were expected to "first serve as herdsmen for their families. When the young men reach the appointed age, the elders conduct initiation rites in which the youths pass from workers for their families into servants for the tribe" (Bates and Shepsle, 1995: 7).

In those African societies that relied on age-set and kinship organization, public goods problems were thus solved by rules that required everyone to have a community assignment dependent on their age. When the individual became an elder, the level of responsibilities for physical work decreased substantially but their acquired wisdom was called upon. Further, elders now reaped benefits from all of their past service.² Provision of local peace and order in Africa has been difficult to achieve in the last 50 years as institutions – such as the age-set – have been weakened and not effectively replaced by effective police and court systems.

In many contemporary settings, individuals have created for themselves a wide diversity of institutional arrangements that allow them to provide local public goods through various forms of public organization, through voluntary associations, and through informal arrangements that closely approximate those found in the official public sector. However it is done, information about the preferences of potential providers and consumers must be obtained

² Bates and Shepsle develop a formal model of a three-period overlapping generation, public goods provision game. It is interesting to note that Bates (1983) found that the capacity to provide public goods was enhanced with larger group size rather than decreased. By having a larger group, it was possible to pass responsibilities to all members of the group without these responsibilities becoming too overwhelming. This is consistent with the findings of Agrawal and Yadama (1997).

and aggregated via some process that is seen to be fair. For large-scale public goods – such as national defense – national governments are the prime mechanism used to provide (and produce) these goods. Mixed public and private systems are quite frequent for the provision of goods, such as public radio, where government subsidies supplement voluntary contributions made by citizens. When local public goods are made effectively available on a sustainable basis, one usually finds some complex of government and private organizations that have evolved or been self-consciously designed to overcome the perverse incentives that would otherwise lead to underproduction. Thus, without the development of adequate rules governing who will provide what and how the production of the good will be carried out, public goods will be undersupplied.

Donors are frequently asked to fund projects that provide public goods. As we discuss throughout the rest of this report, donors may be able to finance the short-term provision of public goods. All too frequently, however, donor interventions do not address the underlying incentive problems, and thus do not generate sustainable solutions to these problems.

2.4.3 Common-Pool Resource Problems

Similar to public goods, it is hard to exclude potential beneficiaries from the use of common-pool resources. Unlike public goods, however, one person's use does subtract from the resources available to others. Thus, the problem concerning common-pool resources is that without effective institutions, users harvest too much from them. Natural resources such as forests, fisheries, and grazing areas can become overused, congested, and even destroyed.

Humans also create common-pool resources such as the treasuries of a national government or a private firm. Similar tragedies of the commons can occur as increasing demands on limited financial resources can lead to serious irresponsible budgetary behavior. The "harvesters" in this case are bureaucrats, local and national politicians, and interest groups who keep increasing their demands on the recurrent budget by calls for increased investment spending. The government budget is viewed "as a common resource pool which they can dip into with little or no cost" (Campos and Pradhan, 1996: 19). Donor largesse, in some cases, creates an illusion that the fiscal commons is unlimited and subject to few constraints (see Eriksson Skoog, 1998).

Common-pool resources can be overused, congested, and even destroyed. Garrett Hardin (1968) paints a grim picture to characterize the "tragedy of the commons," thought by many observers to occur whenever multiple actors jointly use a single common-pool resource. Hardin's metaphor so dramatically captured the imagination of scholars, activists, and officials, that major policies related to natural resources in developing countries have been based on the presumed helplessness of the users themselves to change the structure of incentives they faced. The Hifadhi Ardhi Dodoma Regional Soil Conservation Project (HADO) in Tanzania was based on a presumption that

the severe erosion in this district was largely the result of overgrazing by a growing population in the area. The project supported the activities of the Ministry of Natural Resources. These included tree planting, construction of bunds, and the "temporary" destocking of all animals in one region in 1979, which was actually continued for many years. No investment was made in helping the "beneficiaries" develop their own more effective rules related to stocking densities. Evaluations of this top-down, national government effort in 1995 questioned the extent of benefits achieved – particularly when one looked at the region to which the livestock population had been moved (see Erikson et al., 1995; Catterson and Lindahl, 1999).³

Field research has, however, identified many common-pool resources where the users of the resource have developed rather effective rules for governing and managing it over time (Bromley et al., 1992; McCay and Acheson, 1987). The particulars of any specific harvesting situation differ dramatically from one location to another and one cannot tell simply from the outside whether a resource is actually being harvested in a sustainable manner or whether overharvesting is occurring. Determining what kinds of problems exist in the use of local resources is of major concern when adopting policies, as it is possible to create new institutions for governing and managing common-pool resources that end up destroying existing systems that have functioned relatively well for long periods of time.

One of the projects that we examine in Chapter 9 is related to developing sustainable forests in Orissa, India. A core part of the problem is helping participants to overcome the incentives they face in common-pool resource problems. Solving forestry problems has become a major activity in the portfolio of Sida and other development agencies. This has become even more important as deforestation is a core problem leading to global warming. In addition to forestry problems, development agencies are coping with helping to improve the governance and management of inshore fisheries, grazing lands, and irrigation systems. It should be pointed out that the basic issues related to natural common-pool resources also relate to common-pools created within organizations. Government budgets are obviously one of the largest common-pool resources of importance in development assistance. The IAD framework helps improve policy analysis by identifying the minimal set of questions that an analyst would need to ask in order to begin an examination of a common-pool resource situation (see E. Ostrom, Gardner, and Walker, 1994; E. Ostrom, Schroeder, and Wynne, 1993).

The capability of individuals to draw on the generally held norms of trust and reciprocity to devise equitable and efficient ways of solving common-pool resource problems is well documented. Sustainable mechanisms for the manage-

³ Ngaido and Kirk (2001) provide an excellent review of the failed efforts of many African countries to solve rangeland problems through centralized interventions as well as the recent paradigm change to radical decentralization, which they argue will also be an inadequate institutional structure for a phenomena that is complex and many layered.

ment of common-pool resources must generate sufficient information on the activities of participants and on the status of the resource itself. The role of public entrepreneurs, who invest time and energy in organizing, is also important and becomes essential once groups move toward a more formal organization (Ueda, 2001). In the field, many contextual factors affect the likelihood of self-organization and its sustainability over time. What is generally agreed upon is that these informal arrangements are relatively fragile under the conditions of rapid change, increases in the number of users of the resource, and environmental degradation. Controlling demands on created common-pool resources – such as common treasuries – requires strong agreement on the limits of the resource and the appropriate rules for limiting use. "Soft" budget constraints – made possible through donor assistance – lead to less, rather than more, responsible behavior (see Eriksson Skoog, 1998).

2.4.4 The Samaritan's Dilemma

Another situation that often occurs in the context of development assistance is the Samaritan's Dilemma, as first analyzed by Buchanan (1977). Bossert (1990) graphically illustrates this problem in regard to donor-supported health projects in Central America and Africa. Eriksson Skoog (1998) vividly describes the soft budget constraints that occur when kind-hearted government officials repeatedly bail out state-owned enterprises who spend more than their budgets. Such help – instead of being viewed by the enterprises in Tanzania and elsewhere as a temporary measure – led to major inefficiencies. "Expectations of bail-out in case of financial trouble weaken incentives to economise on costs, and thus generate resource waste and rigidity within the enterprises" (ibid.: 2).

An actor who is deeply concerned about the well being of others confronts situations in which other actors are in serious need of help. The Samaritan is thus confronted with choosing between helping and not helping. The recipient, on the other hand, has to decide how much effort the recipient will make to help them in this case. If the Samaritan extends help and the recipient exerts high effort, the Samaritan will be benefited substantially as will the recipient – but from the recipient's perspective, they could be even better off if low effort was expended. A formal representation of this dilemma as a two-person game with ordinal payoffs can be represented as:

Figure 2.3: The Samaritan's Dilemma				
	Recipient			
		High Effort	Low Effort	
Samaritan	No Help	2, 2	1, 1	
	Help	4, 3	3, 4	
Source: Adapted from Buchanan (1977: 170).				

Samaritans are faced with the puzzling problem that their dominant strategy is always to extend help. They are better off with this action no matter what the recipient does. However, once the recipient understands that this is the dominant strategy for the Samaritan, the recipient's best response is to expend a low level of effort. Although the Samaritan would prefer the case where help is extended and the recipient puts in effort, real situations that have this structure tend to result in help being extended with low effort being made.

A graphic description of a Samaritan's Dilemma is presented by Ian Fisher, the Nairobi bureau chief for *The New York Times*, in his "Can International Relief Do More Good than Harm?" He tells of interviewing a Nuba rebel leader who describes a trip he made in 1993 to an area in southern Sudan that had been receiving considerable food aid from the United Nations. "The people of the area are great farmers,' he says, 'but because there is this relief food, they did not farm for three years. I could see the difficulty. It was spoiling people. They just sleep and have food. It is very bad" (Fisher, 2001: 74). Fisher goes on to describe the considerable efforts that members of the humanitarian aid community were expending to develop an aid program to provide help to the Nuba without invoking the Samaritan's Dilemma, but doing so is obviously a very challenging task and one that involves giving the Nuba considerable power over making key decisions — or "ownership," as we are using the term in this report.

When analyzed formally, this problem is strictly a "motivational" problem and does not depend on the absence of information or the asymmetry of information. The recipient knows from the structure of the situation that the Samaritan is going to help. The Samaritan knows that the recipient is unlikely to put out high effort. From an external view, the joint situation may be efficient if the payoffs are similar to those chosen by Buchanan since both the lower left and lower right-hand cells are equal in value. The matrix of Figure 2.3 shows the subjective preference ordering of the two players. Most likely, however, the equilibrium outcome of the Samaritan offering help and the recipient undertaking low effort will be inefficient when measured in terms of material well being.

The distribution of benefits, in any case, is skewed to the benefit of the recipient. Moreover, if the situation is repeated – as it often is in the development assistance process – the donor may be creating a situation where the recipient loses skill and motivation over time. Further, so long as the Samaritan is genuinely distressed by the need of the recipient and receives benefits from decreasing the need of the recipient, the recipient is actually in the more powerful position.

This has been a frequent problem in regard to the upkeep of infrastructure constructed with donor assistance. Much of the donor-supported infrastructure has seen rapid destruction due to lack of maintenance. A NORAD staff member interviewed by Catterson and Lindahl reported that "modern power stations can last fifty to sixty years, if limited but constant efforts are made

to maintain them" (1999: 145). In many recipient countries, however, major rehabilitations are needed every ten to fifteen years "mainly since the politicians cannot see the point of putting limited amounts into maintenance over time when, free of charge, they can have a totally rehabilitated or new plant within a few years" (ibid.) Given the values of the donor or Samaritan, this actor has little choice. It is the recipient whose actions make the difference in outcomes from sustainable to nonsustainable. A more sophisticated Samaritan might try to condition their aid on meaningful participation by the recipient. Alternatively, efforts might be made to give the recipient a better sense of joint ownership (see Chapter 1) of a project.

2.4.5 Asymmetric Power Relationships

In many situations, individuals face other actors with greater command over key resources. Thomas Hobbes observed that, "the POWER of a man, to state it universally, is his present means, to obtain some future apparent good" (1651/1994: 56; emphasis in original). Power rests in the capacities and potentials of individuals in "taking actions in arranging present means in appropriate ways to realize future apparent goods" (V. Ostrom, 1997: 92). As such, power may be distributed in a relatively equal manner as is frequently assumed in public good and common-pool resource problems. Frequently, however, power in the sense of "present means to obtain some future apparent good" is distributed in a highly skewed fashion and full information exists about its distribution.

The farmers who are located at the head end of an irrigation system, for example, have considerably more power to affect what happens downstream of their intakes than the farmers who are located at the tail end of an irrigation system. Empirical studies of irrigation systems in Nepal have established that when the headenders utilize a farmer-constructed and managed irrigation system that does not need much maintenance due to its position related to a year-long natural stream or other favorable circumstance, headenders tend to take most of the water and leave only what they cannot use for tailenders (see E. Ostrom and Gardner, 1993). In these cases, tailenders do not make much investment in helping to maintain the system or in high-yield crops that require regular water applications. On the other hand, in similar farmer-managed irrigation systems where the farmers themselves have created rules that require substantial maintenance, tail-end farmers have considerably more bargaining power and can successfully demand a larger share of the water in return for their contribution to the maintenance of the system (see Lam, 1998). These systems tend to produce the highest agricultural yield per hectare.

Many other sources of asymmetric power exist beyond those of location. Most collective-action problems are themselves embedded in the context of a pre-existing distribution of economic and political power. If that distribution is highly unequal, it is likely that the elite have ensured that past decisions have distributed assets disproportionately to them. There are collective-action problems in which the current situation leads to low productivity, but

generates advantages for those with asymmetric power. If they feel threatened by changes that increase the joint outcomes for all, but do not leave the elite in an advantageous position, these individuals may resist any effort to change the distribution of outcomes. They prefer a less productive *status quo* that distributes assets to them in a disproportionate manner to a more equitable and productive change.

2.5 Information Problems at an Operational Level

Until now, we have discussed a variety of problems that stem primarily from the underlying motivation structures of frequently found operational-level collective-action problems. Most models of these situations assume that all parties in the situation have perfect information. When institutional arrangements have not been designed to help the actors counteract these motivational problems, either some or all of the actors are led to take actions that generate undesirable outcomes when evaluated using efficiency, fairness, or sustainability criteria.

Now we will turn to a set of problems that is initially generated due to missing or asymmetric information. Concerning these problems, even if all actors rank joint outcomes in the same order – in other words, the actors are a *team* in the sense that Marschak (1972) introduced this concept – substantial coordination problems result from missing or asymmetric information. Further, missing or asymmetric information creates structures of incentives that produce still further problematic situations referred to as the lack of local knowledge, moral hazard, principal-agent problems, and adverse section (Holmstrom, 1982a, 1982b). Further, the motivational problems discussed in Section 2.4 are more challenging to remedy when missing or asymmetric information is introduced. Thus, we continue our discussion of operational-level problems and focus first on the problem of missing information and, secondly, on asymmetric information.

2.5.1 Missing Information

In a situation with missing information, actors are no longer assumed to know the complete structure of the situation they face. They may be missing information about some of the actions they could take, about the linkages of actions to outcomes, and about material or intrinsic payoffs. We will focus first on situations where there is missing information about the action-outcome tree itself and then about the problem of missing information about the past actions of other actors.

Learning What Works in Particular Settings - Local Knowledge

In solving most public good and common-pool resource problems, considerable local knowledge is required. Friedrich Hayek (1948) long ago recognized a body of important but unorganized knowledge that individuals, each in

their particular circumstance, hold about their own time and place. This knowledge, by its nature, cannot be tabulated and, thus, cannot be made use of to plan an entire economic order. Instead, it stands the best chance of being utilized when humans, working together to solve problems confronting them, relate to each other through institutional arrangements geared to the scope of the problem. Some of the essential local knowledge about the specificities of particular locations and the processes that are likely to occur within them is usually held by participants living in a location over a very long period. For example, farmers who have used a stream to irrigate crops are usually well aware of where the stream crosses solid rock as contrasted to where the stream crosses a long section of sandy and unstable soil. If the engineers designing a donor-funded irrigation project do not learn this information, the canal may wash out after only a few years of operation, as Hilton (2002) graphically describes in regard to donor projects in Nepal.

Such knowledge of time and place contrasts with objective scientific knowledge, which emphasizes the placement of observed regularities within some theoretical context. Hayek (1952) stressed that, given the issue of time-and-place knowledge, methods of scientific analysis appropriate for physical phenomena cannot be uniformly applied without qualification to understand the social-economic nexus.⁴

To build modern, sustainable, engineering works, one needs a combination of scientific and time-and-place knowledge. Depending on how the engineering process is undertaken, one or the other may be missing. If farmers attempt to construct roads suitable for heavy traffic or an irrigation system in difficult terrain, they may not have sufficient scientific and technical knowledge to build a sustainable project. Similarly, engineers who do not obtain reliable information about a local terrain may construct an extremely sophisticated physical infrastructure that is washed out rapidly due to its being placed where the ground is unstable. Incorporating scientific knowledge with local knowledge requires design and implementation strategies that give voice to the technically trained, as well as local, users.

Significant asymmetries of both time-and-place knowledge and scientific knowledge exist in the context of international development cooperation. A central challenge in aid centers on how such scientific knowledge, as marshaled by a central government, an NGO, or a donor, can be introduced within the context of local knowledge of ground realities held by the beneficiaries. The role of local knowledge helps to underscore the importance of recipient ownership of development programs and projects. If those who have extensive local knowledge are truly able to use this knowledge in the design and implementation of projects, then the likelihood of sustainable outcomes is increased.

⁴ Hayek (1952), in his essay "Scientism and the Study of Society," refers to "Scientism" as the uncritical application of the methods, or of the supposed methods, of the natural sciences to problems for which they are not apt.

Establishing Trust through Reliable Monitoring

Where individuals share a norm that reciprocity is an important way of relating to others, they may face a public good or common-pool resource problem in which they would be willing to contribute their share if they trusted the others to do the same.⁵ If the group is small, relatively homogeneous with respect to assets and power, and face-to-face communication is possible, it is highly likely that individuals who share the norm of reciprocity will try to work out arrangements whereby they all contribute "their" share to the common benefit. Developing the agreement is usually relatively easy - working out a way that all who have agreed are assured that others are keeping the agreement is the more challenging problem. Many indigenous groups have successfully solved this problem of building trust. They have either developed mechanisms to make all contributions a matter of public knowledge or developed monitoring arrangements that ensure that those who do not contribute are made known to the others and receive a set of graduated sanctions designed to encourage compliance before imposing a really large sanction. A large sanction is usually held in reserve in case the graduated sanctions that are initially applied do not serve the purpose of establishing compliance (E. Ostrom, 1990).

The bigger the community and/or the larger the relevant terrain, the more important is the development of explicit rules and monitoring mechanisms.⁶ Various mechanisms for rotating use patterns or contribution levels are ways of turning the situation from one of simultaneous choice into one of sequential choice in which information is made available about those who acted first to those who act next.

Many farmer-managed irrigation systems, for example, allocate water according to a spatial and temporal allocation system whereby the farmers who are most directly interested in an appropriate transfer of control over water are sure to be watching each other. No one else needs to be involved. The guarding of some forests and other local resources by local users is sometimes rotated among households on a daily basis. While monitoring, the individual carries some kind of highly identifiable staff or other symbol that identifies that the responsibility for monitoring is carried by the individual. At the end of the monitor's "tour of duty," the monitor then places the staff (or other symbol) at the doorway of the person who is assigned the next duty. This system is a low-cost way of showing that one person has finished their duty and that another person is expected to be carrying out the monitoring responsibility next.

⁵ The problem of trust is not limited just to the provision of public goods and common-pool resources. Havnevik and Hårsmar (2000) conducted a study of rural development in Tanzania in order to examine why the overall increase in economic growth rates was not reflected in improved living conditions among most rural residents. They pointed to uncertainty and lack of trust, which they posited as "a serious hindrance to market development in rural Tanzania" (ibid.: 84).

⁶ These explicit rules may not be written. If not in written form, they are transmitted through rituals, songs, poems, and other means.

These indigenous systems may operate smoothly for long periods with no outsiders knowing how they work. The sustainability of many of these systems, however, has been severely threatened during the last half of the twentieth century as a result of the general acceptance among policymakers and policy analysts that public good and common-pool resource problems pervaded local life and that individuals were not able to solve these problems themselves. Hobbes's earlier logic of Leviathan was reinforced by the extensive analytical literature stimulated by the pathbreaking analyses of Mancur Olson and Garrett Hardin discussed above. Many governments in developing countries were strongly advised to nationalize the ownership of all natural resources and to develop rules strictly limiting who was allowed to use these resources (see Arnold and Campbell, 1986; Wunsch and Olowu, 1995). Many of these efforts were backed with donor funding.

These changes had the unintended consequences of undermining locally evolved, indigenous institutions. Local users were told that they were neither the owners nor the stewards of these resources and that they could not legally use these resources anymore (Arnold and Campbell, 1986). Further, this style of centralized management opened the possibility of national governments entering into contractual agreements with commercial firms to extract timber and other resources in a relatively high volume in order to gain revenue. Tragically, some of that revenue did not go into public coffers and landed instead inside the private Swiss bank accounts of high government officials. Further, local users saw that outsiders were being given the legal right to harvest resources in an unsustainable manner and thus, any effort on their part to continue their conservative practices based on a long-term view of their continued use of the resources would be wasted. Others would gain the benefit of any conservative practices that users adopted. These changes led, in many cases, to long-established local regimes falling apart (for examples, see Singh, 1994). By ignoring indigenous institutions that were well grounded in local time and space information, donors have inadvertently contributed to the loss of both valuable institutions and resources.

2.5.2 Asymmetric Information about Actions

Many frequently encountered situations involve actors holding asymmetric information of one kind or another. The importance of analyzing situations with asymmetric information was recognized by the award of the Nobel Prize in Economics to George A. Akerlof, A. Michael Spence, and Joseph E. Stiglitz for their groundbreaking work on asymmetric information. A common type of asymmetry involves an actor knowing his or her own actions but interacting with others who do not fully know the actions that the first actor has or has not taken. Asymmetric information about actions characterizes a series of problems referred to as *moral hazard*. Originally analyzed in regard to insurance problems, moral hazard problems are found whenever an actor is protected against risk partly resulting from the actor's own actions. Another common situation with asymmetric information is called a *principal-agent* problem. Princi-

pal-agent problems are found whenever a work team is organized in a hierarchical fashion, or when a principal cannot know all of the actions that someone they hire as their agent is undertaking. Moral hazard problems can occur within the context of a principal-agent structure of relationships.

Moral Hazard

Moral hazard problems exist in a wide variety of settings where individuals are guaranteed a benefit or protected against loss once an initial contract has been entered, regardless of whether they take the proper level of effort to realize the benefit or avoid the loss. 7 Moral hazard problems have traditionally been associated with the difficulty of developing effective insurance institutions. At least some individuals are more likely to be careless after they have been insured for fire loss, accident loss, or any other risk that has both an unpredictable, contextual cause (such as floods or fires) as well as being the result of the future actions of the actor (such as not repairing a drainage system or leaving incendiary materials in a garage). Whether the actor deliberately refuses to perform these costly actions, or whether he or she is simply negligent, is not at issue. The crucial problem is that, at the time of gaining future protection, the individual promises to take preventive action. These actions are not easy for the external protector to observe. Since the actions are costly and the actor is now protected, the protection itself may reduce the likelihood that the actor takes preventive actions.

The term *moral hazard* has come to be the general term used for hidden action problems (see Campbell, 1995). The most dramatic example of a moral hazard problem is the father who commits suicide after buying a very large insurance policy to endow his wife and family with a substantial nest egg. Most contemporary life insurance contracts specifically release an insurance firm from an obligation to pay the amount specified in the contract if it is found that the death is a result of suicide. Suicidal deaths, however, are not always easy to detect.

The attempt to provide low-cost health insurance plans for a large group is riddled with moral hazard problems. Health problems are caused both by unpredictable events over which an individual actor has no control and by individual actions. Individuals who are insured may not take as many precautionary efforts as they would otherwise. In addition, they may opt for costly benefits even if they do not personally benefit more from receiving these benefits than their cost to the insurance company. Individuals are somewhat notorious for drawing on insurance payments to cover costs that may not really be worth the funds expended. Since the actor does not have to pay for the benefits, and however, without much thought about the consequences, individuals obtain insurance benefits that spread the costs to others (Cutler, 1994). One of the remedies for moral hazard problems is to be sure that indi-

⁷ These problems are sometimes referred to as "post-contractual opportunism."

vidual actors bear at least some proportion of the cost of their actions. Thus, the advantage that insurance brings of sharing risk among a larger population can be obtained. At the same time, the individual recognizes that there are costs to their actions and may not take excessive advantage of "opportunities" that appear to be totally free.⁸

In a developing country context, some efforts to help shield farmers from the adversity of weather or major drops in agricultural commodity prices are a way of helping to spread risk and provide important benefits for poor farmers. Trying to devise agricultural insurance schemes that reduce the problems of moral hazard, however, is extremely difficult. An even larger moral hazard problem can occur when governments take costly actions at one time period to reform their institutions in order to reduce the risk of future economic and political failures. Governments receiving large sums of donor financial aid may make solemn promises to reform their own institutions, but may avoid following through for long periods. "The indiscriminate availability of aid creates a moral hazard, where aid availability, by 'insuring' incompetent governments from the results of their actions, allows governments to postpone reform efforts and weakens their incentive to find alternative revenue sources" (Bräutigam, 2000: 24).

Principal-Agent Situations

Much of productive life is organized in hierarchies in which individuals in decision situations are arrayed in a series of superior-subordinate positions. All IDAs and other government agencies involved in development assistance tend to be organized hierarchically, even when there is a sincere effort to reduce the number of levels in the hierarchy, as there is with Sida. In relatively naive models of hierarchy, the assumption is made that superiors know best how to accomplish a task and have sufficient information so as to monitor the performance of subordinates to get that task done effectively (see Wittman, 1995).

In an idealized bureaucracy, the superior defines the work; determines how, when, and where the subordinate is to do the work; measures performance; and expects that the subordinate will pursue the tasks as defined by the superior. Implicitly, the assumption is made that the superior can know what the subordinate has done and can thus reward a well-performing subordinate more effectively than a poorly performing subordinate. Little attention is paid to the incentive structure for the subordinate, the information conditions of the superior, and why the system should work smoothly. This is the theory

⁸ Campbell (1995: 339) points to an interesting example of the use of small fees to reduce moral hazard problems in Canada. "In 1992 Quebec introduced a \$1.60 charge per prescription for residents over sixty-five. This group had been receiving free medicine. The fee was expected to save the province \$16 million a year, but the annual savings have been closer to \$40 million. A resident who had been customarily getting refills 'just in case' would now wait until it was clear that the medication was needed – and so on."

⁹ Eriksson Skoog (1998) provides a detailed analysis of this problem in regard to Tanzania between 1967–1992.

that underlies the recommendations repeatedly made to developing countries, until quite recently, that they should adopt highly centralized national governments in order to build an effective nation (for a description and critique, see V. Ostrom, 1999; Wunsch, 2000).

Analytical work in the political-economy tradition, on the other hand, has stressed that all hierarchies are riddled with problems derived from asymmetric information and the possibilities for moral hazard to occur (Alchian and Demsetz, 1972; Tirole, 1986). All hierarchies involve delegated authority to agents who may have their own separate goals. Aid organizations and the governments with which they work confront the full range of problems associated with principal-agent relationships, as is well documented by Gauthier (1990) in regard to the World Bank.

In a principal-agent relationship, the principal is the individual (or the representative for an organized set of individuals) who benefits from the outcomes achieved while the agent is offered a contract to take the appropriate actions to achieve these benefits. The principal receives value from outcomes that are affected by the actions taken by an agent who is delegated authority to take actions on behalf of the principal. The principal has coarser information than the agent who knows specifically what actions the agent has taken (Rasmusen, 1989).

The simplest example of an isolated principal-agent situation occurs when an individual consults a doctor or a lawyer. The individual is the principal who is asking an agent for professional services to increase the principal's welfare. The individual, however, does not have a guarantee that the professional will thoroughly consider their interest and provide them the best service. One of the mechanisms used around the world to reduce the difficulties in principal-agent problems of this sort is to create professional associations that monitor the performance of their own members. It is in the interest of the professionals to be able to claim higher reliability in serving the interest of their clients by having adopted a professional code and being a member of a professional association. Obviously being able to bring suits for malpractice is another mechanism available to principals who do not feel they have been well served. These protections are weak to nonexistent among many recipient countries and principal-agent problems are rife in doctor-patient relationships (Narayan, 2000).

While there are many principal-agent problems involving only two individuals, many principal-agent relationships are linked in a full chain from the head of an organization all the way through a series of superior-subordinate relationships to the lowest-ranked agent. Within a firm or public agency, the bosses are the principals and the workers are the agents. They are linked in a series of principal-agent relationships. In this view of hierarchical relationships, the agent is posited to have their own utility function as well as better information. Both assumptions were missing in the traditional model of bureaucracy. The agent's utility function typically varies from that of the principal. In particular, agents may wish to take actions that are less costly than

others. Such actions might be preferred by the principal. However, the principal cannot know of all the actions that his or her agent performs.

In linked principal-agent relationships, not only is there an incentive problem but one has an ever-increasing problem of missing information and of asymmetric information. Because the subordinate is unable to tell the superior everything known by the subordinate to be happening in such a situation, there is always a reduction in the level of information passed along to superiors. If information is passed through a chain of five, seven, or more links, the amount of information held by those at the very top will be, of necessity, a very small proportion of the information known to those at the bottom (Williamson, 1967, 1973). If this information transmission was simply an unbiased reduction in information, it would be difficult enough. However, subordinates have a distinct incentive to pass information favorable to their own performance on to superiors and to withhold information that might place them in a bad light. Thus, those at the very top have received not only extremely limited information but also biased information. Of course, institutions can be designed to counteract at least some of these problems. Dictators, for example, often establish multiple organizations focusing on different aspects of internal security so that biased information provided by one can be compared to the other. Each set of agents can counteract the other to some extent. Still, these information problems bedevil any effort at autocratic rule.

The problem of motivating employees is found in all organizations, whether they are located in the private or public sphere. The problem may be reduced to some extent in private firms since agents may be made poignantly aware of the link between their actions and the profitability of the firm — especially in small firms. In large private firms, however, the contribution of any one employee is not as clearly linked to profit as it is in a small firm with only a few staff members. To counteract the perverse temptations to shirk (or, worse, to redirect the principal's resources to be used by the agent for private gain), large private firms offer employees a variety of incentive or performance contracts.

Examples of the types of contracts intended to induce appropriate work-effort include those that try to link pay directly to output such as paying production workers on a piece-work basis, paying salesmen a commission for the sales they make, and paying a bonus to workers at the end of the year based on the profits a firm makes (see Milgrom and Roberts, 1992). Entry-level staff members may be motivated to work hard by the promise of promotions to positions with more responsibility, status, and pay based on performance. Private firms sometimes are known to pay their workers above the going wage for the work they do in an effort to increase the importance to the worker of doing a good job and avoiding being fired. Offering stock options to employees is a particularly effective means of aligning the interests of employer and employee.

Given the complexity of work assignments, even in the private sector, no complete contract can be written covering all exigencies and specifying what will happen to the agent under each circumstance (Grossman and Hart, 1986). The

usefulness and effectiveness of contracts depend on the existence of a fair and effective court system to enforce contract agreement if disagreements occur. Private firms rely heavily on developing good morale and personal relationships so that the intrinsic motivation of their staff is tied to the performance of the firm. Private firms also invest in a host of monitoring efforts related to staff activities as well as being monitored by their ultimate principals – the stockholders – through a variety of accounting and auditing practices.

While creating professional associations to change the internal valuation placed on effort by agents and developing incentive-enhancing contracts to reward employees reduces the problem of moral hazard in the private sector, counteracting the problems resulting from asymmetric information in public bureaucracies is much more difficult. Public agencies are usually charged with a variety of objectives that are difficult to measure and, thus, the linkage between the entire agency's activities and outcomes is difficult to ascertain, let alone any one staff member's contribution (Tirole, 1994). The kind of contracts that can be offered to employees in a government agency is also much more limited. In developing countries, the pay of public employees is frequently much less than the competitive wage – offset by a promise of a relatively long-term contract. It is difficult to fire a government worker in many countries without going through a long and complicated process. While citizen organizations are able to monitor some aspects of the work of street-level public servants, the work of most public employees is carried out far from public view. While schools of public administration stress the professional nature of public service, no professional association has taken on as strong and active a role related to the public officials in any country, as have associations of medical doctors and lawyers.

The combination of low pay and long-term employment exacerbates the severity of moral hazard problems faced in public bureaucracies, particularly in developing countries. Employees may devote their working time to a wide diversity of private activities including running their own private businesses. Where the "privatization" of a public office has gone so far as to be bought and sold, as described by Wade (1985, 1989) in India, employees must find ways of gaining private returns in order to make their investment in obtaining a position worthwhile. Instead of merely shirking, agents who have invested heavily in obtaining a public position must find frequent opportunities to obtain side payments from citizens wishing to obtain a license and from individuals who are suspected of committing a crime.

2.5.3 Asymmetric Information about Characteristics

Actors' characteristics, in addition to their actions, can be private information. As analysts begin to develop models of situations where there are multiple types of actors – rather than a single type, which has characterized much of the political economy literature until very recently – a core question arises as to the difference this asymmetric information makes in the incentives facing individuals and its impact on outcomes.

Adverse Selection

An adverse selection problem occurs when an individual knows their own characteristics – has private information – but others do not share this private information. The individual may have private knowledge about an object that the individual would like to sell (Akerlof, 1970) or about his or her own skills as a worker (Spence, 1973). Adverse selection explains why it is so difficult to devise a sustainable, private health insurance or unemployment insurance scheme. Individuals know their own characteristics in terms of the state of their health and the likelihood of their working skills being inadequate to survive changes in the market.

At whatever cost an insurance company must charge in order to make an insurance scheme profitable, those least likely to need the insurance are the most likely to opt out of the system. That makes the pool of individuals remaining in the insurance scheme to be a pool that is even more likely to incur sickness or unemployment. The rates must then increase. This leads again to a dropout of the individuals who are least likely to draw on the insurance scheme at the new price. Over time, the cost of the scheme becomes ever higher and those that remain are the most likely to draw on benefits. A private market unravels when faced with an adverse selection problem. Putting the insurance scheme in the public sector may solve the adverse selection problem – by greatly expanding the pool of insured to include healthier, as well as less healthy individuals, but it may not solve the moral hazard problem.

Thus, at a general level, adverse selection processes occur when selection of beneficiaries or future employees is a nonrandom process that tends to select for the least-productive individuals. It can occur whenever a government tries to protect a population from risk. In the banking industry, for example, a government providing a guarantee for savings deposited in a bank may attract entrepreneurs seeking loans that are more risky than most. The entrepreneurs know their own characteristics, but it is hard work for a bank official to ascertain the risk associated with a project. With their deposits guaranteed, bank staff may not exert as much effort, and riskier and riskier projects may be proposed (see Romer and Weingast, 1991). In the United States, the Savings and Loan crisis of the 1970s and 1980s was the result of an adverse selection process through which the actors with the characteristics that were least beneficial to the economy and society were the ones selected (see Campbell, 1995: 86–90). Similar processes occur in the selection of development projects when donors do not appear to be willing to insist on the repayment of loans.

Signalling Problems

The private information that is held by individuals and leads to adverse selection problems may be discovered by others involved in an ongoing situation at some cost. Before hiring a new employee, for example, firms try to obtain relevant information about education, skills, and past work performance. Some of this may be acquired by testing and the rest by various screening processes. This

information, however, is always an imperfect indicator of the quality of a future staff member. This is a particularly puzzling problem for agencies working in recipient countries that want to hire local staff members. How excellence is signalled in one culture may differ substantially from the signals that an individual would use in another culture. It is even a puzzling problem for how staff members within an IDA itself signal their skills to superiors. ¹⁰ If they are too overt in trying to show their skills, other staff members may resent their efforts to make their accomplishments known. If they are too humble, they may be overlooked when a promotion opportunity occurs.

One signalling strategy that has been mentioned in the literature is how beggars "signal" that they are in great need by heavily bandaging themselves. The signal of heavy debt by a recipient country is a confusing signal. It can genuinely reflect substantial economic need. Alternatively, some development scholars have puzzled as to whether it instead signals an effort to attract sympathy in a similar way as some beggars try to mobilize sympathy.

Another example used in the literature is how agents may signal principals that they are talented by obtaining a higher level of educational attainment. In this case, educational achievement "signals" to a prospective employer that the individual is a "high quality" worker. Signalling may or may not solve the problem of discerning private characteristics. Signalling works under two conditions.

First, the level of education that is taken as signalling high productivity must be such that the low-productivity workers are unwilling or unable to attain it, even if by acquiring more education they could mislead employers into thinking that their own productivity was high and be paid accordingly. If this *self-selection* constraint were not met, then the low-productivity workers would obtain as much education as high-ability workers, and the education signal would convey no information. The second condition is that failure to obtain the particular level of education should accurately signal that the person is not highly productive; it should not be the preferred choice of highly productive workers. This is a second self-selection constraint. (Milgrom and Roberts, 1992: 155; emphasis in original)

Thus, the action taken as a signal must make a clear separation between the two groups. In this example, obtaining a higher education must be cheaper for the high-productivity workers than for others. This makes the signal credible. If formal educational degrees can be obtained through processes other

¹⁰ The "career concerns" models of Holmstrom (1982a, 1982b) and the multi-task model of Holmstrom and Milgrom (1991) examine what happens when agents are motivated more by the hope of demonstrating their abilities than by immediate monetary rewards. As Seabright (forthcoming: 29) argues, the strategic selection of which tasks to do and how to do them "is particularly applicable to the case of aid agencies whose staff tend to be salaried rather than paid in a manner directly linked to ostensible performance." Convincing superiors that work is outstanding leads to an input bias – which is more easily monitored – as contrasted to focusing on outcomes such as sustainability – which is far more difficult to monitor.

than hard work, however, this form of certification may not convey much information and employers must invest more heavily in screening mechanisms. If the costs of screening are excessive and few reliable signals are available, these problems of asymmetric information may reduce the level of private investment in an economy and retard the rate of economic growth.

2.6 Overcoming Operational-Level Problems

If there are so many operational-level problems, how is it that individuals living in developed countries are able to get anything done? No simple answer can be given to this question. Underlying most answers is the fact that individuals living in developed countries frequently have a much greater capability to self-organize and to solve motivational and information problems themselves than similar individuals living in many recipient countries. By relying on family, kin, and friends, individuals in developing countries are able to undertake a wide variety of small-scale activities that enhance their economic well-being. These arrangements, however, are frequently limited to the "informal sector" and to relatively small-scale enterprises. As Hernando de Soto (2000: 153) expresses it:

Nearly every developing and former communist nation has a formal property system. The problem is that most citizens cannot gain access to it. . . . Their only alternative . . . is to retreat with their assets into the extralegal sector where they can live and do business – but without ever being able to convert their assets into capital.

Thus, understanding the range of situations that occur in all societies and learning how they may be successfully structured in some settings and not in others is a key problem for all agencies interested in development assistance. Achieving increasing economic productivity and poverty reduction requires helping those involved and their political leaders change the structure of the situations they face so that motivation and information problems are effectively counteracted.

In light of the analysis presented in this chapter, we would recommend that in the design phase of development assistance programs, that questions like the following be asked:

- What underlying collective-action problem(s) do beneficiaries face?
 - Is it a public good problem/free-rider problem/tragedy of the commons problem?
 - What are the basic incentive problems facing beneficiaries at an operational level? Motivational? Missing information? Asymmetric information? Other?
 - What are the developmental implications of this collective-action failure?

- What rules or norms have been used in this cultural tradition in the past that may be the source of modern rules that resonate with beneficiaries as fair and can be understood easily?
- Are needed institutions missing or weak, or are perverse institutions in place?
- Would a modification in rules affecting this underlying problem be threatening to the power elite of this country?
- In what ways have previous aid interventions altered similar collectiveaction problems?
 - Did development assistance abet or exacerbate power or information asymmetries or adverse selection?
 - What ownership attributes do the targeted beneficiaries possess?
 - Have aid interventions affected the capacity of the beneficiary group to address the collective-action failure?
 - Have they exacerbated existing perverse incentive structures?
- What are the implications for sustainability?
 - How will the underlying collective-action problems be addressed by a planned future aid project or program?
 - Who will be the owners of this intervention?
 - Given the roles of the beneficiaries, contractors, Sida personnel, recipient government officials, are the prospects for an appropriate solution to the underlying collective-action problem enhanced or reduced?

Chapter 3

Changing Operational Rules in Policy Situations: What are the Incentives?

Summary

When embedded in an open realm that has an effective property-rights system and an accessible and fair court system, individuals can build trusting relationships that enable them to increase the benefits that they can jointly obtain. In aid-recipient countries, however, such institutions are often missing, weak, or bad. These institutional realities frustrate the realization of positive outcomes at the operational level. While changing the rules structured at the policy making or constitutional level may improve joint outcomes substantially, perverse incentive structures at the policy making and constitutional-choice arenas can make it difficult to create the environment that facilitates solutions to prevailing problems of development.

Citizens in developed countries frequently engage in ongoing efforts to improve performance by changing the rules-in-use. In developing countries, by contrast, motivational and informational problems at the policy-making level often inhibit the resolution of unproductive operational outcomes through changes in the rules-in-use.

3.1 Trying to Change Unproductive Situations in Recipient Countries

Where do the unproductive collective-action situations in recipient countries described in Chapter 2 come from in the first place? Most situations that regularly lead participants to generate suboptimal outcomes are rooted in (1) particular configurations of the underlying material or physical events (the "nature of the goods" involved); (2) the specific sets of rules-in-use affecting the structure of the situations (number of participants, their actions, information, outcomes, payoffs, etc.); and (3) the broader community's understandings about the appropriate way to relate to other members of diverse groups. Thus, to change the structure of these situations and resulting out-

comes requires either a change in the context or direct modification in the action situation (by changing the specific actors, for example). Few of these changes are "quick fixes" that can be imposed from the outside without the active agreement and informed participation of those involved. Since it is hard to change the nature of the goods or the attributes of a community, most efforts by participants or by external public authorities to improve the outcomes of operational situations involve efforts to change the rules affecting these situations.

In seeking solutions to problems of collective-action, participants, policy-makers, and those involved in development assistance all face three general types of possible difficulties. First, the solution may not work or may even backfire; second, a clear solution may exist but is politically unpalatable; and third, the solution itself remains elusive.

Actors faced with problematic situations often craft institutions as a way to deal with them. Sometimes, however, these rules themselves generate unintended incentives, leading to perverse results. Some putative problem solutions can themselves trigger dysfunctional processes where, for example, a few benefit at the expense of many others. Those who favor strong state intervention to cure unproductive interactive situations sometimes find that such "solutions" only lead the problem to re-emerge, making this state-centered approach ephemeral.

In some cases, the solution technology is well-known but not adopted. This happens when decision makers fear the loss of substantial personal benefits by making the change, or find that they need to take a grossly unpopular action detrimental to their own well-being. Take, for instance, the case where a donor constructs large-scale, power-generating facilities in a developing country (as we describe in more depth in Chapter 9). Upon a project's initiation, recipient country politicians face few incentives to price electricity so that it covers the operation, maintenance, and replacement of these facilities over the long run. In the early days of a project, the facilities run well, industry is stimulated by the availability of power, and low-cost access to power by the urban poor is immensely popular. As time progresses, however, power failures become increasingly frequent due to the inadequate maintenance, repair, and re-investment. The benefits of the earlier investment prove not to be sustainable given the pricing policies adopted by the recipient governments.

Here, the "solution" to the problem of an unsustainable power industry is relatively well understood. The consumption of power needs to be metered. Users need to be charged for the amount of power they use so that they consume power efficiently, and so that both the marginal and fixed costs of producing electricity are covered. The "solution" involves "getting the prices right." However, in cases where users have been subsidized for a long period of time — and when the economy does not generate a high standard of living in any case — users of electricity strongly resist any effort to "get the prices right." Further, as long as an external donor is willing to provide new funds to rebuild and refurbish power facilities (or, in other words, faces a Samaritan's

Dilemma as described in Chapter 2), national leaders face high costs and few immediate benefits from changing their policies.

The difficult questions in resolving inadequate pricing arrangements concern how to get broad agreement supporting a well-known solution and how to determine who pays what part of the costs. Only after this issue has been sorted out should donors intervene in the problem situation. In this way, the donor can implement long-term improvement through the process by which it selects projects for funding.

In the third set of problems, solutions may be less obvious either to the analyst or to a decision maker. An example: Designing institutions so that forest users are sufficiently motivated to undertake sustainable resource management in regard to harvesting, biodiversity protection, and other ecosystem services is a challenging task. Many of the benefits occur multiple decades into the future, and many of the beneficiaries are located far from the site of a forest. How distant beneficiaries (in time and place) can be involved in providing these benefits so that local users can overcome the immediate dilemmas they face is an extremely challenging problem of institutional design. Considerable controversy currently exists regarding the most appropriate mix of rules and of public and private organizations most likely to accomplish these difficult objectives in diverse types of ecological systems (see Gibson, McKean, and Ostrom, 2000).

3.2 The Problem of Weak or Bad Institutions

In countries with a high per capita gross national product, development has occurred because many of these basic problematic situations are reduced in magnitude and frequency by a broad set of institutional arrangements that facilitate a wide diversity of enforceable contractual arrangements (North, 1990, 1994). When embedded in an open public realm with an effective property-rights system and an available, fair court system, individuals can build trusting relationships that enable them to increase the benefits that they can jointly obtain. When trustworthy behavior and a reputation for being fair and honest can make a difference in long-run opportunities for individuals, strong cultural norms reinforcing these behaviors are likely to grow and develop over time.

Thus, beneath the plethora of counterproductive situations, found in countries receiving large quantities of international assistance funds, are either missing, weak, or bad institutions. In countries with missing institutions, individuals facing basic problems must deal primarily with their own family and networks of friends and neighbors to solve some of these basic problems. Pockets of highly productive and ingenious solutions to some of these problems can be found based, in part, on adapting institutions already in place. However, these solutions are limited in scope and time.

In countries with weak or bad institutions, there may be an extensive public sector with many formal laws about how one should go about solving some of these problems. Tragically, these rules may be used against those who are trying to create productive opportunities for themselves and others. Public servants are underpaid and resort to obtaining additional funds from side-payments extracted from citizens needing official approval for some actions. In addition, the more steps there are in the legal process, the more opportunities exist for citizens to become discouraged (and for public officials to extract still more side-payments). As an extreme example of this problem, de Soto (2000: 192–93) documents the 728 bureaucratic steps required by the City of Lima for a resident to obtain a legal title to a home in a validated housing settlement.¹

Why are institutions sometimes bad, weak, or nonexistent? Changing the rules used at an operational level may improve joint outcomes substantially. However, if the incentives are perverse in the collective-choice arena, then it will be difficult to create policies (collective choices) that facilitate the solution to these problems rather than to making them worse. Here, we again find basic problems resulting from motivational and informational sources. Informational problems may be especially difficult given the uncertainties associated with major institutional changes.

When rules are to be enforced by public authority, some individuals have an incentive to propose rules that give them advantages over others. Profits greater than those that would be available from an open, competitive process are referred to as rent; the process of seeking rules to give these advantages is referred to as rent-seeking behavior. Successful rent-seeking strategies may lead to very substantial costs being imposed on others. Those who have been successful in the past in obtaining privileges may then become entrenched in a patron-client system whereby the elite keep themselves in an advantaged system by distributing rents to their clients in return for their support. Reaching agreement on an appropriate change in rules and then monitoring and enforcing those rules in an efficient, fair, and open manner is thus an extremely challenging task in and of itself at a collective-choice level. It may require definition of new positions of authority and ensuring that actors in these new positions face appropriate incentives and have sufficient information to act wisely. Making these changes sustainable over time is an even more challenging task.

¹De Soto also clocked the amount of time that it takes a typical entrepreneur in Lima to get through all of the legal steps required to set up a sewing machine garment factory in Lima. "We discovered that to become legal took more than 300 days, working six hours a day. The cost: thirty-two times the monthly minimum wage" (2000: 189).

3.3 The Collective-Choice Level

Many operational-level collective-action problems are solved through informal face-to-face discussions that do not change the rules-in-use but, rather, enable the participants to agree upon coordinated strategies and develop shared norms. Coordinated strategies and shared norms are not sufficient, however, to solve all collective-action problems. Participants or their representatives need to consider alternative entry, position, scope, authority, control, information, or payoff rules. The distribution of authority to engage in collective-choice arenas varies dramatically across countries, within countries, and by type of problem faced. When the problem is (1) relatively local and the group affected is within a private firm, (2) distinctly related to a resource, or (3) related to those living within a particular neighborhood, it is possible for many of those who are affected to participate directly in considering changes in the rules-in-use.

How the authority to engage in collective-choice arenas is distributed within a country is itself the result of decisions made in many national, regional, and local constitutional-choice arenas whose decisions affect the rules that will be used in collective-choice arenas. Constitutions are sometimes viewed as the written document called "the Constitution" for an entire nation. This document is indeed an important source of rules to be used at the collective-choice level. Even so, many other decisions and documents are part of the living constitution within any particular country. In addition, many smaller constitutions are created every day in a dynamic political economy. We will not focus in this report on constitutional-choice arenas. Many of the issues that we discuss below characterize constitutional-choice arenas as well as collective-choice arenas. Limited time and space do not allow us to undertake a separate analysis at this level.²

The charter for a NGO organized in order to receive contracts from bilateral and multilateral donors (sometimes formally drafted by a lawyer and filed with an authority, and sometimes hammered out by the founders of the firm without being put to paper) is one example for how collective-choice arenas are created. How will the chief executive be selected and how will the authority of this position concern future policy choices (collective choices) for the firm? What type of development work will be sought after? If a union is recognized, what decisions must be made in bargaining sessions with the union and what decisions must be made by management alone?

Users of a natural resource may have a written document outlining how future collective choices will be made. Alternatively, common agreement about how these decisions should be made may have long-standing provenance (see

² Constitutional processes, however, have received considerably more attention since the influential *Calculus of Consent* by Buchanan and Tullock (1962). The journal *Constitutional Political Economy* contains important contemporary work on this level of analysis.

Lansing, 1991).³ Neighborhood associations sometimes have charters that assign them authority very similar to that of a small local government. Local users of natural resources frequently exercise considerable constraint in how they use these resources when they have a sense of ownership. The question of whether the participants have the formal authority to engage in collective-choice decisions is important to the stability of their decisions, but not necessarily critical to whether they create new rules and enforce them entirely themselves.

Recent events in Uttaranchal in India illustrate how constitutional rules may themselves change rapidly and without the consent of the participants affected. Under colonial rule, residents of the districts of Garhwal and Kumaon vigorously protested British efforts to exercise authority over harvesting from local forests. After a long siege of protests including the burning of thousands of hectares of forests by local peoples, *van panchayats* (forest village councils) were authorized in the 1930s to enable local residents to make their own rules about harvest practices. Much to the surprise of the British and, more recently, Indian Forest Officials, many of the van panchayats have exercised their powers to pass rules that have led to substantial regrowth of forests in the region as well as important economic returns to local communities (see Agrawal and Yadama, 1997; Agrawal, 2001).

In spite of the noteworthy success of a large proportion of the van panchayats to manage their own resources successfully, the State forest department effectively changed the constitution of van panchayats by passing an amendment to the van panchayat rules that had originally been established in 1931 and amended in 1976. This change in the *constitution* of local communities was undertaken by a *legislative* act for the state of Uttaranchal without consultation or agreement by local communities. As reported by Nitin Sethi (2001: 17):

Alive to the fact that forests are the cash cow of the state, the forest department (FD) has wrested control of VPs in one fell swoop. All it needed to do was change the rules of the game (read: amend the law) to take *de facto* charge of the forest village councils. In doing so, the government has deprived the villagers of the only forum that empowered them to manage their ecological wealth.

And now, as the people begin to realize the ramifications of the surreptitious move, the resentment brewing among them is threatening to snowball into a statewide agitation.

Thus, the exercise of asymmetric power by forest officials has led to a dramatic change in the authority of local users over what they have considered to be their own resources. If this change is allowed to stand over time, one can expect that forest users will stop treating these forests as their own property and begin to harvest from them heavily or to burn them once again in protest.

³ Farmers who have shared irrigation works in eastern Spain or have used alpine pastures in Switzerland, for example, have written charters that date back multiple centuries (see E. Ostrom, 1990).

Thus, when the collective-choice arena is a formal governmental body, not only do officials and citizens face problems due to missing and asymmetric information, but also opportunities exist for imposing costs on citizens rather than just solving problems. When collective-choice arenas are embedded in an open public economy and substantial discourse occurs among citizens as to the sources of problems and likely solutions, information is exchanged between and among citizens and their officials to increase the level of information possessed by all. An open public realm and the existence of substantial public discourse can help to create an informed public that is more likely to hold public officials accountable, at least in regard to domestic policies. (The much more difficult problem of holding public officials accountable in regard to a donor country's policies regarding development assistance is discussed in Chapter 7.)

3.4 Motivational Problems at a Collective-Choice Level

As discussed in Chapter 2, development agencies trying to understand where and when projects and programs can lead to sustainable outcomes must understand the motivational and informational problems that beneficiaries face at an operational level. It is also essential to understand similar motivational and informational problems at a collective-choice (or policy) level in recipient countries. Otherwise, a naive assumption is made that better collective choices will come about once recipient countries are democratic in structure. While democratic institutions have the potential of opening governmental processes to greater voice by beneficiaries, they are not a guarantee that collective-choice processes will select rules that enhance the productivity of the general citizens of a country. Let us briefly examine why.

3.4.1 Rules as Public Goods

The benefit of new or reformed rules to govern an operational situation is itself a public good for the set of actors involved. (The use of a rule by one person does not subtract from the availability of the rule for others, and all actors in the situation receive the benefit in future rounds regardless of whether they spent any time and effort trying to devise new rules.) Thus, devising new rules is a second-order, public good problem. Even when the actors who are directly involved have the authority to make their own collective-choice rules, one cannot automatically presume that they will invest in this costly effort (all those meetings!) and reach agreement on a new set of rules that improves their joint outcomes.

Factors that affect the likelihood of individuals solving public good problems at an operational level also affect the likelihood of establishing revised rules to help reduce perverse incentives at the operational level. Public entrepreneurs play a particularly important role by investing time and energy exploring the advantages and costs of diverse rules, and the possibility of their holding a formal, compensated leadership position in the future affects the likelihood of their willingness to invest resources in these costly transactions (Ueda, 2001). Actors who have interacted with one another over a long time period and expect to continue these interactions far into the future – in other words, they do not discount the future heavily – are more likely to invest in the time and effort it takes to propose, discuss, argue, and eventually reach an agreement on a new or revised set of rules than those who have not yet established reputations with one another. In such settings, rules can be changed, actors can watch what happens, they can then change the rules in light of experience and eventually find a relatively good fit to the problem at hand (see discussion of this process in E. Ostrom, 1990). Groups that are able to communicate with others facing similar problems and learn from their successes and failures are able to learn a larger repertoire.

Rules may be public goods, but they also have distributional consequences in the operational-level arenas created by rules and other contextual variables. Such consequences do not go unnoticed. This complicates the design of new institutions greatly (Knight, 1992).

3.4.2 Rent-Seeking

Another motivational problem that may delay the achievement of sustainable economic development in recipient countries is rent-seeking by those who are better connected to governmental authorities.

Rents are returns to activities that cannot be competed away in an open competitive process. In an open competitive market for homogeneous private goods, the first entrants may be able to capture substantial rents, but eventually these will be competed away. If one producer can obtain a monopoly on the right to produce a product, however, this artificial scarcity (rent) can be exploited by charging higher prices than would occur under competition. Thus, governments create rents by granting patents or other barriers to trade and there is considerable motivation by those who receive major benefits to engage in rent-seeking behavior.

Phillip Jones (1995) illustrates how the possibility of tied-aid opens opportunities for rent-seeking in regard to international development assistance. By offering tied-aid to recipient countries, the donor country is effectively subsidizing export goods and services since the recipient country must purchase these from the donor country. Producer groups actively campaign in the donor country that international assistance be in this form. Exporters are likely to adjust their pricing policies when supplying recipient countries. Because of the rent-seeking involved in tied-aid and the consequent loss of value of this form of assistance, many donor countries – including Sweden – have reduced this form of international assistance

Problems of rent-seeking in development assistance have plagued multinational donors as well as bilateral donors. James Putzel (1998) reports that the

office of the UK Permanent Representative to the European Union (EU) encourages British businessmen to propose development projects that will generate revenue for them. The framework contracts used early in the cycle of identifying EU development projects, Putzel argues, also encourage extensive rent-seeking by EU community businessmen leading to inefficient outcomes in regard to project choice.

3.4.3 Corruption

Another aspect of "evil" in the Faustian bargain is that officials who are allocated enforcement powers and the power to make collective-choice decisions may hold up formal action unless illegal rewards are made available to them. The "Faustian Bargain" gives some actors the authority to impose sanctions or rules on others. Those who would be sanctioned (or have rules that they oppose) have an incentive to try to avoid these costs and to offer bribes or other inducements.

The level of corruption in a country has not generally been taken into account in planning development assistance. In fact, as Van de Walle (2000: 231) has pointed out, the most corrupt countries may even be rewarded with major benefits:

A couple weeks apart in the fall of 1999, the western donors announced that Cameroon was slated to be among the first nations to receive significant debt relief in the context of the revised HIPC [Highly Indebted Poor Countries] initiative, and Transparency International announced that Cameroon had for the second year in a row been bestowed with the dubious distinction of being ranked as the most corrupt nation in the world, in its annual Corruption Perception Index.

Robert Klitgaard (1988, 1995) has analyzed the problem of corruption extensively. He argues that it is neither inevitable nor intractable. He stresses, however, that understanding incentives, monopoly, openness of information, and accountability is needed to reduce corruption to a low level. An immense literature exists on the problem of corruption in both donor and recipient countries, but time and space limitations force us to recommend that the interested reader consult Shleifer and Vishny (1998), NORAD (2000), Wade (1985, 1989), and Chambers (1988).

3.5 Informational Problems at a Collective-Choice Level

In addition to the motivation problems identified above, collective-choice decisions also face the possibility of substantial missing and asymmetric information.

3.5.1 Missing and Asymmetric Information

Actors directly involved in an operational situation often constitute themselves to make collective choices. Here, the structure and context of the present situation of the problem situation are relatively well known to them. In some cases, however, adopted rules may give rise to unanticipated strategies, some of which may lead to a deterioration of outcomes. Still, when such collective choice is made in proximity to the operational situation, actors receive feedback more rapidly; they do not need to have it conveyed to them by others. In turn, they can respond quickly. In this way, the learning process is brisk.

When those who make the collective-choice decisions are not directly involved, they depend on various mechanisms for conveying information and preferences to those designated to make these choices. The further away these decision makers are from the situation, the more are the number of links through which information must pass. Further, as soon as one creates rules, there is the possibility for some individuals to be strongly advantaged by one set of rules as contrasted to another. Those who could be substantially advantaged by a new set of rules protecting their position have strong incentives to try to convince legislators and others involved in distant collective choice to pass rules advantageous to a few rather than the many. Such "favors" are rewarded in some cases with material or other forms of support.

3.5.2 Fiscal Illusion

When obligations to a collectivity are collected in the form of monetary resources, rather than as labor or material inputs, knowledge of how these funds are spent and what they produce is extremely difficult to gather. A fiscal illusion can be created that the government is doing great things – in the next locality or district – even though little can be observed in a home district. Cynical taxpayers may seek ways to reduce their tax burden, as they do not see real benefits coming from their payments. Thus, if public sector collective choices lead to a serious fiscal illusion, the long-term process leads to an impoverished public sector.

3.5.3 Translating Preferences into Outcomes – The Impossibility Theorem

Many collective-choice action situations use a decision rule that aggregates individual actions (decisions of how to vote) into a summary action for the group as a whole. While voting is indeed an essential mechanism to give voice to a large number of people about the rules that they themselves will be governed by, all voting systems are, themselves, besieged by various difficulties in aggregating individual preferences into a stable, efficient outcome (Monroe, forthcoming). Kenneth Arrow (1951) established in his famous *Impossibility Theorem* that no voting rule could take individual preferences, which were themselves well-ordered, in a transitive manner and guarantee to produce a

similar well-ordered transitive outcome for the group as a whole.⁴ When communities have very similar views regarding preference orderings, the Arrow Impossibility Theorem is not too much of a problem for them. Communities in which there is considerable disagreement regarding the benefits and costs of different actions and outcomes, face strongly differing preference orderings within the community. In these cases, there is no rule that will guarantee a "final" settlement of the disputes. The outcome is highly dependent on the order in which alternatives are presented for a vote and the extent to which voters misrepresent their true preferences by strategic voting. Thus, we cannot simply rely on a mechanism like majority vote to ensure that stable efficient rules are selected at a collective-choice level. Thus, once an agreement has been reached that collective decisions will be made according to majority rules (or any other voting rule that might be selected), all voting institutions can be manipulated by those who control the agenda (Romer and Rosenthal, 1978; Shepsle, 1979).

3.6 Enter the Donor

We have now examined many of the typical operational and policy situations that exist everywhere in the world. Many of the unproductive outcomes that can happen in these situations have been improved in developed countries due to the capability of participants to engage in ongoing efforts to improve performance by changing the rules that are used in these situations. Given that changes in the rule-structuring situation can also change the distribution of benefits so as to greatly advantage some participants while hurting others, the process of changing rules is never a one-way street toward ever more efficient and fair outcomes. The broad trajectory in the more developed countries has been, however, toward creating nested sets of institutional arrangements that together tend to create many situations that generate positive outcomes for most participants.

One of the major differences between developed and developing countries is the prevalence of dysfunctional situations in the latter. When a donor enters a recipient country to try to help, it enters a diversity of operational and policy situations that are already difficult and adds to the complexity of the prevailing incentive structures. Aid agencies "are not just rational, neutral tools of policy makers and as such external to the problems of development" (van Ufford, Kruijt, and Downing, 1988: 11). As demonstrated by Gardner and Waller in the formal game-theoretical analysis in Appendix B, the entry of a donor into ongoing situations of the type outlined in Chapters 2 and 3 can lead to an improvement, no change, or a deterioration of the base situation.

⁴ By transitive, one means that if A is preferred to B and B is preferred to C, A is preferred to C. A well-ordered preference function meets these criteria as well as the criterion of being complete. A complete ordering is nothing more than stating that an actor can completely rank all outcomes as either preferred one to another or in some cases as being equally desirable (or undesirable).

The donor always adds at least a second layer to the original action situation in that many decisions made by the donor are not made as a participant in the base situations that the donor is trying to change for the better. The donor's presence, whether intentional or not, alters or exacerbates, for better or worse, existing incentives. What's more, the changes in the incentive structure may linger, in many cases, only as long as the donor remains an active player. On the other hand, in some cases, the change may linger for a very long time.

One of the counterintentional impacts of development assistance can be the result of moral hazards introduced by the aid process itself. Even the formulae used in determining the appropriate level of aid are not incentive neutral. Financing gap models have been used by many donors, including Sweden (Andersen, 1996), since they were so strongly recommended in the development economics literature. These models are the academic foundation for a method used by advisors to calculate the estimated amount of support needed by a recipient country to achieve a targeted level of growth (Chenery and Strout, 1966). The underlying financing gap model has been severely discredited by strong empirical evidence that external aid funds have not led to a significant and positive effort of foreign aid on investment.⁵ This method of calculating aid also tends to generate a moral hazard. "There is also a moral hazard problem with giving aid on the basis of a 'financing gap.' Recipient countries will have an incentive to maintain or increase the 'financing gap' by low-savings (i.e., high consumption) so as to get more aid" (Easterly, 1999: 429). The effect of this change in incentive structures may have a very longlasting impact.

At a collective-choice level, many Sida projects involve aid to officials who, in turn, can decide on the merits of alternative projects. (After all, local officials are encouraged to see themselves as owners of each project.) However, these officials, as agents, have their own interests at heart.

It is ironic that Sweden's commendable attempt to avoid power asymmetries in bilateral relations with aid recipient countries – by vesting, in some cases, project ownership with particular recipient country ministries and bureaucratic agencies – can exacerbate already acute power asymmetries in the recipient's political economy and, thus, diminish sustainability. This is a case where the introduction of aid can strengthen bad institutions.

In highly centralized political systems, without the check of meaningful democratic elections, politicians are more likely to use their power over the distribution of development aid to enhance or maintain their status as patron (Joseph, 1987; Coolidge and Rose-Ackerman, 2000). In such cases, forms of aid that are distributed as rewards to clients and followers will be sought after.

⁵ Easterly (1999) shows that only 6 out of 88 countries receiving aid from 1965 to 1995 show a significant, positive relationship greater than one (meaning that there was at least some funds added to investment beyond the aid itself) between Overseas Development Assistance and investment/GDP. What is quite disturbing is that 36 out of 88 countries show a negative and significant relationship between gross domestic investment and Overseas Development Assistance.

In countries where representative elections are seen as legitimate, politicians may seek to target development projects in certain electoral districts – a phenomenon better known as pork-barrel politics (Mayhew, 1986; Stein and Bickers, 1995). If, on the other hand, ethnicity is important in national politics, politicians may try to deliver the benefits of development aid to their clan or tribe. In each case, politicians exercise power over the nature and distribution of aid. The important finding in all these cases is that politicians have an incentive to target development aid to their followers and supporters, who in turn are defined by the particular economic, political, and cultural institutions of a country.

Bureaucrats also hold preferences over the types of aid given by donors. The kinds of aid preferred relate to the incentives that specific bureaucrats face in their various positions (Moe, 1990a, 1990b). In general, top-level bureaucrats are interested in expanding their power. Thus, they are more interested in projects that extend their duties, staffs, and budgets. Lower-level bureaucrats, meanwhile, see donor-funded aid projects as career opportunities, and as opportunities for getting extra (legal or illegal) income (Gibson, 1999).

Given the problems outlined in this chapter, arriving at effective rules to improve the operational situations beneficiaries face in recipient countries is itself difficult due to motivational and informational incentives. Consequently, in addition to asking questions related to the underlying collective-action problems described at the end of Chapter 2, a donor contemplating a new project should be asking additional questions about collective-choice processes in the recipient country including the following:

- What incentives have precluded beneficiaries from resolving their own collective-action problems at a collective-choice level in the absence of aid?
- How would they be affected by a proposed aid project or program?
- What changes in motivation or information will a proposed aid project produce?
- Will these lead to sustainable improvements?

Chapter 4 Incentives across Situations: The International Development Cooperation Octangle

Summary

Action situations, in any modern complex society, are rarely isolated from one another. Instead, the outcomes of any one situation provide input into other situations. In this way, situations link within a *system*. Sometimes the system is contained entirely within one organization and is represented in a simplified form by an organization chart. In regard to international development assistance, the set of linked situations crosses many organizational and national boundaries.

Some action situations function more effectively when linked within a system (Simon, 1965, 1972). Further, the effectiveness of a given system depends on the way its action situations are linked together. An effectively structured federal governance system, for example, links national, regional, and local units so that each can undertake those activities for which it is most efficient. In this way, each provides goods and services complementary to those provided by other levels of government (V. Ostrom, 1997). Conditioned competition among these units can lead toward substantially greater efficiency. Information flows can lead to greater accountability than could be achieved in the absence of an overall system.¹

Development cooperation can similarly be thought of as a system or network of linked action situations. The conventional way of thinking about these linkages is as a "chain of aid delivery," which we will discuss in Section 4.1. This stresses the primacy of the donor as a principal who must work through a series of hierarchically organized agents to reach the final beneficiary (see Figure 4.1). In an era when most donors are stressing the importance of ownership, however, this top-down way of thinking about a chain of relationships is a particularly inappropriate representation. In fact, the only two-way relationships in the chain of aid are those between an individual donor and other donors. Even the recipient government is

¹ Of course, it is also possible to link units of government in a federal system so that these benefits are not achieved, and the overall result is less than could be achieved by either a fully centralized or a fully decentralized system of governance.

viewed here as being no more than an agent of a donor government. While this may be, in fact, how some view the process of development cooperation, we think it is more valuable to think about a set of nested situations that may take on any of a variety of productive or unproductive relationships.

In our effort to understand the complexities of development cooperation, we have developed a schema that we call the International Development Cooperation Octangle – or "the Octangle," for short. Section 4.2 derives the Octangle from its component parts. In essence, we scale up our analysis so as to look at linked action situations rather than isolated situations. Each set of relationships among the relevant actors is outlined, and the entire interlinked set of relationships (the Octangle) arrays all relevant actors in their dynamic contexts. In contrast to the metaphor of the chain, which brings to mind linear linkages from one actor to the next, the Octangle reveals a multifaceted set of relationships among the actors in development cooperation.

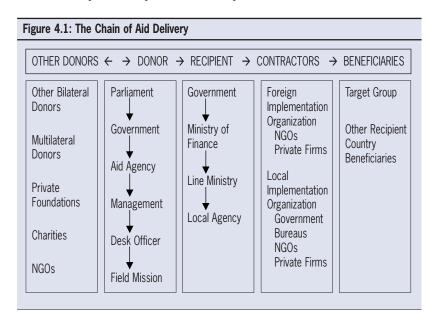
Taken together, the relationships within and across countries, agencies, and their citizens are a tangle of relationships among a donor, a recipient, and the other six types of organizations involved. For example, whereas the donor pays for the services of a contractor, the nominal principal is the recipient government. Meanwhile, the consultant, typically, has more information about ground realities than do officials of the donor or of the recipient agencies – or of the citizens of either country. The result of this tangle of relationships is that many individuals are responsible for ensuring the effectiveness and sustainability of aid, but no one is really held accountable.

4.1 The Chain of Aid Delivery

The bilateral aid delivery process is often interpreted in analogy to a linear chain that links a donor government to a recipient country beneficiary via various concatenated intermediary organizations. These intermediaries include (an assortment of) recipient government ministries and agencies, nongovernmental organizations, other donors, and private implementation contractors. As schematized in Figure 4.1, it clearly shows that international development cooperation involves a very large number of actors. In this representation, the internal workings of the donor government and agency appear remote from the problems beneficiaries face in the recipient country. By conceiving of development cooperation in this way, donors may infer (incorrectly) that the incentive structures of their internal aid-disbursing operations are far-distanced, and thus insulated and largely unrelated to problems of aid sustainability on the recipient side.

² Figure 4.1 can be drawn from the descriptions of the project cycle and of processes in development cooperation presented in *Sida at Work*.

Figure 4.1 portrays how aid funds and responsibilities are transmitted, left to right, from the donor to the beneficiary through intermediary organizations. It highlights, mainly, the principal-agent relationships involved in development cooperation. While many of the links in aid do involve a principal-agent structure, other types of relationships – including Samaritan's Dilemmas, along with the whole host of other collective-action problems identified in Chapter 3 – are also often involved. The chain of aid, thus, does not reveal fully the varied institutional contexts within which each of these multiple actors in development cooperation link, in practice, to each other.



To understand how incentives enhance or detract from aid sustainability, we first need to identify the major types of actors involved in the aid system. Eight types of actors (many of whom are themselves composed of multiple actors) repeatedly have a strategic role to play in a series of linked action situations. The eight major actors are:

- 1. the donor government;
- 2. the recipient government;
- 3. other donors;
- 4. the donor's international development agency (IDA);
- 5. sectoral ministries and agencies within the recipient government;
- 6. third-party implementing organizations, including nongovernmental organizations (NGOs) and private consultants and contractors;
- 7. organized interest groups and civil society organizations within the donor and recipient countries; and finally
- 8. the target beneficiaries.

Second, we need to see how these actors in their situations are connected to each other, as within a system. Beyond the internal structure of any one of the situations involved in development assistance, each situation is complexly interlinked to others. The nature of this complex linkage affects the incentives of those involved and the sustainability of the programs they design or implement. Our Octangle captures a simplified picture of the configuration of linked individual situations.

The sustainability of aid depends on how incentives structure interactions between or among the key corporate and individual actors involved in development cooperation. These structures may result from a conscious effort to design and impose rules governing donor-recipient relations, or from an evolutionary process designed by no one in particular. They may involve asymmetries in power or asymmetries in information, pose moral hazard problems, or yield the Samaritan's Dilemma. (Chapter 2 provides a discussion of these basic problematic situations.)

4.2 The International Development Cooperation Octangle

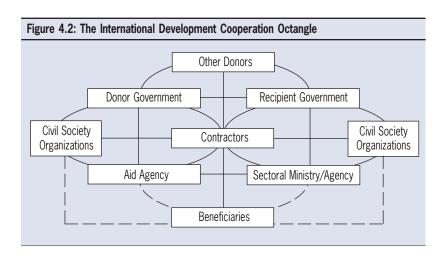
The International Development Cooperation Octangle – by which we intend to convey the tangle of interrelationships among the eight major types of actors – provides an alternative conceptual scheme to that of the Chain of Delivery image.

4.2.1 The Full Octangle

Figure 4.2 brings together the full set of linkages among all eight types of actors involved in the system of international development assistance. The reason for exploring the full set of relationships among the major actors involved in international assistance is to examine whether "the system" as a whole creates positive incentives that counteract some of the negative incentives that exist in many of the individual action arenas examined in Chapters 2 and 3. We are responding to the call of many scholars to examine the linkages among the major actors in development aid and not just within any one agency (see Tendler, 1975, for example). As van Ufford (1988: 13) expressed the need:

It is vital to study the nature of the interorganizational linkages between the different levels. In what ways do the agencies influence each other? How autonomous are they, how much do they depend on the others? How is the policy process changed, adapted or even blocked as funds flow from one level to the next?

While the potential for counteracting negative incentives does exist, it appears that instead of reducing the severity of problems, many of the problems of collective action are accentuated within the larger system of the Octangle.



One relationship is obvious when one examines the Octangle closely. Contractors lie at the center of this schematic representation since they conceivably interact with all the other types of actors. Civil society organizations (in both donor and recipient) are arrayed on the "sidelines," but they can have important impact in some situations. These organizations can, potentially, reinforce beneficiary interests or be pushed effectively aside and have little role. When conducting an analysis, one may be able to examine only one or two linkages from any node in this "Octangle" in relative isolation from others. In fact, most actors in development cooperation, surveying the world from where they stand, do not see the full Octangle. Yet, in practice, the actions of all actors (and their component parts) influence each other over time. Each type of actor may thus be able to play a major role in determining whether the results of aid are sustainable over time. We will explore this question as we explore some of the dyads and triads contained within the overall Octangle. We begin our discussion of the Octangle with the donor-recipient dyad – and we will return to a more detailed analysis of this dyad in Chapter 5.

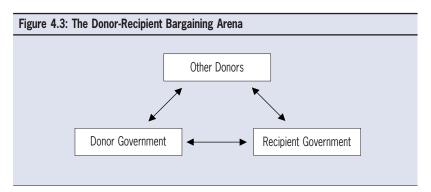
4.2.2 The Donor-Recipient Negotiation Arena

In the modern world of sovereign states, donor governments must gain the formal approval of recipient governments for any official bilateral assistance undertaken within a developing country (for a formal analysis of donor-recipient bargaining see Pedersen, 1998). Thus, as depicted in Figure 4.3, a core action arena at the international level is that between a donor and the recipient government. The nature of these relationships varies with the degree of power asymmetry between the donor and recipient governments, and with the availability of alternative donors. We distinguish three basic configurations of donor-recipient relationships, based on the relative bargaining power of each government.

Strong Donor - Strong Recipient

A relationship between a strong donor and strong recipient can exist if power asymmetries between the recipient government and the donor government are not too significant. Such a relationship can occur in several contexts.

One context is where the recipient government retains strong institutions but requires help to rebuild its physical infrastructure. Here, the recipient government is aware of its needs and the conditions it is willing to accept in negotiating a framework for development cooperation. After the Second World War, for example, the countries of Western Europe, facing massive destruction of their physical infrastructure, received reconstruction aid from the United States. However, many of them had effective systems of government and property rights that survived the war. When strong principals, as in this case, face one another in negotiations, they are frequently able to search out mutually satisfactory outcomes. In such a situation, both countries may find mutually agreeable arrangements that help the recipient country to recover faster and return to being a productive partner with the donor country.



In a second context, a recipient's negotiating strength is improved, and power asymmetries reduced, if it can choose among competing donors. If one donor is not able to meet its needs, the recipient government can approach other donors. The recipient, in this way, is not fully dependent on any particular external source of aid. Indeed, many recipient countries, such as Somalia, were in a much stronger position during the Cold War when they could threaten to seek development assistance from a country that was aligned with "the other bloc."

The Cold War has ended, but alternatives do exist for recipients to threaten to defect to other donors. Recipients that are less aid-dependent – India, for example – can negotiate from a position of greater strength, particularly visà-vis small donors. Donors, though, are increasingly cooperating with each other to regain negotiating strength in this regard. For example, OECD rules, set out in the Helsinki Protocol, presumably deter donors from, in effect, bidding against each other to fund large infrastructure projects (OECD, 1992).

A recipient's increased negotiation strength (resulting, say, from the presence of multiple donors) may not lead to sustainability. When the recipient country is governed by officials who are primarily interested in seeking out opportunities for private gain, and few institutions are in place to keep these motivations in check, moral hazard problems can become substantial. Take, for example, a case where a strong recipient bargains for financial assistance to reduce pressing budgetary constraints. A donor obliges, but on condition that the recipient take up reforms. The aid immediately relieves the constraint faced by the agents of the recipient government. Yet, without this strong budgetary constraint, the recipient government may not implement needed reforms – even when these reforms exist on paper. There is, as a result, no increase in the productivity of operational situations throughout the private and public economy of the recipient (see Eriksson Skoog, 1998: ch. 5).

Strong Donor - Weak Recipient

A weak recipient government is one that may have grown entirely dependent on external assistance, especially if the bulk of that assistance is provided by a single donor. A weak recipient that lacks sufficient capacity in economic planning and project administration may not make much effort to prioritize its needs in seeking assistance and will initially accept most plans presented by the donor (Strategy A discussed in Chapter 5 – see Figure 5.1). Often in cases where a strong donor faces a weak recipient, most of the initiative in planning development assistance must be undertaken by a lead donor. Negotiations between the two nominal sovereigns can be turned into a principalagent situation where the donor, as principal, specifies what the recipient country, as agent, must do if it wants to receive development assistance. In some cases, where the recipient fails to cooperate to the donor's satisfaction, the donor may impose conditionalities.

