Sida Evaluation 97/4

Environment & Land Management Sector Activities, ELMS

1991–1995

Southern African Development Community, SADC

J. Erikson
M. Douglas
Juliana Chileshe

Department for Natural Resources and the Environment

Environment & Land Management Sector Activities, ELMS

1991-1995

Southern African Development Community, SADC

J. Erikson
M. Douglas
Juliana Chileshe

Sida Evaluation 97/4
Department for Natural Resources and the Environment

Evaluation Reports may be ordered from:

Biståndsforum, Sida
S-105 25 Stockholm
Phone: (+46) 8 698 5722
Fax: (+46) 8 698 56 38

Author(s): J. Erikson M. Douglas Juliana Chileshe
Terra Nova, Rural Development Consultants

Sida Evaluation 97/4
Commissioned by Sida, Department for Natural Resources and the Environment

Registration No.: NATUR-1995-0016
Date of Final Report: January 1997
Printed in Stockholm, Sweden, 1997
ISBN 91 586 7459 4
ISSN 1401-0402

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. Telex: 11450 sida sthlm. Postgiro: 1 56 34-9
Homepage: http://www.sida.se

Executive Summary

1. Lesotho, through a Co-ordination Unit in Maseru, has since 1985 promoted, co-ordinated and raised funds for regional activities in the Environmental and Land Management Sector, ELMS. In October 1992, Phase II (commencing in January 1988), was succeeded by Phase III (ending in December 1995), which introduced novel land husbandry concepts together with activities on environmental impact assessment, environmental monitoring, and water resources management.

2. *Sida Support.* The Swedish support of approximately SEK 20 mill. annually in recent years, including technical assistance, has been extended since 1985 to finance programme activities together with most of the core operations of the Co-ordination Unit with Swedforest acting as implementation consultant. Since Phase III did not provide sufficient time for the sector to reduce its financial dependency on Sida, it has been agreed to extend the Swedish support by two years during a so-called Bridging Period 1996-1997.

3. *ELMS Setting and Activities.* During Phase III, all SADC member countries have benefited from ELMS activities in staff training, information services or advisory and backstopping services within the following sub-programmes:

Sub-Programme 1:	Basic Activities
Sub-Programme 2:	Completion of Phase II Activities
Sub-Programme 3:	Development of Manpower and Training Facilities
Sub-Programme 4:	Development of Environmental Monitoring and Assessment
Sub-Programme 5:	Economics of Sustainable Resource Management
Sub-Programme 6:	Applied Research
Sub-Programme 7:	Legal Context of Natural Resource Management
Sub-Programme 8:	Sustainably Productive Land Management Systems
Sub-Programme 9:	Information and Publications

4. Following the introduction of a sector specific strategy in 1994, the sub-programmes were consolidated into a Land Management Programme, an Environmental Management Programme and a Water Resources Management Programme.

5. *Terms of Reference for Evaluation.* This third independent evaluation of the activities of SADC ELMS also takes into account the impact of activities implemented from 1985 onwards (the previous independent evaluations took place in 1987 and 1990).

6. *Main Achievements of ELMS.* It should be recognised that ELMS is an unusually complex sector, both subject matter wise and institutionally. Its vantage point is also by necessity distant from the conditions of the users of natural resources, ELMS being concerned with providing what may be termed tertiary rather than secondary services in relation to the primary extension services. The restrictions imposed by the sector mandate—co-ordinating activities rather than implementing them—add to the difficulties in properly assessing demands among rural and urban communities.

7. Within this setting, the sector outputs and contributions on participatory techniques, land husbandry training, guidelines on land husbandry, policy analysis and policy analysis training, building of regional training capability and in preparing the *State of the Environment* have been both impressive and efficiently achieved. In comparison with the situation five years ago, ELMS training and information services have had a tangible impact on the targeted institutions, particularly in the fields of participatory techniques, land husbandry and policy analysis.

8. The considerable impact on regional co-operation and integration has been manifested through the major agreements: Namib-Kalahari Project, Zambezi River Action Plan (ZACPLAN), Convention on Desertification, and Protocol on Shared Water Resources.

9. *Other Findings on Relevance, Implementation Performance and Impact of Activities.* Most ELMS activities have been *relevant* to the needs among the member countries. However, gender considerations have not been adequately addressed in programme formulation and implementation.

10. *Implementation progress* within the more novel environmental field has been slower than for land management while two of the core functions, information services and technical backstopping/advisory services, have been less effective than the training services.

11. It is likely that the detectable *impact* on individual institutions would have had a knock on effect on some rural and urban communities (i.e. the ultimate beneficiaries) within individual member countries. However, ELMS has

no monitoring mechanism in place to prove this. Regrettably, the mission failed to find any evidence of such "grassroots" level impact from within the countries visited or in the documents reviewed.

12. The reasons for the above shortcomings can be found in: (a) planning deficiencies—lack of prioritisation among activities, few linkages between sector demands and available resources, and an absence of output indicators to guide the implementation process; (b) shortcomings in execution; and (c) lack of follow-up of outputs and impact to provide information for corrective actions and analyses of experiences.

13. *Role of Government of Lesotho.* Although ELMS is regarded as high priority sector by GoL, it has not been able to provide the necessary manpower capacity and capability to ensure effective technical and managerial performance of the unit without the help of technical assistance staff in executive positions.

14. *Effect of Technical Assistance.* The long serving implementation consultant, which has not been assigned a direct institution building support mandate by Sida, has been effective in manning the un-filled technical positions. The impact from the planning and managerial support provided by the consultant is still to emerge but efforts are continuing during the Bridging Period.

15. *Cost-Effectiveness of Provided Support.* The reliance on technical assistance for executive duties makes ELMS a high cost operation. Since the overall implementation record is mixed, cost-effectiveness has been modest.

16. *Sustainability.* ELMS sub-programmes have in the past been designed with the expectation of full donor funding. However, it is anticipated that some of the past achievements could be sustained in the future since: further local training of staff based on the ELMS sponsored training is not expensive to arrange once national routines have been established and the trainers have been trained; gradual introduction of cost-recovering fees for training services from the benefiting countries would reduce net expenditure; and intensified efforts to attract external funding for financing of programme activities may reduce the present dependency on one donor.

17. *Future Demand for Services by the Co-ordination Unit.* Over the last ten years, ELMS has seen its mandate expand significantly from its original soil conservation and land utilisation focus to embrace the much broader field of the environment. ELMS has recently been assigned an environmental "watchdog" role by SADC. How it will perform this role has still to be defined but it can be expected to add considerably to the ELMS burden of responsibilities with a corresponding need for additional technical knowledge and financial and manpower resources within the Co-ordination Unit.

18. In addition to the rural sector, line ministries and local authorities in the urban sector at national and local levels experience shortcomings in integrating environmental perspectives into long term planning, project planning and services programming; and gaps among environmental planning and management functions particularly with regard to air and water pollution. The future demand for Co-ordination Unit services within this sub-sector as well as other sub-sectors, including water resources management (which recently became a SADC sector in its own right), will also be affected by the activities of other actors.

19. *Requirements on ELMS Co-ordination Unit.* Consequently, ELMS needs to intermittently review its mandate and territory to eliminate duplication, fill emergent gaps, secure implementation efficiency in relation to its own resources and increase cost-effectiveness. It needs to strengthen the follow-up routines to improve its learning from past activities and it needs to improve managerial procedures and technical staff capabilities.

20. *Implications for Future Sida Support to ELMS.* Future external support to ELMS would be put to more effective use following improvements in Co-ordination Unit management through post upgradings and filling with qualified staff from the region and after sharpening of its procedures for programming and monitoring of activities and outputs.

21. It is also envisaged that external support would be more effectively utilised to support a programme or a project rather than core functions like training or information services since successful assistance to core functions is more demanding on scarce donor resources for supervision and output and impact monitoring.

22. The current Land Management Programme is operating effective training programmes, the effects of which are now ready for dissemination to rural communities through local initiatives. This programme also benefits from a clear sense of direction with regard to target groups, implementing institutions and technical subject matter areas. In addition, the instituted procedural improvements are likely to start generating important feedback on efficiency and effectiveness in the near future.

23. The Environmental Management Programme is more diverse than the Land Management Programme with less clear priorities and inter-linkages among its projects. It may also be duplicating efforts undertaken by other organisations unbeknownst to ELMS. Future support to this programme should be preceded by careful reviews of regional needs/demands within individual areas together with assessments of activities and plans of other actors.

Table of Contents

1. Sector Background

1.1 Evolution of Activities

101. In 1981, Lesotho was entrusted the responsibility "to promote, co-ordinate and raise funds for regional activities" in what was then called the SADCC[1] Soil and Water Conservation and Land Use Planning Sector[2] and a Co-ordination Unit was established in Maseru in 1985. During Phase I, 1985-1987, the administrative structure, including Contact Points in selected ministries in the eight member states, was established with Sida support and a number of "learning" and "action-learning" projects were launched through the Co-ordination Unit.

102. During Phase II (January 1988 to September 1992), the Co-ordination Unit undertook to promote and co-ordinate activities for sustained [agricultural] production and popular participation within a Sida supported structure of twelve sub-programmes. In 1990, the sector mandate was expanded to include environmental co-ordination and its name was simplified to Environment and Land Management Sector—ELMS.

103. During Phase III (October 1992 to December 1995), land husbandry concepts were introduced together with activities on environmental impact assessment, environmental monitoring, and water resources management while the structure of the Sida supported activities was consolidated into nine sub-programmes. During this period, the major elements of a sector specific policy and strategy were also formulated. Urban environment was acknowledged as being part of ELMS mandate in February 1995.

104. Since Phase III had not provided sufficient time for the sector to reduce its financial dependency on Sida, it was agreed to extend the Swedish support by two years during a so-called Bridging Period 1996-1997. Simultaneously, the activities structure was consolidated into three sub-programmes within the sector specific strategy: Environment, Land Management, and Water Resources Management.

105. In August this year, the SADC Council of Ministers decided that water should become a sector in its own right, co-ordinated from Lesotho, while also expanding the environmental mandate of ELMS to include a "watchdog" function which would entail closer co-operation with NGOs and the private commercial sector.

1.2 Demand for ELMS Services

106. The techniques for proper land management are well known among the SADC states by now (although further development is still required within the field of water harvesting and conservation). The challenge is to disseminate these techniques to farmers in such as a way that their implementation coincides with the interests of individual households. This task frequently requires a localised and multi-disciplinary approach while most government extension services still remain top-down oriented with limited interest in land management issues.

107. There is a clear and manifested demand for regionally provided services among the concerned states on management of common water resources as proved by the experience of the Zambezi River System Action Plan (ZACPLAN). Demand for environmental services, on the other hand, varies widely among the member states, frequently calling for national solutions rather than regional approaches. As a reflection of this, and the growing interest in this field by governments and donor agencies, a number of national environmental initiatives have been launched in most of the SADC states.

Immediate Beneficiaries

108. The intended immediate beneficiaries of the SADC ELMS activities are:

a) Environment, land and water resources management *subject matter specialists* and other government officials of the agricultural and natural resources extension services, and *NGO staff* involved in extension, training and/or project implementation at the field level;

b) Environment, land and water resources management related *project and programme managers*;

c) Officials within government ministries and departments involved in *policy making and planning*;

[1] Originally, from 1980 onwards with an initial membership of 8 states, the Southern Africa Development Coordination Conference; subsequently Southern Africa Development Community—SADC—with 12 members currently.

[2] "Sector" in the SADC context may have several meanings. It may refer to all the SADC appointed actors in a sector (i.e. the Co-ordination Unit and the Contact Points together with Technical Committee members and concerned officials and ministers); it may also refer to the activities implemented under the auspices of the Co-ordination Unit; and, finally, it may be used to include also the natural resource users and their assets.

d) Individual researchers and other administrative and technical staff from government *research departments and institutes* investigating environment, land and water resources management issues; and

e) Individuals involved in environment, land and water resources management related research and teaching within *university departments* and other academic institutions.

109. The ambition has been to enhance the skills and expertise of individuals through their participation in regional workshops, seminars and regional and/or national training programmes and by giving them access to relevant information through SADC ELMS information services.

Ultimate Beneficiaries

110. The intended ultimate beneficiaries are rural households of the SADC member countries who largely depend on the utilisation of local natural resources in order to meet their needs for food, cash, energy and shelter (this category of households represents the large majority of the population within the SADC region). It is not possible for a regional programme to directly target such beneficiaries; this is the responsibility of national and field level programmes. However, the regional activities aim to improve the ability of national institutions to provide the requisite support services required to enable rural households to adopt productive and environmentally sustainable land management practices.

111. The "general public" may be regarded as indirect beneficiaries of the SADC ELMS activities as enhanced environmental awareness in the region leads to the implementation of policies and programmes to combat existing environmental degradation, prevent future degradation and promote sustainable and equitable development and utilisation of the region's natural resources.

1.3 Sector Description

Mandate, Aims and Objectives

112. The ELMS mandate during Phase III has simply been to co-ordinate land and environment management activities of regional interest through Government institutions (and recently through NGOs and private organisations) without getting involved in their implementation.

113. The Phase III [Plan] Proposal states that the SADC ELMS sector co-ordination programme aims to help the governments of member countries:

a) to improve their performance in relation to the sustainable management of natural resources, particularly soil and water;

b) to identify actual or potential conflicts of interest that may arise out of environmental degradation and to reconcile such conflicts;

c) to develop policies and promote practices for the sustainably productive management of natural resources based upon partnership between government and communities of farmers and other land-users; and

d) to support institutions in member countries in their efforts to increase their competence in relation to sustainable resource management and to integrate the disciplines and contributions of such institutions.

114. The Phase III objectives, which have been guiding the ELMS operations for most of the period under review, were intended to:

a) bring about a purposeful sharing of data, information, knowledge and know-how relating to the aims of the programme;

b) bring about a rational sharing of training and other technical facilities among member countries;

c) assist member countries to strengthen and build up relevant institutions and expertise;

d) assist in setting up and running joint field programmes where they are necessary or desirable;

e) assist countries or groups of countries in preparing projects, particularly those for which external funding is required; and

f) assist member states in preparing Environmental Impact Assessments.

Structure of ELMS Activities

115. During the period under review, 1991-1995, the ELMS activities consisted of the sub-programmes (originally twelve, from 1 October 1992 nine sub-programmes) supported by Sida and regional projects[3] supported by other donor organisations or by Government of Lesotho. The Sida supported activities included core assistance to the Co-ordination Unit—Sub-Programme 1: Basic Activities—together with:

Sub-Programme 2:	Completion of Phase II Activities
Sub-Programme 3:	Development of Manpower and Training Facilities
Sub-Programme 4:	Development of Environmental Monitoring and Assessment
Sub-Programme 5:	Economics of Sustainable Resource Management
Sub-Programme 6:	Applied Research
Sub-Programme 7:	Legal Context of Natural Resource Management
Sub-Programme 8:	Sustainably Productive Land Management Systems
Sub-Programme 9:	Information and Publications

[3] Regional projects included, among others, the Zambezi River System Action Plan (ZACPLAN), the Plan of Action for the Kalahari-Namib Affected Areas and a project for development of Environmental Impact Assessment, the implementation of which is being co-ordinated/monitored by the Co-ordination Unit

Strategy

116. While the ELMS forerunner on soil and water conservation had technically been a sub-sector under the Food, Agriculture and Natural Resources Sector, co-ordinated from Harare and being guided by its rather general policy and strategy framework, in 1993-1994 it formulated its own policies and strategy, influenced by Agenda 21, which were approved by the SADC Council of Ministers in August 1996.

ELMS Support Responsibilities and Resource Allocations

117. The sector activities are financed jointly by Government of Lesotho and donor agencies of which Sida has been most prominent. It is an intention that 25% of the operating expenditure for Sub-Programme 1: Basic Activities should be funded by Government of Lesotho but it has not been possible to obtain figures on the extent of its contribution. In fact, neither the Annual Progress Reports, the Agreed Minutes from the Annual Sector Reviews nor any of the other documents made available to the mission contain information on actual expenditure by GOL or Sida. The absence of information on actual expenditure in the recurrent reports is made to felt an even bigger loss by the fact that the information on budgeted expenditure in the Plans of Operations is inconsistent, providing breakdowns for broken fiscal years interspersed with calendar years, alternating in Maloti and Swedish kronor.

118. The mission believes that annual budgeted Sida contributions to the nine sub-programmes have been as follows (Mill. SEK), including the cost of technical assistance and the management fee for the consultant company Swedforest (other donors, including member states, contribute to the regional projects):

Jan-June 1991	1991/92	1992/93	1993/94	1994/95	July-Dec 1995
11.5	21.1	20.6	21.0	20.4	11.2

119. The Swedish support to the sector, with particular intention to promote institution building and information sharing, is regulated in two agreements, *Specific Agreement on Agricultural Support* (9 July 1992, covering both Production through Conservation in Lesotho, PTC, and ELMS) and *Specific Agreement on Support to the SADCC Environment and Land Management Sector (ELMS) Co-ordination Unit* (24 November 1992). The Ministry Of Planning is responsible for the co-ordination of the Swedish development assistance to Lesotho.

120. The Sida Development Co-operation Office in Maseru was closed on 30 June 1993 after which the co-ordination responsibility was transferred to Sida headquarters in Stockholm.

Organisation and Management

121. The organisational core structure consists of the Co-ordination Unit in Maseru; the Contact Points in the member countries—commonly senior officials in agricultural or natural resources ministries; and the Technical Committee, which meets annually with a predominant membership of Contact Points to formulate/approve policies, review proposals for new activities and monitor and follow-up on the progress of sector activities.

122. In addition, the concept of Focal Points has been introduced. These refer to subject matters such as environmental education, Indigenous Knowledge Systems and land degradation and soil erosion.

123. *Planning Procedures.* The process for planning of new activities may be as follows: (a) an idea may originate from many quarters, including the Contact Points; (b) initial screening takes place within the Co-ordination Unit by applying certain criteria of which regional interest or applicability is one, after which it will be referred to the Technical Committee for "noting"; (c) further formulation is undertaken by consultants or through representative workshops; and (d) approval is sought via the Technical Committee from the Co-ordinating Committee of Officials of Agriculture and Natural Resources and the Committee of Ministers for Agriculture and Natural Resources.

124. *The Co-ordination Unit.* The Unit forms part of the Ministry of Agriculture, Co-operatives & Marketing in Lesotho. It reports to its Permanent Secretary on matters of policy nature and to the National SADC Contact Point in the Ministry of Planning and the SADC Secretariat on sectoral issues.

125. The current professional staff of the Co-ordination Unit is as follows (September 1996):

Director;
Senior Land Management Officer;
Senior Environmental Officer (not yet reported);
Senior Hydrologist (to be transferred to novel Water Sector);
Chief Information Officer;
Information Assistant;
Data Analyst (not yet reported);
Data Entry Technician;
Senior Technical Advisor (technical assistance; up to 31 December 1997);
Land Management Advisor (short term consultancy);
Environmental Management Advisor (technical assistance up to 31 December 1996; thereafter 2 man-months of consultancy);
Information Advisor (technical assistance; up to 30 June 1997); and
Environment Information Facilitator (Bilateral Associate Expert; up to 20 May 1997).

126. The Land Management Advisor and the Information Advisor received counterparts in November 1993 (Chief Information Officer and Training Officer—later Senior Land Management Officer).

127. In March 1996 the following additional posts were approved: Environmental Monitoring Officer, Principal Land Use Planner together with Senior Executive Officer (administrative post; filled) and Personal Secretary.

1.4 Wider Organisational Setting

SADC Policies and Structure

128. The purpose of SADC is to promote economic independence, regional integration, use of own resources and international co-operation. It now comprises 19 sectors, the latest addition being the Water Resources Sector, with a new crop sector being contemplated, including also extension services. SADC works through a decentralised, minimalist structure, comprising the sector set-up described above, and a small Secretariat in Botswana. The operations of the individual sectors should reflect the capabilities of the host country since other member states are not expected to contribute.

129. The apex echelons for ELMS consist of the Co-ordinating Committee of Officials of Agriculture and Natural Resources; the Committee of Ministers of Agriculture and Natural Resources; the Standing Committee of Officials; and the Council of Ministers. It is not permitted for a sector to have several Contact Points in a member state but it is possible to engage nationals from other member states to work short or long term in the Co-ordination Units; this is also acceptable to Government of Lesotho.