This can lead to several undesirable outcomes. Reforms attempted by the donor may not be sustained after funding is terminated due to both a lack of commitment and a lack of local credibility (Brunetti and Weder, 1994; Johnson and Wasty, 1993). The moral hazard problem, implicit in a situation where a recipient government becomes dependent on a donor, may again lead to promises of reform made at the time of aid financing, but then not kept as the donor's attention is diverted to other problems. Still again, the donor could take advantage of the weak position of the recipient and push toward an unfair bargain – including loans given at excessively high interest rates, demands for priority access to key natural resources, and excessive levels of tied-aid.

Even when a donor does not try to take economic or political advantage of a weak recipient, the donor may try to act as a principal and specify what the recipient government must do to qualify for development assistance. Alternatively, the recipient government may grow increasingly dependent on the donor government prolonging an unhealthy relationship between the two countries (Lensink and White, 1999a; Sida, 1996a, 1996b; Bräutigam, 2000). For a weak

recipient, being dependent on a large infusion of foreign aid reduces the accountability of the recipient government to its own people, since the leadership is not fiscally accountable to them. An administration that is highly dependent on aid is also more susceptible to top-down decision making within its own governmental apparatus. Aid projects may not enhance the capabilities of the final beneficiaries or even officials located in local or regional governments. (See our discussion of the Sector Wide Approach (SWAP) in Chapter 6.)

Several recent studies of aid and economic policy making in recipient countries have stressed, however, that even "weak" recipients are stronger than expected given their capacity to ignore conditions after agreeing to them in the first place (Devarajan, Dollar, and Holmgren, 2001; Goldsmith, 2001). Policy processes within recipient countries are driven heavily by domestic factors that have sometimes been consistent with conditions that donors have wanted to place on recipients. Frequently, domestic politics have "trumped" donor efforts to obtain policy reforms. Further, both donors and their critics have avoided discussing the accumulating evidence that donors rarely have asymmetric power to impose policies on reluctant recipients. As Collier (1997: 57) expressed it:

Obviously, the donors did not wish to admit that their conditionality was a charade. Equally, the critics of market-friendly policy reforms – largely Marxist academics and the nongovernmental organization (NGO) community – wanted to attribute the impetus to reform to imperialist donors rather than to African governments. Donors and their critics thus connived at exaggerating the power of donor conditionality out of proportion to its true effects.

Thus, even "weak recipients" have had more power than often thought due to their capacity to continue to receive international assistance from some donors even after not performing on previous agreements.

Enlightened Donor - Weak Recipient

Over the past decade, many donors recognized that recipient reliance on prolonged aid processes induce perverse incentives. As a result, these enlightened donors – including Sida – have tried to change the structure of the aid relationship. According to their official policy, an official recipient owner is designated for each aid intervention. Such owners often are the recipient country ministry or government agency in charge of the sector of aid activity. The purpose of vesting such ownership is to build local capacity and to foster commitment. In this way, development projects and programs are intended to be sustainable after external assistance ends.

While this idea of ownership is commendable, its meaning and interpretation are often lost when translated into development practice. In Chapter 1, we saw that the theoretical conception of ownership is not fully clear in general. Nor, does it appear that Sida itself uses one clear definition of ownership throughout its publications and staff interpretations. In our effort to define the concept of ownership clearly, we articulated four dimensions that are

involved in this concept. First, the owner needs to enunciate a demand for the provision of financial, material, or technological inputs to be used in their own efforts to find better institutional arrangements for their own problems of collective action. Second, the owner needs to allocate at least some of their own assets to the production of a project or program so that they have a real stake in the way their own and other actors' assets are used. Third, the owners need to consume some of the benefits of a successful project or to share responsibility if the project fails. Fourth, the owner needs to participate in key decisions about continuing or not continuing a project. In practice, all four of these conditions are rarely exercised by the beneficiaries or even found together within a single organization, even when a donor sincerely believes that ownership is an essential condition to sustainable development. Consequently, for participants to have a clear picture of who the co-owners of a project are, the parties involved need to have a clear assignment of responsibility as well as knowing the repercussions if they do not discharge their responsibilities. This does not always happen.

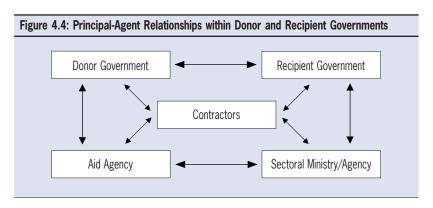
Indeed, the current emphasis on "ownership," by nearly all major donors, highlights a tension present in bilateral and multilateral aid processes. This tension arises from the fact that the interests of donors and recipient governments frequently do not fully coincide. In the early years of aid, the dominance of donor plans highlighted both the divergence of interests between donor and recipient as well as the weak position of recipient governments. Contemporary policies that stress recipient ownership have not removed these tensions, nor the implicit power that recipient's have of agreeing to a contract but not performing. In fact, aid practices of many donors and recipients have not substantially changed (see, for example, Mule, 1996).

Sweden has tried to avoid playing the strong donor-weak recipient game by encouraging ownership of development projects by recipient governments, by establishing country frames for long-term investments, and by providing technical assistance so that recipients can build their own competence over time. This has worked well in some relationships but less well in others. It turns out to be extremely difficult to engage in dyadic negotiation processes where the donor has access to the funds that the recipient really wants while, at the same time, providing full ownership to the recipient. Sophisticated donors do not want to be Samaritans that are taken advantage of time and time again by recipients who do not put in much effort. To avoid the Samaritan's Dilemma, donor governments need to have more control over the process. How can recipient ownership be reconciled with donor control? Indeed, having an official policy to encourage ownership and actually carrying this out within real programs and projects are quite different activities.

The specific structure of donor-recipient and donor-recipient-donor relationships varies substantially across projects and programs within the different recipient countries. In Chapter 5, we expand on the analysis presented above to apply the IAD framework more specifically to the donor-recipient negotiation arena.

4.2.3 Principal-Agent Arenas within Donor and Recipient Countries

In addition to the dyadic and triadic relationships among sovereign governments, there are a series of principal-agent relationships within the ministries of the donor and recipient governments. All of these, in turn, have additional principal-agent relationships with those contractors that are responsible for carrying out a particular project (see Figure 4.4).



In Sweden, for example, the Finance Ministry and the Foreign Affairs Ministry play a major role in developing foreign aid policies and disbursement priorities. In turn, Sida, as Sweden's International Development Agency, assumes major responsibility for managing development programs. The recipient country, correspondingly, may specify a single agency, such as the Indian Department of Economic Affairs in the Ministry of Finance, or authorize several internal ministries or agencies to coordinate its aid policy and to undertake the detailed negotiation and oversight of foreign aid programs and projects.

The likelihood of asymmetric information problems within the involved donor agency is often more severe than for other public sector bureaucracies. This is so since there is frequently little correlation between the level of individual effort of the donor agency staff and the effectiveness and sustainability of aid. Entry-level staff often seek employment with an IDA sensing opportunities to do good, the possibilities of overseas travel, and the security of a government job. Yet, those posted abroad may find their technical skills are being narrowly applied without the benefit of broader language or cultural training. Those working in the home office may similarly perceive little direct connection between what they do and how this affects the sustainability of their projects; much of their daily work involves fruitless paperwork and meetings with only indirect ties to the reality in the field. Further, objective rewards in the form of salary increases, promotions, and overseas assignments are distributed often in a manner that is hard for entry-level staff to understand. Gaining a valid and reliable measure of how the entire agency is doing in regard to sustainability in particular, as well as in regard to other broad goals, let alone how one's own contribution is making a difference to the donor agency's mission, is difficult (see discussion in Chapter 7).

Thus, unless the evaluation department of the IDA has a substantial budget and an imaginative and rigorously trained staff, there will be little systematic feedback to the rank and file: Evaluations undertaken only upon the termination of projects cannot fully serve their purpose; unless substantial effort is devoted in the home office to organizing seminars to study project evaluations, to discuss their central lessons, and to build these lessons into the design of new projects, the IDA as a whole is not learning much from its own activities. When there is little connection between project evaluations and the work of IDA personnel connected with the project, recipient ownership can come to be a way for IDA personnel to fault the owner for things that go wrong with the project.

Two of the most important sets of principal-agent relations within the Octangle include: (1) all governments include politicians and bureaucrats, with the latter less directly dependent on electoral (or other) success and (2) projects are typically implemented by contractors outside of the official bureaucracy.

Principal-Agent Relations - Politicians and Bureaucrats

Principal-agent relationships also occur between political leaders and bureaucrats, where the politicians, as principals, are supposed to make policies and the bureaucrats, as agents, are supposed to carry them out. As in all principal-agent relationships, there is the potential for substantial divergence of preferences and behavior between the principal and the agent. As in all incomplete contracts, therefore, substantial room exists here for moral hazard and other adverse incentive situations (Tirole, 1994).

The political leaders of a recipient country may wish to conduct public affairs in a way that benefits a small clique of influential supporters (as Bauer, 1971, recognized years ago). Politicians who are worried about political survival may want bureaucrats to implement policies in a way that benefits their own supporters (Geddes, 1994). Meanwhile, bureaucrats are more likely to be worried about their own career development. This is especially the case in many recipient countries where bureaucrats are paid poorly and are not protected by civil service rules. In such cases, accepting bribes for speeding up licensing procedures or approving projects may become the accepted way of earning sufficient income. Those who resist such practices, where they are common, may find themselves given assignments that lower their chances for upward mobility.

In the donor country, politicians may be interested in their political survival and in convincing the public that taxpayer dollars are being spent in a wise and efficient manner. Politicians tend to stress the progress that foreign aid is achieving. Officials in a donor country's IDA face their own incentives. While they may be protected from arbitrary dismissal, they are charged with administering a set of programs for which there are no known "sure" technologies to achieve economic, political, and social development. Thus, it is hard for anyone to know if progress is really being made.

Development organizations are directly affected by the basic contradiction of development goals.... They are placed between different publics: (a) the public which is at the receiving end of aid, and (b) those who are allocating funds. These two parts of the environment are segregated from each other and do not overlap. The ambiguity greatly affects the ways development organizations operate. (van Ufford, 1988: 21)

A nearly universal pressure exists within almost all development agencies, however, to spend the money that is allocated in one budgetary cycle, as parliamentarians are likely to interpret unallocated funds as evidence that the funds are not needed (Catterson and Lindalh, 1999; E. Ostrom, Schroeder, and Wynne, 1993). Indeed, this need to "move the money" is a universal incentive in all public bureaucracies. Such an incentive can lead to particularly perverse outcomes in the context of development cooperation where projects are sometimes selected by the donor country's IDA because they involve a large sum of money without the need for an equivalently large amount of time and energy on the part of IDA officials (see Chapter 5). As Lavergne (1988: 60) reflected, drawing on a study of Canadian development assistance:

Aid agencies are far removed geographically, administratively, and politically from the people of the Third World, the intended beneficiaries of their activities. As a result, the role of aid agencies is, to a large extent, merely that of channeling aid funds to other bureaucracies or agencies responsible for the actual implementation of aid projects and programs. Hence, Donors do not so much manage development projects as development funds, and one of the prime objectives is to allocate these funds with as little administrative cost as possible to the government.

For this reason, large infrastructure projects involving donor country contractors are usually more attractive to top management at an IDA than small projects involving extensive participation of beneficiaries. Large projects move the money faster. There is political support in the home country for projects undertaken by donor country contractors. In addition, these projects make lower demands on scarce staff time.

Principal-Agent Relations - Owners, IDA, and Contractors

While ownership may be vested by the donor agency in a ministry or agency of the recipient government, third-party contractors and consultants are often brought in to assist the owner in implementation. Such contractors and consultants may be selected for the project by the donor country's IDA or by a recipient country ministry or agency, or by both. The relationship between these third-party implementing agencies and the donor/recipient ministries is another principal-agent relationship where the interests of all parties have some overlap but also have considerable divergence. Incomplete contracts also characterize all of these relationships (see Murrell, 1999, for an extended analysis of the incentives for donors, recipients, and contractors). Ministry officials typically consider projects that proceed according to plan and meet deadlines as successes.

In the donor country, contracting with a donor country implementing organization may be seen as a way of reducing the influence of unsavory interest groups in the recipient country and reducing the level of corruption. Further, the suppliers of aid services in the donor country – private for-profit firms, NGOs, individual consultants, and some academic institutions – may have close connections to the political leaders of the donor country and may have strongly articulated the need for international assistance in general. Officials in the implementing organization may also share some of the interests of the donors and recipient governments, but also may be interested in expending less effort or resources on this project in order to retain budgetary slack (Salanié, 1997). It is also possible that "development bureaucrats can hide behind their consultants" (Epstein, 1988: 206) when they turn questions from their own political principals to their long-term consultants to answer.

In some cases, the initiative for a project at an IDA may have actually come from the potential contractor as this organization, as a business, faces a need to continue implementing projects in its area of expertise. Frequently, the same contractor who designed a project is contracted to carry it out. Given that the officials in both countries' ministries are unlikely to have time to spend informing themselves about the day-to-day problems of implementation, there is considerable asymmetry of information between the implementing agency and the ministries (Laffont and Tirole, 1993).

Given the wide diversity of projects funded in a large number of countries, IDA staff are often stretched to the limit in their effort to stay on top of what is going on. It is almost impossible to achieve the level of monitoring of individual projects that would actually be needed to be completely knowledgeable of how they are operating. The tendency in many IDAs is to rely on certain contractors and NGOs³ who have developed a reputation for doing good work. It is difficult, moreover, for the staff at the IDA to know what is going on in the field for many of the projects in their portfolios.

Taken together, these considerations can tangle the principal-agent relationships among the IDA, the recipient owner, and the third-party implementer. For example, whereas the IDA pays for the services of a contractor, the nominal principal is the recipient owner. Meanwhile, the consultant, typically, has more information about ground realities than do officials at the IDA or recipient agencies. Such consultants may consequently take on, in effect, some of the IDA's administrative responsibilities. In this case, the nominal owner may look to the consultant as its *de facto* principal. The upshot is that, while many individuals are responsible for ensuring the effectiveness and sustainability of aid, no one is really held accountable.

³ Many developing country NGOs dedicate themselves and their resources to their mission of development, rather than organize themselves mainly to obtain donor funds. Many successful projects have been undertaken by NGOs that have a firm commitment to empowering local citizens and to achieving real growth and sustainability. However, not all NGOs have such effective records of accomplishment (see Grindle, 1997; Lancaster, 1999a; Lindahl et al., 1999).

4.2.4 Beneficiaries

The size and definition of targeted recipient country aid beneficiaries vary with the type of assistance provided. In the case of Project Aid, the beneficiary is most narrowly defined to involve those that are supposed to benefit most directly from donor intervention. In humanitarian assistance, beneficiaries are those who are displaced or who otherwise suffer the consequences of natural or man-made disasters. Beneficiaries in program aid presumably are a larger group including the ones that benefit from the marginal impact of the increase of spending. Beneficiary groups, thus, can be small or large, and be composed of well-defined or amorphous groupings. As a result, they may have varying degrees of success in recognizing themselves as a part of an identified group and in recognizing the collective-action problems they face. In many recipient countries, however, a large part of the population does not see much of the public spending.

Improving the welfare of the beneficiaries is the ultimate goal of the IDA. However, feedback links between beneficiaries and an IDA are weak to non-existent. IDA officials find that they are rarely held accountable for the performance of particular projects (see Chapter 7). Media publicity about a particular project can bring unwelcome attention on the IDA in some cases. This, though, is seen sometimes within the IDA as a public relations problem (Interview S67).⁴ Donors frequently fund studies and evaluations of projects. These, however, are taken up usually only after the project is completed. Moreover, they are frequently seen as routine exercises that are required for bureaucratic purposes. Only rarely are the results of these studies discussed with the beneficiaries themselves (Sida, 1999a).

In the case of Project Aid, IDA's interact with beneficiaries through contractors and the recipient's ministries and agencies. In the case of humanitarian assistance, for example, the IDA may be directly linked to the target beneficiaries or through a United Nations or NGO relief organization. In the case of program aid, those who actually do receive benefits are only indirectly linked to the donor and recipient governments.

Links between Beneficiaries and Government

Individuals in beneficiary groups, in theory, are most closely connected to their own governments. The *raison d'être* for government, after all, is to help citizens to work together to recognize and overcome problems of collective action and in this way improve their welfare. Nonetheless, recipient governments are often not accountable to their citizens; they treat them more as subjects. Indeed, such a government may themselves be structured so that

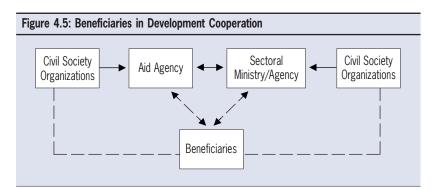
⁴ To assure respondents' anonymity, interviews with Sida staff members are identified by numbers preceded by an "S," consultants with a number preceded with a "C," those interviewed in India by numbers preceded by an "I," and those interviewed in Zambia, by a number preceded by a "Z" (see also Appendix C).

those working within its organization face incentives to act in ways that deter beneficiaries from solving these problems of collective action. In fact, in many cases, they exacerbate existing collective-action problems. In still further instances, they create new power and information asymmetries to secure their hold on authority.

Beneficiary groups in recipient countries face collective-action problems but frequently lack effective institutions to deal successfully with them. Although their governmental organizations are intended to provide such institutions, they often fail. When a donor provides aid in the absence of such institutions, or fails to stimulate them, aid will be unsustainable.

Linking Governments to Citizens and Interest Groups

Besides the major actors we have discussed above, the citizens living in both the recipient and donor countries may participate in this process in a variety of ways (see Figure 4.5). Organized interest groups are particularly likely to participate in both the donor and recipient countries. Business interests within the donor country have frequently pressured the donor government to negotiate tied-aid, whereby the funds given to the recipient country are used to purchase goods (e.g., tractors, turbines, and other equipment) and/or services (such as training and consulting) from the donor country. Now that the Cold War is over, there is less pressure to support political clients of donor countries, but there is increasing pressure to distribute aid in ways that family planning advocates, environmentalists, and other strong interest groups within the donor country support (see Lancaster, 1999a, 1999b).



International assistance policies within the donor country are quite different from domestic policies that may be extensively monitored by a variety of groups. Many citizens in the donor country have a sincere interest in redistributing resources from their affluent incomes to help alleviate poverty in recipient countries. There is, however, very little feedback from the supposed recipient country beneficiaries to the donor country taxpayers. As an economist with the Evaluation Unit of the European Commission in Brussels has reflected:

This lack of direct information feedback makes foreign aid programmes particularly vulnerable to manipulation of information and facilitates the use of persuasion as a political instrument in foreign aid, especially because politicians have privileged access to project evaluation information. Only an explicit information feedback mechanism, labeled generically as 'evaluation,' can correct information asymmetries in foreign aid. (Martens, 2000: 28–29)

The linkage between government and "civil society" is also one of the important relationships in the building of more effective governance in developing countries. Facilitating ways for citizens to make their voice effective is one of the important steps that both donor and recipient countries need to undertake. However, for some recipient governments, this is a risky step as it means opening political discourse to those who oppose government programs. It also provides opportunities to those who wish to undertake many kinds of local development. As this can strengthen local leadership capabilities, it may be threatening to those in central leadership positions. This link, therefore, may be relatively weak in many developing countries.

Competition among Donors

Even though many donor-recipient negotiations are strictly dyadic, many are, in effect, conducted in a strategic environment where the recipient government can elicit competition among potential donors. Such competition among donors can exacerbate incentive problems among recipients. When the recipient knows that other donors will step in to fund a project even if one threatens credibly to withdraw based on its recipient's poor show of effort, there are few consequences for putting in less effort (or conversely few incentives to change strategies).

Schmidtchen (N.d.: 14), in an abstract discourse upon Buchanan's Samaritan's Dilemma, notes that "enlightened" Samaritans could overcome this dilemma by delegating their decision to assist to an independent arbiter who is required to take into account the overall strategic context. "However," Schmidtchen concludes, "if the population of Samaritans is heterogeneous, 'enlightened' Samaritans, which have hired an [arbiter], might now have to compete with those having chosen the 'soft' option. With 'potential parasites' preferring to get help from the second group, something like the result described by Gresham's Law. 'Bad' Samaritans drive the 'good' ones out of the market."

In the Orissa Forestry case study (taken up in Chapter 9), for example, Sida has threatened not to continue funding for its project, citing repeated lapses in follow-through on its agreements by the project's nominal owner – the Orissa Forest Department. Yet this does not appear to have affected the strategy of the Forest Department; in interviews, its officials hinted that aid can be sought from the Japanese – who they claimed were less picky – should Sida decide not to resume funding of its project.

4.3 Conclusion

The International Development Cooperation Octangle is a schema to assist in an examination of the system of relationships that exist among many individual situations that are frequently examined in isolation. It represents an initial effort to "scale up" to a different level of analysis that encompasses the entire development assistance process within both donor and recipient countries.

Some conclusions can initially be derived from the discussion above. For starters, donor-country citizens – altruistically motivated to transfer resources to recipient country citizens – are, by and large, not able to monitor the performance of their own government's stewardship of international development assistance. As discussed above, the feedback loop is broken. Basic agreements, between the donor and the recipient governments, as agents of their people, are hammered out in negotiations outside the limelight of media coverage. While these documents nearly always contain buzzwords like "sustainability" and "ownership," they often put little of this rhetoric into practice. Nothing in the rest of the Octangle seems, at present, to correct for this inability to monitor what is really happening in the field, although there is potential for interest groups in the donor and recipient country to highlight such problems.

Contractors, whose services are paid for by the IDA, stand in the middle of the Octangle and have considerable control over the flow of information in all directions. Officials in the recipient countries often treat them as donor representatives. Moreover, they are the only ones who deal directly with beneficiaries in many projects. Meanwhile, the beneficiaries have little voice or control (except in rare circumstances) as to what will be undertaken in a development project. In some instances, the contractors design a project that they themselves are in a unique situation to carry out (see our further discussion in Chapter 8).

Encouraging programs that place the beneficiaries, rather than contractors, in the center of the linked arenas is an obvious step to give more emphasis to the role of beneficiaries in the ownership of projects. Projects that have involved the beneficiaries in all four processes involved in ownership – provision, production, consumption, and alienation – have been shown to be sustainable long after a project itself has ended (Shivakoti et al., 1997). Putting the beneficiaries in the center, however, requires quite different project designs than have been the predominant pattern in development assistance. For one, they require substantial time and effort by those helping to put beneficiaries in the center to overcome the skepticism and suspicion of the expected beneficiaries who have often been told in the past that they should "participate" only to find that this meant showing up at meetings and accepting the ideas of those designing projects.

The Octangle provides, we argue, a useful way of perceiving the system of aid. A further step in examining the impact of this system is to examine the bilateral relationships between donor and recipient governments more intensively. We do this in Chapter 5. Another step is to review the various types of aid modalities. It is within the context of such modalities that actors in aid perceive their incentives. We discuss aid modalities in Chapter 6.

Chapter 5

Focusing on a Part of the Octangle: An Institutional Analysis of Donor-Recipient Negotiations

Summary

Development assistance processes involve multiple interlinked action situations as discussed in Chapter 4. A key dyad within the Octangle is the negotiation arena involving a donor and a recipient government. Both actors in this dyad must reach a basic agreement for a development assistance program of any kind to exist within a recipient country.

To illustrate how the IAD framework could be used to analyze the multiplicity of dyads, triads, and the many-party situations involved within the Octangle, we conduct an initial institutional analysis of the negotiation arena between a donor and a recipient government. We provide a sketch of how an analyst would approach a more extended examination of this action situation. The questions used in this chapter illustrate the types of questions an institutional analyst uses to conduct an analysis.

The specific context and strategies of each donor-recipient negotiation differ, depending on many factors. Three tentative lessons, gleaned from the analysis of this hypothetical, generalized situation, are relevant for a bilateral donor such as Sida. These lessons are presented as "tentative" since they are hypotheses derived from this application of our theoretical framework and analysis.

- (1) Adopting a policy, such as Sida has already done, that foreign aid will largely be allocated to programs or projects where the recipient government is committed or "owns" the proposed activity is generally more sustainable than when the recipient does not have real ownership.
- (2) The best outcomes are potentially achievable when a long-term commitment to a recipient country is made, as Sida does when it makes a country-frame agreement. If recipient governments are *not* committed to serious institutional

and economic reform, long-term commitments involve substantial investments that produce few desirable results. This could lead to the least efficient and sustainable investment of all.

(3) When facing recipient governments whose leaders are not benefited by institutional reforms and effective economic policies, donors are faced with a choice between helping a few citizens with short-term gains versus pulling out and waiting for more auspicious opportunities. Pulling out may be the only way to help those citizens in the long run, especially if donors can form alliances with other donors not to support countries resisting reform.

Currently, Sida is experimenting with making long-term commitments to a *region*, rather than to a particular country in the region. This may greatly help to get incentives oriented toward producing more sustainable development assistance. While making a long-term commitment to a set of countries, Sida is able to pull out of one country that does not take reform efforts seriously.

5.1 A Further Application of the IAD Framework

Within the large set of dyads and triads contained within the International Cooperation Assistance Octangle, is the important initial negotiation situation between a donor and a recipient government. We select this situation to illustrate an application of the IAD framework, since if an agreement is not reached here, the other nodes of the Octangle are not reached at all. We examine a generalized structure rather than a specific negotiation process so as to gain a broader insight than is possible when looking only at one case. We ask how various possible characteristics of an action situation and of the actors involved affect the incentives involved and the likely interactions between the actors as these may affect the sustainability of projects or programs agreed upon in this situation.

We begin by looking at the underlying contextual variables in order to understand the type of material goods and services that might eventually flow from an agreement, the broad national and international rules affecting a specific negotiation process, and the nature of the political community in each country as well as the broad international situation at a particular point in time. With that contextual background, we then try to understand the structure of the negotiations arena between a particular donor and a particular recipient government. The following questions provide an initial general guide to an institutional analysis of donor-recipient project negotiation relationships (See Appendix A for an illustrative set of questions for an institutional analyst interested in understanding a common-pool resource situation). Obviously, a deeper analysis would require still further questions many of which would be formulated in response to the first set of answers. The general structure of

¹ Concrete institutional analyses of other relationships inherent in development cooperation are taken up in the case studies and analysis found in Chapters 9 and 10. These include project-specific analyses.

relationships can, however, be assessed by asking the following kinds of questions:

- 1. Which actors are involved in this particular negotiation process? Who is directly or indirectly involved in this negotiation?
 - A. Are there representatives from two countries one a donor country and one a recipient country or is one or more actors from a multi-lateral donor?
 - B. Is there more than one bilateral donor providing development assistance to the recipient?
 - C. If so, have the bilateral donors developed mechanisms to avoid being played off against one another so that they can be considered a coalition rather than single players?
 - D. Are these governments starting a new relationship or continuing a long-established one?
- 2. What are the positions of the officials representing the recipient government and donor government within their own countries and in regard to each other?
 - A. How are the recipient government leaders chosen in their home country? In open democratic elections or by authoritarian means?
 - B. How recently have the recipient government leaders assumed office? How close was the contest for national office (if there was a contest)?
 - C. How dependent are the recipient government leaders on entrenched interests who receive benefits from the status quo?
 - D. Have recipient government leaders been selected for their reform policies?
 - E. How are donor government leaders chosen?
 - F. Do donor government leaders represent a new coalition or one that has been in power for some time?
 - G. How secure are donor government leaders if they pursue strong development assistance programs? (e.g., how committed is the donor country population to development assistance?)
 - H. How dependent are donor government leaders on domestic coalitions that benefit from some kinds of development assistance (e.g., tied trade) but not others?
 - I. Can these officials make final decisions for their respective governments or do they have to submit proposed negotiated settlements to others in their government?
- 3. What are some of the key actions (sets of strategies) that donors and recipients can take in the planning and negotiations stage of the process?

The specific actions will always have to do with the issues that are involved in a particular case. To illustrate the method, however, let us outline a stylized version of some of the types of strategies that donor and recipient governments have taken in the past. The actual array of potential strategies is much larger than the strategies outlined here and will depend in a particular instance on many contextual variables. For example, bilateral donors could form a coalition and provide untied funding to support a portion of a broad development plan proposed by a recipient government (see Kanbur and Sandler, 1999). We focus, however, on well-known strategies to illustrate how the broad method helps to identify general relationships.

In negotiating either a development program or a particular project, the *recipient government* needs to decide which of the following general strategies to pursue:

- A. Say yes to any development program or project proposed by the donor without investment in planning and a commitment to follow through. (Get the project!)
- B. Say yes to all programs and projects with strong commitment to follow through on those proposed and supported by own ministries and little commitment otherwise.
- C. Say no to proposed reforms, programs, or projects not consistent with own development policies and plans of recipient government, say yes to those that are consistent.

For the *donor government*, it must decide which of the following strategies to pursue:

- A. Make annual project-by-project decisions.
 - (1) Support proposals designed primarily by own IDA and contractors or by other donor agencies and IFI's.
 - (2) Support proposals designed primarily by recipient government participants.
- B. Make long-term commitments to support reforms, programs, and projects for 3 to 5 years.
 - (1) Support proposals designed primarily by own IDA and contractors or by other donor agencies and IFI's.
 - (2) Support proposals designed primarily by recipient government participants.
- 4. How are these actions linked to potential outcomes?

There are always many specific outcomes related to the type of agreements reached that can result from this kind of negotiation process. Each outcome can be evaluated using any of the criteria discussed above. First, we want to examine whether an agreement is likely or not, whether the agreement will be for a short-term project, or whether the agreement will span a long-time horizon in which both the donor and the recipient government can gain substantial information about performance and be able to adapt the assistance

to local needs and capabilities. Then we will ask which of these outcomes is more likely to be sustainable over the long term.

One way of showing this linkage is illustrated in Figure 5.1. In regard to the immediate outcome of achieving an agreement or not, given the specified strategies, we would expect a negotiation process structured in this manner to achieve agreements in two-thirds of the possible combined strategies. Of those eight potential outcomes, half are likely to be of short-term duration and half are likely to be of long-term duration.

A donor may be in the situation of facing a recipient government who cannot do anything other than select Strategy A given that it does not have a skilled bureaucracy to design and follow through on programs and projects. The recipient government may be eager or even desperate to receive foreign assistance and will agree to any proposal. No matter what strategy the donor adopts, if the recipient government chooses Strategy A, either there is no agreement and no foreign assistance, or the projects that are funded are unlikely to be sustainable, given the lack of commitment by the recipient government. If the donor is highly motivated to provide assistance to this particular country, the donor will find itself in a Samaritan's Dilemma.

Figure 5.1: Action-Outcome Linkages for Simplified Donor-Recipient Negotiation Situations

	Recipient Country Strategies		
Donor Country Strategies	A.Say yes to all, but no involvement or commitment	B.Say yes to all; Commit to own	C. Say no to proposals outside own policies; Say yes and commit to own
A. Short-Term			
A1: Fund Own or Other Donor Designed Proposals	1-1 Short-Term Agreement	1-2 Short-Term Agreement	1-3 No Agreement
A2: Fund Recipient Designed Proposals	2-1 Nothing Proposed	2-2 Short-Term Agreement	2-3 Short-Term Agreement
B. Long-Term			
B1: Fund Own or Other Donor Designed Proposals	3-1 Long-Term Agreement	3-2 Long-Term Agreement	3-3 No Agreement
B2: Fund Recipient Designed Proposals	4-1 Nothing Proposed	4-2 Long-Term Agreement	4-3 Long-Term Agreement

A recipient government, on the other hand, may design some programs or projects on its own and have a real commitment to them, but still agree to any proposal made by the owner (Strategy B). In this case, an agreement is likely, but if the donor funds only proposals that it has confidence in because of its own efforts in their design, the ensuing activities are not likely to be sustainable. If the donor adopts either a short-term or long-term strategy to fund projects where the recipient country shows real ownership, then agreement is likely and those funded under a long-term commitment by the donor are more likely to be sustainable due to the increased knowledge that the donor has about the recipient and the increased confidence that the recipient has that risks that may need to be taken as a result of a foreign assistance may be compensated for over the long run.

From the evidence offered by Sida (1996a, 1996b, 1996c, 1997a), World Bank (1997a, 1998), and others (Bräutigam, 2000; Van de Walle and Johnston, 1996), projects designed primarily by a donor country's own IDA and its own consultants (or by other external IFI's who have defined a major reform program) are less likely to be sustainable than projects where the recipient government has a greater voice in the design and has a real commitment to long-term sustainability. In other words, when the recipient country is the "real" owner of a program or project, in the sense that they have had an active voice in the design of the project and have made a commitment to the activities involved in the project, the probabilities of sustainability are presumed to be much higher than if the donor country is the effective owner of the program or project. Projects that are undertaken with a longer time horizon are likely to be more sustainable – in the sense defined in Chapter 1 – than those undertaken with a short time horizon.

If the recipient government adopts Strategy C and is actually willing to say no to some programs and projects as being outside its own plans, a stalemate is likely to follow if the donor is committed to its own proposals. The tougher stand of the recipient, however, leads to a chance of receiving foreign aid for programs and projects that fit well into its overall development program. Thus, when a donor faces a somewhat tougher recipient country and makes a long-term commitment to support proposals that fit into a recipient country's policies, there is a higher probability of achieving sustainable projects. And, if the recipient government has adopted reform policies leading to less corruption, a more open public realm, an independent and well-paid public service, and supportive of effective market institutions, projects may not only be sustainable, but also generate substantial benefits that have a widespread impact (Dollar and Easterly, 1999).

Thus, as shown by the shaded cells in Figure 5.1, two out of the twelve possible outcomes are more likely to be sustainable than the other outcomes. And, if Outcome 4-3 is reached in a recipient country that has adopted major political and economic reforms, the result may be highly beneficial for all. Unfortunately, there are many reasons why donors and recipients do not choose the strategies leading to Outcome 4-3 and that recipients do not adopt seri-

ous political and economic reforms. Many of these relate to the costs and benefits involved, so we will continue our analysis of the working parts of this type of an action situation.

5. What are the costs and benefits assigned to actions and outcomes?

In simple situations, it may be possible to find a way of assigning costs and benefits to all actions and outcomes using a single metric, such as a monetary unit, and derive a clear-cut overall assessment of the net-benefits present in all action-outcome combinations. For this analysis, we can only illustrate the types of benefits and costs that may be involved for different kinds of participants in this bargaining situation. One of the key problems in assigning benefits to outcomes of development assistances is the problem of fungibility of foreign aid (Cassen, 1994; Feyzioglu, Swaroop, and Zhu, 1998). A donor country may have as a high priority supporting education or health projects and be willing to invest substantially in such projects either designed by itself or designed by the recipient government. The donor country hopes that its investment will be added to the investment in health or education that the recipient country already plans to make. The recipient country, however, may have other priorities.

In some cases, the recipient government may actually reduce its own level of government spending after a grant or loan than it had spent previously. Of course, the donor country may support a reduction in a government budget that reduces deficits as part of an overall reform package. Even if the amount of aid provided is translated into an equivalent increase in the recipient government's budget, a further question is whether the aid results in higher spending in the sector supported. Governments receiving foreign aid to support education, for example, may actually reduce the amount of funds they spend for education and allocate extra funds to another sector (Pack and Pack, 1993). Since foreign aid is frequently fungible, it can crowd out domestic sources of funds – a phenomena that is often observed in regard to the allocations made to a particular sector by a national government. Thus, regardless of whether the total government budget increases, decreases, or is unaltered after donor funding, there is usually some level of crowding-out taking place.

Given the difficulty of assessing the overall benefits of programs or projects, let us instead assume that any of the projects funded would bring at least substan-

² Studies of how much impact foreign aid has had on recipient government budgets have come up with varied responses as one would expect, but studies of a large number of countries have most frequently shown that development financing does not translate uniformly into an increase in funding. Feyzioglu, Swaroop, and Zhu (1998), for example, found that \$1 in concessional loans led to 63 cents in additional government spending for the 38 countries in their sample. Cashel-Cordo and Craig (1990) found no effect of bilateral loans on government spending in their study of 46 countries. Studies of individual countries have not found as much fungibility. Pack and Pack (1990), for example, found that \$1 in aid to Indonesia led to \$1.50 in additional spending. Thus, one cannot make any firm estimation of how much fungibility there may be in a particular setting, but has to be wary that the amount of foreign aid spent does not automatically translate into added government spending.

tial short-term benefits to the recipient country. If any of these projects were sustained, we would further assume that they would generate more benefits than costs and thus be evaluated as both sustainable and efficient in the long-term. This allows us in this illustrative example to proceed with an initial analysis of the costs of diverse strategies to the participants. Since the costs are proximate to those involved and the benefits are diffusely spread across many others and in the future, the costs to participants may be the more relevant factor that affects strategic choice in this type of bargaining situation.

If the government of the recipient country is a relatively entrenched authoritarian regime that owes its continuity in office to its distribution of benefits to key supporters, the costs of the three strategies vary rather substantially. Strategy A is the lowest cost strategy. No investment has to be made in establishing a strong, independent, public service capable of making coherent long-term policies and designing and implementing good projects. So long as donor countries are willing to lend funds, the recipient can get by with promises of commitments, without any real commitments to any externally or internally imposed reforms (see Pedersen, 1996, 1998). If the government is relatively corrupt, then the benefits from diverting funds either directly from the project or through the fungibility of the national budget allows the government to siphon funds that are made available to top government officials and to enter issue-attractive contracts favored by supporters.

This strategy has been adopted so often over the past 40 years that many stories are told about countries that make promises during negotiations but do not carry them out during the implementation phase. These stories illustrate what is meant by the term *moral hazard*. The "dance" between the donors and a recipient was well captured in a 1995 story in *The Economist*:

Over the past few years Kenya has performed a curious mating ritual with its aid donors. The steps are: one, Kenya wins its yearly pledges of foreign aid. Two, the government begins to misbehave, backtracking on economic reform and behaving in an authoritarian manner. Three, a new meeting of donor countries looms with exasperated foreign governments preparing their sharp rebukes. Four, Kenya pulls a placatory rabbit out of the hat. Five, the donors are mollified and the aid is pledged. The whole dance then starts again. (August 19, 1995)

The "dance" continues until the present – only now with a slightly different tune. In 1997, the IMF did stop paying out a large loan it had approved in 1996. With a bad drought in both aid funds and weather, President Daniel Arap Moi has been quite desperate about this situation and is now willing to promise to meet the toughest set of conditions ever imposed by the IMF. This set of promises did open up the flow of \$18 million during the summer of 2000 to help relieve the drastic effects of the recent drought (see *The Economist*, August 5, 2000). Several of the senior Sida staff members interviewed in March of 2000 recounted similar stories of prolonged "dances" in the relations between Sweden and countries such as Nicaragua, Tanzania, and Zambia.

For a corrupt government, Strategy C is very costly, as it involves at least

some level of political and economic reform. Such reforms may lead to the end of the regime itself and are rarely adopted by entrenched authoritarian regimes. Strategy B may be less costly than C, but even this strategy involves some reform efforts in order to come up with programs and plans that a donor would be willing to fund and to commit oneself to follow-through when funding is completed. Most corrupt governments do not have the capacity or desire to make such a commitment. Consequently, a donor can expect that authoritarian regimes are most likely to adopt Strategy A and at most Strategy B. Trying to impose conditions that would move the recipient country closer to institutional and policy reform is unlikely to work. The World Bank, reflecting on its own experience, reports that "policy reforms rarely succeed unless the government is genuinely convinced that the reforms have to be implemented and considers the reform program its own" (World Bank, 1997a: 37).

In the last decade, however, more developed countries have initiated serious institutional and policy reforms with the help of bilateral and multi-lateral donors. Governments who must rely on a broad constituency, rather than a narrow clientele base, are also more likely to resist large government deficits, avoid overdependence on loans, and invest more heavily in elementary and secondary education (Bueno de Mesquita and Root, 2000). Countries with newly elected reform governments are more likely to be committed to reform than even democratically elected governments who have been in power 10 or 15 years (Dollar and Svensson, 1998). Thus, such governments are more likely to adopt Strategy C. When Strategy C is actually adopted, a donor that makes long-term commitments to provide aid and develops some mutually agreed-upon conditional loans may help achieve Outcome 4.3. Such loans enable the reform government to make a public commitment to its reforms and send a signal to private investors that it is now safer to invest in the recipient country.

For the donor country, expending funds to design projects themselves is more costly than relying on design prepared by recipient governments. Thus, assuming equally attractive benefits, a donor would always prefer the second option under either short-term or long-term strategies. Consultants often prepare project designs for recipient governments and it is difficult for a donor to know whether the design represents a genuine interest by the recipient government or a project that a consultant thinks the donor will find attractive. We discuss this puzzle further in Chapter 8.

6. What is the information that is available to each participant about the situation?

A major problem facing both donor and recipient governments is determining which strategy the other will adopt and then choosing their own best response to that choice. Both participants have a considerable amount of private information about the level of benefits and costs of diverse actions and outcomes, but in general there is more information about the donor's costs and benefits than about the recipient's. The asymmetry of information is largely a function of the fact that in most donor countries a free press exists,

and considerable information exists about public opinion and government policy regarding aid.

What the recipient country has a hard time knowing, however, is the strength of the donor government's determination to withdraw further funding if the recipient country does not keep its commitments. As the story in *The Economist* quoted above illustrates, many donor countries have found it difficult to withhold funds from a recipient country that does not keep its promises to perform in certain ways. Once funds have been committed in a donor government's budget, there are potential risks to the donor country's future aid budget of withholding funds to a recipient. Funds that are not spent during one budgetary period are sometimes viewed by legislative bodies as "surplus" to be retrieved from an ineffective agency (see Wildavsky, 1984). Once a donor has been forgiving in the past, however, it has a hard time convincing a recipient country that it will be tough in the future (see the discussion of the Samaritan's Dilemma in Chapter 3).

The donor country, on the other hand, has a hard time knowing whether a recipient has chosen Strategy A or Strategy B. A donor country that thinks a recipient has chosen Strategy A should withdraw entirely from the situation. With Strategy B, there is at least a little hope. A clever recipient government that wants to choose Strategy A, however, only needs to hire a consultant who has good knowledge of the donor and wants to implement a funded project. The government asks the consultant to devise a credible proposal likely to attract the donor's interest (and offers to pay the consultant only if the project is funded!). Thus, the simple presentation of plans and proposals by the recipient does not provide credible proof of the real commitment of the recipient and does not help the donor sort out between Strategy A and Strategy B. (If one wanted to analyze this situation closely, one would need to add one more strategy to Figure 5.1 where a consultant's plans were put forward without a strong commitment to follow-up.) Thus, determining when a government really has a sense of ownership for reforms, programs, or projects turns out in practice to be extremely difficult. And, given the high volume of demands on the officials in a donor country's IDA, actually determining what strategy the recipient government is likely to choose may not be feasible in many donorrecipient bargaining situations.

7. What is the level of control that participants have over the choice of strategy?

For the donor, one needs to ask whether ambassadors or heads of development cooperation agencies in the field are authorized to make independent decisions or whether they must carry out policies designed by the Foreign Ministry, Ministry of Finance, or the cabinet. For the recipient, one needs to ask what decision rules recipient government officials must use before coming to a decision about choice of strategy.

In the initial negotiations over an aid agreement, one can think of the direct participants in the negotiation process as agents of their own country's government. Where the level of control that these agents possess can be very important is when there are disagreements about whether one or the other government has lived up to its "agreements." This can happen, for example, when a recipient government has agreed to conditions attached to a foreign assistance grant and the ambassador for the donor country thinks that the recipient government is not keeping its agreement. An important aspect of the ongoing action situation is how much freedom has the ambassador — who has more direct information about the ongoing strategies of the recipient — been given to cancel future payments due to nonperformance of the recipient government. If the Ambassador has little control over continuing payments, a recipient government uninterested in keeping reform commitments may find itself in a setting with more freedom to adopt Strategy A while professing to have adopted Strategy B or even Strategy C. This problem is exacerbated due to the severe information constraints and asymmetries that frequently characterize this situation.

5.2 Initial Theoretical Lessons Regarding the Donor-Recipient Negotiations Process

As one can see from the above, analyzing the structure of interactions between a donor and a recipient government (ignoring for the moment the discussion on embedding of bilateral negotiations in the context of many other donors interacting with the same recipient) involves bringing together a diverse set of analytical elements. These elements include those related to the context including the nature of the physical world being acted upon, the kind of rules that are involved, and the broad sense of community involved within the donor and recipient countries and between them. Further elements have to do with the structure of particular types of situations such as the types of actors, the positions involved, the actions or strategies that can be adopted, the outcomes that are likely, the control, the relevant information, and the payoffs. Perceived incentives are the result of how all of these elements combine to create a particular structure. And, to make analysis more difficult, the result of changes in any one element frequently depends on the particular values of the other elements.

The specifics of each donor-recipient bargaining situation will differ, depending on a large number of factors having to do with political relationships and dependencies in each country, the history of the interaction, and the subsequent principal-agent relations with those who implement funded programs or projects. But three broad hypotheses can be gleaned from the analysis of this generalized situation. And, the posited relations are based on the empirical evidence presented by many scholars linking effective ownership and a longer-term perspective to an increased likelihood of sustainability (see discussion of sustainability and ownership in Chapter 1, as well as in the concluding chapter). Assuming that these hypotheses are correct, we can reach three broad tentative lessons that are relevant for a bilateral donor such as Sida.

Tentative Lesson One: Adopting a policy, such as Sida has already done, that for-

eign aid will largely be allocated to programs or projects where the recipient government is committed or "owns" the proposed activity is generally more sustainable (two out of twelve possible outcomes with at least some probability of sustainability) than when the recipient does not have real ownership.

Tentative Lesson Two: The best outcomes are potentially achievable when a long-term commitment to a recipient country is made, as Sida does when it makes a country-frame agreement. If recipient governments are not committed to serious institutional and economic reform and accept aid without a firm commitment to sustain, however, long-term commitments can involve substantial investments that produce few desirable results. This could lead to the least efficient and sustainable project of all.

Tentative Lesson Three: When facing recipient governments whose leaders are not themselves benefited by institutional reforms and effective economic policies (due to their reliance for continuance in office on supporters who are advantaged by the status quo), donors are faced with a choice between helping a few citizens with short-term gains versus pulling out and waiting for a more auspicious opportunity. Pulling out may be the only way to help those citizens in the long run, especially if donors can form alliances with other donors to hold firm, but may make it more difficult to obtain large aid budgets in the future as such actions bring public attention to the strategic actions of authoritarian and corrupt recipient regimes.

Currently, Sida is contemplating making long-term commitments to a *region*, rather than to a particular country in the region. This may greatly help to get incentives oriented toward producing more sustainable development assistance. While making a long-term commitment, Sida is able to pull out of a country that does not take reform efforts seriously.

In all cases, however, considerable knowledge about the history and current political context of a regime is needed to apply these tentative lessons wisely in settings where information is scarce about the strategies adopted by a recipient government. Before international aid has the possibility of achieving beneficial outcomes for the citizens of the recipient country (and, if successful, for the citizens of the donor country), further analysis is needed of the role of special interests, of principal-agent relationships between both countries and with implementing organizations, and of their relationships with the citizens being served. All of the actors involved in the international assistance octangle described in Chapter 4 are likely to have a greater or lesser impact on the sustainability, efficiency, and growth-enhancing capabilities of foreign aid. And, all of these actors are involved in potentially difficult, collective-action problems and principal-agent relationships that were earlier discussed.

These tentative lessons help to summarize the specific findings for many studies, but each should be viewed as a theoretical hypothesis for which some initial empirical support exists. Further testing of these hypotheses will be important as a foundation for future policies.

If one is interested in changing the structure of the relationships in a particu-

lar arena, one needs to look to other arenas as possible sources of incentives for the actors in a particular arena as well as examining the underlying physical and material conditions, cultural views, and the rules-in-use affecting the constraints and opportunities within a particular arena. The action situation will differ, for example, if participants come from similar cultures and thus can easily understand each other as contrasted to a situation where they come from diverse cultures and do not know how to read subtle cues about each other's intentions. Trying to develop a sustainable program of building major infrastructures within a country involves a different set of problems than increasing the level of people-centered services (E. Ostrom, Schroeder, and Wynne, 1993). And, constitutional rules in each country – as well as public policies adopted by each country regarding giving and receiving foreign aid – affect the specific actions that each participant can or cannot take in a particular bargaining situation.

Chapter 6

Incentives in the Modalities and Characteristics of Development Cooperation

Summary

This chapter examines some implications of different rule configurations on incentives in development cooperation.¹ These configurations arise in, among other variables, the context of particular aid modalities and characteristics of aid interventions. In this report, we take modalities to mean the broad instruments of development cooperation such as Project Aid, Programme Aid, and Sector Programme Support. We take aid characteristics, in turn, to refer to the means – such as credits, grants, and guarantees – by which aid is delivered, and the conditions – including those related to procurement – on which aid is released.

Much of the literature on incentives in development assistance focuses on conditionality – that is, how aid can be used as a carrot and stick to modify recipient behavior. This literature deals mainly with the relationship between the donor and recipient governments. Chapter 6 points out that incentives in the context of aid are based more broadly and deeply. In Section 6.1, we summarize the underpinnings of this well-explored interpretation of aid as an incentive. Against this background, Section 6.2 draws our attention to the idea that the characteristics and modality of aid carry rule properties that, within specific configurations, take on particular institutional significance. In this regard, Section 6.3 draws out the main rule characteristics of grants, credits, and guarantees as well as tied-aid, while Section 6.4 draws out the main rule implications of different modalities of aid. Finally, Section 6.5 notes that these rule properties interact with institutional realities faced by beneficiaries. Sustainable benefits from development assistance can emerge only when the structure of aid helps align incentives to extant problems of collective action.

¹ While this report provides an overview of the rules inherent in various modalities and characteristics of aid as configured, there is no attempt to be comprehensive. Indeed, we hope that this chapter prompts a more detailed and methodical study of the rule implications of aid.

In sum, we find that incentives in aid must be understood in a broader context of relationships than just that between a donor government and a recipient government. A more complete follow-up analysis should include the larger and more interlocking set of principal interactive arenas depicted in the Octangle. It should also consider more fully the contexts within which the complex of rules introduced by the presence of aid interacts with those on the ground. Such analysis can help us discern if the institutional context of development assistance furthers or retards the resolution of underlying collective-action problems faced by beneficiaries.

6.1 Aid as an Incentive in Itself – A Précis

Early conceptions of aid held that substantial transfer of assets were needed to jump-start the development process. The "gap theory" stressed that the role of foreign assistance was to infuse the capital, infrastructure, and technical assistance absent in developing countries. Official capital flows – facilitated through grants, credits, and guarantees, and financed by the governments of developed countries and multilateral donor organizations – were to make possible this transfer.

After more than three decades of experience in development assistance, the low level of return on the aid-dollar has been linked to three fundamental problems (Collier, 1999b; Stiglitz, 1997). The first is that aid projects are not scalable. Projects that are successful in one context most often are not in others. The second is that project funding is partially fungible (Feyzioglu, Swaroop, and Zhu, 1998). Donor financing of a project releases resources of the recipient government for other more marginal projects. In effect, therefore, donors do not finance the project they appear to pay for, but rather the one that the recipient government, for whatever reason, chooses to undertake with the resources freed up by their aid. The third reason for the relative ineffectiveness of aid is that, even if the project designs were good, the productivity of aid investments depends on the quality of the overall policy environment.

Donors, finding problems of scalability and fungibility difficult to overcome, have sought to enhance aid effectiveness by fostering an improved policy environment. Aid conditionality was developed in the 1980s as a way of using incentives thought to be present in grants, credits, and guarantees, to bargain for policy reform.²

The difficulties of using aid as an incentive for policy change, however, are two-fold: The first relates to the actual potential for grants, credits, and guarantees to serve as incentives for policy change. As we note in Section 6.3 of this chapter, although aid is desirable for various reasons, its potential for af-

² Sector-wide approaches are another attempt to overcome the problems of aid ineffectiveness by improving the policy environment. In this regard, see Section 6.4 of this chapter for a discussion of Sida's Sector Programme Support.

fecting *sustainable* change in the way policy is adopted and implemented is weakened when ownership is separated from responsibility.

The second set of difficulties in using aid as an incentive relates to the interactive contexts of aid negotiations. As Collier (1999b) notes, conditioning programme aid in return for explicit negotiated commitments to reform policy means that this policy change is the price recipient governments would have, in effect, to pay in exchange for aid. This, he points out, leads to several problems:

- First, if donors have "bought" reforms with programme aid, they become, in effect, the owners. Donors, realizing this peril, have sought to portray aid in exchange for policy reform as the "costs of adjustment." Despite such creative labeling, recipient governments can threaten (and have threatened) to rollback previously undertaken reforms as a way of countering donor pressure. The presence, in itself, of such threats shows that recipient government leaders know who really owns the reforms.
- Second, there is little incentive for the recipient country's leader to take on the responsibilities of ownership. Instead, by protesting vociferously the conditions being imposed by donors, hardships caused by the reforms can later be blamed on the donor. By making the donor out to be the "bad guy," popularity at home can be gained. When it is politically expedient to identify ownership of reforms with the donor, leaders are less motivated to develop the domestic consensus needed for reform, restructuring, and belt-tightening to be effective.
- Third, when contracting for policy changes through donor-recipient bargaining, the recipient government's rational strategy is to affect reluctance to reform as a way of wringing more concessions out of the donor. Donor-negotiating teams, meanwhile, see their purpose as extracting the maximum reform for a given amount of aid. Thus, even if the recipient government believes in the reform, the incentive is to impede rather than assist the reform process.

Collier (ibid.) further notes that the donor's offer of aid for reform does not induce a supply response for several incentive-related reasons:

- First, the injection of aid alleviates the immediate fiscal crisis of the recipient government, and hence the urgency for change. In poor policy environments, therefore, aid can delay reform.
- Second, aid faces a time-consistency problem there is no incentive to maintain a promise to reform unless the recipient government is itself interested in this. Often, there is no cost to defaulting on promises of policy reform.

This is because:

Third, aid faces a moral hazard problem. Donor agencies that should enforce the terms of the contract also have an interest in realizing some form of success. Thus, enforcement of the terms of the aid contract is often relaxed if the recipient shows some sign of promise. These indications are sometimes withdrawn by the recipient after the aid has been disbursed; and

- Fourth, the political and commercial goals, pushed by interest groups in the donor country, can subvert the objectives of conditionality and create a soft budget constraint.
- Finally, we can add to the points made by Collier by noting that donor
 agencies are also in the business of disbursing aid. Desk Officers in donor
 agencies typically signal their performance in terms of projects signed
 and funds disbursed; on the other hand, maintaining restraint often does
 not broadcast such signals.

These effects then give rise to the "promise now but delay delivery until later" strategy adopted by the leadership of aid recipient countries, as exemplified in the Kenya-Fund Dance (*The Economist*, August 5, 2000).

6.2 The Configuration of Aid Capital

The context within which aid is structured and administered involves a series of interrelated action situations. Understanding incentives within this *system of aid* requires that we move beyond a focus on a single action situation – that between donor government and recipient government – to consider more complex and configural relationships. The Octangle, developed in Chapter 4, provides a representation of the connections among the primary corporate actors in this system of aid. Incentives in interactions among these actors arise within specific rule combinations that emerge, partly, from the presence of given modalities and characteristics of aid. These modalities and characteristics, thus, can affect the effectiveness and sustainability of donor assistance in solving beneficiary problems of collective action.

6.2.1 The Morphology of Aid Capital

Interlocking arrays of characteristics set apart any particular initiative in development cooperation. These features include, significantly, the sector of activity, the modality of assistance, the form of finance, the nature of the contract, and the channel of implementation. In turn, these categories each imply the presence of certain rules and conditions that circumscribe the context within which development cooperation takes place. Any particular aid intervention represents a particular array of rules drawn from this assortment of aid characteristics.

Such rules, when applied to the arena of development cooperation, will interplay at various depths with diverse indigenous rules and localized contextual understandings. Given that incentives arise from the interaction of individuals within the bounds of formal and informal understandings, the nature of these aid-rule characteristics and their interaction with existing institutional arrangements is important to any understanding of how aid, incentives, and sustainability are related.

The economist Ludwig Lachmann (1971, 1978) refers, in his study of capital, to a morphology of relevant forms that the structure of production assumes in a dynamic environment. If institutions represent a form of social capital, then we can speak as well of various elements or rules that make up each of various organizational structures (E. Ostrom, 1999). Among all of the rules that might apply in a particular situation, only some are feasible. A further sub-set of these may be institutionally meaningful and sustainable. To take a bricks-and-mortar analogue, only certain architectural designs – those that specify the strategic location of load-bearing walls – will support the construction of buildings. Further, only certain types of buildings will be suitable for a given purpose – say, a primary school.

In the case of aid, only particular configurations of its characteristic elements will be feasible. Of these, some may be more relevant in a particular complex setting than others are – particularly given indigenous rules and localized arrangements – in developing the types of incentives that make for enhanced project success and sustainability. To improve the institutional contexts of aid, we would have to come to grips with what each of these characteristics represent, and with how each might work in conjunction with others.³

Numerous combinations and permutations are possible among the categories and rule features of development cooperation. Take, as an illustration, a project in the natural resources sector. The project contract is based on principles of ex ante conditionality, and is financed by a grant. It is implemented by a partner country organization. All these factors have associated rule implications that take on additional meaning in their combined context. Understanding the incentive properties that each of these factors represent – both singly and together, as invoked in the design of any given aid intervention – can make us more aware of the incentive consequences of aid and, hence, the prospects of sustainability.

6.2.2 Caveat

The remainder of this chapter provides brief descriptions of the various characteristics and modalities of aid and draws out some of their rule implications and consequences for sustainability. To be sure, setting out the complete institutional implications of each of these is beyond the scope of this report. The task of examining them in all their permutations and combinations is even more complex. This work is not attempted in this report, save for particular combinations taken up in the case studies presented in Chapters 8 and 9. The descriptions of various characteristics and modalities of development assistance provided below and accompanying incentive analyses are intended merely to highlight some features and concerns; they claim no ambition to provide any detailed or comprehensive description of the institutional context of development assistance.

³ Indeed, much of this knowledge is already held tacitly by practitioners with extensive experience in development work.

6.3 The Characteristics of Aid

The characteristics of aid affect the institutional context of development cooperation. Below, we review three basic means of aid finance – *credits, grants*, and *guarantees*. Following this, we take up some specific conditions attached to such aid. *Tied-aid* conditions specify the locus of procurement – usually in the donor country itself – and *Aid Conditionalities* specify what is required of the recipient in order to qualify for the aid disbursement.

These characteristics of aid yield incentives that have important consequences for aid ownership and sustainability. We explore how.

6.3.1 Grants, Credits, and Guarantees

Grants, credits, and guarantees are three ways in which a donor conveys financial aid to the recipient. Each is characterized by particular incentives, where these incentive effects emerge under specific conditions. Does the fact that aid, in a particular instance, is delivered as a grant rather than as a credit make a difference, or do the conditions circumscribing the delivery of aid vitiate these differences? To assess this, we examine grants, credits, and guarantees in turn, to see what they are, what ownership attributes they convey, how these affect incentives, and hence sustainability.

Grants

Grants are transfers made from the donor to the recipient in cash, goods, or services for which no repayment is required.⁴ The overwhelming majority (approximately 90 percent) of Sida's aid contributions is in the form of grants.

In our everyday understanding, grants are attractive since they do not have to be repaid. Grant applicants – research scientists, for example – are repeatedly motivated to face up to the tedium of writing proposals that set out detailed representations of intended activities. Ownership through accountability is better ensured in this case by the researcher's stake in the outcome of the funded work. Among other considerations, this includes the need to build a reputation among his or her peers, and the need to attract similar funds in the future.

This incentive effect of grants, however, often evaporates in the development cooperation context. We explore three possible scenarios:

In the first, grant funding for a bilateral aid project is transmitted as budgetary reimbursements from the ministry of finance of the recipient country to the bureau in charge of implementing the project – i.e., the designated project owner. In some cases, recipient governments swap all or some portion of their own contributions to the project with that derived from donor funding – the issue of fungibility. Here, the scope of a donor grant provides no added motivation for the prospective owner to maintain effort.

⁴ Definitions are based on those of the OECD. See: www.oecd.org//dac/htm/glossary.htm

In the second, as with the case of the researcher, reputation plays an essential role in linking responsible ownership of grants with an interest in the realization of proper funded outcome. This responsibility is enhanced when recipient governments are constrained to maintain credibility with their donors/creditors. However, if the donor faces a Samaritan's Dilemma, or if there exists competition among donors, there are fewer stakes for the recipient government in maintaining a good reputation.

The third scenario contemplates that even if officials at the recipient's finance ministry have an interest in maintaining credibility with their donor counterparts, they are often far removed from line ministry officials and other *de facto* owners further down the chain of project implementation. These local-level officials, not faced with having to maintain an ongoing relationship with the donor, face fewer repercussions for irresponsible project ownership.

Credits

Credits (or loans) are transfers for which repayment is required. The terms of credits vary with the rate of interest and the length of period allowed before repayment.⁵ Sida provides Concessionary Credits (U-Krediter) and Soft Loans (Biståndskrediter).⁶ Swedish Concessionary Credits combine funds borrowed in international capital markets with those from the Swedish aid budget. Swedish funding is arranged by the Swedish Export Credit Corporation and guaranteed by the Swedish Export Credit Board. The terms of credit depend on how the United Nations classifies the recipient country, with those in the "Least Developed" category - a select list - receiving a higher rate of concessionality.⁷ For projects related to tied concessionary credits, Sida contributes the finance and subjects it to evaluation. It assumes that there is capacity in the recipient country to administer the project. As such, it is considered "reactive" (Sida, 2001b). By contrast, Soft Loans are normally untied, though they need to involve a "Swedish interest." Sida is often more engaged in the design and implementation of projects associated with this type of loan. It is therefore considered "proactive" (ibid.).

A 1996 Sida study, *Bistånd på Kredit*, cites three potential advantages of creditfinanced development cooperation over grant-based development cooperation. First, it holds that credits oblige the recipient country to take greater ownership of projects since accepting credits involve a debt for the country.

⁵ Ibid.

⁶ Their "softness" is measured against terms offered by commercial banks.

⁷ The classification of a country's development status is critical to the considerations it can receive for exemptions in tariff reduction agreements, pollution quotas, terms of credit, etc., under the prevailing international welfare system organized by the United Nations. For example, exemptions for developing countries from having to reduce tariff rates are often desired by domestic industries seeking protectionist shelter. This system creates incentives to maintain or even foster a recording of those economic and social features that enable the state to be categorized as worse-off in the developmental league tables maintained by the UN. There are clear disincentives to "graduate" from a lower development category to a higher one as this implies a loss of various "privileges".

This is called the "disciplinary motive." Second, the use of market-financed concessionary credits is seen to give rise to larger inflows of capital than a pure grant. This is called the "leverage motive." Finally, credits are seen as providing a clearer commercial signal to the recipient. Here, credits to a corporation producing electricity, for example, are taken to provide greater incentives for it to set reasonable tariffs and to run operations efficiently. We may call this the "signalling motive."

Indeed, the incentive value of credits, as per our everyday experience, depends on how well recipient ownership is rooted. If we take a quotidian case of a bank financing an entrepreneur with credit, the borrower has a stake in his or her own success since this enables repayment of the loan. In this way, he remains creditworthy.⁸ The bank correspondingly has an incentive to screen loan applicants carefully as it stays in business through recovering loans plus interest.

However, when ownership is separated from the associated responsibility, as often is the case in development cooperation, the incentive effects of credits become obscured. We examine two possible contexts. In the first, repayments of credits taken to finance particular development *projects* in recipient countries are derived – as they typically are – from the country's general tax base rather than earmarked from the income generated (should it happen) by the funded project. There are, thus, fewer financial stakes for the project owner or recipient government in the success of a given development project. This is particularly so for relatively small projects.

Incentives also weaken when donors extend credits as *programme* assistance—the second context. Programme aid credits are designed to prompt recipient governments to adopt good policies and to make national investments needed for high rates of economic growth and human development. The repayment schedules here are usually extended over periods of up to 20 or more years. At the same time, recipient country agents often do not have as their primary goal the improved well-being of the broader sections of their populations. Indeed, their charge to improve overall conditions over the longer run is often overtaken by short-term political imperatives. Thus, many recipient government officials face incentives to make promises to donors to secure the credits and then not to follow through on commitments.⁹

⁸ Sound lending institutions, at the same time, are aware that a very high rate of interest will attract only the cocky entrepreneur who is willing to take very high risks. They also know that if it lends a very large sum to the borrower, then it can itself become vulnerable to the borrower's threats to default. When a donor country offers credits to a recipient country, it is less financially dependent on repayment of the debt. As such, it can be less discriminating of the creditworthiness of the recipient than private lenders most often are.

⁹ The incentive effect of programme aid leads recipient governments to adopt the "promise now, delay delivery until later" strategy with donors. An exemplar of this relationship is that between the Government of Kenya and the IMF – the Kenya-Fund Dance (see "The Kenya-Fund Dance," *The Economist*, August 5, 2000).

When the expected growth from programme assistance does not materialize, repayment cannot be made and the debt burden can accumulate. This stock of outstanding debt then deters both domestic and foreign investment; in such cases, donor involvement may crowd out private investment. In this way, the recipient becomes more dependent on donors, and this affects, negatively, prospects for sustainable development.¹⁰

Guarantees

Guarantees facilitate the financing of projects – often relating to infrastructure – that use private sources of capital. Emerging capital markets, found in many developing countries, can often raise the large-sized funds needed for local investments in infrastructure. These sources of capital, however, bear risks that have to be overcome if large investments by private firms are to proceed.

There are three basic types of guarantees covering three basic types of risks: Investment Guarantees cover the political risks in share capital, Credit Enhancement Guarantees overcome the credit risks developing country borrowers pose, and Performance Guarantees mitigate the risks to investors from the shortcomings in regulation, legislation, and project execution capacities of the developing country in question (Sida, 1999j).

While guarantees reduce the risk involved for firms from donor countries to invest in specific projects in the recipient country, these selected investments postpone the need for fundamental institutional reform required of the recipient country to deal with the presence of these risks in the first place. A recipient government will be less compelled to face up to its responsibilities — in terms of maintaining credible systems of governance, regulation, and adjudication — as a way of attracting needed private investment as long as donors compensate for these shortcomings though providing guarantees. The Moral Hazard problem presented here is illustrated in a case study of power infrastructure development in Chapter 9.11

6.3.2 Tied-Aid – Issues and Incentives

Donor aid, whether in the form of credits, grants, or guarantees, ¹² is tied when goods and services associated with the project must be procured in the donor country. Although tying aid to domestic procurement fosters a lobby for continued aid in the donor's polity, it is flawed in three ways.

¹⁰ See Bräutigam (2000).

¹¹ See the analysis of Sida's Chandrapur-Padghe project in Chapter 9 of this report.

¹² Although guarantees are formally untied in the case of Sweden, they are required to address a "Swedish interest" – meaning that "Swedish exporters shall have the opportunity of winning contracts in international competition, that the project is a part of Swedish development cooperation in that country, or that Swedish parties are involved in the project" (www.sida.se/Sida/jsp/Crosslink.jsp/d,171/a,5186).

Three Problems with Tied-Aid

First, it deprives the recipient country of ownership since it denies the related prerogative to make decisions about available resources; tied-aid provides fewer prerogatives of ownership to the recipient country than equivalent cash amounts. (As such, it also remains at odds with policy statements by Sida and other donor agencies on the centrality of recipient ownership.) Second, it dilutes the central purpose of aid when, under the guise of helping the less-fortunate abroad, the donor government channels funds drawn from general taxes to specific domestic enterprises. Many donor governments promote their domestic industries through funding for aid programs. This generates incentives within the domestic political economy that influence the sustainability of initiatives in international development. Finally, tied-aid runs the risk of reducing competitive pressure in procurement. In this way, it can hamper the efficient use of aid resources.

Jones (1995: 369) notes "the decision to provide tied-aid depends on political pressures in the donor country and the willingness of donor taxpayers to fund it." He uses tied-aid as an example of how the scope for rent seeking is broadened when taxpayers support government-funded altruism and there are few alternatives for delivering this aid. Jones, in his analysis, also supports the findings of Jepma (1991) – that using tied-aid to protect domestic industries and reinforce comparative advantage results in higher procurement prices than when aid is untied. Relatedly, Hayter and Watson (1985) have calculated that the price of goods financed by aid exceeds world market prices by 25 to 30 percent.

Tied-aid thus runs the risk of being driven by the interests of the donor country beneficiaries rather than of the recipient country beneficiaries. These rent-seeking incentives can have repercussions for sustainability. First, when aid has to be tied to procurement in the donor's country, a search must be made for schemes that can make use of domestic resources, technologies, and expertise. These may be inappropriate to the needs of the recipient. Second, favoring the donor's own expertise and technology over that available in other countries can mean that methods most appropriate to the recipient country realities might not be the ones selected. Indeed, tied-aid can have counterintentional consequences. An early American program to aid grain production in Egypt, for example, almost destroyed its wheat farmers by depressing the price of wheat in domestic markets (Bovard, 1986: 3).

Tied-Aid and Mercantilism

Tied-aid has long been a way for donor governments to pursue mercantilist policies. While subsidizing exports is not allowed by the World Trade Organ-

¹³ Agents of recipient governments prefer untied-aid to tied-aid since, with untied-aid, they can independently contract through international bidding the best contractor or, at least, one of their own choice – for a development project. However, when such ownership is not sufficiently constrained, it broadens the potential for extra-contractual negotiations between recipient country officials and suppliers.

ization, purchasing or financing the purchase of goods to be sent to recipient countries under the guise of aid can amount to the same thing. Various donor governments have, in the past, subsidized exports by guaranteeing loans below market interest rates. Donor governments are also keen to promote their national companies in competition with those of other countries, "especially when big infrastructure contracts are at stake in emerging markets" (*The Economist*, February 1997, "Thoroughly modern mercantilists"). In this regard, a 1994 report by the United States General Accounting Office (US-GAO) on tied-aid noted, based on averages for the 1988 to 1991 period, that U.S. competitors provided between 45 to 91 percent of their tied-aid to capital projects (USGAO, 1994).

The trade effects of tied-aid can be long-lasting. Since tied-aid is most common in the infrastructure sector – which includes projects in telecommunications, power generation, construction, and transportation – the loss of an initial contract usually implies the associated loss to the contracted firm(s) of very lucrative follow-on sales of spare parts and maintenance contracts. ¹⁴ In order to discourage the use of such trade-distorting tied-aid, the OECD in 1992 established the "Helsinki Protocol." This agreement prohibits the use of tied-aid for projects in recipient countries whose per capita income is sufficiently high to make them ineligible for 17- to 20-year loans from the World Bank. It also restricts the use of tied-aid for projects that are otherwise commercially viable. Finally, it seeks to improve transparency in the provision of tied-aid by fortifying notification and consultation procedures (OECD, 1996).

While the Helsinki Protocol requires individual members of the OECD to adhere to the rules on tied-aid, the agreement specifically excludes aid programs of multilateral or regional institutions. United States officials, latterly, have suggested that some European countries are circumventing the protocol by channeling tied-aid through the European Union (USGAO, 1994).¹⁵

Tied-Aid as a Commitment Device

Jakob Svensson (2000) argues that the conventional wisdom on tied-aid — which holds that tying aid to a source in the donor country is bad for the recipient country and that it is mostly a way to increase the commercial impact

¹⁴ The Economist recently reported on the sophisticated mural defenses against the rising ocean which was constructed, at \$13,000 per liner meter, around Male, the capital of the Maldives. "It is interesting to know how Maldives could afford this. As an official explains, the Japanese government was generous enough to pay for it. He hesitates. Yes? He goes on: the aid was linked to a contract award for a Japanese firm, which used patented technology. To extend or repair the wall, the official complains, they must buy from the firm at outrageous prices" (The Economist, May 13, 2000, "Letter from Maldives – Not Sinking but Drowning").

¹⁵ Sweden, in the past, has gone ahead with tied-aid for an infrastructure project despite a decision by the OECD that the offer does not conform to the rules of the Helsinki Protocol. Our study of the Chandrapur-Padghe power project, set out in Chapter 9, describes the circumstances of this case. Sida officials we interviewed insisted that such derogation will not occur again and that Sweden will, in the future, follow a multilateral approach in promoting large infrastructure aid projects.

of the aid program — is flawed since it does not look sufficiently at incentive structures inherent in donor-recipient interactions in tied- versus untied-aid. He holds that recipients may overcome moral hazard problems inhibiting the implementation of needed structural reforms in cases where donors possess a credible commitment technology. Donor-imposed conditionality often does not work, says Svensson, citing *The Economist's* (August 5, 2000) Kenya-Fund Dance. Instead, such commitment can come, he notes, through tied-aid, among other mechanisms.

This commitment technology is introduced since a tied-aid project is contractible within the donor country – in contrast to an untied-aid project where there is no independent framework for enforcement. Tied contracts, he notes, can be enforced by the legal institutions of the donor country. Here, donor country courts could hold the donor agency's feet to the fire. As Svensson concludes, "this in turn constrains the donor's *ex post* incentives, thereby providing the necessary incentives for the recipient governments to induce effort" (2000: 64). Svensson argues that through this precommitment, the donor government's strategy is made credible to the recipient government. In this way, the recipient government is further induced to make the needed effort on its part to help improve aid sustainability. In this way, he notes, the potential commitment properties of tied-aid can overcome the other drawbacks of tied-aid.¹⁶

Svensson's recommendations, if adopted, would undercut the Helsinki Protocol. Given this, more thought has to be given, among other issues, to the conditions under which donor country firms will seek legal recourse. Indeed, it is possible that both the donor agency and the donor country firm can have good reasons to avoid court proceedings. Inhibitions in this regard may stem, for example, from the fear of unfavorable media attention. Such bad press can increase critical scrutiny of donor organizations and dissipate public support for aid.¹⁷

6.3.3 Aid Conditionality - Ex Ante versus Ex Post

In a speech at the Bank-Fund annual meeting in 1999, Joseph Stiglitz, then the Bank's chief economist, observed that traditional conditionality – aid contracts with strings attached – has not worked. He concluded that democratic accountability and economic sustainability require that the recipient country take ownership of its development strategy. In carrying this theme further, Gilbert, Powell, and Vines (1999) argue that negotiating, as is traditional, on the basis of *ex ante* conditionality should give way to *ex post* conditionality shoul

¹⁶ The credibility of this commitment can be further enhanced, notes Svensson, by channeling the disbursement of tied-aid through multilateral agencies that have a stronger reputation for being conservative and inflexible in interactions with recipient governments. This, he concludes, will elicit more ex ante effort on the part of the recipient government in putting in place required reforms.
¹⁷ Another point to consider in this regard regards heterogeneity among donors. Bad Samaritans crowd out good Samaritans. If so, commitment technologies related to tied-aid, as adopted by Good Samaritans, may be ineffective.

tionality, where countries that have adopted good policies and that have used past lending well should be rewarded with aid without further policy-related conditions. Here countries that have demonstrated accountability would be given the full responsibilities of ownership. An *ex post* certification regime would also encourage private investment. In theory, this would signal recipient governments that they would be rewarded for good policy behavior while giving poor reformers a greater incentive to change (van de Walle, 1999b).

Ex post conditionality, however, raises several incentive-related issues. ¹⁸ First, the varying levels of selectivity among different donors can create strategic openings for recipient country agents. What level of performance should donors reward? If some donor governments are less selective than others, then they may snatch away the political, strategic, and commercial rewards of providing aid from donors that are more stringent. This can create a race to the bottom. Without sufficient coordination among donors, incentives will be created for aid recipients to play one donor against the other, leading to no improvement. The resulting *ad hoc* conditionality will again create moral hazard problems.

Second, donor funding under an *ex post* regime creates fewer rewards for the donor country and the donor agency. *Ex post* conditionality will require less donor supervision and project appraisal since these responsibilities are passed on to the recipient owners. When ownership is truly exercised by the recipient, donor countries lose the advantages that providing aid confers them in realizing their own strategic and commercial goals. Donor agencies will also likely lose power and influence – important rewards for donor agency officials – particularly in recipient country polities.

Third, existing incentive structures within donor agencies may not support *ex post* conditionality. As van de Walle (2000: 4) notes, donor agency "staff may well lack the discipline not to lend to marginally deserving or temporarily virtuous countries if professional advancement continues to be related to the size of one's portfolio of projects."

Fourth, foreign aid becomes less publicly defensible to donor country taxpayers when it is disbursed only to countries that, through responsible government, have improved their own level of development. ¹⁹ Such countries attract, in any case, private investment and are not reliant on aid funds. Humanitarian motives underlying public support for aid in donor countries will be undermined when countries dealing ably with their own challenges in development are the ones receiving most of the aid.

¹⁸ There are still others, such as those relating to luck (see Bigsten, 1999), but our present discussion is limited to those relating to incentives.