130. There is an ongoing study on rationalisation of the SADC institutional structure, covering the individual sectors as well as the Secretariat in Gaborone. It is expected to be completed by early 1997.

Other Initiatives, Institutions & Programmes

131. *Regional Initiatives/Organisations.* Related SADC sectors are Agriculture, Food and Natural Resources; Water; Forestry; Fisheries; and Wildlife together with environmentally important Mining; Energy; Industry and Trade; and Tourism.

132. *SARCUS* (Regional Commission for Conservation and Utilisation of Soils) has sub-committees on Remote Sensing; Land-Use Planning; Pastures; and Climatology.

133. *SARDC* (South African Research and Documentation Centre) repackages information: It maintains a bibliographic data base with 4,600 entries for Southern Africa and other regions in Africa together with a contacts data base. It also maintains an institutional data base. It produces fact sheets for reproduction/distribution locally together with articles. It publishes a newsletter every two weeks.

134. The *Communicating Environment Programme (CEP)* involves ELMS, SARDC and IUCN (World Conservation Union). ELMS, SARDC and IUCN produced the *State of the Environment in Southern Africa* in 1994. It has been printed in two editions of 4,000 copies each, of which 3,000 of the first edition were earmarked for commercial sales by SARDC on behalf of CEP at US$ 30. Thematic updates are undertaken by Environmental Experts Advisory Committee with contributors and editors.

135. The *Regional Capability and Network Building Initiative (NETCAB)* engages in policy advising, capability building, information networking and facilitators' exchange.

136. *Continental Initiatives and Organisations.* These include IGADD Inter-Governmental Authority on Drought and Development, CILSS (Permanent Interstate Committee for Drought Control in the Sahel), OAU, ECA (economic Commission for Africa), UNSO United Nations Sudano-Sahelian Office), RSCU (Regional Soil Conservation Unit in Nairobi), and AFRENA.

137. *International Organisations and Initiatives.* These include: UNEP regional programme INFOTERRA, FAO (in particular Communication for Development), World Bank, British Council, NORAD and GTZ. The USAID Regional Centre for Southern Africa, Botswana has launched Initiative for Southern Africa ($300 mill.), including Strategy Objective 3: Smallholder Productivity, which is allocated $ 50 mill., of which $ 5 mill. have been set aside for NETCAB. The IUCN mandate includes biodiversity; equitable use of resources; and servicing members as financier, mediator and backstopper.

2. Assignment Background

2.1 Scope and Focus

201. This third independent evaluation of the activities of SADC ELMS covers the calendar years 1991-1995 although the assessment of their impact also take into account activities implemented from 1985 onwards (the previous independent evaluations took place in 1987 and 1990). Its scope thus coincides with the last 18 months of Phase II[4] of the Sida supported activities and 3½ years of Phase III of which the last stage ended in December 1995 before the current Bridging Period commenced. Sida has indicated that its current core support to the ELMS Co-ordination Unit will terminate by the end of the Bridging Period 31 December 1997 but is prepared to consider financing of specific activities or programmes beyond that date.

202. The purpose of the evaluation is to assess the result and the impact of the activities in the SADC region, with the following foci (see App.1 for full Terms of Reference):

- the evolution and the relevance of the programme during its different phases (the Co-ordination Unit activities as well as the other eight sub-programmes);
- achievement of objectives, outputs and the timetables for activities implementation;
- impact on: (i) institutions—capacity and technical knowledge for sustainable development; (ii) community target groups with particular respect to gender, public awareness and participation; and (iii) regional integration and co-operation on environmental & natural resources management;
- the role of the Lesotho Government;
- the effectiveness of the technical assistance;
- the cost-efficiency of the programme and Sida support;
- financial and institutional sustainability of programme results; and
- the current and future demand for the services of the ELMS Co-ordination Unit.

2.2 Methodology and Work Programme

203. The evaluation team visited Lesotho, Botswana, Zimbabwe and Malawi through arrangements made by the Co-ordination Unit[5]. It had discussions with the SADC ELMS staff, the SADC Secretariat in Botswana, Contact Points and other government representatives as well as NGO staff. Interviews were carried out with the Co-ordinators of the SADC ELMS training initiatives in Zomba College, Malawi; University of Zimbabwe, Harare; Applied Research Sub-Programme representatives in University of Botswana, Gaborone; the Environmental Information Systems (EIS) and with other SADC organisations, including SACCAR and the Food Security; Agriculture and Natural Resources Sector[6]. (Appendix 2).

204. Interviews and discussions were also held with a number of beneficiaries of SADC ELMS training programmes in Botswana and Malawi; the latter discussion was combined with a study of group presentations prepared by the trainees at the Land Husbandry Training Centre at Zomba.

205. The evaluation team reviewed raw data, plans of operations, annual progress reports, technical reports, annual budgets, reports of seminars, and reviews and previous evaluation reports on SADC ELMS (Appendix 3).

206. Before departure from Lesotho, the consultants prepared a draft summary of their initial findings and conclusions which were presented and discussed at a round-up meeting in Maseru on 19 September (Annex 1). The draft version of this report was available on 29 October 1996. This final report benefits from the comments made by the Co-ordination Unit on the draft version, of which the team has incorporated a number of remarks which it believes help to clarify ambigious statements and correct factual errors. The conclusions and proposals presented in this report, however, solely reflect the opinion of the evaluation team.

[4] The official start of Phase III was delayed by three months until 1 October 1992.

[5] The Evaluation Team fielded by Terra Nova, Sweden comprised: Mr. J. Erikson (Institutional Development, Project Management and Economics/Team Leader), Dr. M. Douglas (Land Husbandry, Natural Resources Management and Environmental Issues) and Ms. Juliana Chileshe (Training and Information). The team worked in the SADC member states between 2 and 20 September 1996.

[6] Regrettably, the intended visit to Mozambique did not take place due to late confirmation of the arrangements by the Co-ordination Unit while the field visits in Lesotho had to be cancelled due to late scheduling.

3. Findings

3.1 Relevance of ELMS Mandate, Objectives & Approach

210. It should be recognised that ELMS is an unusually complex sector, both subject matter wise, with many new fields not least in the environmental domain, and institutionally. The vantage point of the SADC sector planning and co-ordination set-up is also by necessity distant from the conditions of the users of natural resources, being concerned with providing what may be termed tertiary rather than secondary services in relation to the primary extension operations. The restrictions imposed by the sector mandate—co-ordinating activities rather than implementing them—add to the difficulties in properly assessing demands among rural and urban communities.

211. As a consequence, the planning of an almost wholly subsidised support programme within this complex sector and at this high organisational level is exceptionally demanding in terms of: (a) conceptualisation (needs assessment, problem analysis, and target group/beneficiary identification); (b) prioritisation among alternative activities; and (c) follow-up—monitoring of impact as well as cost-efficiency. In these respects, ELMS has at least two distinct advantages over national organisations and institutions: first, it can frequently offer more cost-effective solutions to common problems and concerns than can individual countries by virtue of economies of scale; and second, it can use its position as a regional organisation by taking the lead in areas of common concerns and by acting as a broker of information and best practices among the SADC countries.

Mandate

212. ELMS has executed its mandate of sector co-ordination within the field of institution building—disseminating, among other things, knowledge about participatory approaches and providing backstopping services on project planning—and by facilitating exchange and sharing of information on technical and other subject matters within the sector. These functions have been highly relevant to the needs of the sector—the participatory approaches are considered by several member states as essential for sustained efforts at the community level—although, as is revealed below, the concept of institution building has been interpreted narrowly to the detriment of the ultimate target group, the natural resource users, and the prioritisation within the realm of information sharing has not yet included the development of important data bases.

213. The technical mandates of land management and water resource management have both been highly relevant to the needs in the region, not least the pioneering of protocols for regulation of shared resources among member states. Although several criteria have been formulated for selecting activities to be promoted or co-ordinated by ELMS, including criteria for avoiding duplication of national activities, these have not always been put to full effect. Consequently, the environmental mandate has become too large for the resources commanded by ELMS, having gradually expanded into a wide range of activities beyond the original priorities of policy support; EIA operationalisation and backstopping; and identification, mobilisation and support of regional expertise.

Aims and Objectives

214. The ELMS activities during both Phase II and Phase III have been guided by a range of rather general aims and objectives. Most of these appear relevant to the needs of the member states although it is far from clear to what extent they have been derived from explicit, region-wide needs analyses. The value of the aims and objectives would also have been improved had they been arranged within a causal structure, clearly indicating the overriding aim or objective and how attainment of sub-ordinate objectives would contribute to its fulfilment, with specified, attached verifiable indicators.

Approach

215. The approach or strategy for promotion, co-ordination and fund-raising adopted during Phase II and the first two years of Phase III (1993-1994) up to the introduction of the sector specific strategy, suffered from diffuse focus—uncertainty about which activities were most important—and poor consolidation of the activities both structurally and temporally (unclarity about how the numerous individual activities would support each other during implementation). In addition, the requirements of the planned activities in terms of manpower for their execution were rarely specified nor related to the available capacity within the Co-ordination Unit or the external resource base.

216. The thrust of the sector became more evident with the introduction of the sector specific strategy in late 1994 which also helped to rationalise the sub-programme structure. However, the sector specific strategy reflects curiously little of any analyses of the merits or disadvantages of the past approach, being, at least at its current stage of formulation, primarily concerned with priorities derived from Agenda 21. In fact, the present version, which, as the evaluation team has been assured, is continuously being expanded and made more succinct, is still a long way off from combining the proposed activities into a coherent strategy with clear priorities, internal linkages among its elements and with the available resources, and a phased sequence of execution.

3.2 Follow-up on 1990 Recommendations

Key Recommendations

217. The key recommendations of the 1990 IIED independent evaluation team, outlined in a nine page chapter under the heading of *Options For the Future*, were that the CU should:

> Focus on *land husbandry* (including rangeland management; water conservation for livestock and agriculture; soil conservation in all respects; multiple-use land capability analysis; and socio-economic studies concerning resource users);
>
> Take the lead in those *environmental policy matters* that should concern SADCC as an institution. Specifically, it should assist in: (i) mobilising environmental policy expertise in the region; (ii) help in creating relevant policy fora; and (iii) keep track of the experience in the region;
>
> Move slowly into *large regional field projects*;
>
> Continue the *environmental impact assessment* initiative and actively promote its application to projects in SADCC; and
>
> Have as its main concern the development and mobilisation of appropriate *regional expertise* and *regional institutions* no matter what environmental topics are chosen as priorities.

Actions Undertaken by ELMS Management

218. *Land Husbandry Focus.* Since the 1990 evaluation, the recommended land husbandry focus has been most actively pursued through the various activities grouped in the work programme under the heading of *Sustainably Productive Land Management Systems* (referred to as Programme 11 under the Phase II work programme, and Sub-Programme 8 under the Phase III work programme). Of note have been the following key activities:

- The five SADC ELMS sponsored training courses on *Integrating Conservation into the Farming System* conducted by the Land Husbandry Training Centre, Zomba, Malawi;
- The two SADC ELMS developed regional short courses on *Land Husbandry* conducted by the Institute of Continuing Education, Sokoine University of Agriculture, Morogoro, Tanzania;
- The two training courses on *Integrated Land Use Planning* organised by SADC ELMS in Tanzania and Botswana (with a review workshop in Namibia);
- The initiation of documentation of successful land management practices through the *Innovative Rural Action Learning Areas* (IRALAs) programme with national workshops and field programmes in Lesotho, Malawi and Tanzania; and
- An ad hoc training workshop on Water Harvesting organised by SADC ELMS in Namibia.

219. *Environmental Policy Matters.* The CU has sought to address this recommendation in two ways:

- by assisting the Agricultural Economics and Extension Department of the University of Zimbabwe to develop the training materials for, and to conduct, four SADC ELMS regional training courses on Natural Resource Policy Analysis; and
- the formulation of a proposed SADC *Policy and Strategy for Environment and Sustainable Development.*

220. *Large Regional Field Projects.* The CU has not attempted to move into additional large regional projects but has continued its involvement in the development and implementation (where funding is available) with the following regional programmes/projects:

- Zambezi River System Action Plan (ZACPLAN);
- Kalahari/Namib Action Plan;
- SADC Environmental Monitoring Project; and
- Sub-Saharan Hydrological Assessment Project

221. *Environmental Impact Assessment.* The CU failed to secure funding for project AAA 7.0.6 *Development of Environmental Impact Assessment (EIA) Application in the SADCC Region* which affected its ability to address this recommendation. The spirit of the recommendation was revived in 1995 when a workshop was held to review EIA procedures and training needs in the region. A report in part, emanating from that workshop, was prepared outlining a four year (1995-1999) EIA training and implementation programme for the region. This was followed by the holding, in September 1995, of a training workshop on EIA jointly organised and sponsored by the SADC ELMS and the British Council .

222. *Regional Expertise and Regional Institutions.* In line with this recommendation, the CU has pursued a policy of using consultants recruited from within the SADC

region where ever possible. Likewise, the CU has so far entered into 11 formal Memoranda of Understanding (MoU) with various institutions within the SADC region and is in the process of finalising agreement with an additional institution. Four of these MoUs are concerned specifically with the provision of regional level training aimed at enhancing the skills and expertise of officials and subject matter specialists working for various institutions concerned with environment and land management within the SADC member countries [reference to below].

3.3 Implementation Performance 1991-1995

223. In this section, the undertaken or implemented activities are compared those planned and the output generated by the activities are identified and assessed in relation to specified ambitions or in relation to what could reasonable be expected. Towards the end of the section, Supply and Utilisation of Resource Inputs, the resources made available to the sector are assessed in relation to the planned activities to ascertain whether lack of resources or late furnishing of inputs may have contributed to implementation deficiencies. In this part, there is also an attempt to assess the efficiency of the implementation, i.e. if the generated outputs have been worth the expended cost.

Sub-Programme 1: Basic Activities

SADC Meetings

224. *Planned Activities and Outputs.* The SADC mode of operation requires the annual participation of SADC ELMS staff in the following official SADC Meetings:

- Annual Consultative Conference;
- Sector Technical Committee and sub-committee meetings;
- Sectoral Committee of Agricultural, Natural Resources & Environmental Ministers;
- Summit/Council of Ministers;
- Standing Committee of Officials; and
- Meeting of Sector Co-ordinators

225. *Implemented Activities.* SADC ELMS *staff* are required to participate additionally in one or more extraordinary meetings (e.g. Nordic/SADC officials meeting and EEC/SADC officials meetings). It has been estimated that on average some ten weeks per year (including travel time) is spent on these meetings. The SADC ELMS Co-ordinator is required to attend them all. Other CU staff may attend specific meetings if their subject matter is an important agenda item. This applies particularly to meetings of the Sector Technical Committee. It is clear that there are high demands on the CU staff time from their obligations to participate in the official SADC meetings, which reduces the time they have available for other technical duties.

226. *Generated Outputs.* The *documentation* on the Technical Committee meetings, for which the CU has responsibility, is very limited. The only materials available to the evaluation team were the recorded minutes rather than a full written report of the meeting. It is understood that the reported deliberations of such meetings are intended to be confidential with only limited circulation. However, it is believed that for documentation/reference purposes a fuller report should be prepared for such important co-ordinating and consultative meetings. Such a report should ideally contain the meeting agenda, the minutes and as annexes copies (or executive summaries) of all the relevant background documentation.

227. The *minutes* as written may be of value as a brief record to those who attended a specific meeting. However, they are not sufficiently informative for anyone not present should they need to subsequently monitor and review the deliberations and decisions taken at individual meetings. This is important where there are changes in the staff within the Co-ordination Unit in order for new technical assistance and counterpart Government of Lesotho staff to be able to understand the background to what they are asked to undertake. Likewise, better documentation would facilitate the briefing of new country contact points when participating in their first technical committee meetings. Furthermore, it is difficult for supervisory and evaluation missions sent in by donors to follow the rationale for specific activities and changes in work plans if the documentation is not available.

228. The following quote from Page 4 of the minutes for the 1991 ZACPLAN Steering Committee illustrates the lack of information contained in the bare minutes:

> The ZSC found that the project is relevant for the Region, but should be re-formulated to address specific regional interests (use funds proposed for experts and use them to build the capacity of an existing institution in the region, by purchasing more equipment, etc.).

Without being able to talk with a participant at the meeting or the opportunity to dig into the archive files, the minutes as they stand leave the reader ignorant as to the nature of the Regional Project 2 and why the meeting considered it relevant to the region.

International Co-operation

229. *Implemented Activities.* During the period 1991-1995, there has also been a high demand on CU staff to participate in a number of activities initiated by international bodies. For instance, CU staff have participated as official SADC ELMS representatives on the Governing Council of UNEP and IUCN-ROSA Steering Committees. In addition, SADC ELMS prepared materials for, and participated in, the 1992 United Nations Conference on Environment and Development (UNCED) and Earth Summit in Rio de Janeiro. Similarly, SADC ELMS has co-operated with

UNEP and other UN agencies in the development and adoption of the Convention on Desertification.

230. SADC ELMS has also been invited to participate in a range of regional and international conferences, workshops and meetings. Whereas participation in these has helped to raise the international profile of the SADC ELMS programme, it has exacerbated the problem of high demands on the time of CU staff.

231. *Achieved Impact.* There has been profitable co-operation with a number of regional and international bodies which has had both technical and financial benefits for the SADC ELMS work programme. The Commonwealth Secretariat has been a very active co-operating partner, having cosponsored several of the training exercises and the production of the *Guidelines for Better Land Husbandry*. Other collaborating agencies include UNEP, UNDP, IUCN-ROSA, FAO and the British Council, World Bank, NORAD and GTZ.

Sector Policy Analysis and Formulation

232. *Planned & Implemented Activities and Generated Outputs.* The CU has sought to review and analyse the policies and strategies of the member states as they relate to the expanded environmental mandate of the ELM sector. This provided the basis for the formulation of a sectoral policy and strategy which was discussed at a SADC ELMS Policy and Strategy Workshop held in Harare, Zimbabwe in October 1994 before being approved in August 1996. The end product of the workshop was a document entitled *Proposed SADC Policy and Strategy for Environment and Sustainable Development—Toward Equity-Led Growth and Sustainable Development in Southern Africa.* This document is viewed by SADC as one of the key outputs from the implementation of the Phase III work programme.

233. The *SADC Policy and Strategy for Environment and Sustainable* Development is regarded by the CU as the basis for implementing Agenda 21—the global action plan for environment and development adopted at the 1992 Earth Summit—in the southern African context. The policy and strategy starts with the recognition that poverty is the main cause and consequence of environmental degradation and that poverty alleviation is an overriding goal and priority for the SADC community. Because of this, equity is identified as a crucial element of the policy that must be added to environment and development in order to make Agenda 21 more applicable and operational in southern Africa.

234. The document calls for the largely separate policies and programmes for economic development, social progress and environmental improvement to be integrated into a single agenda and strategy for sustainable development. In what has been termed *EIA*^{3}, the new agenda calls for an integrated impact assessment that includes:

- assessing the likely environmental impact of economic policies and activities;
- assessing the likely economic impacts of environmental policies and measures; and
- assessing the likely equity impacts of both economic and environmental policies.

235. The present Policy and Strategy document contains many worthy sentiments which are currently expressed in very general terms. The document does not yet contain the specific details which will be required to operationalise the strategy. A start has been made on this with the formulation of project profiles, as outlined in the April 1966 document entitled *Implementing the SADC Policy and Strategy for Environment and Sustainable Development—Priority Projects for* SADC ELMS, *1996-2000*. Again, these profiles tend to consist of generalities rather than operational specifics. Further project formulation work is required to convert these into fundable programmes and projects.

236. Prior to the inclusion of the environment in the SADC ELMS mandate, the sector work programme contained a number of activities that focused on the issue of sustainable land management at the level of the individual farm household. This focus is largely missing from the present SADC Policy and Strategy document and project profiles. All of the policy areas and proposed programmes and projects outlined in these two documents are directed at the macro national and regional level. This contrasts with the institutional strengthening activities of past SADC ELMS programmes such as the ICFS and Land Husbandry training which have been concerned with how to equip development workers with the skills to work in a participatory manner at the community and household levels for the promotion of sustainable rural development. The end result is to leave the impression that the original grassroots/field level land management focus of the sector has been marginalised following the broadening of the mandate to include the "environment". The evaluation team was assured that this was not the intention of those formulating the policy and strategy document. In order to correct this alleged misperception, it will be necessary to spell out more clearly how improving the macro policy environment will result in improved sustainable livelihoods for individual rural households at the local level as well as what concrete measures need to be taken.