¹⁹ Aid has, as van de Walle notes, two supporting constituencies within the donor's polity – the taxpaying public, which has to be sold on the humanitarian aspects of aid, and the business and foreign policy communities that see direct benefits from providing aid. "Need based aid is superficially attractive in political terms, as it allows governments to play up the humanitarian dimension of aid, and defuse the populist criticism that aid is in effect 'taxing the poor people in rich countries on behalf of rich people in poor countries" (2000, 5).

Donor agencies can attempt to make aid more effective either by being more selective of their projects or more selective of their countries. Project selectivity is often vitiated by the problem of fungibility. Overcoming this by introducing *ex ante* conditionality to improve the policy environment for project sustainability, however, creates strategic incentives for the leaders of recipient countries to evade ownership of reform. Alternatively, country selectivity through *ex post* conditionality calls into question the very rationale for aid. This conundrum again prompts very basic questions as to the nature of development and of the role that donors can play in this process.

6.4 The Modalities of Development Cooperation

Modalities of aid reflect particular rule configurations. Taken together with other rules underlying the characteristics of aid, the collective-action problem facing aid beneficiaries, etc., they can help the analyst understand the institutional context of incentives in development cooperation.

In this section, we take up the modalities of Project Aid, Programme Aid, Sector Programme Support, Humanitarian Assistance, NGO Support, Technical Cooperation, and Research Cooperation.²⁰ In each case, we briefly describe the modality. Then we introduce the actors involved, the linkages among them, and finally, selected issues related to incentives and sustainability that might arise in the context of the given modality. Given the enormity of the area under discussion, the intent here is to highlight some critical issues in order to prompt studies that are more comprehensive.

6.4.1 Project Aid

Description

Project Aid refers to a general modality where support is provided by the donor for specific activities in the recipient country within short- to mediumterm interventions. Project funds cover such expenses as capital investments, recurrent costs, training courses, etc. Although "Project Aid" encompasses a very large variety of activities, the interventions are relatively distinct and limited. The beneficiaries they target are also relatively well-defined. Their purpose is to set in place physical and human capital inputs that the recipient is otherwise thought not willing or able to procure or fund.

Linkages among Actors

Bilateral Project Aid proceeds within a framework drawn up by the *donor government* and accepted through negotiations with the *recipient government*. A country framework, as in Sweden's case, sets out the budget and focus of activity for a period of time. Various individual projects take relevance within

²⁰ In our discussion, we use Sida's terminology and refer to its operational procedures.

this structure. Country frameworks are usually presented by the *donor's foreign* ministry to the counterpart ministry of the recipient government.

Once the donor agency finds a project it wants to fund, it proceeds to identify an owner within the recipient government. This, typically, is an *agency or a line ministry* that holds the portfolio most relevant to the project. These owners may implement the project although, frequently, added inputs – equipment, advice, and training – are contracted through third-party organizations. In the case of tied-aid, procurement is linked to donor country firms and service providers.

Interest groups in both the donor and recipient countries may also be involved. *Contractors* that are to provide equipment or services for a donor-funded project may, for example, lobby the donor government in this regard. On the other side, *civil society organizations*, whether within or outside government, may argue for or protest a project's funding. Targeted *beneficiaries* are those who are to benefit most directly from the project. These groups may be large or small and may be scattered or concentrated. The degree to which their interests are represented in a project's design and execution can vary. *Recipient governments*, in many developing country contexts, poorly represent beneficiary interests unless these beneficiaries are able to coalesce into effective *interest groups*.

Incentives and Sustainability

Any particular initiative in Project Aid involves, in one way or the other, all the main actors of the Octangle. Analyzing the incentives that structure each of these actors and further those that structure interactions among particular subsets of these is particularly complex. The project case studies in Chapters 9 and 10 provide vivid examples of how these are inter-linked. Further, Chapter 7 reveals the structure of incentives within an International Development Agency (IDA) such as Sida. For the moment, therefore, we will point out only two interesting instances that emerge from the triads and dyads of the Project Aid Octangle.

If an aid project funded by an IDA targets what beneficiaries in a recipient country are to receive – say, power generating equipment – it is also a more precise tool in targeting donor country contracting firms – manufacturers of such equipment – that are to provide the capital goods, consultancy services, and so forth, needed to complete a given project. The more specific a project is in terms of who it will benefit and how they are to be assisted through aid, the clearer it is for agents of the donor government to patronize (potentially) selected domestic firms or other organizations for this purpose. Donor country interests, in this case, face incentives to lobby for such projects. When such projects are not suited to the institutional realities, they are prone to be less sustainable or lead to other perverse effects. A paper by Jones (1995) explores this contingency.

Another example of an incentive triad in Project Aid is that between the IDA, the sectoral ministry or agency that is designated the recipient owner, and the beneficiaries. Donor funds sometimes pay for cars, office equipment, etc., needed to facilitate implementation of important components of the project. These inputs are often viewed by recipient country officials in charge of the project as perquisites. Their presence, thus, can create an interest in prolonging the project as a way of continuing with their use. Arguments can be made to prolong a project as long as the beneficiaries continue to face problems. There are, thus, few incentives for recipient country officials to help beneficiaries develop sustainable solutions to their collective-action problems unless there are mechanisms in place for citizens to hold their government accountable. A paper by Smith (1994) highlights this case.

6.4.2 Programme Aid

Description

Programme Aid, in contrast to Project Aid, focuses on supporting the recipient country's overall policy objectives and macroeconomic goals. Programme Aid includes such instruments as debt relief and budget support.²¹ These instruments are usually linked by donors – often explicitly as incentives – to foster economic and governance reforms by the government of the recipient country. Thus, in contrast to Project Aid, Programme Aid has broader aims in policy reform (and these reforms can complement initiatives in Project Aid). In sum, Programme Aid dispenses large lump sums of aid in pursuit of general policy objectives (often related to realizing desired macroeconomic conditions).

Linkages among Actors

Programme Aid links the *donor government* and the *recipient government*, often, in coordination with *other bilateral and multilateral donors*. Although the ostensible *beneficiary* of Programme Aid is the population of the recipient country as a whole, this group is typically too nebulous and does not participate in the normal negotiation process.²² Yet often, groups or individuals who gain from an increase of spending in public expenditures as a result of such aid can be interested parties. In some cases, such *interest groups*, among others, on both the donor and recipient sides seek to make themselves heard. Other interest groups, some NGOs, for example, petition donors to forgive the debt of some highly indebted countries. In the main, however, Programme Aid involves links only at the top of the Octangle.

Incentives and Sustainability

For the donor, Programme Aid has, uniquely, two appealing aspects. First, it is used as an instrument in foreign policy. This is reflected, for example, in that the Swedish account for Economic Reform and Debt Relief is controlled

²¹ Each of these possesses still further particular characteristics.

²² Unrest, rioting, etc., by segments of the population often do have an effect.

in effect by the Ministry for Foreign Affairs, rather than by Sida (1999a). With such control, modifications to Programme Aid allocations (or threats to that effect) can serve as a handy way for Sweden to signal its pleasure or discontent with the policies of a recipient government. Programme Aid is also used as a lure by Sweden to encourage its partners in development cooperation to support its positions in the UN General Assembly and other international forums (Sida, 1999b).

Second, from a viewpoint of the donor ministry, Programme Aid is appealing since it expands the foreign aid budget much more quickly than other modalities. Whereas Project Aid, for example, requires significant commitments of time and effort in set-up, supervision, and follow-through, Programme Aid dispatches large sums of a donor's budget allocation for aid with far less administrative exertion. Given Sweden's commitment towards the one percent goal for its aid budgets, Programme Aid can represent more efficient ways of meeting this target.

For a recipient government, Programme Aid offers a way of meeting its obligations to its creditors in exchange for promises to reform government, change policies, and so forth. When, for example, the regime of a recipient state is threatened with internal unrest because it does not have the funds to pay public sector wages, it can have a strong incentive to make assurances to donors on reforms in exchange for aid. However, there are weak incentives to follow-through on these conditions once the funds have been disbursed; some recipients have become very skillful at the "promise now but delay delivery until later" strategy of securing Programme Aid.²³

6.4.3 Sector Programme Support

Description

Sector Programme Support (SPS) is a Sida initiative that moves away from the idea of directing aid through isolated projects and towards the notion that aid should be coordinated sector-wide as well as be long-term in approach. It reflects a recognition within Sida that there can be little success at the level of individual projects if they take place within sectors of the economy that are diagnosed to be failing.

The SPS initiative is intended to foster strong national ownership and political commitment. This is to be achieved through dialogue between donor and recipient that sets common goals and a common policy framework for a joint program of work (Sida, 2000c).

The SPS is an example of the Sector Wide Approach (SWAP), which has been adopted by various bilateral and multilateral donor agencies.²⁴ SWAPs

²³ Again, one example of this, cited in *The Economist* (August 5, 2000), is the Kenya-Fund Dance.

²⁴ The World Bank's Comprehensive Development Framework is another example of a SWAP approach.

integrate a sector strategy, a government expenditure program, and a management framework for implementation, with a secure funding basis. In this way, SWAPs are supposed to reflect a "process" rather than a "blueprint" for development. In many respects, SWAPs operate as a donor dominated shadow sectoral ministry in that, like a ministry, it develops policy for a particular sector and allocates budgets accordingly.

Linkages among Actors

A SWAP defines a working relationship between a donor government, other donor governments and organizations, and the government of an aid-dependent recipient country. They are usually set up within a national-level Medium Term Budget Framework. This framework, developed through donor-recipient negotiations, outlines the overall national goals, budgetary resources, and expenditure priorities. It also coordinates the joint allocation of government and donor funds. For each of the selected sectors within this overall framework, donors in consultation with the recipient ministries are to work together to define a policy framework, set up the needed organizational capacity to carry out the chosen policies, and plan expenditures accordingly.

Although linkages in SWAPs correspond closely to those at the top of the Octangle, we shall see next how incentives among other actors in the Octangle can be affected by their presence.

Incentives and Sustainability

Sida's SPS attempts to overcome problems related to project and programme aid. Sida has found that many projects fail because they are not supported at the general macro level. Furthermore, they are administratively burdensome to both the donor agency and recipient agency. At the same time, conditionalities, often associated with programme support, can fail due to a lack of sufficient recipient ownership. SPS therefore attempts to develop a hybrid process where:

The partner countries themselves determine the political objectives and that those countries which receive support direct the implementation of programs in a dialogue with the various interested parties, including external financiers. The external financiers relinquish their right to identify and direct individual projects. The restrictions implied in the traditional project form of support are replaced by a continuous dialogue on strategies for the implementation of broader sector objectives. (Sida, 2000c: 15)

By placing ownership with the recipient government within the context of a continuing dialogue process with the donor, SPS is designed to improve incentives and accountability and, hence, sustainability. While SPS would seem to overcome many of the problems encountered in traditional aid, it can discourage beneficiary ownership and institutional development, and foster a culture of dependency. We set out four issues:

First, SWAPs can be unfavorable to building ownership, including beneficiary ownership, in the recipient country and to promoting decentralization. For maximum recipient ownership, donor funding should be long-term, predictable, and untied, while the framework for development cooperation should be flexible.²⁵ Further, the local owners must have a stake in the outcome of the SWAP-based endeavor. These conditions do not always apply for SWAPs.

Donor disbursement schedules can often erode a sense of ownership. Donors, for administrative reasons, often are keen to make financial commitments based on their own disbursement timetables. Thus, when multiple donors are involved in a SWAP, coordination can falter. Effective SWAPs require extensive coordination among the recipient government and various donor governments. When this is done according to demands of the donors' timetable, dialogue between the recipient government and individuals on the ground – the beneficiaries – can be adversely affected. As a report by the World Health Organization concludes, "these [coordination] pressures can lead to Government signing up to policies and programmes which have not been widely enough discussed to ensure local ownership, or which have not adequately recognized constraints in implementation" (WHO, 1999: 5).

Furthermore, adopting government policy through building a national consensus can be handicapped if foreign donors are seen to be driving it. Though presented as the outcome of a process of dialogue, donors frequently have a disproportionate influence on the management of SWAPs. Should donors require, for example, a fixed approval schedule, owner participation can even become formulaic.

Enhancing the capacity of a sectoral ministry to make policy in the capital city also reduces localized beneficiary participation in crafting the rules that govern their use and distribution of resources. Instead, it strengthens the ownership position of the governing elite. Since such groups traditionally draw their support from urban constituencies, policy initiatives taken by them are susceptible to be at the expense of the rural beneficiaries (Lipton, 1993).

In fact, few SWAP efforts have emerged through broader national debate. As the 1999 study of SWAPs by the World Health Organization further notes, "There is as yet little experience of how to implement a SWAP using a decentralized local government structure" (p. 9). When local decision making and accountability are diminished through a centralization of policy making, local ownership is reduced and the incentives for such target beneficiaries to sustain projects introduced on their behalf become weak.

Second, SWAPs can discourage institutional development, given that institutional development is based on the foundation of stable expectations and understandings. Even as SWAPs seek to promote an institutionalization of sectoral poli-

²⁵ Whereas the predictability and reliability of donor flows help institutionalize aid-based development – and in this way, help the recipient plan productive activities based on this given – the relative permanency of a donor's presence may lead the recipient to take this assistance for granted. As we see in point three, permanency, by itself, is not an adequate basis for a robust donor-recipient relationship.

cy making through long-term donor commitments to remain involved, this involvement can be uneven. Constancy can be undermined when variations in the disbursement calendars of diverse donors, and the differences in interests among them, interrupt the flow of funds.

Indeed, different donors each have, inevitably, their own interests to look after; they may not speak with one voice. There also may be philosophical biases among donors, with some preferring, for example, market-based approaches for delivering, say, health services and others preferring government-produced and provided services. At the same time, aid-dependent recipient governments have few mechanisms with which to hold donors to their commitments.

When these factors delay the completion of donor appraisals and disbursements, beneficiary confidence can become undermined. As the WHO report concludes:

The unpredictability and unreliability of donor flows has serious consequences not only at sector level, but is also a problem for macro-economic management. Donor flows can be highly uncertain as to their timing for purely bureaucratic reasons Managers at all levels can find that the financial resources on which they depend can be interrupted because of the failure to meet conditions at a higher level or lower level over which they have no direct control. (WHO, 1999: 8)

Institutions, serving to streamline incentives in situations where problems of collective action emerge, are based on a convergence of expectations. Such expectations can be undermined when poor coordination among donors makes the SWAP an unreliable organizational resource.

Meanwhile, and third, the relative permanency of overall donor commitment within a SWAP framework may lead recipient agents to contribute less effort. Sida's long-term commitment to national SPS initiatives may generate expectations among recipients that continued support is forthcoming regardless of their own level of effort. This effect will be particularly acute in cases where inputs and outputs are difficult to measure, where monitoring by Sida is difficult, and where Sida finds exiting a difficult or costly option. Discontinuing bilateral support because of a breach of contract is a "big deal" since this has large repercussions on diplomatic relations and for Swedish commercial interests as well. Such an action, thus, is rarely taken.

Finally, within Sida's organization, the career incentives associated with SPS are perceived to be fewer. Desk Officers we interviewed noted that there is often more satisfaction to be had and greater prospects of professional advancement in being associated with shorter and more focused projects, rather than in complex integrated long-term processes such as those of the SPS (Interviews S91, S93). With well-defined and short projects, the Desk Officer has a greater opportunity to create signals that can be noticed by his or her superiors. Larger programmes, such as the SPS, in contrast involve more group effort. Here, there are less clear correspondences between individual effort and overall outcomes.

These four factors can work to undermine the sustainability of SPS-based development efforts.

6.4.4 Humanitarian Assistance

Description

Humanitarian assistance programs can take various forms. These include both responding to and taking steps to avoid natural and man-made catastrophes. In this regard, Swedish developmental humanitarian assistance is intended to provide "a form of assistance, which, in an acute situation, helps to provide long-term solutions of the acute problems and needs of those affected – solutions which are accepted and supported locally" (Sida, 1999i: 6). The stated aim of Sida's program for humanitarian assistance is to deal not only with immediate catastrophes but also with developing local capacity to prevent and cope with emergencies. Sida's policy emphasizes the need to identify and promote local ownership in the delivery and management of humanitarian assistance.

Sida does not administer humanitarian assistance directly, preferring instead to channel it through other organizations; as of 1997, 65 percent was disbursed through the UN system, 17 percent through the Red Cross movement, and 11 percent through Swedish nongovernmental organizations. The remaining 7 percent is disbursed to international organizations and governments. Significantly, 90 percent of Swedish humanitarian assistance is allocated to conflict situations (Sida, 1997g: 4). We, thus, focus on this aspect of humanitarian assistance.

Conflict-related humanitarian assistance, most vividly, involves the delivery of massive quantities of food and emergency supplies to areas where transportation infrastructures have been disrupted by some past disaster or ongoing emergency. This effort often presents severe challenges. Refugee camps, for instance, are often established in areas with limited facilities and where access is difficult. There are also often moral and political dilemmas associated with the delivery of humanitarian assistance. One such case arises when combatants treat the supplies provided by humanitarian aid organizations as a potential resource that can be exploited for their own strategic purposes (MacRae et al., 1994; McGinnis, 1999d).

Linkages among Actors

Humanitarian aid involves *donor governments* seeking to reach *beneficiary groups* that are in dire need of emergency assistance. As noted, in the case of Sweden, direct relief is channeled through *other donors* — the United Nations agencies, the Red Cross, and other international and national NGOs. These organizations, in turn, often work with *contractors* to procure and deliver relief materials and services. In some cases, aid can also be channeled through the central or local levels of the *recipient government*.

Incentives and Sustainability

The fundamental impulse behind the international humanitarian community remains the widespread desire to help fellow human beings facing almost unimaginable conditions. Even so, the presence of aid resources often provides other motivations to involved actors. Below, we highlight some possibilities – both positive and negative.

Nongovernmental organizations:

- These often play critical roles in alerting attention to disasters and are often in the forefront, helping to address pressing needs. Many NGO staff are also innovators in humanitarian assistance and Sida, among others, has drawn on their experience in promoting developmental humanitarian assistance (Sida, 1999i).
- Humanitarian crises often elicit public concern in donor countries, particularly in the face of stark television news coverage. Some NGOs tap into this concern. In extreme cases, less scrupulous organizations are motivated to publicize the worst crises, in hopes of attracting higher donations.
- Given that it is exceedingly difficult to evaluate the effectiveness of humanitarian aid programs, some relief organizations can face incentives to exaggerate the need for their services (Maren, 1997).

• Donor governments:

- These often focus attention on particular regions of concern. Sweden, for example, focuses most of its humanitarian assistance to countries and regions in Africa (Sida, 1997g: 10). This can promote results that are more effective to the extent that the donor gains, or already has, experience and local credibility in the particular disaster area.
- Donor governments often provide humanitarian relief for a combination of reasons. The U.S. government, for example, donates large amounts of food as an instrument of its agricultural policy. Humanitarian relief is one way to dispose of excess crops purchased from domestic farmers in order to support higher levels of domestic production and prices sought after by some farm lobbies.

Recipient governments:

- Recipient government leaders or other local holders of political power or advantageous economic positions often act to take advantage of humanitarian emergencies (Keen, 1994). For example, aid may be routed to those segments of the population supportive of the current government, while disfavored groups may be forced to relocate to government-controlled camps.
- Host governments, for example, may exaggerate the number of refugees serviced in each camp, hoping to attract higher levels of aid that they can divert to other purposes (including military operations).

Beneficiaries:

- Refugees face strong incentives to resume productive lives in their own lands, but are, often, understandably reluctant to return to their home areas as long as the conflict that first caused them to leave remains unresolved.
- In some cases, humanitarian emergencies can become institutionalized, with refugee camps remaining in place for decades. Semi-permanent camps, once established, make it harder for refugees to return home. Life in such a refugee camp, though miserable, often provides a greater level of security, food, and medical attention than life back home; the beneficiaries of humanitarian assistance may prefer the devil they know to one they do not.

Humanitarian assistance has implications for sustainability as well. Efforts to alleviate suffering in the short term may inadvertently undermine the capacity of local communities to cope with less severe conditions over the long term. The regular arrival of tons of food to be distributed free of charge, for example, can severely lower local food prices, giving local producers less of an incentive to plant or harvest their own crops.

Although all viable communities develop means to cope with minor problems, any local community, no matter how successful, can be overwhelmed by sufficiently dire circumstances. This may not become a national problem as long as neighboring communities remain unaffected, provided relations between communities support mutual assistance. However, in times of severe and widespread environmental disruption (or conflict), national governments have an important role to play.

Unfortunately, many governments in less developed parts of the world have shirked on this responsibility, preferring instead to concentrate their meager resources on those groups whose support is most vital for their continued existence in power. Why should such leaders bother to develop a national-level capacity to respond to natural disasters if they can rely on the speedy delivery of emergency supplies from the international humanitarian community?

In short, national governments may come to rely on donor organizations to fulfill basic aspects of governance. Some critics of the humanitarian aid community argue this practice has the effect of legitimizing governments and rebel organizations that routinely violate basic principles of human rights (de Waal, 1997). In short, recipient governments can fall prey to the moral hazard and adverse selection problems inherent in humanitarian assistance.

6.4.5 NGO Support

Description

While much of the analysis of modalities in other sections applies to international development in general, the Swedish NGO sector is unique. In Sweden,

political parties, solidarity groups, church organizations, trade unions, etc., form an integral part of the shared social and political fabric. These NGOs closely complement governmental ones as forums through which citizens associate with each other in addressing issues of common concern and collective action. The distinction between the two, thus, is not as sharply drawn as in other donor countries; NGOs are seen as "popular movements" in their own right.

In Sweden's egalitarian ethos, participation by ordinary Swedes in development work through their nongovernmental, civil society associations is seen as an important expression of their concern for the well-being of people in developing countries; the one-percent target that they expect of their official development assistance, being the notable other. Swedes see these NGOs as ways to volunteer and to participate directly in helping those in poorer societies. In Financial Year 2000, Sida appropriated SEK880 million to supporting NGOs.

Linkages among Actors

Swedish NGOs have been engaged in (what we now call) "development work" for several decades before the advent of official development assistance. Although *Sida* disburses funds to *Swedish NGOs* engaged in various aspects of development work, it has a special relationship with them. The relationship between Sida and Sweden's development community is viewed more as a *partnership* than that of a principal dealing with an agent. This special relationship between Sida and the NGO sector carries over to the strong NGO representation in Sida's Board. Although Sida is Sweden's official bilateral aid agency, it is aware of the instruments of Sweden's unofficial aid; nurturing the interests of Swedes in NGO-based development is also critical for the popular support of official aid.

Because of the special place NGOs occupy in the Swedish political economy, the distinction we have made in the Octangle between donor country interest groups and implementing bodies is somewhat blurred. Triadic relationships exist between the *Government of Sweden*, the *NGO*, and *Sida*, as well as between the *NGO*, *Sida*, and select *beneficiary groups*. Indeed, some Sida officials note that NGO activity can complement regular project activity since this modality can, largely, short-circuit organizations in the recipient government. Still, a distinction is often maintained between the Swedish-based NGOs and the local contractors who actually implement each project.

Sida's financing of the NGO sector is directed mostly to 15 framework organizations and is channeled through various funding windows. These organizations, in turn, funnel aid through a very large number of small NGOs. We take up the meaning of "framework organization," the identity and nature of these organizations, and the types of funding windows, in turn.

Framework organizations are umbrella associations of church groups, labor unions, volunteer and relief agencies, and political parties. Support by Sida for these framework organizations is structured within a set of general guidelines. These, for the most part, specify that they have to be broadly democrat-

ic — i.e., hold annual meetings and have an elected board, etc. The framework organizations are provided funding in the form of large block grants that cover, usually, a two-year period. These grants make up 80 to 90 percent of their budget. Once funded, the framework organizations are free to work within their own particular philosophy or political orientation in further disbursing aid funds. We highlight two such framework organizations — the Olof Palme International Centre and DIAKONIA — as examples.

The Olof Palme International Centre coordinates the development activities of 32 subscribing member-organizations, including those of its founders — the Swedish Social Democratic Party, the Trade Union Confederation, and the Cooperative Union. Put together, these 32 organizations have a membership of more than 3 million, out of Sweden's 8.8 million citizens. The Olof Palme International Centre's work focuses on support to political movements and labor unions in countries in southern Africa, Central America, Southeast Asia, and the Baltic states of the former Soviet Union. Between 1995 and 1999, Sida has annually allocated the Olof Palme International Centre between 66.5 to 85.9 million Swedish crowns, or, approximately, on average 77 percent of the Olof Palme International Centre's budget (SEKA/Sida; http://www.palmecenter.org).

DIAKONIA is an umbrella organization that coordinates the development and relief work of Swedish Baptist and Methodist churches, the Salvation Army, and other such religious groups. It does not implement projects itself, preferring to lend assistance and technical expertise to selected partner organizations. Information dissemination constitutes an important part of DI-AKONIA's mandate – raising awareness of the developing world in Sweden and building information networks in developing countries. DIAKONIA has an annual turnover of approximately SEK190 million, 80 percent of which comes from Sida (http://www.diakonia.se).

Funds to NGOs are disbursed by Sida through various "windows," the main one (accounting for about 35 percent of disbursements) being the SEKA department, which is responsible for cooperation with NGOs. NGO funding is also extended through smaller and widely varied windows, such as country frames, humanitarian relief, and other special programmes. Through the 1990s, NGO support has made up between 17 to 26 percent of Sida's aid; bilateral and multilateral aid makes up the rest (Sida, 1999d).

Incentives and Sustainability

Evaluating donor incentives in the special context of Swedish NGO engagement requires an acknowledgement of the interest that Swedes take in their nongovernmental forms of association as a way of pursuing – through direct involvement – worthy moral and developmental goals abroad. At the same time, and to the extent that funds to NGOs are fungible – that is, once Sida releases funds for one purpose, the NGO's own funds can be directed to other activities, including those that Sida may not support – they can also be

thought to form an implicit government subsidy to the NGO in question. The involvement of political parties in development work – and Sida's grants to organizations such as OPIC – therefore raises important concerns.

Sida does not monitor the work of the framework organizations – it has neither the capacity nor the mandate to do so. An evaluation by Roger Riddell, Anthony Bebbington, and Lennart Peck (1995) revealed that although by-and-large well executed, NGO projects most often are not sustainable. Riddell et al. note that this is partly because many Swedish NGOs are not adequately strategic or realistic about the perils and opportunities of development. Inexperienced volunteers, for example, spend a lot of time coming to grips with developing world actualities.

It is also interesting to note from Riddell et al. that NGO projects that were coordinated through Sida's field development cooperation offices (DCO) were more effective and sustainable. When the Sida field office is able to harness NGO activity, these can complement, and in some cases overcome, limitations encountered in the bilateral donor-recipient framework. Here, the "system" is more effective than its parts. Aid, in some instances, can be targeted more directly to the end-beneficiaries, bypassing those recipient government agencies thought to possess counterproductive incentive structures.

6.4.6 Technical Cooperation

Description

Swedish Technical Cooperation seeks to enhance human resource development in particular recipient countries. Sida's Contract Financed Technical Cooperation (KTS) is a particular example of this approach. Given that the overall area of Capacity Development is complex, we focus on KTS as an exemplar.

KTS finances contracts between a local partner and a Swedish consultant, particularly where Swedish expertise and know-how are found relevant. By dispatching Swedish experts and consultants to a local partner's project, it aims to transfer the necessary technical know-how and skills – and in this way promote Sweden's objectives in international development. Funding by KTS is contingent on several conditions related to the nature of the local partner and the match between that actor's needs and the expertise available in Sweden.

Linkages among Actors

The role of Sida as an *IDA* in Technical Cooperation is to finance the contracts between donor country *contractors* – who supply the skills, technology, and other learning services – and recipient country *beneficiary organizations*. Sida, through KTS, serves as the financier and, as such, is not directly involved in project implementation. Rather it selects projects for funding based on proposal evaluations. These proposals aim to evaluate the competence of the local beneficiary,

its implementation plans, and its ability to make good use of the technical assistance. Proposals requesting Swedish know-how in a specific sector are officially transmitted by the *government of the recipient beneficiary* to *Sweden*. Sida also works with *other donors*, such as the World Bank and the UNDP. Funds provided by Sida make it possible for these multilateral organizations to use Swedish expertise within the framework of projects they oversee.

Incentives and Sustainability

KTS was developed to respond in the 1970s to address human resource development in low- and middle-income recipient countries. These countries, though sometimes lacking in relevant technical capacities, did not fit into the standard development cooperation profile. In filling this gap, KTS evolved from a working committee to a BITS administered program. Following the reorganization of Swedish aid in 1995, INEC and Sida-ÖST, within Sida, are responsible for KTS.

As we noted, the stated purpose of KTS is to contribute to the objectives of Swedish international development cooperation by transferring Swedish knowledge to developing countries. Transferring this knowledge also works to achieve international exposure for Swedish companies, agencies, and institutions (Schedvin, 2001). Strong commercial motivations thus underpin KTS. In the first instance, training programmes offer an opportunity for Swedish consultants to gain contracts that the recipient might not otherwise be able to afford. Further, it provides an opportunity for academics and consultancy organizations in Sweden to develop contacts with decision makers and other influential persons in the recipient country. Such links promote networks between the Swedish and developing country counterparts. These, in turn, can be helpful in developing further business opportunities for Swedish industry and service concerns. In this respect, Forss et al. (1996: 38) note that the initiative for many projects in Technical Cooperation often lie more with Swedish firms and Sweden's embassies than with recipient country organizations.

Recipient country actors also have interests in Sida's KTS. The training associated with technical assistance provides opportunities for selected individuals to learn new skills, to travel abroad, and to meet new people. Being selected for such a program, in many cases, is also a matter of considerable personal prestige.

Sida vests ownership responsibility for KTS projects on the local partner and in this way seeks to secure a greater prospect for sustainability. To overcome Moral Hazard problems, Sida also requires the local partner to share costs: Equipment and operating costs are not normally financed, and local costs are usually expected to be borne by the local partner. Finally, Sida limits the duration and financial volume of KTS projects, with the aim of avoiding aid dependency.

While Sida is not a signing partner in KTS contracts, it necessarily maintains relationships with both the local partner and the consultant. Sida, after all, provides the funds that enable the local partner to pay for the consultant's services.

Sida also is closely involved in the choice of the consultant. In this way, Sida takes some of the mantle of ownership away from the local partner. Ownership is further diffused because important decisions about the project are also within the purview of the relevant line ministry; project proposals, after all, are sent to Sida upon the approval of officials in the coordinating ministry; such actors may have objectives ancillary to those of the local partner. While a single owner – whether an individual person or a corporate entity – may face incentives to take up ownership of a funded activity when the rewards of such ownership are expected to accrue to that owner, dispersed multiple ownership can compromise such incentive effects and lead to sustainability failures. The potential for multiple ownership is present in KTS, despite Sida's statements and policies emphasizing local partner ownership.

Sida's ability to monitor performance can help overcome some aspects of the (often-unavoidable) limitations of dispersed ownership. Effective feedback loops require prompt and careful project evaluations that are followed through – and this takes up staff time. At Sida's Inec department, about 10 officers handle KTS support, among other responsibilities, to some 30 countries. This makes personnel resources scarce (Schedvin, 2001), possibly compromising effective monitoring. Conditions that permit better monitoring capacity for KTS may be present for Sida-Öst since that department covers fewer countries that are also geographically closer to Sweden (ibid.).

6.4.7 Research Cooperation

Description

Swedish support for enhancing the capacity of developing countries to conduct scientific research began in the 1975 under the responsibility of an advisory committee to the Ministry for Foreign Affairs. SAREC, the Swedish Agency for Research Cooperation with developing countries, was created as an independent government agency in 1979. When the Swedish international development cooperation was reorganized in 1995 under Sida, SAREC was merged with the other agencies, becoming its Department for Research Cooperation. SAREC's academic orientation and long-term focus remain its distinctive features. Sida's research cooperation budget is distributed among bilateral, regional, and international programs. It also provides grants for development research in Sweden.²⁶

Linkages among Actors

The *IDA*, Sida's SAREC, provides bilateral support to developing country beneficiary organizations, i.e., universities and other research institutions. SAREC funds collaborations, "twinning," between contractors, i.e., Swedish universities and academic centers, and their counterparts in developing countries. On a regional level, SAREC encourages research cooperation

²⁶ See: www.sida.se/Sida/jsp/Crosslink.jsp?d=396&a=2927

among academic centers of neighboring countries. Finally, in collaboration with *other donors*, SAREC supports research programmes, like those of the World Health Organization and the Consultative Group for International Agricultural Research (CGIAR). It also encourages research within Sweden on issues of relevance to development. In 2000, SEK570 million was allocated for research cooperation through Sida's SAREC.

Incentives and Sustainability

In recent years, SAREC has sought to move from supporting its beneficiaries directly—i.e., grants to individual researchers and research centers—to involve itself in more broadly-based national programmes for capacity development in research. This shift may be in response to perceived bureaucratic pressures within Sida to disburse a greater supply of funds more "efficiently." Whatever the reason, Sida's own evaluations suggest, if in a preliminary way, that such a broader focus may diminish SAREC's influence and the quality of its projects.

A shift in support for research through more broadly-based national programs will involve more actors, including government agencies of recipient country. This will result in more *de facto* owners, each with likely smaller stakes, than when SAREC concentrated more directly on particular researchers and research organizations. In such cases, we might expect fewer incentives among recipient owners to ensure project success and sustainability. A Sida evaluation (4/99) of Swedish-Uruguayan research cooperation reveals, for example, that when moving attention from individual projects to a programme portfolio, fewer stakes in ownership are produced – augering ill for sustainability. A Sida evaluation of research cooperation with Sri Lanka (2/97), likewise, distinguishes unfavorably between the outcomes of directly funded projects and those channeled through the National Resources, Energy, and Scientific Authority of Sri Lanka.

Indeed, as with the rest of Sida, SAREC's ability to monitor its projects deteriorates rapidly as the number of owners increases. This is reflected in the observations among some in SAREC that their portfolio has grown too fast and that they are being spread too thin to ensure the quality of their outputs (Interview S91). In turn, this push to scale-up may be driven by a desire to expend available resources; "use it or lose it" is budgetary peril that SAREC's management—like bureaucratic units everywhere—faces. These incentives to scale-up, without concomitant increases in monitoring capacity, may well prove detrimental to SAREC's reputation for effectiveness and to the sustainability of its efforts.

In stressing local project ownership, SAREC attempts to avoid "academic colonialism." However, ownership takes on full meaning only when funded academics have possession of their own research agendas and when these agendas are based on local evaluations of developmental priorities. Indeed, Research Cooperation is one area where those vested with ownership in the context of development cooperation can, if targeted properly, have significant stakes. Even so, sustainability in the context of academic research can

still remain problematic if, as often happens, local and national governments of developing countries, not seeing immediate results from financing basic research, fail to continue support once donor aid ceases (Behar and Strömberg, 1999).

6.5 Conclusion

This chapter focuses attention on the broader contexts within which incentives affect sustainability. While most analyses of incentives focus on one part of the Octangle – that relating to donor-recipient negotiations, as explored in Chapter 5 – we now see that incentives emerge from across the various situations depicted in the International Development Cooperation Octangle.

Moreover, analysis in this chapter reveals that the various characteristics and modalities of aid possess important rule characteristics. Understanding how these rules operate as configured in the context of a particular aid intervention – and further how these in turn function in the milieu of the underlying collective-action problems facing the beneficiaries of this aid – is necessary to solving the puzzle of sustainability.

In setting out the rule relevance of characteristics and modalities of aid, this chapter presents a series of hypotheses that could be subject to further tests. Its immediate practical relevance is to be found, though, in an evaluation methodology, which is demonstrated in Chapters 9 and 10. Early in this chapter, we noted the example of a grant-financed project in natural resources based on ex ante conditionality, which is implemented by a partner country organization. This example is pursued in a Chapter 9 case study of a Sida forestry project in India. Based even on the preliminary analysis presented in this chapter, we can begin to anticipate some of the incentive effects in play. One aspect of this project, for example, is that it is grant-funded. However, the presence of aid fungibility, potential competition among donors, and a lack of accountability of local project implementation authority to actors involved in the donor-recipient negotiations – all factors identified in our analysis and that are present in this case - appear to vitiate incentives for responsible project ownership. The prospects for sustainability are accordingly made poorer. Even so, other aspects of the project – as perhaps deliberately crafted and introduced – may work to counteract these effects.

A final note: When addressing the problem of sustainability in a multidimensional way, as we seek to do here, it is easy to fall into the trap of finding that everything is related to everything. To some, the only way to spearhead change is through a variety of initiatives targeted simultaneously at different aspects of the problem. The IAD analysis, however, points out that once we identify an action arena, it is possible to work within its confines, even while recognizing the wider institutional context.

Chapter 7

How Does Sida's Internal Organization Affect the Incentives for Stakeholder Performance in Partner Countries?

Summary

This chapter focuses on Sida's internal organization and how it tends to affect the sustainability of outcomes of Sweden's development cooperation. Our analysis of the incentives within the Swedish aid process draws from information collected through interviews of randomly selected staff and selected key managers at Sida headquarters in Stockholm in March, June, and November of 2000, as well as a wide review of Sida documents and literature. In interpreting this information, we will follow the IAD framework briefly described in Chapter 2.

We start out with a discussion of the significance of underlying collective-action problems at Sida headquarters as well as in the field. We note that Sida itself is internally organized in a series of complex principal-agent relationships that are themselves linked to other crucial actors in the development octangle, such as recipient governments, contractors, organized interest groups, and beneficiaries. As suggested by the IAD framework, we analyze the context of these relationships at the *constitutional* and *policy* levels and assess how these relationships affect the prospects for sustainable results of Sida-financed activities at the *operational* level. We emphasize the importance of analyzing three types of contextual factors that influence the formation of incentives within Sida: the institutional, cultural, and material factors. After an analysis of these contextual variables, we discuss our empirical findings on patterns of interactions and their embedded incentives for Sida staff to learn about sustainable outcomes in partner countries.¹ We conclude the chapter with an exploration

¹ We realize that the rather lengthy discussion of contextual factors may seem somewhat obvious, especially for those Sida staff members who have worked for the organization during a long time. We do believe, however, that a detailed account of the Sida action arena context is necessary in order to carry out the incentive analysis in the section that follows.

of what options Sida faces with regards to modifying its incentive structures to better support its quest for sustainable outcomes.

The empirical analysis of internal incentive structures at Sida finds that Sida's management has been successful in creating an internal organizational environment that encourages and sustains cooperation among staff members for the benefit of the organization. We found that Sida staff, in general, are highly committed to the organization's long-term goals and that Sida's personnel policy offers many opportunities for staff to develop professionally through a variety of training programs. While Sida staff's high working morale and strong commitment are truly important resources in efforts to overcome the perverse incentives that abound in the public administration of international development cooperation, they are not sufficient to generate sustainable outcomes in partner countries.

The analysis, which is based on personal interviews with a large sample of randomly selected staff members, suggests that Sida can improve its incentive structures for both individual and organizational learning about sustainable outcomes in field settings. These types of learning, which are distinct from individual professional development, are frustrated by a series of factors. Among the most prominent enemies to learning about sustainability, we especially note (1) the lack of permanence for professional staff because of high internal turnover rates and a growing proportion of short-term staff, (2) sub-optimal use of evaluations as a tool for organizational learning about sustainability, (3) broad tendencies to focus planning on tangible budget targets rather than more appropriate proxies for sustainable outcomes, and (4) Sida's reliance on a large number of intermediary actors for providing essential information about the needs of beneficiaries in partner countries.

7.1 Introduction

The IAD framework allows us to break up the analysis of incentive structures into three different, yet interconnected, analytical levels: the *operational*, *policy*, and *constitutional* levels of analysis. A major contribution of the IAD framework-guided analysis is that the observed results at the *operational level* of analysis may be linked to decision-making processes at the *policy and constitutional levels*. In other words, to fix an undesired outcome in a field activity may require adjustments in the rules-in-use or other contextual factors at superior levels in the decision-making hierarchy, such as in the development agency's headquarters. More fundamentally, however, in order to fix such problems, decision makers must first be able to diagnose *what* to fix and then know *how* to fix it in a reasonable way. To develop that kind of knowledge about sustainable outcomes requires an active learning process not only about field activities but also about institutional responses to undesired outcomes in general, both at headquarters and in the field. The central argument in this chapter is that the incentives for Sida staff to learn about sustainability in

field activities is one of the most fundamental factors in Sida's quest for sustainable development outcomes. We suggest that it is essential that Sida's decisions about its development cooperation program are based on an ongoing learning and adjustment process. For this to happen, it is paramount that the incentives of Sida staff are aligned with the goal of strengthening the individual and organizational learning processes. The purpose of this chapter is precisely to assess whether they are.

7.2 Background

As a donor trying to help the population of a recipient country, Sida staff members face a diverse set of multilevel situations. First, there is the structure of the multiple, underlying operational problems existing in diverse recipient countries that they are trying to help. To achieve sustainable development in the recipient countries, Sida staff members have to affect these underlying situations. To do so requires a substantial knowledge about the history and context of these situations as well as the way operational, policy, and constitutional choices are made in that cultural context. Second, Sida staff members face a set of principal-agent relationships within their own organization and with contractors. Members of the Sida staff are among the most motivated development workers one can find in the world today. Even among this outstanding group of enthusiastic, hard-working and well-educated colleagues, the situations they face involve many of the motivational and information problems identified in Chapter 2.

This leads us to the core message of this chapter: Precisely because it is so difficult to construct effective institutions that can address collective-action problems on the ground, *continuous learning* about why some past efforts succeeded while others failed is essential. Otherwise, the portfolio of a development agency will continue to have the same rates of success and failure. Thus, the incentives for learning from past experience facing the staff of a development agency are crucial to the agency itself improving its performance over time.

The motivational and informational problems that exist in any public agency must be overcome by appropriate incentives to enable Sida staff to learn systematically about outcomes of development assistance and how they were produced. The inquiry below suggests that this ongoing learning and adjustment process at Sida headquarters is necessary in order to optimize the support to institutions that could solve the collective-action problems in recipient countries. Drawing from the general discussion of collective-action problems in public organizations in Chapters 1 and 2, we now employ the IAD framework to identify and analyze specific collective-action problems within Sida and in its relationships with partners at home and in the field.

7.2.1 Applying the IAD Framework to the Internal Organization of Sida

The IAD approach starts by identifying the relevant *action arenas*, where different *actors* interact in a series of *action situations*. Since we are particularly interested in this chapter in how Sida's internal organization affects the prospects for sustainable outcomes in the field, we define the focal *action arena* to encompass the web of interactions between Sida in Stockholm and the different actors in the field. However, to appreciate the behavior of Sida staff in this arena, it is important to consider first the underlying contextual variables at the *constitutional and policy levels*.

The interaction between Sida and the main field actors is hampered by serious information asymmetries. One way of dealing with the information asymmetries is for Sida staff members to engage in interactions to learn about the actions and strategies of the actors in the field and consequently gain more knowledge about possible causes of observed outcomes in Sidasponsored activities. We define these learning interactions to address collective-action problems as our primary *action situation*. We start out by describing the general context and structure of the situations in the action arena, the participating actors, and the central challenges they face in terms of solving embedded collective-action problems.

The Action Arenas: Action Situations and Actors

The structure of the immediate action situations in which the staff members of Sida find themselves during most of their working hours is that of a series of principal-agent situations. Sida itself is an agent for the government of Sweden, which is in turn an agent for the people of Sweden. The people of Sweden say: "Do something about poverty in developing countries." The elected officials in Parliament and the government tend to agree that this is an important task. When a government allocates close to 1 percent of a country's Gross National Product to an activity, it is assigning that activity as a high priority. The outcome of this large investment occurs over a long time period and in places far away from Stockholm. Neither the Swedish people nor the government of Sweden has full information about the specific activities undertaken by Sida and the difference they are making in the lives of people. So the principal in this case wants something done. The principal, however, does not know how to make it happen and has few tools to discover if and how it has happened. This principal-agent relationship is different from that of a patient going to a doctor to seek advice on how to get well. While the patient does not know how to get well, the patient does get direct feedback about what the doctor recommends and can determine whether it makes a difference or not. To supplement this direct feedback, the patient can discuss the doctor's prescriptions with friends who have faced the same problems and with other doctors. In the case of development assistance, the principal rarely gets direct feedback about activities or outcomes. Thus, the principal does not know any specifics on whether or not the life prospects of others have been improved or not. The people of Sweden receive only brief

hints in news reports and official documents about whether the "cures" applied by its agent are working.

Further, given the time frame and the action space of a Sida staff member working on any particular problem, even the agent is not certain whether the activities undertaken by implementing organizations are making a positive and sustainable difference. In the three or four years that a staff member may be assigned to a task (see below for a discussion of average length of assignment), a staff member may be able to see some projects through from the initial design phase through to some operational phase in the field. That time frame is not sufficient, however, to ascertain whether the constructed road, school, or power plant is being used and maintained, or allowed to disintegrate through a lack of proper use and maintenance. If the project involves building of new institutions that require developing expertise by users in how to make them work effectively, the time frame needed to determine sustainability may be at least 10 to 20 years.

Thus, in the principal-agent relationships in which Sida staff members engage, the "ultimate" principal is the Swedish public that has minimal information about what Sida does, what it could do, and what difference this makes. Martens (forthcoming) stresses that the broken information feedback loop is one of the most distinctive aspects of developing assistance.

However, a unique and most striking characteristic of foreign aid is that the people for whose benefit aid agencies work are not the same as those from whom their revenues are obtained; they actually live in different countries and different political constituencies. This geographical and political separation between beneficiaries and taxpayers blocks the normal performance feedback process: beneficiaries may be able to observe performance but can not modulate payments (rewards to the agents) in function of performance. (Martens, forthcoming: 20)

To keep their own positions, however, Sida staff members need to keep government officials informed and satisfied that their general goals are being achieved and that more support is needed over the long term. Given the nature of development assistance, this is a challenge. Little is reported in the media about successful projects. The conditions of an open society with public deliberation are not met in many States ruling over impoverished people. Hints of a scandal related to corruption or an obvious egregious error of judgment will be fully reported by Swedish media as well as coups d'etat or eruption of protest movements. Scandals, coups, and other "newsworthy"

¹ Anna Wieslander (2000: 250) reflects on her own experience in the following manner: After eighteen months of administrative work for Sida in Tunisia in the late 1960s I returned home, rather humble. I had learnt a lot about the aid relationship between 'donor' and 'recipient,' and the relationship between 'us' and 'them.' First of all, I realized that I had not, as I had hoped, much to contribute to Tunisian society. Secondly, I found that most of the Swedish experts in our small community had little contact with the surrounding society. Thirdly, and maybe most important, I realized that aid was granted according to the plans and preferences of the donor, not of those in need.

stories make both citizens and government officials in the donor country nervous about spending more money on development assistance.

One of the "facts," or quantitative indicators, that can be observed by government officials and ultimately the people of Sweden is whether Sida (or any other government agency) has spent all of their allocated funds in the corresponding budgetary period. Given the competing needs for public funds, evidence of nonexpenditure of funds is used in debates to argue for a budgetary reduction to a particular agency. All public agencies face the need to spend allocated funds within short time horizons in order to justify receiving further budgetary allotments (Wildavsky, 1984; Seabright, 2000).

In this type of task environment, one should expect to see Sida staff members spending substantial time reviewing a continuing stream of paper flow related to project design and negotiations, specifying contracts with implementing organizations and consultants, as well as reviewing reports and accounts. Major attention is likely to be paid to what is observable – submission of proper project documents, expenditure of funds, and apparently knowledgeable behavior in meetings. Considerable uncertainty exists as to whether activities are leading to desired outcomes. The specific way this task environment is established within Sida will affect the level of uncertainty, the types of behavior that are rewarded, the perceived incentives of staff, and the impact of these on the sustainability of development activities undertaken by Sida.

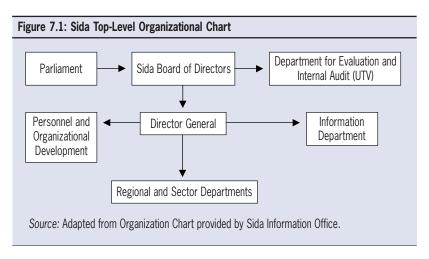
So far we have treated Sida as a black box. In order to understand how Sida staff interact to solve the observed collective-action problems, however, we need to develop a more fine-grained appreciation of the internal dynamics of Sida. In this section, we present the main Sida actors within the main action arenas. We discuss what positions they hold and what their functions are according to the internal staff structure.

7.3 Looking Inside Sida

Sida, in its present incarnation, was established in 1995. Before that date, various bureaucracies within Sweden worked to further development cooperation. The component agencies amalgamated within Sida included: (1) Old SIDA, which conducted regular project and program aid and formed a major part of the new Sida organization; (2) BITS, which dealt with technical support; (3) SwedeCorp, which pertained to private sector-based development; and (4) SAREC, which focused on research cooperation. Many of the senior staff at Sida today originally joined SIDA and the other predecessor agencies prior to 1995 (see discussion of age distribution below). There were around 650 staff members working for Sida at the time of this study.

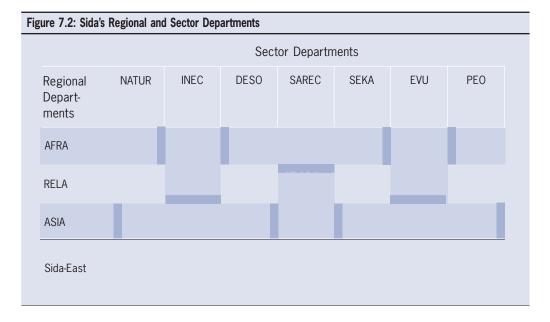
A General Director heads Sida, and also serves as the Chairman of its Board (see Figure 7.1). The Sida Board is made up of representatives from the political parties currently in Parliament, NGOs, the government, and the private sector, and is responsible for approving the annual report, annual budget pro-

posals, annual audit and evaluation plans, measures and responses to the internal audit reports as well as to the annual, external audit report from the Swedish National Audit Office. Most important, the Board is Sida's voice to the government. Although it does not involve itself in the day-to-day management of Sida, the Board maintains general oversight. To this end, the Department for Evaluation and Internal Audit (UTV) reports directly to the Board. As such, UTV has substantial autonomy within Sida.



Also reporting to the General Director is the Information Department, which develops statistics, publicity, and maintains relations with the media. Sida's operations today reflect its reorganization in 1995. The former agencies were rationalized into one organization and divided broadly into sector departments responsible for thematic issues – Infrastructure and Economic Cooperation (INEC), Natural Resources and Environment (NATUR), Democracy and Social Development (DESO), Non-Governmental Organisations and Humanitarian Assistance (SEKA), Human Resources (PEO), Research Cooperation (SAREC), and Finance and Corporate Development (EVU) – and into regional departments responsible generally for Asia (ASIA), Africa (AFRA), Latin America (RELA), and Central and Eastern Europe (Sida-East) (see Figure 7.2).² Of these, the sector departments tend to be larger and have more senior staff with more expertise. Regional divisions, by contrast, tend to be smaller and burdened with more programmatic and administrative work and to employ more junior staff. (SAREC, which presents a longer-term view and an academic orientation, has sought to retain its own identity and sense of mission through the consolidation.)

² Note that the Department for Central and Eastern Europe is considered a combined regional and sector department.

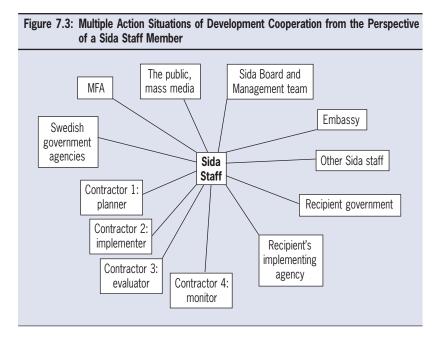


The 14 department heads, who together constitute the Executive Committee, play a central role in the internal planning of Sida activities. The Executive Committee is responsible for the allocation of human and capital resources within Sida. To ensure the prosperity (or survival) of their own department as well as their own more responsible position in the Sida hierarchy, each department head faces incentives to secure their own department's programs and projects and to maximize their funding. Apart from the political priorities defined at the constitutional level, several Sida staff members at both management and Desk-Officer levels that we talked to perceive these allocations to reflect (1) how well the particular departments have addressed past priority areas as set forth by the Parliament and (2) how well they have disbursed funds allocated in previous years (Interviews S7, S14, S30).³

Sida is a relatively flat organization, at least on paper. Starting from the top and moving down from the General Director, there are Department Heads (Avdelningschef – AC), who make up the Executive Committee. At the level below are the Division Heads (Enhetschef – EC), who report to the heads of the respective departments. Under the Division Heads are the Desk Officers who represent the largest group of Sida employees with almost two-thirds of the total number of employees. Finally, there are the Administrative Support staff, which is the second largest group of employees, 25 percent of the total. That means that only about 10 percent of Sida's staff are considered to be in management positions.⁴

³ To assure respondents' anonymity, interviews with Sida staff members are identified by numbers preceded by an "S," consultants with a number preceded with a "C," those interviewed in India by numbers preceded by an "I," and those interviewed in Zambia, by a number preceded by a "Z." ⁴ Excerpts from Sida personnel statistics 2000, made available by PEO.

As is illustrated in Figure 7.3, Sida staff members are involved in a series of action situations with multiple actors at many different levels. In each one of these relationships, asymmetries of information are present. As different actors in the field – such as consultants, recipient government agencies, and colleagues at the Swedish Embassy – report to a Sida staff member in Stockholm, the reported information is seldom complete. Often, pieces of information are lost in each of the interactions shown in Figure 7.3. This information loss is the product of a *selection process* of the information that is transmitted from one actor to another. Each actor has an incentive to select and transmit primarily the information that will benefit him or her personally. This information loss is a common problem in all hierarchies and constitutes a fundamental principal-agent problem also for Sida.



The multiple layers of international development cooperation activities aggravate the information asymmetry problem. The many layers of intermediary actors between the Desk Officer at Sida and the intended beneficiaries in the field complicate the decision-making process for the Desk Officer. Before making crucial decisions about future activities, the Desk Officer at Sida relies on the input from a variety of consultants and national government officials. These intermediary actors, in turn, seldom have direct contact with the ultimate beneficiaries of the development cooperation. Thus, they also have to rely on secondary sources for beneficiary-level information. Broken feedback loops repeatedly occur throughout these layers of activities.

⁵ The desk officer, as we shall see in the following section, makes many of the crucial operational-level decisions.

The multilayered action arena makes it very difficult for the Sida Desk Officer to appreciate what is really going on in the field. The results of our interviews at Sida, which we present below, indicate that the information deficit at the Desk-Officer level is real. The implication of this finding is rather serious for the prospects of achieving sustainable outcomes, because even if the Desk Officer has the best of intentions to achieve sustained improvements in the welfare of the intended beneficiaries, it is virtually impossible for him or her to make the necessary decisions without access to accurate, timely, and reliable information about the beneficiary-level reality.

The challenge for Sida to address the information asymmetry problem is to create an environment in which its staff members are encouraged to actively find ways to seek out the essential information from the interactions with their colleagues in both Sweden and partner countries. Sida can also experiment with ways of reducing the number of intermediary layers – for example, moving more of their Desk Officers out to the embassies in partner countries where they could have more direct contact with local actors. If Desk Officers are unable to get reliable information in a timely fashion about how activities in the field are progressing, it is impossible for them to make the decisions about adjustments in the project that may be necessary to achieve sustainable results. Realizing the importance of the Desk Officer's learning about sustainability, we now turn to describe some of the contextual factors that may influence the incentives that Sida staff members face to engage in such processes.

7.4 Contextual Variables and Their Influences on Action Arenas

Having identified the main action situation for our institutional analysis as Sida's efforts to learn how to address collective-action problems both at home and in partner countries, we now turn to examine what contextual factors might influence the outcomes of these efforts. The types of contextual factors that tend to influence the outcomes of the interactions between actors in the action arenas can be divided into the *institutional*, *cultural*, *and biophysical* characteristics of human interactions. In turn, these three factors can come into play at all three levels of human interactions: constitutional, policy, and operational.⁶

7.4.1 Institutional Factors Influencing Action Arenas: Rules-in-Use

As a government agency, Sida is embedded in a set of constitutional, policy, and operational rule structures – many of which exist in the form of written documents. In Figure 7.4, we present a very brief overview of the levels of

⁶ One of the advantages of the IAD framework, as opposed to other modes of analysis, is that it allows for dynamic analysis of interactions. As the contextual variables change, so do the configuration of variables in the action arena. When changes occur, a modified outcome can be expected. The actors evaluate these outcomes and may adjust their behavior in future interactions on the basis of their individual or collective perceptions. And, they may move up a level to change the structure itself.

policy making and rules that affect the structure of principal-agent relationships within Sida or with contractors. The constitutional rules-in-use, represented by the fundamental laws and policies of the government, define the competence and responsibilities of the different government agents associated with international development cooperation. The very creation of the new Sida in 1995, and the mandate given Sida by Parliament, is an example of a constitutional-level rule-in-use related to Sida itself.

The rules-in-use at the *collective-choice* level regulate primarily how to organize the development cooperation system. This kind of policy has been largely delegated by the MFA directly to Sida. The top management within Sida decides how the day-to-day operation of Sida will be organized. The *operational* rules that affect particular situations are themselves the result of decisions made in collective-choice situations as discussed in Chapter 2. Many of these rules are encapsulated in the relationship of various Swedish and recipient government agencies with Sida.

7.4.2 Interactions between Sida and the Ministry of Foreign Affairs

Although the Ministry of Foreign Affairs (MFA) is officially the authority in charge of Swedish Aid, Sida, Sweden's Official Development Agency, enjoys a considerable degree of autonomy to shape the content, format, and strategies of the Swedish aid program. Sida's autonomy is reinforced by the limited time and staff the Ministry devotes to monitoring Sida. According to Sida at Work, the ministry develops policy guidelines regarding the scope, modality, and budget constraints of aid to specific countries. Sida is to execute its operation within the ambit of these guidelines. The administrative structure and the way that physical and human resources are distributed between various competencies and functions within both the MFA and Sida reflect Sida's operational independence. As illustrated by Figure 7.4, Sida has enough autonomy and authority to influence and control a great deal of the policy decisions that concern the bilateral development cooperation program. The influence of the MFA on Sida is practically limited to issues governed by the constitutional-level rules.

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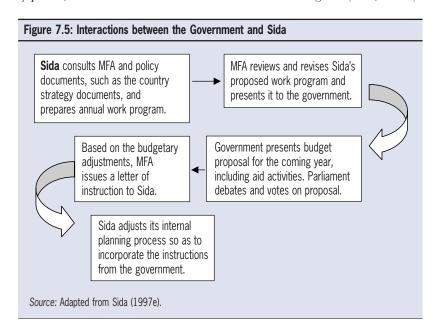
Figure 7.4: A Schematic Overview of the Type of Rules Affecting Swedish Governmental Programs of International Development Cooperation

Level of Interactions	Rules Affecting Action Arenas	Examples of Instruments	Main Actors
Constitutional	The laws and policies that define the fundamental purpose and rationale of Swedish aid.	The declaration of the seven objectives of the Swedish governmental aid program, bilateral framework agreements, expenditure ceilings, etc.	Parliament, MFA Sida
Collective- choice (policy)	Procedural rules that govern the processes that define and change operational rules.	Country strategy documents, internal budgets, <i>Sida at Work</i> , annual work plans.	Parliament, MFA MFi Sida
Operational	The rules that define the format and content of specific activities.	Contracts and terms of reference with staff, consultants, and counterpart organizations.	Sida and Embassy staff, consultants, recipient organizations

Although Sida and the MFA work in close and fruitful collaboration with each other in pursuing the goal of international development, the additional diplomatic and political goals pursued by the ministry can sometimes pull them in opposite directions. For example, aid as a tool in diplomacy can conflict with purely developmental objectives. For example, it is often in the interest of the Swedish Ambassadors and Chiefs of Mission to maintain a large portfolio of development initiatives — whereas Sida prefers its activities to be concentrated within a few sectors and prefers to deal with a limited number of recipient country organizations. A more expansive portfolio allows the Ambassadors certain political advantages and bargaining strengths in fostering Sweden's diplomatic relationships with the development partner. Given Sida's budgetary and technical constraints, however, the resulting lack of concentration can weaken the capabilities for monitoring and follow-up by Sida.

The Ministry also represents Sweden's commercial interests abroad. It works actively to promote Swedish trade, industry, and services abroad. Tied-aid is one way of furthering this goal. In addition, the Ministry has consulted in the past with Sida in regard to providing concessionary lending to countries procuring products from Sweden. Such objectives can sometimes detract from the main goals of Swedish development cooperation (see the second Indian Case Study). The pursuit of political and commercial goals in the formulation of international development cooperation policy is an example of how the political processes at the constitutional level can affect the decisions at the policy and operational levels. This type of centralized decision making can

generate an obvious risk for sustainability if these decisions do not first consider the problem on the ground and the type of support that would be most appropriate to contribute to a solution of that problem. As *Sida at Work* clearly puts it, "decisions should be made where the knowledge is" (Sida, 1997c).



Overall, a great deal of mutual respect characterizes the working relationship between officials at Sida and the MFA. Each appears to value the other's competence and complimentary roles in the shared mission to deliver aid. Our interviews with officials at the MFA, as well as at Sida, show that this norm – that MFA should not try to meddle or micro-manage Sida's everyday work, but be available to offer advice and technical input in selected areas of the program – is usually observed (S30, S41, S100, S61). The MFA's active involvement in the aid processes helps Sida not only in the country strategy formulation processes but also in dealing with politically sensitive issues in the negotiations with recipient organizations. Such political support may be important to stress Swedish concerns for commercial and cultural relationships and for issues such as democratization, economic reforms, gender-equality, and other human-rights issues.

Sida holds the lead responsibility in formulating the aid policy framework that set out its priorities and areas of cooperation with its development partners. These Country Strategy Documents present analyses of the current sit-

⁷ To assure the anonymity of respondents, all interviews with the members of the staff of Sida or with consultants that we interviewed in Stockholm in March, June, or November of 2000 are identified by a number ranging from S1 to S111.

uation in the country, and the prospects for development. Apart from specifying the overall objectives for the bilateral cooperation, the goals for specific contributions, and the priority programs to be considered by Sida, the Country Strategies also define country and sector allocations. These documents are, however, subject to the final approval of the MFA. Sida officials therefore find it wise to consult actively with key MFA personnel – both at the embassies and in Stockholm – when developing Country Strategies. Involving the MFA at an early juncture also tends to speed up the approval of strategy documents at a later stage.

7.4.3 Rules-in-Use for Sida's Internal Decision Making

For its internal management and planning, Sida follows an annual planning routine. Three key policy steering documents guide the decision-making processes. These are (1) the internal, three-year strategic plan (which is updated yearly); (2) the priority area decisions (which are the departmental-level strategies); and (3) the departmental annual work plans. These steering documents are to be in harmony with the regional and country strategy documents. The regional and country strategies provide relatively clear guidance when Sida is to evaluate incoming funding proposals from the partner countries. Although these are evaluated on a case-by-case basis, the assessment follows specific guidelines to make sure that all activities that are funded are consistent with the strategies, objectives, and goals of the policy documents.

Given the relatively few gradations in the Sida hierarchy, officers at each level are provided with substantial responsibility and discretion. This is particularly the case for the Sida Desk Officers. If a project is larger than SEK50 million, the Desk Officer prepares and presents the project or program to the Project Committee, who then makes a decision whether to recommend it to the Director General. If it is smaller than SEK50 million, the Desk Officer who reviews the proposal recommends its approval or rejection to his or her Department Head.

A series of Sida handbooks and manuals provide guidance to Sida employees in a score of different areas. Many of these were produced in conjunction with the creation of the new Sida in 1995. The handbooks, such as *Sida at Work* and *Sida's Guidelines for Sector Program Support*, express what Sida's approach to development cooperation means in practical terms, and as such are important references for the organization's theoretical idea of what its rules-in-use should be.

7.4.4 Rules-in-Use for Sida's Budgetary Process

The Swedish Parliament, based on proposals put forward by the government, decides the size of Sweden's overall aid budget. Swedish aid contains three parts: multilateral aid, bilateral aid, and other. Of the total aid budget of SEK13.6 billion in 2001, Sida will disburse around SEK9.6 billion in bilateral aid. The Ministry of Foreign Affairs administers the core of the multilateral aid

to the United Nations system, the World Bank, and regional development banks. The 2001 budget for multilateral aid is roughly SEK3.9 billion.⁸

Given the 1-percent target, Sida submits a budget request based on its estimation of the size of the Swedish economy. (Actual levels of aid over the past few years have, however, hovered around the 0.7 percent level.) Further, the MFA issues draft policy guidelines and decisions bearing on such things as Sweden's diplomatic relationships with various partner countries. Sida is then to plan and implement the policy received from government within the budget set by the Parliament.

Sida's budget contains two parts: a development co-operation appropriation and an administrative appropriation. The development co-operation appropriation refers primarily to funds for activities in recipient countries, while the administrative appropriation translates to costs at headquarters, such as staff salaries, personnel activities, duty travel, etc.

Sida's budget is set annually, though it is now in its third budget regime since 1995. In the first budget regime, from 1995 to 1997, the government established an expenditure ceiling that was inflexible. The budget for Sida as a whole was set, as well as the budget for the various departments. Little leeway was allowed to move money among Sida's various departments and aid modalities. Breaching these ceilings risked triggering an investigation by the Swedish National Audit Office. This threat led Sida managers to be cautious and to plan on spending a little less than the ceiling (S57). The dominant pattern in this period was to commit to an initial project after extensive negotiations with the recipient government and implementing agency and to keep funding that project for a long time. Budgeting then involved making marginal calculations each year regarding an upward or downward movement in the budget for the project (S41).

With many departments following this cautious budgetary strategy, unspent funds would frequently exist at the end of the year – the difference between the amount of the budget ceiling and the amount actually spent. In addition, there were situations where money already approved could not be disbursed. Natural disasters in the recipient country that disrupt planned activities are an example.

In this first budgetary regime, the extra funds that existed at the end of the year were carried over from year to year as a reserve. This unusual reserve system was promised to Sida by Parliament. It allowed Sida to set up reserve funds that could be allocated as needed rather than under the dire threat of losing the funds. By the end of 1997, however, Sida had a reserve of over SEK3 billion. As these reserves piled up, they sparked the attention of Parliament and the

⁸ The multilateral aid figures include the so-called multibilateral aid projects that are administered by Sida and implemented by multilateral organizations in recipient countries. For instance, a large part of Swedish bilateral project assistance to Guatemala is implemented by the United Nations Development Program office in Guatemala.

general public who wanted to know why Sida was not using up its budget allocations. The natural question was whether these funds could be used elsewhere if Sida could not use them (S57). Hence, in effect, Parliament asked Sida to increase the disbursement rate. Sida management, recognizing this peril, convened in emergency to devise a strategy for drawing down the reserves.

The second budgetary regime was initiated early in 1998. Sida management was able to convince Parliament to have more flexibility in how it managed its own funds. Sida was permitted to keep the funds it had in reserve with a promise to work out careful ways of drawing down these reserves. A system of portfolio management was introduced. In addition, in an attempt to draw down the reserves, Sida started to over-program (much in the way airlines overbook passengers) in the expectation that some percentage would not come to fruit. They were allowed to exceed budget limits in their disbursements to Tanzania, Mozambique, and other programs. Top-management established a general rule of thumb that departments could increase their commitments for any year, up to 130 percent of what they thought they could actually disburse. It looked as though this would be a successful strategy to enable Sida to draw down the reserves in a slow and controlled process. Thus, Sida accelerated its funding commitments (but not their disbursements) during the first part of 1998 in order to try to spend more by the end of 1998 (S41).

The second regime lasted less than a year. The beginning of the third regime was marked by the re-introduction of budgetary ceilings in December of 1998. At the time, it was thought that this was a temporary measure that would last no more than three months. Thus, many departments continued to plan and make commitments as if they had their full budget to disburse during the year plus spending some of the past reserves. In April of 1999, however, Parliament made clear that the ceiling was not temporary. Rather, due to a general budget squeeze, Sida now faced a permanent ceiling on expenditures. Coming after a period when the push was on to commit funds more rapidly, this severe cutback was a difficult challenge to face. Since many projects are funded for a long period of time, finding means of making rapid downward changes is relatively difficult. Many economic measures, such as cutting down on staff travel and hiring of permanent staff, were adopted.⁹

⁹ According to UTV, the budgetary ceilings have affected both the administrative and development cooperation budgets, but have had the worst impact on the development cooperation. An internal budgetary ceiling was also adopted by Sida to restrict the expenses of the administrative appropriation. This so-called "June Decision" lasted for years in order to be prepared for, and to be coherent with, the general budgetary ceilings (UTV comments, June 2001).

Ta	Table 7.1: Total Disbursements of Sida Budgets for 1997–2000 by Quarter (SEK)							
	Quarter	1997	1998	1999	2000			
	1 st	1,267,025,432	1,372,360,129	2,866,072,552	2,302,032,160			
	2 nd	2,089,850,692	1,849,667,065	1,686,893,222	2,497,049,205			
	First half	3,356,876,124	3,222,027,194	4,552,965,774	4,799,081,365			
	3 rd	1,600,213,330	2,091,751,397	1,829,923,050	2,079,786,305			
	4 th	3,120,446,858	2,093,224,836	2,096,431,879	3,385,428,692			
	Second half	4,720,660,188	4,184,976,233	3,926,354,929	5,465,214,997			
	Per year	8,077,536,312	7,407,003,427	8,479,320,703	10,264,298,362			

The disbursement patterns during the 1997 through 1999 budgetary years (the calendar year) reflect an impact of these budgetary regimes as shown in Table 7.1. In 1997, the last year of the budgetary regime with a tight ceiling, disbursements in the fourth quarter were 39 percent of the total for the year. Total disbursements fell in 1998 as several readjustments were set in place by the second regime and plans were made for accelerated disbursements in 1999. These were carried out during the first quarter of 1999 when 34 percent of the total disbursements for the year were allocated, but the cutbacks that occurred during the second and third quarter of 1999 are substantial when compared with the previous three quarters. In 2000, disbursement patterns are dominated by accelerated spending during the fourth quarter, constituting about one-third of that year's total spending. Examining the rather limited time series of disbursement data and taking into account the atypical conditions of the 1998–1999 period, a pattern of increased disbursements during the latter part of the year emerges.

7.4.5 Cultural Factors Influencing the Action Arena

Sida as an organization exists within the broader Swedish community as it focuses on the activities of government in general, and of international assistance in particular. Aspects of public opinion are shaped by the coverage given to international assistance by the media and by the opinions expressed by business interests who support key aspects of international assistance.

The Public and Government View of Development Assistance

A widely shared moral obligation to assist the less fortunate in developing countries underpins much of the widespread public support for development aid. This sentiment has been consistent since the 1960s and remains a rela-

¹⁰ We appreciate the help of Mathilda Hansson, Department for Finance and Corporate Development, for providing our study with this disbursement data.

tively fixed feature in Swedish politics. In addition, there exists a strong agreement to earmark 1 percent of the Gross National Product to be used for foreign assistance. Indeed, there is even a sense of disappointment or shame if such targets are not sufficiently met. In addition to its consistent and generous support of Swedish development cooperation, the public expects this support to be disbursed in an effective and accountable way.

Support for aid within Sweden is also motivated by perceptions of the geopolitical strategic interests of Sweden. Aid, particularly program aid, can be used to win support from developing country governments in international forums, such as the United Nations General Assembly, for positions that the Swedish government favors. As evidence of the importance of program aid to the more general conduct of Sweden's interactions in international arenas, and of a subtle shift in the relationships between Sida and other ministries, program aid is handled almost entirely through the Foreign and Finance Ministries in Sweden, although Sida technically shares the account for Economic Reform and Debt Relief with the Ministry of Foreign Affairs.

Swedish aid had also traditionally been a tool for expressing solidarity for political movements with whom the public and governments in Sweden have sympathized. Sweden had been a strong, long-standing, and consistent supporter of socialist regimes from Vietnam and Ethiopia to Nicaragua. For example, the Olof Palme Government decided to support a series of development projects in countries such as Tanzania, Nicaragua, and Vietnam, which shared the fundamental notions of the Swedish Government's social democratic ideology. In Vietnam, the Bai Bang paper mill project, conceived of and designed during that country's war with the United States (and built shortly after), was a way of showing Sweden's solidarity to the government in Hanoi (Sida, 1999c).

In addition, in keeping with the strategic use of aid, Swedish development cooperation has been concentrated on relationships with 34 main countries. Sweden, as a middle power, has sought to be a niche player, concentrating its resources and attentions to gaining influence in particular regions such as southern Africa (Schraeder et al., 1998). Sweden's international reputation is one of a loyal donor that remains engaged over the long haul (Lumsdaine, 1997). These examples illustrate how cultural norms at the constitutional level may influence the interactions between actors in the action situations.

The Media

Given a strong public and government commitment to development assistance, the media in Sweden takes a keen interest in the disbursement and administration of such aid. The media reflects many of the core cultural features of Swedish aid. Sida, in the public's mind, is a well-known organization in Sweden and as such it represents the Swedish aid establishment. As a result, Sida is the focus of much critical scrutiny. In the past, Swedish investments in large-scale projects, such as the Bai Bang project in Vietnam, generated much negative publicity. Sida, as all other multilateral and bilateral aid agen-

cies, has also had to come to terms with the perceived high failure rate of development initiatives. Sida has consistently been open in acknowledging the challenges it faces in development cooperation and, in this way, strives to maintain its reputation and credibility.

Commercial Interests

Apart from public interest and support, the Swedish private sector is also a strong advocate for aid. As Sida itself reports (Sida, 1997b: 17), around 60 percent of Swedish aid funnels back to Swedish firms and consultants. Swedish corporations view development cooperation as a way to gain a foothold in foreign markets (as reported to us by S26, S65, S102). These views reflect an important cultural attribute of the private sector community in Sweden. For these actors, development cooperation provides the means by which they can acquire public funds to support their particular business and thus gain a competitive edge against foreign firms. Aid can thus become the subject of rent-seekers.

Another consequence of this observation is that a significant component of domestic expertise and technology accompanies aid from Sweden, although Sweden is certainly not unique among donors in this respect (USGAO, 1996). Sweden directs as much as four-fifths of humanitarian aid through Swedish NGOs (Sida, 1999d). Thus, much of the general support for development assistance in Sweden can be attributed to the extensive support this does provide to Swedish firms and NGOs.

7.4.6 Biophysical Characteristics Influencing the Action Arenas

One of the major influences on the incentives generated in an operational-level action situation is *the nature of the good* that the interaction revolves around. As we have discussed in Chapter 2, when operational situations involve public goods or common-pool resources, specific attributes of the good strongly affect incentives.

Those involved in natural resources have to understand how various institutional arrangements enhance or detract from the incentives of field managers and users to build, maintain, and sustain resource systems. Those involved in educational projects have to understand a different set of institutional arrangements and how they affect the incentives and behavior of teachers, school administrators, and students. And those involved in humanitarian aid, building institutions, or still other projects have to understand how diverse biophysical characteristics in each sector and in different parts of a recipient country affect outcomes.

Many different biophysical characteristics affect the capability of direct participants and of Sida staff members to learn how to enhance the sustainability of different types of projects. This increases the complexity of learning about sustainability for everyone within Sida.

7.5 Patterns of Interactions: Incentives for Learning about Sustainable Outcomes

Building on the findings from the previous section about the contextual and structural influences on the action arenas, where incentives for Sida staff form, the next section explores what it would take for Sida, or any IDA, to create a working environment that is conducive to learning about sustainable outcomes. We then examine our empirical findings and compare these with the postulated theoretical conditions that seem to generate positive incentives for learning about sustainable outcomes.

We start out by identifying incentives related to the action situation, which we previously defined to encompass the interactions Sida staff engage in to learn about how to achieve sustainable outcomes in the field. As we shall see in this section, identifying the incentives is a fairly straightforward procedure when following the IAD framework. But a word of caution is warranted on the interpretation of the identified incentives. Identifying the incentive is one thing, but to assess the incentive compatibility and to predict the net effect of the identified incentives is a more challenging task. The main difficulty is associated with reliable methods of measurement. It is difficult to measure accurately the relative strength of one incentive compared to another because the result of the internal process within individuals of weighing incentives against one another depends on each actor's individual preferences.

Another problem facing studies of this nature is that even if one can detect the existence of positive incentives, these may be overpowered or counteracted by institutions that generate negative incentives. At the end of the day, the individual IDA staff member will act upon the net effect of a mix of positive and negative incentives, which are different for each individual. To measure this net effect accurately is a complex task, and it is certainly beyond the scope of this report to do so. Nevertheless, as a result of our extensive interviews with randomly selected Sida officers, long discussions with many Sida staff members that UTV suggested we interview, and reading as many internal documents as it was feasible to review, it is possible to discern general patterns of predominating incentive structures for the three areas discussed above.

Our main argument in this section is that Sida would increase its prospects for achieving sustainable outcomes if it were to invest more into a robust system of learning about how to achieve sustainable outcomes in the field.¹¹ We believe that when such a system forms the basis for the continuous adjust-

¹¹ Our findings are somewhat more positive than the study of learning within Sida conducted by the Swedish National Audit Bureau in 1988 as summarized by Weislander (2000: 255–56). Weislander concludes that RRV found that while there is an obvious interest in learning, Sida is better at changing its thinking than its acting. Among the problems mentioned is that Sida is incapable of describing 'good aid projects.' Expressed goals are conflicting, and one goal – disbursement – is not even included. . . . Evaluations are not effectively used, the rate of internal staff turnover precludes learning, and there are no useful routines for transferring the experience of TA. Learning at Sida is said to take place mainly by doing, it is top-down, and promoted primarily through changes in routines.

ments and fine-tuning of institutional factors, Sida will become better at contributing to collective-action solutions both at home and in partner country institutions.