237. Table 4.1 of the SADC Policy and Strategy document summarises the priority issues, objectives and programme areas to be addressed by the SADC Environment and Sustainable Development programme(?). The table lists 16 key policy areas of which only the first one specifically addresses the issue of *Land Management & Sustainable Development*. This section of the table currently identifies just two programme areas which in turn correspond to the following two projects detailed in the project profile document:

Project 7.2.4 *Complete a Regional Land Capability Study and Plan for Sustainable Land Use.*

Goal 1: Assess the situation and options and set priorities for sustainable land use in the SADC region.

Goal 2: Prepare national and regional land use maps and a sustainable land use plan for the SADC region.

Goal 3: Approve and implement a sustainable land use plan for the SADC region.

Project 7.2.5 *Implement the Kalahari-Namib and Other Action Plans on Desertification.*

Goal 1: Strengthen and implement the Kalahari-Namib Action Plan for combating desertification.

Goal 2: Adopt an overall SADC Sub-Regional Action Plan (SRAP) to combat desertification.

Goal 3: Implement the SADC Sub-Regional Action Plan (SRAP) for combating desertification, including assistance to countries for preparing and implementing national action plans.

238. Both of these programme areas currently have as their focus studies and plans undertaken at macro national and regional levels. The section on programme areas in Table 4.1 therefore needs rethinking with additional areas added to ensure that the original grassroots/field level land management focus of the sector is not marginalised and remains at the centre of the land management component of the future SADC ELMS work programme.

Support to Project Development and Design

239. *Planned and Implemented Activities.* One of the activities envisaged for the CU was to provide consulting services to member countries in the formulation of projects that are in line with the aims and objectives of the sector. Such services were to be rendered either by CU staff or by consultants or a mixture of the two. Such assistance in the formulation of both regional and national projects is documented in the annual reports for 1991, 1992 and 1993 but appears less prominently in later reports although they have continued within the context of Integrated Land Use Planning (Sub-Programme 8: Sustainably Productive Land Management Systems, below) and in connection with national follow-up activities within Sub-Programme 7: Legal Context of Natural Resources Management (below). However, the exact nature of the assistance is not clear: it would appear that given the limited numbers of technical staff within the CU that it may frequently have been limited to commenting on draft project proposals rather than providing technical assistance from the start in the design of individual projects.

240. *Generated Outputs and Achieved Impact.* During the early stages of its establishment, the CU received a number of poorly formulated national project proposals. Poor project design was therefore early on (Phases I & II) identified as one of the constraints to tackling environmental and land management problems within the region. In response to this, in the late 1980's the CU organised two training workshops and a hands on training course on conservation project design. The 1990 evaluation found that the knowledge gained from these activities had been of help to the participants in formulating better project proposals. This particular training activity has not been carried over into the 1990s work programme. Instead of assisting the member countries, through regional training activities, to build up their own staff capabilities in project design within the member countries, the CU has preferred to tackle the problem of poor project design through the provision of short term, and of necessity limited, technical assistance (CU staff and consultants). This is considered an inadequate response to a regional need and shows a failure to build on and develop an earlier successful SWCLU programme.

Sub-Programme 2: Completion of Phase II Activities

241. There were two key practical activities initiated under Phase II which carried over into Phase III, namely *Erosion Hazard Mapping* (Programme no. 4) and *Impact of Soil Erosion on Crop Yield* (Programme no. 8).

Erosion Hazard Mapping

242. *Planned & Implemented Activities and Generated Outputs.* The erosion hazard mapping project started in 1985 with two aims: (a) to produce the actual maps; and (b) to conduct training in the methodology. 1989 saw the publication of the maps and reports for Zimbabwe, Swaziland and Lesotho. Work on the maps for Malawi, Tanzania and Zambia was completed in 1991 whereas the maps for Angola, Botswana and Mozambique were completed in early 1992. A consolidated report for these last six countries is listed in the latest SADC ELMS publications list as still in production. This is disappointing considering that all the maps for the original nine SADC member countries were completed, printed and distributed to member countries by 1993.

243. This project was extended to include Namibia after it became a SADC member. A short workshop was conducted in Namibia in July 1993 to train Namibian nationals in the methodology of data collection and analysis for erosion hazard mapping. Following this, work was initiated on the preparation of a Namibian map. Delays have been experienced in its production, in part because the Namibians introduced wind erosion as an additional variable into the study, and the map is still to be completed and printed.

244. A regional review workshop was convened at the end of 1995 to review the project and discuss the digitisation of the data and its incorporation into the database of

the proposed SADC ELMS GIS based Environmental Information System (EIS).

245. The Annual Progress Report for July 1995-June 1996 notes that this project is concluded except for finalising a regional erosion hazard map which would include Namibia (but not South Africa and Mauritius which joined SADC too late to be included in the project). A final report assessing the entire project and its usefulness is currently under preparation.

246. *Achieved Impact.* The 1990 evaluation noted that the maps were of limited use in agricultural extension work but nevertheless provide some information for planners on the potential erosion problems which a newly settled area may experience. It was recommended that further attention should be given to mapping actual erosion to provide information on present, rather than potential, problems. This element has not been included in the project so far since the Co-ordination Unit considers it irrelevant to its objectives and consequently has not awarded it priority. Data on the extent and severity of soil erosion within the SADC region is expected to be collected and stored within the proposed regional EIS database. This will then allow a comparison between potential erosion (erosion hazard) and actual erosion. There are anecdotal reports that areas classified as having a high erosion hazard are not necessarily those areas where severe erosion has actually taken place. The explanation for this can be expected to lie in differences in the socio-economic circumstances and land management skills of the land users.

Impact of Soil Erosion on Crop Yield

247. *Planned and Implemented Activities.* The objective of the impact of soil erosion on crop yield project has been defined as "to link the phenomenon of soil erosion with production or productivity, and hence, with farm economics". The project has to date been implemented by four of the SADC member countries, Botswana, Lesotho, Mozambique and Tanzania. Within the SADC region, the programme is co-ordinated by the CU. However it should be noted that this SADC activity is part of a wider global network on *Erosion-Induced Loss in Soil Productivity* originated by FAO Rome which has been responsible for the overall co-ordination and technical direction (research methodology) of the project.

248. The field experiments were first established by SACCAR in Botswana in the late 1980s; however, field activities appear to have come to an end in 1992/93 when it was proposed that the experiment be taken over by the Botswana Ministry of Agriculture. None of the subsequent annual progress reports make any reference to field activities in Botswana; however, the July 1994-June 1995 Annual Progress Report notes that a regional consultant contracted to prepare the final report on the Botswana experiment was unable to locate the post 1992 records. The experiment at the National University of Lesotho became fully operational in November 1992, at Sokoine University of Agriculture in Tanzania in April/May 1993 and at the University of Eduardo Mondlane in Mozambique with the start of the rains late 1994.

249. *Generated Outputs.* SADC ELMS has assisted in the convening of periodic consultative meetings of the researchers from the four countries to discuss progress and problems in implementing the experiment. Although the data from these four experiments are available at the Co-ordination Unit there is no published report of the findings to date. As a result, there has been no attempt to draw any conclusions with regard to the costs of soil erosion within the SADC region or the financial and economic benefits to be obtained from the adoption of improved land management practices.

Sub-Programme 3: Development of Manpower and Training Facilities

250. *Planned Activities.* Anticipated developments included: training facilities—inventory and assessment of demand and supply; management training; "distant education"; long term training; curriculum development; and training in audio-visual techniques.

251. The implementation of most of these activities is reviewed under Sub-Programme 8: Sustainably Productive Land Management Systems (below).

252. *Implemented Activities and Generated Outputs.* Since 1991, notable progress has been made in capacity building as the result of prior, wide consultations and planning with the stakeholders and institutions in the member states which had training programmes. Rather than to invest in new infrastructure and develop new programmes and staff development schemes, the training has tapped into the existing resources and facilities to make progress in a cost-effective manner.

253. The short training programmes sponsored by the Co-ordination Unit and based in Sokoine University, Tanzania and Zomba College, Malawi represent a direct response to Human Resources Development. Surveys by SADC on existing capacity to reduce land degradation and soil erosion in the SADC region revealed that there is a dire shortage of skilled and qualified human resource to apply effective techniques and methods to reverse land degradation.

254. The ICFS courses at Zomba conducted between 1991-1996 are as shown in Table 1 (below) which also shows numbers of participants from the SADC member states:

Table 1: Land Husbandry Training Centre Attendance By Country By SADC ICFS Course 1991-1996

Country	1991		1992		1993		1994		1995		1996	
	T	A	T	A	T	A	T	A	T	A	T	A
Angola	2	n.a	0	0	2	2	2	0	2	2	2	1
Botswana	2	n.a	0	0	2	1	2	2	2	2	2	2
Lesotho	2	n.a	0	0	2	2	2	2	2	2	2	2
Malawi	2	2	0	0	2	2	2	2	2	2	2	2
Mauritius	0	n.a	0	0	0	0	0	0	0	0	0	0
Mozambique	2	n.a	0	0	2	2	2	1	2	1	2	0
Namibia	2	n.a	0	0	2	2	2	1	2	2	2	0
South Africa	0	n.a	0	0	2	2	2	2	2	2	2	0
Swaziland	2	n.a	0	0	2	2	2	2	2	1	2	2
Tanzania	2	n.a	0	0	2	2	2	2	2	2	2	2
Zambia	2	n.a	0	0	2	1	2	2	2	2	2	3
Zimbabwe	2	n.a	0	0	2	2	2	2	2	2	2	0
Total	20	18			20	20	20	18	20	20	24	14

255. Systematic curriculum development and a process to determine the content of the training programmes has not been established. However, the content of the courses offered have been designed to meet the training needs of the region.

256. Training modules have yet to be prepared and consolidated. Development has depended on courses which have been obtained in the institution of learning as is the case for Policy Analysis course at the University of Zimbabwe and the land husbandry course in Zomba College, Malawi. Expertise to teach the courses is drawn from the existing training institutions, therefore this arrangement does not necessitate recruitment of new full time staff. Resource persons from outside the institutions are also invited to teach on the courses as well as to collaborate with SADC ELMS on the development of course materials.

257. It is notable that only a small number of persons from the region can attend the courses although those who are trained are required to conduct similar courses in their countries. Participants are selected from the region with assistance from Contact Points. Screening of available records of participants by the mission reveal that there is very low participation by women in most of the courses as well low participation from the Lusophone countries, Mozambique and Angola, in spite of determined efforts to identify English-speaking candidates.

Sub-Programme 4: Development of Environmental Monitoring and Assessment

258. In 1990, a proposal for *SADCC Environmental Monitoring Project No. 7.08* was prepared by the Co-ordination Unit for implementation between 1991-1994. The project was discussed and approved by the SWCLU Technical Committee, the Meeting of Ministers of Agriculture and Natural Resources and the Council of Ministers at their respective meetings in 1990. The aim of the project was to gain experience with the monitoring of environmental changes through the initiation of studies in a number of sample areas selected to be representative of the major physiographic regions and agro-ecological zones of the SADC region. The initial focus was to be on monitoring land degradation, soil erosion, water quality, rangeland conditions and forest resources. In addition, there was to have been a special programme covering air pollution, groundwater conditions and leakage of pesticides from farmland.

259. The CU failed to secure donor funding for project 7.08. However, various of the activities undertaken within Sub-programme 4 *Development of Environmental Monitoring and Assessment* have been in line with the key objectives of this project. The Phase III planning document emphasised the following priorities: (a) develop national capabilities; (b) monitor actual long term trends; (c) assess current situation of degradation; and (d) develop long term programme.

260. Activities and outputs related to Sub-programme 4 can be grouped under the following headings:

Compilation of an Inventory of Monitoring Programmes and Facilities;

Production of Technical Guidelines;

Regional Seminars and Training in Monitoring Techniques;

National Training in Monitoring Techniques;

Agro-chemical Pesticides Monitoring;

Data Quality Assurance;

Reporting and Assessment of the State of the Environment;

Environmental Education;

Environmental Information Systems;

Environmental Information Exchange; and

Environmental Impact Assessment.

Compilation of an Inventory of Monitoring Programmes and Facilities

261. *Planned Activities.* It was proposed in the *Plan of Operations and Budget 1 July 1992-30 June 1995* that an inventory would be compiled of the environmental monitoring programmes and facilities existing within the SADC member countries. To assist with this, a questionnaire was developed by the CU and circulated to the member countries. By the end of 1994, reports had only been received from Lesotho, Namibia, Swaziland, Zambia and Zimbabwe. There is no record in the subsequent annual progress reports of reports having been received from the remaining SADC member countries. There were proposals to store the information in a computerised database to facilitate access and updating; however, this has yet to be done.

262. *Implemented Activities.* It is reported that information on soil erosion monitoring programmes within the various member countries was collected at the workshop on *Soil Erosion and Land Degradation, Monitoring Methods and Techniques* held in Harare, December 1995. It is intended that the workshop report will contain an evaluation of the information on soil erosion monitoring

programmes. At the time of the evaluation, the report of this workshop had not been published.

263. Five years after it was proposed, there is still no consolidated SADC ELMS computerised inventory of the environmental programmes and facilities to be found within the SADC region. The information currently available to the CU can be found in a limited number of country reports compiled with the assistance of local consultants, a few workshop papers, a couple of published workshop reports and the personal knowledge of past and present CU staff. This is inadequate for the purpose of co-ordinating environmental monitoring activities within the SADC region.

Production of Technical Guidelines

264. *Implemented Activities.* Three guideline manuals have been produced and published as a result of the activities of Sub-programme 4. These have been released within the SADC ELMS Monitoring Techniques Series as follows:

1991 Volume 1. A Practical Approach to Satellite Image Analysis for Environmental Monitoring;

1991 Volume 2. Air Photo Analysis for Environmental Monitoring in the SADCC Region; and

1995 Volume 3. Environmental Monitoring of Pesticide Residues Guidelines for the SADC Region.

265. *Generated Outputs.* The first two volumes on satellite image and air photo analysis, while containing much technically sound information, provide little SADC specific guidance on how to use these techniques for monitoring environmental changes. The initial theoretical chapters by and large repeat material that has been published by others both within and outside the region (see Conex/Agritex publications from Zimbabwe and the Land Husbandry Manual from Malawi). These guidelines would have been more valuable had they contained more case study material from the SADC region and provided a set of clear practical guidelines on: (a) how to recognise the different forms of environmental degradation that can be expected to occur within the region; and (b) how satellite images and airphotos can be used to monitor changes.

266. SADC ELMS cosponsored a workshop on water quality monitoring and assessment at which the following draft guidelines were reviewed:

Ballance R.C. & Bartram J. 1993 *Manual on Freshwater Quality Monitoring*. UNEP/WHO.

267. It is understood that, following an agreement between SADC ELMS and UNEP-GEMS, that the SADC ELMS programme can refer to and make use of this UNEP/WHO manual once published.

268. It was proposed in the *Plan of Operations and Budget 1 July 1992-30 June 1995* that additional guideline manuals be prepared for monitoring sediment transport, vegetation, soil erosion and afforested areas. Some draft guidelines on *Soil Erosion and Land Degradation Monitoring Methods and Techniques* were reviewed at the December 1995 workshop of the same name. The evaluation team had no opportunity to obtain a copy of the draft. The quality of the document and its present production status is therefore unknown. The 1995/96 Annual Progress Report notes that terms of reference were written in co-operation with the Water Management Programme for a consultant to produce guidelines on *Hydrological and Sediment Monitoring Techniques;* this is an activity scheduled to take place in 1996/97. Although much discussed, little progress has been made on the production of *Vegetation Monitoring Guidelines.* Further progress appears to be on hold pending a review of what other initiatives have been taken on this within the region, for instance by the Forestry Sector with its CU in Malawi.

Regional Seminars & Training in Monitoring Techniques

269. *Implemented Activities and Generated Outputs.* Between 1992 and 1995, SADC ELMS organised or cosponsored at least 14 regional seminars and workshops in the field of environment management and monitoring (see Annex 4). Some of these meetings took the form of regional expert consultations while others were organised more specifically for the purpose of training and information exchange. To date, these seminars and training activities have only produced 3 published reports (nos. 34, 35 & 36). It is understood that draft reports exist for some of the other meetings but due to shortage of funds have not yet been published. However, it was reported to the evaluation team that the CU had taken the decision not to publish reports of some of these activities as it was felt the deliberations of such meetings would be of limited interest to non-participants. This is a surprising decision and begs the question as to why go to the expense of holding regional meetings if their conclusions and recommendations are not considered of value to others within the SADC region. It is believed that the CU are underestimating the value of the wider distribution of the reports of such meetings.

National Training in Monitoring Techniques

270. *Planned and Implemented Activities.* It was proposed that a national training course in *monitoring* would be arranged for each SADC member country during the period July 1993 - June 1995. The aim was to improve the skills amongst regional monitoring personnel and for regional standardisation of methods and techniques. There is no record in any of the progress reports to such training having been conducted.

271. The training course on *remote sensing and environmental monitoring* conducted in Portuguese in Angola April 1992 was effectively a national training programme as all the participants came from Angola. It is unclear from the reports whether Mozambique was invited to participate.

Agro-chemical Pesticides Monitoring

272. *Planned and Implemented Activities. Activities* under this heading were concluded with the production of the SADC ELMS Report No. 35 *Agro-chemical Pesticides in the SADC Region: Use and Concerns*, and the guidelines manual on environmental monitoring of pesticide residues referred to above.

Data Quality Assurance

273. *Planned and Implemented Activities.* It was proposed in the *Plan of Operations and Budget 1 July 1992 - 30 June 1995* that during the period January 1993 - June 1995 the quality of the data generated by regional agro-chemical monitoring activities would be assessed and where appropriate recommendations for improvements given. It has since been decided that data quality assurance would be integrated into the monitoring activities.

Reporting & Assessment of the State of the Environment

274. *Implemented Activities and Generated Outputs.* SADC ELMS entered into partnership with IUCN-ROSA and SARDC to undertake joint programme of activities concerned with environmental awareness raising and known as the *Communicating the Environment Programme*. Through this programme, SADC ELMS played a valuable technical and financial role in the production of the book *State of the Environment in Southern Africa*. This is a comprehensive and well written document that has had a lot of care and attention devoted to its layout. As a result, the information contained in it is accessible to the lay person as well as to environmental specialists. It deserves to be widely circulated and read within the region.

275. The production of this book involved: (a) the collection and review of documentation held by many institutions and individuals around southern Africa; (b) a conference to discuss chapter outlines; (c) contributions by numerous environmental experts in the region; (d) a workshop on future environmental scenarios; and (e) review of the final draft for scientific accuracy. Its 14 chapters are organised into three parts. Part One sets out background information on southern Africa, its physical environment and the way it has been managed throughout history to the present. Part Two deals with the priority environmental issues of concern to southern Africa. Part Three looks towards what could be expected in the future with regard to the state of the environment in the region.

Environmental Education

276. *Planned Activities.* While higher institutions of learning offer practical courses to key personnel in extension services which directly benefit the land users, the farmers, it has been important to plan work to reach the youth in the region who ultimately would be the land users. Therefore, plans were made to survey and establish the state of Environmental Education in the region.

277. *Implemented Activities and Generated Outputs.* Activities related specifically to environmental education (EE) were initiated in 1993 when an inventory of EE activities within the region was compiled, following a SADC ELMS regional workshop entitled *Environmental Education for Youth—Creating Awareness* which also recommended that a regional centre for environmental education be established. Four examples of success stories in EE from within the region were then selected and documented on video tape. The inventory report and the video were made available to the participants at a second EE workshop in Umgeni Valley, Howick, in South Africa in February 1996. After a survey of training institutions in the region, Umgeni Valley was recommended and the Council of Ministers of Environment endorsed the selection. Since the second workshop, SADC ELMS has contracted a consultant to draft a regional EE programme and all member states have nominated national focal points for EE.

278. The proceedings of the 1994 EE workshop have been compiled and distributed as photocopies to the participants in the 1996 workshop. It is unclear as to whether the proceedings of both workshops will ever be officially published for wide distribution within the region.

279. Under the theme of popular participation and as a way of harnessing essential information on land management using the Indigenous Knowledge Systems, SADC ELMS has organised a workshop on Indigenous Knowledge.

Environmental Information Systems

278. *Implemented Activities.* There have been three workshops (1992, 1994 and 1995) to discuss the development of a SADC Environmental Information System (EIS). The 1995/96 Progress Report notes that in 1993 an assessment of the status of EIS in member states was undertaken and that the 1994 workshop endorsed the report. This is difficult to verify as there is no published report from the 1993 workshop; draft documents may exist in the archive files but these were not seen by the evaluation team. A report exists for the 1995 workshop but this is still in draft form and requires considerable editing before publishing

279. *Generated Outputs.* The third workshop was described as further consolidating the SADC ELMS EIS programme and led to the formulation of two project proposals, one on training and the other to establish a network database and data exchange component. The draft 1995 workshop report documents current EIS activities within the member countries—it is unclear as to why this information had not already been collected during the previous workshops? Likewise, why were three workshops required before fundable project proposals were formulated?

280. There are a number of other EIS initiatives on-going within the region, such as the World Bank supported *Program on Environment Information Systems in Sub-Saharan Africa,* although their aims may not be identical to those of SADC ELMS. The need to establish a separate SADC ELMS regional EIS, in addition to establishing data bases on environmental programmes and facilities in the region and facilitating the development of a regional network of Environmental Information Systems, has yet to be clearly defined in any of the documents seen. Natural resources data stored within a GIS data base is most valuable for environmental management planning and monitoring at the national level, hence such data should be collated and stored in national EIS data bases. There are very few cross border environmental issues which would justify the cost of maintaining a regional EIS computerised database, purely for monitoring purposes.

Environmental Information Exchange

281. *Implemented Activities.* In addition to the EIS programme being undertaken under the auspices of the Environment Management programme, the Information Section of the CU has initiated a separate programme under the heading of *Environmental Information Exchange In the SADC Region.* A regional workshop on this theme was held in Lesotho in July 1995 with the objective of establishing an environmental information exchange network[7]. The recommendations in the draft workshop report are inadequate as the basis for the development and operationalisation of a functioning information exchange network but should be seen as the initial stage of a process of continuous consultations. In particular, more thought needs to be given to determining who would be the main users of such a network and identifying what would be their information needs. The term environment embraces a very wide range of issues; hence there is a need to clearly define the specific fields of interest of the potential users in order to determine the type of information to be exchanged.

Environmental Impact Assessment

282. *Planned and Implemented Activities.* Project AAA 7.0.6 entitled *Development of Environmental Impact Assessment (EIA)—Application in the SADDC Region* was formulated by the SADC ELMS CU in 1989. Failure to secure the necessary funding meant that the project could not be implemented as planned. The first major activity under this heading did not take place until March 1995 when a regional workshop was held in South Africa to review EIA procedures and training needs in the region. A report in part, emanating from that workshop, was then prepared outlining a four year (1995-1999) EIA training and implementation programme for the region. This was followed by the holding, in September 1995, of a training workshop on EIA jointly organised and sponsored by SADC ELMS and the British Council.

283. Most, if not all, of the SADC member countries are currently receiving donor support on a bilateral basis for the development of national EIA procedures. Given the limited EIA expertise within the CU, there is restricted scope for SADC ELMS to provide a technical lead in this specialised area. However, it could provide a co-ordinating role by periodically bringing countries together to share their experiences with EIA procedures as applied to particular development proposals.

284. There is a proposal for SADC ELMS to develop a set of regional EIA guidelines. There already exist a number of comprehensive EIA guidelines produced by other agencies such as the World Bank, as well as several national/departmental sector specific guidelines. For this reason, it appears hard to justify the production of yet another set of guidelines targeted at environmental specialists. However, a case could be made for the production of a set of environmental appraisal guidelines that would enable non-environmental specialists to take account of environmental concerns when designing, appraising, implementing and monitoring development projects and programmes. In this regard, the ODA 1992. *Manual of Environmental Appraisal.* Natural Resources and Environment Department, Overseas Development Administration, London, could serve as a model for the development of SADC specific guidelines.

Sub-Programme 5: Economics of Sustainable Resource Management

285. *Planned Activities.* The core of this sub-programme was to be the *Natural Resource Policy Analysis Course* at the University of Zimbabwe, Harare. It would feature teaching by senior core university staff with boarding payment by member states. The original plans did also include the establishment of regional network on policy analysis, research, and the eventual establishment of a SADC Research and Economic Institute.

286. *Implemented Activities and Generated Outputs.* The University of Zimbabwe has a special competence and capacity in the field of policy analysis since it is also offering MSc training in Agricultural Economics. The objective of the training is to introduce economic arguments in policy analysis through a combination of case studies, role playing, field visits and a seminar series, including business and mining topics.

287. The course has been held in (February) 1993, 1994, 1995 and 1996. The duration is 3 weeks and 3 participants

[7] The CU was first established by Government of Lesotho in 1985. It may be surprising that the establishment of a programme for information exchange was not initiated earlier on; however, an activity for information exchange was proposed under Phase III in 1991, only to have to be abandoned due to lack of funds and capacity at the Co-ordination Unit.

per country can be accepted, meaning an effective attendance of 20-24 people.

288. While it was well received from the beginning, the participants' appreciation has increased over the years and the course must today be considered as one of the most successful training ventures supported by ELMS.

289. The training material was originally developed by consultants while the corresponding manual was developed by ELMS. The current training material has been developed through the university with the copyright owned by ELMS Co-ordination Unit. All participants are equipped with a copy of the training manual. The course has in some instances generated other workshops through the use of the training material.

290. The course is currently conducted by 8 university staff with four resource persons.

291. Initial problems experienced referred to poor communications with the benefiting institutions and with the ELMS Co-ordination Unit. Nominations had first to go to Maseru for approval which sometimes caused delays. Since 1995, communication is direct with the University of Zimbabwe.

Sub-Programme 6: Applied Research

292. The Applied Research Sub-Programme is under the aegis of the University of Botswana, in the Department of Environmental Sciences. Under a Memorandum of Understanding between SADC ELMS and The University of Botswana, the Department is organising annual seminars. The sub-programme calls for research papers from the region on specific environmental themes while the reports from the seminars comprise selected research papers. Participants in the seminars are selected from the region by Contact Points in the member states of SADC. Eminent scholars are invited to present keynote papers on the themes of the seminars.

293. *Planned Activities.* The Applied Research Seminar Series have a long term objective while activity plans are a function of the support secured. Themes for the seminars are selected jointly by SADC ELMS and the University of Botswana and have to be in furtherance and achievement of some SADC ELMS objectives. Participants at seminars brainstorm some ideas for coming workshops.

294. *Implemented Activities and Generated Outputs.* The seminars are evaluated by the participants at the final session but their impact on the institutions in the member states has not been assessed and there are no plans to do so. Selected papers from the seminars are compiled in the Applied Research Series. Since 1991, four reports from seminars have been prepared.

295. Some participants in the Applied Research Series lack the requisite qualifications for quality input in the seminars. Some research papers are not of high standard and some of the methodologies used in research are questionable. Attempts are made at authenticating the research findings when the methodology has been found to be wanting.

296. Applied Research has not yet addressed gender issues in its programme of seminars. However, in Africa women are known to be primary producers of food and the main actors in ensuring food security at household level and production of food depends on land and water. There are major issues that constrain gender balanced participation in Land, Water and Environmental Management, just as there are possible strategies and actions that can be embarked on to achieve gender balanced participation in Applied Research.

297. Female participation in seminars has been low and this is because of the nature of the disciplines of Water, Land and Environment in which there are women few specialists.

298. In 1996, no seminar will be held because of delays in making preparatory work. The sustainability of the Applied Research Sub-Programme appears to in doubt and mechanisms need to be put in place to ensure that the series continue with assistance from the University of Botswana.

Sub-Programme 7: Legal Context of Natural Resources Management

299. *Planned Activities.* This sub-programme represent the worthy cause of facilitating popular participation through amended land management legislation and thus serves to analyse linkages between existing and proposed legislation. Planned activities have included national studies, regional and national seminars, monitoring of implementation of legislation.

300. *Implemented Activities and Generated Outputs.* National legislation studies executed by consultants have been undertaken in Lesotho, Zimbabwe, Tanzania, Mozambique with ensuing seminars more or less promptly organised. A regional seminar was held in Zambia in December 1995.

Sub-Programme 8: Sustainably Productive Land Management Systems

301. The objective of this sub-programme is "to promote the development of land management systems, based on partnerships between government and rural communities and land users, for the application of production oriented conservation".

302. The Phase III planning document refers to peoples participation, land husbandry, integrated land use planning, studies and training—through initiation, strengthening of institutions and training of trainers—directed at schools, decision makers, professionals, extensionists and trainers in land husbandry, and to model communities.

303. Activities and outputs are reported on in the annual progress reports according to the following headings:

Participatory Rural Appraisal (PRA);

Integrating Conservation Into The Farming System (ICFS);

Integrated Land Use Planning (ILUP);

Technical Course in Land Management;

Land Husbandry Course (LHC);

Guidelines to Better Land Husbandry in the SADC Region;

Innovative Rural Action Learning Areas (IRALAS);

Environmental Education (EE); and

Water Harvesting.

Participatory Rural Appraisal (PRA)

304. *Implemented Activities and Generated Outputs.* SADC ELMS has played a lead role with regard to introducing soil and water conservation specialists within the SADC member countries to the concepts of peoples' participation and the use of participatory rural appraisal (PRA) methods. The concepts were first introduced to the region by means of two seminars on the theme of peoples' participation in soil and water conservation (Maputo, Mozambique, March 1987, Report no. 10, and Mohale's Hoek, Lesotho, October/November 1989, Report no. 26). The IIED 1990 Evaluation reports that these seminars were well received but that many of the participants, while liking the general principles, felt that they had not been given adequate practical guidance for implementing them in specific political and bureaucratic environments.

305. Practical training was initiated in April 1991, with a pilot rapid rural appraisal training exercise conducted within the SIDA funded Farm Improvement with Soil Conservation (FISC) Project in Lesotho. The participants were local extension agents and district subject matter specialists. The success of this exercise resulted in the convening of two regional workshops on PRA. The first was held in Mohale's Hoek Lesotho in February 1992 and was aimed at introducing the core concepts and principles of PRA to medium level officers involved in natural resource management. There is no published report of this workshop which means that the experience gained by the participants with the use of various PRA tools has not been documented in a form that can be distributed to, and used, by other interested parties.

306. The second workshop was held in Livingstone, Zambia in April 1993. This workshop sought to target senior level government officers (e.g. heads of department) within the fields of agriculture, environment, natural resources, civil engineering and forestry. The aim was to familiarise them with the principles and practice of PRA, thereby enabling them to facilitate the introduction of PRA techniques in natural resource management projects. The experience of this workshop is usefully documented in the published Report no. 32.

307. *Achieved Impact.* The 1992 and 1993 workshops were instrumental in introducing the principles and practice of PRA to the SADC ELMS work programme. Their focus was by and large on PRA as an end in itself. No further PRA workshops have been organised. Instead, the strategy has been to incorporate the principles and practice of PRA into the programmes and training materials of the various ICFS, ILUP and LHC practical training courses sponsored and organised under the auspices of the SADC ELMS work programme.

Integrating Conservation Into The Farming System (ICFS)

308. *Implemented Activities.* Training in Integrating Conservation into the Farming System (ICFS) was initiated at the Land Husbandry Training Centre (LHTC) in Zomba, Malawi in 1986. The first training programme was targeted at soil conservation specialists from the Commonwealth countries of East, Central and Southern Africa. It was conducted by the LHTC with the financial assistance of the Commonwealth Fund for Technical Cooperation (CFTC) and technical assistance from the Food Production and Rural Development Division (FPRD) of the Commonwealth Secretariat. SADC ELMS supported the first training exercise through sponsoring the participation of the CUs Economist as a resource person for part of the course.

309. The first ICFS training programme was characterised by the fact that it was international in nature and the bulk of the resource persons were brought in from outside Malawi. The second ICFS training course was held in 1987 when the participants were exclusively drawn from within Malawi. They were technical subject matter specialists working at the Agricultural Development Division level. This time there was only one external resource person, an FPRD staff member, and his expenses were met by CFTC. All other costs associated with the training were met by the Malawi government. Much of the responsibility for the teaching of the second course was taken on by those Malawians who had participated as trainees in the first ICFS course. The ICFS training was repeated for a third time in 1988 when it was run and funded entirely by Malawi. Several additional ICFS courses for Malawian subject matter specialists were conducted by the LHTC between 1988 and 1990 at which time further courses were put on hold due to growing financial constraints within the budget available for training.

310. In 1991, SADC ELMS renewed its support for the ICFS course when agreement was reached with the LHTC to offer the ICFS course to participants from the entire SADC region. The first SADC ELMS sponsored ICFS training course was conducted by the LHTC in September 1991. The success of this course led to the signing in 1993 of a formal Memorandum of Understanding between the CU and the LHTC for the organisation of further ICFS training on an annual basis. The second SADC ELMS spon-

sored ICFS course was held in September/October 1993 and has been repeated annually since. The first two courses lasted 4 weeks all subsequent courses have lasted 5 weeks. To date, 89 subject matter specialists from within the SADC region have completed the SADC ELMS sponsored ICFS training.

311. *Generated Outputs.* It is understood that at the end of each ICFS course the Principal of the LHTC produces a report that is submitted to SADC ELMS as a record of what was done. It would seem that these reports are then filed and that no effort is put into having them edited, reproduced and distributed to interested parties. The CU appears to be unaware of the value of sharing the experience gained from the various SADC ELMS training activities. Given the innovative nature of the subject matter and teaching methods used in the ICFS, Land Husbandry and Resource Policy Assessment, SADC ELMS training courses published reports of each activity would be valuable for disseminating information about the approaches and training experience to others who may wish to undertake similar work. Given that SADC ELMS has yet to produce any guidelines on how to conduct such training, publishing the reports of individual training exercises would provide examples of how such training could be undertaken.

312. *Achieved Impact.* The SADC ELMS support to the ICFS training is a good example of the way in which existing expertise and an institution in one of the SADC member countries can be harnessed for the benefit of the region as a whole. Apart from providing sponsorship for the participants in the training, SADC ELMS has strengthened the capabilities of the LHTC through the provision of a computer and the occasional resource person from within the region. The CU has had limited technical input into the training programme itself but has encouraged the LHTC staff to place more emphasis on socio-economics and participatory approaches in line with the findings of the participants course evaluations.

313. Of the four training institutions with which the CU has a MoU, the LHTC is unique in that it is a government departmental training institution. The other three are all universities. The resource persons/trainers at the LHTC are all serving government officers who at various times have worked as Land Husbandry Officers within individual Agricultural Development Divisions (ADDs). They therefore have practical field experience with tackling agricultural development and soil and water conservation related problems. The regular rotation of staff between the LHTC and the ADDs in Malawi ensures that the trainers can draw upon their own recent field experience for teaching purposes. This gives the LHTC a distinct edge over the other training institutions involved in the SADC ELMS work programme when it comes to offering practical hands-on field based training. The lecturers that serve as resource persons in the SADC ELMS university based courses, while generally having high academic qualifications, usually have had few opportunities to gain practical field experience with the problems associated with sustainable development at the level of the small-scale farmer. Thus such courses can be expected to be more academic and theoretical in nature.

Integrated Land Use Planning (ILUP)

314. *Implemented Activities.* Activities related to Integrated Land Use Planning (ILUP) were initiated by means of a regional seminar in Mohale's Hoek, Lesotho in August/September 1989. This seminar identified the need for a practical training programme on how to integrate socio-economic and conservation issues in land use planning. This provided the mandate for SADC ELMS to organise two such regional courses. The first was conducted in Arusha, Tanzania (February/March 1991— Report no. 28) and the second in Tlokweng, Botswana (October 1992 — Report no. 31).

315. From a review of the reports it would appear that the ILUP approach taught in the two workshops by and large follows what can be described as a conventional physical planning approach to land use. This is particularly true of the *Sequential Process (Non-linear)* outlined on pages 116-119 of Report no. 31. Reference is made to "consulting with the villagers" but the actual plans prepared bear the hallmarks of top down plans with the recommendations on suitable land uses having been determined according to external technical criteria (for instance determining livestock numbers according to recommended stocking rates). The assessment of the bio-physical and socio-economic circumstances for each study area would appear to have been done by the "planners" using traditional formal survey methods (e.g. air photo and map interpretation, questionnaire based interviews). There is no reference to the need to firstly understand the rationale behind the existing land use practices before seeking to change them, a key principle of any participatory approach to land use planning. The ILUP approach as outlined in the reports lacks the clear farming systems focus of the ICFS approach.

316. The ILUP component of Sub-Programme 8 culminated in a regional workshop entitled *Guidelines for Land Evaluation for Land Use Planning in the SADC Region*, held in Windhoek, Namibia in August 1994. The workshop followed the implementation of a regional consultancy which was undertaken to: (a) document the approaches to land evaluation and land use planning used within the SADC member countries; and (b) prepare a draft set of guidelines on land evaluation for land use planning. The draft guidelines were discussed and approved by the participants to the Namibian workshop.

317. *Resource Inputs.* The consultancy and subsequent workshop were the result of a collaborative programme involving SADC ELMS and the SADC Land and Water Management Research Programme (L&WMRP) of SACCAR.

The consultancy input was jointly prepared but exclusively funded by SADC ELMS whereas the workshop was financed by the EDF/CEC funded technical assistance project that was supporting the SADC-L&WMRP.

318. *Generated Outputs.* The report of the workshop was published by the SADC-L&WMRP and released under the title *Guidelines for Land Evaluation for Land Use Planning in the SADC Region.* The title is misleading since the approved set of guidelines contained in the report can best be described as a series of generalities lacking in the specific detail needed to guide a potential land use planner through the evaluation and planning process.

Technical Course in Land Management

319. *Implemented Activities and Achieved Impact.* SADC ELMS assisted in the selection of seven participants from the SADC region to attend a course in soil and water conservation, between 15 January and 10 March 1992, at the Central Soil and Water Conservation Research and Training Institute (CSWCRTI) Dehra Dun, India. The course was funded by the Commonwealth Secretariat as part of its collaboration with SADC ELMS in the development of technical training appropriate to the SADC region. The training received in India was judged to be of a high technical standard but was largely focused on the use of physical conservation works within an Indian context. The training materials, while relevant to the conditions in India, were considered less appropriate by ELMS to the different agro-ecological, socio-economic and institutional situation within the SADC region. However, the Indian course was a valuable model for SADC ELMS in developing the two Land Husbandry Courses in Tanzania and also by providing examples for the production of the *Guidelines to Better Land Husbandry in the SADC Region.*

Land Husbandry Course (LHC)

320. *Implemented Activities.* The review of the Indian training course led to the conclusion that there was a need for a change of direction with regard to training to reflect the new thinking concerning successful approaches to soil and water conservation. This thinking can best be summed up as a shift in emphasis from soil conservation to land husbandry (see Lundgren L. and Taylor G. 1993: *From Soil Conservation to Land Husbandry. Guidelines Based on SIDA's Experience*). The 1993 Annual Progress Report notes that the name of the proposed technical course was changed from soil and water management to land husbandry. The LHC was developed jointly by SADC ELMS and staff of the Institute for Continuing Education (ICE) at Sokoine University of Agriculture (SUAS), Tanzania with inputs from some of the authors of the Land Husbandry guidelines manual.

321. An MoU was signed in 1993 between the SUAS and SADC ELMS when agreement was reached for ICE at SUAS to take responsibility for the organisation of the LHC. The course lasts 6 weeks and has as its overall objective "to promote a reassessment of commonly held approaches towards minimising land degradation to achieve sustainable and increased production in the Southern African region".

322. The first course was held in June/July 1994 when 28 participants from all the SADC member states were introduced to the concepts of better land husbandry. The second course took place in June/July 1995 and had 31 participants, again from all the SADC member states. A third course was scheduled for 1996 but was cancelled due to funding problems.

323. The two courses conducted to date have both followed the same basic pattern. The first week is classroom based and concentrates on introducing the participants to the concepts and principles of land husbandry. The aim is to achieve a common understanding amongst the participants on the new ideas and approaches to the problems of sustainable land management. In this regard, the initial draft of the land husbandry guidelines manual has been used as a key reference text for both courses and the recently printed version will be used in future courses.