The section starts out with a discussion of the importance of staff motivation for an organization like Sida that wants to correct its incentive structures to become more effective. The discussion draws from our own empirical findings as well as from the results of Sida's own, voluntary, Web-based survey of staff perceptions of the working conditions at Sida. We then raise the question whether it is sufficient to have a highly motivated staff to overcome internal incentive problems related to learning about sustainability. We identify two *patterns of interactions* that we believe are crucial for the formation of Sida's internal incentive structures associated with learning about sustainable outcomes: individual and organizational learning about sustainability. We pay particular attention to the effect that formal evaluations and the annual budgetary cycle seem to have on these incentive structures.

7.5.1 A Highly Motivated Staff

For visiting researchers to the Sida home office in Stockholm, one of the most noticeable aspects of the general atmosphere within the home office is the number of highly motivated members of the staff. Staff members are working in their offices when one first arrives and as well as when one leaves several hours after official closing hours. In the over 90 interviews we conducted with Sida staff members, we found them engaged and more than willing to talk with us about their perceptions of Sida's work and their own incentives.¹²

A very recent internal survey of the attitudes of Sida employees¹³ conducted during August and September of 2000 confirms our general impressions. A general request was sent to all current staff members at Sida to answer a set of questions on a Web-based survey instrument. A total of 308 Sida staff members responded, of which 102 (one-third) were male and 206 (two-thirds) were female. ¹⁴ Although the survey was not given to a random sample, respondents were well distributed across all of the Regional and Sector Departments within Sida. ¹⁵ One of the limitations of giving a survey to a non-random sample of

¹² We conducted semi-structured interviews with over 60 staff members using the Study Guide reproduced in Appendix C. Interviews with the senior staff, and with those directly involved with the Indian and Zambian projects described in the following chapters, were focused on specific substantive questions rather than following the same semi-structured interview schedule for each interview.

¹³ Sida-PEO 2000. Sidas Organisationsmätning An initial report of the responses to this survey was sent to us in the Winter of 2000. We appreciate having access to this data very soon after it was collected. Krister Andersson translated the questions from Swedish to English.

¹⁴ The response rate of 56 percent was penciled onto the recording sheets sent to us.

¹⁵ It is reasonable to assume that the most committed employees were the most likely to respond to this voluntary survey. Moreover, it would be natural for some staff members to worry about the possibility that their responses would be traced back and linked to them personally.

Sida staff is that one cannot be sure how representative that sample is with regards to the entire population of employees. One should therefore be careful to make inferences and draw general conclusions on the basis of the results of this survey. The age distribution of the respondents is shown in Table 7.2.

Table 7.2: Age Distribution of Respondents to Sida Staff Survey									
	Age	< 20	21 – 30	31 - 40	41 - 50	51 - 60	>60	Total N	
		1	41	65	79	114	8	308	
		0.3%	13.3%	21.1%	25.7%	37.0%	2.6%		
		0.3%	13.3%	21.1%	25.7%	37.0%	2.6%		

Respondents were asked a variety of questions related to their commitment to working at Sida and their general evaluations of their working environment. The survey results confirmed many of our own observations and perceptions, including: (1) most respondents are highly committed to their work, (2) more than 70 percent of the respondents to this in-house survey strongly agreed or agreed completely that they felt engaged by and committed to their work, and (3) more than 70 percent were also willing to "stand up and push for Sida's goals and vision, even outside of Sida." The mean response – on a scale that ranged from a low of 1 representing the response "don't agree at all" up to 6 for a response of "agree completely" for all of the questions on commitment, responsibility, and work relationships – varies from 4.3 to 4.9 – a very high mean response rate for questions of this kind. The top management of any agency receiving such a strong endorsement from the staff would be pleased with the high morale and commitment shown here.

Is a Highly Motivated Staff Sufficient for Achieving Sustainable Results?

The question must be asked, however, if a highly motivated staff is sufficient to foster the sustainability of development assistance. And, given our analysis in Chapters 2 through 4, our answer has to be that it is a *necessary* condition but not a *sufficient* condition. The devotion and hard work of the Sida staff do overcome many of the problems of moral hazard found in organizations where morale is low and shirking (or even worse activities) are frequently observed. The problems of missing and asymmetric information discussed in Chapter 2, however, still affect the likelihood of designing international assistance programs that lead to sustainable results in the sense used in this report and defined in Chapter 1 – the longevity of development cooperation's effects on the six specific development goals, as well as the overarching goal of poverty reduction as defined by the Swedish Parliament.

A major problem facing the staff of all international development agencies who try to strengthen institutions in recipient countries is the problem of gaining sufficient information about what works well to overcome specific collective-action problems in particular cultural and historical contexts. As

we saw in Chapters 2 and 3, collective-action problems are context-specific, characterized by the particular recipient country's historical, cultural, and institutional context. This location-specific contextual information tends to change over time with political changes, the appearance of new constellations of actors, and the changes in the rules-in-use that emerge from the interaction within new constellations of actors. Any donor-supported intervention designed to facilitate the solution of a particular collective-action problem must therefore construct mechanisms that can acquire timely and reliable contextual information. Time and distance represent substantial constraints, especially for IDA staff working in the home office and who may visit their partner countries perhaps only one or two weeks per year. To overcome these constraints, the IDA may provide incentives for staff to acquire essential contextual information. Taking the example of Sida, this report discusses incentives for two kinds of learning: individual and organizational learning about IDA strategies to achieve sustainability of project activities.

Individual Learning about Sustainability

The question is: How do individual staff members learn which kinds of projects or programs are the most likely to lead to sustainable outcomes? One way of learning is entirely personal. If this were the primary way to learn about sustainability, individual staff members would need to be assigned to individual projects and programs for a very long period of time so that they could observe what works and what does not seem to work well in a particular socioeconomic and cultural setting. To motivate individuals to learn effectively about the sustainability of development assistance, substantial effort would be made to evaluate how their own activities are related to the success of a project. While recently there is a strong commitment to ownership within Sida, it is consistent with Sida's official concept of ownership that the agency providing funds and technical expertise does not simply fund any project that a potential recipient would like to see funded. No bank could ever succeed over the long-run if it funded applications for business loans without either examining the business plan and its likely success or basing the loan on strong past evidence of success. In the case of development assistance, a strong record of past successes would rule out some of the neediest recipients. Thus, in regard to development assistance, even greater need exists for a strong evaluation of the likelihood that a future project would lead to sustainable results. And, thus, rewarding staff who have contributed to the design, technical advice, and successful implementation of activities that have a sustainable impact on the goals of development would be an important step to encourage a substantial investment for this kind of individual learning.

If an organization composed of several levels of principal-agent relationships had created incentives for individual learning about sustainability, one would expect to find:

(1) Long-term assignments of staff to overseas positions where they could observe projects from the initial design through sufficient years of opera-

- tion to learn which kinds of projects had the highest probability of being sustainable.
- (2) Careful efforts to ensure that individual staff, who were shifted to other assignments, were able to obtain continuing information about projects with which they had an earlier association so that they could learn whether any sustainable results had been achieved.
- (3) A resistance to hiring temporary staff and a strong effort to retain younger staff who have had opportunities for substantial learning.
- (4) Career advancement criteria based to some extent on past participation in projects that had proven to be sustainable particularly for managerial staff.

Each of these conditions would directly affect the level of feedback that an individual staff member would receive about the factors that affect sustainability in specific projects as well as the composition of the Sida staff by retaining those who have had the most opportunities to learn about sustainability.

7.5.2 Empirical Evidence on the Conditions for Individual Learning about Sustainability

What empirical evidence exists to support or reject the propositions about the existence of positive incentives for individual learning within Sida? In the sections below, we reveal that we did not find much evidence to support an argument that the incentives inside Sida are strongly oriented toward learning about sustainability and rewarding efforts that lead to sustainability of development assistance efforts. Many of the incentives that were identified above as being of particular importance for the sustainability of projects appear to be missing or have a different structure in Sida's contemporary organization and budgetary structure.

The lack of strong incentives for learning from past projects and the field shows up in Sida's own Web-based survey discussed above. Almost one-fourth of the Sida staff members who responded to the survey chose not to give a rating to the statement: "I feel Sida is good at harnessing knowledge from the field and the experience acquired by embassy personnel." Of those who did respond, over 50 percent *disagreed* with the statement. The mean response of 2.9 to this question contrasts markedly with the consistent mean responses of over 4.0 in regard to general questions about working for Sida. More staff members responded to the following questions in the survey:

I perceive Sida as an organization that monitors and follows up on its activities well, and

I perceive Sida as a workplace where it is self-evident to question the established thought-patterns and working routines.

The mean response to both of these statements was only 3.4, which again is a bit lower than the neutral response score of 3.5. Almost 50 percent disagreed

with the first; over 50 percent disagreed with the second. Sida staff members either did not respond (34 percent) or tended to disagree with the statement that "I feel that Sida's division of responsibilities is clear between Stockholm and the embassies." The mean response to this question was a low 3.1. This reinforces the information we received in our own interviews regarding low levels of coordination between headquarters and the field. These data help to provide a general overview of a staff who are less certain about knowledge transfer and learning from the field and from embassy personnel, who are under considerable pressure at work. We now turn to our own empirical findings with regards to a conducive environment for Sida staff to learn about sustainable outcomes.

Short-Term Assignments

Instead of longer-term assignments that would enable Sida staff to learn from their own prolonged experience in a particular socioeconomic and cultural environment and from projects that they have seen through an entire project cycle, Sida staff typically rotate relatively rapidly among different postings both among departments and divisions at headquarters as well as between headquarters and the field. Rapid movement from assignment to assignment promotes greater integration among staff, and exposure to a variety of experiences. However, it also fosters the development of generalists rather than those with deep knowledge of the particular circumstances and culture of the recipient and beneficiaries.

Of the 46 permanent staff members we interviewed in March or June of 2000, for whom we were able to obtain detailed information on the length of time they have been in different assignments, we found that the length of time in an assignment varied from five months for one staff member to another who indicated serving 18 years with one department at Sida headquarters. The average length of time in an assignment in the field or at headquarters, however, is only four years. One staff member who has worked for Sida for 25 years had the following pattern of assignments:

30 months in Field Assignment 1

28 months in Field Assignment 2 27 months in Field Assignment 3

23 months in Field Assignment 4

12 months in Field Assignment 5

72 months at Headquarters

12 months in Field Assignment 6

36 months in Field Assignment 7

42 months in Field Assignment 8

18 months at Headquarters

With work experience like this, an individual gains a good overview of Sida operations in many locations and has much to offer Sida in terms of accumulated wisdom about the inner workings of Sida. But, few of the field assignments lasted long enough for the staff member to see all phases of a set of

projects. Rarely is a project completed from the initial idea, through the design and implementation stage, to a stage at which its sustainability can be assessed during a four-year period. Thus, Sida staff members tend to be joining departments or field offices when some projects are just beginning, others are midway through (and their beginnings can only be guessed at from massive files), and others are just ending.

Many of the staff with whom we talked reflected on this problem. Of the 50 Sida staff members who expressed their opinion regarding the effect of frequent changes in personnel on the performance of Sida projects, 75 percent (38) of them indicated that the rapid turnover of assignments had a negative impact on performance. Only 8 staff members (16 percent) thought that turnover brought positive results due to the introduction of new skills and insights, and 4 (8 percent) thought it had no impact.

Communication after an Assignment

One way of encouraging staff to learn about the sustainability of past projects is to facilitate communication between the staff who have shifted to a new assignment and those staying behind.

We did not find much evidence of the transmission of learning from prior projects to staff members now working in another location. A consistent message from our interviewees is that field assignments are viewed as highly desirable since they enable staff to participate "in the action" as well as to live a more comfortable lifestyle and earn more money.¹⁶

When staff are first assigned overseas, there is a strong effort to orient them to current activities there but not when they returned to Stockholm. The rationale was given by several staff members that they needed to be oriented to the new country and conditions when posted to the field but could find their way around in the familiar terrain of Stockholm. Staff returning from the field possess insight about the posts they have just left. This knowledge is, however, rarely utilized by staff who are continuing to work in their former posts. Of the 48 Sida staff members who had worked on multiple projects, 23 (47 percent) responded to our questions that they had no contact at all with the projects on which they had worked earlier. Only 16 (33 percent) indicated a limited level of contact (around once a year), and 9 staff members (19 percent) indicated a fair amount of contact (around one to three discussions per year). Indeed, the practice is to shift to a different area of work as a way of diversifying one's job portfolio. When such information is lost, fewer opportunities for learning from experience occurs; less learning takes place; lessons are not transmitted about how to avoid making the same mistakes or to achieve good performance and thus, how to realize more sustainability in project outcomes.

¹⁶ This may be a rather surprising finding since many departments say they have problems recruiting staff for field posts. Sida's own Web survey confirms our data: an overwhelming 77 percent of the respondents said they were interested in taking a field assignment of some sort during the next few years (Sida, 2001a: PEO, p.14).

Temporary Contracts

As can be seen from Table 7.3, there has been considerable stability in the size of the permanent staff at Sida; but, at the same time, there is at any point in time a significant number of Sida employees who do not have permanent positions. The number of permanent staff has slowly grown from a total of 677 in 1995 to 711 in 1999, the last year complete data was available. During the same time, the number of temporary staff has grown from 90 in 1995, to 126 in 1999 (with a dip to 73 in 1996). The proportion of temporary staff to permanent staff has shifted over this five-year period, from 11.7 percent to 15.1 percent.

Table 7.3: Distribution of Permanent and Temporary Staff at Sida from 1995 to 1999

Year	Total # of Employees	Permanent Staff	Temporary % of Total	% of Staff	Staff on Total	% of Leave	Total
1995	767	677	88.3	90	11.7	94	12.3
1996	746	673	90.2	73	9.8	100	13.4
1997	749	659	90.0	89	11.9	99	13.2
1998	787	683	86.8	104	13.2	107	13.6
1999	837	711	84.9	126	15.1	112	13.4

Source: Sida, Personnel and Organization Development Department, December 2000.

Most temporary contracts are substitute positions for vacant Desk Officer posts or for staff on leave. The length of temporary contracts typically ranges from 3 to 12 months. If a person's contract is extended to more than three years over a five-year period, an employer is liable to offer permanent employment agreement according to the applicable Swedish labor protection laws (LAS, 1982: 80). Other types of contracts are project contracts that are temporary posts associated with a specific activity rather than a vacant post within Sida. The length of this contract must not exceed the lifespan of the project. It is also possible for Sida to hire temporary relief staff during seasonal peaks of workload, such as during the end of the bookkeeping year when it is time to balance the books (maximum length for this type of contract is two years).

At the time of our visit in the spring of 2000, there was a very large proportion of the Desk Officer positions within the Africa and Latin America Regional Departments holding temporary contracts. In the Latin American Department, for example, four out of six Desk Officers working in March of 2000 held temporary contracts – all four with less than one year's experience. In the Africa Department, eight out of twelve Desk Officers had temporary employment agreements. In the Asia Department, one out of six Desk Officers was reported to be a temporary staff member. These employees were hired and rehired on three-month contracts.

¹⁷ All interviews reported in this paragraph were conducted in March 2000.

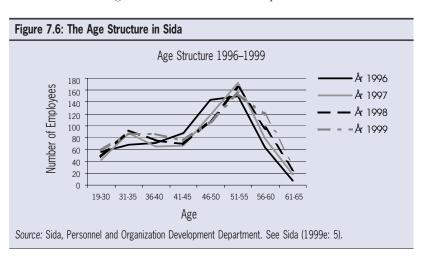
While these individuals may have considerable knowledge and skills, such contracts inhibit staff from absorbing detailed knowledge about the societies in which their projects are to be applied. This can lead to a weakness in the formulation of strategic visions for the given recipient country's development. Staff performance frequently depends on how well they interact with their coworkers. We can expect temporary workers to be less likely to invest in relationships with others in their group leading to a reduced level of learning from communication with coworkers. Temporary staff also have less incentives to object to instructions and more incentives to do as they are told.

Retention and Recruitment of Younger Staff

Having lost full-time, permanent staff following the 1995 consolidation and reorganization, and having not recruited actively for many years, Sida has recently begun a new push to hire permanent staff. Two distinct generations of staff thus coexist within Sida: the older set, which maintains strong ideological convictions and possesses wide experience in working in development; and the younger set, which appears more pragmatic and less committed to a career within Sida.

The random sample of staff members who we interviewed have, on average, worked at Sida for ten years. The age distribution within Sida, however, indicates that many younger staff members do not stay with Sida throughout their careers. Currently, as reported in Table 7.1, 40 percent of the 308 staff members who responded to the Web-based internal Sida study are over 50 and only 34 percent are under 40. There appears to be a group of senior staff members who have been with Sida for a long time and cannot be replaced with an equivalent-sized younger cohort in the 40- to 50-age bracket. A similar drop occurs as one proceeds down the age brackets.

This age distribution appears to be representative of all permanent staff given the data shown in Figure 7.6 based on data for all permanent staff members.



As shown in this figure, even though the age distribution peaks at about the same age (in the early 50s) and the average age of Sida staff has been 46 years for some time, the proportion of staff members above 50 has been gradually increasing while the proportion of staff members below 50 decreased during 1996 to 1998, and only began to increase again in 1999. The potential challenge that this age distribution might present to Sida was recognized in the Personnel and Organization Development Department's *Annual Report for 1999* (Sida, 1999e: 5) where it was noted:

Between the years 2000 and 2005, 72 members of the staff will retire. A further 222 persons will retire between the years of 2006 and 2011. This will be an extremely serious loss of skilled personnel. In response to the departure of such a large number of staff and to bring new skills into Sida, Sida has recruited younger staff during the last three years, in particular young program officers. Instead of a large number of younger staff members vying for more senior positions, it would appear that the ranks of the 40 to 50-year-old staff are relatively small, while many of the younger staff members leave during their first decade of employment. This portends of a loss of institutional memory likely to happen in the next decade or so.

Further, given that, in the Regional Departments, a large proportion of the staff in Stockholm consists of temporary staff, considerable demand has been placed on Desk Officers with permanent posts, who tend to represent the department's institutional memory and have an intimate knowledge of current and potential future collaborating institutions in priority sectors and countries. This may leave the permanent Desk Officers with little time to monitor and follow up the quality of work carried out by temporary staff or contractors. If Sida's budget were to increase rapidly for the African region – which appears likely – one of the few things that can prevent investments in risky or inappropriate projects is the expertise of Sida Desk Officers who have the "civil courage" and professional integrity to motivate a slowdown in the budgeted disbursement rate. Relying on a few Desk Officers with such expertise, particularly in view of the recently announced doubling of resources for Africa (over the next three-year period), is a cause for concern.

Part of the reason for the relatively rapid turnover of younger staff is their perception of limited opportunities for promotion. When asked about their perceptions of "in-house advancement or promotions," 41 out of the 60 (or 68 percent) staff members who responded to this question indicated that they perceived it to be rather poor to very poor. No one responded that they perceived the advancement potential to be very good. While currently motivated to work hard, many of the younger staff members indicated to our research team that they planned to work for Sida for five years or so before going on to a different position in another organization.

Career Advancement Criteria Related to Performance of Past Projects

Success or failure in the initiatives taken in development cooperation has little perceived bearing on the careers of involved Sida staff. There was almost universal acknowledgement of this point among our interviewees. Only one respondent indicated that promotions are based on the performance of the projects on which individuals have worked in the past. Twenty-eight staff members (or, 60 percent of the 47 respondents who had been at Sida long enough to have an opinion about the promotion process) thought that promotions are not at all related to the past project performance, while the others (19 or 32 percent) thought that perhaps some aspects of past project performance were taken into account indirectly. Several reasons for this were advanced: first, that there are so many factors that go into the success or failure of a particular project that it is difficult to clearly see what difference the involved Sida official made. There are so many other players, and so many other inputs, as well as external factors – natural disasters, war, etc – that correspondence cannot meaningfully be established between sustainability and effort. Second, the outcome of many development initiatives is so long in coming to fruition and so general in scope that the concerned officer would have well moved on by then. Further, outcomes of some projects, such as in drug prevention, where success is perceived as the absence of particular conditions - e.g., addiction - are difficult to measure.

In the internal document *Sida's Managerial Policy*, the Personnel and Organization Development Department has provided a clear statement about "what it means to be a manager at Sida" and "a description of Sida's recruitment process." This is an excellent statement aimed at developing a "common understanding and explicit views of what it means to be a manager." The document stresses that six criteria for effective managers have been identified and that training programs are organized around these. Managers at Sida are expected to be supported and trained in their roles as:

- Communicator
- Facilitator of Learning
- Investigator/Researcher
- Decision-maker
- Coach
- Agent of Change

While it is obvious that Sida has an outstanding Personnel and Organization Department that invests heavily in recruitment, training, and career development, it is also obvious that the record that a Sida staff member has in managing his or her portfolio of projects (including monitoring the performance of contractors and counterparts) that are evaluated as sustainable is not included in the criteria for promotion to (or evaluation of) management positions.

Sida's relatively flat hierarchy would seem to pose problems for the aspiring Desk Officer since, as we noted before, many Desk Officer positions exist (67 percent) while there are few managerial ones (10 percent). Indeed, several of the young Desk Officers we interviewed noted that they are not interested in

a long-term commitment to Sida precisely because the chances of moving up the professional ladder appear to be so slim.

On the other hand, those in management pointed out to us that there are many opportunities available. First, it was pointed out that Sida's flatness was not particularly out of the norm in Sweden – that enterprises in Swedish industry and the public sector frequently adhere to this model. Second, due to the demographic peculiarities, as already noted, many of the older staff members will be retiring soon, creating vacancies and, thus, incentives to stay on within Sida. Third, it was noted that the pay disparity between the professional staff and management was not that different, particularly after taxes. (A division head, we were told, earns only about 30 percent more than a Desk Officer.) At any rate, we were informed, a Desk Officer has plenty of interesting things to do and lots of responsibility to go with it. Thus, it was argued (by those in management) that there is a great deal of satisfaction in remaining a Desk Officer.

We were also able to observe, as also pointed out, that though there are few official levels in the organization, there are several subtle gradations in salary, power, and perks. First, we noted that salaries are individually negotiated (although Sida's unions prefer that these remain within certain bands for each type of employee and level of seniority.) Second, some types of jobs were seen as more interesting or prestigious. Jobs in the Director General's secretariat, for example, are highly prized. In addition, jobs in the sector departments are valued over the regional ones for these offer junior officers more opportunities to shine in the eyes of their bosses. Most senior management are old Africa hands. This leads also to a greater attraction for working on projects in that continent. This is where the action is perceived to be.

Among the junior Desk Officers there are two schools of thought: the first, appreciate the experience and responsibility of their post but see no long-term commitment to Sida. Their strategy is to lie low. The second, who nurse ambitions for careers within Sida, perceive their incentives very clearly. They must create the impression of being clever up-and-comers. In neither case are there incentives to foster new or critical thinking. Meetings, which were often seen as being too numerous and unproductive, are seen primarily as forums to show off to one's boss.

Further, and as we have noted, there are very high rates of turnover within Sida with individuals moving among departments as well as rotating between the field and headquarters. This makes establishing a correspondence between the staff member and the performance of his or her portfolio less transparent. Moreover, staff are not required, as a rule, to maintain regular contacts with projects they may have ushered or overseen in one capacity or another. In some cases, however, individual staff members noted being aware of their earlier work if they happened to continue to work in the same region or if there was a lot of media attention focused on a project once worked on.

In short, few Sida staff members who we interviewed believe that the fate of their project will impact their career, since there is no effective tracking mechanism that links project success or failure with the individual contributions of Sida staff members and, as we discuss below, evaluations do not capture the effort or insights of staff members involved in a project. Further, promotions or other incentive schemes are not based, as a rule, on an employee's contribution to the sustainability of a portfolio of development projects.

We do not find evidence that Sida has attempted to create any of the four types of incentives that we posit above as ways to enhance individual incentives to learn more about how to achieve more sustainable projects. Of course, it would be difficult to adopt these strategies, but developing incentives that enhance the likelihood of achieving sustainable aid investments is indeed extremely difficult.

7.5.3 Organizational Learning through Formal Evaluations

When principal-agent relationships are organized within a permanent organization, learning does not need to occur only at the individual level. As Carlsson and Wohlgemuth (2000:9) point out, learning in development assistance activities is complex and difficult largely due to the fact that multiple organizations who are geographically separated must learn from each other. "Knowledge is generated and learning takes place in parallel processes in the aid agency and in the organizations in the home country." A key problem is how to get these processes integrated. The processes "have to be married at some point if the parties are to be able to work together and learn from each other" (ibid.). Information from scattered sources needs to be aggregated and made comprehensible so that future designs can be improved in light of past experience. Efforts can be made to undertake formal reviews or evaluations that provide information to a large number of staff members about the kind of projects that have proved to be successful and sustainable in coping with particular types of problems in specific socioeconomic and cultural contexts. The evaluation processes could become a crucial strategy for ensuring that many people are learning from the experience of their colleagues and can thus avoid making the same errors time and time again. Unfortunately, a large number of evaluations are undertaken but are seriously studied and discussed by only a handful of people.

If an organization had created positive incentives to learn about factors leading to sustainable development assistance, one would expect to find:

- A formal evaluation process that occurred prior to the completion of a
 project so that project participants would learn more effectively about
 their own activities and be able to adjust strategies mid-project in order to
 enhance the sustainability of at least the investment made in that activity.
- (2) Those affected by projects (the beneficiaries) would be involved in the evaluation of projects so that learning would occur for the beneficiaries as well as the donors and contractors.
- (3) Considerable stress would be placed on the factors identified in the past as important for achieving sustainability. If ownership, for example, is considered a necessary (but not sufficient) condition for sustainability, then

- (4) The establishment of arrangements to ensure that evaluations were read, discussed, and affected future planning in all departments.
- (5) The staff should feel that formal evaluations were useful and that serious attention was paid to them.

These factors help to ensure that processes are in place to enhance the learning about sustainability that groups of Sida staff members can achieve as well as developing a reliable and valid evaluation process that is important for the beneficiaries as well as for the Sida staff.

Empirical Evidence on Organizational Learning: Incentives to Use Evaluations for Learning about Sustainability

While there is considerable emphasis on learning in the official documents issued by the Department of Personnel and Organization Development, our findings do not provide strong evidence that the individual learning process within Sida is oriented to learning about the factors that lead to sustainability. Obviously, the high morale and dedication of Sida staff members is itself evidence of an environment that listens to staff and allows for individual growth. The topic we were asked to examine, however, is what incentives within Sida are conducive to increasing the sustainability of development assistance investments. To this question, we have to respond that there are individuals at Sida who are motivated to learn more about sustainability, but the incentives created by the general structure and personnel policies of the organization do not stress paying close attention to the sustainability of aid investments.

Thus, the official evaluation process becomes even more important as a greater weight must be placed on it as a way of encouraging learning about sustainability.

The General Usefulness of Evaluations

The usefulness of evaluations has already been the subject of studies within UTV/Sida (Sida, 1997d, 1999a). The most recent study undertaken by Jerker Carlsson, Maria Eriksson-Baaz, Ann Marie Fallenius, and Eva Lövgren, presents a very frank picture of evaluations. In the Executive Study, the authors state:

It is no exaggeration to say that there is still some way to go before the typical evaluation process provides a good starting point for a broad utilization of evaluations results. There is, across the board, a significant disregard of the critical factors which determine whether an evaluation will be relevant to all stakeholders. An evaluation continues to be a concern for a very limited proportion of all those who have an interest in a project and are affected by its outcome.

The evaluations analyzed in this study have been used in various ways and for various purposes. It is discouraging to find that the general pattern has been that the further away you are from the centre of the project in terms of power and involvement, the less information you receive on evaluation recommendations and findings (emphasis in original).

The authors were deeply concerned that stakeholders – particularly those who were not directly involved in a contractual relationship regarding a project – had little or no voice in its evaluation. They could not, therefore, use the evaluations to further their own learning. Further, this evaluation of the evaluation process concluded that there were "few examples of evaluations actually contributing something new in terms of knowledge" (Sida, 1999a, Executive Summary, 2).

These internal studies confirm information we gained through interviews — that the formal evaluations conducted by Sida are not perceived as useful. Of the 60 staff members who discussed this topic with us, only 9 (15 percent) considered formal evaluations effective in providing projects and programs with useful information, while 51 (85 percent) considered them ineffective. Twenty-five staff members (41 percent) considered evaluations to be irrelevant to the assessment of the success of a project. Evaluations are generally seen as onerous administrative chores and are completed only as a required exercise. Consequently, evaluations are not embraced as opportunities to pass on learning or insights on the practice of development.

Many staff members perceive evaluations as coming too late in the process. A staff member who had earlier worked in the Infrastructure Department indicated that they used to require every project to have an annual independent review, which he felt allowed project staff and recipient government officials to take corrective action immediately if needed. As the staff member reflected: "The way evaluations are currently run in Sida do not play the role that they should. Many program staff have left the project by the time it is evaluated. They don't absorb any lessons from the evaluation. Thus, very little learning is really gained from evaluations" (S93).

Others focused on the effectiveness of the evaluation process. A Department Head commented that the "program evaluation process is not very effective in changing the ways things are done around Sida. The Country Frame has lots and lots of projects in it. Most have strong advocates of Sida staff and host government or NGOs. Evaluations don't really help distinguish among projects" (S4). Others commented that the evaluations report only on the tangible, readily available, and measurable information from a project rather than trying to get at deeper reasons for successes or failures. They are often written to justify decisions that have already been made and to represent the vested concerns of various interested parties, and thus, are rarely perceived to be objective. Further, the UTV studies found that evaluations were not widely shared and discussed – that is, used as tools for learning (Sida, 1999a).

Since ownership has been given so much emphasis by Sida management, we were also interested in examining how evaluations addressed the question of ownership. In our visits to Sweden, we were given 16 different evaluation reports that we have read at various times during the past year. In order to provide a more systematic study of how ownership was treated in the evaluation process, we pulled a random set of ten of these evaluations, and read them carefully to assess what was stated about the ownership of a project, about the importance of ownership, and what was stated about sustainability.¹⁸

An evaluation report is required to make an assessment of sustainability, and the ten reports did examine the technical question of whether the particular project was sustainable. Since many of these were infrastructure projects, the key question was whether the physical infrastructure would survive, rather than whether institutions created to govern and manage the infrastructure over time would survive and flourish to encourage long-term sustainability.

Most of the reports contained no discussion of ownership as a factor leading to project outcomes or sustainability. One document did contain a significant discussion of ownership. The evaluation of *HESAWA*, *Health through Sanitation and Water*, (97/12) devoted Section 4.2 (p. 17) to a discussion of the active participation and village/user ownership that had been established as part of this project. In a sympathetic discussion of the problem of finding appropriate technologies that would effectively involve women and other beneficiaries from the villages in the provision, production, and consumption of improved water and sanitation, the evaluation reported that user groups were sometimes presented with inappropriate options. The report urged that more emphasis be given to augmenting local capacities to construct, monitor, and maintain sanitation and water systems.

The Evaluation of the Pahal Project – India: Participatory Approach to Human and Land Resource Development (97/17) focused extensively on participation without tying this concept to ownership. It evaluated the level of participation in the project as around four or five on a scale that started at one (involving manipulative participation – or a pretense at involving users) to seven (involving the affected beneficiaries taking initiative to change systems and control how resources are used). The report pointed out that the high subsidy levels in this project were eroding the level of participation of users. The concept of ownership is briefly mentioned in The Bank of Zambia – Way Forward (98/32). In this case, there was only a short paragraph on the last page indicating that there appeared to be a strong commitment to change by the Bank management and employees. The other reports were even less specific on the subject of ownership. Unless we missed the concept in our reading of the reports, one will not learn from these evaluations much about how to build ownership or its relative importance in achieving sustainable investments.

¹⁸ The ten evaluation documents were: 97/25, 98/21, 96/13, 99/5, 97/12, 97/17, 98/32, 97/11, 99/10, 97/3.

Lack of Agreement on Criteria of Performance

Further, many staff members perceive a lack of an agreed-upon criteria within Sida for project success. Of the 64 responses to our question about which criteria are used to evaluate project success, 24 Sida staff (38 percent) responded that there were no well agreed-upon criteria, 14 (22 percent) responded that improved institutional capacity was the major criterion; 11 (17 percent) indicated that the disbursement rate was the prime factor; 3 (5 percent) indicated that poverty reduction was the main criterion, and 12 (18,5 percent) cited a variety of other criteria. A similar uncertainty surfaced in regard to the reasons that some projects fail. Of the 38 Sida respondents who ventured an opinion about the major reasons for failure, 15 (40 percent) thought most projects failed because of design flaws; 4 (10 percent) thought it was due to recipient lack of follow-through; and 19 (50 percent) cited a variety of other reasons. If design flaws are frequently involved in failed projects, it is all the more important to stimulate a formal learning process from past failures as new projects are being designed.

Project Innovation

When asked where ideas for projects to fund come from, most respondents pointed to sources outside Sida. Only 5 staff members of the 45 who had been at Sida long enough to assess the sources of project ideas, felt that ideas came primarily from within Sida. Two-thirds of the staff (30) responding to this question felt that project ideas came from the outside – mostly from a network of consultants with whom the Desk Officer or other staff is already familiar. Due to the trust relationships implied when dealing with familiar faces, a Desk Officer can relax his or her supervision. However, within such arrangements, there is less potential for new ideas or new ways of thinking to permeate Sida. Consultants themselves have an incentive to vend their particular services and are unlikely to provide advice that is unfamiliar or that challenges the view of the staff member.

To conclude this section on evaluations, we did not find any of the strategies outlined above that an IDA might adopt if it wanted to stress incentives for sustainability. The formal evaluation process now occurs only after a project has been completed, while earlier mid-term evaluations did occur for some projects at an earlier date so that learning and adjustments could be made. According to Sida's own evaluations of its evaluation process (Sida, 1999a), the beneficiaries of projects are not involved in the evaluation process nor do they learn the outcome of an evaluation effort. Of the evaluation reports that we sampled, only one paid serious attention to ownership – a factor that has been identified by Sida as important for achieving sustainability. Evidently, evaluations are not strongly urged to address how ownership is being implemented in evaluation. While some departments do make an effort to organize discussions of evaluations and Sida staff do attend meetings outside of Sida, we could not find a strong, department-wide effort to learn from the formal evaluation process.

And, finally, the Sida staff members who we sampled do not find formal evaluations to be useful or that serious attention is paid to them.

The evidence reviewed on incentives for both individual and organizational learning at Sida begs the question: What kind of learning about sustainability does go on within the various departments at Sida?

How Do Sida Officers Learn about Sustainability?

With UTVs help, our team asked selected representatives in all Sida departments to what extent they engage in learning about sustainability and how they would characterize this learning process with regards to both frequency and content. ¹⁹ Although these inquiries were nonsystematic from which no scientific inferences should be drawn, we did learn a great deal about how some of Sida's departments try to encourage their staff to learn about sustainability. The questions were e-mailed to selected representatives of all Sida departments, out of which 11 answered. ²⁰ Among our findings we particularly note that:

- 1. Representatives from all of the departments recognized the central importance of having a common understanding of sustainability and a plan for how to ensure that it is considered in all phases of the project cycle.
- 2. While no department reported having a particular forum dedicated *exclusively* to sustainability issues, most departments say the topic permeates the entire work program and that discussions of the topic are frequent whenever discussing specific project activities or potential Sida-supported activities.
- 3. Most discussions on sustainability are associated with the preparation (be-redning), i.e., in the screening of projects by both the departments and Sida's overall project committee. According to respondents, the screening process often generates discussions among desk officers about how to assess the prospects for sustainability from a project design perspective. Several department representatives stressed that these discussions, often informal in character, may be the most important opportunity for learning about sustainability at Sida. Lunch seminars, staff meetings, and coffee break discussions all provide a forum for learning about sustainability.
- 4. There are several opportunities for Sida personnel to discuss sustainability issues with their colleagues, but the frequency of such opportunities varies greatly from one department to another. Some departments reported on discussions on issues related to sustainability in one way or another at weekly staff meetings, while others claimed that attention to the issue of sustainability is either "rare," "inconsistent," or "nonexistent."

¹⁹ UTV sent the following question via e-mail to all Sida department representatives (12 representatives responded): "How does your department address sustainability issues in its daily work program, and, in your opinion, how has the frequency of your department's discussions of sustainability issues changed over time?

²⁰ The following departments answered our informal query: UTV, POL, Sida-East, AFRA, RELA, ASIEN, REGEU, INEC, DESO, SEKA, NATUR.

5. While most of the respondents mentioned discussions of sustainability taking place during the project preparation and screening phase of the project cycle, only one department mentioned sustainability being discussed in relationship to evaluations, and none of the departments reported on efforts to learn about sustainability from monitoring ongoing project activities.

7.6 Budgetary Processes Oriented Toward Sustainability²¹

Much of development assistance activities focus on spending money. All government agencies tend to face considerable pressure to disburse their funds within the budgetary year in which they are appropriated. This tends to lead toward a bias for larger projects that enable staff "to move the money" as rapidly as possible. This incentive tends to become even more important in that size of the staff relative to the size of the budget it must administer is relatively small or if the demands on the staff for many kinds of projects are very high.

If an organization had created positive incentives to resist this budgetary strategy, one would expect to find that:

- (1) Few staff would mention the pressure to disburse as a regular part of their work experience.
- (2) Various informal as well as formal strategies would be in place to try to discourage this strong motivation to take over budgetary decisions.

7.6.1 Empirical Evidence on Budgetary Pressure and its Impact on Learning about Sustainability

As we noted above, almost all government agencies in all countries in the world feel the pressure to disburse. We understand that considerable efforts have been taken to try to counteract this pressure, but most of the Desk Officers we interviewed noted that they do feel pressure to disburse fully their projects' yearly budget allocations. At the same time, it was repeatedly stressed to us by senior levels within Sida's management that official policy does not stress disbursement over other goals.

Some Desk Officers noted that as much as 40 percent of the year's disbursement takes place in the November to December period. (Sida's fiscal year coincides with the calendar year.) Table 7.1 shows that heavy disbursements were particularly the case during the fourth quarter of 1997. Others mentioned a panic atmosphere at the end of the budget year. A few noted that some Division Chiefs took a detailed interest of the progress in funds disbursement by Desk Officers working under them. These Division Chiefs would ask for frequent updates of the projects they were receiving and approving. Moreover, they would provide their superiors with project proposals

²¹ We are grateful to Lars Boberg at UTV for explaining the many technical budgetary issues discussed in this section. Any remaining errors are entirely the authors' responsibility.

that they had drummed up themselves.²² These happenings have created the impression among many Desk Officers that there is a push to disburse and that their superiors would look upon them favorably if they could come through for them in meeting such unofficial targets.

Empirical evidence suggests that this impression among Desk Officers – to disburse allocated budgets efficiently – is widespread. Among the 46 randomly selected staff who had been at Sida long enough to discuss their perceptions of what was actively monitored by the Heads of Department and Division, two-thirds indicated that disbursement rates (at Sida headquarters or in the recipient country) were actively monitored in the day-to-day business of aid administration. Sida employees feel that they are under pressure to spend money, especially at the end of the budget year.

This push to disburse draws from a combination of constraints at the constitutional and policy levels. We noted earlier that Sida is responsible for disbursing a large portion of Sweden's foreign aid budget and that the public is anxious to see that this money, approaching the 1-percent target, is well-spent. Sida is in the position of having to disburse this amount on a yearly basis and to do so responsibly. Sida, however, finds balancing both mandates to be increasingly difficult. At the same time, there is pressure from Parliament, whose members find it hard to understand why Sida is unable to use up the allocated funds.

Expenditure ceilings, as have been imposed recently on Sida, favor patterns of disbursement that may not foster sustainability. Expenditure ceilings set a maximum level of resources that can be spent in a given year. They have the potential to create adverse administrative incentives, as they give rise to fear that, unless budgeted amounts are fully disbursed, the extra funds will be considered superfluous and not re-budgeted in following years. This leads to incentives to identify and fund those projects that are able to quickly and more reliably disburse their allocated budgets. Projects that promise effectiveness and sustainability, but which are not as fast disbursing, can be overlooked within such an expenditure-ceiling regime. Administrative pressures to disburse fully allocated funds can thus act as an incentive that places internal short-term, administrative targets over longer-term objectives in sustainable development.

Further, this pressure can lead to a funding bias of renewal of ongoing projects, rather than the initiation of a long process to approve an entire new project. To examine a different source than the random sample of staff members interviewed, we randomly selected 21 ongoing Sida-supported development projects from the PLUS database and examined the history of the project. We found that 16 of these projects (or 76 percent) were indeed continuations of earlier Sida support to the same recipient organization. While this is a small

²² One Desk Officer told us how the Department Head, from mid-November until the closing of the books on December 17, requested daily updates of disbursements so as to ensure that no resources were lost. We were told of another Department Head, who promised a Champagne toast to colleagues who had managed to disburse fully their year's budget.

sample, it was randomly selected and that three-quarters of the projects were, in effect, continuations does substantiate the reports given to us by many Desk Officers that the way to succeed was to spend the money and to do this with any level of responsibility meant that most projects had to be renewals.

By contrast, a reserve fund – a mechanism that carries forward balances unspent in a given budget year – provides Sida's staff and management flexibility in the way development financing can be disbursed. Several reserve funds and endowments have been established in recent years and these are really important tools in the effort to reduce disbursement pressure (S100). For instance, Sida can accelerate or decelerate disbursements as incentives to its development partners to pursue policies that enhance project effectiveness and sustainability. The introduction of an expenditure ceiling, on the contrary, reduces the use of the reserve fund as a strategic tool.

The effort to realize sustainable development outcomes requires budgetary flexibility. In order to enhance their success and sustainability, aid projects need to fine-tune to local realities. This, in turn, means that disbursement timetables have to be adaptable. To be effective, therefore, Sida must continuously monitor the recipient's actions and accordingly adjust its support. Strict budget ceilings, without the flexibility of reserve funds, foster a resource-focused, rather than content- and quality-driven, management of Sida's initiatives in development cooperation.

Budgetary pressures do not seem to be congruent with efforts to stress incentives for sustainability. Many of the staff we interviewed felt strong pressures to disburse – especially toward the end of the year. Few efforts seem to have been made – except for strong denials of its existence – to counteract the pressure to disburse.

7.7 Discussion of Findings: Incentives and Sustainability within Sida

How does Sida's internal organization influence the incentives for stakeholder performance in partner countries? While the characteristics of Sida's internal incentive structures are geographically far from the problematic operational-level collective-action situations in partner countries, the analysis in this chapter shows that Sida's internal incentive structures influence important decisions in the policy and constitutional-level action arenas that may ultimately have profound effects on stakeholder behavior at the operational level.

Many of the incentives that officials working for Sida face – a pleasant atmosphere that is respectful of the views of all, opportunities for overseas travel, association with a well-educated and informed set of colleagues, and an opportunity to do something that is viewed by participants as important – help to generate a highly motivated staff that energetically approaches work. Some of the other incentives that Desk Officers in Sida face may lead them

to invest less in planning and preparing projects. As we have noted, few rewards or accountability are related for the successes or failure of projects upon which a Desk Officer has worked. Conversely, clear incentives do exist to signal others that one is clever and to prepare good documents. Preparing good documents, however, is not synonymous with devising good project designs or strategies. This is especially relevant given the lack of opportunities for in-depth discussion of what makes a project design potentially more likely to lead to a sustainable project.

Further, a propensity exists to continue funding of existing projects, as these require less preparation time, less administration, and since these also disburse funds more rapidly. This, in turn, creates incentives to prolong projects and not develop them with an eye to fostering local ownership and sustainability.

Finally, several Desk Officers expressed an interest in working more collaboratively with their managers, and since many Desk Officers are motivated more by their commitment to development than by considerations of pay or career opportunities, managers' appreciation can serve as an important reward. Some Sida managers, however, do not seem to live up to the Desk Officers' expectations about closer collaboration. This may be simply because of managers' heavy workloads, or because managers fear being accused of micro-management, something all Sida managers seem to want to avoid. Managerial behavior that produces a less than desirable contact between desk officers and managers may lead to weaker incentives to perform for Desk Officers, not just because of lack in supervision, but because of the lack of encouragement and guidance from their managers.

While many aspects of Sida's organizational structure and personnel policies encourage a learning environment, we did not find many inducements to engage in individual or organizational-level learning about sustainability as such. While this is an extraordinarily difficult topic to take on successfully, Sida is probably better equipped to do so than any other donor agency. We would urge Sida to start addressing sustainability by thinking through how the organization may foster an even stronger commitment to sustainability in its relationships with development cooperation partners. A core message of this report is that a serious commitment to sustainability would require a similar commitment to the emphasis of incentives that encourage individuals and their organized units to learn from their own and others' experiences.

Sida managers have an opportunity to create a better environment for individual and organizational learning about sustainability. Managers play a key role in making this happen by supporting their colleagues in efforts to learn about the underlying processes that generate the institutional incentives conducive to sustainable development.

Chapter 8 Incentives for Contractors in Sida-Supported Activities

Summary

As revealed in the Octangle, contractors¹ occupy a central position in the system of international development cooperation. Sida relies on contractors for a wide variety of services including project design and planning, project implementation, project evaluations, ongoing monitoring, and follow-up of field activities, as well as for expert advice on particular topics. Furthermore, the contractor's role is particularly important given that they, rather than Sida staff, often have the closest and most regular contact with recipient organizations. A study of the incentives facing contactors is thus essential to understanding issues of aid sustainability.

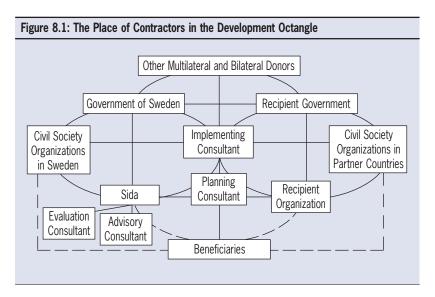
The incentive analysis of consultants presented in this chapter draws on interviews with representatives from ten large Sida contractors. It draws, as well, on visits to five Sida-supported field projects in India and Zambia; these projects employ, or have employed, a variety of Swedish and local contractors to perform specific duties for the recipient organizations. We find that there are inherent contradictions between the incentives consultants face in promoting ownership and the incentives they face in retaining control of the project. While control over project decisions might increase the likelihood of good short-term project results that may please Sida, it can well compromise the prospects for sustainability.

The chapter begins by identifying the positive incentives generated by the competitive bidding process, followed by a discussion of how such incentives can affect sustainability. The chapter ends with an assessment of motivating factors critical to realizing quality contractor performance. In concluding, we argue that Sida can improve aid sustainability by combining consultant expertise with local knowledge held by local beneficiaries. This, in turn, calls for assigning a greater role to beneficiary organizations in the design, implementation, and evaluation of Sida-financed field activities.

¹ For the purposes of this chapter, there will be no distinction made between the terms "contractors" and "consultants."

8.1 Introduction

A quick look at the Octangle, developed in Chapter 4, reveals the central importance of contractors. Contractors are involved in essentially all stages of Sweden's international development cooperation program. Figure 8.1 expands on the earlier Octangle representation to account, more completely, for the different roles and contributions that contractors play in the aid process. As we can see, consultants can be hired to perform a series of specialized tasks related to planning, implementation, monitoring, and evaluation of field activities. In addition, they are often called on to provide expert advice to staff members at Sida headquarters in Stockholm.



The proliferation of consultants is a relatively new feature in Swedish development cooperation. Traditionally, foreign aid officials at SIDA, SAREC, BITS, and Swedecorp oversaw – and, in many cases, directly implemented – development assistance activities themselves. Changes to this scheme began in the 1980s because of a public inquiry on Swedish governmental roles and responsibilities (eventually published as "Rollutredningen," 1989). The report concluded that some types of foreign assistance, along with certain other public services, could be performed more cost-effectively if they were contracted out to the private sector. After a few years of experimentation with contracting out some specialized services, Sida's 1990 Method Handbook published the new policy dictating that all specialized services and technical assistance in Sida-financed projects should be subject to a competitive bidding process among specialized consultants. This procedure became the modus operandi at Sida and remains so today.

8.2 Incentives Generated by the Competitive Bidding Process

Swedish firms are disproportionately represented among winners of Sida contracts, including contracts that are openly bid (S74). However, this is in keeping with procurement trends in most, if not all, DAC members (ibid.). To the extent that Sida employs contractors, there are clear incentives for it to favor Swedish consultants. Several possible reasons motivate this. First, contracting domestically helps to strengthen the Swedish human resource base for international development cooperation. Second, compared to consultants from other OECD countries, Swedish consultants tend to be more knowledgeable about Sida's operating procedures, methods, and development cooperation mission. Third, Swedish contractors - particularly those with extensive experience in working with Sida – already understand Sida organizational cultures, modes of doing business, and competencies, while Sida understands theirs. Indeed, Swedish contractors that have won Sida contracts in the past appear to enjoy advantages over new competitors. Long-standing relationships between Sida and older, established, and primarily Swedish consultants lower the transaction costs for both parties in negotiating contracts for new assignments as well as for monitoring.

According to Sida's Division for Legal Services and Procurement Advice, the international bidding processes for Sida contracts are increasingly open and competitive, with the share of contracts awarded to international firms on a steady increase. In fact, a new trend seems to be emerging that shows that Swedish firms that lack certain sets of needed skills are being increasingly nudged aside by foreign firms. Based on an analysis of recent contracts, Sida's Division for Legal Services and Procurement Advice notes that the proportion of non-Swedish firms appears to be increasing in areas such as comprehensive evaluation studies and large macroeconomic analyses (S74). Even so, Swedish firms continue to land the vast majority of what consultants consider the most lucrative of consultant contracts, those as implementers of Sida-supported activities (ibid.).

This increased competition for contracts is a healthy development as it may inspire Swedish firms to develop additional competencies with long-term advantages to Sweden's technical assistance resource base. This process appears to be encouraged by Sida's assurance that the areas such as comprehensive evaluation studies and large macroeconomic analyses will remain central to the agency's overall mission, and, hence, will continue to be well-funded.

8.3 Incentives for Contractor Performance in the Sida Project Cycle

Incentives, present in particular phases of the aid project cycle, can and do inspire contractors to perform at a high level. However, the sections below highlight constraints on the proper functioning of such incentives. We begin

8.3.1 Pre-Design Phase

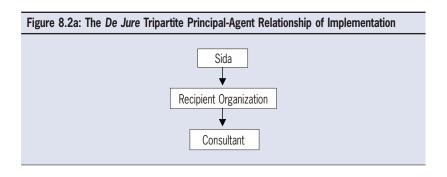
The classic or textbook notion of how a given Sida project begins is with a request from the recipient organization (Sida, 1997c). But both staff members within Sida and consultants interviewed indicated that a *consultant* is frequently involved in the project development process *even before* an initial inquiry is made from the recipient (S72, S48, C5, C6, C10). Consultants may seek opportunities for prospective Sida contracts by "helping" the recipient to formulate a project inquiry. These initial inquiries by consultants usually involve problem areas where the consultant has special expertise. Our interviews and some project tender documents also indicate that it is not uncommon for project design consultants and project implementation consultants to be one and the same firm (C1, C2, C4). Not only does this system potentially favor consultants' interests over the needs of recipients and beneficiaries, it probably undermines recipients' sense of project ownership because the consultant (rather than the recipient or the beneficiary) is the project instigator.

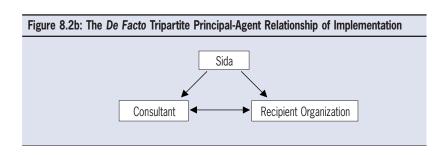
8.3.2 Design Phase

Sida policies attempt to discourage consultants from competing for projects that the consultants have already had a hand in designing. The incentives for consultants to participate in project formulation and subsequent project implementation are clear. Consultants that are invited to help formulate new projects often know the recipient actors, the latter's needs, and the peculiarities of local, institutional contexts. To the extent that Sida preferentially awards contracts for both project design and project implementation to Swedish firms, the likelihood of a project designer winning a project implementation contract is relatively high. This is so since the pool of qualified Swedish consultants is relatively small. Such a system represents ownership-related risks for both the recipients and for Sida.

8.3.3 Implementation Phase

Our interviews reveal that during project implementation, both recipients and consultants perceive a great vesting of power in the Sida Desk Officer (C1, C2, C5, C6, C8, C9, Z37, Z44). That perception is evident in the triangle of communications among the Desk Officer, the recipient organization, and the consultant (Figures 8.2a and 8.2b).





Sida policy urges that recipient organizations take ownership — i.e., responsibility for project goals, project administration, and project resources. In theory, the Sida Desk Officer could advance this policy objective by insisting that recipient organizations make key project decisions and that recipients constitute the contractors' primary point of contact for negotiating project issues. Our interviews reveal an important caveat to this otherwise praiseworthy system — namely that the Sida Desk Officer is most often the *de facto* principal. This can be the case when the consultant perceives that it is Sida's evaluation of the consultant's work "that counts most." Figure 8.2b illustrates the *de facto* principal-agent relationship between Sida-contractor and recipient organization. The incentives for the consultant to perform are quite different in the *de jure* and *de facto* situations. The implications of these differences merit a more in-depth discussion.

8.4 Incentive Incompatibilities: Control vs. Ownership

According to Sida's official stance, the recipient organization is formally the principal and the consultant the agent in the recipient organization-consultant relationship. However, most project funds are typically not held by the recipient organization and, rather, are normally paid directly by Sida to the consultant. Given this typical structure, it is natural for the contractors to strive primarily to satisfy Sida. We thus have a *de facto* principal-agent relationship between Sida and consultants. In this relationship, we can expect

most consultants to worry about their reputations as responsible firms as they seek a longer- rather than shorter-term relationship with Sida – if for no other reason than that a longer-term relationship is better for business.

Given the tripartite principal-agent dilemma described in Figure 8.2b, consultants can be expected to maximize efforts along those dimensions that they think will please Sida, first. If the consultant, as agent, does not highly value future contracts with Sida, we would expect him or her to shirk and invest minimum effort. However, if a consultant seeks a long-term relationship with Sida, his or her incentive to shirk will be minimal.

In essence, we can expect the consultant's incentive to perform to depend on: (1) the importance of the donor to the portfolio of the consultant, (2) the nature of the good being contracted (which determines the profit margins), and (3) the extent to which the aid is tied and the extent of competition in the donor country. We discuss each one of these incentives below.

- The importance of the donor to the portfolio of the consultant.
 The more the consultant depends on Sida for its business, the stronger the incentive to perform well on Sida contracts.
- 2. The nature of the good that is contracted.

The indicators of performance that the consultant will try to maximize change with the nature of the good. Sometimes the output and quality of work – such as in the provision of physical capital, such as a hospital or a turbine – are easier to measure than in others – such as in projects that seek to enhance human capital. It is especially difficult to measure the quality of the consultant's work in institution-building projects. How, for instance, does one assess the performance of a consultant charged with building the analytical capacity of bureaucrats or changing the attitudes of recipient organization representatives? If the project outcomes are not easy to measure and evaluate, it is easier for the consultant to hide project misperformance or failure. This condition suggests that consultants have weaker incentives to perform at a high level when project outcomes are difficult to appraise. Moreover, cunning consultants who expect to perform at a low level of competence have an incentive to prescribe difficult-to-measure project outcomes.

3. Open or restricted bidding procedures.

Tied-aid may reduce the consultant's incentive to perform since this can reduce the competition for the contract with Sida. This depends on the extent of competition in particular areas of expertise within Sweden. In the case of Sida's portfolio of industrial energy projects, for example, there are only two major contractors (Swedpower and Sweco), and even these are part of the same parent company. As we see in the case studies from Zambia, this situation can create incentives for the consultant to be more complacent. Zambian officials with experience in Sida projects indicated that a more competitive bidding process, in which non-Swedish firms would be invited to participate, would increase the pressure on the consultants to perform (Z-1, Z-14, Z-37, Z-40, Z-44). Consultants oper-

ating in a more competitive environment, and who value future business with particular donors, have stronger incentives to perform.

8.5 Contractors' Incentives and the Prospects for Sustainability

Figure 8.2b illustrates that the Sida contractor commonly interfaces with two counterparts – Sida and the recipient organization. In the field, consultants often have an incentive to take control – i.e., to dominate the project's management. This scenario is more likely to occur if Sida decides to support activities that are more closely associated with the goals of specific Swedish interest groups rather than those of the recipient organizations or beneficiaries in partner countries. Such interest groups may include Swedish NGOs, influential individuals in the Swedish Parliament, or even the consultant. In some cases, a creative and proactive consultant may be able to convince Sida of the feasibility of a certain project, even though the recipient organization may not share enthusiasm for or even accept the goals of such a project. Here, the incentive for the consultant to take control creates an ownership problem, thus jeopardizing prospects of sustainable outcomes.

8.5.1 Is a Consultant-Directed Project Likely to be Sustainable?

A consultant concerned with their possible future contracts with Sida is likely to maximize his or her control over a project and not pass along control to the intended beneficiaries. Passing along "ownership" to the beneficiaries might be risky – they may not perform in the ways that Sida wants. Reducing this uncertainty by retaining control, the consultant maximizes expected returns from future contracts.

Ownership refers, in part, to an individual's rights to an asset, especially the right to transform an asset from one type to another (i.e., rights to convert land into currency; currency into rights to land). This transformation implies the power to choose. In the context of international development cooperation, a narrow interpretation of ownership as the right to transform may imply that complete ownership is achieved only if the recipient exercises full control over an asset.

More concretely, if a donor were to give money to a recipient without any strings attached on how to spend that money, the donor would, in essence, pass along complete control over the asset, and thus complete ownership. The fewer the choices given to the recipient over the dispensation of the good, the less ownership is transferred. As Sida realized long ago, active participation by stakeholders in decision making is one way of enhancing the right to choose. The more beneficiary participation in decision making in project activities — including the decisions about which consultant to contract, and about what that consultant should do — the larger the beneficiaries' share of ownership.

8.5.2 What is the Role of the Consultant in Ownership?

Within the de facto relationship between Sida, contractors, and recipient organizations (Figure 8.2.b), all three share aspects of project ownership. Consultants often are able to exercise choice over the disposition of the assets involved in the donor's project. These choices, however, can be constrained by the terms of the contract and the ability of the donor to monitor performance (and thus also the nature of the good). In many cases, consultants will have more control than will the intended beneficiaries: sometimes it is even possible for the consultant to choose which groups, among the larger set of beneficiaries, will be targeted. Ownership, in this way, can rest more with the contractor than with the beneficiary. However, finding constructive ways for direct beneficiary participation in the bidding process can be a challenge. As our interviews with several Swedish consultant firms revealed, often it is not easy to get the recipient organization involved in decision making (C3, C5, C8, C9). Involving beneficiaries can be even more difficult. Consultants with a firm that implements projects in both Southern Africa and Southeast Asia noted in this regard the difference in the attitudes of recipient organization representatives. While recipient organization officials in Vietnam consistently demonstrated their desire to be in control of project activities and emphasized the advisory role of the Swedish consultant firm, officials in a similar recipient organization in Namibia were more passive in their relationship. The latter did not insist on retaining such control over project decisions. In fact, the Namibian counterparts often referred to the consultant as "the boss."

Beneficiary participation in decision making can be further complicated in cases where recipient organizations are reluctant to acknowledge ownership.² If the intended beneficiaries were already well-organized, it would tend to make things easier. However, in cases where there are several organizations of beneficiaries, various questions arise: Do you include them all, or do you make a selection? How do you select among them? If the intended beneficiaries of the development activity are not formally organized, how can their input into decisions be incorporated? These questions have no obvious answers. Nevertheless, given the potential risk of consultant-driven projects and the important role of beneficiaries in achieving sustainable outcomes, they are questions that should be addressed in all development activities, and in particular those that involve external consultants.

The discussion of the contractor's incentives, so far, has been rather theoretical. We now turn to examine our empirical evidence regarding what incentives Sida's contractors perceive and how they tend to act on these. For in-

² Making the distinction between recipient organizations and intended beneficiaries may not be without controversy, as Sida sometimes considers the recipient organization the main beneficiary of the Sida-supported intervention. This is the case in many training and institutional support activities, for example. Throughout this chapter, we refer to beneficiaries as the end-beneficiaries of activities. In institutional support activities, we consider the beneficiaries to be the individuals who are served by the organization receiving the Sida support.

stance, one of the implications of our tripartite principal-agent model – in which the consultant is accountable to two principals simultaneously – may lead to ambiguities as to who their "employer" actually is. In our interviews, we asked the consultants whom they felt they actually worked for. The following section reports on the results.

8.6 The Sida Contractors' Perceptions

8.6.1 "For Whom Do We Work?"

Sida policy indicates that consultants who help implement projects are appointed by recipient organizations. The latter include host country ministries or other relevant agencies. However, our interviews indicate that in the process of undertaking contractual obligations, consultants are often more preoccupied with what they perceive to be Sida's concerns than with what they perceive to be the recipients' needs (S88, C8, C11). This sentiment varies by project and country. In some instances, a contractor seeking to change a salary provision in a contract might expect to deal principally with the Sida Desk Officer rather than the contracting recipient organization. A consultant (C8) suggested that host-country counterparts in South Africa tended to be quite passive about personnel and technical resource-related contractual matters. According to the consultant, the South African recipient organization's attitude is that:

This project involves Sweden's money, not ours. What is the purpose of aggravating a consultant who seeks to change a salary condition? If we irritate him, he may do his job less competently. Perhaps the changes that the consultants seek are not what we desire, but it is better to get some assistance than no assistance at all.

The interviewee added that accounting procedures in South Africa are sufficiently poor that the recipients probably would not detect changes to financial aspects of contracts. The consultant claims that if it sought to make changes to a contract, and to be honest about these changes, it would raise the issue first with a Sida Desk Officer.

By contrast, in a recent instance in Vietnam, a consultant sought changes to a salary line in a contract. The consultant approached a Sida Desk Officer with this request, who referred the consultant to the project's owner – the Vietnam's General Statistics Office. According to the consultant, in Vietnam, recipient organizations genuinely behave like "the boss." The contractor added that Vietnamese recipients are "obsessed" with budgets and contract details and Sida contractors should expect to deal with the counterpart agency first and foremost. These two anecdotes suggest that recipient organizations' ownership over project resources may at least partly depend on country contexts and the level of institutional development in the recipient country or region. It is no surprise that Sida should expect recipients' administrative competencies to vary by region.

8.6.2 Contractors' Perceptions of Relationship to Sida

Several consultants expressed frustration with the quality of technical expertise at Sida. Some questioned whether Sida's technical prowess has declined in recent years and they regretted a trend toward "generalization" rather than "specialization" in Sida's skill base. Others surmised that while many Sida staff members were competent in a variety of technical areas, growing administrative workloads at Sida discouraged the use of technical skills. Disadvantages of the demise of specialization at Sida and loss of technical knowledge entail more than just Sida's increasing dependence on skilled contractors. In some cases, it also includes a dependence on skilled evaluators because Sida officials who lack technical skills are less capable of evaluating project performance or the quality of work performed by consultants.

On the other hand, consultants recognized that an older system – where Sida officials performed most of the in-country logistical operations, staffing, and implementation – was impractical, and that efficiency was gained by outsourcing these tasks to consultants. Nevertheless, technical consultants bemoaned the fact that their work was not necessarily understood or appreciated by Sida staff. This problem might manifest itself in subtle ways. In one case, technical passages in a report prepared by a consultant specializing in natural resource management received no comments from the relevant Sida project manager. The latter failed to engage the consultants on technical aspects of their work and did not demonstrate a nuanced understanding of project methods and results. This problem may be the result of the heavy workload that most Desk Officers bear. Further, it is indicative of a potentially more serious problem – inadequate monitoring of consultants' work. Sida and recipients are susceptible to moral hazard because consultants might exert too little effort and produce results whose low quality is determined only at project's end.³

In addition to concerns about Sida personnel's technical expertise, some consultants complained about the lack of uniformity in Sida's ways of conducting business with consultants – a problem that consultants assume is a remnant of Sida not having fully assimilated the various organizational cultures, rules, and procedures of BITS, Sarec, and other merged Swedish aid agencies.

Some consultants urge that Sida do a more thorough job of providing information about the work that other contractors are undertaking for Sida. Contractors believe that workshops where contractors share experiences and discuss ongoing and planned activities are worthwhile.

8.6.3 What Makes a Consultant Tick?

Some of the consultants we interviewed indicated that one of their primary goals was to secure well-paying work for their firm. They assume that by performing well on current Sida tasks, additional and perhaps larger and more

³ These esteem-related motivational problems may exist within Sida internally, as well. For example, Desk Officers who do not receive encouragement from superiors may underperform.

lucrative Sida contracts might be obtained in the future. Consultants indicated, however, that profit-orientation is only one motivator for doing good work, and is not even necessarily the most important one. This is a salient finding for Sida as it encourages contractors to perform well as Sida searches for low-cost alternatives to motivate its consultants. Interviewees stress the importance of being able to develop meaningful, productive partnerships with counterparts overseas. Developing and refining skills and implementation models through long-term projects are also mentioned as key aspirations.

Consultants also express a desire to receive public praise for their work – a source of pride and also a means for advertising their skills and experience. Consultants feel that their profession is a noble and rewarding one in that their work leads directly or indirectly to improved economic and living conditions for the poor. It is interesting to note that many of the "core values" that "make people tick" are manifested in consultants' remarks (above), including wealth, enlightenment, skill, well-being, respect, righteousness, and affection. These remarks also suggest that while consultants need to be paid fairly for their work, they can be motivated to try to achieve sustainable projects (rather than to fulfill a contract in a perfunctory manner) by using relatively low-cost measures. Nonmonetary awards for successful projects (public praise, certificates of appreciation, or other commendations) and invitations to relevant convocations (where skill and respect values may be indulged) are important ways to increase motivation for learning and high performance.

8.7 Conclusions

While the caliber of contractors hired by Sida to work on its projects appears to be high, incentives structured in Sida's process of contracting and monitoring contractor and consultant performance creates conditions for moral hazard. While competitive bidding may help mitigate the risk of moral hazard, our analysis suggests that such procedures may be only a necessary but not a sufficient, condition to encourage consultants to perform at a high level. Additional institutional arrangements are needed to ensure that consultants perform in ways that maximize the benefit of aid to beneficiaries.

One potential scheme may be the use of *performance measurement indicators*. Such indicators tie consultants' (or Sida employees') rewards to their job performance. We believe that carefully designed performance measurement and other types of "result-oriented management" systems can help to improve contractor (as well as staff) performance.

A complementary approach involves reducing knowledge asymmetries. Since many consultants have worked in a particular country or region for many years, they frequently do have a greater knowledge of what has worked or not

⁴ See Lasswell (1971: 18), who identified eight core values to classify the nearly infinite number of outcomes that people prefer. When asked what they most valued about their work, Sida contractors interviewed for this study mentioned seven of Laswell's eight values.

worked in the past and thus bring individual knowledge about sustainability that may exceed that of many Sida staff members. Designing ways of drawing more effectively on that knowledge, while encouraging more effective exercise of ownership by the target beneficiaries, is one of the substantial challenges facing Sida in the future.

Indeed, enhancing beneficiary participation is critical. Sida's recipient organizations can be encouraged to open up their decision-making apparatus and to be more directly accountable to beneficiary groups. To be sure, Sida continues to emphasize the development of such accountability mechanisms through a variety of Sida-supported, institutional-building efforts. Strengthening this commitment is therefore a crucial element of a strategy to strengthen direct beneficiary participation in decision making. Assigning a more significant role to beneficiaries and beneficiary organizations in the hiring, monitoring, and releasing of consultants may be an important step toward combining the local knowledge of beneficiaries with the technical expertise possessed by consultants.

Chapter 9 Sida in India

Summary

This chapter presents two Sida projects in India as case studies. These are "Capacity Building for Participatory Management of Degraded Forests in Orissa" and "The Chandrapur-Padghe HVDC Converter Terminal Project" in Maharashtra.¹ The cases demonstrate the use of institutional analysis as a diagnostic tool. Further, they illustrate how problems of motivation and asymmetric information discussed in Chapter 2 arise within the complex mix of actors involved in each project to present distinct challenges for sustainable development. As such, these two studies, along with those presented in Chapter 10, provide a rich and contextual interpretation of many of the theoretical issues raised in earlier chapters of this report.

These cases also reveal two larger issues that aid officials and others must take into account in planning future projects or conducting evaluations of past projects. The first major theme relates to the nature of the underlying collective-action problem that gives rise to the existing incentive problem. In simple terms, this is the reason why we identify particular situations as requiring remedy in the first place. Here, we need to ask why existing institutions have failed, how those trapped in social dilemmas can overcome this failure, and (only then) how development assistance can help. Both cases provide examples in which the underlying collective-action problems are not addressed successfully.

The second major theme relates to ownership. Ownership of an asset refers to participation in provision, production, consumption, and decision making related to its continued use. In the field, these attributes are often dispersed among the donor, the consultant, and the formal owner or recipient. Beneficiaries, who often have an enormous stake in the outcome of a project, however, are often excluded from the prerogatives and privileges of ownership. Sida's early experience in Orissa, for example, shows how ownership that is poorly defined and improperly vested can hamper the success and sustainability of an aid project. In the Maharashtra power case, the formal owner is financially and politically weak while the *de facto* owner regularly interferes with its prerogatives. As a result, the power sector continues to be underfunded by local commercial interests and faces a rampant free-rider problem.

¹ The case studies of Sida projects reflect events up to July 2000. "Sida" refers to the Swedish International Development Agency and "SIDA" refers to its predecessor, the Swedish International Development Authority.

9.1 Introduction

In the Orissa Forestry Project – analyzed in Section 9.3 – Sida seeks to transfer greater ownership of forest management from the state's forest department to the forest communities themselves. Orissa forests face degradation since institutions – many of which are indigenous to forest communities – that help forest users overcome common-pool resource problems have eroded while in the government's custody. The forest department, though formally vested with the protection of forests, has long operated the state's forests in ways that promote its own interests – frequently, at the expense of those of the forest users. Sida's initiative to spur the Orissa Forest Department to embrace Community Forest Management, however, runs up against the incentives structured within that bureaucratic organization as well as within Sida itself.

The Maharashtra power project – analyzed in Section 9.4 – is set against a context where sustainable and indigenously generated private investments to develop much-needed power resources are stymied since the state's utility monopoly – the MSEB – does not have the financial resources to pay back investors. A rampant free-rider problem underlies the MSEB's woes: State politicians hand out free, or nearly free, power to influential constituents. Slum dwellers and others also steal power through illegal taps and nonpayment of bills. Donors, such as Sida, can help to alleviate short-run power bottlenecks by helping to pay for needed infrastructure that the MSEB cannot presently afford. However, this can exacerbate – in the longer run – existing perverse incentive configurations. This bodes ill for sustainability.

A brief overview – taken up in Section 9.2 – of Sweden's development cooperation with India precedes the two case studies. This section shows that internal priorities of the governments of Sweden and India – in promoting various political and administrative objectives – can erode the potentially positive incentive effect of aid.

9.2 Sweden's Development Cooperation with India

Swedish development cooperation with India takes place within the framework of overall bilateral relations. This framework is drawn up through negotiations between officials at the respective foreign ministries. Sida's representative in India takes up practical consultations on the agenda for development with the European Community Desk Officer at the Department of Economic Affairs (DEA) at the Indian Ministry of Finance. Sida officials and the concerned central and state ministries and agencies in India also take up further negotiations on the terms and performance of particular projects.

Folke (1998) holds that there is little genuine policy dialogue between the Swedish Ministry of Foreign Affairs and the Government of India (GoI), observing that "the new country strategy, for instance, was a largely donor-driven affair." Formal consultations notwithstanding, he notes that the Swedish

government effectively decides the scope, content, and modalities of its development assistance in India – a point echoed by Sida staff (I-9).

9.2.1 The Government of Sweden

The Country Strategy

Policy guidelines set out by the Department for International Development Cooperation at the Swedish Ministry of Foreign Affairs, frame Sweden's development cooperation with India. Country Strategy documents, periodically revised, set out the guidelines. Sida executes its bilateral aid operations within the ambit of these strategies.

Country Strategy documents are developed almost exclusively through internal government consultations; they are printed in Swedish only. They set out the scope and expected outcomes of Swedish aid support. Taken together with related bilateral agreements, they govern Swedish aid policy towards a particular development cooperation partner for a period of three to five years. The latest India Country Strategy of July 1996 was due to be in force until June 2001. Country Strategy documents do not in general specify what particular projects are to be implemented. They do set out priorities, such as those in environmental degradation, poverty reduction, infrastructure development, etc. The Strategy also provides directives on how to make development cooperation operational – i.e., whether to implement projects through NGOs, UN agencies, etc. Finally, the Country Strategy sets out budget limits. Together the directives on *focus*, *modality*, and *budget* provide the overall bounds for Sida's initiatives in development within a particular recipient country (Sida, 1997c).

Sweden's strategic priorities in its development cooperation with India have changed since its inception in the 1960s. Edgren (1995) identifies two basic periods in Swedish assistance to India. The first, roughly from the mid-1960s through the 1970s, was motivated by a need to *strengthen alliances* between the two nations, which had both adopted a policy of nonalignment in the Cold War standoff, and to *respond to public concerns* raised by the Swedish mass-media's interest in India and its poverty. In addition, the Swedish Ministry of Finance had endorsed the then-prevailing model of comprehensive development planning, with its emphasis on filling in the gaps in investment and trade. Reflecting these interests, the objectives of Swedish aid in this first period referred to raising the standard of living and held that the priorities of the recipient country should guide the selection and design of particular aid interventions. In line with these priorities, aid to India was structured mainly in the form of grants for import support.

Edgren (ibid.) identifies the second period of Swedish assistance to India as the 1980s and 1990s. By the mid-1970s, he notes, the Swedish media began to stress that the persistence of poverty in India despite aid was related to poor governance. In reaction, Sweden's Parliament and SIDA's Board insist-

ed that Swedish aid should more directly target the poor. The Swedish government also demanded that a larger share of project aid disbursements target specific poverty groups.

Concurrently, as India's commercial potential was being recognized, an interest in expanding commercial contacts "prompted the selection of energy production as a concentration sector and the very unusual measure of 'double-tying' Swedish aid in the mid-80s, i.e., tying it both to the sector (energy) and to the country of procurement" (Edgren, 1995: 12). Swedish policymakers had found that sectoral cooperation with India in energy provided opportunities for employing Swedish technology. By the early 1990s, loan-financed energy projects made up the largest component of Swedish aid to India followed by poverty-related Social Forestry projects. By this time, import support programs had all but disappeared (IIED, 1994: Annex 1: 15).

The latest Country Strategy (*Landstrategi Indien*, 1996) shows another shift in these priorities. "Poverty Reduction" has been emphasized over "Infrastructure Development" as an overall direction for bilateral assistance to India. This change of focus reflects OECD regulations that limit subsidized aid credits to projects that are otherwise commercially viable, as well as Sweden's own learning from executing projects in energy development (OECD, 1996; I-19).

Implementing the Country Strategy

As the form of cooperation changed from general import support of the first period to sectoral project grants and tied commodity aid of the second, administrative problems in disbursing committed aid amounts grew. The time taken to design complex projects and to overcome licensing and other bureaucratic bottlenecks within India led to delays in implementing projects that had been budgeted. This led to a backlog in unspent monies that, as an IIED report argues, led to the approval of the Uri power project as a way to spend the balance.²

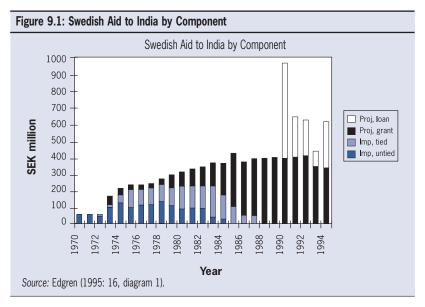
Due to internal constraints on its administrative budget, as well as reluctance by the GoI to attach large numbers of Swedish advisors to projects, management of aid projects has relied heavily on third-party implementation. Sida and its predecessors have variously sought to use UN agencies, consultants, and NGOs as intermediaries. The moral hazard problems involved in aid implementation, however, make it difficult to find any arrangement that does not enable implementing agencies to put their own priorities above those of Sida and of the beneficiaries.

² "Another major factor in the decision to go ahead with the Uri project seems to have been the huge carry-over of funds – some SEK 700 [million] – which had developed by the late 1980s in the tied aid via country budget frames. These reserves were the result of bureaucratic delay and the rejection of Swedish bids and projects by the Indian government because they were too expensive. Arguments in Sweden emerged to the effect of 'millions of poor people in India and we cannot spend our money.' A quick solution could thus be provided by the Uri scheme" (IIED, 1994: Annex 1: 29).

9.2.2 The Government of India

Receiving Aid from Sweden

Three parts of the GoI normally participate in development cooperation. Officials at the Department of Economic Affairs (DEA) and Ministry of Finance, negotiate with Sida's representative (and those of other bilateral and multilateral donors) based on internal assessments of stated national needs and priorities. Priorities come from proposals drawn from within the various Indian bureaucracies and other sources as matched up with interests expressed by donors. Although the DEA is interested in expanding donor cooperation, it can face difficulties in getting viable and well-written proposals, as there are few incentives for individuals deep within the bureaucracy to contribute such documents (I-24).