324. The major part of the course consists of a 4 week field study tour in which the participants are shown a range of land degradation problems and get to visit a variety of projects that are seeking to tackle them. One of the reasons for holding the course in Tanzania is that the country contains a great diversity of agro-ecological zones. During the four weeks, the study tour takes the participants to the arid environment of Dodoma; the highly degraded lands in Kondoa; the high potential production environment of Arusha; pasture based farming systems in Moshi; water harvesting experiences in the mountains of Mwanga; finally ending with coastal farming systems and cash crop systems in the island of Zanzibar. During the field visits, the emphasis is on learning through direct observation and discussions with land users and project staff.

325. The participants return to SUAS for the last week of the course. There, working in smaller groups, they are required to analyse and synthesise their observations and experience and prepare a report for presentation and discussion in a plenary session on the last day. In addition to reporting on their general observations, each group was expected to briefly evaluate one of the projects visited. These brief reports form part of the course report submitted by the organisers to the SADC ELMS CU.

326. *Achieved Impact.* A summary of the course programme is included in each report. The information given on what was done each day is very brief which makes it difficult to determine exactly what was covered and what teaching/learning methods were used for particular topics. It would appear that the LHC offers fewer opportunities than the ICFS course for the participants to gain practical experience with the use of RRA/PRA techniques for learning directly from farmers about their problems and

opportunities. To do this would require visiting fewer projects enabling more time to be spent in each project.

Guidelines to Better Land Husbandry

327. *Planned and Implemented Activities.* Following the Indian training course, a decision was taken by SADC ELMS and the Commonwealth Secretariat to work together to produce a manual specifically geared to conditions within the SADC region. This led to the production of an outline for a technical manual. Initially, three authors (two from the SADC region and one international) were contracted to work on the manual. They met with SADC ELMS staff in Morogoro, Tanzania in July 1993 when the initial outline was critically reviewed and thoroughly revised. It was at this point that it was decided that the need was for a set of guidelines rather than a manual as such; likewise, that it should reflect the major change in thinking, both within the region and internationally over the last few years. Hence the document became guidelines for better land husbandry and not a soil and water conservation manual.

328. The initial outline had focused primarily on assessing the characteristics of the land in order to arrive at a land capability class which could then be used as the basis for making land use recommendations. This was in line with the past approaches to soil and water conservation recommendations prevailing within the region. However, the July 1993 meeting recognised the need, not only to characterise the land, but also to assess the circumstances of the land users. With the support of FAO a fourth author was brought in to cover this aspect of the guidelines.

329. *Generated Outputs.* The first draft incorporating the work of all four authors was ready by January 1994. This was circulated to all the SADC ELMS national Contact Points in the region. The draft was then reviewed with three of the authors by 20 specialists from the region at a workshop held in Maseru, Lesotho in March 1994. Following this, a slightly revised draft text was tested for the first time during the first SUAS/SADC ELMS Land Husbandry Course (June/July 1994) and during the third ICFS course in Malawi in 1994. This led to further refinement of the document through incorporating experiences from the two courses and the inclusion of additional references. The final version was published in March 1996.

330. As with the publication *The State of the Environment in Southern Africa*, the publication of the land husbandry guidelines is a collaborative effort of which the SADC ELMS CU can justifiably feel proud of. The document is unique within the SADC region and its contents put it at the fore-front of international thinking on current approaches to sustainable land management. It deserves to be well publicised and widely distributed both within and outside the region.

Innovative Rural Action Learning Areas (IRALAS)

331. *Planned and Implemented Activities.* The original Phase III proposal outlined a component called Model Areas. The intention was to develop a field based programme with the SADC member countries which would support the establishment of model village areas in which the "theories, concepts and principles" of the SADC ELMS philosophy could be put into practice and serve as working examples of good land management. The original ideas smacked of top down planning with the villagers being told what to do by the technicians. This helps to explain why the model areas component was redesigned.

332. The model areas component has been replaced by the *Innovative Rural Action Learning Areas* (IRALAS). Instead of technicians demonstrating to farmers good land management practices, the focus has changed to that of documenting examples of communities and individual households who are already using sustainable land management practises. The October 1993 IRALAS proposal envisaged that the revised component would involve:

- a national inventory of successful local natural resource management systems;
- national workshops involving farmers, development workers, researchers and policy makers to review the inventories and select 2 to 4 of the best areas for more in depth analysis;
- case study analysis to identify the reasons behind the success (or failure);
- publication and dissemination of the results at the local, national and regional level;
- using the lessons learnt for awareness creation, formulation of natural resource management policies and to guide the direction and nature of future training and research programmes; and
- convening periodic regional review workshops to evaluate progress and determine future directions.

333. IRALAS activities were initiated in Lesotho, Malawi and Tanzania. Preliminary inventories have been done in all three countries and national workshops held to select the areas/farm households for in depth case study analysis. All three of the national workshops were attended by participants from the other two countries (in addition, Mozambique participated in the Tanzanian workshop). In Lesotho, the IRALAS work is being supervised by the Institute of Southern African Studies, in Malawi by the University of Malawi and in Tanzania by the Institute of Resource Assessment. The 1995/96 Annual Progress Report notes that Mozambique has developed an IRALAS proposal that will concentrate on coastal production systems. The programme co-ordinator will be the Arquivo de Patrimonio Cultural (ARPAC).

334. *Generated Outputs.* There is a growing body of documentation emerging from the IRALAS activities. However, all of the reports are still in draft form and none

of these has so far been published by SADC ELMS. The quality of the documentation seen is variable with the Malawian and Tanzanian reports generally being of a higher quality than those from Lesotho. On the basis of a very brief scan of some of these documents, it would appear that most of the farmers studied are ones identified by the extension services as following the officially recommended practices. More effort needs to be made to identify farmers who are using, or have developed, their own local (indigenous) conservation effective and productive land husbandry practices. The IRALAS programme has been publicised in the last two issues of *SPLASH* (Vol. 10, No. 1 & Vol. 11, No. 1) and it is proposed to feature details from the various case studies in future editions.

335. A workshop *Integrating Indigenous Knowledge into Land Management Programmes* was held in Maseru, Lesotho in March 1996. It was sponsored by the World Bank and organised jointly by SADC ELMS and IUCN-ROSA. One of the workshops recommendations was that SADC ELMS develop a programme proposal for integrating indigenous knowledge systems (IKS) into natural resource management. It is believed that any such programme should be undertaken within the IRALAS component rather than establishing a separate programme.

Environmental Education

336. The earlier annual progress reports report on environmental education activities as a component of Sub-Programme 8. The latest cover this under the reports on activities for Sub-Programme 4. For information on the findings of the evaluation team for this component, see previous discussion on Sub-programme 4: Development of Environmental Monitoring and Assessment Systems.

Water Harvesting

337. *Planned and Implemented Activities.* The Phase II work programme included as one of its components Programme 9: Water Resources Relating to Soil Conservation—Village Level. No activities were carried out under this heading during Phase II except to initiate, in 1991, preparations for a workshop on water harvesting. The workshop did not take place until Phase III when it was undertaken as a component of Sub-Programme 8.

338. The SADC ELMS workshop on water harvesting took place in Windhoek and Okakarara, Namibia in May 1993. It was designed as a practical training workshop in which the participants learnt about a broad range of water harvesting techniques as well as gaining practical experience with the use of social water development participatory planning techniques. The workshop is well documented with a comprehensive report that will be of benefit to a wider audience within the SADC region than just the workshop participants. The report was finally published in April 1995, some two years after the event.

Sub-Programme 9: Information and Publications

339. *Functions.* The Co-ordination Unit has an Information Unit whose functions include:

- Information exchange and networking;
- Preparation of the SADC ELMS newsletter, *SPLASH*;
- Publicity which involves interaction with the mass media regionally and internationally; and
- Capacity building within the Co-ordination Unit so that other staff can take on administrative tasks that the Information Unit has hitherto been executing.

340. *Staffing.* The present establishment of the Information Unit has the following positions: Chief Information Officer, Information Assistant and two technical assistance staff, Information Advisor and Environment Information Facilitator. The Chief Information Officer and the Information Assistant are employees of the Government of Lesotho while the two technical assistance positions are Sida funded.

341. The professional backgrounds and training of the Chief Information Officer and the Information Assistant are that of a lawyer and a clerk, respectively. Both the Information Advisor and the Environmental Information Facilitator have wide experience of information systems and documentation and newsletter preparation.

342. The Information Unit does not yet have the full professional capacity and relevant qualifications to run it effectively. For example, a professional in Library Studies is lacking. The Chief Information Officer and the Information Assistant Officer been sent for further training but on their return would have still have to understudy the technical assistance staff to acquire more skills.

Information Exchange and Networking

343. The Information Unit of SADC ELMS has attempted to forge links with major institutions in the member states by forming a network for Environmental Information Exchange in 1995, which would do the following:

- Promote increased sharing of information among environment and natural resources institutions in the region;
- Promote the establishment and further development of environment information exchange networks; and .
- Engage in environmental information exchange activities.

344. Ongoing endeavours include the Geographical Information System (GIS) and the Environmental Information System (EIS) which is just being set up in Zimbabwe within the premises of the Food Security and Natural Resources Sector.

345. The Documentation Centre, which previously serviced requests for information as Documentation Service, exchanges materials with other information centres.

346. Networking in exchange of information is important for the SADC region; however, commitment to it depends on the amount of time and resources that can be provided to the network by the institutions in the region and the SADC ELMS Information Unit itself.

SPLASH Newsletter

347. The SADC ELMS newsletter has been instrumental in creating awareness of the sector, publicising the ELMS presence in the member states and facilitating exchange among professionals in the region.

348. However, the initial quarterly preparation of the newsletter has dropped over the years to one issue per year. Preparation of the newsletter has neither been short of funds nor articles, 50% of which come from the readership. An alternative way to ensure that the newsletter is produced regularly could include constituting a small editorial committee to put the articles that are subscribed to together.

349. The contents of the newsletter covers Water, Land and Environmental topics; however, a mechanism for evaluating the significance of the messages has to be built by way of finding out through the newsletter how the readership benefits from the information. The local staff are currently being trained to acquire all the necessary technical skills for the production of *SPLASH*.

Documents/Data Bank

350. The Documentation Centre has a library with 2,700 acquisitions on Water, Land and Environment. Few publications come from the region but South Africa sends publications to the Centre regularly. The Report Series is progressing with 4-5 issues per year. The Centre lacks a clear strategy for its work; however, this shortcoming is currently being addressed through a desk review of the information activities within the sector.

Regional Projects

351. Of the regional projects which have benefited from ELMS contributions[8], ZACPLAN, during ZACPRO 6, has been supported by Sida together with NORAD, Danida and UNEP. The Sida support has facilitated preparation of an Integrated Water Management Plan, including the establishment of data bases, sector studies and the drawing up of a Phase II management plan.

3.4 Achieved Impact 1985-1995

352. The ELMS aims and objectives reprinted in 1. Sector Background (above), are all worthy but are expressed in such general terms and without the benefit of any means-end structure that it becomes difficult to use them as a yardstick for measuring the impact of the multitude of activities undertaken by SADC ELMS. This shortcoming is compounded by a dearth of verifiable indicators[9] in relation to the aims and objectives. There is also the inherent difficulty in gauging the impact of the activities of a set-up like SADC ELMS, whose mandate has largely been synonymous with co-ordination of services and acting in a supportive capacity.

Institutions—the Immediate Target Group

353. *Overall Impact on Institutional Performance.* ELMS has contributed to institutional strengthening by enhancing the skills and expertise of individuals through their participation in regional workshops, regional and/or national training programmes and by giving them access to relevant information through the SADC ELMS Information services.

354. It is evident that the ELMS impact on institutions is considerably greater now than it was in 1990. Although the absolute numbers remain small, many more staff have benefited from the ELMS supported services which in turn has had positive effects on the way their organisations operate.

355. The main immediate beneficiaries of the SADC ELMS activities have been:

a) Environment, land and water management subject matter specialists and other government officials of the agricultural and natural resources extension services, and NGO staff involved in extension, training and/or project implementation at the field level;
b) Environment, land and water management related project and programme managers and individual researchers and other administrative and technical staff from government research departments and institutes investigating environment and land management issues; and
c) Officials within government ministries and departments involved in environment, land and water management policy making and planning.

356. *People's Participation & Multi-Disciplinary Approaches in Sustainably Productive Management.* It is clear to anyone who has worked over the last 10-15 years within the SADC region in the field of environment

[8] These projects include Zambezi River System Action Plan (ZACPLAN); Kalahari/Namib Action Plan; SADC Environmental Monitoring Project; and Sub-Saharan Hydrological Assessment Project.

[9] We understand that this deficiency is being corrected through measures which include internal workshops on logical framework techniques.

and land management that there is currently a far greater understanding and acceptance amongst the regions senior officials/policy makers, development planners, research and extension workers of the concepts and principles of the new participatory land husbandry approach to sustainable land management. However, it is extremely difficult to say how much of this change in thinking can be attributed directly to the implementation of the SADC ELMS work programme as opposed to the influence of the programmes of other organisations operating within individual member countries or at the regional and international level. FAO, UNEP, IFAD and the World Bank have all implemented related programmes within the SADC region and these must have had some impact on present institutional attitudes.

357. Although it cannot be proven conclusively, it is believed that SADC ELMS has played a key role in promoting participatory approaches to land management at the community and farm household levels within the region—particularly through the participation of SADC nationals in the ICFS and Land Husbandry training courses, which within the region are unique to the SADC ELMS programme.

358. *Transfer and Sharing of Knowledge.* It is particularly difficult to assess the impact of *training* since the evaluation team are unaware of any guidelines/routines that have been established by SADC ELMS as a means of following up the effect of its various training activities[10]. It would appear that there has been no attempt to ascertain the subsequent performance by those who have been trained on return to their duty station, or the secondary effects of their acting as trainers for colleagues at different levels within their own organisations (government department, university faculty, NGO agency etc.). This is surprising given that the major part of the SADC ELMS work programme over the last ten years has been directed at enhancing the skills of government and NGO personnel through their participation in regional seminars, workshops and courses.

359. Similarly, the impact of *information and data dissemination* through the SADC ELMS Co-ordination Unit to the recipient organisations and individuals is equally hard to measure in the absence of targets and explicit ambitions. ELMS has lagged behind compared to the Forestry Sector in terms of the development of an effective information service for the institutions within the region. It has yet to decide on whether to develop comprehensive computerised databases for the storage and retrieval of bibliographic, technological and institutional information. Because of this, the information service has had less impact than would have been expected had a concerted effort been made earlier on to collect, collate and disseminate information in the field of environment and land management. Further, there have been few attempts to ELMS to avail itself of the opportunities available for staff secondments and other forms of personnel exchange.

360. The newsletter *SPLASH* has been the main means for disseminating information on ELMS to potentially interested parties within the region. Failure to produce this on a regular basis has led to the perception amongst many institutions that it has ceased production. Proposals to charge a subscription fee for *SPLASH* can be expected to significantly reduce its readership within the region. This can be expected to have a negative impact on the dissemination of information within the region.

361. *Sharing and Development of Facilities and Expertise.* ELMS has signed Memorandum of Understanding with 11 training, research and other institutions and is in the process of entering into a 12th with a wildlife society in South Africa. The MoUs for the running of SADC ELMS regional training programmes with the Zomba LHTC and the Zomba LHTC and the Universities of Sokoine and Zimbabwe have been particularly successful..

Rural & Urban Communities—the Ultimate Target Groups

362. The ultimate beneficiaries of the SADC ELMS activities are intended to be the rural households of the SADC member countries that largely depend on utilising their local natural resources together with urban households in need of environmental protection and better water and waste management. It is not possible for a regional programme to directly target such beneficiaries; this is the responsibility of national and field level programmes. However, a regional programme can improve the ability of national institutions to provide the requisite support services required to enable rural households to adopt productive and environmentally sustainable land management practices.

363. The mission has learned of few examples of where the skills or knowledge acquired by the staff of specific institutions through their participation in training promoted by SADC ELMS has yet directly benefited the members of individual communities. This is not to say that this has not happened, just that the lack of documented follow-up means that there is no evidence of this having occurred.

Members of the Public

364. There was a general feeling among the respondents met by the mission that the impact of SADC ELMS sponsored training, education and information dissemination has been largely limited to Government officials. There is a growing demand for education and information on land management and environmental issues amongst the general public that still has to be met.

[10] The mission has been informed that the Contact Points are now being requested to report on training effectiveness.

Regional Co-operation and Integration

365. *Conflict Reconciliation.* The evaluation team have been made aware that one of the most appreciated contributions by SADC ELMS has been its efforts to facilitate or bring about conventions and protocols addressing common concerns among two or more SADC member countries, i.e. the Namib-Kalahari Project, ZACPLAN, Convention on Desertification and the Protocol on Shared Water Course Systems).

366. *Sharing of Data.* ELMS has yet to explore the scope for the development *of common architectures for computerised databases* on the environment and land management related institutional and skilled personnel resources to be found within the region. Such databases would potentially have high pay-offs in terms of the development and mobilisation of appropriate regional institutional and individual expertise.

367. It is surprising, given the focus of the IRALAs programme on *documenting successful land management practices*, that ELMS has not entered into co-operation with the WASWC WOCAT programme. The WOCAT programme (World Overview of Conservation Approaches and Technologies) of the World Association of Soil and Water Conservation (WASWC) is currently coordinated by the Group for Development and Environment, Institute for Geography, University of Bern, Switzerland. They recently organised a practical workshop within the SADC region to document, by means of a detailed questionnaire, various of the conservation approaches and techniques currently used within the region. It is unclear to the evaluation team as to why SADC ELMS has not established collaborative links with the WOCAT programme given that the IRALAS component of its Sub-Programme 8 is seeking to document successful land management practices within the SADC member countries. There is considerable scope for SADC ELMS to become the Southern African focal point for the WASWC WOCAT programme.

368. *Assistance on EIA Preparation.* Although there has been good co-operation with other agencies within and outside the SADC region in the production of regional guidelines on land husbandry, use of pesticides and remote sensing, ELMS has so far not found itself in a position to take the lead in the sharing of information on EIA standards (other agencies such as the World Bank currently have a higher regional profile in this field).

3.5 Cost-Effectiveness of ELMS Activities

369. Cost-effectiveness is taken as the ratio between the economic value of the impact of undertaken activities and the economic cost of conducting these activities. Meaningful interpretation of any computed cost-effectiveness ratio has to rely on comparisons with other organisations with similar mandates and operating conditions. In the regional context, ELMS is an relatively expensive set-up with high staff costs due to the continued reliance on external technical assistance and presumably high travel costs[11] to compensate for poor communication means.

370. The mission has not been made aware of efforts by ELMS to conduct pre-implementation or post-implementation assessments of the cost-effectiveness of activities or sub-programmes in order to ensure sustainability or for other purposes although it acknowledges that it is particularly difficult to attach economic value to the impact of promotion and co-ordination oriented activities. However, it is probably fair to say that the overall cost-effectiveness has been on the low side due to the large number of responsiblities shouldered by ELMS and the mixed implementation performance. However, it can be assumed that the cost-effectiveness has been relatively higher for those activities for which ELMS enjoy economies of scale, such as: design and production of training and teaching materials, which repeatedly have been benefiting participants from all member states; identification and provision of trainers and resource people for training sessions, workshops and seminars; curriculum development; and backstopping on technical subject matters which would have been too costly to provide by individual countries.

3.6 Planning & Implementation Arrangements

Key Procedures

371. *Strategic Planning.* The *Policy and Strategy for Environment and Sustainable Development* is an important framework for the ongoing policy and strategy formulation efforts which will fill the void felt during the previous implementation phases. The strategy formulation process has also been instrumental in rationalising the ELMS sub-programme structure which is likely to improve both implementation efficiency and cost-effectiveness in the future. It can be said, however, that the planning effectiveness might may have gained from clearer definitions of terms such as "strategies", "categories", "building blocks", and "components" [12] and that the links to the

[11] This is difficult to verify in absence of information on actual expenditure (cf. para. 118, above).