Second, proposed donor projects are also subject to the purview of the National Planning Commission and the concerned line ministry. The Planning Commission is charged with forming long-term strategic visions of the nation's priorities, and coordinating state and national actors. Third, line ministries must also ensure that any proposed donor project lies within its policy arena. In rare cases, projects that raise security issues are also referred to the Home Ministry (I-6; http://planningcommission.nic.in).

The Incentives of Aid at the State Level

India's federal structure affects the content, type, and implementation of aid. The states in the Indian Union themselves are of a size and population equivalent to many of the larger countries of Europe. It thus makes sense for Sida and other smaller donors to focus development efforts on particular states as

this provides a greater focus and potential for impact. Historically, Sida has concentrated its assistance to the states of Rajasthan and Orissa. Given that bilateral aid must be structured on the relation between sovereign states however, Sida faces a situation where overall aid negotiations and disbursements are conducted by the DEA while the operational details of the project are discussed with officials at the state level (I-1, I-9, I-10).

Although disbursements made by Sida and other bilateral and multilateral donors for projects they fund in various states are provided under various terms and conditions, the DEA transforms them all into a standard 70 percent credit: 30 percent grant facility. (In fact, until 1989, the GoI passed on only 70 percent of the allotted aid amount to the state hosting the project as per the 70/30 formula, with the remainder distributed among all the states.) Further, the GoI has cut, in some past cases, its own monies allocated for projects in the face of replacements drawn from donor funding. In such cases, as a consequence of fungibility, recipient states would see little or no net added incentive from the donor-derived funding³ (I-8, I-23).

While the DEA's role dilutes the influence that donors have over state governments, the DEA argues that its actions are well-founded since it bears the risk of currency fluctuations in paying back donor loans, it strives to develop all the states of India on an equal footing, and it helps defend Indian sovereignty against foreign pressures. Sida's staff indicate that this GoI involvement limits possibilities of tailoring the terms and modalities of aid as rewards and incentives to particular states (I-1, I-8).

State governments have an incentive to obtain foreign assistance when, as in some cases, the funds introduced by a donor represent a real addition to the state's plan and budget – that is, they enable the state to undertake activities that it otherwise could not support. Once accepted, however, donor funds become indistinguishable from other funds disbursed by the state. In such circumstances, states, in the presence of donor funding, have reduced, on occasion, their own financial commitment to an aid project – reflecting, again, the problem of fungibility. If, finally, additional funds are made available for the donor project, this creates more room for activities by the department in charge (I-13).

In sum, by the time an Indian project grant passes from the donor to the owner, it changes modality. The net addition to the owner is prone to be reduced by the Union Finance Ministry and the State Finance Ministry. Finally, the fungibility of donor funds vis-à-vis other accounts in the state budget means that the aid itself does not represent an incentive to modify the behavior of the project owner. The prospect of a grant from a foreign donor can act as a spur for change within an agency in the recipient country when the offer is made – formally or informally – conditional upon it. The incentive effect of such a grant on a project owner's performance, however, is nearly vitiated when it is processed through the reviewed administrative transactions.

³ See Swaroop, Jhaa, and Rajkumar (2000). The authors find that the central government's expenditures are unaffected by external assistance. Thus, state governments may not be reaping the full benefits of foreign aid.

Priorities and Incentives at the National Level

The GoI, having made a conscious decision in the 1970s to avoid dependence on any single donor or group of donors, resists to some extent efforts by donors to force the adoption of particular policies or conditionalities. This independence varies depending on the influence of the donor and the condition of the Indian economy: India may be able to say "no" to a small donor like Sida, but it says no with less confidence to the World Bank or the Asian Development Bank, particularly when there exists serious balance of payments problems (I-8, I-23).

As macroeconomic conditions are at present robust, the DEA's emphasis in development cooperation has shifted to the microeconomic objectives of project aid. Here, the Finance Ministry has chosen particular priorities. Perceiving that there is sufficient technical expertise within India, their focus is on securing untied concessional loans or grants. DEA officials hold that India can extract the best deal for itself through international competitive bidding for projects (I-8).

All the same, donor contributions to Project Aid continue to be of interest to the Ministry of Finance since, along with the Reserve Bank of India, the Ministry is concerned with the state of India's foreign exchange reserves. Donor financing raises net reserve levels when donor financing substitutes for a project that would have been undertaken by the recipient government (Edgren, 1995; I-23).

Project aid is also seen as useful by the national government in pushing for reforms it favors in various sectors and various states. The DEA sees itself, at least in theory, as matching donors' interests with particular initiatives that they would like to pursue in the course of promoting the nation's development. Large donors, like the World Bank, are thus employed to initiate reform in particular sectors of the economy – such as in the power sector, as we will review – while smaller donors, like Sida, are seen as useful in initiating change in more focused areas and projects – such as in the forest sector in Orissa (I-8).

9.2.3 Suspension of Aid

Following the test explosion by India of a nuclear device in 1998, the Swedish government, responding to popular sentiment in Sweden, suspended its agreement covering development cooperation with India. Projects that were already approved were to continue, but all new projects were frozen.

The Swedish aid suspension does not appear to have had a major impact on the tenor of relations between Sweden and India, and goodwill on both sides remains strong. The Swedish government, at the time of our visits, appeared to be reevaluating the status of its diplomatic relations and bilateral cooperation with India, revealing that, in receiving as well as providing aid – notably in the commercial motivations of tied-aid – there exists a mutuality of interests that bind this bilateral relationship.

9.3 Capacity Building for Participatory Management of Degraded Forests in Orissa

9.3.1 Project Background

Project Description

Sida's project for Capacity Building for Participatory Management of Degraded Forests in Orissa (hereinafter referred to as the Capacity Building project) supports the natural regeneration and restoration of degraded forests in the Indian state of Orissa through fostering the initiative of indigenous forest users. It attempts to involve the forest communities directly in the protection and management of the areas they depend on for their own livelihoods, but which they do not own, at present, in terms of legal rights of access. To this end, it seeks to put into practice the concept of community forest management (CFM). The project seeks to restructure the Orissa Forest Department, the present owners of the state's forests, to make it more sensitive to the new participatory approach.

India, Social
Forestry Project in
Orissa. Tree
planting by school
children. Social
Forestry Project
Directorate.



The project design has two phases. Phase I commissions preparatory studies on how to enhance the capacity of the Orissa Forest Department and local forest protection organizations. Accordingly, in 1998, Scandiaconsult Natura⁴, a Swedish consultancy, was contracted, *inter alia*, to conduct qualitative

⁴ Swedforest Consulting AB was established in 1973 by the Swedish National Forest Enterprise (Domänverket). In 1992, the company was renamed Swedforest International AB. Scandiaconsult AB purchased Swedforest International AB in 1996; Swedforest International AB became a subsidiary company – focusing on the organization and management of land and water-based natural resources – to Scandiaconsult AB. Swedforest International AB kept its name for two years after the purchase. In 1998, it was renamed to Scandiaconsult Natura AB, which is the company's present name. As we discuss the consultant's role at various periods, we use "Scandiaconsult Natura" throughout for the sake of simplicity.

assessments of community initiatives in forest management, and to propose the development of a legal framework to govern the new relationship anticipated between the Forest Department and the communities. Phase I also requires the Forest Department to reorganize internally in order to be poised to carry out the consultant's recommendations. Of the Phase I project budget of SEK13.5 million, SEK5.6 million was set aside for consultancy services contracted directly by Sida, while the rest was disbursed through the GoI.

Phase II, budgeted at SEK20 million annually over three to five years following the completion of Phase I, is to implement the recommendations determined in the earlier phase. Phase II, however, can be initiated only when sanctions by Sweden on India are lifted.

Project History

Sida's support for the Capacity Building project reflects learning from earlier work in Orissa forestry. SIDA support for forestry in Orissa was initiated in 1983 with a "Social Forestry" project. The initial Social Forestry project was built on an idea that the Indian Commission of Science and Technology had developed in the early 1980s. Perceiving the threat to forests as coming from the overexploitation of products by rural communities, the concept of social forestry sought to supplement supplies of fuelwood, fodder, and small timber through the plantation of seedlings in community and private lands. It held that fuelwood was the major problem in rural development, and that cooperatively managed plantations could be a response to this situation (I-1).

In response, nearly all major donors had Social Forestry projects in India in the 1980s. For SIDA, the move into Social Forestry also coincided with a framework shift in the India program from supporting import balance of payments to project funding. As a result, while most donors were ending involvement in Social Forestry projects after the first five-year period, SIDA (along with the British ODA) stuck with it (I-1). SIDA's reasons for remaining were partly its commitment to long-term solidarity. Interests in preserving the *status quo* on the part of consultants, the Forest Department, as well as SIDA itself, also played a strong part.

SIDA's Social Forestry project led to the establishment of a separate Social Forestry Wing within the Orissa Forest Department. While it also increased the availability of fuelwood, it did not lead to sustainable harvesting and replanting of the social forestry plantations. Even so, the Social Forestry project offered a lesson to involved SIDA staff on the role that traditional communities play in the protection of forest areas over which they exercise some ownership, of the ambiguous role played by the consultants, and of the limitations of the Orissa Forest Department as the legal owner of the project. Further, they realized that since most forests are able to regenerate from rootstock, the planting scheme was, in many cases, redundant (I-1, I-11).

By 1990, staff changes at Sida's India field office led to a reevaluation of the Social Forestry project. Despite resistance from the consultants and the Forest

Department, the project was successively shifted towards a focus on natural regeneration and community management of natural forests. Field trials of this strategy were initiated during the last two years of the Social Forestry project.

Sida, from experience in the Social Forestry project, did not have strong confidence in the Orissa Forest Department. The Forest Department would make promises, year after year, to SIDA on the utilization of the social forestry plantations; and these, repeatedly, would not be kept. While Sida officials recognized that clear and convincing arguments could be made not to continue engagement with the Orissa Forest Department, Sida was at that time in need of a project to fund; there was a large carry-over in the budget of the country frame. Recognizing, implicitly, a Samaritan's Dilemma, Sida decided to proceed – but cautiously (I-1).

The Capacity Building project was thus broken into two phases, with the second phase contingent on the Forest Department fulfilling the commitments of the first phase (I-1; A. Ingevall-Memorandum, July 22, 1997-Embassy of Sweden, New Delhi). In the negotiations, the Forest Department argued that breaking up the project into two separate sections would lead to discontinuities and gaps in execution. Sida, however, held that preparatory work on the second phase could begin even as the first was ending and that such discontinuities should not occur. In this way, the project design included built-in incentives to the Forest Department to follow-through on its program for reform as a precondition for the initiation of Phase II. The Capacity Building project was initiated in 1998 by agreement between the DEA and Sida (Project Agreement/Files).

The Capacity Building project has been interrupted due to the Swedish government's suspension of the bilateral Development Cooperation Agreement following the Indian government's explosion of nuclear devices in May 1998. As a result, all projects in India were terminated, aside from those that had fresh agreements for a limited period. The preparatory phase of the Community Building project was completed in June 1999 through this exception. The Orissa Forest Department has since sent a note to Sida via the DEA on resumption of project activities associated with Phase II.⁵ It has not yet received word on Sida's disposition since the Swedish government has not, to date, revised its position on development cooperation with India (I-13, I-16).

9.3.2 Applying the IAD Framework

Action Arena: Actors and the Action Situation

The Capacity Building project involves many actors on the donor and recipient sides. The configuration in Figure 9.2 shows various departments within

⁵ Senior officials of the Orissa Forest Department interviewed for this study in May 2000 evinced a keen interest in resuming active Swedish involvement. They claim that the Forest Department continues to maintain the staff and equipment needed to carry out the work implied in the project and that this uses budgetary resources in an unproductive way (I-13, I-16).

Sida, its field office, consultants, and ministries dealing with forest issues at the federal and state level in India, the Orissa Forest Department, and the forest communities themselves.

To conduct an institutional analysis, we place these actors in the contexts of specific (overlapping) action arenas, as per the Octangle developed earlier (Figure 9.3). Based on our knowledge of the case so far, the Octangle helps us to focus on two primary action arenas – that involving Sida, Scandiaconsult Natura, and the Orissa Forest Department, and that among Sida, the forest communities, and the Orissa Forest Department.

Influences on the Action Arena

• Physical/Material Conditions

The state of Orissa, one of the least developed in India, lies on the upper eastern peninsular coast of India. Of the total population of 31.5 million, about 22 percent are identified as tribal. The state's forests account for 36 percent of its area, though about half of these forests are severely degraded. These forests vary from coastal mangrove swamps to village woodlots to dense jungles of the Eastern Ghats. There are, as well, varieties of communities — each of different size and social composition — whose members directly or indirectly rely on various near or adjoining forests for their livelihood and survival. Particularly among the tribal population, there is a strong reliance on the gathering and sale of minor forest products as a primary means of subsistence (Saxena, 1999; I-12).

When one individual or group gathers timber or nontimber forest products (NTFP), this subtracts units of this resource from what is generally available at any one time. In the absence of appropriate rules governing such common-pool resources, individuals or particular forest communities face incentives to harvest as many forest products as they can for fear that others may do the same and that, as a result, such products will not be available later. Sustainable forest use requires that the rate of extraction from the forest not exceed the rate at which the forest regenerates itself.

Forest communities in Orissa have long governed their resource use within certain indigenous institutions. These institutions are of various strength, and many have been eroded as a result of policies pursued by the Forest Department. Forest Department officials interviewed for this study pointed out that particular user groups sometimes raid forests traditionally viewed as the preserve of other communities. The Forest Department thus sees its official role as protecting the forests from overextraction by enforcing the law and by adjudicating related disputes among communities.

Attributes of Various Actors

Forest Communities

The rural population of Orissa relies heavily on the forest for fuelwood and other NTFP such as *kendu* leaf, which are used to roll *bidis* – a type of Indian cigarette. For most rural people in forest regions, NTFP provide

India, Social
Forestry Project in
Orissa. Village
wood lot grass
collected by
villagers. Social
Forestry Project
Directorate.



for 10 to up to 40 percent of their annual income (Saxena, 1999). However, many of these rural poor are denied access to the forests to collect NTFP. Even in cases where they can collect them, they are often denied the formal right to process and market them. In Orissa, the state has monopoly rights over the sale of any forest product. The state in turn seeks to maximize its royalties by arranging contracts with timber companies, the paper industry, and other middlemen and end-users. Given the state's objective of maximizing revenue, the state pays little attention to the interests of the tribal and other poor communities (I-6).

In fact, the Orissa Forest Development Corporation and the Tribal Development Cooperative – public sector corporations that have exclusive rights for marketing many types of NTFP – have high fixed costs of operation (created in part by a huge payroll). They balance their books by marking down the price paid out to tribal groups. Since tribal groups and other traditional forest users are, thus, not able to make a living through using the forest, their incentive to conserve the forest diminishes. Consequently, practices in the preservation and management of forests by local communities, long established in traditions of sustainable forest use, have been severely eroded through state ownership of forestlands (I-6, I-12).

Even so, forest communities attempt, in various ways, to manage their forest resources both with respect to their own use and with respect to the access rights of other nearby communities. Kant, Singh, and Singh (1991: 42) note that village-level organizations in Orissa often display "tremendous organizational and managerial capabilities in managing community resources," though this varies based on such factors as the degree of community homogeneity and prior experience in problem solving. Starting in the 1960s, a very large number of forest protection and management efforts were taken up by communities in various parts of

Orissa. Most of these were newly crafted institutional arrangements (though often drawing heavily on existing arrangements) to manage forest and other common-pool resources and issues at the local level. At present, an estimated 6,000 communities are protecting and managing up to 500,000 ha of Orissa's state-owned forests. This represents around 10 percent of the total forest area in the state (I-12).

Such communities practicing forest management have lately developed a great amount of political clout in Orissa. From 1988 to 1996, the government of Orissa passed four resolutions to facilitate a system of co-management where legal ownership of land would remain with the Forest Department but village communities would now be officially recognized under a system of Joint Forest Management (JFM).⁶ Politicians have also attempted to "show" support for CFM; the government of Orissa was the first in India to issue a facilitative resolution that declares forests being protected by villagers to be "Village Forests" (I-12; Mahapatra, 2000).

Recognition of institutional significance of these grassroots activities — though apparent to some Sida staff — was slow to come to Sida (I-1). Sida's change from the Social Forestry approach to the Community Forestry approach lagged, revealing a slow organizational learning curve. As recognized ultimately in Sida's CFM approach, the recovery of Orissa's forests and the improvement in the lives of its citizens rests, at the end, in providing forest users ownership to their own efforts and in this way fortifying indigenous institutions for managing their common-pool resources. Setting right the prevailing power asymmetries requires, among other things, providing legal recognition of forest users' rights, strengthening local institutions, and promoting the processing and marketing of NTFP (particularly those that contain locally value-added components) by the forest users themselves⁷ (A. Ingevall, Memorandum, July 22, 1997, Embassy of Sweden, New Delhi).

The Orissa Forest Department

The Orissa Forest Department is charged with implementing nearly all forestry projects in the state. Officers of the Indian Forest Service,⁸ deputed to service in the Orissa cadre, manage the Department, which remains by tradition a rigid hierarchical structure.⁹ It is geared towards executing

⁶ A fuller appraisal of IFM is provided below in a discussion of "Regimes of Forest Protection."

⁷ See Agrawal and Gibson (1999).

⁸ The Forest Service, in its modern incarnation, is an All-India organization intended to produce an elite cadre trained for managerial responsibilities related to forestry at the state and national levels. Graduates of the Forest Service institutes are deputed to the forest departments of various states where they serve out their careers. Saxena (1995a: 172), while recognizing the presence of many dedicated and capable officers, describes the service as autocratic and alienated from the public.

⁹ The Forest Service operates within a heavily regulated and complex legal system covering the protection of forests and the sale of timber and other forest products. There are, by the Forest Service's own acknowledgement, significant problems in illegal felling and smuggling of timber throughout India (I-13). There are also persistent allegations that the Forest Department is involved in some of these illegal operations.

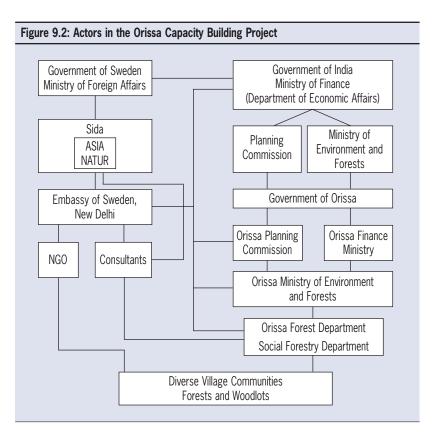
orders from above rather than encouraging a culture of inquiry. Junior officers rarely express their professional opinions when it contradicts that of their superiors. As a result, senior echelons can become remote from field realities and problems (Saxena, 1995a).

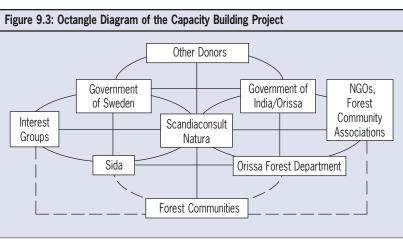
The ethos of the Forest Service continues to reflect its founding purpose when, in 1864, it was developed by the British as a way to collect revenue from forest contractors. The Forest Department, in essence, regards the forests as its own property and values them primarily for their commercial value. It continues to see its role as protecting and managing the forests for this purpose with little or no recognition of the use rights of the people (Pal, 2000; Saxena, 1995a).

By contrast, indigenous communities have traditionally perceived the forests less as standing timber and more as a living resource from which to extract a sustained livelihood (Kumar, 2000; Conroy, Mishra, and Rai, 2000; Pal, 2000). The Forest Department, however, is reluctant to give up their control of the forests by recognizing local user rights.¹⁰

Within the Forest Department today, there are the "traditionalists" who believe in the authority of the Forest Department and in the exclusion of people from forest management. Even those considered more progressive are against handing too much responsibility to the communities (Kumar, 2000: 49; I-13, I-15, I-16). Bureaucrats, particularly the traditionalists, can stall reform. For example, the incumbent (as of May 2000) Principle Chief Conservator of Forests – the head of the Orissa Forest Department – is skeptical of the concept of communally managed forestry, and initiatives in this regard have languished over the period of his tenure (I-13).

¹⁰ Indeed, the Orissa Forest Department is not only alienated from the public, but it is also frequently passive to directives from the GoI. Although the GoI's forest policy states clearly that the overriding objective of forest management in India is to contribute to the welfare of rural people, the Forest Department continues to act, in effect, as a revenue collection agency (Saxena, 1995a).





The Government of Orissa

The Government of Orissa, like other states in India, possesses a parliamentary model with the elected government headed by a Chief Minister, assisted by a council of ministers. Formally, ministers set policy within their various portfolios, and a permanent administrative bureaucracy ex-

ecutes these for the benefit of the population. Informally, however, there exists a well-entrenched system of patronage and tribute whereby particular political and bureaucratic officeholders provide rewards and protection to those clients who subscribe to them. In this way, as is the general formula in India, various ministries and departments have become political fieldoms with strong tendencies toward rent seeking and corruption (Wade, 1989). Patron-client relationships are maintained through the particular monopoly power exerted by stewardship of the concerned portfolio (such as for forests).

Aid projects, once cleared at the national level, deal with not only the relevant departments and ministries of the state government, but also have to clear the state's ministry of finance and the state's planning commission. The planning secretariat performs functions similar to its national counterpart; proposed projects are analyzed to see if they fit into the state's broad policy objectives and if the resources required for such initiatives do not detract from other goals. Meanwhile, the state's finance ministry views donor funds as a way of balancing its various accounts. There are, therefore, incentives in attracting donor projects as a way of meeting the state's fiscal obligations for the present (even though it creates future liabilities¹¹) (I-13).

Sida

Chapter 7 presents a detailed analysis of Sida's attributes. Projects that are successful within Sida must, first, fit well within Swedish domestic policy priorities and available expertise and, second, satisfy constraints created within Sida's bureaucratic organization.

Mothander and Sassarsson (1992), in their evaluation of the earlier Social Forestry project in Orissa, cite two sets of reasons for SIDA support. The first is that aid to the forestry sector fits in with domestic public priorities in Sweden concerning fostering environmental protection. Aid to this sector, they note, also fits in with Swedish expertise in silviculture. Further, Sweden possesses the financial wherewithal required to implement the program in India. The second reason for SIDA support is that, as Mothander and Sassarsson put it, the Indo-Swedish Forestry Development Program "is large enough to consume funds that can be handled by SIDA with limited administrative resources" (ibid.: 44). Both sets of reasons remained as considerations for the Capacity Building project as well.

The division of responsibilities within Sida for the Capacity Building project lies, at headquarters, between the Asia department (Asien) and the Department for Natural Resources and the Environment (Natur). Sida's

At present, resulting from a staggering amount of interest it has to pay on past loans (estimated at \$400 million in 1998–99), the state government of Orissa is under extreme financial strain. The World Bank, at the time of our field visits, was considering providing a loan to the state under a special budget support program. This loan is reported to be contingent on the state adopting anti-corruption measures, strengthening its budget management, and improving its cost recovery of public services (*Times of India*, May 15, 2000).

field office in the Development Cooperation section of the Embassy of Sweden in New Delhi takes the lead in negotiating and overseeing the course of the project. As we noted in our institutional analysis of Sida, the regional divisions were smaller and more oriented towards administrative tasks than the sectoral ones, which take on more policy-related initiatives. The Orissa Forestry project is primarily the responsibility of Natur.

Chapter 7 points out that some incentive structures within Sida have the potential to detract from contextual learning. The Capacity Building project has benefited from the continuous involvement of staff with long knowledge of the realities of Orissa forestry – a relative rarity within Sida. Consequently, there has evolved a deeper understanding among such staff of the underlying institutional realities of the case. However, institutional learning has been poor. Sida long ignored the existence of widespread community initiatives in Orissa, taking up the concept of participatory forest management in India well behind other donors.

Scandiaconsult Natura

Scandiaconsult Natura, a for-profit consultant, is placed in a position of keeping Sida happy and in not offending the Orissa Forest Department whose cooperation they require to show success. Such success is needed for Scandiaconsult Natura to maintain its reputation as an effective consultancy.

As a consultant with experience in this case pointed out in an interview, Scandiaconsult Natura possesses important technical skills, have demonstrated considerable personal commitment towards their task, and have made strong efforts to advance Sida's concerns under difficult local conditions (I-4). However, they have no stake in the well-being of the forest village communities. Further, there is little competition from other consulting firms within Sweden for this type of service. Informational asymmetries, made possible by Scandiaconsult Natura's close knowledge of the situation in Orissa, make it relatively indispensable to Sida.

Effective supervision by Sida is often absent because Sida does not have the manpower to do so. When the role of consultants in the framework of the donor-owner relationship is not clearly specified, the consultant can step in to fill administrative and supervisory roles left unattended by Sida. The direction of the project, in this way, may come to reflect more of the priorities of the consultant than those of the donors, Forest Department, or local communities.

NGOs

The role of nongovernmental organizations refers not to the village communities themselves but rather to various independent intermediaries that seek to assist communities in their developmental activities.

Local NGOs working directly with communities and their forests have played an important role in Orissa in highlighting the concerns of village communities to officials at the national and state levels in India, as well as internationally. In their work, they have to be careful not to offend the local police, district administrators, and, in some cases, Forest Service bureaucrats. NGOs are required in India to be registered with the central government when they receive funds from foreign sources. The processing of these permits can be stalled by irate government officials if the NGO is not careful to build good relationships with them (I-1, I-12). Local NGOs have also been vocal in criticizing Sida's Social Forestry project and have sought to bring to Sida's attention the relevance of indigenous institutions to its project design. Sida's Capacity Building project is in part a response to this lobbying effort.

International NGOs also play an important role in representing and fostering forest community interests. Sida, through Oxfam, encourages various village protection groups to federate within a larger movement and thus present a more potent political force with which to assert their traditional ownership claims (I-11). Some results of this have already been discussed.

Rules-in-Use

The Forest Department

Incentives facing the rank and file, as well as the managerial ranks of the forest department, can be understood through the following stylized explanation: Consider that those seeking positions within the department, from the lowly forest guard to various grades of rangers and conservators, face a market for jobs where each position is priced based on its potential for rent extraction. Thus, as Robert Wade (1985) has documented with regard to the similarly structured irrigation bureaucracy in a state in South India, many individuals pay a certain amount to obtain a particular job. At each stage of the bureaucratic organization, the career aspirant has to collect enough money in order to recoup the investment made in gaining his present post and to purchase from his superior the next commission from among other bidders. Closed-career hierarchical organizations, such as that of Wade's model, are prone to lead to a chain of rent seeking and corruption. The chain, notes Wade, ultimately connects to the political level where illegally collected funds are expended on patronage and election campaigns. The rules-in-use in Orissa's Forest Department appear similar to that of the irrigation bureaucracy described above¹² and anecdotal evidence supports the view that such patterns of rent seeking take place in the Forest Department (I-1, I-12).

As long as the Forest Department "owns" the forests – in that, it is provided legal monopoly power in protecting (i.e., excluding) and raising revenue from the forests – there is scope to use this power asymmetry to make money on contracts for timber, bamboo, and other NTFP. This money

 $^{^{12}}$ Indeed, the pattern of rent seeking and corruption described is characteristic of many Indian bureaucracies (Wade, 1989).

feeds into a chain of rent seeking described by our explanatory scheme. Initiatives crafted within donor projects that seek to increase the control by tribal groups and other forest users over forest resources – i.e., to redress this power imbalance – lessen the potential for advancement by rent-seeking individuals within this perverse institutional set-up. As these interfere with the network of expectations of how the career system operates, members of the forest bureaucracy will resist them.

Regimes of Forest Protection

Forest communities in Orissa have long evolved various indigenous rules and practices for sustainable management of their forests, both within their own group as well as with respect to coordination and cooperation with other groups. These arrangements are varied, reflecting, for example, whether the land in question was previously under the protection of a local rajah.

These indigenous institutions have been severely eroded over the many decades of Forest Department management and this has had an effect on forest degradation (Conroy, Mishra, and Rai, 2000). In recognition of this, the idea of Joint Forest Management (JFM) was pushed on the state forest departments in the early 1990s by the GoI, with encouragement by the Ford Foundation. Under JFM, legal ownership of land would remain with the Forest Department, but village communities would now be officially recognized as co-managers in that they would be entitled to a share of proceeds from the sale of NTFP and timber (Kumar, 2000).

JFM can be effective when the local forest department recognizes traditional ownership by forest users, where they do exist. In Orissa, however, we observed that the Forest Department's implementation of this program involves a village or forest community representative signing a preprepared standard written Memorandum of Understanding with the Forest Department. By these terms, the Forest Department would permit foraging and the harvest of nontimber forest products by the community in village woodlots and other designated forest areas. At the end of a fixed period, when the trees would become viable as timber, the Forest Department and the community are supposed to divide the revenue equally from the harvest and sale of the trees. Villagers as such have no say in matters relating to the transfer of power, the formation of village committees, or

¹³ These agreements raise issues that require further follow-up: Who signs the agreement on the part of the village community? How are these representatives determined? Who are the principal beneficiaries of the harvested wood? The communities in question are not homogeneous units. Indeed, they are stratified by caste, land ownership, sex, and religion. It is well possible, therefore, that the village elite who sign these memoranda are the main beneficiaries of the revenue gained from their harvest. At one village visited for this study, the proceeds of the latest wood-lot harvest, the outcome of the Social Forestry project, were spent to erect a temple. These types of public expenditure, which reflect more the preferences of the village elite, we were told, are not uncommon (I-12). To the extent that the proceeds from managing communal woodlots are not distributed equitably, the incentives for the sustainable management of the same among the wider village community become weaker.

the negotiation of rule changes. Villagers, therefore, are prone to see the JFM administration as arbitrary and biased, as has been documented by others.¹⁴

Through their involvement in the Social Forestry project, SIDA officials recognized the importance of community ownership. They concluded that JFM, as interpreted by the Orissa Forest Department, would likely not lead to sustainable forest use. They thus sought, instead, to encourage a version of Community Forest Management (CFM) that is legally recognized by the Forest Department (I-1). As such, the move from JFM to CFM was to represent a shift along a continuum from greater state control to greater community ownership over forest resources. Whereas JFM rules are defined by the state that are then interpreted by the Forest Department, CFM seeks to invoke collective-choice arrangements based on local conditions, often drawing upon indigenous forest protection practices (Conroy, Mishra, and Rai, 2000: 54; Kumar, 2000).

From the point of view of the Forest Department, however, CFM is a less attractive regime; it is less financially lucrative – both in terms of fewer donor funds and less revenue from timber and NTFP – and it limits the power of the Forest Department.

Aid and Policymaking in India

Sida's leverage to encourage institutional change in this case is complicated (as we have already indicated) by the rules of center-state relations in India. Sida, as Sweden's official bilateral agency, is obliged to fund the project through the GoI. Sida disburses its grant to the DEA, which in turn reimburses expenses undertaken by the State of Orissa according to a 70 percent credit: 30 percent grant package.

The Finance Ministry Government of Orissa uses the aid money it receives from the Finance Ministry of the GoI to manage its own ways and means within each budget period. Officials at the state finance ministry are interested in attracting donor-funded projects to the state, though, for them, the particular nature of these projects, much less issues of their sustainability, is not of critical concern. Indeed, their interests lie more in the size and continuity of donor involvement (I-13).

Further, the management of forests in India is the concurrent responsibility of the GoI and the state, though the GoI's prerogatives take precedence. While the GoI is responsible for making policy and setting national standards, the state governments implement these regulations. At the Orissa state secretariat, the forestry portfolio is a low prestige post within the Indian Administrative Service (IAS) cadre that makes up the elite bureaucracy. We found that the post of Forest Secretary had repeatedly been

¹⁴ Sundar (2000) and Kumar (2000), who have documented interest in JFM more thoroughly, show this from the villagers' point of view. We found that very few of these JFM memoranda have been signed in Orissa, as apparently most communities do not see an incentive to do so.

vacant over the recent past; its occupants quickly seek other, more prestigious, postings. Further, as generalists, these IAS officers were not fully aware of, or perhaps even keenly interested in, the issues facing forest users. The sentiment within the Indian Forest Service (IFS) is that this senior post should be set aside for one of their own senior officers (I-13, I-16).

Consequently, issues concerning the reform of the Forest Department and forest policy do not receive sustained attention at the state's policy-making level. Indeed, as hierarchical and command-style bureaucracies, both the IAS and the IFS are prone to be less proactive and innovative at their lower levels; reform, if any, is usually pushed from the central government.

Policy initiatives, such as those in Joint Forest Management, have usually been initiated by the GoI. At the other end, the demand at the village level for reform is manifested, mainly, by people taking their own initiatives in protecting the forest. Though not always verbally articulate or well-coordinated, local political movements have emerged and, in recent years, gained force in several places in Orissa (I-12).

As a small donor in India, Sida would have more influence at the state than at the national level. The structure of the bilateral relationship and the organization of the Indian federal and bureaucratic systems however create a situation where Sida's relative sway with the GoI, where introduced changes in policy can matter, is small, while at the state level, where it is a bigger player, its influence is reduced by the metamorphosis in the modality of aid, the interests of the state finance ministry, and by the relative passivity of the state government on issues of forest policy.

Patterns of Interaction

• The Sida – Orissa Forest Department – Forest Communities Triad

The immediate effect of Sida project funding is to increase the budget and staff of the Social Forestry Division within the Orissa Forest Department. There is considerable prestige in being associated with a donor-funded project. The increase in staff and budget for the Social Forestry Department increases its director's standing and puts him in serious contention for promotion to higher grades. The personal rewards of a donor-funded program, however, do not percolate much further down the forest bureaucracy since prospects for promotions or other rewards are bound within the bureaucratic rules-in-use already described. Occasionally, projects offer selected opportunities to particular individuals within the staff for a study trip abroad (I-13, I-16).

On the other hand, the presence of aid directed towards one division can foster disinterest in other parts of the Forest Department. Since aid funding is organized as reimbursements, the Forest Department's expanding expenditures in the area of community forestry are initially drawn out from spending otherwise budgeted for other divisional activity. Consequently, other conservation work, such as those in reserve forests, is cut back (I-13).

Meanwhile, the communities, whose members' participation is vital to the sustainable management of forests, have, traditionally, not contributed directly to the design or promotion of Sida's community forestry projects in Orissa. There was no involvement of the community, not even in reference to villagers' interests, in Sida's Social Forestry project. Little was done to foster a sense of beneficiary ownership. In the Capacity Building project, village communities have so far had no input into the design of the project, even though the project seeks to invoke their participation through CFM (I-1, I-12).

The Forest Department's response to Sida's Capacity Building project has to be seen in the context of the political clout that local communities have been gathering. In many stretches of forests, *de facto* control of forest lands has already passed from the Forest Department to the communities. Promoting CFM effectively, as per Sida's project, is likely to further reduce the Department's powers. The insecurities of the Forest Service therefore run deep, as they are unlikely to reassert authority over these forests (I-12). As we observed, therefore, the Orissa Forest Department is very resistant to greater participatory forest management.

• The Sida – Scandiaconsult Natura – Orissa Forest Department Triad

In theory, Sida identifies a project owner – the Orissa Forest Department in this case – in which it vests responsibility for a project. Consultants hired as agents to implement aspects of the project are expected to look to this Sida-nominated owner as their principal. The patterns of interaction in Sida's involvement in Orissa forestry, however, reveal a more complicated picture. It shows that the consultants often are able to maximize their own objectives when effective ownership responsibility is not exercised by either Sida or the various Indian actors.

The consultants in the earlier Social Forestry project were very closely associated with SIDA.¹⁵ This point is acknowledged by the individuals in the Orissa Forest Department, by Sida personnel, and by some that were consultants themselves (I-3, I-4). This aspect was as well picked up by Mothander and Sassarsson in their review of the Social Forestry project. They note "the consultant was originally considered more or less as a part of SIDA. Their office in New Delhi was in the same premises as the Development Cooperation Office and their project was called the SIDA Forestry Coordination Project" (1992: 17). More to the point, as a former consultant interviewed for this study put it, "the consultants were in bed with SIDA" (I-2).

¹⁵ Understanding the role of the consultants under the old Social Forestry project is relevant since it raises some critical points of more general concern – such as, to whom is the consultant really accountable? As an academic study, this report is interested in understanding incentives structured within the various relationships in development cooperation. Even though the Social Forestry case is closed, it reveals important lessons.

Mothander and Sassarsson further note that in the Social Forestry case, consultants were even given the authority to pose conditions for financing a project component on behalf of SIDA. They conclude by noting that it is "questionable if a consultant should be retained for the purpose of extending on-going programs. This is basically a SIDA task, and if SIDA needs consultancy support in this matter, such a consultant should not have an interest in creating work for itself" (ibid.: 35).

From the perspective of the Forest Department, SIDA and the consultant are seen as being more or less the same (I-13, I-16). Yet, if the project is seen as a Swedish undertaking, it risks losing commitment from the project owner. Indeed, a consultant's role should reflect Sida's philosophy that the consultant's responsibility is to the project owner. Yet, if the consultant, working for the nominal project owners, while being associated by those owners with the donor, takes up appraisal work on behalf of Sida, then this leads to serious ambiguities, not least those that relate to the independent assessment of the terms of the relationship agreements.

Further, if the Forest Department is not as interested in the reforms implied in a project but faces incentives to make the right noises to keep the donor and its funds engaged, then its relationship as owner to the consultant, particularly when the consultant is allied philosophically with the donor, becomes peculiar. Sida purchases the consultant's services for the project owner, but this owner – assuming it cares – has little control over its supposed agent's efforts and priorities.

Given that Sida staff normally face a high rate of turnover in their assignments (Chapter 7), the main source of project continuity is frequently the consultant. Sida's staff often has to learn of a project's status from the consultants. This asymmetry in knowledge further compromises Sida's ability to administer the work of the consultants. In such cases, Sida's Desk Officers may find it expedient to extend a consultant's contract without a proper appraisal. Indeed, consultants can have the upper hand in bargaining with Sida when such asymmetries are present. A Sida staff member whom we interviewed for this project recalled an instance in the social forestry project where the consultant opposed Sida's initiatives to conclude his firm's participation in a project (I-1).

In the Capacity Building case, longer-term involvement by particular Sida staff enabled Sida to manage consultants more effectively through well-specified contracts. Proper use of consultants requires more administrative resources from Sida. Sida, however, remains constrained in this regard.

9.3.3 Outcomes: Implications for Ownership and Sustainability

Ownership

This study illustrates that practical understandings of project ownership in development cooperation can be nebulous; while the main actors in this aid

project exercise or exhibit some features of ownership, none bear the required responsibility.

Sida vests formal project ownership with the Orissa Forest Department. Examining the organization and incentives structured within the Forest Department reveals, though, that this corporate designation of ownership is rarely translated into responsibility on the part of its particular staff members. Next, while Sida provides the funds and sets many of the conditions of the project – and these are ownership attributes – it is not willing, nor is it in practical terms able, to take responsibility for the project. Further, we have seen that consultants often exercise day-to-day ownership but that they have no stake in the communities themselves. Meanwhile, the communities – those who have the greatest stake in responsible management of their forest resources – are themselves rarely accorded any of the privileges of ownership.¹⁶

To be sure, the Capacity Building project does seek to gear the Forest Department – the project's Sida-nominated owner – to recognize, foster, and use indigenous capacities among various village communities for sustainable forest use. This, however, confronts Forest Department officials with a dilemma. On one side is their stake in preserving their interests, drawn from a particular interpretation of prevailing JFM arrangements and other rules-in-use. These have to be balanced against those incentives configured within the Capacity Building project, which brings with it – in the short run – other benefits that derive from a foreign donor's involvement. In the longer run, these donor-derived privileges for Forest Department officials end, as do those advantages that come from their current control of Orissa's forests. In such a case, the exercise of ownership by the forest department can be, at best, tentative.

Sustainability

Phase I of the Capacity Building project calls for studies on how to enhance the capacity of the Orissa Forest Department and of the local forest protection organizations to implement CFM. Scandiaconsult Natura has completed the community assessments and legal analyses required of it. The work of the Forest Department, including that undertaken jointly with the consultants, remains, however, incomplete. In particular, the Forest Department has not carried out the (admittedly difficult) prerequisite steps towards its own internal reform. The conditions for proceeding on to Phase II of the project remain unfulfilled.

Sustainability, in terms of the lingering effects of the project, has not been realized. On one hand, it is premature to judge the sustainability of an incomplete project. On the other hand, our incentive review of the case provides reason for some pessimism.

¹⁶ A decade ago, Kant, Singh, and Singh (1991: 50) pointed out, in the conclusion of their SIDA-sponsored study of community-based forest management systems in Orissa, that "in order to sustain and expand the phenomena of community management of forests, it is vital to increase the community's stake in the continued existence of forests."

Given the state's control of the forest and the culture of corruption within the Forest Department, there are incentives to receive aid but not to reform. Meanwhile, Sida's own proclivity in keeping project administration to a bare minimum precludes it from engaging the Forest Department on an alert and ongoing basis. The resulting strategy of the Forest Department, it appears, is to stall on reforms while hoping to convince Sida of future changes.

Forest Department officials note that the bureaucratic reform called for in the transition from Phase I to Phase II cannot be ushered through donor mandates and deadlines but rather through continual engagement. They point out that policy reform in India is a long-term process. It requires, they say, that right-thinking personnel fill the needed sensitive positions. As and when this happens, they note, pieces of the reform process fall gradually into place. They hold that as bureaucracies tend to slip back into passivity in the absence of an outside stimulus such as that which a donor provides, Sida should maintain its presence over the long haul to encourage this process (I-13, I-16).

Further, these officials point out that while transitioning from JFM to CFM, the viability of the incentives expected within the apparent CFM regime must remain very credible. This can happen only if Sida remains committed to the process. They point out that if Sida's commitment stalls when the Forest Department's reforms hit a snag, it makes it all the more difficult to carry out the needed reorganizations (I-13, I-16).

While Sida distinguishes itself from other donors by "being in it for the long haul" – as far as taking a long-term perspective in propelling a process of reform – its project mangers have to show results from time to time. Even if Sida officials were to recognize the points made by the Forest Service, they could not fund the project indefinitely without realizing some interim benchmarks of success.

Sida will be confronted at some point with questions about how to proceed. It risks its credibility if it proceeds to fund Phase II when conditions for the completion of Phase I remain unmet. At the same time, officials at the Forest Department hint that other donors can be found to take up the project if Sida withdraws. In either case, prospects for basic reform of the incentive structure within the organization of the Forest Department look poor. Unless a significant degree of ownership passes on to beneficiary groups of forest users through a CFM regime, the incentives underlying the prevalent collective-action problem will remain unchanged, and the sustainability of Orissa's forests will remain in peril.

9.4 The Chandrapur-Padghe HVDC Converter Terminal Project

9.4.1 Project Background

Project Description

Tied-aid from Sweden financed the purchase and installation of converter terminals (and associated services) for a High Voltage Direct Current (HVDC) transmission line in the state of Maharashtra, India. The equipment for these terminals was procured from Asea Brown Boveri AB (ABB), a Swedish multinational corporation, and from Bharat Heavy Electrical Limited (BHEL), ABB's Indian partner. The original project, a SIDA/BITS intervention, was meant to improve prospects for sustainable development in India by fortifying the physical infrastructure of the national high voltage grid.

Sweden's assistance to develop capacity for power transmission in Maharashtra forms one component of the more comprehensive Second Maharashtra Power Project (SMPP). The SMPP, funded in part by the World Bank, Sida, and the governments of India and Maharashtra, was initiated in 1992. The purpose of the project was to meet the increasing demand for electricity in western Maharashtra, particularly metropolitan Mumbai.

India, HVDC Converter Terminal Project in Maharashtra. Chandrapur Power Station. ABB.



The overall SMPP project was comprised, first, of the construction of an additional 500 MW coal-fired unit to the existing power stations in Chandrapur, which is located in the coal-rich eastern portion of the state. Second, it involved the construction of a 500kV, 1500 MW High Voltage Direct Current (HVDC) line from Chandrapur across a distance of 735 kilometers to Padghe, which is near Mumbai. Such HVDC lines require specialized terminals at either end of

the line to convert power from Alternating Current (AC) as generated to Direct Current (DC) for transmission and back to AC again for distribution (I-22).¹⁷ Third, it paired this construction and installation of hardware with a distribution enforcement program aimed at reducing losses in selected areas. Finally, the project called for consultants' studies, financed by the World Bank, on load management, on environmental management, on the preparation of private power projects, and on an institutional review of the power sector in Maharashtra¹⁸ (BITS/SIDA Appraisal Report 1.34/1 IND 32.3 1993, Project Agreement between IBRD and the State of Maharashtra, July 8, 1992). Through these measures, the SMPP sought to increase power supply, enhance service, and strengthen the finances of the Maharashtra State Electricity Board's (MSEB), the state-owned and controlled utility. These reforms were in turn expected to encourage private sector investments in the power sector.

Project History

Before Chandrapur-Padghe, ABB and the National Thermal Power Corporation of India had cooperated in the construction of two similar projects. The first, a back-to-back station at Vindhyachal, was launched in 1985 and commissioned in June 1989. The second project, for which ABB was a subcontractor to the Indian state-owned BHEL, concerned the construction of two converter terminals for a HVDC line between Rihand and Delhi. This project was started in 1986 and put into commercial operation by 1992. In both these cases, the World Bank was the lead agency and main financier, though ABB's contracts were financed through concessionary credits with contributions from BITS and SIDA. These two pioneer projects were then to be followed by the third project – the SMPP, which required the same type of transmission terminal links as the Rihand-Delhi line (I-19, I-21, I-22).

By 1992, the MSEB had retained Hydro-Quebec, a Canadian utility, as its own overall technical consultant for planning the SMPP. Bids were then floated by the MSEB by March 1992 for the HVDC terminals. The bidding was officially arranged according to a two-envelope system, with the technical qualifications and specifications forming one part and the price and financing forming the other. Bidders were required to submit a full financing package, with conditions similar to or better than export guarantees. Bids were submitted by ABB in partnership with BHEL, as well as by Siemens-

¹⁷ Transporting power via Direct Current (DC) rather than by Alternating Current (AC) over high voltage lines is advantageous since it suffers smaller transmission losses, requires a smaller right of way for the transmission lines and towers, and reduces power theft. Installing HVDC lines also contributes in part to the infrastructure being developed for an integrated national grid, under plan by the national power ministry, based on HVDC technology.

¹⁸ Of the total SMPP project cost of US\$1.2 billion, the World Bank provided loans worth \$350 million and a soft-credit package of \$200 million. The GoI and the MSEB together financed the remainder of the agreement with the Bank (project documents). As we have noted, Sweden contributed to the completion of the SMPP by financing the purchase and installation of two converter terminals, supplied by ABB and its Indian partner BHEL, each at either end of the Chandrapur-Padghe HVDC line.

Germany and GEC-Alsthom. Each in turn had put together a financing package in connection with domestic donor agencies. The MSEB was formally in charge of evaluating the bids, though Hydro Quebec was consulted in judging the technical requirements. The financial details, in all likelihood, were overseen at the political level. By February 1993, the tender put forth by ABB/BHEL was judged the most competitive from this process (I-27, I-28).

By May 1993, the MSEB conveyed its intentions to the Government of Maharashtra (GoM). After the proposal was parleyed through the state planning and finance ministries, it was passed on to the DEA at the Ministry of Finance. Thus, in coordination with ABB's bid and its liaison with BITS and SIDA, a proposal was sent to New Delhi by the MSEB to recover funding from Sweden through the established bilateral aid channels (I-27, I-28).

The Chandrapur and Padghe terminals were executed through four coordinated contracts entered into on October 1, 1993: The first contract was for supply of equipment from ABB Power Systems, Ludvika, Sweden. The second was for its erection by ABB India. A parallel set of contracts was made with BHEL for the remaining equipment and its erection. According to the deal, ABB-Sweden had a contract for SEK1 billion, BHEL a contract for SEK800 million, while ABB of Switzerland and ABB of Germany were contracted for SEK200 million for the remaining components (I-19, I-21; *Development Today*, July 6, 1994).

Of the Swedish financing of the HVDC project, BITS would provide soft loans of SEK500 million, SIDA would provide a grant of SEK175 million, while the Swedish Export Guarantee Board was to guarantee the remaining SEK325 million that was raised in the capital market by the Swedish Export Credit Board. ABB's other European subsidiaries correspondingly were able to secure additional sources of soft loan financing from the governments of Germany and Switzerland. The bilateral agreement between Sweden and India regarding the financing of this project contained a tied-aid proviso – that the Swedish contributions were to be used only for the financing of goods and services of Swedish origin. The contract made no mention of reforms to be undertaken to enhance the sustainability of the power sector (I-18, I-19; Project Agreement between the President of India and the Government of Sweden, June 24, 1993).

Meanwhile, in March 1993, the HVDC project, due to its high value, came under automatic consideration in Paris by the Consultation Group of the OECD. Under the so-called Helsinki Package, a project that is otherwise commercially viable is not eligible for soft loan financing. The Helsinki Package seeks to ensure fair competition among OECD countries for tied-aid related exports to the developing world. Based on this criterion, the Paris Group turned down Sweden's financing of the HVDC project. BITS, however, argued that the Paris Group's judgment of commercial viability was based on estimates of electricity tariffs that were higher than that which MSEB could charge and was therefore not sound. It also argued that the project would take a long time to phase in and could not become financially

viable until 1997. Feeling otherwise, the Paris Group found BITS' price estimates unrealistically low and its time estimates unrealistically long (*Development Today*, July 6, 1994).

Faced with this decision, however, Sweden chose to override the OECD's consensus and proceeded to provide subsidized concessionary credits for the HVDC project. In a letter dated May 24, 1993, to the OECD Secretary-General, the Swedish Minister for European Affairs and Foreign Trade pointed out that Sweden's decision was taken to enhance India's developmental potential and to further Sweden's solidarity with India. Reporting on this story, the trade newspaper *Development Today* (ibid.) noted that, according to ABB, this contract would save 2,500 jobs that year in Sweden. It implied that this was an important motivation behind Sweden's action.¹⁹

The World Bank, meanwhile, had urged the state of Maharashtra to undertake in-depth reforms of its power sector within the framework of its loan for the SMPP. The World Bank stipulated *inter alia* that the state readjust its level of power tariffs, that it reorganizes the MSEB's financial and administrative and public utility practices, and that the MSEB reduce its total commercial accounts receivable. As of October 1996, the World Bank, citing noncompliance with the above terms, threatened suspension of further withdrawals of project loans (Letter of Joseph Wood, Vice President, The World Bank to Mr. V. Govindarajan, Joint Secretary to the Government of India, October 22, 1996).

In response, the state attempted to comply with some of the terms though, in the World Bank's judgment, with little improvement, particularly with respect to the MSEB's accounts receivables. The suspension thus remained in place and the remainder of the loan (US\$237.7 million) was cancelled as of June 1998. Some remaining parts of the projects were then completed with funds provided by the governments of India and Maharashtra. The World Bank's objective of strengthening the institutional base of the power sector in Maharashtra, therefore, was only partially met (ibid.).

Despite the World Bank's decision, Sida concluded that it was worth completing the link needed to transfer generated electricity to the Mumbai area. Work on the HVDC terminals has been completed, though after delays caused by an unrelated dispute over the contract for insulation materials used on the transmission wires. The transmission lines were tested in July 1999 and finally handed over to the MSEB by ABB/BHEL in November 1999. The lines now carry power generated at Chandrapur as well as from the National Thermal Power Corporation's Korba Super Thermal Station. As the supply of electricity has increased, the power situation in the Mumbai area has improved, for now (I-22, I-27, I-28).

¹⁹ Some Sida staff have argued that since financing of the project was almost complete by the time of the Helsinki Package, they considered this a borderline case in regard to the OECD.

9.4.2 Applying the IAD Framework

Action Arena: Actors and the Action Situation

The SMPP is a complex project with multiple actors, including various personnel in departments within Sida, the World Bank, various ministries and agencies within the governments of India and Maharashtra, contractors, as well as power consumers in Maharashtra. The concerned actors are represented in relation to each other in Figure 9.4. From its complexity, it is evident that there are multiple and nested sets of actors, interacting within numerous interrelated contexts. Yet, while Figure 9.4 shows all the interconnections among a broader set of organizational actors, it is not institutionally revealing.

We can simplify Figure 9.4 by concentrating on Sida's contribution within the overall scope of the SMPP, and by representing it, as in Figure 9.5, in terms of the Octangle. Through this simplification, we can focus on two primary action arenas – one on the recipient side and the other on the donor's side. The arena on the recipient side structures situations within a triad formed by the GoM, the MSEB, and special interest groups that receive subsidized power. On the donor's side, the structured triad is among the government of Sweden, Sida, and lobby groups within Sweden that benefit from tied-aid contracts. Also of relevance is the OECD, whose rules attempt to confine donor relationships with recipients, and the power consumers, the relevant beneficiaries in this case.

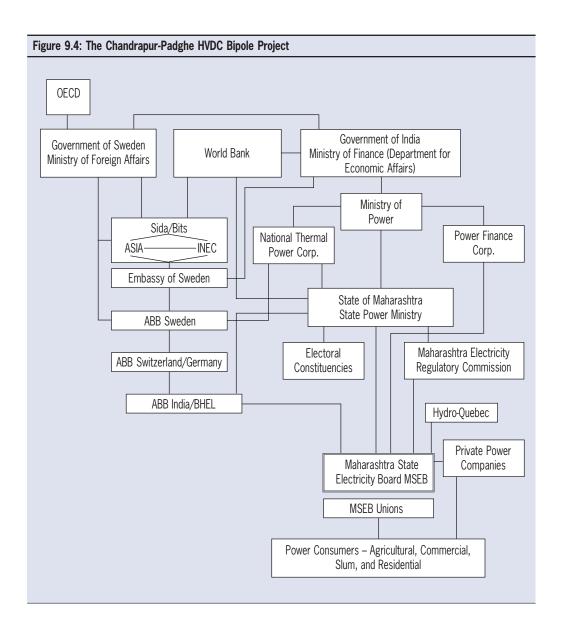
Influences on the Action Arena

The need for adequate power is particularly acute in the western Indian state of Maharashtra, which incorporates metropolitan Mumbai. This region is one of the most important load centers in the country, taking up about 6 percent of India's total electricity demand. Maharashtra has a high concentration of industry that depends on reliable power to become more productive and internationally competitive. Increasing power production and distribution through more investment is thus critical for development.

Indeed, the need for additional capacity in generating and distributing reliable electricity throughout India is very clear: The per capita consumption of electricity, at 380kWh per annum, is among the lowest in the world, demand exceeds supply by more than 20 percent at peak times, and the current installed capacity is working only at 60 percent efficiency.

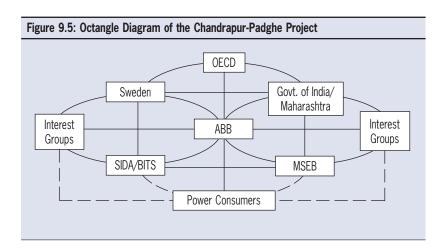
With the population of the country at one billion and the near-term economic growth projected at the rate of 6 to 7 percent per annum, massive investments in additional capacity need to be made just to keep pace. Today, commercial and residential consumers face frequent and often-unanticipated brownouts and blackouts. Even when the electricity is on, it is of poor quality as the voltage fluctuates widely. Apart from disrupting industrial production, the lack of reliable power has also led to worsened air pollution as countless





individual generators start when the lights go out (*The Economist*, "Many Obstacles Still Ahead," March 4, 2000).

The lack of adequate power is thus a serious condition affecting India's developmental potential. It is rooted in a problem of collective action. To understand how, we look at the formal structure of India's power sector and the cultural context in which it operates. We then examine the nature of this collective-action problem as the context for the aid project under study.



Rules-in-Use

The development of the power sector as well as power production, transmission, and distribution of electricity has been viewed traditionally as a governmental responsibility in India, with this responsibility divided between the central and state governments. The GoI, through the Ministry of Power, oversees the central Electricity Authority, the National Thermal Power Corporation (NTPC), the National Hydroelectric Power Corporation, the Northeastern Electric Power Corporation, and the National Power Transmission Corporation. The operations of Regional Electricity Boards and Power Finance Corporation (PFC) and the Rural Electrification Corporation are also supervised by the Department of Power with the stated aim of developing a national power policy and coordinating development in the power sector. Of these, the National Thermal Power Corporation and the National Hydroelectric Power Corporation are bulk suppliers of power to State Electricity Boards (SEB) while the Power Finance Corporation provides loans to the SEBs²⁰ (http://www.powermin.nic.in).

The state governments, in turn, control their respective SEBs – in effect, utility companies – and the State Generation Companies. These agencies together generate about three-quarters of the electricity that finally reaches consumers. While nominally independent, as based on the Electricity Supply Act of 1948, SEBs and State Generation Companies need to obtain approval from the state government (often at ministerial level) for all major decisions involving investments, tariffs, borrowings, salary, and personnel practices. Legislation that, in 1953, set up the SEBs also entrusted them with regulating the private utilities. Subsequently, most private utilities were taken over by the SEBs. Today, only a handful remain, including the Bombay Suburban Electric Supply Limited. Even these utilities are at least partly dependent on the SEBs for the power they distribute.

²⁰ For more information, see: http://www.powermin.nic.in; www.pfcindia.com; www.ntpc.co.in.

²¹ For more information, see: www.bses.com and www.msebindia.com.

• Attributes of the Community

The patron-client culture often underlies the *de facto* structures of governance in India. Politicians hand out favors in return for tribute in the form of electoral support and/or (legal and illegal) financial contributions. Doling out patronage depends upon the state holding the reins over critical resources. Thus, control of the MSEB – that is, over the regulation, generation, transmission, and distribution of power – enables state politicians in Maharashtra to hand out electricity connections and subsidies to favored electoral clients – rich farmers, organized urban slum dwellers, and others. Control of the MSEB also enables politicians to award jobs at the MSEB to supporters. Today, the MSEB swells with 125,000 personnel on its payroll (I-27).

Flows of patronage down from the political level are balanced by those of tribute. For example, a portion of the illegal charges for connections collected by some MSEB staff is transmitted through the system and on to the political levels. Political control over the SEBs implies a role in awarding contracts for expanding the infrastructure of power generation and distribution. Here, ministers — personally involved in the final selections within the tendering process — take a direct cut of large infrastructure projects. In fact, as we were informed in confidence by several of those interviewed, the practice of paying the so-called "success fee" — about 5 percent of the size of the deal — by the winning contractor is well established. Since infrastructure projects can run into hundreds of millions of U.S. dollars, these cuts are large (I-22, I-23, I-24).

Senior officials interviewed at the MSEB referred to a "cross-subsidization" of the "winners" – politically well-connected groups of farmers, slum dwellers, etc. – at the expense of the "losers" – industrial and residential customers – and said that this is perpetuated through political interference. They held that such practices have prevented the MSEB from organizing itself more efficiently and this has had a negative effect on power management and investment in capacity. These officials favor greater independence from political control, but remain unsure of the likelihood of such a prospect (I-27, I-28, I-29).

• Physical and Material Conditions

As noted, the power sector in India has traditionally been viewed as a natural monopoly. Policymakers in India have, until recently, held that only the state is capable of marshalling the large investments in facilities needed in power generation, transmission, and distribution. However, given the prevailing patron-client culture of government, its ownership of this sector has led to pervasive free-riding. As we saw, politicians, particularly at the state level, have used their control to provide, as a form of patronage, free or subsidized power to well-connected interest groups. Power tariffs remain low since revising them is politically unpopular. Further, given that utility workers can be tipped to look the other way, theft of

power is rampant and bill collection inadequate. The state, in short, has failed, due to the incentives structured within its own organization, to exclude beneficiaries who fail to contribute to the provision of electricity.

With so many free-riders, the MSEB is not able to recoup the costs of producing and providing power. It is thus not able to pay private companies for producing and providing power. In turn, private investors have few incentives to offer such goods and services on their own initiative. Excludability problems, rooted in the poor discharge of ownership responsibilities by the state, have thus led to the problem of free-riding, which in turn has led to chronic underinvestment in capital and maintenance.

In 1991, the GoI, citing the need to expand power capacity and noting the financial limitations of the SEBs in this regard, opened ownership of power generation to private investment. However, the poor fiscal condition of the SEBs left them unable to pay for power purchased from private sources (I-23). As a result, there has been little increase in private investment in power generation capacity. The GoI has since recognized the need to put the SEBs on a more sound financial footing. In this regard, it has urged greater autonomy for SEBs from their respective state governments.

Patterns of Interaction

The Recipient Government – MSEB – Interest Group Triad

The relationship between the recipient government, the "owner" agency, and the interest groups, as identified in the Octangle, is complicated in this case due to the nature of India's federal system. The impetus for reform in India's power sector, as in many others, comes from the GoI. The GoI, seeing that achieving growth requires relieving the bottleneck of power supply, has encouraged the states to reform their power utilities. It has urged them to (1) improve metering, billing, and collection through the use of new metering technology, computerization, and enforcement; (2) advance the professionalism of power utility staff through training; (3) create more autonomy for the SEBs from the state governments; and (4) raise power tariffs to reflect costs of production and transmission.

These objectives are being pursued through various strategies. First, states have been encouraged by the Power Finance Corporation of India to reform their SEBs through the award of study grants, attractive loan terms, and large-scale loans for new investments. Second, the GoI has promoted foreign donor participation as a way of accelerating reform. The World Bank's Second Maharashtra Power Project, for example, set conditions for changes in the regulatory structure as a condition for its loans. Third, the Indian Parliament enacted in 1998 the Electricity Regulatory Commission Act requiring states, such as Maharashtra, to set up independent power utility regulatory bodies that will set tariff rates, regulate purchase and procurement processes, and promote competition and efficiency.

Other reforms – including the unbundling of monopoly utilities, corporatization, and privatizing distribution – are being ushered in such states as Orissa, Haryana, and Andhra Pradesh. In Maharashtra, as elsewhere, such initiatives have met opposition from the state government and from SEB unions.

The recently constituted Maharashtra Electricity Regulation Commission (MERC), made up of retired senior civil servants and judges, recently ordered the MSEB to revise and publish its tariff rates and to come up with a plan to install and read meters. It also chastised the state energy minister and the MSEB for waiving unpaid arrears by politically well-connected power-loom operators in Bhiwandi and elsewhere ("MSEB told to revise tariff proposal," *Times of India*, March 1, 2000). The minister, in turn, has tried to dilute the influence of the MERC by packing the Board with sympathizers, and by starving it of budgeted funds ("Maharashtra power regulator under siege," *The Economic Times*, July 5, 2000).

Also, the over 120,000 employees of MSEB have threatened repeatedly to go on strike to protest the state government's decision of May 30, 2000 – following the directive of the MERC – to divide the MSEB into three separate corporations, each handling generation, transmission, and distribution. Employees feared that this would lead to the eventual privatization of the utility and the loss of their jobs ("MSEB employees to go on indefinite strike," *Times of India*, June 12, 2000; "MSEB unions call for strike," *The Economic Times*, July 21, 2000).

Meanwhile, distributing electricity as patronage to powerful special interests remains entrenched within the state's political system. As a state utility regulator interviewed for this study noted, "for politicians, the SEBs are too big a cash cow to be spun off as independent entities; they are likely to remain a while longer under some form of political control." These recent events suggest that the creation of a more viable institutional environment for the power sector, one that can attract investments by independent power producers, is actively opposed by those who benefit greatly from the present system of patronage and tribute (I-23).

Development of Maharashtra's capacity in power production requires not only investments in infrastructure but also changes to the incentives prevailing within extant political institutions. If aid investments made by donors in productive capacity are to maintain their momentum, such institutions that foster these incentives must be restructured, even though such changes may not be in the interest of Maharashtra's politicians.

• The Donor Government – Sida – Special Interests Triad

In addition to resonating the genuine and deep belief among the Swedish people of their moral responsibility to aid in the development of less fortunate societies, Swedish aid has always reflected significant commercial motivations. Sida's own publication, *Sida at Work*, notes that about 60 percent of Swedish development assistance ultimately benefits Swedish in-

dustry and service providers. Aid expenditures on the part of the government of Sweden are thus of interest to Sweden's industry and services.

Bilateral aid is conducted between two sovereign states. This means that aid is mediated through the agents of those states. Governments of donor countries thus can use funds derived from broad-based taxation and earmarked for development assistance to support particular domestic industrial and service lobbies by enabling poor countries to purchase or finance the purchase of the capital goods that they manufacture. As such, special interest groups arise, representing those who benefit from such directed public expenditure, when differential advantages can be secured through the political process (Buchanan and Tullock, 1962; Jones, 1995). In the case of aid, the potential for realizing commercial gain from such differential advantages is limited within the scope of procurement procedures of the donor country's aid agency and the level of immunity these procedures enjoy from political influence.

The level of influence that a large Swedish multinational company, such as ABB, can bring to bear in lobbying for differential advantages in procurement of manufactured goods and services used in Swedish development assistance thus has to be gauged carefully in terms of prevailing and practiced donor agency procedures and immunities. Like similarly sized corporations in Sweden, ABB has extensive influence within the Swedish government. (The same may be said of large corporations in other OECD countries.) The exercise of such lobbying power and the limits to which it can be exercised bear importantly in evaluating the incentives and sustainability of Sida-funded investments in infrastructure.

Our interviews with diverse individuals with knowledge of this case show that SIDA's financing of the HVDC project owes much of its existence to intervention from the Swedish Ministry of Foreign Affairs and its clear intent to promote development of the Swedish private sector (I-19, I-22). Members of the Swedish Parliament also faced incentives to protect jobs in Sweden. In this regard, ABB's award of contract for the HVDC terminals both furthered Sweden's commercial interests and preserved employment for 2,500 workers at ABB (*Development Today*, 1994). For its part, we were informed, ABB lobbied skillfully at all levels within both SIDA and the Ministry of Foreign Affairs, as well as with the Swedish Embassy in New Delhi and with local authorities in Maharashtra (I-9, I-19, I-22, I-27).

• The Donor – Other Donors – Recipient Triad

Various OECD commitments strive to encourage donors, in solidarity with each other, to promote institutional reform in recipient countries. To the extent that commitments among donors, such as that which the Helsinki Package represents, create an aid cartel to usher institutional changes among recalcitrant aid recipients, cracks in this front weaken all donors' hands in future aid negotiations. Sida officials view their organiza-

tion's breach of the Helsinki Package in this case to be a singular occurrence, and pledge it will not be repeated²² (I-19).

Further, Sweden did not stop its own funding of the completion of the ABB part of the project even though, we are told, Sweden supported the Bank's suspension of SMPP funding.²³ In considering this point, Sida's managers pointed out that while the suspension would not have any impact on the behavior of officials in the Maharashtra government – since only a small part of the Swedish financing remained – suspending the Swedish component of the overall project would have increased costs due to delays in completion (I-19).

To be sure, Sida, as a small donor with a project in a relatively aid-independent country, would likely have not succeeded where the World Bank failed in reforming politics in Maharashtra. Nevertheless, Sida's action does signal to Maharashtra's politicians that reform (of the power sector, as in this case) can be put off by the extent to which commercial motivations driving donor interests overcome reticence founded in considerations of promoting sustainable development.

• The Contractor at the Center

ABB is interested in maintaining a long-term relationship with the NTPC, MSEB, and other national- and state-level power agencies in India. ABB continues to see the power infrastructure development in India as an important business opportunity. ABB has clear incentives to seek profits in markets where risks might otherwise preclude participation. Sida helps ABB by mitigating the risk it faces and by financing the purchase of products sold by ABB, which would otherwise not be affordable to the recipient.

ABB managers noted to us that while they are internationally competitive in terms of quality, they are sometimes less competitive in price. Linking sales of their products with attractive financing from donors is one way to overcome this problem. Sida's financing of ABB sales, for example, has helped ABB to secure future business and to move into developing country markets. The role of a donor such as Sida in offering tied concessionary credits and/or guarantees — while meeting the stated objective of improving economic and diplomatic cooperation between Sweden and the recipient country — is all the more important to a contractor like ABB.

²² Further, they note that financing for the project had more or less been committed to when the Helsinki Package was put into place.

²³ The BITS/SIDA support to the Maharashtra project was initially approved under the precondition that the reform component would be taken care of by the World Bank.

²⁴ In March 2000, ABB was awarded a contract by the MSEB, valued at about US\$10 million, for transmission line substations. This project is funded by the Japanese Bank for International Cooperation.
²⁵ The essential question in this regard is whether donor country taxpayers, under the guise of aid, should subsidize the sale of products of particular domestic firms.

India, HVDC Converter Terminal project in Maharashtra. Padghe Converter Transformer. ABB.



This is because doing business directly with the financially weak Third World agencies, like the SEBs, is risky.

Sida's role in fostering sustainable development has to be distinguished from ABB's natural incentive to seek profit. Within this case study, Sida's role as the MSEB's "development partner" is less clear given its simultaneous function as ABB's financier. Sida and ABB risk being seen as having common purposes and interests by the project owner-MSEB. In fact, Inec within Sida is in close communication with ABB, as it is with other Swedish corporations. Further, some Inec staff have previously worked for ABB, revealing the presence of informal networks between the two organizations – though not necessarily that such staff are partial to ABB.

Sida officials suggested that SIDA's procurement rules, which at that time permitted semi-closed bidding, might have been a further factor helping ABB secure the contract. Indeed, the administration of a project is made easier when procurement can be limited to those firms with which officers at Sida are already familiar. Sida staff thus may have an incentive to favor this system. Officials at Sida assured us that such semi-closed bidding is unlikely to happen in the future, as Sida's formal procurement procedures are being reassessed, consistent with an internal auditor's report (I-19).

In this particular case, however, ABB had informally sounded out its financing from BITS and SIDA even as the formal request was being channeled through the Indian Finance Ministry. From this, it would appear that the procurement of the equipment and services from ABB, as against from some other firm, was never in question. Thus, existing procurement rules in SIDA did not serve to insulate the primary developmental objectives of aid from those of promoting Swedish commercial interests. These objectives need not be in conflict. Still, Sida as, foremost, a development

agency bears a responsibility to make sure that consideration for the first is not made to suffer for the consideration of the second.

Recipient Beneficiaries

There are two basic sets of power consumers in Maharashtra – those who pay, and those who do not pay. In the first group are those who receive free or subsidized power as patronage. These "winners" include the politically well-organized farmers, mill operators, and slum dwellers. The "losers" of the second group include residential customers and other small- to medium-sized commercial and industrial consumers. (Most of the larger industrial consumers have installed their own generating capacities.) Given that the MSEB imposes its losses on the state's budget, the cost of power is also being borne by those who pay taxes and those who might otherwise benefit from state services and investments.

In such a situation, those in the first set receiving power free or at nominal rates have no immediate incentive to change the status quo. In turn, those in the second set have incentives, often in league with corrupt MSEB officials, to tap power illegally and not to pay their bills.²⁶ These losers also have an interest in reform, but as they are numerous and scattered, they are unable to coordinate a sustained articulation of their interests (see Olson, 1965). The solution to this free-rider collective-action problem remains elusive.

9.4.3 Conclusions on Ownership and Sustainability

Ownership

The MSEB, Sida's nominal owner of the Chandrapur-Padghe Converter Terminal project, is financially and politically weak. Extensive subsidies and illegal tapping of electricity undermine its revenue base. As long as the MSEB is not able to pay reliably for power production and transmission, private investment to address critical problems in undercapacity will not be forthcoming. The MSEB is not able to assert its proper ownership prerogatives as a regulated utility due to gross interference from the GoM, the *de facto* owner. Responsible ownership – whether by a regulated MSEB or an alternative competitive arrangement – is vital for sustainable private investment in India's power sector.

We noted in Chapter 1 that ownership is meaningful only when placed in the context of the institutional resolution of the underlying collective-action problem. Our case study in Maharashtra reveals a rampant free-rider problem. The system is plagued with extensive subsidies, illegal taps into power

²⁶ The MSEB's metering and monitoring capabilities are poor; for instance, meter readers, when they do have meters to read, often take bribes in exchange for underreporting readings. The MSEB faces enormous problems of power theft and nonpayment. For example, the MSEB estimates a loss of 29 percent in revenue due to power theft and transmission losses. A recent estimate by the MERC has put this loss at close to 50 percent ("MSEB losing revenue due to power theft," Times of India, April 14, 2000).

lines, and nonpayment of power bills. Donor funding of capital assets for the MSEB increases the capacity of the utility to access and distribute power, but does not resolve the basic free-rider problem. The World Bank's attempt, in this regard, to wrest effective ownership from the GoM through loan conditionalities has failed.

The SMPP has increased the power supply. However, since the underlying free-rider problem remains unsolved, adequate private investment in enhancing power capacity has not materialized. In this way, donor intervention has not helped to sustain investment in India's energy sector.

Sustainability

The core issue in this case is the sustainability of investment in the energy sector rather than the sustainability of particular donor-financed hardware. From an engineering viewpoint, the HVDC terminal project has been successfully implemented. While it is presently too new to report problems related to the reliability and maintenance of the HVDC terminals, ABB managers maintain that their products are of exceptional quality and endurance. They point out that Rihand-Delhi terminals built earlier are also functioning well. Finally, they point out that the local technical capacity, such as possessed by BHEL, is sufficient to maintain the lines and stations.

Aid-based finance can add to the capacity of the Indian grid by putting physical assets on the ground. Sida's managers argue that the developmental rationale of this case has to be seen in terms of the overall continued progress of India, and that Sweden can help to relieve the immediate bottlenecks in power generation and delivery systems that threaten this process. They see donor assistance as a critical component in building up India's national high voltage grid infrastructure.

While donor investments in expanding the availability of power through the SMPP has helped, in the short run, to stanch some of the discontent among those being poorly served, it has also potentially created a bigger pool of patronage. Donor financing in this case may have unwittingly strengthened ownership by the GoM. If so, donor investment will have further crowded out private investment. This adversely affects, over the longer run, capacities to raise and sustain the financing needed for private sector-led development of the infrastructure required to cope with demands of development.

Chapter 10 Sida in Zambia

Summary

This chapter presents a case study of three selected Sida-supported field projects in Zambia. The IAD framework allows us to identify the predominating incentive structures for several actors in the action arenas of the three projects. We bring some of these incentive structures out in the open and discuss to what extent they contribute to the achievement of sustainable outcomes in the three settings. To carry out the case study we interviewed about 60 individuals in both Sweden and in Zambia, who are or have been involved in the projects. Our empirical evidence from the institutional analysis indicates that: (1) Aid to Zambia appears only rarely to have changed the underlying institutions that contribute to poor policy outcomes. (2) In the electricity sector, where we studied two projects, the government continues to underinvest while many donors keep it going with aid, and thus weakening the incentives for high performance. (3) Cost is not a good predictor of sustainable outcomes. The Conservation Farming Unit is an example of a low-cost project that has achieved impressive results in a relatively short period of time. (4) The success of the CFU can, to a large extent, be explained by the introduction of positive incentive structures for beneficiaries and consultants that are compatible and closely aligned with Sida's own incentives. (5) Through its strong emphasis on institution building, Sida can play a significant role in several sectors' future development in Zambia, especially in those sectors that undergo structural reforms.

The chapter starts with an overview of Sweden's bilateral development cooperation with Zambia. We note that Zambia's relative dependency on aid, not only from Sweden but also from other countries, has a profound impact on incentive structures conducive to beneficiary ownership and this also to sustainable outcomes. This is especially true for the government-to-government model of development cooperation, which channels most of Sweden's support to Zambia. The overview is followed by an institutional analysis, guided by the IAD framework, of the three selected field projects: (1) Zambian Energy Regulation Board, (2) Kafue Gorge Hydropower Station Rehabilitation Project, and (3) The Zambian National Farmers' Union and their Conservation Farming Unit (CFU). Each project's analysis follows the same sequence of IAD-structured analysis: We start by identifying the action arenas, its actors, positions, and the type of situations they interact within. Because of their influence on each actor's incentive structures, we spend a great deal of time discussing the particular

contextual variables that define the characteristics of the action arena. The incentive structures materialize in the "patterns of interaction" and are described explicitly at the end of each section. We end the chapter with a discussion of the implications of our incentive analysis findings for Sida.

10.1 Sweden's Development Cooperation with Zambia

10.1.1 Background

Zambia's overall economy has generally gone the way of its mineral exports, especially copper. Before the dramatic plunge of the world price for copper in 1974, Zambia's economy boasted one of the highest growth rates and per capita income in Africa. But the economy and the Zambian government's ambitious development plans depended heavily on copper revenue¹: when price of copper fell sharply, the government turned to outside financing, and accumulated debt. The one-party government (in power from 1972–1991) chose deficit financing² and policies that favored urban dwellers over farmers, leading to stagnant or negative growth in both the industrial and agricultural sectors.³ The Zambian economy has suffered from high inflation, enormous budget deficits, and distorted prices. Although many of the policies that generated these outcomes were changed with the end of the one-party state in 1991, even the more open, market-based economy finds the average Zambian as poor as he had been 20 years ago.