[12] One purpose of the document is to operationalise Agenda 21 in the SADC context, including emphasis on equity and EIA[3] assessment. An early version featured three main goals and three functional goals; 20 programme areas based on six selection criteria; five "strategic categories" of rather general nature; and 25 projects to be co-ordinated by ELMS (with few direct internal linkages)—however, the approved version is less complex and more operational. New features are Expert Committees (to approve and monitor progress), Task Forces (activity implementa-

Phase III Proposal could have been stronger as an analysis of the experience provided by that phase would have been useful for the formulation process. It also appears that neither the comparative ELMS advantages nor other rationales to undertake a particular programme or activity rather than other regional or international organisations are routinely reflected in the planning write-ups and clearly defined target groups (end users), based on explicit criteria, are also lacking for many of the ELMS programme activities. As a consequence, the required problem analysis, as a basis for formulating objectives and support activities, may be wanting in precision.

372. ELMS has yet to develop a gender policy framework for its activities. As a result, gender considerations are not adequately addressed in programme formulation and implementation.

373. *Medium Term Planning.* The Phase II and Phase III Proposals, while providing valuable scenarios for the upcoming implementation periods, had few cross-sectoral perspectives and did not serve as particularly effective planning frameworks for the annual planning processes. Regarding the preparation of individual sub-programmes, there are limitations to the workshop approach in generating innovative thinking. Such workshops can be used to arrive at a regional consensus on the need for particular activities and an agreed outline programme. However, to do this effectively requires a good deal of thorough preparatory work on the part of the Co-ordination Unit. There was little evidence from the available workshop reports for the various Phase I and Phase II sub-programmes that the Co-ordination Unit had made effective use of its in-house knowledge (or that of consultants) to prepare in advance of a regional workshop draft documents/working papers as the basis for discussion. Good planning documents cannot be written from scratch in such meetings. Someone has to prepare an initial draft which the meeting can then review and revise to take account of specific national and regional concerns as put forward by the invited experts from the SADC member countries. The conclusions and recommendations of all too many of the regional workshops are best described as worthy generalities. They typically lack the specific detail required to make them operational at either the national or regional levels.

374. *Annual Programming.* The Plans of Operations have served as the essential guiding instrument for the ELMS activities. The annual plans did originally not include much on the context of the programmed activities but this has been redressed in recent years; occasionally, they have also failed to address problems and issues raised in the Annual Progress Reports. Target groups or beneficiaries of planned activities have been rather broad with only few references to the ultimate target groups. They have commonly indicated quantified implementation targets for the planned activities but rarely for the (multiple) objectives or the expected outputs.

375. *Implementation Co-ordination.* Intra-sector co-ordination has been undertaken through the Contact Points, the Technical Committee, and the different workshops and other venues and cross-sectoral co-ordination has been exercised through the semi-annual Co-ordinators' Meetings. There have been several instances of difficulties in bringing old projects to a close. Focal Points are being increasingly used as mechanisms for cross-sectoral co-ordination and liaison.

376. *Technical Backstopping.* This has been an ad hoc activity of less frequent occurrence in recent years in relation to project development and design and for preparation of training guidelines.

377. *Supervision, Monitoring and Evaluation.* Procedures are lacking for monitoring of training and workshop events through systematic reporting while the follow-up of the provision of information services and backstopping services appears to be left to the discretion of individual officers. An internal monitoring of the effects of training activities was undertaken in late 1995 which largely confirms the findings of the evaluation mission; this is being studied by the ELMS management.

378. *Reporting.* Trainees are sending reports to the Contact Points and to respective ministries but these are usually not passed on to the Co-ordination Unit in Maseru. Reports from workshops and seminars have frequently experienced delays in preparation and distribution.

379. The Annual Progress Reports would become more valuable with the inclusion of: (a) stronger linkages to the preceding and upcoming Plans of Operations; (b) information on actual expenditure; (c) consistent and comparable budget data; (d) disclosure of the contribution by Government of Lesotho to ELMS; (e) routine reviews of the staffing situation; and (f) reporting on the outcome of any fund raising efforts.

380. *Financial Control.* The quality of accounting and financial control has been an issue of growing concern and a financial management study was undertaken by a consultant in 1995 together with a special audit. The revealed shortcomings are being addressed by the ELMS management.

381. *Fund Raising.* It is not clear to the mission to what extent ELMS has been successful in its efforts to raise

tion or supervision) and inter-Ministerial Task Forces in member countries (for inter-sectoral co-ordination and co-operation). It also include guidelines on use of consultants (regional consultants rather than international consultants) and funding.

The base document is supplemented by 20 priority Project Profiles, listing Key Issues and Concerns; Objectives with multiple goals; Activities with time schedules; Collaborating Partners; and Reporting and Evaluation Procedures.

funds from other donors than Sida for the implementation period beyond 31 December 1997.

Technical and Managerial Capability

382. *Subject Matter Capability.* It has been ELMS policy to rely on consultants for expertise on technical subject matters such as land husbandry or environmental aspects while limiting the in-house capability to broad technical expertise and expertise on training and information. This points to a real dilemma when deciding on future trade-offs: should ELMS expand further out into the environmental periphery with its mainly generalist staff or should it focus on fewer activities that are better suited to the capabilities of the specialist technical staff available in Lesotho?

383. *Managerial and Administrative Capability.* Some the experienced shortcomings of the Co-ordination Unit—poor advance planning, frequent delays in reporting and responding, lack of follow-up on undertaken activities and poor accounting standards—can be attributed to lack of staff in relation to the assumed tasks and generally weak managerial and administrative functions. They also reflect the absence of effective procedures in several areas, from scheduling and reporting of individual staff time to everyday office administration, although an administrative manual has reputedly been prepared by an auditing firm.

Organisation

384. The rather unwieldy set-up with a cumbersome superstructure, limited-capacity Contact Points and infrequent meetings by the Technical Committee is common to all SADC sectors.

385. *Government of Lesotho Role and Policy.* ELMS is regarded by the Government of Lesotho as a very important sector. It is recognised that the Co-ordination Unit suffers from inadequate management capacity, delayed recruitments and inadequately trained staff. Internal plans within the Ministry of Planning for improvement include: (a) better support from the administrative staff; (b) improved linkages with PS/A; (c) improved linkages with other sectors in Lesotho; (d) a more effective organisational structure; and (e) new positions for more qualified people.

386. *Co-ordination Unit.* Its internal capability has encompassed expertise in land management/training (Government of Lesotho/technical assistance), environmental planning and management (technical assistance), water resources management (Government of Lesotho), general technical expertise (technical assistance) and in information services. It has been relying on consultants for special technical subject matter expertise and some project planning expertise. Only two of the technical assistance staff have had appointed counterparts while the others have been acting as executing CU officers.

387. While the evaluation mission supports the desire of the Co-ordination Unit to use consultants recruited from within the member countries, it was noted that this had at times led to the reiteration of conventional ideas on land management rather than the introduction of new and innovative approaches. Care needs to be taken when selecting consultants from the region to ensure they have not only the relevant technical background but also the necessary experience (notably exposure to international thinking) to be able to assist the ELMS programme in the introduction of new concepts and procedures.

388. *Contact Points.* Procedures for liaison with Contact Points in member states have sometimes been ineffective due to poor means of communications or scheduling deficiencies while some Contact Points remain encumbered by other tasks in their organisations. The Terms of Reference for Contact Points were last updated in 1988.

389. *Technical Committee.* It is meeting once annually, reviewing prepared Country Reports, proposing new projects and making recommendations to the Co-ordinating Committee of Officials. The minutes from the Technical Committee Meetings are now made available to Sida as a major donor to the sector.

390. *Sub-Committees.* An Environmental Sub-Committee and a Water Sub-Committee have been assisting the Technical Committee.

Sida Support

391. Supervision by Sida has been exercised through Annual Reviews and Mid-Term Reviews held in between the Annual Reviews (except in 1994). Sida appears to have been more effective in influencing strategic matters than operational matters relating to management, manpower capabilities, cost-effectiveness and financial control.

Implementation Consultant

392. Swedforest, as Implementation Consultant, has been responsible for: (a) technical assistance recruitment and employment; (b) consultant recruitment and employment (shared with CU); (c) technical and managerial backstopping, including internal monitoring and evaluation techniques; and (d) procurement of specialised equipment. It has not had any overall mandate for manpower development or procedural development other than through individual technical assistance staff nor has it been responsible for financial management and control.

393. The technical assistance staff have made very important contributions to the successes achieved in land husbandry training, policy analysis training, popular participation and conventions and protocols on management of common regional resources. Due to the few counterpart

staff, no formal programme with defined targets for achievements have been developed for transfer of knowledge from the technical assistance staff. From a point of principle, it would have been preferable for the Environmental Information Facilitator, as a Sida recruited Bilateral Associate Expert with different Terms of Reference and obligations from the other technical assistance staff, to be employed by Sida rather than by Swedforest.

394. While the Implementation Consultant has assigned considerable resources for technical backstopping, not least for land management, it has been less successful in assisting the Co-ordination Unit to improve its managerial performance. However, it is expected that expanded efforts during the current Bridging Period will in time have a noticeable impact on planning methodologies, techniques for annual programming and resource scheduling, and procedures for monitoring and follow-up of undertaken activities.

3.7 The Bridging Period 1996-97

395. The purpose of the Bridging Period, which commenced on 1 January 1996, is to allow ELMS to restructure its activities to reflect the *Policy and Strategy for Environment and Sustainable Development* and to raise funds from other donors to support their implementation. The activities are organised within three programmes, Land Management, Environmental Resource Management and Water Resources Management. which in turn are subdivided into sub-programmes and projects. The immediate target groups are better defined in the current Plan of Operations than in the past but the links between planned activities and available manpower resources remain tenuous.

396. The thrust during the Bridging Period is increasingly turned in the direction of environmental management. There is also more emphasis on public awareness. The former Sub-Programme 1 : Basic Activities and Sub-Programme 9: Information and Publications have become part of the permanent functions of the Co-ordination Unit. A quarterly reporting routine was introduced in 1996. The technical assistance will be phased out during 1997 or be replaced by short, recurrent consultancies. The budgeted cost is SEK 25 mill. for the two year period while it is unclear to what extent the new ELMS programmes have succeeded in attracting donor support for implementation of activities from 1998 onwards.

4. Summary of Conclusions With Proposals for Action

4.1 Main Conclusions

401. *Relevance of Activities.* ELMS is a complex sector in which the management is requested to perform co-ordination functions at a high regional level far away from the reality of the natural resource users. Further, the role of ELMS has been evolving in response to the demands of the member states without the benefit of an model institution. Within this setting, the ELMS mandate 1991-1995 is regarded as relevant although its responsibilities in environmental resource management are becoming increasingly diverse in relation to its institutional resources. Its objectives are clearly stated in relation to all activities although they are frequently formulated in rather general terms. Its activities cover a wide range of worthy subjects and fields but do not always support each other to make their combined effect greater than the sum of the effects of the individual activities.

402. *Implementation Performance.* The sector outputs and contributions on participatory techniques, land husbandry training, guidelines on land husbandry, policy formulation, policy analysis training, building of regional training capability and the *State of the Environment* have been both relevant and efficiently achieved. Performance shortcomings, in spite of high ambitions and good intentions among management and staff, relate to aborted activities, poorly prepared events, delayed implementation and late or non-existent reporting on events.

403. *Impact.* In comparison with the situation five years ago, ELMS training and information services have had a tangible impact on the targeted institutions, particularly in the fields of participatory techniques, land husbandry and policy analysis, while the institutional impact of its information services is less palpable.

404. It is probable that the detectable impact on individual institutions would have had a knock on effect on some rural and urban communities (i.e. the ultimate beneficiaries) within individual member countries. However, ELMS has no monitoring mechanism in place to prove this. Regrettably, the mission failed to find any evidence of such "grassroots" level impact from within the countries visited or in the documents reviewed.

405. The impact on regional co-operation and integration has been manifested through the major agreements Namib-Kalahari Project, ZACPLAN, Convention on Desertification and Protocol on Shared Water Resources.

406. *Role of Government of Lesotho.* ELMS is regarded as high priority sector by GOL which has made valuable technical contributions to its programme of work. However, it has not been able to provide the necessary manpower capacity and capability to ensure effective technical and managerial performance of the unit in spite of its dedicated leadership.

407. *Effect of Technical Assistance.* The long serving Implementation Consultant, which has not been assigned a direct institution building support mandate by Sida, may not have brought cutting edge expertise to bear into all technical fields but it has been clearly effective in manning the un-filled positions. Transfer of knowledge has been facilitated in recent years by the appointment of more counterpart staff and it is believed that *SPLASH* will soon be produced through the efforts of local staff only. The main effects from the planning and managerial support provided by the Implementation Consultant are still to emerge but efforts are continuing during the Bridging Period.

408. *Cost-Effectiveness of Provided Support.* The reliance on technical assistance for executive duties makes ELMS a high cost operation. Since the overall implementation record is mixed, cost-effectiveness has suffered accordingly

409. *Sustainability.* Most sub-programmes have been designed with the expectation of donor funding. However, it is expected that much of past achievements can be successfully consolidated[13] since: (a) further local staff training based on the ELMS sponsored training is not expensive to arrange once the national routines have been established and the trainers trained; (b) information exchange will be able to continue through the embryonic regional networks that have been established on different subject matters; (c) the cost for further "expert consultations" can be reduced through increased reliance on electronic communications; (d) gradual introduction of cost-recovering fees for training services from the benefiting countries; and (e) intensi-

[13] It is assumed that core functions within the ELM sector will continue to be fully supported by GOL or others donors after the Sida funding is terminated.

fied efforts to attract external funding for financing of programme activities;

410. The financial and institutional sustainability the of Co-ordination Unit will be influenced by the facts that: (a) additional posts have been created with ensuing commitments for their filling by GOL; (b) GOL is aware of the need to further strengthen the programming, co-ordination, monitoring (of activities implementation as well as of financial procedures) and reporting procedures and appears prepared to take the necessary actions; and (c) the remaining part of the Bridging Period 1996-1997 is expected to result in: (i) consolidation of the already well functioning routines for consultations with the member countries on technical and institutional subject matters; and (iii) intensified efforts to reduce internal operating costs.

4.2 Future Demand for Co-ordination Unit Services

411. Over the last ten years, ELMS has seen its mandate expand significantly from its original soil conservation and land utilisation focus to embrace the much broader field of the environment. The broader environmental mandate has increased the demand for specialist staff within the ELMS Co-ordination Unit (technical in the stricter sense, legal and economic) while requiring close/frequent liaison with events/people in the member states on environmental matters. ELMS has recently been assigned an environmental "watchdog" role by SADC. How it will perform this role has still to be defined but it can be expected to add considerably to the ELMS burden of responsibilities with a corresponding need for additional technical knowledge and financial and manpower resources within the Co-ordination Unit.

412. In the view of the evaluation mission, three challenges will put particular demands on ELMS in the medium term future: (a) land degradation, the effects of which on agricultural productivity are becoming increasingly serious; (b) co-ordination of the activities of a an expanding number of environmental departments/units to help avoid duplication and make the best possible use of limited institutional capability; and (c) reaching rural communities with methods of better resource management and urban communities with better techniques for water and waste management and environmental protection. Among line ministries and local authorities in the urban sector there is frequently: (i) insufficient integration of environmental perspectives into long term planning, project planning and services programming; (ii) gaps and overlaps among environmental planning and management functions particularly with regard to air and water pollution and supply; (iii) insufficient inter-organisational co-ordination of environmental planning and implementation; (iv) absence of Local Environmental Action Plans and mitigation plans; and (v) insufficient detailed knowledge of current and planned donor support.

413. The future demand for CU services within ELMS, including water resources management (which in the meantime has become a SADC sector in its own right) will also be determined by the following facts pertaining to other organisations in these fields: (a) there are many actors—governments supported by resourceful bi-lateral and multi-lateral donors, including the World Bank; international technical agencies such as UNEP and FAO; international non-governmental organisations such as IUCN; regional organisations such as SARDEC; national non-governmental organisations such as ZERO; (b) several of them have mandates/objectives to support "common systems", "complementarity between national and regional strategies and programmes" and "sustainable utilisation of natural resources and effective protection of the environment" and do favour common approaches and solutions; and (c) most of these organisations possess good technical competence on key subject matters.

414. Consequently, ELMS need to recurrently review its mandate and territory to eliminate duplication and to fill emergent institutional gaps. In the view of the mission, it is doubtful if a mandate of" co-ordination" only is sufficient for ELMS to maintain its value in the eyes of the member states; it appears that it also ought to be in a position to offer leadership and outstanding competence in key subject matter areas.

4.3 Proposals for Action

415. ELMS has at least two distinct advantages over national organisations and institutions: (a) it can frequently offer more cost-effective solutions to common problems and concerns than can individual countries by virtue of economies of scale; and (b) it can use its position as a regional organisation by taking the lead in setting uniform standards in areas of common concerns and by acting as a broker of information and "best practices" among the SADC countries.

416. The advantages attributable to superior cost-effectiveness appear to apply to the following areas: (i) training and education—design and production of training and teaching materials, identification and provision of resource people, identification and provision of trainers, and curriculum development; and (ii) backstopping on specialist subject matters which may be out of reach for individual countries.

417. The "positional" advantages should apply to: (iii) drafting and moving conventions and protocols; (iv) setting of standards in areas where ease of data interchange or direct joint control is important—water, air and wildlife; and (v) facilitation of exchange of information by acting as a broker of information and knowledge on natural

resources and technology—i.e. "disseminating what each country is good at"—among the member states.

418. In the view of the mission, the future priority should be on human resource development through long and short term skills enhancement training. The ELMS responsibilities should include production of regional guidelines and training materials, identification and provision of key resource persons from within (and when necessary from outside) the region, and the implementation of regional level training of trainers activities. National institutions should be encouraged to take the lead responsibility for replicating SADC sponsored regional training (such as the ICFS, LH and Conservation Project Design) within individual member countries. The mission's proposals and suggestions pertaining to the future ELMS mandate, core support functions, planning and management procedures and staffing and technical assistance are detailed in the following sections.

ELMS Mandate

419. The ELMS environmental and land management mandate should, in the opinion of the mission, encompass promotion of new ideas and approaches, sharing/dissemination of information between member countries, co-ordination of joint activities, and securing of donor funding for regional and national projects and programmes in addition to GOL resource inputs and revenue generated from fees and charges for the rendered services.

Core Support Functions

420. Three functions appear to be particularly important for SADC ELMS in the future:

(a) *Training of trainers* and other "agents of change" through: (i) courses/work-shops/seminars on technical subject matters and communication techniques; (ii) study tours, exchange visits and work attachments amongst the region's institutions; and (iii) follow-up and backstopping to ensure maximum effects of expended regional efforts;

(b) Strengthening of general and selected technical and socio-economic subject matter knowledge by *information services* directed at specific institutions and individuals through: (i) research monitoring/documentation/computer data base establishment/facilitation (resource data bases on institutions and experts, together with subject matter data bases); compilation of written documentation (through bibliographies); assessment of "best practices" within rural and urban sectors (including domestic water supply, sewage and solid waste management); and dissemination of the information through *SPLASH* and networks (to be established through SADC ELMS; and (ii) facilitation of personal interchanges through inter-collegial meetings and expert consultations; and

(c) Preparatory/introductory/*advisory* (guidelines development) and *backstopping services* on (i) utilisation and management of common natural resources ("conventions and protocols"); (ii) design and implementation of environmental/land management projects, (iii) land husbandry extension management, (iv) EIA for non-specialist staff, (v) "subjective" EIS compatible monitoring of rangelands, and (v) "best practices".

421. The individual proposals on training, information services and advisory services are detailed in the following:

Training

(1) Build on past strengths: Integrating Conservation into the Farming System, Land Husbandry Course, Natural Resource Policy Analysis Course, and Conservation Project Design;

(2) Focus on assisting member countries with the development and implementation of appropriate in-service training (develop a specific training of trainers programme);

(3) The gender perspective at community level, especially as it pertains to land issues and property rights, needs special attention in training, including land husbandry courses;

(4) Replication of regional training activities at the national level through providing regional resource persons to work with national trainers in the development and implementation of specific in-service training activities;

(5) While the present training courses are in-service and targeted at officers in governments and NGOs, a bigger target would be reached by developing a mechanism of ensuring that the new skills, knowledge and experience acquired in the three institutions are shared with pre-service training institutions in the member states of SADC. To this end, publications and compiled course contents should be shared with relevant training institutions in member states, especially the Agricultural and Natural Resources ones;

(6) Applied Research workshops have to be seen to have an input into the relevant programmes of training in the universities and tertiary institutions in the region, e.g. in providing relevant training materials.

(7) Training courses need to be thought through carefully so that they run on course and according to requirements (the Zomba Land Husbandry course in 1996 was not accorded the full six weeks period and the course in Sokoine University in Tanzania will not be conducted in 1996);

(8) Guidelines for contact points on how to selected participants to the courses based on needs assessments should be worked out so that those with requisite qualifications and experience can benefit fully from the courses;

(9) Selection of candidates for training should emphasise affirmative action of encouraging women to apply;

(10) To assess the impact of the training programmes, it is recommended that a tracer study of all those who have attended the courses be conducted to find out how they have applied the knowledge and skills acquired from the courses. The ultimate beneficiaries of the courses as the small scale farmers and this is where the impacts should be made and felt;

(11) Make MoUs with teaching institutions include cause on impact of training: definition of the meaning and indicators; how to monitor and measure; responsibilities; and required actions to enhance unsatisfactory impact.

Information Services

422. SADC ELMS currently assists with the exchange of information within the region through: (a) the distribution of SADC ELMS publications notably the newsletter *SPLASH* and various workshop reports; (b) the issuing of press releases; and (c) the convening of Regional Seminars, Workshops and Expert Consultations to facilitate the exchange of experience on environment and land management related issues between subject matter specialists in the SADC member countries.

423. *Proposed Tasks.* SADC ELMS currently lacks the capability to meet the regional information needs of the sector. To do this requires the establishment of a comprehensive information service. From a review of past and present SADC ELMS information activities, it would appear that these have been undertaken as disparate activities. For instance, the proposal for the Environment Information Systems component of the Environment Management Programme has been formulated separately from the proposal for an Environmental Information Exchange Network put forward by the Information Section of the CU. In reality, these should be formulated as sub-components of an information service that would assist in meeting the information needs of the SADC ELMS projects and programmes and the SADC member countries **[reference].**

424. It is recommended that SADC ELMS, in collaboration with SARDC and IUCN-ROSA, should consider developing a SADC Environment and Land Management Information Service (ELMIS) involving the following:

(12) Expansion of the existing documentation centre;

(13) Development of a regional information network of collaborating and participating institutions and individuals;

(14) Detailed assessment of the environment and land management information requirements of the various potential user groups;

(15) Initiation of the documentation of field experience (indigenous knowledge and project experience) with the principles and practice of improved land management (better land husbandry) for crop, livestock and tree production;

(16) Collection and collation of additional information related to environment and land management issues within the SADC region;

(17) Development of computerised databases for the storage and retrieval of bibliographic, technological and institutional information related to environment and land management;

(18) Development of computerised geographic information systems for the storage and retrieval of environmental and natural resources data sets that can be used for monitoring the state of the environment at the SADC regional level;

(19) Thematic literature searches;

(20) Periodic dissemination of information, extracted from the documentation centre and databases, in the form of published documents and/or on diskette;

(21) Responding to ad hoc requests from individuals and institutions for information on specific topics;

(22) In a region where the issue of poverty needs serious attention, research results should be seen to contribute to poverty alleviation, to increased productivity and to economic growth;

(23) Gender integration in the programme of the Applied Research series needs a long term plan;

425. With regard to the above, particularly proposal (14), SADC ELMS should consider becoming a WOCAT consortium member with a view to serving as the Southern African focal point for the collection of information on soil and water conservation technologies and approaches. As a consortium partner, ELMS would have access to the WOCAT global data base and its technology documentation software.

426. *Proposed Outputs.* There is scope for SADC ELMS to promote information exchange as well as publicising the aims of its work programme through the production of an expanded series of publications and other non-print media

materials. The following are some of the different options that could be produced under the SADC ELMS logo:

Newsletter *SPLASH*: Restore the central position of *SPLASH* as the lead publication for the dissemination of information on SADC ELMS activities. *SPLASH* should go back to being published 3 times per year; twice a year is insufficient to create in subscribers the expectation that another issue will shortly be forthcoming;

At present, the majority of people within the SADC region who have heard about the activities of SADC ELMS have heard about them via *SPLASH*. The present recognition profile of the SADC ELMS amongst soil and water conservation and environmental specialists within the region (and internationally) is in large part due to the past distribution of the newsletter. Any decrease in its circulation (already down from a high of 4000+ a couple of years back to approx. 1,300 at present) will reduce the profile of the CU and could have an adverse effect in terms of reducing its effectiveness as a co-ordinating and catalytic agent. It is difficult to co-ordinate activities if people do not know you exist. During the visit to Botswana, Zimbabwe and Malawi several of those met said that they used to read *SPLASH* but had not seen any recent issues and were under the impression that it had ceased production.

There are proposals to charge for all SADC ELMS publications as a means of cost recovery. Whereas a case can be made for charging for SADC ELMS reports, manuals and directories, it is believed that charging for *SPLASH* will be counter productive. *SPLASH* is targeted at the district level subject matter specialist/extension worker, given their present low salary levels it is doubtful if more than a handful would be prepared to pay out of their pockets for a personal subscription. Particularly, if this had to be paid in hard currency, i.e. US dollars. Note, even if the fee is kept low as proposed (US$ 4 per year for 2 issues), the bank charges associated with transferring that sum to the CU in Maseru would equal, if not exceed the cost of the subscription. A mechanism for paying in local currency might encourage more to subscribe but many of the present subscribers can be expected to balk at paying for something that over the last few years has come out on a very irregular basis.

There is scope for the CU to explore ways of reducing the present high production and distribution costs. Currently, printing costs in Maseru work out at over US$ 2.00 per copy of SPLASH. It could well be much cheaper to print it elsewhere, e.g. South Africa. Postage charges have risen dramatically in Lesotho (over 400%), particularly with the abolition of the printed paper rate. Alternative ways of distributing the newsletter could be explored such as: (a) sending bulk orders by freight carrier to the national contact points and have them distribute individual copies to subscribers within the country; or (b) sub-contracting the production and distribution to an NGO or private sector company in a country with cheaper printing and postage charges.

More effort needs to be given to exploring alternative ways of funding SPLASH. Paid adverts have been suggested but no marketing efforts have yet been made in this regard. Advertisers would have to have products or services they could expect to sell in most (if not all the SADC countries). This would severely restrict the potential pool of advertisers to multinational companies with interests in all 12 countries. (Do any such companies (e.g. Coca Cola) have a track record in the SADC region for sponsoring environmental education programmes?)

Alternatively, the SADC member countries could be asked to share the costs of production and distribution through a subvention to the core operating costs of the CU. This does not mean that the funds have to be physically transferred to Maseru but an equivalent fund could be built up at the national level and used for funding activities hosted by the country. Funds, that would have otherwise have been transferred by the CU to that country for a particular activity, could remain in Maseru and be used for SPLASH.

It is believed that SPLASH has a vital role to play in increasing the impact of the SADC ELMS work programme within the region and additionally at the international level. It does this by providing the CU with a "popular" way in which it can:

- disseminate information on SADC ELMS activities;
- introduce new concepts and approaches in the field of environment and land management; and
- offer a forum in which development workers/subject matter specialists from the SADC region can share their ideas and field experiences.

SPLASH should thus be seen as a core SADC ELMS activity and for this reason it should continue to be sent to subscribers free of charge. Attempts to cover the costs through paid subscriptions will seriously reduce its circulation and therefore regional impact. It should also be noted that a smaller print run will significantly increase the production cost per copy. The costs associated with the production and distribution of *SPLASH* should be regarded as an integral part of the core operating costs of the sector co-ordination unit and therefore met from whatever funds are secured for this.

Working papers: These would be akin to the working papers produced by agencies such as ICRAF. They would be regarded as provisional/draft documents made available in limited numbers for comment, discussion and review by those involved in

similar work elsewhere. A SADC ELMS working paper series would enable the CU and individual experts from within the SADC member countries to publish initial thoughts and ideas with regard to the concepts, procedures and/or methodologies related to specific environment and land management issues;

Technical guideline manuals/handbooks/training outlines: These could be derived from earlier working papers revised on the basis of in-country and regional experience gained during the implementation of SADC ELMS or similar activities. Alternatively, they could be documents commissioned by SADC ELMS for a particular sub-programme or to fill an identified gap in the technical guidelines available within the region. The intention would be to produce basic texts that could be used by field practitioners as guidelines for developing their own technical manuals or in-service training materials at the national level;

Technical monographs/bulletins/short papers: These would provide the opportunity to publish technical descriptions of individual better land husbandry practices, case studies of indigenous and improved conservation farming systems (IRALAs), soil and water conservation/land husbandry research results and evaluation studies of land husbandry practices, projects and programmes. These could also be used for publishing state of the environment reports on a national and/or regional basis as well as for documenting specific environmental problems and experience (successes and failures).

Directories: These would provide information related to "who is doing what and where" within the SADC region. Notably, providing details of the various institutions and agencies involved in environment and land management related training and research activities, as well as details of individual past, on-going and proposed field projects and programmes. In addition, one such directory could be in the form of a SADC ELMS "experts" register containing details of the skills and experience of different disciplinary specialists, in the fields of environment and land management, who could be called upon in an advisory/consultancy capacity. Such directories would require regular updating.

Annotated Bibliographies/Literature Reviews: Any review of the published and "grey" literature related to environment and land management within the SADC region could be published either as an annotated bibliography[14] or a literature review. The former would comprise a published record of recent papers on a particular topic with for each individual record a summary of the document's contents and any key findings. The latter would involve an analysis of the recent literature in order to prepare a review of current thinking on, and experience with, specific aspects of environment and land management within the SADC region.

Seminar, Workshop and Training Reports: These should be prepared as routine after each seminar, workshop, expert meeting or training exercise in which SAD-ELMS was formally involved as organiser, sponsor and/or collaborator. This used to be done but has not been done on a systematically in recent years. As a result, much of the training experience and information exchanged as a result of the ELMS work programme is not being widely shared.

Other **non print media materials** such as **videos, slides** and **film strips** to be produced to provide audio visual reference material for SADC ELMS training and publicity purposes. There is currently a very limited range of suitable audio-visual materials (slide sets, filmstrips or videos) that can be used for training purposes on the concepts and principles of participatory approaches to land management (better land husbandry). There are a number of existing slide sets and film strips produced by FAO and others related to the promotion of specific soil conservation measures. However, these mostly depict the past top down physical planning approach, and do not directly address the issue from the farmers' point of view. Given the expense of producing good quality video material, production of SADC ELMS videos would require special funding. However, suitable slide sets, with accompanying notes for presenters, could be produced relatively cheaply and quickly. The SADC ELMS CU, in co-operation with the collaborating institutions, should be encouraged to build up a slide collection documenting its experience and the field situation within the SADC member countries from which such teaching slide sets could be compiled.

Advisory and Backstopping Services

428. The mission has made no detailed proposals or recommendations on the advisory and backstopping function. However, it requires perhaps more of ELMS subject matter capability than the other two core support functions. The Co-ordination Unit should command in-house or through associations subject matter knowledge on utilisation and management of common natural resources (successfully proven during the reviewed period), planning of land management projects, on land husbandry extension management, if it is decided to make this an ELMS concern, EIA introduction and application, some important EIS aspects

[14] To date SADC ELMS has published only two such annotated bibliographies on soil and water conservation in Zimbabwe (1987) and Malawi (1989).

together with the overall technical assurance demanded when reviewing "best practices" in various fields.

Support Programmes

429. *Criteria for Activity Selection and Approval.* The Co-ordination Unit and the Technical Committee may consider the following criteria when reviewing a proposed activity for inclusion in the ELMS programme: (a) it would fill a gap not currently met by other agencies; (b)ELMS involvement would significantly improve what is currently done by others (e.g. by offering additional technical and/or financial support); (c) there is a common interest amongst several member countries in it becoming an ELMS responsibility; (d) there are economies of scale to be had from operating at the regional rather than individual national level; or (e) there is superior ELMS Co-ordination Unit competence or experience through "positional advantage" or other merits (e.g. working experience of particular standards and procedures).

430. ELMS should be "adding value" to what is being done or it might be done at the national level.

Land Management Programme

(24) Development and dissemination of methods for working in a participatory manner with farmers for better land husbandry (grass roots level focus);

(25) Development of regional guidelines on the various techniques and participatory planning approach involved in the design of conservation/natural resource based environmental management projects for rural households/communities;

(26) Development of simple guidelines on techniques that can be used by non-economists for the economic and financial appraisal of field level better land husbandry practices intended for adoption by small-scale farmers;

(27 Development of a training manual in the form of a guidelines framework detailing appropriate methods and strategies that could be used for training farmers, development workers and others in the principles and practice of better land husbandry;

(28) Development of guidelines for participatory environmental monitoring and evaluation (i.e. use of simple visual indicators that can be used by farmers, extension workers and others in the field for determining trends in the "state of the environment" within their local area);

431. *ICFS Course, LHTC Zomba, Malawi.* The following proposals are put forward:

(29) Continue to provide support to the LHTC in Zomba Malawi for the running of an annual ICFS course for participants from the SADC region;

(30) Assist the LHTC to develop the ICFS course as a self sustaining commercial training activity in which the costs of running the course are met from the tuition fees charged per participant. SIDA could consider guaranteeing to provide scholarships for half the participants for the first few courses run on this basis;

(31) The next ICFS course (August/September 1997) should be targeted specifically at potential trainers. The existing 5 week programme could be reduced to 4 weeks providing the resource persons and participants are prepared to work a 6 day instead of 5 day week. The fifth week could then be devoted to a training of trainers session. The aim would be for those who have just completed the practical ICFS training to spend 4-5 days discussing and determining how they would conduct such training in their own countries. Issues to consider would be:

- how to develop a course outline that would reflect the needs and circumstances of a specific country or institution;
- which teaching methods to use for learning about specific topics with the emphasis on participatory learning approaches and the use of practical "learning by doing" field exercises;
- what disciplinary background and experience would be required of the trainers/resource persons and where might they be found; and
- the production of country specific handouts and other training materials.

(32) SADC ELMS should consider using ICFS resource persons from the LHTC Zomba to assist in the replication of the regional training at the national level.

432. *ICFS for Arid/Semi-Arid Areas.* The ICFS training offered in Malawi focuses on the problems of sustaining agricultural production in a sub-humid environment where the dominant farming systems are based on annual crop production with livestock production as a minor, or non-existent, activity:

(33) Consideration should be given to the development of a comparable ICFS course where the focus would be on the conservation and production problems of livestock based farming systems or pastoral systems in arid/semi-arid environments;

(34) The following reference text should be used in conjunction with the SADC ELMS Land Husbandry Guidelines when developing such an ICFS type training course: Scoones I. 1995. [editor] *Living With Uncertainty—New directions in pastoral development in Africa.* Intermediate Technology Publications, London, England;

(35) It is recommended that efforts are made to identify an institution within the area covered by the Kalahari/Namib Plan of Action that would have the capability to offer such training on a routine basis. SADC ELMS, with advice from the staff of the LHTC Zomba, should then work with this institution to develop such a training programme.

433. *Land Husbandry Course, ICE, SUAS, Tanzania.* The following proposals are made:

(36) Continue to provide support to the ICE SUAS in Morogoro, Tanzania for the running of an annual Land Husbandry Course for participants from the SADC region;

(37) The course should be subject to critical review. The review of the LHC should be done in conjunction with a similar review of the ICFS training to ensure that the present complementarity between the two courses is further enhanced;

(38) Assist the SUAS to develop the LHC as a self sustaining commercial training activity in which the costs of running the course are met from the tuition fees charged per participant. Sida could consider guaranteeing to provide scholarships for half the participants for the first few courses run on this basis;

(39) The programme for the next SADC ELMS Land Husbandry Course should be revised to give it a clearer focus on the issue of how to address the land husbandry dimension within agricultural, livestock, forestry and traditional soil and water conservation projects. Participatory learning approaches should be introduced during the first week to replace some of the current lecture sessions. During the 4 week field study tour, it is suggested that fewer projects be visited so that more time can be spent in each. This would allow for more in depth discussion and analysis of issues related to project design, management, institutional organisation and monitoring and evaluation. During brief project visits, it is difficult for the trainees to get beyond the "success" story that project staff will present in order to show their work in a favourable light. More time will enable the trainees to probe into the implementation of an individual project in order to obtain a truer picture of its real successes and failures. These "lessons learnt" would provide the trainees with real life examples of the various factors that should be taken into consideration to ensure that the land husbandry dimension is properly addressed when designing agricultural development/natural resource management projects.

434. *Land Husbandry for Commercial Large-scale Farmers.* The commercial large scale farming sector is growing within the SADC region. So far, the focus of the land management component of the SADC ELMS work programme has been on the problems of small-scale farmers. There is thus scope for the development of a regional training programme aimed at introducing the concepts, principles and practice of better land husbandry to commercial large scale farmers and those extension and research personnel who advise them.

435. *Conservation Project Design.* There is still a need to strengthen the project design skills of those planners and development workers responsible for formulating projects within the fields of environment and land management. It is therefore recommended that:

(40) The SADC ELMS CU reactivates the conservation project design training programme that the 1990 evaluation found to have been well received in the region. The existing training materials (see Reports no. 7, 14 and 19, Vols. 1 & 2) will need updating to bring them more into line with the SADC Land Husbandry guidelines, notably the training would need to give more emphasis to the use of participatory planning methods. The long term sustainability of such training would require the identification of a suitable training institution within one or more of the SADC member countries.

436. *Integrated Land Use Planning.* It is proposed that:

(41) The 1991 and 1992 practical ILUP training workshops should not be repeated. The development objectives of this programme can be better met by supporting the above training programmes. Specialist training in remote sensing and GIS techniques should form part of the Environment Management Programme Capacity Building Sub-programme.

437. *Natural Resource Policy Analysis (NRPA).* The following proposals are made:

(42) Continue to provide support to the University of Zimbabwe for the running of an annual NRPA course for participants from the SADC region;

(43) Assist the University of Zimbabwe to develop the NRPA course as a self sustaining commercial training activity in which costs of running the course are met from the tuition fees charged per participant. Sida should consider guaranteeing to provide scholarships for half the participants for the first few courses run on this basis;

(44) Ensure that the natural economics parts of the course are put over in a way that is comprehensible to non-economists; and

(45) The problems experienced refer to poor communications with the benefiting institutions and with the ELMS Co-ordination Unit. Nominations should be

processed by ELMS as promptly as possible to minimise the risk for delays.

Environmental Management Programme

(46) Identify and prioritise key environmental areas where SADC ELMS can take the lead, i.e. gap filling in areas where it has (or could develop) in-house expertise and resources—not to duplicate work that other agencies are already doing often with more resources and technical expertise.

(47) Development of regional guidelines on the various techniques and participatory planning approach involved in the design of conservation/natural resource based environmental management projects for rural households/communities;

(48) Development of simple environmental appraisal guidelines for use by non environmental specialists as a complement to the more technical EIA guidelines available from other sources, and as a companion volume to the state of the environment report;

(49) Development of guidelines for participatory environmental monitoring and evaluation (i.e. use of simple visual indicators that can be used by farmers, extension workers and others in the field for determining trends in the "state of the environment" within their local area);

Water Resources Management Programme

438. Water has become a sector in its own right, leaving ELMS to concentrate on a more limited mandate.

439. The water sector requires *links* to land management—i.e. on use of water for productive purposes in crop and livestock production, and to "environment"—water for domestic and hydroelectric use, contamination/pollution risk and disposal of sewage water.

Planning and Management Procedures

Planning

(51) The following proposals are made with respect to sub-programme planning: (i) More explicit criteria and transparency in the project/activity identification and preparation process; (ii) Stricter structure—objectives, outputs, activities, inputs—instead of aims, goals, objectives and activities; (iii) Prune among objectives (one development objective and just a few immediate objectives); (iv) Quantified targets for objectives and outputs; and (v) Link activities to available manpower for programming and implementation;

(52) The following proposals are made on planning in general: (i) Time budgeting to be done per programme among CU staff; (ii) Budget format to allow breakdown per project including staff inputs; and (iii) Additional staff training to be conducted on planning techniques.

Monitoring

440. Procedural aspects on monitoring are covered among the proposals on the core functions and on the individual programmes.