In such a weak economic environment, foreign aid has been a very important resource for Zambia. Aid has increased substantially over the years in Zambia, both per capita and as a percentage of GDP. Most aid is bilateral: in the 1970s, the largest donors were the United Kingdom (25 percent of external aid), the United States (15 percent), and Sweden (13 percent). In the 1980s, the list of most important donors changed to Japan (14 percent), Germany (13 percent), and Sweden (12 percent) (Saasa and Carlsson, 1996: 48–49). Sweden's share has remained roughly constant over the past two decades. Most bilateral and multilateral aid to Zambia has been predominantly in the form of grants, not loans, and balance of payment supports grew strongly in the late 1980s and 1990s, to as much as 90 percent of gross aid to Zambia (Mwanawina and White, 1995). In fact, White and Edstrand (1994: 286) claim that donors have provided foreign aid so that Zambia may pay its foreign debt. In 1997, aid represented 17 percent of Zambia's GNP, 107 percent of its gross domestic investment, and 35 percent of its imports.

¹From 1965–1969, copper accounted for 42.3 percent of Zambia's GDP. That fell to 7.5 percent in 1990–1993 while still accounting for 82 percent of the country's exports (Saasa and Carlsson, 1996: 35). ²Zambia was the most indebted country per capita in the world in 1984.

³Growth in real GDP was negative for six years out of ten from 1982–1992 (Andersson and Ndulo, 1994). ⁴Zambia was one of the largest recipients of Swedish balance of payments support at the time: SEK600 million from 1990/91 to 1992/93 (Mwanawina and White, 1995: 100).

Saasa and Carlsson (1996: 54) note five distinct periods for Zambia's sometimes "rocky" relationship with donors: (1) 1980–1983, before Zambia's first structural adjustment program (SAP); (2) 1983–1987, during the SAP; (3) 1987–1989, when the government defected from the SA; (4) 1990–1991, when liberal policies were adopted by the new multiparty government; and (5) after 1991, when SAP measures were accelerated by the government. The periods reflect a country that is highly aid-dependent, but whose domestic politics at times foster a break with international donors.

10.1.2 Sweden's Role in Zambia

Sweden has been a consistent donor to Zambia since its independence in 1964. In a review of project memoranda from 1965–1993, Öståker (1994) notes that during the first period of Swedish aid to Zambia, one of the main objectives was to support the country's efforts to "liberate from the influences and power structure remaining from the colonial era" as well as to decrease Zambia's dependence on white minority regimes in southern Africa. In addition to these political and economic goals, Swedish aid featured assistance to food production, poverty reduction in rural areas, and increased participation by local people.

With the decline in the price of copper, Sweden's aid to Zambia grew. With the end of neighboring liberation struggles, the assistance focused more on social and economic "equalization" in the 1970s and early 1980s. A proliferation of personnel-intensive – and often uncoordinated – projects emerged. Generally, this aid fell into the health, education, and agricultural sectors.

The mid-1980s saw a reorientation in Swedish assistance: programs were consolidated and moves were made to become less personnel-intensive. Added to Sweden's focus on agriculture, health, and education were import support and a personnel and consultancy fund. Rural development was also emphasized, and a new emphasis was placed on helping women. With the new democratic elections in 1991, Swedish assistance also incorporated the support of democracy and governance into its country strategy (e.g., "Strategy for Sweden's Support to Democratic Governance in Zambia 2000–2002"; Adam et al., 1994: 28-65). Because of concerns about the new government's trends toward authoritarian behavior, however, Sweden suspended its longerterm "development cooperation agreement" at the end of 1998. Sida launched a new country strategy in January of 1999 that allows only for "specific agreements" with respect to projects and sectors. Most Sida staff felt that this lack of a development cooperation agreement did little to affect their projects and sector aid; they view it as a political statement on behalf of the Swedish government that has had little practical implications on decision making in the bilateral cooperation (S82-S93).⁵

⁵ Throughout the report we protect the anonymity of our interviewees and cite them as S1 – S125 for our Sida Headquarter's sources and Z1-Z60 for our colleagues in Zambia.

While an extensive evaluation of Sweden's aid to Zambia reported some positive effects – especially with more recent programs to build institutions (Adam et al., 1994) - many experts see problems with Zambia's overall high dependency on aid, especially as they relate to ownership and sustainability. Bräutigam (2000: 31-32) cites an aid official working in Zambia as saving that "most projects are donor-driven" in Zambia, and that "there is little local initiative" in the design and development of aid projects. Several of our interviews endorsed this assessment (Z-3, Z-34, Z-43, Z-54). Indicative of this observation is that in 1999, Zambia had \$500 million in aid projects committed but not vet implemented. Cromwell (1995: 195) claims that the level of aid to Zambia delayed the demise of the one-party state there, and Rakner (1998) argues that it continues to allow the democratically elected president to act like a dictator (see also Bräutigam, 2000: 29). While it can be argued that high dependency on aid may weaken the incentives for local initiatives, ownership, and thus also sustainability, these issues are difficult to sort out at the aggregate, national level. How does the general aid dependency in Zambia play out in the decisions of individual projects? What other contextual factors influence the incentives that may enhance collective efforts to achieve sustainable outcomes? To find answers to these and other questions related to the incentive structures of the actors in the development octangle, we now turn to analyze three specific cases in which Sida aid has been important.

10.2 The Zambian Energy Regulation Board

10.2.1 Project Background

The energy supply sector is critical for the Zambian economy for many reasons. First, the sector's policy decisions affect the performance of virtually all productive sectors in the country because of their varying degrees of dependency on electricity supply (Interview with ECON consultant, October 29, 2000). Second, the Government of Zambia (GRZ) sees the exploitation of the country's largely unexplored energy resources as an opportunity for generating desperately needed cash revenue through the exportation of electricity (Z-1, Z-14, Z-36, Z-37, Z-44, Z-54). In an effort to secure these advantages, GRZ has embarked on a market-friendly liberalization program to attract private participation in the sector. Despite these emerging reforms, the Zambia Electricity Supply Corporation (ZESCO) remains by far the largest operator in the electricity sector and continues to dominate the generation, transmission, and distribution of electricity.

In 1994, the GRZ issued a new National Energy Policy (NEP), which set out to deregulate ZESCO, the state monopoly of electricity, a heritage from the pre-1991 one-party government. The core rationale for this set of reforms was to establish a market-based structure that would be more appropriate for improving the economic efficiency of Zambia's energy supply industry (ESI).



Zambia, ERB project in Lusaka. Workshop with ERB staff and consultants. Peter Fritz, EME Analys.

The NEP noted that in a deregulated, market-based energy market in which private participation is encouraged, there is also a need for an independent regulator. Consequently, the Energy Regulation Act (ERC) of 1995 provided for an Energy Regulation Board (ERB) and charged it with the specific task of providing politically independent regulation of the supply of petroleum, electricity, and other forms of energy. The ERB became operational two years later, in July of 1997.

The ERC defined the official mandate and general ground rules for the ERB. According to the ERC, the most important functions of the ERB include (1) monitoring the efficiency, performance, and level of competition among the sector operators; (2) investigating complaints from consumers with regard to price adjustments, services received, establishment of new entities in the industry; and (3) designing standards with regards to the quality, safety, and reliability of the supply of energy. The principal instrument by which the ERB can impose these rules on sector operators is its power to license. If an operator is found to have violated any of the rules or regulations, the ERB may not only impose fines but also withdraw the firm's or individual's license to operate in the sector.

Another way for the ERB to regulate the sector's operators is through its decisive role in the price adjustment review process. If an operator wants to raise electricity tariffs, for instance, it must file an official application with the ERB who then proceeds to review the motivations for such a request. To make such an application, the operator must show that it has performed according to the standards pronounced in the licensing agreement. A request for a price adjustment can be rejected if these standards have not been met by the operator. Also, before approving a price hike for any operator, a public hearing is organized by the ERB. These are often televised events, in which individuals and organized interest groups may air their views on the proposed price adjustments. The ERB is required to take these publicly expressed views into account when making the decision on whether an adjustment is warranted. The ERB has developed its own procedures for what it considers due process for the review of

both applications and complaints from the consumers and the public. According to these – still informal – rules, the ERB places the burden of proof on the plaintiff who needs to present solid evidence for their request. However, the ERB has been criticized by several domestic interest groups for not taking these public hearings as seriously as they should (Z-9, Z-13, Z59).

As part of Sweden's support to Zambia's effort to rehabilitate the electricity sector's infrastructure and policy reform process, Sida provides economic assistance to a four-year project called Institutional Capacity Building Project of the ERB. The project is part of the sector-wide, World Bank-coordinated Power Rehabilitation Program (PRP). The Swedish support consists of financing the services provided by Sweco, a Swedish consulting firm with expertise in electricity regulation.

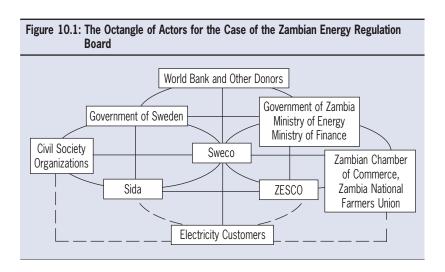
10.2.2 Applying the IAD Framework to the Case of the Energy Regulation Board

Action Arena: Actors and the Action Situation

Given that the ERB seeks to regulate the energy sector of Zambia, there are a *great number of actors* interested in its formation and activities. The major actors are the Zambian government (Ministry of Energy and Ministry of Finance), ZESCO, the World Bank (IDA), and the public. There are other actors who also play key roles in the ERB, such as Sweco, the consultant paid by Sida to help the ERB, and several interest groups including the Zambian Chamber of Commerce and the Zambia National Farmers Union (ZNFU). This study considers the relationships between these actors and the period of Sida's involvement with the ERB as the *action situation* to be explored; this study also stays mainly at the collective-choice level of analysis (see Figure 10.1 for the case of the ERB).



Zambia, ERB
Project in Lusaka.
Board Members,
ERB staff and
consultants outlining
the project.
Peter Fritz, EME
Analys.



Influences on the Action Arena: Physical/Material Conditions, Attributes of Community, and Rules-in-Use

The ERB is the legal regulator of the energy sector in Zambia. While this means that the ERB deals with all types of energy production and distribution, much of its work – and hence the focus of this section – features electricity, the underlying good of this project. Electricity has long been considered a natural monopoly, and this has been the case in Zambia as well. Until the advent of the ERB, ZESCO had been the sole organization with the authority to generate and distribute electricity in Zambia. Due to its decades-long preeminent position, ZESCO created a far-flung enterprise that controlled nearly all upstream and downstream linkages in the electricity sector. New thinking about the *nature of the good* – i.e., whether or not electricity really is a natural monopoly (a private good with high entry costs) – led the government and World Bank to consider the privatization of the sector (the 1991 government elected in the transitional multiparty elections had considerable support from the private sector, and thus was business-friendly). Sida has also been thinking about the reform of public enterprise, e.g., INEC's RIPE program.

Most important among the *community attributes* that inform the action arena in the case of the ERB is the powerful legacy of the one-party state in Zambia. Bureaucracies and parastatals dominated all major economic sectors in Zambia, resulting in generations of professionals who know few alternatives to one-party state structures. Consequently, there is great reluctance among many, if not most, bureaucrats to move towards any other system (like privatization), especially since Zambia's business arena offers few formal employment options that exist for public employees who are sacked. This one-party legacy also distorted market signals to such a great extent that operating within any market-like system is very new for most Zambian public employees. This is especially true for the electricity sector: for decades, ZESCO has not been charging prices for electricity that were remotely reflective of its costs.

This has also generated expectations on the part of the public for very inexpensive electricity (Z-1, Z-5, Z-10, Z-22, Z-37, Z-53).

Because the ERB is a new agency interacting with more established organizations, the set of rules-in-use that affect the behavior of actors in this action arena reflects both new and old institutions. Formally, the ERB is responsible for issuing licenses to any energy production or distributing entity in Zambia and approving prices for energy. The ERB's revenue consists of the license fees it collects from these entities. The fee that each entity has to pay is defined as a percentage of the entity's gross annual income (GAI). Because the foreseen unbundling and privatization of ZESCO has not yet started, the vast majority of the ERB's revenue comes from ZESCO. By law, the ERB is required to deposit all fees collected into the government coffers; the government, in turn, is supposed to remit back to the ERB funds according to the ERB's approved budget. In an effort to acquire increased financial flexibility and to ensure stable cash liquidity for recurrent expenditures, the ERB reached an agreement with the Ministry of Finance to retain 50 percent of the collected fees in order to prevent delays in paying salaries and other expenses. In actuality, however, the ERB has retained all of the fees it has collected, and has petitioned the Ministry of Finance for approval to formally retain 80 percent of the fees. The informal arrangement that allows ERB to retain complete financial control turns out to be decisive for its incentive structures. As we shall see, these may not always be compatible with the public interest.

The ERB is part of the World Bank-funded Power Rehabilitation Program (PRP). As part of the conditions for the loan, the World Bank insisted on an independent regulatory agency. The continued existence of the ERB is formally necessary for the continuation of the PRP.

Although the government, through ZESCO, had been the source of price changes, both are allowing the ERB to control the process of pricing as per the 1997 Energy Act. Because the government, through its Minister of Energy, chooses the members of the ERB, however, there are questions about the independence of the board members. For example, the government allowed months to pass before naming the second set of board members (Z-45, Z-52).

The structure of financing is an important determinant of the set of rules-inuse that the actors in this arena function by. Formally, the World Bank has lent the money to the government, which, in turn, has lent the money to ZESCO at a commercial rate. On paper, ZESCO must repay the monies it receives from the PRP to the government. As observed earlier, loans and grants generate quite distinct incentives.

Patterns of Interaction: Incentives and the ERB

The characteristics of the action arena, the actors, and their interactions have produced incentives that support the ERB's continued existence and functioning, at least in the short run. Many, if not most, observers from within and out-

side government, however, doubt the sustainability of the ERB's independence – and therefore its effectiveness, especially if donor support is withdrawn.

Incentives of Government

Prior to the agreement to revamp the electricity sector, the government knew well that the electrical generation and production systems in Zambia were at the point of collapse (Z-10, Z-24, Z-37, Z-53). In addition, members of the government were keen to privatize many sectors of their economy. This position fit with the orientation of the World Bank, which had been active in making loans to update and privatize different sectors in developed countries. The PRP project was the result of this confluence of thinking. As part of the PRP, the World Bank also insisted on institutional reform — especially changes to ZESCO's history of low prices and low rates of collections. Such reform was thought to require an independent regulatory agency like the ERB.

Although they lose some control over the setting of prices and the licensing of energy producers, there were strong incentives for the government to allow the creation of the ERB. First, it met the World Bank demand for some institutional change without wholesale changes to government structures. The ERB would appear less intimidating to the government since it possesses the power to appoint the Board's members. Second, the ERB provides the government with a buffer from the public criticism generated by rate hikes and other privatization actions (such as the selling of the Copperbelt Electricity Company and the lower Kafue Gorge generating station) (Z-1, Z-5, Z-39).

The fact that many respondents thought that the government sees ZES-CO as a future source of foreign exchange provides incentives that could be at odds with the official position of this sector's privatization and the independence of ZESCO. ZESCO staff and other government officials – especially the Cabinet – believe that Zambia can earn a great deal of money from the exportation of its power; as one respondent put it, "the cash cow that can replace copper" (Z-10, Z-39, Z-53, Z-54).

Incentives of ZESCO

At first glance, the creation of the ERB stripped some powers over the electricity sector away from ZESCO. Long used to setting prices and the condition for electricity supply, ZESCO lost some of this control to the ERB. On balance, however, there are incentives for ZESCO to support the work of the ERB. Since ZESCO desperately needed the funds offered by the World Bank for the rehabilitation of the energy sector, in some ways the ERB was the bitter medicine it had to take (Z-37). But the ERB also provides ZESCO with political cover when it asks for tariff increases: according to ZESCO top-management, the ERB gives legitimacy to ZESCO's demands for the painful but necessary tariff hikes, which it needs to become solvent (Z-5, Z-24, Z-25, Z-53).

• Incentives of the ERB

As a new agency, the members of the ERB have strong incentives to seek support from those individuals or groups that can help sustain them. Even though the ERB is, in part, designed to protect the public interest, the ERB's survival probably depends more on the support of the World Bank, the government, and donors (Z-21, Z-39, Z-45, Z-53).

Clearly, the World Bank has a strong influence on the incentives of the ERB. In fact, during a public outcry against increases in electricity tariffs, the World Bank took the unusual step of publicly supporting the ERB. Because the World Bank made the ERB part of the conditions for the energy sector loan, and has pushed strongly for the effective functioning of the ERB, the Board's members have had the incentive to live up to their official mandate as an objective, independent arbitrator in the sector that requires them to observe certain standards of performance.

Less clear are the incentives that the government generates for the ERB. The government appoints ERB members, so at a fundamental level the jobs of these individuals depend on meeting what they perceive to be the interests of government. Further, in an era of uncertainty and limited private sector jobs, such a position on the ERB is highly valued. The signals that the ERB gets from the government tend to parallel those of the World Bank. Even though different members of the government may complain about the tariff increases — especially legislators who are under pressure from their constituents — the government seems content in the short run to allow the ERB (and World Bank) to bear the responsibility for these unpopular actions (Z-5, Z-39, Z-45).

Members of the ERB have strong incentives to secure aid from donors like Sida. As a new agency, the ERB lacked training, support staff, and basic office supplies to carry out its arguably very important role. Sida's help – through Sweco – was considered pivotal by the ERB in electricity (although less so in the petroleum and biomass sectors). Donor support also helps them to travel and to enhance their personal qualifications and thus gain a competitive edge on the job market. One of the ERB's main roles is to bring together the sector's key actors to negotiate proposed regulation decisions and try to build a broad-based consensus with actors before passing regulation. Sweco has been important in training ERB staff and Board in performing this new approach (stakeholder analysis and participatory planning).

Finally, the *de facto* mechanism for financing ERB operations, which lets ERB retain all its revenues, produces perverse incentives for ERB to be agreeable to all solicited price hikes. Since price hikes lead to increased revenues for ZESCO, ERB benefits indirectly from approving these and thereby augmenting ERB revenues from licensing fees. The actual influence of this incentive on decision making at ERB is determined by the strength of counteracting institutions at ERB to serve the public's interest. For instance, ERB board members' commitment to the organization's objectives and the

willingness of GRZ's to monitor the ERB behavior may prevent ERB decisions to be biased towards approving price hikes. We found no evidence that ERB is approving price hikes in order to raise more money for its organization. It should be noted, however, that the perverse incentive structures, embedded in the organization's rules in use, do exist and as such constitute a potential risk for the future performance of the ERB.

• Incentives for the Public and Interest Groups

The public and special interest groups have incentives to support an independent regulator to monitor political meddling and corruption in the energy sector. The majority of noncommercial electricity users are not organized into any effective group. Lately, however, some commercially-oriented interest groups have grown very critical of the ERB's role. The ZNFU and the Zambian Chamber of Commerce and Industry, for example, argue that the Board has become another bureaucracy that is interested in generating more income for itself and the government. Both interest groups and the public object strongly to price hikes, since for decades they have enjoyed subsidized electricity. Additionally, they do not see significant changes in customer service, as mandated by the ERB. Interest groups also accuse the ERB of collecting illegal taxes and swindling, but have not provided evidence nor undertaken any legal action against the Board (although they have lobbied to get a representative on the Board) (Z-10, Z-53).

Incentives for Sida

There were clear and strong incentives for Sida to support the ERB. First, the World Bank sought donor help to support the ERB. Second, much of the monitoring of the PRP is to be done by the World Bank, not Sida. Third, such institutional help fits one of the new directions that Sida has been taking in the reform of public enterprise (see, INEC, "Ripe for Change," December 1997). Fourth, Sida had been involved in the energy sector before and had experience with Swedish consultants in this area (Z-1, Z-2, Z-5).

Support for institution-building projects like the ERB might, however, be threatened with the increase in budget scheduled for Sida in Africa. Institution building is rarely an expensive effort – the Sida total commitment to the ERB is only SEK7 million over four years (Sida, *Semi-Annual Report*, 2000).

Outcomes: Implications for Ownership and Sustainability

Sida's support for the ERB has been important. Sida's consultant, Sweco, has given the Board the crucial technical support at the beginning of any new agency. Further, there is evidence that Sida staff took a strong position to support the ERB in discussions with the Zambian government personnel.

An analysis of the incentives at the collective-choice level provides strong reasons to be skeptical about the long-run effectiveness of the ERB, however, if

the Board's independence is a crucial part of Sida's goals. ZESCO remains the dominant player in the electricity sector, and although the ERB turned down ZESCO's first attempt to increase rates, the second attempt did go through. The fear remains among nearly all interviewees that since the Ministry of Energy appoints the ERB's members, the government will eventually get its way (and thus ZESCO, through the government, will get its way). When the World Bank finishes with the PRP, and/or when Sida or other donors pull out of their support of the ERB, it is easy to envision the end of its independence. Most interviewees believe the World Bank's policies for the PRP provide the only real incentives that prevented business as usual in a country where a one-party state – and now one-party dominant in a multiparty state – can use the electricity sector to secure political support for itself.

There is no easy translation of the ERB case into Sida concepts of "ownership" and "sustainability." No one interviewed thought that the ERB was likely to be dismantled completely, as it is one of the conditions of the World Bank funds for the entire PRP. But without continued donor support, few thought the ERB would remain independent. Thus, in one sense, the ERB might be sustainable while being "owned" by Zambia, but it is unlikely that this type of survival would include its effectiveness as an independent regulator in the energy sector. Even with donor support, sustaining the existence and independence of the ERB will likely take a long time in a political atmosphere that generally seeks to prevent agency independence.

There exist strong political incentives on the GRZ side to bend the ERB to its will. Sida's contributions to the ERB may not prevent this from happening completely. But it is likely that Sida – especially in partnership with the World Bank – may slow down this process of politicization.

This case demonstrates that Sida's participation in institution building can be an inexpensive way to affect an entire sector. Consultants can bring technical assistance to an agency at a relatively low cost. But creating institutions in a politically sensitive area obviates against a short-term strategy, and will most likely require sustained efforts on the part of Sida to make a long-term impact.

10.3 The Kafue Gorge Hydropower Station Rehabilitation Project

10.3.1 Background

The Kafue River drains the central part of Zambia into the Zambezi River. At Kafue Gorge, the river drops vertically about 600 meters over a distance of 30 kilometers, making it an ideal location for a hydro-electrical power generation station. With credit guarantees from the governments of Yugoslavia, Norway, and Italy, GRZ initiated the construction of the Kafue Gorge Hydropower Station (KGS). In 1971, the 600 MW power station was taken online and by 1976, ZESCO (which was established in 1970) had taken over the

management and expanded the KGS with two additional 150 MW turbines. This expansion program was supervised by the Swedish Consultant firm, Swedpower. In the mid-1980s, the KGS generated more than half of the country's electricity.

Zambia, KGRP Project in Kafue Gorge. Spillway of the hydropower station. Clas Winroth, Swedpower International.



On March 26, 1989, a major accidental fire destroyed much of the KGS and caused a complete power outage for about nine months. In a first effort to make the KGS operational again, Sida took the lead to provide major economic support (SEK72 million) to an emergency restoration plan. In 1994, all damaged parts had been restored to pre-fire performance levels. Between 1970 and 1994, Sida contributed with a total of approximately SEK300 million for the station.

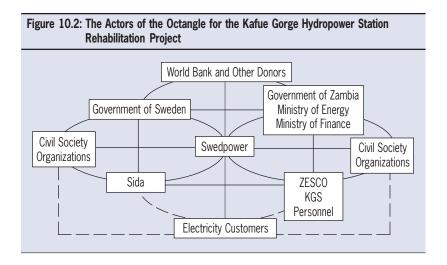
Although the power plant has been up and running at more or less the prefire capacity for some time now, the recent World Bank/GRZ policy to rehabilitate and privatize the electricity sector has led ZESCO to design a plan for the complete rehabilitation of the KGS. A technical audit carried out by Swedpower in 1996 concluded that, to make this happen, several civil and electromechanical rehabilitation works needed to be constructed (ZESCO project document, 1998). In this new phase, Swedpower is working for ZESCO with funds from Sida to advise and train ZESCO personnel in the management of the rehabilitation project. The analysis that follows stays at the level of collective choice (see Figure 10.2).

10.3.2 Applying the IAD Framework to the Case of the Kafue Gorge Hydropower Station Rehabilitation Project

Action Arena: Actors and the Action Situation

The Kafue Gorge Hydropower Station Rehabilitation Project (KGRP) is a component of the World Bank-funded PRP. The KGRP involves the rehabil-

itation of civil, mechanical, and electrical works at the Kafue Gorge Hydropower Station. The main *actors* in this project are the World Bank, the government of Zambia, ZESCO, Sida, and Swedpower, the consultant who is helping ZESCO to manage the project. This study considers the action situation to comprise the period of Sida's support to the KGRP and the actors at the collective-choice level, as in Figure 10.1.



Influences on the Action Arena: Physical/Material Conditions, Attributes of Community, and Rules-in-Use

The KGS produces the majority of the electricity in Zambia. Due to underinvestment in maintenance, the World Bank and the Zambian government identified its rehabilitation as central to the overall PRP. The station's rehabilitation includes repair and/or renovation of spillways, power house, personnel rooms, and roads, and the provision of goods such as monitoring equipment, spare parts, and surveying tools. Sida's involvement with the KGRP is in paying for the consultant that will help supervise the implementation of this rehabilitation. Thus, the *nature of the goods* directly involved with the KGRP are the standard, private goods common in much development cooperation: hardware and the technical assistance of consultants; the underlying good is electricity.

As in the case of the ERB, the dominance of ZESCO in the production and distribution of electricity in Zambia is one of the most important *community attributes* in the case of the KGRP. The dominance is augmented further in the case of the Kafue Gorge station. As the "backbone of the Zambian network" (ZESCO, Contract for Consulting Services, Kafue Gorge Rehabilitation, Appendix B, p. 2), the station has had a privileged position in ZESCO, and even in the government itself. Even in the discussions of the privatization of the electricity sector, no respondent in or outside of government thinks this station will ever be sold, despite the World Bank's goals. Another impor-

Zambia, KGRP Project in Kafue Gorge. Switchyard of the hydropower station. Clas Winroth, Swedpower International.



tant community attribute in this case is the long relationship between the staff at the Kafue Gorge station and the company Swedpower: Swedpower has given technical assistance to the station off and on for decades. (Swedpower also produced the technical audit that assessed the rehabilitation needs of the station in 1993–1994.)

The rules-in-use that affect the behavior of actors in this action arena reflect the history of ZESCO, the Kafue Gorge station, and the new institutions of the rehabilitation project. While ZESCO has long dominated the electricity sector in Zambia, many respondents told us that consultants like Swedpower and the government had more power over ZESCO operations in the past. ZESCO staff said that in previous projects, the consultants would have already been chosen by Sida (tied-aid); the consultants would talk directly with Sida and bypass ZESCO altogether. Now the rules-in-use find ZESCO far more active in the project. ZESCO personnel believe that they are completely in charge of the rehabilitation project. As evidence of their belief, they point to the fact of ZESCO's participation in the choice of consultant (while ZESCO believed it still had to be a Swedish consultant, ZESCO did alter some of the terms of reference). Further, their consultant is accountable to ZESCO first, since consultant invoices are not paid by Sida until after ZESCO approves them (Z-1, Z-14, Z-37, Z-40, Z-44).

Respondents identified several sources for ZESCO's new powers and actions. First, the World Bank insisted from the beginning that ZESCO manage the whole PRP, although consultants would be part of each component. Second, the money from the World Bank allows ZESCO not to be dependent on any one consultant or bilateral donor. Third, since the Sida aid was a grant to the government but a loan (no interest) to ZESCO, the agency is more motivated to see that it gets its money's worth. Finally, ZESCO's power and increased training in the area of procurement through the PRP has changed their understanding and action in that area (Z-14, Z-40).

Patterns of Interaction: Incentives and the Kafue Gorge Hydropower Rehabilitation Project

The influences on the action arena, the actors, and their interactions have created clear incentives for Sida's participation and incentives that have empowered ZESCO officials. This KGS is a standard, "old-style" development cooperation project with short- to medium-term goals that most respondents think will be met well. The long-run impact of the project – like many projects that feature technical assistance (Sida's part), equipment, and construction – will be more difficult to sustain without additional intervention, as indeed has been shown in the station's history: the government has continuously underfunded its maintenance, and donors – especially Sida – have continuously stepped in to help.

Incentives of Government

The Zambian government knows that the production and distribution systems of the electricity sector are in poor condition. Further, since the Kafue Gorge station is the country's most important producer of electricity, the government was very interested in its rehabilitation.

The government faces few negative incentives with the KGRP. Sida gave a grant for the technical assistance part of the project, which the government has lent to ZESCO. The rest of the project's funding will come either from other donors or from the World Bank (IDA) loan. Almost no reorganization of the Kafue Gorge station was required from any lender (an implementation unit for the project had to be constructed). And given the belief that electricity may be an important export for Zambia in the future, the government is glad to have assistance for the rehabilitation of their most important station.

As mentioned earlier, few respondents believe that the station will be part of any privatization, the goals of the World Bank notwithstanding: the KGS produces the majority of electricity in the country and is seen thus in terms of national security. If electricity does become an important export, the government will also have an incentive to keep ownership of the station in state hands as a means of generating foreign exchange.

Incentives of ZESCO

Like the Zambian government, ZESCO faces generally positive incentives with the rehabilitation of the KGS. It receives much-needed funds to repair various works and has successfully avoided much institutional restructuring. However, ZESCO officials report that two important institutional changes have changed their incentives. First, employees assert that since the government has lent – not granted – ZESCO the money from Sida, they have stronger incentives to keep track of Sida and other World Bank/PRP money. Second, these incentives are strengthened because ZESCO now has the power to procure for itself (rather than through another unit in the government) (Z-14, Z-40, Z-44).

Incentives for Sida

Sida faces strong incentives to support the KGRP. Sida has a long history of supporting this station, has a long history with contracting the same consultant for these projects, and was asked by the World Bank to support the consultancy for this project. In comparison with a new project, Sida's oversight costs should be far lower in this project since Sida would be working with the same group of people on both the Zambian and consultancy sides (reputation effects).

Incentives for Swedpower

Like Sida and ZESCO, Swedpower possessed strong incentives to be part of the KGRP. They had been helping the station for decades, had close ties with the staff at the station and within Sida, and had the expertise for the job. While some members of Swedpower do not prefer working with the World Bank due to its bureaucratic procedures, Swedpower generally gets along well with Sida personnel.

Outcomes: Implications for Ownership and Sustainability

The help provided by Sida for the rehabilitation of the KGS is an example of classic development assistance. Sida has given money for technical assistance, provided by a Swedish firm, which the recipient country needed. As training always has long-term effects, there will be enduring effects at some level from this transfer of knowledge as a result of Sida's contribution (although measuring these effects is always difficult). Without new institutions, however, ZESCO faces the same sets of incentives as it always has – get donors to pitch in when possible. Sida has been happy to do so over the years, as such support to KGS is clearly important to the country as well as being relatively easy to measure for Sida.

It seems that the structure of the World Bank's PRP has increased the level of ownership for the Zambian ZESCO personnel: they feel empowered by the tendering process. Thus, in the context of Sida's aid, ZESCO felt more control over the process. In this respect, ownership appears higher than in projects past. This empowerment may also endure, and then one could perhaps say that this aid had an effect on sustainability. The GRZ's continuous need for outside assistance undercuts these effects, however. GRZ remains completely dependent on outside funds for the continued operation of the KGS, and Sida's help – both in this instance and over the years – has not generated a way out of this dependence.

10.4 The Conservation Farming Unit

10.4.1 Background

While many of the biophysical conditions, such as soil fertility and climate, are relatively favorable for farming in Zambia, the sector is still far away from

Zambia, CFU project. Woman farmer participant in Southern Province. Krister Andersson, Indiana University.



its productivity potential (Sida annual report 1999). Why might this be so? Many analyses reviewed for this study seem to agree that one of the main obstacles to a thriving agricultural sector in Zambia is inappropriate farming practices, especially among the sector's smallholders (ECAZ, 1999; ZNFU, 1998; MFA, 1999; CFU, 1997). Contemporary agronomic research is making it increasingly clear that the country's predominating, conventional smallholderfarming practices are not well suited for the existing biophysical context (GART, 2000). The conventional practices, which are characterized by extensive tillage methods, have caused severe soil erosion and a decline in soil fertility (ibid.). The apparent mismatch between the biophysical conditions and the existing farming technology has recently

become the target problem of a series of initiatives in Zambia, including several externally funded projects and programs under the auspices of the Ministry of Agriculture, Food, and Fisheries (MAFF). However, one of the pioneering efforts to introduce better farming practices was a private-sector initiative by the Zambian National Farmers' Union (ZNFU) and their Conservation Farming Unit (CFU), which they established in 1995. Sida, along with other international development agencies in Zambia, has provided substantial economic support to the activities of the CFU since 1996.

The principal objective of the CFU is to promote smallholder adoption of conservation farming technology, mainly through the training of trainers who work within the existing sector organizations, such as nongovernmental organizations, commercial firms, and MAFF. A recently published econometric analysis of a series of agricultural experiments performed by the Golden Valley Agricultural Research Trust (GART) compared conventional farming with conservation farming practices and concluded that the net economic benefits from conservation farming are, on average, twice as large as those of conventional

⁶ Since 1996, CFU has also received economic support from NORAD, USAID, Finnida, EU, and the World Bank in different phases of the project. Currently, the project is in its third phase, which ends in 2002.

methods (assuming that the grown crops actually get sold in the market)⁷ (GART, 2000). The CFU has, despite its relatively small size and limited budget, managed to make the CFU approach to smallholder farming one of the most promising strategies for combating rural poverty in Zambia (ECAZ, 1999). Only five years after the introduction of the CFU approach into Zambian agriculture, it is estimated that there are approximately 75,000 Zambian farmers who currently practice conservation farming in one way or another (Sida, 1998b).

Given many international development agencies' frustration with promoting effective poverty reduction strategies in Zambia, the CFU experience can potentially provide useful lessons for the development of future development programs, especially in the agricultural sector. The CFU is different from many projects, however, in that it is quite small, is not organized through a government ministry, and is run by highly motivated managers. These features will impact its sustainability and ownership characteristics.

10.4.2 Applying the IAD Framework to the Case of the Conservation Farming Unit

Action Arena: Actors and Action Situations

The promotion of conservation farming in Zambia started in 1995 when the ZNFU invited the "father of conservation farming," Brian Aldrey from Zimbabwe, to present his farming approach at a workshop in Lusaka. After the workshop, ZNFU decided to create a special unit dedicated to the promotion of this "new" concept of farming.8 In October that same year, Peter Aagard and Dutch Gibson were asked to head the new unit, called Conservation Farming Unit, and before long the CFU had received enough funds from the European Union and the World Bank to become operational. The objective of the funded CFU activities is to coordinate efforts to promote and demonstrate conservation farming technologies among smallholders in selected regions of Zambia (CFU, 1997). Sida first began supporting the CFU in April of 1996 and has, together with NORAD, contributed the largest financial support for the CFU project, with a total amount of about US\$600,000 from Sida alone. The CFU is a very small project in Sida's portfolio of support in the area of sustainable agriculture in Zambia as it represents only 2.6 percent of Sida's total support to the country's agricultural sector during 1998–2000 (Sida, 1998b). The financial support goes directly to the CFU project managers.

⁷ It should also be noted that labor costs are estimated to be about 50 percent higher for conservation farming compared to conventional farming methods that use oxen-draught tillage, at least during the early stages of adoption (GART, 2000).

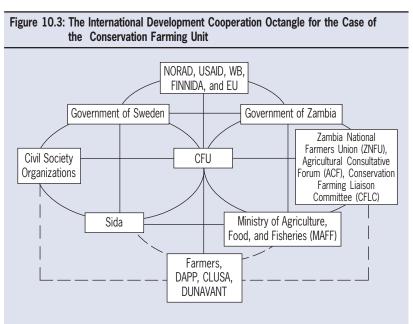
⁸ Arguably, the principle of minimum tillage per se was nothing new to most Zambian farmers since this was the way smallholders farmed long before colonization. However, other components of the conservation farming approach, such as rainfall-harvesting, the timeliness concept, using plant residues to retain moisture and nutrients of the soil, etc., were indeed novel to most Zambian farmers in 1995.

In contrast to most aid-supported projects in the agricultural sector, the CFU is not part of the support channeled through MAFF but is considered a private sector initiative. Nevertheless, MAFF recently adopted conservation farming as one of its main priorities for its extension program, which means that MAFF plays an increasingly important role in the promotion and future success of conservation farming in Zambia. It may have taken only a handful of individuals to create the CFU, but it has required the active engagement and professional commitment of great many more actors in making it a success. The main actors in the current phase of the CFU project are: CFU staff, donors, clients (Development Aid from People to People, DAPP, Co-operative League of the USA, CLUSA, Dunavant, MAFF), individual farmers and organizations participating in the project's coordinating body – the Conservation Farming Liaison Committee (CFLC).

This study considers the period of Sida's involvement with the CFU, and the actors depicted in Figure 10.3, as the *action situation*.

Influences on the Action Arena

The IAD framework helps us to identify what factors might influence the interactions in the action situation by asking questions about the prevailing *biophysical*, *socioeconomic*, *and institutional conditions* of the agricultural sector in Zambia. The *biophysical characteristics* help us define the problem of natural resource management in Zambia, providing a rationale for the promotion of the CFU technical package. The semi-arid conditions in the south and central provinces of Zambia make conventional farming techniques inappropriate, mostly because of a popular belief that it is necessary to plow the soil before planting. The reli-



Zambia, CFU project. Demonstration farmers in Southern Province. Krister Andersson, Indiana University.



ance on oxen-assisted tillage prevents the farmers from doing the "right things at the right time" (CFU staff interview, 2000). Since, according to this popular belief, the land cannot be plowed until the rain falls and the seeds cannot be planted until the soils are plowed, farmers are forced squeeze whole series of decisive farming activities into a very period short time, typically a couple of weeks.

The importance of trying to shorten the time lag be-

tween plowing and planting is highlighted by the empirical observation that for each day the planting of seeds is delayed after the season's first rainfall, farmers lose 1.3 percent of their yield (CFU, 1997). This means that farmers who are ready to plant two weeks after the first rainfalls lose out on almost a quarter of their potential harvest yields (ibid.: 6). Since the conservation farming approach does not rely on plowing, farmers do not need to wait for the rains to plant, but can already have the seeds in the ground when the first rains come.

Community Attributes

For the CFU to be effective in the production of the good, their strategy needs to address sociocultural factors in an explicit fashion. A first factor is that farmers have grown accustomed to not having to repay loans because government officials and politicians have supplied them with fertilizers and seeds in the past. These supplies were often given on loan terms, but since the repayments were seldom enforced, they were *de facto* donations. The CFU addresses this by disallowing participation in the CFU unless farmers honor agreements of paying back the fertilizer and seed inputs that the project offers to farmers as a loan.

Another factor is that during the one-party era, farming – especially the cultivation of maize – was heavily subsidized. These subsidies made the

whole sector extremely inefficient, and the subsidy culture in turn produced a monoculture of maize production, even in areas where other crops have been grown successfully; indeed, knowledge of how to grow these other crops is disappearing with the older farmers. One of the main goals of the CFU is to recover this knowledge and diversify smallholder production. The CFU strives to achieve this through a crop diversification program that selects crops with an eye on the market as well as the biological feasibility.⁹

A third factor is that, despite the fact that an epidemic of Corridor disease in the 1980s wiped out the vast majority of cattle for the Zambian smallholder, the reliance on oxen in small-scale farming remains strong. There is a general reluctance to abandon the oxen-draught plowing practices partly because this is regarded a more "modern" and "developed" way of farming. Using the hoe, as prescribed by the CFU, is associated with a past era when no other farming tools were available. Consequently, there is a certain degree of prestige associated with the use of oxen and plow as compared to the technologically less sophisticated hoe. Part of the challenge for the CFU is to overcome this cultural discrimination against "going back to the hoe" (Z29-Z36). The CFU addresses this challenge by selecting and working with demonstration farmers who are highly regarded individuals in their communities. If these individuals, who have earned the respect of their neighbors, demonstrate that conservation farming indeed produces better results than using the plow, then neighbors are more likely to start experimenting with conservation farming themselves. The use of demonstration farmers has proven to be an effective way of overcoming the cultural barriers to accepting conservation farming.

Institutional Context and Rules-in-Use¹⁰

The CFU's success is, in part, attributable to its flexibility. The formal rules of the agricultural sector are not necessarily the rules-in-use; the CFU managers' understanding of this discrepancy has helped its functioning.

Although there are *formal* rules in the bureaucracy that constrain individuals to take advantage of the public provision of goods, a study of the agricultural sector's *rules-in-use* tells a different story. The elites within the government party hold the political authority to control the outcomes of the legislative and judicial processes. The hierarchical structure within the party can stifle all attempts to divert from the officially endorsed party line. The existence of the strong one-party system weakened the accountability mechanisms between politicians, the bureaucracy, and the citizenry, despite the new multiparty democracy. The weak accountability mechanisms

⁹ Crop diversification is inherent to the conservation farming approach since it requires at least three crops to be annually rotated from one section of the plot to another. Each individual farmer selects a minimum three crops with the advice of the extension officer.

¹⁰ For a more thorough discussion of the central importance of rules-in-use, see Chapter 2 on the IAD framework.

anisms are evidenced by repeated interventions in the agricultural sector by politicians. A case in point is the use of fertilizer imports for purposes of political campaigning: while formal rules prohibit this, politicians running for reelection regularly pass out fertilizer to woo voters. Even if the civil servants at MAFF wanted to intervene and put an end to this behavior, it would be difficult if the politicians in question had the support of the party elite (Z-13, Z-27, Z-28, Z-53).

Even though the formal rules require MAFF to organize meetings and prepare reports for its projects, it has had problems living up to these commitments. Several donors observed that due to shortages of qualified personnel at MAFF, its handling of the reporting to donors is not yet up to par. This has led donors such as the World Bank, Sida, and NORAD to seek alternative ways of supporting activities within the Agricultural Sector Investment Program (ASIP) and, in effect, bypass the administrative bottleneck of MAFF and deal directly with the operational entities of the projects. The World Bank now directs most of its activity support to the district levels, while bilateral donors such as Sida and NORAD provide an increasing part of their support to agriculture through private sector initiatives such as the CFU and the Economic Expansion to Outlying Areas Project.

When the World Bank coordinated the ASIP in the mid-1990s, it was formally agreed by the GRZ and the consortium of donors that a series of sector reforms were to be put in place before the launching of the MAFFled program. One of the agreements was the retrenchment of half of the existing 6,000 extension officers and the subsequent salary raise for the remaining officers. While the retrenchments were carried out as planned, the promised salary increases were not. The result is that MAFF employees in general continue to be unmotivated and underpaid and are often forced to take on side-jobs to make ends meet. A MAFF employee with a university degree currently makes approximately \$45 per month (Z-22, Z-33). Extension officers make even less. The current working conditions do not allow MAFF employees to do their jobs properly because they cannot afford to spend the required eight hours at work. These working conditions constitute a breeding ground for rent-seeking and opportunistic behavior, which are difficult for development projects to change. Development projects that do not take these rules-in-use into account make things worse when they inject resources into a rent-seeking bureaucracy. The increased availability of funds tends to fuel the rent-seeking process (like in India, see Section 9.4).

Another less obvious implication of the actual institutional context is the effect it has on the behavior of MAFF employees in the interaction with personnel from externally funded development projects. The differences in salaries (and thus professional status and prestige) may inhibit the development of an environment for mutual learning. Extension workers who earn less than 5 percent of the CFU directors' salaries might be reluctant to be advised by their well-paid colleagues (Z-8, Z-17, Z-27, Z-28).

Having noted the difficulties faced by the traditional sector projects channeled through MAFF, the CFU sought an alternative strategy through which it could operate independently from MAFF while, at the same time, collaborate with MAFF in the implementation of activities. Being operationally independent from MAFF, however, has not meant that the CFU operates in isolation from MAFF. In fact, CFU staff has actively worked with MAFF staff at all levels in promoting conservation farming technology primarily through study trips and training activities for staff. One result of this is that the Minister of Agriculture has made the promotion of conservation farming a priority policy for the entire ministry.

Patterns of Interaction: Incentives and the Conservation Farming Unit Project

Decision making at the collective-choice level involves the planning of CFU activities financed by Sida and other donors. Several forums join the main participants who have a say in the definition of strategies and rules of project implementation. Sida and CFU project managers are the most important actors at this level as Sida's support goes directly from the Embassy to the CFU. Two other actors play influential roles in the decision making: MAFF and the Sida consultant who is hired to monitor the progress of the project. Other collective-choice forums include Sida's quarterly reviews with CFU project managers, evaluations and mid-term reviews of project activities, informal forums where Sida representatives interact with a broader set of sector actors, for example, the Agricultural Consultative Forum (ACF) and the Conservation Farming Liaison Committee (CFLC).

The CFU project represents a sharp contrast to the traditional government-to-government support. The project's relative decision-making autonomy from MAFF and other government agencies is one of the project's fundamental collective-choice-level rules. This rule of administrative independence makes it possible for the CFU to adopt a flexible and experimental approach that evolves with the challenges that the project faces. Below we outline the incentives faced by each of the four central actors at the collective-choice level.

Incentives of CFU Project Managers

The historical background of the externally supported activities in the agricultural sector in Zambia explains a great deal of the current funding opportunities for project entrepreneurs. The past failures of the traditional sector support via MAFF have made donors wary of the limitations of this kind of support. Having noted several donors' willingness and even preference to bypass MAFF in agricultural projects, project entrepreneurs have an incentive to develop projects with private sector actors since these are more likely to achieve positive short-term results.

Considering the donors' knowledge of the failures of traditional projects to have an impact at the individual farm level, project entrepreneurs, such as CFU project managers, have an incentive to introduce and promote better farming techniques directly to small-scale farmers.

The CFU strategy to achieve sustainability is straightforward. The project staff maintains that the sustainability lies with the utility of the technical package rather than with the project. In order to achieve sustainability, the project must "do the first things first." This means that the viability of the idea must be tested and validated by farmers before it can be institutionalized by a second- or third-degree organization. The project has been criticized for not having a clear vision of how to institutionalize the technology, but it was not until very recently that the conservation farming technology was recognized as a valid technical package. Now that the technology has been validated, its future institutional home has become a crucial issue. What are the incentives of CFU managers to pursue this strategy of institutionalization? In short, because Sida and other donors demonstrated such a keen interest in the CFU approach, the CFU project managers have a strong professional stake in the success of the project's concept. The managers have been careful to expand slowly, to be highly adaptive, and to work with other organizations on the ground. Further, knowing that farmers may discount the advice given to them by a temporary consultant, the CFU has worked with extant NGOs so as to gain the trust of its target population quickly.

Incentives for MAFF

Although MAFF is only peripherally involved in the decision making at the collective-choice level of the CFU, it remains a central actor in the sector. If the technology is not endorsed by MAFF, its prospects are limited for wider dissemination and adaptation at the national level. The fact that MAFF is being bypassed by an increasing number of externally funded projects, even the ones included under the ASIP umbrella, means that it has lost some of its importance as a central actor in the sector. While this situation could induce MAFF to attempt to obstruct the projects that do not benefit them directly, MAFF managers have instead decided to recognize its inferior level of performance openly in order to attract funding for sector reform projects. The recent acceptance of the conservation farming technology as a part of MAFF official extension policy follows this logic.

Incentives for Sida

Given the history of meager results of support to the agricultural sector in Zambia, Sida program officers faced incentives to propose that the organization support a new, different, and innovative approach. The relative low cost of the CFU project support reduced Sida's risk. Such a nontraditional project also gives Sida officers an incentive to follow and support it with extra care. The small size of the project (SEK4.2 million), however, may in and of itself generate a disincentive for Sida to recommend that it be supported. The recent increase in Sida project allocations for Africa and the low-level staffing of field missions generate incentives for Sida management

to focus on larger projects. Larger projects may not require much more time to prepare and review than considerably smaller ones but, from the donor's perspective, the larger projects have the advantage of absorbing more money and thus improving disbursement efficiency. Such a focus on efficiency may be in tension with the object of sustainability.

• Incentives for Conservation Farming Promoters

The effectiveness of extension officers in promoting the conservation farming technology is likely to be linked to the farmers' perception of the extension workers' vested stake in the program. A short-term consultant will hardly ever be perceived as having the same stake in a project as would an extension officer who will engage in repeated interactions with the farmers and whose future personal well being is linked to the success of the promoted technology. The result is that the consultants rarely enjoy the same credibility as the national extension workers. The team's assessment of the farmers' perception of CFU staff credibility would suggest that farmers have put a great deal of trust in the people working for the CFU. The sense of trust between farmers and field staff increases the prospects for effective coproduction in the area of conservation farming.

Outcomes: Implications for Ownership and Sustainability

The CFU has enjoyed positive reviews and has been endorsed by the Minister of MAFF. They have reached thousands of farmers with their technology package and expect to reach thousands more each year they are in existence. As impressive as the empirical results of conservation farming technology seems, its technology is not by itself sufficient to increase the welfare of Zambian farmers. The knowledge of how to maximize yield is certainly an extremely valuable asset for any farmer, but the farmer is not likely to reach its welfare potential until he or she acquires the knowledge of managing the entire farming system, including choosing the right crops, harvesting and selling at the right time, and to the right price and buyer. It will be the conservation farming farmers' ability to acquire these management skills that will ultimately determine how far the CFU will go to contribute to the overall project objective of poverty reduction in Zambia.

The CFU is not self-sustaining and most likely will never be. While it does garner revenue by working with NGOs, it remains a project based on technical assistance (we found no plans to have the farmers themselves pay for these extension services). Neither is it likely that the government's own agents in MAFF could be as efficient as the CFU, although if MAFF picks up the project it may have a longer shelf life. The impacts of the CFU, on the other hand, could be quite sustainable if farmers see their incomes rise over time, although this depends upon more than CFU technology alone: existence and knowledge of markets, weather, etc.

The question of ownership is quite complex when looking at the CFU. Donors, as usual, are part owners of the CFU. The CFU managers themselves

have a great deal of the project's ownership: they have designed and implemented the program and have personal stakes in its outcomes. If local farmers do not want to participate, the CFU can move on to another set of farmers who might. Thus, while the targeted populations certainly have a say about whether they will participate in the program, they do not possess any significant management powers within it. Without the strong commitment and vision of the CFU managers, the program would most likely lose steam.

This issue ties directly to the possibility of MAFF's future involvement in CF. There is talk of MAFF adopting the extension of CFU concepts. But many of MAFF's extension personnel, in contrast to the CFU, are not only demoralized and underpaid but have since long promoted the conventional farming practices that conservation farming tries to eliminate. Extension officers who in the past have promoted the conventional practices may be concerned with losing their face with their clients, admitting that they had gotten it wrong before but now hold the answer to increasing yields. If the extension officers do as they are told and go along with the prescribed MAFF policy to promote CF, it may create a credibility problem in the relationship to their client farmers. The credibility of the extension officer is a crucial factor for the farmers' incentives to adopt CF. In the field, the farmer's observation of results will determine the incentives to expand, continue as usual, abandon, or only slightly modify the current conservation farming approach. The farmers' incentives to obey the advice given by extension officers will depend on their assessment of the credibility of their advice. This assessment will in turn determine the discount rates (by way of affecting the level of perceived uncertainties) for calculated conservation farming benefits. Thus, expansion through MAFF, one way of sustaining the conservation farming idea, may actually undermine the usefulness of the CFU approach.

10.5 Conclusion

The three brief cases we explored in Zambia exhibited sets of incentives that had both different and common elements. All three occur in the context of an aid-dependent country: aid is rarely refused by the Zambian government (Z-12, Z-56). But aid appears only rarely to have changed the underlying institutions that contribute to poor policy outcomes. The Kafue Gorge case exemplified the traditional way of doing development aid and its subsequent moral hazards: the government continues to underinvest in the electricity sector while many donors keep it going with aid. The CFU is an example of a low-cost project led by highly motivated individuals whose preferences are probably very closely aligned with Sida's, and whose work can be rejected by beneficiaries. These factors help the CFU to achieve the success it has so far enjoyed. The ERB was the strongest case of institution building we examined in all of this report's cases. Its long-term impact could be enormously important to the effective restructuring of the electricity sectors, given its continued independence. But the ERB also shows that institution building will be as much a political issue as a technical one.

Chapter 11 Lessons and Recommendations

11.1 Introduction

This study has examined how incentives structured in the system of development assistance affect sustainable outcomes. In Chapters 1 through 4, we explored how all collective human endeavors are plagued by incentive problems related to motivation and information. We then investigated how institutions shape the choices of individuals and the organizations within which they work, and how these institutions can lead to better - or worse - outcomes. In the sphere of foreign aid, these organizations are arranged in a complex set of relationships that we called the International Development Cooperation Octangle. In Chapters 5 through 9, we employed these theoretical insights to analyze the incentive structures of Sida's aid modalities, the organization of Sida-Stockholm, development assistance contractors, and specific Sida-funded projects in India and Zambia. We found many institutions – some inherent in development assistance and some specific to the structure of Sida – that foster incentives that both promote and undermine Sida's goal of sustainable development. In this chapter, we explore some options that may help Sida mitigate some of the perverse incentives found in the system of aid.

This chapter contains suggestions about how to improve development assistance. It is, first of all, important not to lose sight of how well Sida already accomplishes many of its tasks. Throughout our work in Stockholm, India, and Zambia, the Workshop team was consistently impressed with the caliber and motivation of Sida staff. Indeed, these skills and commitments allow Sida to overcome some of the perverse incentives that the system of development cooperation generates for its participants. Time after time, we encountered Sida staff members who had worked far beyond the normal demands of their jobs in order to ensure better outcomes for the Swedish development assistance program. Indeed, Sida's courage to request this consultancy is testimony to its commitment to better the plight of the needy in developing countries. Such dedication increases the chances for sustainable development, but is not sufficient to achieve it.

In the rest of this chapter, we indicate how things might be done better, building on what Sida seeks to accomplish with its staff and resources. This chapter, then, responds to the Terms of Reference (TOR) for this study (see Appendix D). The TOR asks us to examine the relationship between aid, incentives, and sustainability, and to suggest areas where it would be most relevant to carry out reviews or evaluations to improve the organization and management of aid activities at Sida. We identify eight areas below.

11.2 Awareness of the Role of Incentives

Most individuals with experience in development cooperation realize that incentives underpin aid effectiveness and sustainability. Yet, while we may be sensitized to the importance of institutions and the incentives they produce, the knowledge underlying this realization is often tacit and, moreover, is rarely transmitted in a systematic way. A more explicit and systematic understanding of institutions and the incentives that emerge within particular organizational structures, as well as mechanisms for transmitting this knowledge, are therefore crucial to improve Sida's mission effectiveness.

Recommendations

We suggest formalizing an understanding by Sida staff (with, in some instances, their counterparts in development cooperation) of incentives in the system of aid through Sida's training modules. Such training should draw on the experiences of more experienced Sida staff members. It should explicitly confront how the institutions of development assistance affect incentives, and hence the sustainability of aid. Such initiatives will foster a keener awareness of project and program design and implementation, yielding higher chances of success. Sida can react to the findings of this report in one of three ways. It can implement a pro-forma response, do nothing, or resolve to address its mission in a meaningful way.

In the first instance, yet another short training course for Sida staff on yet another topic – in this case on incentives – will not suffice to overcome the problem of perverse incentives. In fact, we doubt that any development cooperation agency can fully mitigate the structures that produce unwanted sets of incentives. Powerful incentives can emerge from within the structural context of aid over which a development agency has little control. The structure of political institutions in both donor and recipient countries, for instance, often begets rules that work directly against effective development aid. The current ratio of staff per development aid budget within Sida itself is just one of numerous rules that work in unanticipated ways. At best, it constrains the effective design and delivery of development assistance. At worst, it can have the counterintentional effect of undermining the possibility of sustainability.

Sida has often remained passive in the face of critical analysis. In fact, many, if not all, of the issues highlighted in this report have been mentioned by others in previous Sida reports and evaluations (although we believe we are the first group to examine fully their theoretical foundations and likely out-

comes), often without meaningful follow-through. Funding for development assistance in general can be expected to continue despite its problems because such funding is invariably de-linked from the sustainability of funded efforts. There are presently no institutions or competitive mechanisms that calibrate and reward the efficient delivery of sustainable aid.

Ultimately, the only way that an understanding of incentives will lead to better development assistance is through the resolve of an agency's own staff to create rules that promote "good" incentives. Such rules may be costly in terms of an agency's own time and money, and may not necessarily lead to greater resources from their government. We would argue, however, that this investment to create better incentive structures will lead overall to better outcomes for development assistance.

11.3 The Nature of the Good

This report has emphasized that the "nature of the good" – or, in broader language, the physical and material conditions – is an important part of the context affecting the incentives of actors in any ongoing situation. As both our review of theory and case studies show, the nature of the underlying good and the nature of the aid intervention affect the incentives found in any development assistance project.

First, the underlying goods that are the focus of development assistance have a direct impact on incentives. Recipient country actors face collective-action situations when they wish to provide public goods, manage common-pool resources, or reform institutions so as to encourage entrepreneurship, investment, democratic development, and increased economic growth. The complex structure of these collective-action situations often yields problems that must be well understood if a donor is to introduce effective and sustainable improvements (see Appendix A). Such features are present in all sectors of development assistance. Case studies in this report have focused on the infrastructure and natural resources sectors and have highlighted the presence of information and motivational asymmetries that can inhibit rapid and sustainable development.

Second, once a donor enters a development arena, the characteristics of different aid modalities produce additional layers and varieties of incentives to different actors. The effects of whether aid is in the form of a grant or technical assistance, for example, clearly matters a great deal to the pattern of incentives facing different actors in the Octangle (see Chapter 4). The dimensions of moral hazard, adverse selection, and signaling problems differ by modalities as well as by the rules-in-use and by the community involved.

Thus, an IDA should understand the wider incentives involved in the underlying or core good as well as the more narrowly focused incentives related to its own assistance. Such an understanding, coupled with a desire for sustainable results, would most likely move away from projects that primarily involve

infrastructure provision and move more towards efforts in institution building. Providing infrastructure or hardware with no realistic plan of maintenance on the part of the recipient is a sure recipe for poor sustainability and donor dependence (although it allows the donor to monitor immediate outcomes more easily and to move large sums of money).

Recommendations

In considering future projects and programs, Sida should develop a clear analysis of the underlying collective-action problems that it is trying to ameliorate and how the characteristics of diverse aid modalities affect the incentives of all participants involved in development assistance.

11.4 Ownership and Sustainability

Sida, as an innovative donor, has rejected the idea of development assistance as a short-term infusion of funds from the wealthier to the poorer nations. This approach to development was based on early theories in development, which sought to use aid monies to facilitate major investments in the infrastructure of poorer countries. This was seen as a way to build capacity, allowing poorer nations to take off economically. Later theories in development emphasized the complementary need to improve governance and strengthen democratic procedures. These approaches have also not worked in many cases given that underlying and introduced incentives systems were, again, not properly taken into account. As a result, development assistance has often not produced sustainable results (Chapter 1).¹

Sida voices a strong concern for the sustainability of development cooperation. It considers that long-term positive change is a better return on investment than more temporary results. Sida seeks to improve the outcomes related to its efforts in development cooperation by giving ownership of aid to recipients. Managers at Sida insist that projects belong to the recipient agency, and characterize Sida's role as that of a concerned partner, advisor, and financier. Fostering ownership is thought to promote sustainable outcomes.

The recent stress by Sida and other donors on ownership is an implicit recognition of the problems that development cooperation generates for provision, production, consumption, and alienation (Chapter 1). If recipient agencies (and targeted beneficiaries) are included in these activities, perverse incentives may be ameliorated. Allowing the recipients to participate in the provision process may help align the incentives of donor and recipients as well as make better use of local knowledge and institutions. Participation in the production process may help prevent recipients from free riding on the aid. Participation

¹ Recent studies have found, however, that development assistance allocated to countries that have themselves invested in institutions that enhance economic performance is much more likely to have sustainable results (see Rodrik, 1999 and studies cited in Chapter 1).

in the consumption of benefits and costs may motivate greater concern for appropriate outcomes. Finally, participation in the alienation of aid may generate information likely to reduce the probabilities of continuing unsuccessful projects or programs. Thus, including recipients in true ownership can help solve some of the severe incentive effects related to information and motivational problems in development cooperation discussed in this report. As we have repeatedly stressed, however, this is not a sufficient condition to ensure sustainability.

Our theoretical findings demonstrate that applying the concept of ownership and sustainability to actual development cooperation relationships is, in practice, quite difficult. Our analysis shows that motivational and information problems in aid are very deeply embedded. As challenging as these problems are in the context of individuals with full ownership rights in an arena of well-enforced institutions, they pale in comparison with the multi-actor, multi-level, multi-owner characteristics of development assistance. Our representation of the system of aid – the Octangle – demonstrates how every dyad and triad in aid is subject to these motivational and information problems. And our analysis of different aid modalities and characteristics demonstrates that no type of development cooperation is free from powerful perverse incentives.

Furthermore, the difference between a *recipient* and a *beneficiary* of development cooperation highlights the difficulty of parceling ownership. In some cases, recipients of aid are the targeted beneficiaries; in other cases, the beneficiaries have little or no voice. The official owner is the national government that may in fact have little knowledge about or interest in the problems facing the targeted beneficiaries. The responsibility and accountability that an owner has, in the conventional meaning of the word, is transformed to nearly unrecognizable forms by the system of development assistance. When the owner is not one of the beneficiaries, endowing a distant government's agent with ownership may do little to change the perverse incentives of the beneficiaries or anyone else involved in traditional development assistance. Nor does it affect the flow and accuracy of information from beneficiaries to the official owner.

Our theoretical findings were buttressed by our experiences in the field. The Orissa Forestry project illustrates how multi-actor, multilevel relationships affect ownership and sustainability. In this case, Sida (Stockholm and India), the national and state governments, the state bureaucracy, and the consultants each shared some type of ownership over the community forestry project. Chapter 9 demonstrated how each of these actors confronts powerful incentives to pursue goals other than those outlined in the project. The result was a project in which responsibilities were not well understood, different actors were working at cross-purposes, and intended beneficiaries were not well integrated. The institutions found in this case nearly guarantee that even with full funding, the project will not meet its goals.

The case of Sida's forestry project in Orissa also illustrates how incentives created by power asymmetries at the bureaucratic level affect sustainability. The Orissa Forest Department, as other closed career hierarchical bureaucracies in India and elsewhere, can be depicted in terms of a rent-seeking model. Career aspirants compete in a market for jobs, with desirable postings going to the highest bidder. This structure encourages forest service officers to exploit the forest, forest users, and development cooperation to secure good postings. The incentives spawned by this bureaucratic organization lie at the root of the problem of forest degradation. Sida's attempts to reform the Orissa Forest Department to be more sensitive to community forest management run directly counter to the Forest Department's present set of incentives, making long-term change improbable. Long-existing, indigenous forest institutions – as practiced by forest users themselves – have been weakened by the policies of the Orissa Forest Department so that the former stewards of local forests no longer have much voice in the effective management of forests upon which they depend for fuelwood, fodder, and timber - indeed, their very livelihood.

Chapter 9 also illustrated that some types of ownership devolution may have the unintended effect of exacerbating the power asymmetries found within the recipient country. Sida's funding of equipment for a component of a large-scale power project in the state of Maharashtra, for example, has helped to increase power supply in India. However, this has created a bigger pool from which politicians can potentially hand out free power. Since the underlying free-rider problem remains unsolved, private investment in enhancing power capacity has still not largely materialized. In fact, the aid project may have made the free-rider problem even more severe by crowding out the private investment needed to expand the state's power capacity. By inadvertently strengthening the hand of Maharashtra's politicians, the aid intervention undermined indigenous capacities to sustain investment in power production. Much the same long-term consequence can be anticipated for the case of the Kafue Gorge Hydropower Project in Zambia (Chapter 10). And Sida's effort to foster new organizations and policies by supporting the Zambian Energy Regulation Board does not appear to be sustainable once external financial support to it is withdrawn (Chapter 10).

Despite Sida's important efforts to change the orientation of its development assistance, it remains in many important ways a *de facto* owner of development assistance. Sida remains the primary actor in decisions related to the terms of its funding and often has a large input into the design of the project. It is also clear that beneficiaries rarely exercise much ownership in most cases, especially when project implementers and project beneficiaries are different groups (which is the usual situation).

The everyday usage of the term "ownership" conveys an individual or organization with clearly defined responsibilities who receives the benefits and pays the costs resulting from its exercise of these responsibilities. Within development cooperation processes, responsibilities and accountability are unclear.

Who "owns" the project when things go wrong? The large number of actors within development cooperation allows each actor with partial ownership to deny full ownership, and therefore accountability. The entire Octangle may be filled with actors pointing to each other as the source of problems.

Given aid's complexity regarding relationships and incentives, it is understandable that Sida staff and documents should offer various views of ownership and sustainability. As mentioned in Chapter 1, Sida staff, recipient government personnel, and private sector consultants expressed different views of what the concepts of ownership and sustainability mean in practice. Defining these core concepts clearly is far from an academic exercise: in fact, our team would argue that it is an essential first step for any IDA that seeks to be more effective in its development efforts.²

Recommendations

We suggest that Sida revisit its concept of ownership. The common meaning of ownership does not translate automatically to the realities of development assistance. While the term has been fashionable within aid circles, it has rarely led to changes in the incentives facing actors in development assistance situations.

We argue that Sida needs to allow sufficient opportunities for the "owner(s)" to contribute to the design, implementation, and mid-course corrections of the project/program. A final step is to allow the owner full participation in the final evaluation of a project/program. We set out four criteria for beneficiary ownership. Beneficiary owners need to (1) enunciate a *demand* for aid, (2) allocate at least some of their own *assets* to the project or program so that they have a real stake in the way their own and other actors' assets are used, (3) obtain benefits, and (4) have clear-cut responsibilities and be able to participate in decisions regarding continuance or noncontinuance of a project.

Part of the success of the CFU project in Zambia is related to the fact that it allows beneficiaries a greater role in these actions. Farmers possess some input in the design of how CFU technologies will be used on their lands. Farmers must participate in the production of crops, and they consume all of its benefits and nearly all of its costs. And farmers can choose not to participate in the project at any time. As a result, better chances exist for longer-term impacts of this project than for most.

Genuine devolution of ownership may mean less control for Sida and its agent/contractor. While less control is not without its attendant risks, we argue that it is necessary to achieve more sustainable results.

Less control, however, does not mean less Sida involvement in ongoing activities in partner countries. In fact, we find that Sida staff can play a crucial facilitative role to ensure that ownership of activities is anchored primarily with

² While there could exist a Sida document in which ownership is clearly defined in a development assistance context, we found none in the documents we reviewed.

beneficiaries, and not taken over by consultants or individuals within recipient organizations. The incentive structures that emerge in each Sida-supported undertaking are greatly influenced by Sida's interventions, or lack thereof. In general, we think Sida staff in the field are overstretched in their work to gather and evaluate information about their projects and programs. Devolving ownership may involve allocating greater resources to project monitoring.

We further recommend that Sida focus on the concepts of responsibility and accountability as they relate to ownership. Sida staff should articulate which specific responsibilities they seek to devolve to which actors, and how such actors can be held accountable for their actions. Such an exercise should include an examination of the institutional context and the incentive it generates, as well as the incentives produced by different aid modalities.

As ownership is thought to affect sustainability, we also suggest that Sida revisit its idea of sustainability in development cooperation. As discussed in this report, this term's imprecision and application to diverse outcomes has left it without much meaning. Sida should make clear, in each project or program of development cooperation, precisely what is intended to be sustainable, how its development assistance helps produce sustainability, what time frame is being used, and how sustainability will be measured. Thus, project-planning documents should clearly identify the intended owners and include an analysis of the anticipated impact that this designation of ownership will have on sustainability. Such documents should also detail how meaningful ownership will be vested and what evidence will be gathered to ascertain success in these goals. In designing its projects/programs, Sida officers must also keep in mind that the greater the number of owners, the smaller the stakes will likely be for any particular owner to ensure success.

These recommendations are not easy palliatives. To implement them effectively will be, in fact, very, very challenging. The findings from our team suggest that development agencies have little time for developing, requiring, collecting, and evaluating such evidence. This task is also challenging since Sida finances projects and programs and thus always remains a *de facto* owner; Sida may find itself in a Samaritan's Dilemma. Further, Sida must operate within the political logics of its own and a recipient country, which may not be amenable to the aim of promoting sustainable development. Even so, steps can still be taken to improve a sense of ownership among recipients and beneficiaries.

11.5 Information and Learning within Sida

Sida, both as an organization and as a collection of talented individuals, can boast of a deep reservoir of knowledge and expertise in development cooperation. Even so, Sida's institutions have not employed this knowledge to its best effect. Given the high rate of turnover of staff dealing with any one project or program, and the lack of a link between career advancement and participation in sustainable projects, few incentives – besides personal moti-

vation – exist for individuals within Sida to be involved with a project after reassignment. These institutions detract from Sida's potential for organizational learning and ability to create better projects/programs.

Recommendations

We recognize that tying individuals to the design and implementation of programs and projects in addition to their basic administrative duties is a sensitive and difficult endeavor. Most staff would want to avoid the risk that this might pose to their professional position. Even so, Sida can improve information asymmetries within its own organization by, at a minimum, reassigning staff to mid-term evaluations of projects they have earlier been associated with so as to capture more effectively their knowledge of original conditions and design. A more challenging, though ultimately fruitful, approach would be to reward staff, especially at the manager level, for more sustainable projects.

11.6 Information and Learning within Development Cooperation

Perverse incentives thrive in the absence of information. The motivation and information problems of development cooperation create sets of perverse incentives for the actors involved. In many, if not most, instances of development cooperation, most of the actors within the Octangle are not motivated by achieving sustainable outcomes; or, if they are, there are still other goods they prefer more. It is not that accountability does not exist. It is that most Octangle actors are generally not directly accountable for producing sustainable results. IDAs seek first to meet the demands of their own country's government, legislatures, foreign ministries, staff, and organized interest groups. Recipient governments first attempt to remain in power by targeting resources to constituents. Consultants and NGOs seek to please their IDA-employer (albeit this may include successful, sustainable projects). Highly critical evaluations can upset these actors' abilities to achieve their immediate goals. In other words, no effective demand exists for meaningful evaluations of development assistance.

These incentives often lead to a watered-down evaluation process (Martens, 2000). Evaluations come late in a project or program's life, are not linked to the career paths of the IDA staff, and generally do not include the views of the intended beneficiaries. Further, if consultants are the actors who perform evaluations, there can be incentives not to suggest the end of assistance to any project/program. Evaluations provide a critical feedback mechanism between beneficiaries and donors. When evaluations are missing, the likelihood of sustainable outcomes decreases.

Recommendations

The incentives and outcomes of evaluations as currently being performed are already well-known to Sida. We suggest that Sida take the steps outlined in its own reports about evaluations (e.g., see Sida, 1999a). A system of evaluations is one of the few ways available to increase the level of information for all participants in development cooperation. And with increased information comes a chance to learn and thus improve outcomes. We also recommend that Sida consider returning to its earlier practices of organizing mid-term evaluations so all actors involved in a project can learn and adjust during the second half of a project. Midterm formal evaluations are particularly critical to improving sustainability. Such evaluations would allow project participants to learn more effectively about their own activities and, if needed, adjust strategies mid-project in order to enhance sustainability — or even to disinvest in projects that are not expected to be sustainable.

All those affected by projects – particularly the beneficiaries – should be involved in the evaluation of projects. This will encourage beneficiaries, donor officials, and contractors to learn of each other's concerns and from each other's experiences. In cases where beneficiaries are numerous, random samples can be done with a survey tool. For some projects, focus groups may be more appropriate. Projects across Sida should also be randomly selected to study thematic issues raised in these evaluations. To increase learning within Sida, staff with past involvement with the project/program should be invited to project evaluation discussions.

Evaluators should be instructed to examine the level of ownership in a project or program, and the impact of ownership on sustainability should be seriously discussed. Evaluations should be read and discussed formally both with recipient country officials, with beneficiaries where possible, and at Sida. They can then be used as guides to future projects. Staff with past experience on a particular project should be encouraged to participate in the discussion of these evaluations. To support this practice, evaluations should be reviewed in conjunction with staff performance reviews.

11.7 The Role of Consultants

Given the policy within Sida to reduce its role in the implementation of projects and programs, and the fixed administrative staff levels, the role of consultants has increased in Sida's delivery of development assistance. This role has important consequences for the ownership and sustainability of aid.

Consultants clearly possess some level of ownership over a donor's projects and programs. While their choices are constrained by the terms of the contract and the ability of the donor to monitor performance, they often exercise in practice significant control over assets they receive from the donor. Consultants also possess important informational advantages with respect to a donor. Consultants often have greater knowledge about project realities in

the recipient country than Sida staff, particularly given the latter's turnover rate; and consultants clearly have more information about their own sector. In many cases, consultants also have more control than the intended beneficiaries have: often consultants can choose their target (beneficiary) populations. Targeted populations, on the other hand, rarely choose consultants. Giving them the power of choice would be an example of giving more meaningful ownership to a targeted population.

If we assume that consultants seek long-term relationships with donors, then they will worry about their reputations and will try to please their donor-employer. This yields two effects. First, given the information asymmetry about how the project is actually working, consultants have incentives to provide information about the project that Sida staff would like to hear (part of the principal-agent problem). In the absence of well-executed, external evaluations, this information asymmetry can lead to the continuation of projects that do not produce sustainable outcomes. Sida's proposed increase in funding for the African region, while holding the number of staff constant, will exacerbate existing limitations in monitoring capacity.

Second, a consultant concerned with possible future contracts with a donor agency is likely to maximize control over a project, rather than pass control to the targeted individuals for aid. Passing along ownership to the beneficiaries is perceived to be risky – they may not perform in the ways that a consultant or donor wants. Reducing this uncertainty by retaining control, the consultant maximizes expected returns from future contracts. Such control is also affected by the nature of the good. The provision of physical goods is less affected than the provision of less measurable goods. The more difficult the measurement of the good being provided, the more likely the consultant attempts to control its provision so that donors are satisfied.

Inclusion of consultants in the pre-design and design phases of projects also produces incentives to prioritize the needs of the consultant over the recipient or beneficiary. Tied-aid can reduce the recipient's level of ownership and decrease a consultant's incentive to perform since this can reduce the competition for the contract with Sida. This depends on the extent of competition in particular areas of expertise within the donor country. In the case of energy and Sida, for example, there are only two major Swedish consultants (Swedpower and Sweco), and even these are part of the same parent company.

Recommendations

We suggest that contracts to consultants should specify outputs Sida believes are important, measurable, and less subject to information asymmetries and manipulation. These measurable outputs should be clear enough to be used in any subsequent evaluation. All IDAs try to get around missing and asymmetric information problems by contracting consultants they know well. Reputation effects do help mitigate uncertainty and some of the principal-agent problems discussed in Chapters 3 and 4. But rather than depend on

reputation alone, Sida should discuss with its consultants exactly what it considers as success, especially for its major goals of ownership and sustainability.

We further suggest that Sida follow the example of the British ODA and untie all of its aid. This is actually the official policy as outlined in the Sida Method Handbook of 1990, and Swedish firms are now winning Sida contracts at a decreasing rate. The rate remains high enough, however, that many recipient government officials continue to think of Swedish assistance as being tiedaid. Expanding the open international bidding process should lead to greater competition and, ultimately, better performance by consultants.

11.8 Putting Beneficiaries First

Effective and sustainable development assistance must center on beneficiaries and the problems they face with respect to their collective-action problems. Evaluations of projects and programs with a focus on beneficiary incentives can help a concerned donor to address how individuals in the action situation relate to each other and how they might overcome their problems and dilemmas through institutional change. This process requires that beneficiaries – rather than recipients - take ownership of their developmental prospects in all four senses of that term (i.e., provision, production, consumption, and alienation). The tools developed in this report can help. They allow the analysis of the institutional change that will be required to allow beneficiaries to overcome their collective-action problems and realize their own developmental potential. Supporting research on indigenous institutions, norms, and local knowledge systems also provides essential understanding for helping to build contemporary institutions on the healthy roots of earlier normative systems used to solve collective-action problems. This requires, as well, that donors rethink their own role. Sida's mission statement – creating the requisite conditions for development – points in the right direction.

Recommendations

Development assistance should focus on the intended beneficiaries and the problems they face. To be sustainable, aid should address how beneficiaries relate to each other in dealing with diverse collective-action problems. Without this deeper analysis and programs focused on institutional change to facilitate the long-term improvement in the lives of beneficiaries, aid is likely to provide only short-term benefits.

As part of the design phase of any project or program, we suggest that questions like the following be asked:

- What underlying collective-action problem(s) do beneficiaries face?
 - Is it a public good problem/free-rider problem/tragedy of the commons problem? (For example, the Indian power case is at root a free-rider problem.)

- What are the basic incentive problems facing beneficiaries at an operational level? Motivational? Missing information? Asymmetric information? Other?
- What are the developmental implications of this collective-action failure?
- What rules or norms have been used in this cultural tradition in the past that may be the source of modern rules that resonate with beneficiaries as fair and can be understood easily?
- What incentives have precluded beneficiaries from resolving their own collective-action problem at a collective-choice level in the absence of aid? How would they be affected by a proposed aid project or program?
- Are needed institutions missing or weak, or are perverse institutions in place?
- Would a modification in rules affecting this underlying problem be threatening to the power elite of this country?
- In what ways have previous aid interventions altered similar collective-action problems?
 - Did aid abet or exacerbate power or information asymmetries or adverse selection?
 - What ownership attributes do the targeted beneficiaries possess?
 - Have aid interventions affected the capacity of the beneficiary group to address the collective-action failure?
 - Have they exacerbated existing perverse incentive structures (as is the situation in the Indian power case)?
- What are the implications for sustainability?
 - How have the underlying collective-action problems been addressed by the aid intervention?
 - In what ways are such issues included in the feedback loops of the Octangle?
 - Given the roles of the contractor and the recipient, are the prospects for an appropriate solution to the underlying collective-action problem enhanced or reduced?

The Sida Desk Officer and the intended beneficiary are separated by many intermediary actors,³ each one with an incentive to select and transmit only the information that is likely to benefit him or her privately. The information asymmetries in this multilayered arena make it very difficult for the Sida Desk Officer to appreciate the reality on the ground.

³ Desk Officers rely, in important respects, on the input of embassy colleagues, consultants, and national government officials. These intermediary actors, however, seldom have direct contact with the ultimate beneficiaries of the development cooperation and also have to rely on secondary sources for beneficiarylevel information.

Sida has taken important steps to address the information asymmetry problem. We were particularly pleased to learn about the encouraging results of Sida's pilot efforts to decentralize a wide range of management responsibilities to selected embassies. The experiment may serve to reduce the number of intermediary layers in Sweden's development cooperation program. While such structural modifications might improve the possibilities for decision makers to acquire essential beneficiary-level information, it will hardly be sufficient to generate stronger incentives for Sida officers to actively seek out information about sustainability issues in ongoing field activities. As suggested by the evidence in Chapter 6, Sida can improve the conditions for learning about sustainability by addressing current constraints in both organizational and individual learning.

11.9 Development of Knowledge in Recipient Countries

While the learning components of most foreign aid are project/program specific, the process of development is itself complex and broad-based. Local capacity is needed to integrate learning across donor projects with knowledge of indigenous institutions. Sida can help recipient countries increase their incountry ability to create and analyze alternative forms of development and institution building, based on the analysis of the structure of incentives in the process of development assistance. Such an enterprise may be most useful in Africa, where educational opportunities for such training are highly constrained.

Recommendations

We suggest that Sida fund a program that (1) identifies scholars in several major African universities interested in development and institutions; (2) fund said scholars for at least one year at competitive salaries; (3) train them in institutional analysis and development, using both African and non-African academics as source persons; (4) help them develop a syllabus for such courses at their own institutions; (5) help them to create materials for such a course; (6) support their teaching of this course to undergraduates, graduates, and interested policymakers; and (7) bring these scholars together annually to create better courses based on their ongoing research and experience.

Such a program would be on the cutting edge of development: a direct effort to give recipients the tools to evaluate the development assistance they receive. This innovation would not only develop capacity that Sida could use directly, but also, more importantly, be a step in the more general process of empowering the citizens of recipient countries to make more effective use of development cooperation.

⁴ Dar es Salaam, Hanoi, and Managua.

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Appendix A The Institutional Analysis and Development Framework

This appendix is divided into four sections. The first section provides a basic overview of the IAD framework – its history and broad capabilities. The second section focuses on the core analytical construct we use in all analyses – the action arena composed of an action situation and actors that interact within it. How to examine patterns of interaction, outcomes, and the evaluation of outcomes is addressed in the third section. The fourth section digs into the contextual factors that affect all action situations by examining rules, physical and material conditions, and the general attributes of a community. The conclusion of the appendix focuses on the use of IAD in incentive analyses.

An Overview of the Institutional Analysis and Development Framework

Since its formation in 1973, Workshop scholars have developed a useful theoretical tool called the *Institutional Analysis and Development* (IAD) framework (Kiser and Ostrom, 1982; Oakerson, 1992; E. Ostrom, Gardner, and Walker, 1994). The IAD framework has been used as the foundation for a large number of studies including those that (1) measured the impact of metropolitan-area governance structures on urban service delivery, (2) gauged how institutional incentives affect infrastructure sustainability in developing countries, (3) examined how diverse forms of organization affect irrigation system performance, and (4) explained how ecological conditions combined with institutional structure affect land use change dynamics (particularly changes in forest cover, extent, and composition) (see McGinnis, 1999a, b, 2000). It highlights the ways in which policy outcomes are jointly shaped by physical and material conditions, rules-in-use, and the attributes of community.¹

A Tool for Studying Development Cooperation and Sustainability

The IAD framework serves as an appropriate tool to study development assistance and sustainability for several reasons. First, the IAD framework has a multidisciplinary origin. One cannot study development assistance processes

¹ A similar framework was used by Alexis de Tocqueville (1945) in Democracy in America, as his first three chapters of volume 1 clearly lay out.

drawing on one discipline alone. All of the social sciences – anthropology, economics, history, political science, and sociology – have developed important concepts and theories that are relevant for understanding why some development processes are sustainable while others wither away when external funds are no longer available. Sociologists are interested in value systems and how humans organize their relationships. Economists are concerned with the efficient use of resources. Anthropologists and historians have developed tools to analyze the context within which a situation is located. Political scientists tend to be focused on the power relationships among participants. IAD provides a more general language than the languages developed by any single social science discipline (but one compatible with all of them) needed to address development assistance puzzles.

Second, IAD presents a practical method for dealing with multiple levels of analysis. When individuals interact in repetitive settings, they may be in *operational* situations that directly affect the world, such as the construction of a power plant or the planting of an agricultural field. Alternatively, they may be making decisions at other levels of analysis that eventually impinge on operational decision-making situations. Elected officials in legislative or executive decision situations make some of these policy decisions. These policies or *collective choices* are themselves made within a set of *constitutional* rules that affect who will make policy decisions using what type of procedures. The nested structure of rules within rules, within still further rules, is a particularly difficult analytical problem to unravel for those interested in the study of institutions and incentives. IAD provides a way to communicate about processes that occur at all of these levels as required for a study of aid, incentives, and sustainability.

Third, IAD allows for investigation of configural processes. Configural processes are those where the relationship between two or more variables is dependent upon the values of at least one other variable. In other words, the final outcome of a configural process is not a simple additive process. Many of the causal processes related to the study of incentives are basically configural or interactive in nature. This is particularly the case with the rules that affect incentive structures. In order to predict and understand the effect of a change in one rule, one must frequently know the other rules in effect. The configural nature of rules makes institutional analysis a more difficult and complex enterprise than studies of phenomena that are strictly additive. IAD provides a framework for relating the complex configural processes found in development cooperation.

Frameworks, Theories, Models

The study of institutions and incentives depends on theoretical work undertaken at three levels of specificity: frameworks, theories, and models. *Frameworks* are meta-theoretical schema that facilitate the organization of diagnosis, analysis, and prescription. The IAD framework provides a general list of the types of variables that should be used to analyze a relevant problem. In

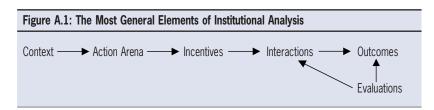
other words, the framework identifies the *universal* elements that studies of incentives need to include.

The development and use of *theories* enables the analyst to specify which elements of the framework are particularly relevant to specific kinds of puzzles and to make assumptions about these elements. After using the framework to ensure that the important questions are asked, an analyst needs to utilize theory to put the answers together, explain processes, and predict outcomes. Economic theory, game theory, the theory of complex adaptive systems, transaction cost theory, and theories of public goods and common-pool resources are all compatible with the IAD framework. We will make use of all of these theories from time to time within the body of this report. Game theory is a particularly useful tool for institutional analysis when it can be reasonably assumed that actors have a high level of common knowledge, the capability of processing information, and strategically choose actions to achieve the desired goods, as is illustrated in the Technical Appendix B by Gardner and Waller.

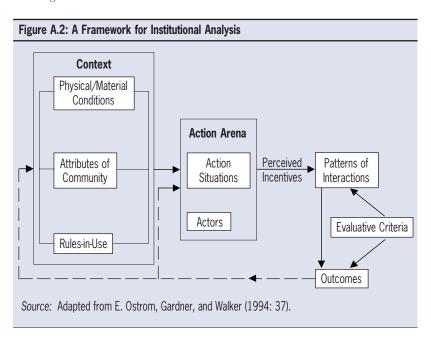
Models make precise assumptions about a limited set of parameters and variables and enable one to make precise predictions for a limited set of specific settings of relevant variables. Specific game theory models of several core processes involved in development assistance are presented in the Technical Appendix B.

Doing Institutional Analysis

When conducting an institutional analysis, the analyst needs to identify the arena that is of direct relevance to the problem being examined, the context that frames and affects that arena (including other relevant arenas), and the behavioral interactions and outcomes that are likely. The context of a situation provides the initial conditions or "the environment" that structures the efforts to achieve outcomes (Ashby, 1960). It is within that context that an analyst can identify an action arena and its incentives. Actors facing these incentives interact and generate outcomes. The analyst may apply one or more evaluative criteria in addition to examining the likely set of outcomes that will be achieved. Sida has, for example, identified the evaluative criteria of sustainability as being of major interest in sponsoring this research effort and report. Other evaluative criteria that are frequently used in evaluating international assistance are efficiency, accountability, and equity (see discussion below and Ostrom, Schroeder, and Wynne, 1993). At the broadest level, these elements of institutional analysis are related as shown in Figure A.1.



When actually conducting a specific analysis, all of these elements are decomposed into finer and ever-finer categories of analysis. The *context* is set by configurations of physical conditions, rules-in-use, and the attributes of a community. In examining any kind of problem or puzzle, the analyst first needs to identify a relevant *action arena*, which is a complex conceptual unit containing one set of variables about an *action situation* and a second set of variables about an *actor*. An actor can be either a single individual or a group of individuals who have a regularized way of making decisions, such as a firm or a government (see Figure A.2). The concept of an *action situation* helps the analyst isolate the immediate structure affecting a process so as to explain why particular outcomes tend to occur and potentially identify ways of reforming them.



The structure of an action situation is composed of the following sets of variables:

- 1. The set of actors;
- 2. The specific positions that are filled by the actors;
- 3. The set of actions that each actor in a position can potentially take;
- 4. The level of control that an actor has over this choice of actions;
- 5. The linkage of actions to a set of potential outcomes (the decision or game tree);
- 6. The external costs and benefits assigned to actions and outcomes; and
- 7. The information that is available to each actor about a situation.

The actors in a situation can be characterized by four sets of variables:

- 1. The resources (time, energy, finances) that an actor brings to a situation;
- 2. The *internal valuation* that actors assign to actions and outcomes (including pride and shame);
- 3. The way actors acquire, process, retain, and use *knowledge* and *information*; and
- 4. The *processes* actors use to *select* particular courses of actions.

Before we discuss each of the above working parts of a particular action arena, it is important to mention that there are two additional and important steps to conducting an institutional analysis if one is interested in doing policy analysis and in recommending ways of improving the outcomes of a situation. First, besides learning about the structure of a particular action arena, the analyst wants to know the factors that affect the structure of the arena itself. To do so requires that one dig into the physical and material conditions that are involved, the specific rules being used to structure the arena, and the nature of the general community within which any particular arena exists. Second, one may want to examine how an arena is linked to others — and in the analysis of development assistance processes, both of these steps are important.

Having gained an overview of the IAD framework, we will now venture a little deeper into the basic elements and begin to unpack some of these into specific variables. The first part of Section 2.2 is a discussion of the specific assumptions used about the "actor" in doing institutional analysis and the second part focuses on the components of an action situation. Then, we will examine the diverse set of evaluative criteria that can be used before examining the contextual variables involved in an institutional analysis.

Focusing on Actors and Action Situations

The Actor in a Situation

Definition of Actor and Action

The *actor* in a situation can be thought of as a single individual or as a group functioning as a corporate actor. The term *action* refers to those human behaviors for which the acting individual attaches a subjective and instrumental meaning. All analysts of micro behavior use an implicit or explicit theory of how individuals make decisions in order to derive inferences about the likely behavior of each actor in a situation (and, thus, about the pattern of joint results that may be produced). The analyst must make assumptions about what and how actors value; what resources, information, and beliefs they

have; their information-processing capabilities; and the internal mechanisms they use to decide upon actions (or strategies involving plans for future actions to be taken) given the expected strategies of others.

Use of Full Information, Homo Economicus Model of Actors

For many problems, it is useful to accept the political economy view that an actor's choice of strategy in any particular situation depends on how he or she perceives and weighs the benefits and costs of various strategies and their likely outcomes. The most well-established model of the individual used in institutional analysis is *homo economicus*. The *homo economicus* model frequently involves the assumptions that actors have complete and well-ordered preferences, complete information, unlimited computational capability, and that they maximize the net value of expected returns to themselves.

All of these assumptions are controversial and their empirical validity is being challenged on many fronts (see, for example, Camerer and Thaler, 1995; Bowles, 1998; Bowles and Gintis, 1993). These assumptions are, however, extremely useful for analyzing situations in which considerable competition exists and when the competitive process generates survivors whose behavior is consistent with these assumptions. For field settings that approximate this kind of competition, these theories generate empirically confirmed predictions. Further, these assumptions can be used analytically – in game theoretic and other micro-institutional models – to generate specific and testable conclusions. These assumptions are also useful when one is interested in knowing what results to expect when individuals are short-sighted and competitive. The formal models of problematic situations, on which our discussions in Chapter 3 are largely based, use this model of the individual. It is the base model initially used by most political economists to capture the core incentives of a particular situation.

Need for a Broader Conception of Individual Behavior

Once the stark features of a situation are understood, many institutional analysts prefer to use a broader conception of individual actors. For example, some scholars stress that perceived costs and benefits should include the time and resources devoted to establishing and maintaining relationships (Williamson, 1979), as well as the value that individuals attach to establishing a reputation for being reliable and trustworthy (Breton and Wintrobe, 1982). Many of the situations of interest in understanding collective-action problems are uncertain, complex, and lack the selective pressure and information-generating capabilities of a competitive market. Therefore, one can substitute the assumption of bounded rationality – that persons are intendedly rational but only limitedly so – for the assumptions of perfect information and utility maximization used in axiomatic choice theory (see Simon, 1965, 1972; Williamson, 1985; E. Ostrom, Gardner, and Walker, 1994: ch. 9).

Information search is costly, and the information-processing capabilities of human beings are limited. Individuals, therefore, often must make choices based on incomplete knowledge of all possible alternatives and their likely outcomes. With incomplete information and imperfect information-processing capabilities, all individuals may make mistakes in choosing strategies designed to realize a set of goals (V. Ostrom, 1986). Over time, however, they can acquire a greater understanding of their situation and adopt strategies that result in higher returns. Reciprocity may develop rather than strictly narrow, short-term pursuit of self-interest (Hyden, 1990; Oakerson, 1993).

Not all individuals in an interaction have access to the same information. Literacy makes available to some individuals much more information than to others. The contribution of any one individual to a joint undertaking is often difficult for others to judge. When joint outcomes depend on multiple actors contributing inputs that are costly and difficult to measure, incentives exist for individuals to behave opportunistically (Williamson, 1975). Opportunism - deceitful behavior intended to improve one's own welfare at the expense of others - may take many forms, from the inconsequential and, perhaps unconscious (e.g. shirking), to a carefully calculated effort to defraud others with whom one is engaged in ongoing relationships. The opportunism of individuals who may say one thing and do something else further compounds the problem of uncertainty in a given situation. Moreover, the level of opportunistic behavior that may occur in any setting is affected by the norms and institutions used to govern relationships in that setting, as well as by attributes of the decision environment itself. Boundedly rational individuals may learn from the institutional setting in which they find themselves how to make reciprocity work for them over time or how to act opportunistically so as to achieve more than others in the same situations. Different types of individuals learn from situations which strategies pay off in the long run.

Using a Fallible Learner Model

More broadly, one could assume that individuals calculate benefits and costs but do so as *fallible learners*. Fallibility and the capacity to learn can thus be viewed as assumptions of a more general theory of the individual (Simon, 1985, 1997; V. Ostrom, 1987). Fallible learners can, and often do, make mistakes. Mistakes are, in fact, essential for learning to occur (Ashby, 1960). Whether incentives encourage people to learn from these mistakes, or to continue to make the same mistakes forever, depends on the particular institutional setting. And, whether incentives encourage the adoption of a reputation for being reliable and trustworthy or the seeking out of short-term benefits without taking into account the effect on longer-term patterns of interactions, also depends largely on the rules structuring particular situations.

Viewing actors as fallible learners within specific institutional arenas leads to the conclusion that the institutional arrangements that individuals use in governing and managing problematic situations offer different incentives and opportunities to learn. In some settings, incentives lead them to repeat the mistakes of the past or to seek only short-term advantages. In these settings, individuals learn to become more opportunistic over time. In other settings, actors learn quickly from their past actions and can adopt more effective strategies over time. They may learn the importance of a reputation as a trustworthy participant and norms of behavior that, when adopted by most participants, leave them all better off. Further, in all cases, the repertoire of institutional design principles known to individuals and their past experience in crafting their own rules also affect their capacity to change their institutions in order to improve learning and other outcomes when faced with repeated failures.

When fallible, learning individuals interact in frequently repeated and simple situations, it is possible to model them as if they have complete information about the relevant variables for making choices in those same situations. In highly competitive environments, mentioned above, we can also assume that the individuals who survive the selective pressure of the environment, act as if they are maximizers of a key variable associated with survival in that environment (e.g., profits or fitness) (Alchian, 1950; Dosi and Egidi, 1987). When individuals face a relatively simple decision situation where institutions generate accurate information about the variables relevant to a particular problem, that problem can be adequately represented as a straightforward, constrained maximization problem.

Variation in Internal Norms Adopted

Game theorists tend to assume that actors are, in addition to having complete information, narrowly selfish and do not adopt any internal norms that would constrain their maximizing of personal gain. Actors who enter and succeed in highly competitive situations can be modeled successfully using this narrow conception of individual morality. However, in many settings other than highly competitive markets for strictly private goods, actors vary in regard to the extent to which they care for others' well-being and in terms of their personal commitment to keeping promises and honoring forms of reciprocity extended to them (E. Ostrom, 1998). Even within private profitmaking firms, individuals need to establish reputations for being trustworthy. Cultural norms developed within firms reduce problems of shirking and untrustworthy behavior (Kreps, 1990).

Assuming variation in the types of norms that guide individual behavior adds substantial complexity to formal models. Recent work drawing on evolutionary theory has begun to provide some analytical tools that can be used to manage this complexity (Güth, 1995; Boyd and Richerson, 1985). What is most important, however, is to recognize that humans are capable of adopting norms about the actions that they must, must not, or may choose to take. Given this capacity for reflection and choice of personal norms, groups that develop a shared understanding of the "do's and don'ts" that they all agree to follow are able to deal more effectively with many of the collective-action problems discussed in Chapter 3. Designing rules that enhance the likelihood that actors may come to know one another, interact at least occasionally on a face-to-face basis, detect when others fail to conform to group rules and

norms, and encourage learning about the importance of shared norms, greatly increases the sustainability of collective action (E. Ostrom, 2000b).

The Fallible Learner in Development

Individuals in society, whether within the developing or developed countries of the world, behave for the most part within the bounds of some indigenous institutional framework. Though we rarely reflect consciously on this, whether we, as fallible learners, learn from our mistakes or keep repeating them depends on whether the particular institutional settings that we find ourselves in are suited to the problems we face.

The appropriateness of these institutional settings for development, in turn, depends on the repertoire of design principles we possess and on our own past experience in crafting rules to adapt to contemporary challenges. Indigenous institutions contain a wide variety of normative prescriptions that are expressed in ways resonant to us in our own social context. As such, they help to constitute an adaptive community of understanding, and, in this way, contribute to the wealth of social capital.

While such institutions have enabled groups to solve collective-action problems in the past, they may not necessarily (1) be applied to new situations in socially beneficial ways or (2) be legal in a contemporary setting. Further, they may have been perverted over time for partisan purposes, through negligence, or as a result of misunderstandings by external authorities. Negative outcomes can result when institutions fail as a result. In developing countries, aid projects and programs frequently address the manifestations or outcomes of such institutional failures. However, interventions by a foreign donor introduce additional rules and constraints to the action arena. These often reflect institutional understandings formed within the cultural context of the donor's own community. New rules and constraints are necessarily interpreted, however, by the developing country learner within the context of his or her own indigenous institutional context.

Unless external aid initiatives build on existing institutional understandings and hence "improve" them in terms of their ability to overcome particular collective-action problems, indigenous learning will not occur or the lessons learned may hinder rather than promote development. Any resolution to the underlying problem will not be sustained. Indeed, ownership in aid takes meaning when individuals confronting a collective-action problem are poised to modify an institutionalized system of incentives by drawing on past learning to encourage new learning and resulting changes in the structure of incentives they face. Ominously, however, aid can erode or undermine local social capital when the rules and constraints that come along with it are placed carelessly in inappropriate interaction with other elements within the local structure of social capital. When this happens, social capital is destroyed, learning is inhibited, and the developing society is left poorer for the aid it has received.

An Action Situation

The term *action situation* refers to an analytic concept that enables an analyst to isolate the immediate structure affecting a particular process of interest in order to explain emergent regularities in human action and results. In order to improve patterns of interactions and outcomes obtained, one needs a deeper understanding of processes that generate them. Through institutional analysis, we can attempt, by changing the structure of interaction, to improve on the pattern of outcomes.

The common set of variables used to describe the structure of an action situation within a particular environmental context includes:

- 1. the set of actors,
- 2. the specific positions to be filled by actors,
- 3. the set of allowable actions and their linkage to outcomes,
- 4. the potential outcomes that are linked to individual sequences of actions,
- 5. the level of control each actor has over choice,
- 6. the information available to actors about the structure of the action situation, and
- 7. the costs and benefits which affect perceived incentives assigned to actions and outcomes.

Also affecting individual strategies is whether a situation will occur once, a known finite number of times, or indefinitely. When explaining actions and cumulated results within the framework of an action arena, these variables are the "givens" that one works with to describe the structure of the situation. These are also the common elements used in game theory to construct a formal game.

A Common-Pool Resource Action Situation – An Illustration of the IAD Approach

A frequent collective-action situation found in all countries is that of a set of users harvesting from a local natural resource such as a forest, an irrigation system, or a fishery. Common-pool resources can be overused, congested, and even destroyed. Garrett Hardin (1968) paints a grim picture to characterize the "tragedy of the commons," thought by many observers to occur whenever multiple actors jointly use a single common-pool resource. In explaining how, Hardin asks us to "picture a pasture open to all." He then sets out an institutional structure where each herder has an incentive to keep more animals on the commons:

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to the herd. And another. . . . But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein lies the tragedy. Each man is locked into a system that

compels him to increase his herd without limit – in a world that is limited. Ruin is the destination towards which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. (Hardin, 1968: 1,244)

While the metaphor of the commons is a particularly dramatic picture, field research has identified many common-pool resources where the users of the resource have developed rather effective rules for governing and managing it over time. The particulars of any specific harvesting situation differ dramatically from one location to another and one cannot tell simply from the outside whether a resource is actually being harvested in a sustainable manner or whether overharvesting is occurring. Determining what kinds of problems exist in the use of local resources is of major concern when adopting policies, as it is possible to create new institutions for governing and managing common-pool resources that end up destroying existing systems that have functioned relatively well for long periods of time.

We apply the IAD framework to common pool resource problems to help make the framework more understandable (see also Appendix B). We have chosen to illustrate the IAD framework with a situation frequently confronting development assistance agencies. In one of the projects that we examine in Chapter 9, for example, related to developing sustainable forests in Orissa, India, a core part of the problem is helping participants to overcome the incentives they face in common-pool resource problems. Solving forestry problems have been a major activity in the portfolio of Sida and other development agencies. This has become even more important as deforestation is a core problem leading to global warming. In addition to forestry problems, development agencies are coping with helping to improve the governance and management of inshore fisheries, grazing lands, and irrigation systems. It should be pointed out that the basic issues related to natural common-pool resources also relate to commonpools created within organizations. Government budgets are obviously one of the largest common-pool resources of importance in development assistance. The IAD framework helps improve policy analysis by identifying the minimal set of questions that an analyst would need to ask in order to begin an examination of a common-pool resource situation (see E. Ostrom, Gardner, and Walker, 1994; E. Ostrom, Schroeder, and Wynne, 1993). Answers to the following questions are needed before analysis:

- The Set of Actors: Who and how many individuals withdraw resource units (e.g., timber, water, or fish) from this resource system in an environmental context?
- *The Positions*: What positions exist (e.g., members of a forest users' committee or an irrigation association, guards, officers of an association, others)?
- The Set of Allowable Actions: Which types of harvesting technologies are
 used? (e.g., Are chainsaws authorized for harvesting timber or only hand
 implements? Are there open and closed seasons? Is there a rotation system for water or fishing times? Are some species off limits? Is there an
 upper or lower size limit to the resource units harvested?)

- *The Potential Outcomes*: What chain of events links actions to outcomes? How do actions link to the sustainability of a resource? What kinds of actions would lead to the destruction of the resource?
- The Level of Control over Choice: Do users take the above actions on their own initiative or do they confer with others? (e.g., Before entering the forest to cut fodder, does a user obtain a permit?)
- The Information Available: How much information do users have about the condition of the resource itself, about other users' cost and benefit functions, about how their actions cumulate into joint outcomes? Do users know what actions other users (or their officials) are taking currently or have taken in the past?
- The Costs and Benefits of Actions and Outcomes: How costly are various actions to each type of user, and what kinds of joint and individual benefits can be achieved as a result of various group outcomes?

Predicting Outcomes within an Action Arena

Depending upon the analytical structure of a situation and the particular assumptions about the actor used, the analyst makes strong or weak inferences about results. In tightly constrained, one-shot, action situations under conditions of complete information, where participants are motivated to select particular strategies or chains of actions that jointly lead to stable equilibria, an analyst can frequently make strong inferences and specific predictions about likely patterns of behavior and outcomes. Gardner and Waller (Appendix B) illustrate how specific conclusions can be reached in well-specified game theoretical models.

When no limit exists on the number of users harvesting from a common-pool resource or on the amount of harvesting activities they undertake, for example, one can develop a mathematical model of an open-access, common-pool resource (see, e.g., E. Ostrom, Gardner, and Walker, 1994). When the net benefits of harvesting to each entrant increase for the initial set of resource units sought and decrease thereafter, each appropriator acting independently tends to make individual decisions that jointly yield a deficient (but stable) equilibrium. The tragedy of the commons will occur in such a situation. A model of an open-access, common-pool resource generates a clear prediction of a race to use up the resource leading to high social costs. Both field research and laboratory experimental research strongly support the predictions of overuse and potential destruction of open-access, common-pool resources where appropriators do not share access to collective-choice arenas in which to change the open-access structure they face (ibid.). But, as we discuss below, many common-pool resources are managed in a sustainable way by local users who have devised rules-in-use to counteract the perverse incentives stemming from the nature of the resource itself.

Many action arenas, however, do not generate such unambiguous results. Instead of completely independent decision making, individuals may be em-

bedded in communities where initial norms of fairness and conservation may change the structure of the situation dramatically. Within these situations, participants may adopt a broader range of strategies. Further, they may change their strategies over time as they learn about the results of past actions. The institutional analyst examining these more open, less-constrained situations makes weaker inferences and predictions on the patterns of outcomes that forecast greater variation in the likely result from a particular type of situation.

In field settings, one can assume that helping individuals to engage in face-toface discussions will increase the probability of improved outcomes, but there are many historical factors that also affect this likelihood. Even weak inferences about likely results have an importance in specifying general tendencies. At times, it is possible to predict what will *not* occur. Predictions of impossibilities are very useful when contemplating reforms.

In field settings, it is hard to tell where one action arena starts and another stops. Life continues in what appears to be a seamless web as individuals move from home to market to work (action situations typically characterized by reciprocity, by exchange, or by team problem-solving or command). Further, within arenas, choices of actions *within* a set of rules as contrasted to choices *among* future rules are frequently made without recognizing that the level of action has shifted. So, when a "boss" says to an "employee," "How about changing the way we do X?," and the two discuss options and jointly agree upon a better way, they have shifted from taking actions *within* previously established rules to making decisions *about* the rules structuring future actions. In language of the IAD framework, they have shifted from an operational arena to a collective-choice arena.

Evaluating Outcomes

In addition to predicting outcomes in terms of the events that transpire as a result of the actions of participants, the institutional analyst may also evaluate the outcomes that are being achieved as well as the likely set of outcomes that could be achieved under alternative institutional arrangements. Evaluative criteria are applied to both the outcomes and the processes of achieving outcomes. While there are many potential evaluative criteria, let us briefly focus on those most frequently used in institutional analysis: (1) economic efficiency, (2) equity through fiscal equivalence or through redistribution or a search for just remedies, (3) accountability, (4) conformance to general morality, and (5) adaptability. Given that we have been asked to examine the effect of incentives on the sustainability of development assistance, we will ask how these evaluative criteria are themselves linked to sustainability.

Economic Efficiency

Efficiency is a criterion for evaluating the relationship between the benefits produced by a set of actions as contrasted to the costs of these actions. To be minimally efficient, the benefits must be greater than the costs. Maximal effi-

ciency is achieved when no other option will produce a greater positive difference between benefits achieved and costs borne. The concept of efficiency plays a central role in studies estimating the benefits and costs or rates of return to investments, which are often used to determine the economic feasibility or desirability of public policies. When considering alternative institutional arrangements, therefore, it is crucial to consider how revisions in the rules affecting participants will alter their perceived incentives, their behavior and, hence, the allocation of resources.

Equity

There are three principal methods for assessing equity: (1) fiscal equivalence – or the relationship between individuals' contributions and the benefits they derive and (2) redistributional equity – or the long-term opening up of resources to the poor, and (3) equitable solutions to a conflict.

Fiscal Equivalence

Fiscal equivalence is a criterion for evaluating the equity of the formula used to assign the costs of creating goods and benefits to those who benefit from these goods (Olson, 1969). A fundamental assumption underlying much of contemporary life – and, particularly in an exchange economy – is that those who benefit from a service should bear the major burden for financing that service. Perceptions of fiscal equivalence, or a lack thereof, affect the willingness of individuals to contribute toward the development and maintenance of public facilities that generate public benefits. On the other hand, in many poor countries, if fiscal equivalence were the only criterion of equity applied, many poor people would not be eligible to receive needed goods and services.

Redistributional Equity

As an alternative criterion of equity, redistributional equity asks whether those who are the poorest in a particular setting receive sufficient goods and services that they can improve their condition over time. Some public facilities may be created primarily to achieve redistributional equity so that essential goods and services are made available to those who are the most needy. Thus, although efficiency would dictate that scarce resources be used where they produce the greatest net benefit, equity goals may temper this objective, resulting in the provision of facilities that benefit particularly needy groups. Likewise, redistributional objectives may conflict with the goal of achieving fiscal equivalence.

Equitable Conflict Resolution Remedies

Concepts of equity are also involved when actors deal with conflicts. Having available open and relatively low-cost confliction resolution mechanisms allows participants in ongoing conflict situations to seek out equitable solutions so that long-term conflicts do not disrupt productive arrangements.

Accountability

In a democratic polity, officials should be accountable to citizens concerning the development and use of public facilities and natural resources. This is the principle of *res publica*. Accountability is a criterion applied to the pattern of interactions rather than to the outcomes of a process. Without accountability and openness, actors can engage successfully in the various opportunistic behaviors. Concern for accountability need not conflict greatly with efficiency and equity goals. Indeed, achieving efficiency requires that information about the preferences of citizens be available to decision makers, as does achieving accountability. Institutional arrangements that effectively aggregate or make transparent this information assist in realizing efficiency at the same time that they serve to increase accountability and promote the achievement of redistributional objectives.

Conformance to General Morality

Do the procedures used or the outcomes achieved conform to the general norms held in a society or by the individuals who are most involved in a situation? If rules seem unfair or appear to result in unfair outcomes, such rules are unlikely to be observed and followed for long. Thus, this evaluative criterion needs especially to be used in the design of a new project and in explaining situations that are faltering. Any situation that involves voluntary compliance over a long period of time is likely to be evaluated as involving procedures and outcomes that are consistent to the general norms accepted in that society.

Adaptability

Finally, unless institutional arrangements are able to respond to ever-changing environments, the sustainability of investments and resources is likely to suffer. Rural areas of developing countries are often faced with natural disasters and highly localized special circumstances. If an institutional arrangement is too inflexible to cope with these unique conditions, it is unlikely to last. For example, centrally controlled infrastructure projects are sometimes unable to respond to local emergencies due to rigid procedures and a lack of information about the conditions existing in diverse service areas.

Trade-offs among Evaluative Criteria

Trade-offs among these criteria are often necessary. It is particularly difficult to choose between the goals of efficiency and of redistributional equity. The trade-off issue arises most explicitly in considering alternative methods of funding public projects. Economically efficient pricing of the use of an existing resource or facility should reflect only the incremental maintenance costs and any external or social costs associated with its use. This is the well-known, efficiency-pricing principle that requires that prices equal the marginal costs of usage.

The principle is especially problematic in the case of goods with *nonsubtracta-bility* attributes – such as with the generation of new knowledge. When the

goods involved are nonsubtractive, one person's gaining a benefit from using the good does not subtract from the availability of that good to others. In such instances, the marginal cost of another user utilizing the good is zero; hence, the efficient price is also zero. Zero user prices, however, require that all sources of resource mobilization are tax-based, which induces other kinds of perverse incentives and potential inefficiencies given that funds are extracted from individuals without their being able to withhold payment for nonperformance. Evaluating how institutional arrangements compare across overall criteria is quite a challenge. Analytical examination of the likely trade-offs between intermediate costs is valuable in attempting to understand comparative institutional performance (see E. Ostrom, Schroeder, and Wynne, 1993; ch. 5).

Further, how these frequently used criteria in the evaluation of public programs are themselves related to sustainability needs to be examined rather closely. Obviously, a donor-funded program or project that is not considered efficient, in the sense that benefits exceed costs, is immediately suspect in regard to its sustainability. When the most important overall goal is poverty reduction, however, some projects that are not immediately efficient, but do benefit the needy (and would be evaluated positively in regard to redistribution), may be considered sustainable so long as those who would pay for the activities after donor funds are withdrawn are deeply committed to the goal of redistribution. A donor may contribute to the construction of a major infrastructure project in the first place due to its own commitment to redistribution (from its taxpayers to the poorest in the recipient country). It is hard to imagine how such a project would be sustainable in the long run, however, if operating costs are not assigned roughly in proportion to those who receive benefits from the continuing operation of the project.

Further, indigenous practices that may seem on the surface to be wasteful in terms of time or effort, may be sustainable if they simultaneously satisfy other criteria such as conformity to local traditions or perceptions of fairness. Time spent in deciding various aspects about a project, if they lead to an agreement that most perceive as fair and appropriate, may add to the social capital of those involved by re-enforcing the legitimacy of shared norms as well as the long-term sustainability of the project. Given the importance of solving information problems discussed in Chapter 3, some indigenous practices are very effective in sharing information about the input of all participants even though it would be possible to design a more efficient practice if solving information problems was not so difficult.²

As we will see below, one of the most difficult problems facing donors is finding ways of shifting the support of an ongoing project from revenue provided

² An example of this are the many practices used by irrigators or fishers that have been criticized as economically inefficient when analysis is conducted assuming full information. When the information-generating aspects of the indigenous institution are examined, however, many indigenous institutions are evaluated differently as having solved some of the problems that have limited the sustainability of other institutions in similar settings due to missing or asymmetric information (see E. Ostrom, 1990).

by the donor to revenue provided by the beneficiaries. The criterion of accountability is clearly related to sustainability. Ensuring that (1) funds are used for the purposes they were allocated, (2) corrupt practices are revealed, and (3) procedures for reviewing practices are institutionalized, are all necessary conditions for any investment to be sustained over the long run.

The Context of Human Action

We have now completed a brief overview of the working parts of an institutional analysis applied to any particular action arena. Underlying the conceptualization of action arenas are implicit assumptions about the *rules-in-use* individuals use to order their relationships, about attributes of *states of the world and their transformations*, and about the *nature of the community* within which the arena occurs. Rules, states of the world, and the nature of the community all jointly affect the types of actions that individuals can take, the benefits and costs of their attributes to these actions and resulting outcomes, and the likely outcomes achieved.

The Concept of Rules

In the IAD framework, we use the term "rules" rather than the term "institutions" since the latter term is frequently used to refer to organizations as well as to the rules that individuals use within and across organizational boundaries. Rules are shared understandings among those involved that refer to enforced prescriptions about what actions (or states of the world) are required, prohibited, or permitted. All rules are the result of implicit or explicit efforts to achieve order and predictability among humans by creating classes of persons (positions) who are then required, permitted, or forbidden to take classes of actions in relation to required, permitted, or forbidden states of the world (Crawford and Ostrom, 1995; V. Ostrom, 1991). Some of these positions are the agreed-upon enforcers of the rules themselves and have the power to coerce conformance. In a democratic society, rule enforcers must follow agreedupon procedures for the enforcement of rules. In an authoritarian society, enforcement may be quite arbitrary. In studying these development assistance processes, one needs to ask where the rules which individuals use in given action situations originate.

In an open and democratic governance system, there are many sources of the rules that individuals use in everyday life. In many instances, individuals may legally self-organize in voluntary associations and craft their own rules of interaction. There are also formal rule-making processes — laws and regulations are apt to be passed by central, regional, local, and special units of government. Within private firms and voluntary associations, individuals are authorized to adopt many different rules regarding who is a member of the firm or association, how profits (benefits) are to be shared, and how decisions will be made. Even each family constitutes its own rule-making body or is organized in relation to a patriarchal or matriarchal extended family.

Many of the multiple layers of rules are written down on paper in literate societies. Many rules, however, emerge as individuals work together to figure out solutions to commonly faced problems. For example, colleagues in a work team craft their own rules when they say to one another: "How about if you do A in the future, and I will do B, and before we ever make a decision about C again, let's both discuss it and make a joint decision." In a democratic society, problem-solving individuals do this all the time. They also participate in less fluid decision-making arrangements, including elections to select legislators.

Working rules may also come about "informally" to serve illegal or immoral purposes. For instance, institutional arrangements among politicians, allowing them to behave as organized bandits (McGuire and Olson, 1996) and prey on the citizenry, do not promote the overall prosperity of societies. In some bureaucracies, officials have set the price that they must be paid by an applicant in order to receive a position in the bureaucracy (Wade, 1985). Here, the rules by which positions are to be purchased are well known, as are the rewards and punishments for observing or violating these (usually illegal) rules and norms. Although such rules and norms create incentives that promote cooperation and coordination within the rent-seeking bureaucracy, the corruption and ineptitude sponsored by this institution inhibit the development of the larger society (de Soto, 2000).

When doing institutional analysis, we attempt first to understand the working rules that individuals use in making decisions. Working rules are the set of rules to which participants make reference when asked to explain and justify their actions to fellow participants. While following a rule may become a "social habit," it is possible to make participants consciously aware of the rules they use to order their relationships. Individuals can consciously decide to adopt a different rule and change their behavior to conform to such a decision. Over time, behavior in conformance with a new rule may itself become habitual (see Shimanoff, 1980; Toulmin, 1974; Harré, 1974).³

Once we understand the working rules, we can attempt to understand where those rules come from. In a system governed by a "rule of law," the general legal framework in use will have its source in actions taken in constitutional, legislative, judicial, and administrative settings augmented by decisions taken by individuals in many different particular settings. In other words, the rules-in-form are consistent with the rules-in-use (Sproule-Jones, 1993). In a system that is not governed by a "rule of law," citizens actively attempt to evade many formal laws and the officials in the system may also seek ways of evading formal law.

Rule-following or conforming actions are not as predictable as biological or physical behavior explained by scientific laws. All rules are formulated in hu-

³ The capacity of humans to use complex cognitive systems to order their own behavior at a relatively subconscious level makes it difficult for empirical researchers to ascertain what the working rules for an ongoing action arena may be.

man language. As such, rules share problems of lack of clarity, misunder-standing, and change that typify any language-based phenomenon (V. Ostrom, 1980, 1997). Words are always simpler than the phenomenon to which they refer. The acceptance of rules represents a type of Faustian bargain (V. Ostrom, 1996). Someone is given the authority to use coercion in order to increase the general good.

The stability of rule-ordered actions is dependent upon the shared meaning assigned to words used to formulate a set of rules. If no shared meaning exists when a rule is formulated, confusion will exist about what actions are required, permitted, or forbidden. Regularities in actions cannot result if those who must repeatedly interpret the meaning of a rule within action situations arrive at multiple interpretations. Because "rules are not self-formulating, self-determining, or self-enforcing" (V. Ostrom, 1980: 342), it is human agents who formulate them, apply them in particular situations, and attempt to enforce them. Even if shared meaning exists at the time of the acceptance of a rule, transformations in technology, in shared norms, and in circumstances more generally change the events to which rules apply. "Applying language to changing configurations of development increases the ambiguities and threatens the shared criteria of choice with an erosion of their appropriate meaning" (ibid.).

What rules are important for institutional analysis? Myriad specific rules are used in structuring complex action arenas. Anyone attempting to define a useful typology of rules must be concerned that the classification is more than a method for imposing superficial order onto an extremely large set of seemingly disparate rules. The way we have tackled this problem using the IAD framework is to classify rules according to their impact on the elements of an action situation.

Rule Configurations

A first step toward identifying the working rules can be made, then, by overtly examining how working rules affect each of the variables of an action situation (See page 12 above). A set of working rules that affect these variables should constitute the minimal but necessary set of rules needed to explain actions and results based on the working rules used by actors to order their relationships within an action arena. Because states of the world and their transformations and the nature of a community also affect the structure of an action situation, working rules alone never provide a sufficient explanation of outcomes.

Seven types of working rules can be said to affect the structure of an action situation. These are: *entry and exit rules, position rules, scope rules, authority rules, aggregation rules, information rules,* and *payoff rules.* The cumulative effect of these seven types of rules affects the seven elements of an action situation.

Entry and exit rules affect the number of *actors*, their attributes and resources, whether they can enter freely, and the conditions they face for leaving. Posi-

tion rules establish *positions* in the situation. Authority rules assign sets of *actions* that actors in positions at particular nodes must, may, or may not take. Scope rules delimit the *potential outcomes* that can be affected and working backwards, the actions linked to specific outcomes. Authority rules, combined with scientific cause and effect relationship of the world being acted upon, determine the shape of the decision tree – the *action-outcome linkages*. Aggregation rules affect the level of *control* that an actor in a position exercises in the selection of an action at a node. Information rules affect the *knowledge-contingent information sets* of actors. Payoff rules affect the *benefits and costs* that will be assigned to particular combinations of actions and outcomes and establish the objective benefits and costs of action. These expected, objective benefits are perceived by actors as incentives or deterrents. The set of working rules is a *configuration* in the sense that the effect of a change in one rule may depend upon the other rules-in-use.

Let us return to the example of conducting an analysis of a common-pool resource situation discussed earlier. Now we will focus on a series of questions that are intended to help the analyst get at the rules-in-use that help structure a situation. Thus, to understand these rules, one would begin to ask questions such as:

- Entry and Exit Rules: Are the users from this resource limited to local residents; to one group defined by ethnicity, race, caste, gender, or family structure; to those who win a lottery; to those who have obtained a permit; to those who own required assets (such as a fishing birth or land); or in some other way limited to a class of individuals that is bounded? Is a new actor allowed to join a group by some kind of entry fee or initiation? Must a user give up rights to harvest upon migrating to another location?
- Position Rules: How does an actor move from being just a "member" of a group of appropriators to someone who has a specialized task, such as a water distributor-guard?
- Scope Rules: What understandings do the users and others have about the
 authorized or forbidden geographic or functional domains? Do any maps
 exist showing who can appropriate from which region? Are there understandings about resource units that are "off-limit" (e.g., the historical rules
 in some sections of Africa that particular acacia trees could not be cut
 down even on privately-owned land)?
- Authority Rules: What understandings do users have about mandatory, authorized, or forbidden harvesting technologies? For fishers, must net size be of a particular grossness? For forest users, must they use some cutting tools and not others? What choices do various types of monitors have related to the actions they can take?
- Aggregation Rules: What understandings exist concerning the rules affecting
 the choice of harvesting activities? Must certain actions require permission from, or agreement of, others prior to taking the action?

- *Information Rules*: What information must be held secret and what information must be made public?
- Payoff Rules: How large are the sanctions that can be imposed for breaking
 any of the rules identified above? How is conformance to rules monitored? Who is responsible for sanctioning nonconformers? How reliably
 are sanctions imposed? Are there any positive rewards offered to appropriators for any actions they can take? (e.g., Is someone who is an elected
 official relieved of labor duties?)

The problem for the field researcher is that many rules-in-use are not written down. Many of the rules-in-use are not even conceptualized by participants as rules. Therefore, the field researcher cannot simply be a survey worker asking a random sample of respondents about their rules. In settings where the rules-in-use have evolved over long periods of time and are understood implicitly by participants, obtaining information about rules-in-use requires spending time in a site and learning how to ask nonthreatening, context-specific questions about rule configurations.

Physical and Material Conditions (The Nature of the Good)

While a rule configuration affects all elements of an action situation, some of the variables of an action situation are strongly affected by attributes of the physical and material world. What actions are physically possible, what outcomes can be produced, how actions are linked to outcomes, and what is contained in the actors' information sets are affected by the physical world being acted upon in a situation. The same set of rules may yield entirely different types of action situations depending upon the types of events in the world being acted upon by participants.

The attributes of states of the world and their transformation are explicitly examined when the analyst self-consciously asks a series of questions about how the world being acted upon in a situation affects the outcomes, action sets, action-outcome linkages, and information sets in that situation. The relative importance of the rule configuration and states of the world in structuring an action situation varies across different types of settings. The relative importance of working rules to attributes of the world also varies dramatically within action situations considered to be part of the public sector.

For example, rules define and constrain the way legislators vote more than attributes of the world. Voting can be accomplished by raising hands, by paper ballots, by calling for the ayes and nays, by marching before an official counter, or by installing computer terminals for each legislator on which votes are registered. However, in regard to organizing communication within a legislature, attributes of the world strongly affect the available options. The principle that only one person can be heard and understood at a time in any one forum strongly affects the capacity of legislators to communicate effectively with one another (see V. Ostrom, 1987). Size of deliberative bodies is

an important variable affecting intelligible communication. The larger the size, the greater the threat to human understanding.

Certain configurations of physical and material factors play an especially important role in institutional analysis. We discuss private and public goods, common-pool resources, and natural monopolies below.

Private Goods

Attributes, frequently used to distinguish the particular nature of goods and services, help us to analyze the mechanisms for their provision, production, and allocation. Private goods are those where the cost of excluding potential beneficiaries from access to a good or service is relatively low, and where one person's consumption subtracts from the corpus of goods available. Examples of private goods include agricultural commodities as well as consumer durables such as refrigerators and automobiles. The production of all private goods involves some combination of fixed costs (those incurred in creating the facility needed to produce the good) and marginal costs (those incurrent in the day-to-day production of an increment of the good). Private goods differ from one another rather substantially in regard to the relationship of their fixed costs of production versus the marginal costs of production. Arrangements for exchange within markets provide the context for the efficient provision and production of private goods (see any basic textbook on microeconomics).

Here, those who seek and sell private goods and services engage in *quid pro quo* relationships. In a well-functioning market, producers and suppliers respond to the demands made by consumers in the marketplace. Competition among producers increases their efficiency and this generates goods at lower cost to consumers. When market processes are well-ordered, donors are less involved in supporting projects related to strictly private goods, with the possible exception of those that require very large initial investments.

Natural Monopolies

Many private goods do not involve large investments in fixed costs before units of the good can be produced. Others require extremely large initial investments. Goods such as electricity and water not only require a large investment in plant and facilities but also a large investment in the facilities that connect individual households and industrial plants to the source of electricity or water. If there were to be direct competition for final consumers between two producers of water or electricity, each producer would need to replicate the extensive service lines that connect central facilities to final consumption units. Thus, instead of competition between private producers leading to economies, competition greatly increases the total costs of production and thus the cost of the services for consumers. Goods and services that have these characteristics are called "natural" monopolies. "A market has a natural monopoly if one firm can produce the total output of the market at lower cost than several firms could" (Perloff, 1999: 394). Many donor-assist-

ed projects are designed to help in the initial financing, construction, and maintenance of energy or other infrastructure projects that have the structure of natural monopolies (see Chapters 9 and 10 for brief case studies of such projects in India and Zambia).

Excludability, Free-Riding, and Public Goods

When it is very difficult or costly to exclude beneficiaries from a good once it is produced, it is frequently assumed that such a good must be provided and produced by governmental agencies, rather than by private firms in a competitive market (Weimer and Vining, 1999; Riker and Ordeshook, 1973). Goods that are characterized by difficulties in exclusion, but where one person's consumption does not subtract from the level of the good available to others, are called *public goods*. Knowledge, national defense, and protection of the air we breathe are typical examples of public goods.

When the benefits of a good are available to a group, whether or not members of the group contribute to the provision of the good, that good is characterized by problems with excludability. Where exclusion is costly, those wishing to provide a good or service face a potential free-rider problem – a type of collective-action problem, discussed more generally in Chapter 3 (Olson, 1965). Individuals who gain from efforts to rid the atmosphere from pollutants, for example, may not wish to contribute to the costs of higher fuel, more expensive cars, or other necessary inputs, hoping that others will bear the burden. This is not to say that all individuals will free ride whenever they can. A strong incentive exists to be a free rider in all situations where potential beneficiaries cannot easily be excluded for failing to contribute to the provision of a good or service.

When it is costly to exclude individuals from enjoying benefits, private, profit-seeking entrepreneurs, who must recoup their investments through *quid pro quo* exchanges, have few incentives to provide such services on their own initiative. Provision of a good involves finding out the demand for it, finding a way of financing the production of that good, arrangement for production, and allocating the good to consumers (V. Ostrom, Tiebout, and Warren, 1961). Production of a good can be undertaken by a public agency or by a for-profit or not-for-profit private firm that contracts with a public agency making provision decisions relying on the power to tax or other nonexchange mechanisms for mobilizing resources. Government agencies, private firms, and NGOs are all involved in delivering development assistance.

Public sector provision of goods and services with excludability problems raises additional problems in determining preferences and in organizing finances. When exclusion is low-cost to the supplier, preferences are revealed as a result of many *quid pro quo* transactions. Producers learn about preferences through the consumers' willingness to pay for various goods offered for sale. Where exclusion is difficult, designing mechanisms that honestly reflect beneficiaries' preferences and their willingness to pay is complex, regardless of whether the providing unit is organized in the public or the private sphere.

In very small groups, those affected are usually able to discuss their preferences and constraints on a face-to-face basis and to reach a rough consensus. In larger groups, decisions about public goods are apt to be made through mechanisms such as voting or the delegation of authority to public officials. The extensive literature on voting systems demonstrates how difficult it is to translate individual preferences into collective choices that adequately reflect individual preferences (Arrow, 1951; Shepsle, 1979; Buchanan and Tullock, 1962).

Another attribute of some goods with excludability problems is that, once they are provided, consumers may have no choice whatsoever as to their level of consumption. An example is public spraying for insect control. If an individual does not want this public service to be provided, there are even stronger incentives not to comply with a general tax levy. Thus, compliance with a broad financing instrument may, in turn, depend upon both the legitimacy of the public-choice mechanism used to make provision decisions and the value of the goods provided by these mechanisms to those who are taxed for their provision.

Subtractability of the Flow and Common-Pool Resources

Another set of problematic goods and services are common-pool resources that yield benefits where exclusion is difficult and each person's use of a resource system subtracts units of that resource from a finite total available for harvesting. The withdrawal of a quantity of water from an irrigation canal, for example, by one farmer means that there is that much less water for anyone else to use. Most agricultural or urban uses of water are highly subtractive. Similarly, the cutting down of trees for timber or the extraction of firewood from a local forest is also highly subtractive. When the use of a flow of services by one individual subtracts from what is available to others and when the flow is scarce relative to demand, users will be tempted to try -i.e., face incentives - to obtain as much as they can of the flow for fear that it will not be available later.

Effective rules are required if scarce, fully subtractive service flows are to be allocated in a productive way. Charging prices for subtractive services obviously constitutes one such allocation mechanism. Sometimes, however, it is not feasible to price services. In these instances, if other allocation rules do not limit who can use and how much use is authorized, some individuals will be able to grab considerably more of the subtractive services than others, thereby leading to inefficient uses of the flow and creating high levels of conflict among users.

Allocation rules also affect the incentives of users to maintain a commonpool resource, as well as to use the subtractable flow efficiently. In regard to an irrigation system, for example, farmers located at the tail end of an irrigation system that lacks effective allocation rules have little motivation to contribute to the maintenance of that system. They will only occasionally receive their share of water given that the farmers at the head end have no restrictions on their use. Similarly, farmers located at the head end of such a system are not motivated to provide maintenance services voluntarily because they will receive disproportionate shares of the water whether or not the system is well maintained (E. Ostrom, 1996).

Consequently, for common-pool resources whose flows are highly subtractive, institutional arrangements related to the allocation of the flow of services are intimately tied to the sustainability of the resource. It is highly unlikely that aid projects can achieve sustainability without careful attention to the efficiency, fairness, and enforceability of the rules specifying who can appropriate how much of the service flow, at what times and places, and under what conditions. Furthermore, unless responsibilities are linked in a reasonable fashion to benefits obtained, the beneficiaries themselves will resist efforts to insist that they take responsibilities.

Many of the collective-action problems that so pervade the political economies of developing countries are the result of a lack of appropriate institutions designed to facilitate the provision, production, distribution, and allocation of goods produced by natural monopolies, public goods, and commonpool resources.

Attributes of the Community

A third set of variables that affect the structure of an action arena relates to the community. The attributes of a community that are important in affecting the structure of an action arena include the norms of behavior generally accepted in the community, the level of common understanding potential participants share about the structure of particular types of action arenas, the extent of homogeneity in the preferences of those living in a community, and the distribution of resources among those affected. The term *culture* is frequently applied to this bundle of variables. At times, external advisors look at all communities within a developing country as an undifferentiated group rather than recognizing the substantial differences in the cultural endowments of diverse groups (see Kottak, 1990).

Groups, for example, differ substantially in regard to their capabilities for managing a common-pool resource efficiently and sustainably. When the users of a common-pool resource share a common set of values and interact with one another in a multiplex set of arrangements, the probability of their developing adequate rules and internal norms to govern resources is much greater than that of larger groups or highly heterogeneous groups without shared norms (Taylor, 1987). The importance of building a reputation for keeping one's word is important in such a community. The cost of developing monitoring and sanctioning mechanisms is relatively low. If the users from a resource come from many different communities and are distrustful of one another, the task of devising and sustaining effective rules is substantially increased. Thus, the particular norms that are accepted, the homogeneity or heterogeneity of the groups involved, and the history of conflict on diverse issues are important contextual factors in any given situation.

Linking Action Arenas

Having outlined the components of action arenas and the contexts that define them, in this section we move to a consideration of the ways in which different action arenas are linked together. Whereas the concept of a "single" arena may include large numbers of participants and complex chains of action, most of social reality is composed of multiple arenas linked simultaneously or sequentially.

When individuals wish to intervene to change the outcomes achieved in socially constructed realities to guide (or control) participants toward a different pattern of results, they do so by attempting to change the rules individuals use to order their interactions within particular types of action arenas. Some interesting and important institutional arrangements for coordinating complex chains of actions among large numbers of actors involve multiple organizations competing with one another according to a set of rules.

Markets are the most frequently studied institutional arrangements that achieve coordination by relying primarily on rule-governed, competitive relationships among organizations (Bowles, 1998). Rule-governed competition among two or more political parties is considered by many analysts to be an important requisite for a democratic polity. Less studied, but potentially as important a means for achieving responsiveness and efficiency in producing public goods and services, are arrangements that allow rule-ordered competition among two or more potential *producers* of public goods and services (McGinnis, 1999a, b).

Multiple Levels of Analysis

Besides multiple and nested action arenas at any one level of analysis, nesting of arenas also occurs across several levels of analysis. All rules are nested in another set of rules that define how the first set of rules can be changed. The nesting of rules within rules at several levels is similar to the nesting of computer languages at several levels. What can be done at a higher level will depend on the capabilities and limits of the rules (or the software) at that level and at a deeper level. Whenever one addresses questions about *institutional change*, as contrasted to action within institutional constraints, it is necessary to recognize the following:

- 1. Changes in the rules used to order action at one level occur within a currently "fixed" set of rules at a deeper level.
- Changes in deeper-level rules usually are more difficult and more costly to accomplish, thus increasing the stability of mutual expectations among individuals interacting according to a set of rules.

It is useful to distinguish three levels of rules that cumulatively affect the actions taken and outcomes obtained in any setting (Kiser and Ostrom, 1982). *Operational rules* directly affect day-to-day actions made by the actors in any setting. *Collective-choice rules* affect operational activities and results through

their effects in determining who is eligible and the specific rules to be used in changing operational rules. *Constitutional-choice rules* affect operational activities and their outcomes in determining who is eligible and the rules to be used in crafting the set of collective-choice rules that in turn affect the set of operational rules (see Siegan, 1994; Buchanan and Tullock, 1962; Shugart and Carey, 1992).

At each level of analysis there may be one or more arenas in which the types of decisions made at that level will occur. In the government and management of a local resource, for example, some of the operational rules are made locally, some are derived from laws passed at a regional level (if present), and others are adopted at a national collective-choice (or constitutional-choice) level. The units usually correspond to multiple geographic domains. In collective-choice and constitutional-choice situations, activities involve prescribing, invoking, monitoring, applying, and enforcing rules (Lasswell and Kaplan, 1950; Oakerson, 1994). The concept of an "arena" as described earlier does not imply a formal setting, but can include such formal settings as legislatures and courts. Policy making (or governance) regarding the rules that will be used to regulate operational-level choices is usually carried out in one or more collective-choice arenas. Federal systems of governance necessarily imply multiple layers of governance.

Using IAD for Incentive Analysis

To conduct a thorough institutional analysis in a particular field setting, the analyst can use the broad IAD framework to identify relevant questions that need to be answered in order to understand the structure of a particular situation and the underlying contextual variables creating that structure. We have provided illustrative questions in this appendix for beginning to examine one type of situation that is often at the core of a development assistance project - common-pool resource situation. No single list of questions, however, will fit any and all situations involved in complex development assistance programs. The task is to try to understand who the actors are, how they came to be in this situation, and the characteristics that they share (or do not share) that affect their perceptions of the situation and each other. In addition to understanding the actions they can take and how these are linked to outcomes, the institutional analyst pays particular attention to the information available to actors (in terms of completeness and distribution) and to the benefits and costs assigned to different actions. The analyst is trying to understand the structure of the situation as viewed by the participants. All these factors enter into the perception of incentives by actors.

It is the identification of the perceived incentives that leads the analyst to generate hypotheses about expected patterns of interactions and resulting outcomes. If the analyst finds that the behavior actually observed in a situation is similar to that expected from the analysis, the analyst has generated a sufficient explanation. If the resulting behavior is different, the analyst has missed

one or more crucial variables that impinge on actors' incentives and thus on their interactions with one another. Some field settings are so complex that it takes several iterations to understand the context and the existing situation. Thus, an institutional analysis of a particular project would involve a relatively detailed and precise analysis of how the various working parts of a situation fit together and the resulting motivational and informational problems that may exist or have been solved by the way individuals have structured the rules they are using or the norms that are generally shared by the community.

Institutional analysis is also used to examine more general types of situations that are repeatedly found in most societies. Here the effort is not to understand the specific structure of a particular situation, but rather to understand the incentives that may exist in a large number of situations that share the broad outlines of the "stylized" situation. Knowing the general structure of a diverse set of situations can be useful to a policy analyst investigating a potential project or evaluating an existing one. The analyst can immediately ask whether or not an existing situation has a known structure and thus a set of likely outcomes prior to the advent of donor assistance. Then the important question is how donor assistance changes the incentives toward, or away from, a sustainable and productive set of outcomes.

Appendix B Technical Appendix

Incentives in Strategic Interactions Involving an International Development Cooperation Agency

by

Roy Gardner Chancellors' Professor of Economics and West European Studies Indiana University Bloomington, Indiana 47405 USA

Email: gardner@indiana.edu

and

Christopher J. Waller
Gatton Chair of Macroeconomics and Monetary Economics
University of Kentucky
Lexington, Kentucky USA
Email: cjwall@pop.uky.edu

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Summary

In this Technical Appendix, game theory is applied to strategic interactions involving an International Development Cooperation Agency (IDA). The purpose of this application is two-fold: to meet the terms of the contract, and to better inform IDA policy in real-life situations. Our game-theoretic analysis makes the following points that may help to inform IDA policy:

 Initial conditions in the target recipient almost always reflect tragedies of the commons, public good problems, and principal-agent problems. Given the incentives present in such problems, an IDA has an unenviable task at the outset.

- 2. The Samaritan's Dilemma arises as the Nash equilibrium of a repeated game.
- 3. As a consequence of the Bad Folk Theorem, repetition of a game with perverse incentives for an IDA can lead to even worse outcomes than playing the game just once.
- 4. Aid dependency can take many forms. One involves collusive behavior between the recipient country government and in-country aid officials.
- In the context of aid conditionality, an IDA home office can neutralize the worst effects of the Bad Folk Theorem by a credible strategy of withdrawal.
- 6. An IDA can forestall the worst effects of the Principal-Agent problem by conducting tournaments among the target recipients for an aid project.
- Market failure pervades aid recipients. Aid projects that address market failures, such as public goods underprovision and tragedies of the commons, are more likely to succeed.
- 8. Corruption represents the configuration of multiple market failures, and pervades target recipients where IDAs operate. Entry by an IDA into a corrupt situation does not guarantee development success.
- Coordinated commitment on the part of donor country IDAs can forestall the worst effects of the Bad Folk Theorem.
- 10. External aid not only changes economic incentives, it also changes the distribution of payoffs. Such changes may jeopardize the sustainability of efficiency gains.
- 11. The Warm Glow effect puts strong pressure on IDAs to move the money, for political as much as humanitarian reasons.

A strategic interaction is any interaction between two or more actors, whose outcome depends on the strategies chosen by those actors. The interactions between an International Development Cooperation Agency (IDA) and its own government, as well as the governments and officials of target recipient nations, are strategic and thus amenable to analysis using game theory. For instance, we analyze aid dependency, popularly known as the Samaritan's Dilemma, in section 2 below. This is just one example of many that we provide. Although game theory is replete with technicalities, in this Technical Appendix we try to communicate the essential economics with minimal technicality. Throughout the analysis that follows, we point the reader interested in technical details to some of the relevant literature.

1. Initial Conditions and Donor Motives

To set the stage for the analysis that follows, we first consider initial conditions in a target recipient country. Prior to IDA involvement in the target recipient, we already have the following:

Initial conditions in the target recipient almost always reflect tragedies of the commons, public good problems, and principal-agent problems. Given the incentives present in such problems, an IDA has an unenviable task at the outset.

IDAs do not operate in countries like Denmark, Finland, Sweden, and New Zealand, the top four countries in the world on the Transparency International ratings, which means they have the lowest corruption. IDAs tend not to operate in countries that have good investment climates and high per capita GDP. Instead, IDAs operate in countries exhibiting bad results – terrible investment climate, high levels of corruption, and very low per capita. Most IDA programs are committed to poverty reduction efforts in less-developed countries (LDCs), but the inability of LDC governments to address governance problems associated with practically all forms of government intervention, and poverty reduction programs in particular, complicates the task of the IDA. We identify four motives/mechanisms behind such a decision on the part of a developed country to enter a target recipient with aid:

- Altruism. Caring about those less fortunate than ourselves is a commonly-held value in developed countries. Development aid is an expression of this value. Even in the harshest budget battles, development aid is almost never singled out for a zero-option. Of course, to be effective in addressing altruistic motives, such aid must achieve verifiable results.
- Increased per capita GDP, via growth factors, including essential capital
 investment. Given poor investment climate and underdeveloped internal
 financial markets, the private sector, even at the global level, will not provide the capital necessary to fuel growth. In addition, governments with
 poor credit ratings, rife with corruption, will also not attract growth capital, even at extraordinary interest rates. Thus, unless an IDA offers aid to
 such a country, growth will be negligible, if at all.
- Overcoming market failures in target countries. All economies face externality problems, such as public good problems, arising from the provision and maintenance of public goods; the tragedy of the commons, afflicting common-pool resources; and principal-agent problems, which often manifest themselves in market failure, or inefficient market outcomes. Externality problems are especially intense in LDCs. The view of many donors is that, without IDA programs targeting these problems, national governments and national markets will not solve them.
- Warm glow. Economic experiments as well as a vast literature in sociology and social psychology have identified the existence of warm glow that donor governments, IDA personnel, and citizens will feel good simply from the act of giving, whether they get any results or not. To the extent that warm glow drives public support for IDA activities, development results are simply a fringe benefit.

We now turn to the strategic implications of this mix of initial conditions and donor motives on IDA outcomes. In particular, we demonstrate that aid dependency is a likely outcome of this mix.

2. Strategic Implication of Altruism for Results

2a. Aid in a One-Shot Game: The Samaritan

Aid is often intended to serve as a means of helping those less fortunate than oneself. In the broadest sense, developed countries are "Samaritans" who give help to the less fortunate countries. For example, drought and resulting food crises are simple but common examples in which foreign aid alleviates the temporary misfortune of a country in crisis. Developed countries give food aid to the affected nations to alleviate hunger. The drought-stricken country accepts the food and distributes it to the starving citizens. The world media broadcasts pictures of starving children eating food to the citizens of the developed countries. In this "good" equilibrium, the hungry are fed and the senders of the food feel good about their help in alleviating starvation. Both sides benefit from the aid of food.

2b. Aid in a Repeated Game: The Samaritan's Dilemma

The story above is a description of a "one-shot" aid game between donor and recipient. It is also a stylized description of how we all believe the aid game should be played and the outcomes that should occur. However, in many aid games, this type of equilibrium does not arise. The reason is that foreign aid can alter the incentives that recipient countries face. In the story above, the aid is viewed as a "one-shot" game or one-time event. But in many aid situations, the game is repeated again and again. The mere fact that the game is repeated allows the players of the game to base current actions on past behavior and expected future behavior. Consider the same game above in a repeated environment. A developing country knows that if it experiences a food shortage, developed countries will provide food. They then view developing countries as subsidizing domestic food production and this gives them an incentive to reallocate their own scarce resources away from agriculture to alternative, and not necessarily productive, uses. As a result, the country does not produce enough food and a "crisis" arises that requires food transfers from the developed countries to the developing country. Consequently, a "bad" equilibrium can arise in this repeated version of the food aid game in which the recipient country consistently underproduces food and developed countries consistently send food to prevent starvation. Thus, the fungibility of aid (i.e., the ability to reallocate resources to other uses) creates a situation of aid dependence.

Fungibility of aid is not the only problem that can arise in this simple aid game. The objective of donor countries is to get the food to the starving citizenry. However, the food must be received and distributed by an intermediary of some sort. It is often the case that the control of the resources allows the intermediary to take actions that ultimately cause food to be reallocated to alternative uses than to feed citizens. In Somalia for example, in some cases, intermediaries directed food towards warring clans who then used the food to

buy weapons or coerce young men to join the clan militias in return for their families receiving food. Thus, food aid essentially became a resource for extending civil war and misery.

Clearly the donor country would like to ensure that these undesired outcomes do not arise. But how does it do so? The donor countries would have to monitor the behavior of the recipient countries to ensure that reallocation of resources does not occur. This requires a substantial amount of information. Secondly, the donor country must then be able to affix blame on who is responsible. This requires accountability. Then if reallocation of resources or food is detected, the donor country must be able to take action to "punish" errant behavior on the part of the recipient country. This typically requires some form of legal recourse within the country or threatening the loss of future aid if the problem is not resolved in a satisfactory manner. But as we mentioned above, the initial conditions in aid recipient countries prevent such courses of action – information is scarce, accountability of bureaucrats is nonexistent, and legal recourse is unlikely due to ineffective legal systems.

The examples above suggest that a key problem is that the objectives of the donor do not match the objectives of the recipient. These problems are referred to as Principal-Agent problems in the economics literature. Indeed, these problems are likely to be encountered at almost every level of society, from personal interactions to the interaction between the Central Government and a Ministry of that government. In the next two sections, we present generic game-theoretic models of principal-agent problems in both "normal form" (payoff matrices) and "extensive form" (decision trees with payoffs) to illustrate how game theory can be used to model actors' strategies and equilibrium outcomes.

2c. Principal-Agent Problems in One-Shot Games

A principal is a person or firm that hires another person or firm to perform services. An agent is any person or firm hired to perform services for a principal. A homely example is a person with a legal problem (the principal) who hires a lawyer (the agent) to solve that legal problem. In precisely the same sense, a Central Government tasks its Ministry of Foreign Affairs to conduct its foreign policy in the desired manner (see Gardner, 1995: chap. 10 for detailed analysis).

The reason relationships between a principal and an agent can lead to problems is that often the interests of the principal and of the agent do not coincide. A person with a legal problem may want his or her lawyer to work harder than the lawyer wants to work. A Central Government may want to implement a certain policy with regards to another country, while the Ministry of Foreign Affairs prefers that another policy be implemented with regards to that country.

Figure B.1 shows a simple, but typical, Principal-Agent problem in extensive form. The Principal moves first in this decision tree diagram. At first move,

the Principal either offers the Agent a contract, or not. If the Principal does not offer the Agent a contract, then the game ends with the payoffs

(0,0) = (0 for Principal, 0 for agent).

0 is a normalization, representing no relationship or a worthless relationship.

If the Principal offers the Agent a contract, then it is the Agent's turn to move. The Agent either accepts the contract or does not accept the contract. If the Agent does not accept the contract, then the game ends with the payoffs

(0,0) = (0 for Principal, 0 for Agent).

Finally, if the Agent accepts the contract, the Agent again has to decide whether to expend High effort or Low effort in fulfilling the contract. This decision by the Agent is the crux of the Principal-Agent problem.

How does effort in this simple example correspond to the case studies discussed in the main body of the report? For example, in the Maharashtra power station case, effort is characterized by expending resources to monitor theft of electricity from the power grid – high effort corresponds to reducing theft but at a cost of policing effort, low effort is simply doing nothing and thus maintaining the status quo. Also, expending effort to reduce costs, firing workers to trim the labor costs, and giving up political patronage all correspond to generating high effort. Hence, effort is simply a short-cut method for capturing disutility of undertaking reforms.

Consider the situation portrayed in Figure B.1. The optimum choice – the first-best arrangement – is for the Agent to expend High effort. This yields the payoff vector

(4,4) = (4 for Principal, 4 for Agent)

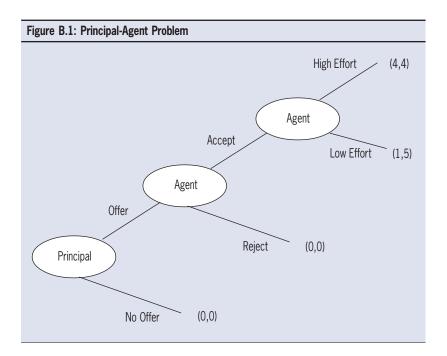
with a total of 8, the largest available in the entire diagram.

However, the Agent, whose choice it is, prefers to expend Low effort. This yields the payoff vector

(1,5) = (1 for Principal, 5 for Agent)

with a total payoff of 6, the second largest available in the entire diagram.





What is 25% better for the Agent (5 > 4) is 25% worse for society (6 < 8).

In this case, the Principal-Agent problem leads to a loss in efficiency of 25% relative to optimum. It is obvious that if the agent could commit to putting forth high effort, both parties would all be better off. But perfect commitment is very difficult to do in general. Hence, alternative methods are needed to improve on the low-effort equilibrium.

We have considered a very simple Principal-Agent problem here. More complicated problems can arise. For instance, one can work out the implications of a 3-player interaction, where one player is overall Principal, one player is Agent to the overall Principal and Principal to the third player, who is Agent to the intermediate Principal. One can show that increasing the number of players in such linked manner reduces overall efficiency – precisely the same number-of-players effect as in public goods and commons problems (see Svensson, 2000b, for a treatment of such complications).

Even in the most advanced economies, Principal-Agent problems pose challenges; these challenges are especially pressing in countries targeted as recipients by IDAs. The issue for the principal is to design an incentive mechanism to induce the agent to behave in the manner desired by the principal. In this example, the principal wants the agent to put forth high effort. So consider the following contract offer to the agent: If the total output is observed to be 8, the agent will receive 75% of total output rather than 50% of total output. Now the agent's best response is to put forth high effort, which pays him 6 instead of 5. The principal is also made better off because he receives a payoff of 2 rather than 1. Thus, by offering the agent more than a 50-50 split,

the principal can alter the agent's incentives in such a way as to produce the optimum. This contract is a form of aid conditionality – aid is given conditional on a particular outcome being observed. Consequently, this hypothetical approach would require the donor to commit more funds to a project than they would like to as a way of enticing the recipient country to put forth high reform efforts.

2d. Principal-Agent Problems in Repeated Games

The key feature of the incentive contract above is that it is conditioned on the history of play in the game. While one-shot games are interesting, most IDA/ target recipient relationships are long-lived, three years appears to be a minimum, with some lasting twenty years or more. Thus, long histories of play and behavior can be used to design contracts. In this case, history of play is valuable information for trying to obtain the best equilibrium. In game theory, long-lived relationships are modeled as repeated games (Gardner, 1995) or as time-dependant supergames (Herr, Gardner, and Walker, 1997). There is a set of famous results for such games, called Folk Theorems – since they were widely known to be true long before proofs appeared in print. A finitely repeated game can model the relationship between an IDA and a target recipient. Let G be such a game. The relevant Folk Theorem for such G says:

"Good" Folk Theorem. If G has a good Nash equilibrium and a bad Nash equilibrium, then finitely repeated G has, for any Pareto optimal outcome, a Nash equilibrium outcome in the vicinity (in outcome space) of that Pareto outcome.

This would seem to be good news for an IDA. The trouble is, with incentives, as often arise in an IDA/target recipient relationship, we can get the

"Bad" Folk Theorem. Suppose the IDA is a passive player in G, while local officials and IDA personnel in-country are active players in G. If the interests of the IDA and the active players clash, then a nearly Pareto optimal outcome for active players can be payoff minimizing for the IDA.

To foreshadow our main point here,

Repetition of a game with incentives for an IDA can lead to even worse outcomes than playing the game only once.

To see this, consider the following one-shot normal form game G, which will be played between local officials (player 1) and IDA personnel in-country (player 2):

		High	Low
	High	(2.4,2.4)	(1,4)
1's strategies			
	Low	(4,1)	(1,1)

High and Low refer to effort levels by the two players, respectively. The most value in the game G is created by High Effort on the part of both players. We can think of this as stemming from a Principal-Agent problem. The IDA personnel in-country (player 2) act as principal; local officials (player 1), as agent. The best outcome for IDA personnel – assuming they put forth High Effort, occurs when the local officials put forth High Effort also. However, local officials get even higher payoff by putting forth Low Effort. So incentives to "cheat" are present in G. The task for the donor is to design an incentive scheme that induces the agent to behave in the desired fashion.

The game G above has three Nash equilibria:

(Low, High) paying (4,1). At this Nash equilibrium, the local officials put in Low Effort, while the IDA personnel in-county put forth High Effort. This outcome is best for local officials. The efficiency of this equilibrium is (4+1)/(4+1) = 100%; a good equilibrium.

(High, Low) paying (1,4). At this Nash equilibrium, the local officials put in High Effort, while the IDA personnel in-country put forth Low Effort. This outcome is best for IDA personnel in-country. The efficiency of this equilibrium is again 100%; another good equilibrium.

(Low, Low) paying (1,1). At this Nash equilibrium, both local officials and IDA personnel in-country put forth Low Effort. The outcome (1,1) pays the least for both players. The efficiency of this equilibrium is (1+1)/(5) = 40%; a bad equilibrium.

Although two of these equilibria achieve 100% efficiency, they divide payoffs very unevenly, with the player putting forth Low effort getting the lion's share of the gains.

Now suppose the game G is played many times. Repeated play gives the players much more latitude for designing "reputation" strategies that reward and/or punish the other player based on the history of play. One simple way for the two players to interact in this relationship is to alternate between (High, Low) and (Low, High). By playing in this fashion, they average (1+4)/2=2.5 each. The only problem with this rotation is if some player should deviate. When it is player 1's turn to put forth High effort, he gets the same payoff by putting forth Low effort. Thus, a reputation strategy must be employed by each player to ensure that the other player puts forth High effort when he is supposed to.

Consider the following reputation strategy in which deviating does not pay:

Play rotates between (High, Low) and (Low, High). If either player ever deviates, then the players play (Low, Low) from then on until the end of the game. This strategy will produce a Nash equilibrium. Furthermore, not only is it a Nash equilibrium but also a subgame perfect equilibrium (see Gardner, 1995: chap. 7 for details).

To verify this, suppose player 1 puts forth High effort in odd-numbered periods; player 2, in even-numbered periods. Suppose player 1 considers deviating in the very first period. Deviation yields no gain, since 1-1=0, but a long-run loss of -3 every other period, since 1-4=-3 in subsequent odd-numbered periods. The long-run loss overwhelms the short-run 0 gain; deviation does not pay. The same holds true for player 2. Hence, we have a Nash equilibrium.

So by adopting strategies based on the history of play, the donor country can ensure better performance on the part of the recipient country. Again, this is essentially a form of aid conditionality.

Now that we have outlined a two-player Principal-Agent game, we want to consider how adding a third player can affect the game. Now we add a third player, IDA home office, which is passive. Player 3 has no strategic choice, and simply gets a payoff from the game played between players 1 and 2. We represent this as

Call this game G+. IDA home office payoff is 0 in the event of Low effort by both players – this corresponds to not even entering the target recipient. IDA home office payoff is 1 in the event of Low effort by exactly one of the players – this corresponds to partially successful development. IDA home office payoff is 3 in the event of High effort by both players. This corresponds to successful development.

Here comes the Bad Folk Theorem. G+ and G have the same active players and the same set of Nash equilibria. By the Bad Folk Theorem, local officials and in-country IDA officials can achieve the payoffs (2.5,2.5) by rotating between (High, Low) and (Low, High) effort every period. Since (2.5,2.5) dominates (2.4,2.4), we hardly expect the local officials and in-country IDA officials to put forth (High, High) efforts. What is good for players 1 and 2 guarantees a payoff of 1 – partial development success – for player 3, the IDA. This is an embedded Principal-Agent problem with a vengeance.

This is one of the many forms aid-dependency can take. The target recipient wants to continue the relationship, as do IDA personnel in country. However, the personnel at IDA headquarters would very much like better results from the relationship. At a bad Nash equilibrium, however, better results are not forthcoming. In addition, if a player in a game is passive – here, the IDA headquarters with no strategies to choose from – then there is nothing that player can do to change the outcome. The bad equilibrium does not go away on its own, and the active players have every interest in seeing that equilibrium persist. This is a mechanism for supporting aid-dependency in the long run. A comparable point is made, in a rather more complicated way, by Pederson (1996) and Murrell (1999).

3. Foreign Aid as a Substitute for Borrowing in Capital Markets

Information problems, lack of credibility, and poor legal structures make borrowing on internal and world capital markets impossible for many developing countries. Consequently, developed countries may opt to indirectly lend to developing countries via foreign aid. However, aid takes on the properties of a lending contract in these situations rather than a form of charity.

Countries tend to borrow in capital markets to finance major capital or infrastructure projects. Power stations, highways, airports, shipyards, water treatment, and housing are all examples of major capital projects that need major financing and engineering skills to accomplish the project.

With these types of projects, the Samaritan's Dilemma is at the forefront. Consider the production of a power plant. A donor country may well see this as a "one-time" expenditure, much like food aid during a drought. The donor provides funding and engineering expertise to build the power station. Once the power station is built, the donor's job is done and the recipient country is now better off by having a new reliable source of power supply. However, like all capital, power stations must be maintained. Maintenance requires resources being allocated to it. The recipient country may not allocate the resources or have the technical expertise to run the power station correctly. In the end, the power station deteriorates and forces the donor country to assume long-run responsibility for the upkeep of the capital stock. Thus, large, technical capital projects are ripe for generating aid dependence.

In addition to these maintenance problems, as in the food distribution story, significant principal-agent problems exist with the distribution of electric power. We will address this issue in the next section on market externalities since electrical power takes on the properties of a "public good" or "common-pool resource" known as a CPR. Furthermore, corruption on the part of local bureaucrats can lead to underprovision of productive capital due to resource extraction in the form of bribes and the disincentive effects for private investment. We will return to the issue of corruption and private investment in section 4.

Thus, by taking the place of capital markets, donors take on the role of "lenders" for capital projects in developing countries. As with any lenders, setting up the correct incentives to ensure borrower compliance requires substantial information and means of enforcing the "loan contract." In the next sections, we outline how principal-agent relationships and mechanism design can be used to enforce desired outcomes.

3a. Aid Conditionality

In the previous section, we saw the baleful effects that a repeated relationship can have on the part of an IDA home office, when that home office is a passive player. This could be the equilibrium corresponding to maintaining a power station or policing power theft from the power grid. We now consider how a more active IDA home office (player 3) can affect the aid relationship. Through the use of appropriate threats, the IDA can improve on bad equilibrium outcomes. (For a more complicated version of this result, see Drazen, 1999.) To anticipate our result, we show that

An active IDA home office can neutralize the worst effects of the Folk Theorem by a credible strategy of withdrawal.

Recall the 3-player game described in section 2d. Let the matrix G+ in that section correspond to the strategy for player 3 called "passive." In that equilibrium, the two players had to devise strategies to try and improve on the low-low equilibrium. In this section, we consider the IDA as playing the role of an "enforcer" of good behavior. Let the matrix below, G++, correspond to the strategy for player 3 called "active."

2'c	ctrategy	activo	2'c	strategies
22	Strategy.	active	25	Strategies

	High	High (0,0,0)	Low (0,0,0)
1's strategies			
	Low	(0,0,0)	(0,0,0)

What player 3 has done is zero out the game – all payoffs at zero correspond to terminating the aid relationship. It is a very blunt instrument, to be sure, but it has the effect – quite beneficial for player 3 – of preventing negative payoffs. The following is a Nash equilibrium for the game consisting of matrices G+ and G++:

Players 1 and 2 rotate between (High,Low) and (Low,High) every period. Player 3 plays "passive."

This Nash equilibrium corresponds to the IDA settling for partial development success, so as not to "rock the boat," and yields an average efficiency per period of (1+4+1)/(2.4+2.4+3) = 77%, not especially bad.

Fortunately for the IDA, there are other Nash equilibria – in particular, one that achieves 100% efficiency (of course, this is theorists' contrivance, but theoretical efficiencies in the 90's should be our goal – why settle for less). Here it is:

Players 1 and 2 play High all but the last period, when they play any Nash equilibrium of the one-shot game. Player 3 plays "passive" throughout the game. If any player ever deviates, players 1 and 2 play (Low, Low) forever, while player 3 plays "active."

Notice the efficiency of this equilibrium, per play, is (7.2)/(7.2) = 100%, except in the last period. As the number of periods T gets large, the weight on the last period (1/T) vanishes. This equilibrium gains credibility because player 3 – the IDA home office – is prepared to shut down the relationship in case of partial development success, when full success is attainable.

In projects supported by one donor country, such as the Sida-supported power station in Maharashtra, the use of reputation strategies can enforce "good play" of the game by the participants. However, credibility is always an issue with reputation strategies; the IDA must be willing to carry out threats to terminate the aid relationship. In the case of the power station, the donor country must be willing to let the capital stock deteriorate to ensure good play by the participants in the recipient country. The donor country must view its expenditures on the power station as a "sunk cost" that cannot be recouped. Thus, all that should matter to a donor country is current and future expenditures, not past expenditures.

However, despite the logic of ignoring sunk costs in economic decision-making, it is difficult to get individuals to ignore sunk costs. Thus, despite its threats to withdraw maintenance funds for a capital project, recipient countries know that the threat is not credible. In these situations, the donor country may opt for an institutional arrangement as a substitute for credibility. For example, borrowing from the central banking literature on delegating monetary policy to a "conservative" central banker, Svensson (2000b) argues that IDAs should turn over their aid powers to a "tough" international organization who is willing to reduce aid if certain events are not realized. This is similar to a bank turning over its collection activities to a "mafia" bill collector who threatens to break your legs if you do not repay your debt. Thus, viewing aid in this form is similar to a bank loan that must be collected on somehow. While this idea is a clever theoretical construct, we doubt that individual countries will turn over the aid decisions to an independent international organization.

3b. Aid Tournaments

In most of the aid stories discussed so far are bilateral aid arrangements — there is a single donor and a single recipient. Due to this bilateral relationship, the recipient country has substantial "bargaining power" over how aid is to be used and results are measured. Furthermore, the risk of losing aid from

putting forth low reform efforts is low. Thus, IDAs could employ "aid tournaments" to allocate aid among a group of countries. Tournaments have been shown to be effective ways to elicit high effort from participants. In effect, countries have to compete for foreign aid rather than negotiate for it.

An IDA can forestall the worst effects of the Principal-Agent problem by conducting tournaments among target recipients for an aid project.

This works as follows. Return to the situation in Figure B.1; only now suppose that the principal has 2 agents, each exactly like the one in Figure B.2 with whom to deal. The principal is the IDA; the 2 agents are 2 target recipients

The IDA, if it plays the game depicted in Figure B.1 twice – that is, enters both countries – gets the same second best outcome in each: low effort, partial development success.

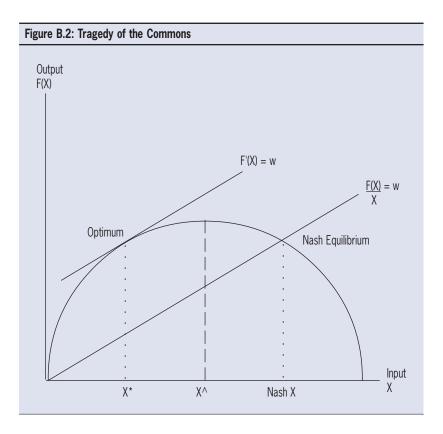
Contrast that rather unsatisfactory outcome to the following subgame perfect equilibrium outcome. The IDA says to the first target recipient, "I know how your competitor for this project will operate. They will put in Low effort, and the project will be a partial success – a payoff of 1 for me. If you commit to High effort, and allow me to observe your effort, then I will give you the project, and I will guarantee that you get a payoff 10% higher than 5, 5.5. I will take the extra out of my payoff from the first best outcome."

This speech contains a Nash equilibrium – one that is quite acceptable from the point of view of both the IDA and the lucky country that wins the competition for the aid project, by committing to High effort. This is what it takes to win the tournament being conducted by the IDA, and this is what it takes to achieve complete development success.

Moreover, this strategy is eminently playable (see Svensson, (2000b), for a detailed treatment of how the IDA can commit to such a strategy). Consider the set of countries in a region. Even when one is talking about very large countries – Russia, China, or Brazil – there are still other countries in the region. So there is always another target recipient in the region of the one an IDA is dealing with. And since IDAs are usually organized by region, such a strategy is completely consistent with internal organization.

An alternative way of using a tournament is much like a lender asking for the borrower to put up collateral for a loan. An aid tournament could consist of a qualifying round and a final round. In the qualifying round, countries would have to undertake a certain amount of reforms to qualify for the actual aid tournament. In this way, they are putting up collateral to get a chance at the aid funds. In game theory, this is referred to as the "stick and carrot" strategy—the recipient must incur some costly activity in order to be rewarded.





An extra benefit of a tournament is that the donor shields itself from being subject to "hold-up strategies" on the part of the recipient. Hold-up strategies can be used when the donor country has no recourse but to comply with the recipient's demands. For example, in banking relationships, major borrowers can use the threat of nonpayment to take the bank hostage. In foreign aid, an example would be an aid recipient threatening to form political alliances opposed by the donor country. In these situations, the donor is essentially taken hostage by the recipient country. The best response on the part of an IDA to avoid this situation is to have a regional alternative lined up — what we have called here a tournament.

Although we have talked about aid tournaments exclusively in terms of between countries, they might also be conducted within countries, just as open tenders might be conducted. The same logic applies to the within-country case.

4. Externalities and Market Failures

A standard economic reason for government intervention in the private provision of goods and services is that the market "fails" to provide the good efficiently (social marginal benefit equal to social marginal cost). Classic economic

examples of market failure involve public goods and common-pool resource problems. In these situations, government intervention to improve the allocation of resources is a common method for overcoming the market failure. However, in developing countries, weak governments or conflicting objectives require the input from a "neutral" third party to help solve the problem. Foreign aid is a form of third-party intervention to solve market failures.

4a. Public Good Problems

A phenomenon that pervades target recipient countries is the public good problem. A public good is defined by two characteristics: exclusion is prohibitively costly, and consumption is nonrivalrous. Thus, public goods are polar opposites of private goods. While private goods only rarely exhibit inefficient outcomes when markets are effective, public goods almost always exhibit inefficient outcomes. The inefficiency associated with public good problems is observed the world over in target recipient countries. Here are just three examples:

- Law and Order. The provision of law and order is the fundamental public good underlying all civil societies. This public good is underprovided, especially in target recipients torn asunder by civil strife and armed insurrection (Sierra Leone, Ruanda, Kashmir).
- 2. Trust. Without trust, most social arrangements, including economic ones, are hard to sustain. Lender/borrower relationships are a good example. It rarely pays to lend to someone that one does not trust. At the same time, the presence of trust makes possible the play of good equilibria, whose play would not otherwise be possible a result known in game theory as the Folk Theorem (Gardner, 1995: chap. 7).
- 3. Technology Transfer. Once a technology has been developed, it represents a public good to the rest of the world. The transfer of such technologies plays a major role in IDA success. However, developing a technology is costly, and pricing it as a public good (if a market for such a good exists at all) does not cover cost, so technologies tend not to be developed solely for transfer.

All these examples have the feature that the public good is underprovided: There is not enough law and order, too little trust, and not enough technology transfer. Here follows a simple game model (a parable, if you like) to illustrate the incentives behind the underprovision of public goods. This model is shown to have considerable explanatory success in the classic experiments run by Isaac and Walker (1988).

Consider a set of n players. Each player has a single indivisible unit of human resource at his or her disposal. If the player devotes that unit of human resource to private sector activity, the player gets the return w. If the player devotes that unit of human resource to public sector activity, every player in the game gets the payoff 3w/4. The following game matrix shows the situation for n=2, and w=1:

Thus, if player 1 invests in the private sector while player 2 invests in the public sector, player 1 gets

$$1 + 0.75 = 1.75$$

the first term from private sector investment, the second from player 2's public sector investment,

while player 2 gets the payoff

$$0 + 0.75 = 0.75$$

from the same investment pattern. This matrix is an example of a Prisoner's Dilemma, a game whose unique equilibrium is inefficient. The unique Nash equilibrium has each player investing in the private sector, so there is zero provision of public goods. The payoff to this equilibrium is 1 + 1 = 2. The optimum, where the sum of payoffs is maximized, has each player investing in the public sector, so there is maximum provision of public goods. The payoff to the optimum is 1.5 + 1.5 = 3.

The efficiency of the Nash equilibrium is 2/3 = 67%, an already considerable efficiency loss with just 2 players.

Worse yet, the efficiency loss increases as does the number of players – a result reminiscent of the Tragedy of the Commons. For instance, with 3 players, the optimum pays 2.25 + 2.25 + 2.25 = 6.75,

while the equilibrium pays 1 + 1 + 1 = 3, for an efficiency of 3/6.75 = 44%. This efficiency approaches 0 as the number of players approaches infinity. The payoff to the Nash equilibrium with n players equals n; the payoff to the social optimum with n players equals 0.75n2, so the efficiency in the limit is

$$\lim_{n \to \infty} \frac{1}{[0.75n]} = \lim_{n \to \infty} \frac{1}{[0.75n]} = 0$$

as n goes to infinity. The public good problem can be very serious.

One might say that the technology assumed here is extreme (linear), and this accounts for the corner optimal solution, with each player investing all resources in the private good. Although this is certainly true, the decrease in efficiency of a public good Nash equilibrium as the number of players rises is a very general result.

Most countries identified as a target recipient by IDAs reflect the short- and long-run inefficiencies associated with public good problems. There is a real and persistent market failure here, reflected in underprovision of law and order, trust, and technology transfer, among others. This market failure opens a window of opportunity for IDAs to enjoy development success. IDAs need to address the public good problem in the target recipient.

4b. CPR Problems

Consider next a common-pool resource, or CPR. A CPR is defined by two characteristics: exclusion is costly, but consumption is rivalrous. Thus, CPRs are polar opposites of club goods, where exclusion is costless but consumption is nonrivalrous. Club goods can be local (as in country clubs) or global (the European Union (EU)). Clubs exclude nonmembers from benefits (compare Sweden to Norway with regard to EU membership), while one member's consumption of benefits from club membership does not reduce another member's consumption of benefits from membership (compare Sweden and Finland). While club goods rarely if ever have tragic outcomes, CPRs are plagued by outcomes exhibiting short-run inefficiency and long-run unsustainability (destruction) — a phenomenon popularly known as the Tragedy of the Commons. This tragedy is often observed the world over in target recipient countries. Here are two classes of examples where tragic outcomes have been or could be observed:

- Deforestation of tropical forests throughout the world, forests being a CPR
- Electrical power generation, with power grids acting as a CPR

Two of the case studies in this report are essentially examples of CPR problems: the Orissa forestry management project and the Maharashtra electrical power project. Ostrom (1990) contains many more such examples of tragic outcomes, as well as many examples where the users of a CPR have organized themselves so as to overcome the strong temptations to overharvest and have sustainably used CPRs for many centuries.

Ostrom, Gardner, and Walker (1994) study CPRs from the point of view of game theory, institutional analysis, empirical political science, and experimental economics. (See also Svensson, 2000a, for an application of CPRs to foreign aid and rent seeking.)

To fix ideas, suppose there are n players, each having the same access to the CPR, a forest. We sacrifice no generality by calling the CPR a forest. The production of forest output is given by a concave production function F(X), where X is the number of players using the forest. Each player has one of two choices:

- (1) use the forest, in which case the player's payoff is F(X)/X
- or
- (2) do not use the forest, in which case the player's payoff is w.
- (1) follows from the equal access assumption; (2) represents a fixed outside opportunity, w, available to all potential users.

Forest production is shown on the vertical axis of Figure B.2; inputs X into production, here the number of users, on the horizontal axis.

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First determine the Nash equilibrium of the game played by the n potential users of the forest, the players. A player will use the forest in the event that (1) pays better than (2);

F(X)/X > w then use the forest.

A player will be indifferent between using the forest and exercising his outside option when (1) and (2) pay the same:

F(X)/X = w then use the forest or exercise outside opportunity.

A player will exercise the outside opportunity in the event that (2) pays better than (1):

 $F(X)/X \le w$ then exercise outside opportunity.

At a Nash equilibrium, each player individually has maximized payoff; hence, this is a number of players X using the forest commons such that

$$F(X)/X = w$$

or

$$F(X) = wX$$

the point labeled Nash equilibrium in Figure B.2.

Next, consider the optimization problem posed by the forest. One wants to maximize net output, which is the difference between forest output and opportunity cost:

Maximize F(X) - w X.

Using the theorem of the mean value from calculus, it is clear that the above maximum occurs at the point marked Optimum in Figure B.1.

It follows from concavity of the production function that the number of users at Optimum is always less than the number of users at Nash equilibrium. So the situation portrayed in Figure B.1 is completely general. Thus, we have as an immediate implication that the forest is overused at a Nash equilibrium.

This already implies an inefficiency. Define efficiency to be

Efficiency = (total payoff at Nash equilibrium)/(total payoff at Optimum).

This definition is a literal rendition of Debreu's coefficient of resource utilization (Debreu, 1951). For the case shown in Figure B.1, we have

Efficiency =
$$wX/[F(X^*) + w(X-X^*)] < 1$$
.

Indeed, this efficiency will be well below 100%, since CPR production in Figure B.2 occurs in the counterproductive zone, where marginal product is negative. As long as average product is positive, no matter how low, one may get a Nash equilibrium at that level – all it takes is a low enough outside opportunity w.

Here is the recipe for ultimate tragic outcomes: w near 0 (low value outside opportunity) and large X (many potential users, for whom the CPR is the best thing they have). This is the situation in many developing countries, such as India (Orissa), where property rights to forested lands are ill-defined or where large-scale, government-owned forests are not guarded effectively and are de facto, open-access forests. In some cases, the property rights to such forested areas were relatively well defined and enforced prior to colonization but not understood or recognized by colonial powers. Thus, earlier systems of property rights to forests were destroyed by external governments leaving many resources to be effectively open-access resources that had earlier been regulated by those who have communal rights to their use. Where the economic opportunities that local residents face outside an unprotected forest are very low and the population of local users is growing, the level of inefficiency can get worse and worse. The outcome is very low efficiency, as the Nash equilibrium is driven further and further towards zero – which must be reached in the limit as X grows large, again by concavity.

The study of the Maharashtra power project is another example of a CPR. The power grid covers a wide area, is relatively easy to tap into, and power theft is rivalrous since it prevents others from consuming the electricity generated. Agents illegally tap into power grids, thereby making it nearly impossible for private electricity suppliers to cover production costs. Furthermore, the state electricity board used access to the power grid as a means of generating patronage. Since one bureaucrat's decision to hand out cheap (or free) electricity to his patrons does not incorporate how such a decision affects other users on the power grid, the grid is similar to a fishery that is "overfished" by the bureaucrats.

Returning to our mathematical model, in the limit for large X as w goes to zero, efficiency is driven to zero:

$$\label{eq:limit} \text{Lim Efficiency} = \lim \le X / \left[F(X^*) + x(X - X^*) \right] = 0 / \left[F(X^*) = 0 \right]$$

where X^{\bullet} is the X satisfying $F'(X^{\bullet}) = 0$, where maximum CPR output occurs.

We identify low efficiency of CPR utilization as a short-run tragedy. However, overuse also has long-run implications. Indeed, if overuse is not sustainable, then the CPR is inevitably degraded, and may even be destroyed as a result. We identify destruction of the CPR as a long-run tragedy.

Most countries, identified as target recipients by IDAs, reflect the short- and long-run tragic outcomes associated with CPRs. There is a real and persistent problem of property rights that have not been well specified. This problem opens a window of opportunity for IDAs to enjoy development success: address the tragedy of the commons in the target recipient.

One might move some way toward the optimum with some kind of management scheme, for instance management by the central government, or even by the IDA. The trouble with management by the IDA is that it might in-

fringe on widely held conceptions of sovereignty; thus, the IDA would most likely be represented by a consultant. In either case, management by the central government or by a consultant representing the IDA, an efficiency problem could arise if the agent who coordinates or monitors these management functions is corrupt. We now turn to the consideration of corruption.

4c. Corruption

Corruption pervades the target recipients where IDAs operate. In the phenomenon of corruption, market failures come together in an especially perverse configuration. First, we can think of (and usefully model) foreign direct investment (FDI) as a fiscal commons, which is plundered by corrupt officials seeking bribes to invest in an economy – this is a Tragedy of the Commons. Second, we can think of corruption as a breakdown of law and order – this is a public good problem. Third, we can analyze corruption as a conflict between the citizenry (the Principal) and its government officials (the Agent) – this is a Principal-Agent problem. There is no guarantee that the IDA will be able to overcome the configural nightmares posed by embedded corruption. To anticipate our main result:

Corruption represents the configuration of commons, public good and principal-agent problems. Corruption is a pervasive problem in target recipients where IDAs operate. Entry by an IDA into a corrupt situation does not guarantee development success.

To make this point as vividly as possible, consider the case of FDI, where corrupt officials charge bribes so that FDI can take place. This turns out to be a CPR problem in the extended sense, and game theory can treat it (see Waller, Verdier, and Gardner, 2000, for more details). According to this view, bureaucrats view the private sector as a CPR that can be "harvested" via bribes. Corruption is a hallmark of almost every potential target recipient – it is one of the fundamental guarantors of bad initial results in such countries. We model corruption as a public official using public office for private gain. In particular, suppose a public official can give or deny permits for a foreign investor to invest in a given country – think of licenses, permits, fire inspections, tax inspections, and the like. The public official does not distribute permits on the basis of merit. Rather, the public official asks for a bribe, which is the price a foreign investor must pay to get this permission. The more permissions a foreign investor must get, the higher the price in terms of total bribes.

To take a concrete example of configuration, consider the decision by an IDA to invest in the infrastructure of a country by building roads. Then the problem consists first in getting the necessary construction permits (the above CPR problem). But the problem is compounded by the need to hire local contractors to build the road (a principal-agent problem). Local contractors have an incentive to put forth low effort, by skimping on costly inputs if they can get away with it. So the IDA requests government inspectors. But if in-

spectors can get a bribe for looking the other way (a public good problem), then the new investment by the IDA has fueled opportunities for bribe-taking and poor work. Many of the roads built in developing countries twenty or even ten years ago have deteriorated very rapidly due to this problem.

The basic situation before the IDA enters the country is shown in Figure B.3. Quantity of FDI, denoted Q, is shown on the horizontal axis; the price in terms of total bribes, B, is shown on the vertical axis. The demand for permits is the piecewise linear function with vertical intercept at

$$Q = 0, B = k$$

And horizontal intercept at

$$Q = 1, B = 0.$$

The vertical intercept represents the willingness of the foreign investor with the highest value investment project to invest. We denote this willingness by the parameter k. The higher this parameter, the more investment demand there is, for a given slope (which we hold constant). For simplicity, we assume linearity of demand in the figure. However, the main result is true for any demand function that displays monotone elasticity of demand-demand elastic at high prices, inelastic at low prices.

Depending on how corruption is organized, various outcomes along the demand function are possible:

- First-best. The country has no corruption; or if it once had corruption, an anti-corruption drive has succeeded in wiping it out. In either case, B = 0, no bribes are taken, and all willing FDI enters the country. This case is represented by the horizontal intercept in Figure B.3. We normalize Q = 1 to mean that 100% of all willing FDI enters the country.
- Second-best. The country has corruption, but that corruption is coordinated. For instance, the coordinator may be the president or prime minister, or some family member of the above. The coordinator sees that the most money possible is raised from bribes. This outcome is denoted Coordinated Equilibrium in Figure B.3. The Coordinated Equilibrium is precisely what a monopoly public official would charge if he or she were handling bribes. This sort of equilibrium is encountered in one-family states or kleptocracies, such as Indonesia or Azerbaijan.
- Third-best. The country has corruption, indeed is rife with it, and the corruption is decentralized. That is, there are n corrupt officials, with n large, and each corrupt official charges a bribe on his or her own. This is just like many users, each using a CPR on his or her own, and not internalizing the implications of that use on the entire set of users. Just as in any CPR, one gets overuse of the CPR, much higher bribes in total are charged, and much less FDI enters the country, compared to either first-or second-best. This outcome is denoted Decentralized Equilibrium in Figure B.3. Russia and Ukraine, the countries rated as the very worst in the world for investment climate according to the World Competitiveness

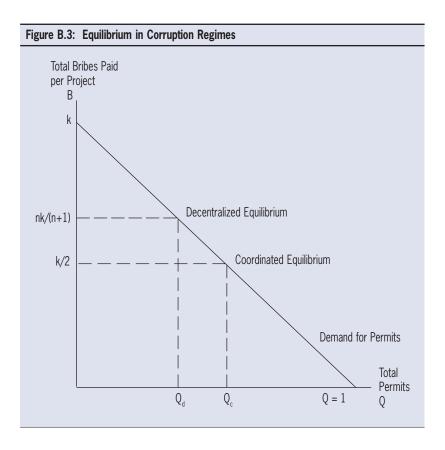
Report (HIID, 1999), exhibit the Decentralized Equilibrium. A typical value of n for Ukraine is 30.

The above rankings are based on an efficiency measure, namely how much FDI is achieved relative to the optimum of 100%. There is another commonly used measure of corruption, namely how much is the total value of bribes collected. In terms of Figure B.3, this is the difference between the quantity axis (Q) and total revenue (BQ). In the event that Coordinated Equilibrium falls in the elastic range of market demand for permits, the rankings given by total bribes rate Coordinated Equilibrium worse than Decentralized Equilibrium, the opposite of the rankings given by efficiency.

If this is a commons, we should expect a potentially tragic outcome. And, true to form, here is how the Tragedy of the Commons arises. As n goes to infinity, the bribe charged at the Decentralized Equilibrium, B = nk/(n+1), approaches k, the reservation price of the most willing investor. That is, with enough corrupt public officials making enough inspections, FDI is completely discouraged. As an example of this, consider a country with an extremely poor investment climate, Russia, thanks in part to corruption. Very few foreign investors are found in Russia. At the same time, the biggest component of FDI into Ukraine comes from Russian investors, for whom Ukraine offers a better investment climate than home.

The initial situation facing the IDA before entry into the target recipient is bad, especially if it faces the Decentralized Equilibrium. Generally speaking, three things can happen when the IDA enters the country in the role of investor. However, it would not be correct to assume that IDA investment simply adds to that of the rest of the market FDI. Here are three scenarios for what can happen to market demand as portrayed in Figure B.3:

- 1. Crowding-In. This is the best scenario. IDA investment signals to the rest of the market that reform is underway. This signal is credible when IDA investment is tied to reform, and that tie is known to other investors. In this event, IDA investment encourages more FDI, the demand for permits shifts outward and upward (larger value of k), both B and Q rise. The rise in Q has beneficial micro and macroeconomic effects, contributing to overall development success. As a practical example, if IDA investment in power generation leads to sector-wide reforms, then private investment is also encouraged.
- 2. No Change. IDA investment neither encourages nor discourages FDI, and the demand for permits does not change. Since B and Q do not change, there is no contribution to overall development success.
- 3. Crowding-Out. This is the worst scenario. IDA investment merely replaces existing local investment, while having no effect on FDI. For example, by providing electrical power to the state of Maharashtra via foreign aid, private investment in electricity generation was driven out. In this case, the demand for permits shifts inward and downward (smaller value of k), both B and Q fall. The fall in Q has deleterious micro and macroeconomic effects, detracting from and possibly reversing overall development success.



The IDA is confronted with a three-scenario analysis: these occur over and over again, quite naturally, in real-world decisions. To determine which of these three scenarios is most likely, and to what extent that scenario is realized, requires a great deal of further data (country-specific, especially), as well as a close analysis of potential FDI. In the best case, IDA entry may even reduce corruption (here modeled by a lower value of n) as part of an overall reform package.

Traditionally, IDAs have focused on improving the capacity of official government agencies. This focus has been reinforced by the priorities of officials in target recipient countries. A more efficient government can also more efficiently extract rents (raising corruption), while aid that more directly enhances the capacity of local communities to coordinate their own actions might be more efficient (lowering corruption). In terms of the contrast between Nash equilibrium (3) and social optimum (4), an increase in corruption lowers the value of (3), while leaving the value of (4) unchanged.

The inefficiencies caused by corruption only get worse with a greater number of levels of corruption. For instance, if corruption is also present at the local community level, then the efficiency gain pointed to above may not materialize. An IDA will have to put up with some level of corruption – this is present

in all target recipients – although there is no doubt a threshold above which they would prefer to deny aid (following the logic of section 3). This suggests that a rational government in a target recipient will find that threshold value, and extract just as much as possible without causing the IDA to pull out completely. If so, this is a certain invitation to continued dissatisfaction on both sides.

Sometimes training government officials to be more efficient makes them more efficient at rent seeking and finding. As long as a government cannot credibly threaten to fire such officials, the problem of corruption will be present forever. The key to the solution of this problem is adding some government levels that truly are responsive to a public. Local democratic systems where voters do have some chance to vote out corrupt local officials can at times improve the situation. So even though adding more government levels may make the situation regarding corruption worse, it may also bring with it the means of a solution to the problem.

Coordinated Aid

So far we have considered a single pair of countries, one represented by the IDA, the other represented by the target recipient. There are also interesting strategic aspects when there are two or more countries represented by IDAs.

As we pointed out in the previous section, IDAs typically encounter corruption in the target recipient. Corruption can encompass CPR problems, public good problems, and principal-agent problems. Put all together, these encounters can utterly vitiate all results of development activity. Even worse, it may seem there is nothing the donor countries can do about this baleful situation.

Here is a simple model of the phenomenon. Suppose two IDAs, each representing a donor country, face the payoff matrix G+ (recall section 2d). There is a single target recipient, and for each IDA, the interaction inside the target recipient should the IDA enter looks like G+. Given passive IDAs, either donor country can expect the payoff 1 – partial development success – from entering, or staying in, the target recipient.

Now suppose that donor country A has entered the target recipient, and decides to improve the situation by getting tough with the target recipient, playing actively. This means A credibly threatens to withdraw, with the payoff consequences given by G++.

What does the target recipient do in a case like this? It turns to the second donor country B, which has not entered the target recipient, and invites B to replace A in the donor/recipient relationship — often with (noncredible) promises of development success. (We heard this repeated in numerous interviews.) This is precisely exercise of an outside opportunity by the target recipient — the outside opportunity being the country not currently operating in the target recipient.

So it would seem the donor countries are stuck, strategically speaking, in partial success equilibria with their attendant aid dependency – and no way out to complete success.

In a situation like this, it is often useful to change the rules of the game. This is precisely what the OECD donor countries did when they ratified the OECD Treaty Against Corruption in 1999. By providing the possibility of taking legal actions against OECD firms that pay bribes, OECD members essentially ruled out scenarios like the above, where a single corrupt target recipient plays off one donor against another.

Even better from the standpoint of the donors, with this rule change the equilibria of the form (High, High, passive) unless there is a deviation, are restored to viability. Instead of having to settle for partial development success, the donors can demand (and come very close to getting) complete development success. Their interests are best served by crafting the rules of the game in such a way that bad (for them) equilibria are ruled out.

The main point here is:

Coordinated commitment on the part of donor country IDAs can forestall the worst effects of the Bad Folk Theorem.

6. Equity Considerations

To this point, we have considered only efficiency gains as a desired consequence of IDA activity. It would be an oversight not to say something about distributional consequences from external aid. Here we show:

External aid not only changes economic incentives, it also changes the distribution of payoffs. Such changes may jeopardize the sustainability of efficiency gains.

Here is a simple game sketch of this process. Prior to entry by the IDA, the players in the target recipient are playing a symmetric equilibrium – everyone uses the same strategy and receives the same payoff, 1. With two players, this is the distribution

```
(player 1, player 2) = (1,1).
```

So, one starts with a situation of complete equality. Suppose this total payoff, 2, represents 50% efficiency.

Now external aid enters the country, making government officials more efficient at distributing that aid – but also more efficient at channeling that aid to groups whose support the government wants to court. Such is often the case when a developing country is monetized. The mere institution of money is sufficient to create winners and losers, depending on access to money and credit.

Suppose that as a result of the aid process, total payoffs in the economy double (from 1+1=2 to 4), but player 1, favored by the government, gains while player 2 loses:

(player 1, player 2) = (3.1, 0.9).

Now the preexisting but inefficient situation has been replaced by a very asymmetric but efficient situation, where one player (think of this as representing a large constituency) is a winner and another player is a loser. Clearly, such distributional asymmetries may not be sustainable – they may be upset by social unrest, even revolution.

We suspect that IDAs often have very specific distributional objectives in mind. Improving the lot of the poorest might be seen as a success from some perspectives, and could be touted as a success. From such a standpoint, the above example of raising efficiency from 50% to 100% would not be counted as a success. In any event, equity successes of that sort are very likely to clash with efficiency – a familiar result from the debate over Rawls's theory of justice.

7. Warm Glow Effects

In this Technical Appendix, analysis was conducted under the presumption that the donor country was altruistic, i.e., it received utility only if the aid provided generated results in terms of improving the standard of living in the recipient country. The disturbing facts of foreign aid, documented in Burnside and Dollar (1998, 2000), is that aid does not seem to generate the desired results. As we have argued in this appendix, this may be the result of donor country IDAs not using the appropriate mechanisms to provide the appropriate incentives for recipient countries to reform. But an alternative view comes from the evidence from economics and social psychology on charitable giving. It is well documented that agents like to give to charities regardless of whether or not the aid accomplishes anything. This is called the "warm glow" effect (see the classic paper by Andreoni, 1990). For example, it appears to be a major reason that people vote in national elections even though the paradox of voting suggests that it is not individually rational to expend private resources to vote.

If one views foreign aid from a "warm glow" perspective, then all that matters to aid givers is the act of giving itself. If the aid actually accomplishes something, they are happy; but if it does not, they do not care since it's the act of giving that matters. In this situation, expending resources to actually achieve results is not necessarily desirable – what matters is simply making sure that the aid money is spent, i.e., that bureaucrats "move the money." If donor countries care only about giving and not what the giving produces, one should observe considerable amounts of aid being given to countries with little effort being expended to ensure that the giving accomplishes something. This prediction is clearly consistent with the data of foreign aid. While clear-

ly a cynical view of foreign aid, it seems to fit the facts and is supported by considerable experimental and empirical data. Furthermore, voters may base election votes on how much aid a politician is willing to spend rather than how it is spent or what it produces. Consequently, to give voters their desired "warm glow" effect, they have incentives to put pressure on IDAs to "move the money" for political reasons rather than humanitarian reasons. If the warm glow effect is what drives foreign aid decisions, then designing appropriate incentive mechanisms for recipient countries is a moot point.

8. Conclusion

In this Technical Appendix we have exhibited the kind of insights into the strategic interactions facing an International Development Agency that game theory makes possible. The models considered have been quite simple, so as to avoid needless complication. At the same time, the models considered have been rather abstract. The reason for this was to make the most general points possible, and generality would be compromised by overly specific examples. At the same time, we are sympathetic to the criticism that the models considered have not been complicated enough. Finally, our references list contains only work referenced within this appendix; many more references can be found in the main text.

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_____. 2000b. "When is Foreign Aid Policy Credible? Aid Dependence and Conditionality." Journal of Development Economics 61:61–84.

Waller, Christopher J., Thierry Verdier, and Roy Gardner. 2000. "Corruption: Top-Down or Bottom-Up?" Gatton School of Business and Economics, University of Kentucky. Unpublished.

Appendix C Methods Used in This Study

A major method used in this report is the Institutional Analysis and Development (IAD) framework. It is briefly discussed in Chapter 2 and presented in more detail in Appendix A. It is applied throughout the Final Report. The IAD framework has been used to identify the set of questions posed to Sida staff working at headquarters, and to various participants involved in the cases examined in India and Zambia. The framework identifies the core questions raised throughout the volume. It enables us to anticipate, understand, and organize the answers we received to our questions. In addition to using the IAD framework as the central organizing theoretical tool, we have also undertaken an extensive literature review, reviewed extensive archival materials in the files at Sida headquarters, conducted semi-structured and in-depth interviews with the staff of Sida, with officials at other Swedish agencies, and with consultants who are familiar with Sida's operation. We also present a formal, game-theoretical analysis of some aspects of the relationships between aid, incentives, and sustainability in Appendix B.

Literature Review

As a core part of our study, we conducted an extensive review of key books, journals, databases, etc., that had a possibility of containing key information about incentives, development, and aid. The more useful databases that we consulted were: Electronic Development Information Service, Joint Libraries Information System – an electronic database of the World Bank and IMF library network – and the Social Science Citation Index. Further, we were able to draw on the extensive bibliographic facilities of the Workshop in Political Theory and Policy Analysis, which contain a large number of reports and documents that have not been formally published. As can be seen from the bibliography for the report, we consulted a very wide-ranging body of literature. The synthesis of what we found from the literature review is contained in Chapters 1 through 6.

Interview Methods

To obtain accurate information about incentives (perceived future benefits contrasted to the perceived costs of current actions), it is essential to talk with the staff involved in development cooperation at all levels. One can learn a great deal about incentives by studying the formal structure and archival

records of an organization. It is essential, however, to obtain good information about the perceptions of those working in a process about the incentives they face in order to understand their behavior and how it may cumulate to affect the sustainability of aid projects and programs.

In this short study, we made a considerable effort to interview a sample of staff members working at all levels within Sida headquarters in Stockholm. Fortunately, UTV identified a set of senior staff members who had worked at all levels within Sida (and the organizations that pre-date Sida). In addition to interviewing these senior staff members, we drew a random sample of Desk Officers and members of the Administrative Staff (see list of individuals interviewed for this study).

For the staff at Sida (interviewed by Krister Andersson, Matt Auer, Elinor Ostrom, Sujai Shivakumar, and Chris Waller during March and June of 2000), we constructed a semi-structured interview that addressed a variety of incentives that the staff faced, as well as some of their own career patterns (see the end of this appendix). We recorded these interview data in both structured and standardized responses, as well as in long text form. Structured interviews were completed with 63 staff members. In addition, more qualitative, in-depth interviews were conducted with a set of senior staff at Sida, with public officials at the Ministry of Foreign Affairs and the Ministry of Finance, with consultants who are familiar with Sida's development assistance, and with recipient government officials and organizations associated with the projects selected for case studies in India and in Zambia. In other words, we interviewed key actors in six of the organizations involved in the International Development Cooperation Octangle described in Chapter 4. To preserve respondents anonymity, we used a numbering system to identify where specific information was obtained. Interviews conducted in Sweden are identified with an S, those conducted in India with an I, and those conducted in Zambia with a Z.

Five Brief Case Studies

Although not required by Sida's TOR, we felt it important to examine, albeit briefly, Sida's operations in the field in order to gain insights into how the actors involved in development assistance perceived the incentives of development cooperation. We thought it was important for us to gain a direct sense not only of the incentives within Sida headquarters, but also of Sida officials, recipient officials, and beneficiaries in the field. In our research design we chose one country (Zambia) heavily dependent on foreign aid and one country (India) that is less reliant on aid. We expected that the incentives of the recipient governments would differ and that this could have a significant impact on the structure of aid and the choices that actors made. Because of the expertise of members of our team in regard to Zambia and India, we chose these two countries to meet these specifications. To facilitate comparative analysis, we wanted to examine projects that were in similar sectors. Again,

due to the expertise of the team, we felt that we had strengths in understanding public infrastructure and natural resources/agriculture. In consultation with Sida staff both in Stockholm and in the Swedish embassies of Zambia and India, we originally identified four projects, one in each sector per country. Since another Sida-funded project in Zambia (the Energy Regulation Board) was closely related to the project first selected (Kafue Gorge Hydropower Rehabilitation), and because it was innovative in its attempt to build institutions, we included it in our sample. The case studies are arranged in the following matrix.

More Dependent on Aid	
Zambia	Less Dependent on Aid India
Conservation Farming Unit	Capacity Building for Participatory Management of Degraded Forests in Orissa
Kafue Gorge Hydropower Rehabilitation Project Energy Regulation Board	Chandrapur-Padghe HVDC Converter Terminal Project
	Conservation Farming Unit Kafue Gorge Hydropower Rehabilitation Project

The short-term nature of the consultancy prevented a fine-grained analysis of these five cases: an in-depth study of the incentives of any development cooperation over multiple levels and including all actors takes far more time than the approximate ten person days per site that we were able to devote to these site visits. We felt it important, however, to illustrate the central theoretical findings of our work with reference to extant Sida development cooperation and to ensure that our theoretical understanding was consistent with what we observed in the field.

Thus, the methods used in this study combined our theoretical orientation with an in-depth literature review, with extensive interviews, and with five short case studies.

Interviews Conducted

In Stockholm

Åberg, AnnLis, Head of Division, INEC IKTS, Department for Infrastructure and Economic Cooperation, Division for Technical Cooperation and Training

Agrell, Jan-Olov, Deputy Director of Department, DESO, Department for Democracy and Social Development

Åkesson-Beckman, Louise, Assistant, GD-Stab, Director General's Office

Amberg, Adam, Head of Division, Sida-East EVB, Department for Central and Eastern Europe

Andersson, Mikael, Desk Officer, PEO EOL, Human Resourses Department, Division for Organisational Learning

Andersson, Urban, Desk Officer, South Asia, Ministry for Foreign Affairs

Arneback, Jessica, Desk Officer, AFRA SYD, Africa Department, Division for Eastern and Western Africa

Asplund, Eva, Head of Department, SEKA, Department for Cooperation with NGOs and Humanitarian Assistance

Bäckström, Robert, Consultant, Orgut Consulting AB

Berlin, Anders, Evaluation Officer, UTV, Department for Evaluations and Internal Audit

Båge, Lennart, Ministry for Foreign Affairs

Birkoff, Carl-Fredrik, Desk Officer, DESA, Division for Democratic Governance

Boberg, Lars, Controller, POL, Secretariat for Policy and Socio-Economic Analysis

Bojö, Ulf, Desk Officer, Sida-East EME, Department for Central and Eastern Europe

Bolte, Pia, Desk Officer, Zambia, Ministry for Foreign Affairs

Bomboma, Richard, Desk Officer, AFRA SYD, Africa Department, Division for Eastern and Western Africa

Borrman, Therese, Desk Officer, SEKA EO, Department for Cooperation with NGOs and Humanitarian Assistance, Division for NGOs

Brisman, Johan, Desk Officer, NATUR, Department for Natural Resources and the Environment

Byman, Per, Desk Officer, Sida-East EVB, Department for Central and Eastern Europe Carlsson, Barbro, Desk Officer, SAREC TEMA, Department for Research Cooperation

Cedergren, Magnus, Desk Officer, ASIEN, Asia Department

Dahlgren, Stefan, Coordinator, Project Committee, POL, Department for Policy and Cooperation Development

Denell, Chris, Consultant, SCB (Statens Statistiska Centralbyrå)

Donovan, James, Desk Officer, AFRA SYD, Africa Department, Division for Eastern and Western Africa

Edehorn, Göran, Desk Officer, INEC NÄRING, Department for Infrastructure and Economic Cooperation, Private Sector Development Division

Egneus, Hans, Professor, University of Gothenburg (by telephone)

Ekelund, Elisabeth, Deputy Head, Financing and Capital Markets Division, INEC, Department for Infrastructure and Economic Cooperation

Ekman, Bengt, Chief Controller, Director General's office

Elmqvist, Anette, Desk Officer, EVU JUR, Department for Finance and Corporate Development, Division for Legal Services and Procurement Advice

Eriksson, Ina, Desk Officer, RELA, Department for Latin America

Eriksson, Jan, Consultant, Swedpower

Eriksson Skoog, Gun, Evaluation Officer, UTV, Department for Evaluation and Internal Audit

Fallenius, Ann Marie, Head of Department, UTV, Department for Evaluation and Internal Audit

Folkesson, Rolf, Desk Officer, DESA, Division for Democratic Governance

Fritjofsson, Björn, Ministry of Finance

Gabrielsson, Annelie, Consultant, ECON

Gerremo, Inge, Desk Officer, NATUR MILJÖ, Department for Natural Resources and the Environment, Environment Policy Division

Ginste, Magdalena, Desk Officer, INEC AVU, Department for Infrastructure and Economic Cooperation

Gough, Kristina, Desk Officer, SEKA EO, Department for Cooperation with NGOs and Humanitarian Assistance, Division for NGOs

Granlund, Anders, Head of Division, SAREC UFO-P, Department for Research Cooperation, Division for the Sida Research Council on Developing Countries and Programme Support

Gyllhammar, Kerstin, Desk Officer, Sida-East EBC, Department for Central and Eastern Europe, Division for Baltic States and Central Europe

Hagström, Britt, Head of Department, PEO, Human Resourses Department

Hagwall, Anders, Head of Division, INEC INFRA, Department for Infrastructure and Economic Cooperation, Infrastructure Division

Halkjaer, Eivor, GD-Stab, Director General's Office

Hallonsten, Pia, Desk Officer, INFO, Information Department

Hamren, Monica, Secretary/Assistant, SEKA AL/ADM, Department for Cooperation with NGOs and Humanitarian Assistance

Hansson, Björn, Consultant, SCC (ScandiaConsult AB)

Hansson, Mathilda, Desk Officer, EVU EKONOMI, Department for Finance and Corporate Development, Division for Accounting, Financing and Financial Control

Hedlund, Hans, Consultant/Professor, Stockholm University

Hellgren, Theresa, Ministry of Finance

Hellman, Kalle, Desk Officer, AFRA SYD, Africa Department, Division for Southern Africa

Herm, Hugo, Desk Officer, SEKA HUM, Department for Cooperation with NGOs and Humanitarian Assistance, Division for Humanitarian Assistance

Herrmann, Niklas, Consultant, Orgut Consulting AB

Hessling-Sjöström, Ulrika, Desk Officer, INEC FINANS, Department for Infrastructure and Economic Cooperation, Financing and Capital Markets Division

Hillerström, Hans, Project Manager, ABB (by telephone)

Himmelstrand-Smith, Mona, Secretary/Assistant, POL, Department for Policy and Cooperation Development

Holmberg, Margareta, Desk Officer, PEO PER, Human Resourses Department, Division for Personnel Administration

Holmgren, Wiveca, Internal Auditor, UTV, Department for Evaluation and Internal Audit

Holmqvist, Göran, Head of Department, RELA, Department for Latin America

Höök, Lars-Olof, Head of Division and Adviser, AFRA, Africa Department

Horm, Peeter, Deputy Head of Department, Sida-East AL, Department for Central and Eastern Europe

Illes, Erik, Desk Officer, NATUR, Department for Natural Resources and the Environment, Policy Secretariat

Ingevall, Anita, Senior Adviser, NATUR, Department for Natural Resources and the Environment

Irani, Farhad, Desk Officer, INEC INFRA, Department for Infrastructure and Economic Cooperation, Infrastructure Division

Janson Landin, Susanna, Desk Officer, INEC IKTS, Department for Infrastructure and Economic Cooperation, Division for Technical Cooperation and Training Programmes

Jernberg, Inger, Desk Officer, DESO KULTUR/MEDIA, Department for Democracy and Social Development, Division for Culture and Media

Karlstedt, Cecilia, Consultant, ÅF-SMG (Swedish Management Group)

Khan-Berg, Elisabeth, Desk Officer, INFO, Information Department

Kjellström, Claes, Desk Officer, SAREC UNI, Department for Research Cooperation, Division for University Support and National Research Development

Lagging, Lars B., Civil Engineer, Consultant

Larsson, Karl-Anders, Ministry for Foreign Affairs

Liljeson, Lars, Deputy Head of Department, INEC AL, Department for Infrastructure and Economic Cooperation, Departemental Management Group

Lind, Agneta, Head of Division, DESO UND, Department for Democracy and Social Development, Education Division

Lindell, Magnus, Head of Division, SEKA EO, Department for Cooperation with NGOs and Humanitarian Assistance, Division for NGOs

Löfström-Berg, Ingrid, Adviser, POL, Department for Policy and Cooperation Development

Lundberg, Christine, Desk Officer, INEC IKTS, Department for Infrastructure and Economic Cooperation, Division for Technical Cooperation and Training Programmes

Malm, Anne-Charlotte, Desk Officer, INEC, Department for Infrastructure and Economic Cooperation

Markensten, Klas, Head of Department, ASIEN, Asia Department

Mattsson, Per-Ola, Desk Officer, DESO, Department for Democracy and Social Development

Milton, Olof, Head of Division, AFRA, Africa Department

Norberg, Carin, Head of Department, DESO, Department for Democracy and Social Development

Odén, Bertil, Ministry for Foreign Affairs

Öhman, Ulf, consultant, ScandiaConsult AB (by telephone)

Olander, Sven, Desk Officer, AFRA/SYD, Africa Department, Division for Southern Africa

Olsson, Berit, Head of Department, SAREC, Department for Research Cooperation

Olsson, Jan, Consultant, ÅF-SMG (Swedish Management Group)

Persson, Per, Head of Division, INEC URBAN, Department for Infrastructure and Economic Cooperation, Urban Development Division

Pettersson, Hans, Consultant, SCB (Statens Central Byrå)

Rask, Greta, Desk Officer, PEO/EOL, Human Resourses Department, Division for Organisational Learning

Rein, Mikael, Consultant, Orgut Consulting AB

Rifflet, Ingrid, Secretary/Assistant, SAREC UNI, Department for Research Cooperation

Schönning, Jörgen, Head of Division, ASIEN, Asia Department

Severin, Erik, Consultant, SWECO

Söderbeck, Mikael, Desk Officer, INEC, Department for Infrastructure and Economic Cooperation

Stödberg, Ann, Head of Department, POL, Department for Policy and Cooperation Development

Strand, Gisela, Desk Officer, INEC FINANS, Department for Infrastructure and Economic Cooperation, Financing and Capital Markets Division

Sundgren, Margaretha, Desk Officer, NATUR, Department for Natural Resources and the Environment

Sundström, Bo, Consultant, ÅF-SMG (Swedish Management Group)

Sundström, Mats, Internal Auditor, UTV, Department for Evaluation and Internal Audit

Sverkén, Karin, Desk Officer, AFRA, Africa Department

Thege, Per, Vice President, ScandiaConsult AB

Thornström, Carl-Gustaf, Desk Officer, SAREC TEMA, Department for Research Cooperation

Thunberg, Jerker, Head of Department, NATUR, Department for Natural Resources and the Environment

Timm, Karin, Desk Officer, INFO, Information Department

Trydell, Anders, Deputy Head of Division, AFRA, Africa Department

Wadstein, Susanne, Desk Officer, POL, Department for Policy and Cooperation Development

Wellroth, Sylvia, Desk Officer, PEO PER, Human Resourses Department

Wiking, David, Desk Officer, SEKA HUM, Department for Cooperation with NGOs and Humanitarian Assistance

Winai, Peter, Consultant, Goab

Zejan, Mario, Chief Economist, POL, Department for Policy and Cooperation Development

Zinn, Katarina, Desk Officer, SEKA HUM, Department for Cooperation with NGOs and Humanitarian Assistance, Division for Eastern and Western Africa

In India

Acharya, Rita, Additional Secretary, DEA, Ministry of Finance, New Delhi

Andersson, Owe, Head of Development Cooperation, Sida, New Delhi

Bajaj, Jagmohan, Member, Uttar Pradesh Electricity Regulatory Board, New Delhi

Carlsson, Carl-Göte, General Manager, ABB India, New Delhi

Deo, Pramod, Principal Secretary, Energy and Environment, Government of Maharashtra, Mumbai

Jadhav, N. N., Deputy Executive Engineer, MSEB, Mumbai

Jahar, H. S., Secretary Forests, Government of Orissa

Jiwrajka, K., Deputy Inspector General of Forests, Ministry of Environments and Forests, New Delhi

Lövkrona, Jonas, Assistant Head of Development Cooperation, Sida, New Delhi

Majumdar, S. M., Superintending Engineer, Transmission Planning, MSEB, Mumbai

Mohanty, P. R., Director, Social Forestry, Orissa Forest Department

Mohanty, S. C., Special Secretary Forests, Government of Orissa

Mohapatra, B. C., Principal Chief Conservator of Forests, Orissa Forest Department

Mukalla, Ramesh, Embassy of Sweden, New Delhi

Patani, V. S., Technical Director (EHV-Projects), MSEB, Mumbai

Saxena, N. C., Secretary, National Planning Commission, New Delhi

Singh, Neera M., Director, Vasundhara, Orissa

Singh, R. V., Conservator of Forests, Orissa Forest Department

Vijaykumar, S., Joint Secretary, Government of India

In Zambia

Aagaard, Peter, Associate Director, CFU

Aamodt, Peter, Chairman, Zambia Chamber of Commerce and Industry

Akapelwa, Kuwana, Director, Distribution and Customer Services, Top position at ZESCO/Former Project Director at PRP

Andersson, Torsten, Agriculture Sector Officer, Embassy of Sweden

Banda, A. K., Director, Planning and Co-operatives Development, Ministry of Agriculture, Food, and Fisheries

Cruickshank, Stuart, Chief Executive, Zambia Privatization Agency

Cypriam, Chitundu, Project Manager, Generation Component of the PRP, ZESCO

Fraser, Ian, Advisor, Zambia Privatization Agency

Fuller, Richard, FAO Representative, FAO

Gibson, Dutch, Associate Director, CFU

Gröva, Magne, Agriculture Sector Officer, NORAD-Norwegian Embassy

Gunther, Helen, Chief, Agriculture and Private Sector, USAID

Hedebro, Göran, Counselor, Embassy of Sweden

Hibajane, Silvester, Technical Advisor, ERB

Holmlund, Marie, AG Operations Officer, Embassy of Sweden

Jonsson, Lars-Ove, Senior Land Husbandry Adviser, Land Management & Conservation Farming Program

Kamanga, Andrew, Manager, Financial and Economic Analysis, ERB

Kasaro, Ezekiel, Schedule Control Engineer, ZESCO

Kezia, Mrs., Sida Desk Officer, Ministry of Agriculture, Food, and Fisheries

Kwasherai, Samson, Extension Officer, CFU-S. Province

Lombe, Grace, Administrative Officer, CFU-S. Province

Manda, James, Inspector Electricity, ERB

Mausala, Mukupa A., Finance and Budget Analyst, Agricultural Consultative Forum

Mfula, Lukunde, Inspector Acting Director (Petroleum), ERB

Mothander, Björn, Consultant (for 2000 follow-up team)

Mukutu, Namukolo, Chairman (and former P.S. of Ministry of Agriculture, Food, and Fisheries), Agricultural Consultative Forum, Golden Valley Research Trust (GART)

Muleba, Mulenga, Health and Energy Sector Officer, Embassy of Sweden

Munzife, George, Accounts Manager, ERB

Mwale, Masiye, Electrical Engineer, Kafue Gorge Hydropower Station, ZESCO

Mwale, Teddy, Senior Manager, ZESCO

Mwanakasale, Alex, Ag Operations Officer, World Bank

Mwanza, Jacob, Governor, Bank of Zambia

Mwenechanya, J. M., Professor/Consultant, McLink Consulting Firm

Nguluwe, Jones, Site Manager, PRP Kafue Gorge Hydropower Station, ZESCO

O'Donner, Mr., Spokesperson, Vice Chairman, Zambian Association of Manufacturers

Oscarsson, Pär, Reporting and Monitoring Advisor, Land Management & Conservation Farming Program

Otteby, Olle, Senior Adviser, Economic Expansion in Outlying Areas

Phiri, Matthew, Manager, Kafue Gorge Hydropower Station, ZESCO

Salasini, Rafael, Former Chairman (1997–2000), ERB

Serenje, Wilfred, Director of Energy, Department of Energy

Silungwe, Sunday, Extension Officer, CFU S. Province

Svensson, Kristina, Ambassador, Embassy of Sweden

Vlahakis, Shatis, Coordinator, CFU S. Province

Vukovich, Istan, Consultant (for 2000 follow-up team)

Wu, Junhui, WB Task Manager, Energy, Zambia

Zama, Moses, General Manager, Board Secretary, ERB

Zyambo, Mr., Managing Director, Zambia National Farmers' Union

Interview Guide

Personnel Interviews at Sida Headquarters – March 8–19, Stockholm, Sweden

Date: 3/ /2000

Subject Name:

Subject ID:

Division: AFRA RELA ASIEN Sida-East DESO INEC NATUR SAREC SEKA EVU INFO POL UTV

Our Ref No:

Category of Subject: M P S Interviewer: EO SS KA CG

Purpose

We have been asked by Sida's Department for Evaluation and Internal Audit to undertake a study on how aid, incentives, and sustainable development. The purpose of this study is to examine the institutional contexts within which development cooperation occurs and to identify areas where such cooperation can be improved. As part of this review, we are conducting interviews with Sida staff to determine how they perceive their institutional environment, the incentives they face, and their impact on aid programs. These interviews form a crucial component of the research and analysis required for this study, which we hope will provide critical insights to the understanding of the effectiveness of aid.

Conditions of the Interview

We propose to discuss with you your understanding of the organization of Sida and your place within it. Needless to say, anything you discuss with us will be completely confidential. Your thoughts and inputs, as we note them, will be kept securely by us. No reference will be made in our written reports that will link you in any way to a specific response. We will, however, list the people we have talked with in the back of our report.

(INTERVIEW): Can we clarify anything about the purpose of the interview or the terms under which it is being held?

Y N

We would like to start by asking about your background and your impressions of how the way Sida is organized.

Personal History

(HISTORY 1): Could you tell us a little about your background and how you came to work for Swedish Development Cooperation?

(HISTORY2): At what level did you enter Sida or its predecessors?

(HISTORY3): How long have you worked at Sida and its predecessors?

(HISTORY4): How long did you work at each of your positions?

Turnover

(Turnover1): In leaving one post and joining another, did you overlap with your predecessor or successor?

Y N

(TURNOVER1A): Did this affect your ability to perform in your new post?

Y N

(Turnover2): Do you maintain any contact with the projects you handled in your previous posts?

Y N

- 1. No contact at all (0)
- 2. Little contact (1 time/year)
- 3. Fair amount of contact (1<c<3)/year)
- 4. A lot of contact (c>3/year)

(Turnover3): Do you think that personnel changes within Sida affect its projects or programs?

Y N

- 1. Very negatively
- 2. Somewhat negatively
- 3. No perceivable effect
- 4. Somewhat positively
- 5. Very positively

Career Success

(CAREER 1): How have people been promoted at Sida?

(CAREER2): Which are the most desirable jobs at Sida?

- 1. Director posts at HQ
- 2. High ranking professional posts
- 3. Field posts in general

(CAREER2A): Why?

(CAREER3): What are the prospects for in-house advancement/promotions?

- 1. Very poor
- 2. Rather poor
- 3. Reasonably good
- 4. Very good

(CAREER4): Do job options affect your choice of portfolio?

Y N

(Career4a): How?

(CAREER5) Do portfolio options affect your career prospects?

Y N

(Career5a) How?

(CAREER6): In what ways did the 1995 restructuring affect your work or career plans?

- 1. Very negative
- 2. Mostly negative
- 3. Mixed

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- 4. Mostly positive
- 5. Very positive

Networks & Sources of Information

(Network 1): Personal contacts can often be useful in advancing professionally. How important a factor do you consider this to be in Sida?

- 1. Not important at all
- 2. Somewhat important
- 3. Very important

(Network2): Who reports to you?

(Network3): To whom do you report?

(Network4): Would you say that there exists a "grapevine" within Sida?

Y N

(Network4a): How does it operate?

(NETWORK5): Do you socialize with your colleagues from work?

V N

- 1. No never after work
- 2. It happens but not very often
- 3. Yes very often

Project Cycle

(PROJECT CYCLE 1): How is the agenda for your division set?

(PROJECT CYCLE 2): How have projects with which you have been involved with initiated?

(Project Cycle3): Do ideas for funding projects come from within or outside the organization?

- 1. More from within
- 2. About equal distribution between inside and outside
- 3. More from outside

(Project Cycle4): How are responsibilities for these projects distributed?

(ProjectCycle5): How consensual is the program development process?

(PROJECT CYCLE 5A): How is dissent handled in the process?

(PROJECT CYCLE6): Do the Sida decision-making processes emphasize consensus in the divisional meetings?

- 1. No, not at all
- 2. Sometimes depends on the decisions
- 3. Yes, as a general rule

(PROJECTCYCLE7): Do others outside of Sida significantly influence the projects or programs?

Y N

(PROJECT CYCLE7A): Who and how?

(PROJECT CYCLE 8): Does the decision-making process in the Executive Board follow the consensus rule?

- 1. No, not at all
- 2. Sometimes depends on the decisions
- 3. Yes, as a general rule

(PROJECT CYCLE9): How does the Board influence projects?

Criteria for Project Success

(ProjectSuccess1): What do you consider a successful project?

(ProjectSuccess 1 A): Why?

(PROJECTSUCCESS2): What do you see as the most successful program/project with which you have been involved?

(ProjectSuccess2a): Why?

(ProjectSuccess3): What does Sida consider a successful project?

- 1. No well agreed-upon criteria
- 2. Disbursement rates
- 3. Poverty reduction
- 4. Improved institutional capacity
- 5. Other

(ProjectSuccess3a): Why?

(PROJECTSUCCESS4): What official procedures are used within Sida to evaluate projects or programs?

(ProjectSuccess5): Do you think these are effective?

(PROJECTSUCCESS5A): Why or why not?

If yes: Why do you think evaluations are effective?

- 1. They are usually timely
- 2. They usually contain the most essential information for the decision makers at SIDA

- 3. They are usually carried out by competent teams of consultants from both Sweden and the partner country
- 4. Other

If no: Why do you think evaluations are NOT very effective?

- 1. Their timing is often off they come too late in the game
- 2. They often only report on the tangible, readily available and measurable information about projects, which is not sufficient to make informed decisions about projects
- 3. Evaluations are often biased because consultants sometimes have an interest in the extension of the project
- 4. They do not take into account long-term effects of the projects
- The number of evaluations carried out by each division overwhelms their technical capacity to provide adequate quality control and followup on reports
- 6. Other

(PROJECTSUCCESS6): How relevant are evaluations as a way of determining the success of projects?

- 1. Not relevant at all
- 2. Somewhat relevant
- 3. Quite relevant
- 4. Very relevant

(PROJECTSUCCESS7): Do you think the success of a project (using Sida's criteria) affects career advancement?

Y N

- 1. No, not at all
- 2. Perhaps, in some indirect ways
- 3. Yes they are

(ProjectSuccess7a): How?

(PROJECTSUCCESS8): What do you think are the reasons that projects fail? Design flaws, recipient failure to follow through, Sida failure to follow through, other?

DF RF SF O

- 1. Design flaws
- 2. Recipient failure to follow through
- 3. SIDA failure to follow through
- 4. Other

(ProjectSuccess8a): Can you give examples?

(ProjectSuccess9): Is it possible to identify particular causes to project failures or successes?

- 1. No, not possible
- 2. Hardly ever

- 3. Sometimes but not always
- 4. Yes, possible

(PROJECTSUCCESS9A): How would you change Sida so as to make a bigger impact on sustainable development?

Relationships with other Actors

Does the success or failure of projects depend on contacts or relationships with:

(Relationships 1a): other country sectors

Y N

(Relationship 1B): other sector desks

Y N

(Relationship 1c): other field offices?

Y N

(Relationships1d): the Foreign Ministry?

Y N

(Relationships 1E): your development cooperation counterparts?

Y N

(RELATIONSHIPS 1F): Swedish firms that are often part of projects?

Y N

(RELATIONSHIP 1g) Swedish consultants

Y N

What is being monitored by EC, AC and GD in the day-to-day business of aid administration?

- 1. Indicators of recipient performance
- 2. Spending rates in the recipient country
- 3. Disbursement rates at Headquarters
- 4. Other
- 5. Nothing

Other Comments

(Other:)

Interviewer's Observations

Conclusion

Thank you very much for your time. As we noted at the beginning, we will keep our notes of this conversation fully confidential. If you have any questions about this study, feel free to contact us.

Appendix D

Terms of Reference for a Study of How Aid, Incentives, and Sustainability are Related

Sida/UTV A. Berlin/S. Olander 1999-10-23

1. Introduction

Studies have shown that many aid projects are not sustainable and one factor behind this is likely to be perverse incentives of aid itself (e.g. Catterson & Lindahl, 1999; Ostrom et al., 1993). If perverse incentives are a problem of significant importance for achieving sustainable projects it is imperative to weaken these incentives and enhance the "proper" incentives in order to promote the effectiveness of aid. This requires that knowledge about the problem is taken into consideration in Sida's design and implementation of activities.

However, the knowledge about the perverse incentives of aid and their importance for project and program sustainability is scattered and possibly limited, and the methods for a systematic pre- and post-analysis of these incentives remain poorly developed. Hence, we know little about which incentives actors on the donor and the recipient side face, from what sources they spring, and how they affect the behaviour of the actors.

The Department for Evaluation and Internal Audit (UTV) will therefore explore the subject by initiating a study of how aid, incentives and sustainability are related.

2. Purpose

The purpose of the study is to review the state-of-the-art as regards the existing knowledge about incentives and aid. The second purpose is to identify areas, with regard to aid, incentives and sustainability, where it is relevant to Sida to increase its knowledge in order to improve the organisation and management of its aid. The third purpose is to suggest an approach as to how to evaluate the relation between aid, incentives and sustainability.

3. The Assignment

3.1 Tasks

- 1. Review the literature on how aid, incentives and sustainability may be related. The following questions need to be answered: What do we know about incentives and aid? What do we specifically know about how aid, incentives and sustainability are related? What theoretical models and empirical methods have been employed in these analyses and what are the experiences? In surveying the literature, the paper "Background Discussion for a Study of how Aid, Incentives and Sustainability are Related" discusses different topics that are to be considered in the review.
- Review key Sida documentation with respect to incentives and project/ program sustainability and assess to what degree the role of incentives is discussed. Interview Sida staff to assess the concern and consciousness of the issue of incentives and sustainability.
- 3. In the light of 1 and 2 suggest areas where it would be most relevant to carry out reviews or evaluations on how aid, incentives and sustainability are related in order to improve the organisation and management of aid activities at Sida.
- 4. How may incentive analysis become a useful tool in aid evaluations in general, and for Sida in particular? On the grounds of the suggestions made under 3, and with the guidance of the questions under "3.2 Issues," the consultant is to present and discuss possible theoretical models and empirical methods at hand and/or develop new approaches to enable an evaluation within the suggested areas. The consultant shall assess the different approaches, their theoretical strengths and weaknesses, as well as their empirical feasibility.

3.2 Issues

The issues below represent broad questions which might, at least partly, be embraced in a future evaluation and therefore should be considered when performing the tasks 1–4 above:

- 1. Identify incentives facing staff at Sida and assess how these incentives promote or hamper the sustainability of aid financed activities.
- Identify incentives facing officials in the recipient country and assess how these incentives promote or hamper the sustainability of Sida financed activities.
- 3. Describe how the nature of co-operation between the donor and recipient create and/or affect existing incentives, which hamper or promote the sustainability of aid financed activities. Specifically the evaluators are to assess how the organisation and management of Swedish aid administration create and/or affect incentives that are faced by recipient government officials.

3.3 Responding to Tasks and Issues

Tender

In the tender the consultants are to account for how they will survey the theoretical and empirical literature. They also have to clarify how they will go about searching archives and conducting interviews. Possible field visits also have to be suggested in the tender.

Inception Report

The inception report should be a deeper interpretation of the terms of reference and propose a detailed work plan including possible field visits. The inception report will have to be discussed with and approved by the Department for Evaluation and Internal Audit before entering further into the assignment.

Methodological considerations during the assignment

The consultants are to present one or more theoretical models that can explain and account for how incentives and sustainability relate to each other through the behaviour of actors in the development co-operation. When considering theoretical models the feasibility of applying such models empirically must be considered.

The availability of information and quality of data should be taken into consideration when assessing the empirical feasibility. Given a certain approach, questions to ask are: What documents are needed? Can they be found in the Sida headquarter or in the field? Who is necessary to interview, where can he or she be found? The reasons for suggesting an approach must also be transparent and clear.

The supportive documentation for the study consists of Sida documentation and other published material. In particular, evaluation reports considering the sustainability of different development activities in the Swedish aid portfolio may prove valuable. The task of identifying and compiling relevant material rests primarily with the consultant. In this work the consultant cannot rely on support from Sida/UTV.

The nature of the assignment requires a close and open dialogue between UTV and the consultant. The consultant shall keep UTV informed of the progress of the work and inform UTV well in advance of any problems that may jeopardise the performance of the assignment. UTV also reserves the right to participate in part of the study after consultations with the contracting consultant.

4. Competence

The evaluation shall be carried out by a team with advanced knowledge of and experience in:

- development economics and/or institutional economics
- anthropology and/or sociology and/or political science and/or institutional development
- · experience in developing theoretical models and empirical methods

At least one team member must have the ability to read Swedish.

5. Work Plan

The study is envisaged to require an estimated 20–30 man weeks.

The tentative time schedule for the study is:

November	1999:	Tender invitation
December	1999:	Contract consultant
January	1999:	Submission of inception report
May	2000:	Submission of draft report of assignment
June	2000:	Submission of proposal for an evaluation of how
		aid, incentives and sustainability are related.
August	2000:	Submission of final versions of the report and proposal

6. Reporting

Three documents shall be presented to Sida:

- An inception report shall be presented to Sida commenting and interpreting the terms of reference. The inception report shall include a work plan for how and when the work will be conducted.
- A literature review on how aid, incentives and sustainability may be related shall be presented (not exceeding 60-80 pages excluding annexes). The review of Sida documentation and interviews should be included in the same document.
- A proposal for an evaluation on how aid, incentives and sustainability
 may be related shall be presented, including a theoretical and empirical
 approach.

The review shall keep an educational format and more technical discussions are to be left to annexes. The reports shall be written in English and follow Sida Evaluation Report – a Standardised Format (see Annex 1). Within three weeks after receiving Sida's comments on the draft reports, final versions of the reports in two copies each, and on diskette, are to be submitted to Sida. Subject to decision by Sida, the reports will be published and distributed as publications in the Sida Evaluations series. The evaluation reports shall be

written in Word for Windows or in a compatible format and should be presented in a way that enables publication without further editing.

The evaluation assignment includes the production of a summary according to the guidelines for Sida Evaluations Newsletter (Annex 2) and the completion of Sida Evaluations Data Work Sheet (Annex 3). The separate summary and a completed Data Work Sheet shall be submitted to Sida along with the draft reports.

Sida Studies in Evaluation

96/1	Evaluation and Participation – some lessons. Anders Rudqvist, Prudence Woodford-Berger Department for Evaluation and Internal Audit
96/2	Granskning av resultatanalyserna i Sidas landstrategiarbete. Göran Schill Department for Evaluation and Internal Audit
96/3	Developmental Relief? An Issues Paper and an Annotated Bibliography on Linking Relief and Development. Claes Lindahl Department for Evaluation and Internal Audit
96/4	The Environment and Sida's Evaluations. Tom Alberts, Jessica Andersson Department for Evaluation and Internal Audit
97/1	Using the Evaluation Tool. A survey of conventional wisdom and common practice at Sida. Jerker Carlsson, Kim Forss, Karin Metell, Lisa Segnestam, Tove Strömberg Department for Evaluation and Internal Audit
97/2	Poverty Reduction and Gender Equality. An Assessment of Sida's Country Reports and Evaluations in 1995–96. Eva Tobisson, Stefan de Vylder Secretariat for Policy and Corporate Development.
98/1	The Management of Disaster Relief Evaluations. Lessons from a Sida evaluation of the complex emergency in Cambodia. Claes Lindahl Department for Evaluation and Internal Audit
98/2	Uppföljande studie av Sidas resultatanalyser. Göran Schill Department for Evaluation and Internal Audit
98/3	Evaluating Gender Equality – Policy and Practice. An assessment of Sida's evaluations in 1997–1998. Lennart Peck Department for Evaluation and Internal Audit
99/1	Are Evaluations Useful? Cases from Swedish Development Cooperation. Jerker Carlsson, Maria Eriksson-Baaz, Ann Marie Fallenius, Eva Lövgren Department for Evaluation and Internal Audit
99/2	Managing and Conducting Evaluations. Design study for a Sida evaluation manual. Lennart Peck, Stefan Engström Department for Evaluation and Internal Audit
99/3	Understanding Regional Research Networks in Africa. Fredrik Söderbaum Department for Evaluation and Internal Audit
99/4	Managing the NGO Partnership. An assessment of stakeholder responses to an evaluation of development assistance through Swedish NGOs. Claes Lindahl, Elin Björkman, Petra Stark, Sundeel Waslekar, Kjell Öström Department for Evaluation and Internal Audit
00/1	Gender Equality and Women's Empowerment. A DAC review of agency experiences 1993–1998. Prudence Woodford-Berger Department for Evaluation and Internal Audit
00/2	Sida Documents in a Poverty Perspective. A review of how poverty is addressed in Sida's country strategy papers, assessment memoranda and evaluations. Lennart Peck, Charlotta Widmark

Department for Policy and Socio-Economic Analysis

- The Evaluability of Democracy and Human Rights Projects. A logframe-related assessment.
 Derek Poate, Roger Riddell
 Department for Evaluation and Internal Audit
- 00/4 Poverty Reduction, Sustainability and Learning. An evaluability assessment of seven area development projects. Anders Rudqvist, Ian Christoplos, Anna Liljelund Department for Evaluation and Internal Audit
- 00/5 Ownership in Focus? Discussion paper for a Planned Evaluation. Stefan Molund Department for Evaluation and Internal Audit
- 01/01 The Management of Results Information at Sida. Proposals for agency routines and priorities in the information age. Göran Schill Department for Evaluation and Internal Audit
- 01/02 HIV/AIDS-Related Support through Sida A Base Study. Preparation for an evaluation of the implementation of the strategy "Investing for Future Generations Sweden's response to HIV/AIDS". Lennart Peck, Karin Dahlström, Mikael Hammarskjöld, Lise Munck Department for Evaluation and Internal Audit
- 02/01 Aid, Incentives, and Sustainability. An Institutional Analysis of Development Cooperation. Main Report. Elinor Ostrom, Clark Gibson, Sujai Shivakumar, Krister Andersson Department for Evaluation and Internal Audit
- 02/01:1 Aid, Incentives, and Sustainability. An Institutional Analysis of Development Cooperation. Summary Report. Elinor Ostrom, Clark Gibson, Sujai Shivakumar, Krister Andersson Department for Evaluation and Internal Audit

Aid, Incentives, and Sustainability

 Does 'aid' itself create incentives that undermine sustainable outcomes? This is the provoking question underlying the present study. The study explores how incentives that arise in the system of development co-operation affect the sustainability of development outcomes

The study provides a partly novel framework for institutional analysis of the relationship between 'aid', incentives and sustainability and conducts a partial evaluation of the incentive structure within Sida and five Sida-supported projects in India and Zambia. It highlights the importance of incentives and increases our understanding of incentive problems and their institutional causes within developing-country contexts as well as within the system of 'aid' itself.

An overall conclusion is that Sida can contribute to more sustainable outcomes, through 1) a more explicit and systematic understanding of incentive problems in developing-country field settings and those that are shaped by the very system of 'aid'; 2) the creation of incentives that encourage individual and organisational learning about sustainability; and 3) the devolution of ownership to the actual target population.

The study was conducted by a research team from the Workshop in Political Theory and Policy Analysis at Indiana University, headed by the internationally acknowledged political scientist Professor Elinor Ostrom.



SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Department for Evaluation and Internal Audit Address: SE-105 25 Stockholm, Sweden. Visiting address: Sveavägen 20, Stockholm. Tel: +46 8 698 50 00. Fax: +46 8 20 88 64.

E-mail: info@sida.se www.sida.se