Reporting

(53) Annual Reports should: (i) become more analytical; (ii) include reviews and summaries of past developments (outputs, activities and resource inputs); and (iii) Systematically compare planned and executed activities;

Administration

(54) Build in redundancy in communications: letters, e-mail, telex, telephone, faxes;

(55) Improve tele-communications by installing fax machines/computers with modems for e-mail with Contact Points;

Auditing

(56) Approval and implementation of unambiguous routines for internal and external auditing together with monitoring of the adherence to these procedures;

Technical Assistance and Co-ordination Unit Staffing

441. The required subject matter capability within or outside the Co-ordination Unit is likely to be of three kinds:

(a) "*Functional*", i.e. important for carrying out the three core support functions, encompassing communication skills relevant in: (i) staff training; (ii) household interaction (including participatory techniques) and (iii) publishing/information dissemination (production, printing and dissemination of printed material) together with skills in computer data base management: (iv) data base "architecture"; and (v) electronic collection, storage, retrieval and dissemination procedures;

(b) *Technical*, encompassing: (i) land husbandry; (ii) land use planning; (iii) GIS; (iv) environmental impact assessment; (v) Environmental Information Systems; (vi) natural resource management and environmental economics; and (vii) legal matters; and

(c) *Managerial*, encompassing: (i) project planning; (ii) extension management planning (field work, training, staff backstopping, monitoring); (iii) "guidelines introduction and application", including EIA application by non-specialists; and (iv) monitoring techniques.

442. In relation to these capabilities, the following proposals are made:

(57) Sida support for the Senior Technical Advisor position should be withdrawn as after 12 years of support it is believed that the GOL CU staff should be able to take over his/her technical responsibilities;

(58) Future technical assistance should be aimed at filling gaps within the technical capabilities of the CU and as a means of introducing SADC ELMS to new concepts and approaches to environment and land management;

(59) Primary emphasis should be on short term specialist inputs as required for the development and implementation of specific SADC ELMS activities;

(60) Sida support for the Information Advisor position should be phased out now that the GOL has appointed a full time Chief Information Officer;

(61) Future technical assistance related to the information service should primarily be short term and clearly focused on assisting with specific tasks. The immediate priority is for a consultant in Computerised Information Management to help set up a computerised database network, customise the database software and train the Co-ordination Unit staff to use it;.

(62) There is a need for better selection of regional consultants to ensure they have the relevant technical background and wide experience (exposure to international thinking) to be able to introduce new concepts and procedures;

(63) It is recommended that regional consultants, whose only experience is with the former conventional approaches to soil and water conservation/environmental management, should be avoided as they have nothing new to offer and their recommendations are likely to lead to a continuation of outdated and discredited methods;.

(64) Internationally recruited consultants should as appropriate be paired with regional consultant counterparts. The regional counterpart would bring his/her local knowledge of the region and in return they would benefit from working with someone with a wider international experience of the issues involved.

443. There is a need to re-establish the Economics Officer post within the Co-ordination Unit as the economic dimension, particularly with regard to determining the financial costs and benefits of sustainable land management/environmental practices at the rural household level, has received less attention in recent years. In the short term, this may require some technical assistance, particularly for the production of the guidelines for economic and financial appraisal. However, the aim should be for this post to be filled by a GOL staff member.

444. There is a need for a full time Training Officer post within the Co-ordination Unit to co-ordinate all training activities within both the environment and land management sectors. Such a person would be critical for the development of an effective training of trainers component of the ELMS work programme. It is understood that the counterpart to the recently departed TA Training Officer is to become ELMS Co-ordination Unit Co-ordinator. Filling the post of training Officer within the Co-ordination Unit would require the recruitment of an additional GOL staff member.

5. Lessons Learned

501. *Problem Analysis.* Since ELMS is an unusually complex sector, both subject matter wise and institutionally, the design and planning of a subsidised support programme requires special rigour with regard to needs assessment, problem analysis and target group/beneficiary identification. The new sector specific strategy introduced in 1994 appears to be based on priorities derived from Agenda 21 rather than on thorough regional or country reviews. Target groups are only vaguely specified, making subsequent impact assessments difficult, and the identified problems are not arranged within an hierarchical order to reflect internal causalities and local priorities.

502. *Policy and Strategy Formulation.* The sector specific strategy of 1994 reflects curiously little of the past approaches. The programme aims and objectives would have been more effective as guiding parameters had they been arranged within a structure indicating the overriding aim or objective and how attainment of sub-ordinate objectives would contribute to its fulfilment and equipped with specified, attached verifiable indicators. In its current form, which is continuously being expanded and made more succinct, the strategy still falls short of combining the proposed activities with the available resources. Since ELMS has yet to develop a gender policy framework for its activities, gender considerations have not been not adequately addressed in programme formulation and implementation.

503. *Project/Programme Planning Procedures.* There are limitations to the workshop approach in generating innovative thinking. Such workshops can be used to arrive at a regional consensus on the need for particular activities and an agreed outline programme. However, to do this effectively requires a good deal of thorough preparatory work on the part of the Co-ordination Unit. Good planning documents cannot be written from scratch in such meetings. Someone has to prepare an initial draft which the meeting can then review and revise to take account of specific national and regional concerns as put forward by the invited experts from the SADC member countries. The conclusions and recommendations of all too many of the regional workshops typically lack the specific detail required to make them operational at either the national or regional levels. Further, the comparative ELMS advantages to undertake a particular programme or activity, rather than other regional or international organisations, do not appear routinely in the project write-ups, raising questions about sub-optimisation.

504. *Annual Programming.* The Plans of Operations have been the major guiding instrument for the implementation of the ELMS activities. They have commonly indicated quantified implementation targets for the planned activities but rarely for the objectives or the expected outputs, thus precluding effective monitoring and follow up. The lack of a consistent budget format has made financial follow-up difficult.

505. *Monitoring of Activities, Outputs and Impact.* Procedures have been lacking for monitoring of training and workshop events through systematic reporting while the follow-up on the provision of information services and backstopping services appears to have been left to the discretion of individual officers. As a result, ELMS has received little feedback on efficiency and effectiveness of the undertaken activities as a basis for course adjustments.

506. *Managerial and Administrative Capability.* Some the experienced shortcomings in implementation efficiency can be attributed to lack of Co-ordination Unit staff in relation to the assumed tasks and generally weak managerial and administrative functions but also to ineffective programming and budgeting procedures.

507. *External Support.* The Co-ordination Unit has been relying on consultants for special technical subject matter expertise and some project planning expertise. Its own internal capability has encompassed expertise in land management/training (Government of Lesotho/technical assistance), environmental planning and management (technical assistance), general technical expertise (technical assistance) and in information services. Only two of the technical assistance staff have had appointed counterparts while the others have been acting as executing CU officers. Swedforest, as Implementation Consultant, has been responsible for: (a) technical assistance recruitment and employment; (b) consultant recruitment and employment (shared with CU); (c) technical and managerial backstopping, including internal monitoring and evaluation techniques; and (d) procurement of specialised equipment. It has not had any specific mandate for manpower development or procedural development other than through the Job Descriptions of individual technical assistance staff nor has it been responsible for financial man-

agement and control. As a result, there have been no targets established for manpower proficiency and procedural effectiveness and no formalised procedures for transfer of knowledge between technical assistance staff and GOL officials, perhaps contributing to the protracted dependency on outside support.

508. *Sida Supervision and Follow-up*: Supervision by Sida has been exercised through Annual Reviews and Mid-Term Reviews held in between the Annual Reviews. While Sida has promoted institution building, it has not made this task part of the Terms of Reference for the Implementation Consultant. Similarly, its expressed interest in education of rural households in natural resource management has not helped to sharpen target group definitions or impact follow-up procedures.

509. *Implications for Future Sida Support to ELMS*. The mission believes that future external support to ELMS would be put to more effective use following improvements in Co-ordination Unit management through post upgradings and filling with qualified staff in conjunction with upgrading of the procedures for programming and monitoring of activities and outputs.

510. It is also envisaged that external support would be more effectively utilised to support a programme or a project rather than a core function like training or information services since successful assistance to core functions is much more demanding in terms of supervision and output and impact monitoring.

511. The Land Management Programme is operating effective training programmes, the effects of which are now ready for dissemination to rural communities through local initiatives. This programme also benefits from a clear sense of direction with regard to target groups, implementing institutions and technical subject matter areas. In addition, the instituted procedural improvements are likely to soon start generating important feedback on efficiency and effectiveness.

512. The Environmental Management Programme is more diverse than the Land Management Programme with less clear priorities and interlinkages among its projects. It may also be duplicating efforts undertaken by other organisations unbeknownst to ELMS. Future support to this programme should be preceded by reviews of regional needs/demands within specific areas together with assessments of activities and plans of other actors.

Sida

Department for Natural Resources
and the Environment
Ulla Andrén

1996 06 12

Diarienummer

Natur-1995-0016

EVALUATION OF SADC-ELMS - TERMS OF REFERENCE

1. Background

In November 1981 Lesotho was given the responsibility by SADCC (Southern Africa Development Coordination Conference) to coordinate regional activitites relating to Soil and Water Conservation and Land Utilization (SWCLU) and in 1985 a Coordination Unit was established in Maseru.

The first phase of the SWCLU programme (1985-87) included setting up of the sectoral administrative structure and a number of learning projects. During the second phase (1988-91) the programme focused on sustained and increased production, popular participation, water resources management, legal aspects of conservation, monitoring activities and research.

In 1990 the SWCLU Sector's mandate was expanded and charged with the overall responsibility for environmental coordination. The Sector was renamed Environment and Land Management Sector (ELMS). The third phase of the programme (1992-97) consequently included environmental monitoring, assessment and reporting, provided greater focus on institution-building, replaced old concepts in conservation with a new focus on sustainable land management and production.

A SADC (Southern Africa Development Community) policy and strategy for environment and sustainable development was formulated during 1993-95. This document outlined an indicative programme to be carried out by the different SADC sectors and coordinated by ELMS.

The ELMS own programme of work was also revised and for 1996-97 there are three distinct programmes of land, environment and water resources management, each comprising of a number of activities.

Sida has supported the sector since 1984. As from this time up to the end of 1995 a total amount of 105 million SEK has been paid.

The current agreement covers the period 1996-97 and has a budget of 25 million SEK. A major cost component is technical assistance. Swedforest International AB has provided these consultancy services to the programme during the whole project life.

The programme has been evaluated by Sida in 1987 and 1990. Internal assessments of the activities undertaken have also been made, the last one in December 1995. However, no impact study of the programme has been made so far.

2. Purpose and Scope of the Evaluation

The purpose of the evaluation is to assess achievements of result and the impact of the programme in the SADC region.

With regard to programme results the evaluation should focus on the period 1991-95, whereas the impact assessment should take into account the whole ten-year period 1985-95.

Sida has indicated that it will not be willing to continue core funding of ELMS beyond 1997. However, Sida will use the evaluation as a basis for discussion with ELMS on possible funding of specific programmes or activities in the future.

3. The Assignment

The evaluation shall focus on, but not necessarily be limited to, the following aspects:

a) The evolution and relevance of the Programme during its different phases and in a changing SADC environment. The Programme should in this respect include the Coordination Unit as well as the Sector's different sub-programmes.

b) Programme effectiveness with regard to achievement of objectives, implementation of activities and realising expected outputs.

c) Programme effects on selected target groups in SADC member countries, specified with regard to gender, and analysis of cause-effect relationships.

d) Programme impact in member states with regard to improved institutional and technological capacity for achieving sustainable development, public awareness and participation, and regional integration and cooperation on environmental and natural resources management.

e) The role and support of the Lesotho Government in effectuating the mandate of ELMS.

f) Effectiveness and efficiency of the technical assistance funded by Sida.

g) Cost-efficiency of the programme and of the Sida support.

h) Sustainability of programme results, and in particular ELMS institutional and financial sustainability.

i) The demand by member states for the ELMS Coordination Unit's services. This assessment should take into account a possible transfer of the water resources management programme to a separate SADC sector.

4 Methodology, Evaluation team and Time schedule

The evaluation should be carried out by an independant consultancy team consisting of a team leader and two to three team members. The team should have expertise in institutional development, project management, land and water resources management, environmental issues, training and information as well as economics. Preferably, one or two of the team members should come from the region. None of the team members should previously have been involved in the project.

The ELMS Coordination Unit will provide the team with all relevant background material. The team should visit four of the initial member states, including Lesotho. The team should interview governmental organizations and institutions as well as relevant private and non-governmental organisations .

The evaluation should require a maximum of totally sixteen consultancy weeks. It is expected that the field work will be carried out in September/October 1996 and a draft report should be presented to Sida not later than 15 October 1996.

The consultancy firm will be requested to outline a proposed methodolgy for the evaluation in their tender. This should include type of data collection and whom to be interviewed.

5. Reporting

The team should present its conclusions and main findings to the ELMS Coordination Unit before its departure from Maseru.

The evaluation report shall be written in English and should not exceed 50 pages, excluding annexes. The outline of the report shall follow Sida Evaluation Report - a Standardized Format, see Annex 1. Five copies of the draft report shall be submitted to Sida in Stockholm, not later than October 15, 1996. Within two weeks after receiving Sida's comments on the draft report, a final version in five copies and on diskette shall be submitted to Sida.

Subject to decision by Sida, the report will be published and distributed as a publication with Sida Evaluations series. The evaluation report shall be written in WP 6.1 for Windows or a compatible format and should be presented in a way that enables publication without further editing.

The evaluation assignment includes production of a summary to the Guidelines for Sida Evaluations Newsletter and the completion of Sida Evaluations Data Work Sheet, attached to these terms of reference, see Annex 2 and 3. The separate summary and a completed Data Work Sheet shall be submitted to Sida along with the final report.

Sida may require the Consultant to present the conclusions and main findings at a seminar arranged by Sida in Stockholm or Maseru as part of the overall evaluation assignment.

Annex 1. Sida Evaluation Report - a Standardized Format
2. Guidelines for Sida Evaluations Newsletter
3. Data Work Sheet

APPENDIX 2:

List of Persons Interviewed

SADC ELMS

1. Mr B. Leleka	Director SADC-ELMS.
2. Professor P. Maro	Senior Technical Officer.
3. Mr Jobo Molapo	Training Officer.
4. Dr Barbro Gretener	Environmental Advisor.
5. Mr Mikael Segerros	Consultant.
6. Mr Thato Foko	Chief Information Officer.
7. Ms Pernilla Strid	Environmental Information Officer.
8. Mr Eduardo Coelho	Technical Advisor.
9. Mr Lenka Thamae	Senior Hydrologist Officer.

BOTSWANA

1. Dr K. Mbuende	Executive Secretary, SADC Secretariat
2. Mr Madonsela	Desk Officer, SADC Secretariat.
3. Mr K.K. Mmopi	Principal Agricultural Officer, Ministry of Agriculture.
4. Dr Raban Chanda	Co-ordinator of SADC-ELMS Applied Research, Department of Environmental Sciences, University of Botswana.
5. Dr Fanikiso	Co-ordinator, Livestock sector.
6. Mr M.L. Nchunga	Chief Natural Resources Officer, National Conservation Strategy (NCS/A).
7. Mr S.C. Monna	Principal Natural Resources Officer.
8. Ms Botsatano Coyne	Senior Natural Resources Officer, (NCS/A) Research and Monitoring.
9. Mr R.M. Kwerepe	Principal Range Ecologist, Department of Crop Production and Forestry.
10. Dr J. Ndunguru	Director SACCAR.

BOTSWANA PARTICIPANTS IN SADC- ELMS SPONSORED WORKSHOP / SEMINAR

1. Mr V. B.M. Tenalerwa	Senior Range Ecologist.
2. Ms Constance Masalila	Assistant Range Ecologist.
3. Mr Mbuluki Mpenya	Soil Conservation Officer.
4. Mr J.D. Mafoko	Senior Soil Surveyor.
5. Mr B. Dimeku	Senior Technical Officer, Beekeeping.
6. Mr M.K. C. Modisaotsile	Soil Conservation Officer.
7. Mr D.K. Dipholo	Secretary, Agricultural Resources Board (A.R.B).
8. Mr S. Mmui	Senior Technical Officer (A.R.B.)
9. Mr Sekwele	Director of Agriculture Planning and Statistic.
10. Mr Mandevu	Acting Contact Point.

ZIMBABWE

1. Mr Mandisotza M.T.	Deputy Director - Natural Resources Department.
2. Mr Shoko N.	Chief Natural Resources Officer.
3. Mr Kunene I.D.	Chief Ecologist.

4. Dr Sukumi	Course Co-ordinator / Lecturer, Department of Agriculture and Economical Extension (DAEE) POLICY ANALYSIS COURSE, University of Zambia.
5. Mr Mudimu G.D.	Senior Lecturer,University of Zimbabwe.
6. Mr Mugwara	Director, SADC Food Security.
7. Mr Yona Jairos	Technical Co-ordinator.
8. Mr Munyaradzi Chenje	Director, SARDC.
9. Mr Nils Christofferssen	Programme Officer, IUCN-ROSA.

MALAWI

1. Mr J.N. Mulenga	Controller of Land Resources and Conservation.
2. Mr V. Mkandawire	Senior Husbandry Officer.
3. Mr Ndhlovu	Principal Economist.
4. Mr Kandaya	Principal , Zomba.
5. Mr Ralph Kabwasa	Environmental Co-ordinator.
6. Dr Charles Mataya	Head, Marketing, Trade and Development, Bunda College of Agriculture.
7. Dr Moses Kwapata	Vice-Principal / Head of Crop Sciences, Bunda College of Agriculture.
8. Mr Ernest D. Misomali	Information Management Specialist.
9. Mr D.P. Lemhofer	Co-ordinator Indigenous Forests Management, SADC Forestry Sector.
10. Mr Lovemore Nhalene	Principal Forestry Officer.
11. Mrs Esther Mede	Permanent Secretary, Ministry of Research and Environmental Affairs.

LESOTHO

1. Mrs Mota	Chief Conservation Officer (Lesotho Contact Point).
2. Dr J. Putsoe Raputsoe	Principal Secretary, Public Service.
3. Mrs Teboho Taoana	Director, Public Service.
4. Mrs Mawokoena Ramollo	Employee Relations Officer.
5. Mr R. Makhoone	Principal Secretary, Ministry of Agriculture.
6. Mr. Ndlolu	Principal Secretary, Ministry of Planning .

APPENDIX 3:

List of Consulted Documents

Planning Documents

Major Planning Documents

1982 Consultancy for the Ministry of Agriculture and Marketing in Lesotho, SADCC Co-ordination Programme on Soil and Water Conservation and land Utilisation, *Swedforest Consulting AB*, December 1982

1987 July A Suggested Phase II Programme of Work, *SADCC SWCLUS Co-ordination Unit*

1991 August Proposal for Phase III Sector Programme, *SADC ELMS Co-ordination Unit*, Harare

1994 October Proposed SADC Policy and Strategy for Environment and Sustainable Development, *SADC ELMS Co-ordination Unit*

1996 June Proposed SADC Policy and Strategy for Environment and Sustainable Development: Project Profiles, *SADC ELMS Co-ordination Unit*

Planning Documents for Individual Programme Components

1990 September Environmental Monitoring Project, *SADCC SWCLUS Co-ordination Unit*

Annual Programming Documents

1992 September Plan of Operations and Budget, 1992-1995 (July to June), *SADC ELMS Co-ordination Unit*

1992 December Plan of Operations and Budget, 1993-1995 (July to June), *SADC ELMS Co-ordination Unit*

1995 May Plan of Operations and Budget, 1995 (July to December, *SADC ELMS Co-ordination Unit*

1995 October SIDA Annual Plan of Operations and Budget, 1996 (January to December, *SADC ELMS Co-ordination Unit*

Review, Monitoring and Other Ex-Post Reports

Documents on Individual Programme Components

1986 April Cost-Benefit Analysis of Soil and Water Conservation Projects, Report from A Seminar, Maseru, Lesotho, *SADCC SWCLUS Co-ordination Unit*, Report No. 4, July 1986

1986 November Monitoring Systems for Environmental Control, Report from A Seminar, Gaborone, Botswana, *SADCC SWCLUS Co-ordination Unit*, Report No. 13, March 1987

1988 March Economics of Conservation, Proceedings from A Workshop, Maseru, Lesotho *SADCC SWCLUS Co-ordination Unit*, Report No. 17, August 1988

1988 August Conservation Project Design, Report from Regional Training Course, Masvingo, Zimbabwe, *SADCC SWCLUS Co-ordination Unit*, Report No. 19, Volume 2, December 1989

1991- 1992 Natural Resource Conservation and Management in SADC Region: Challenges and Opportunities, Proceedings of the 1st and 2nd SADC ELMS Applied Research Seminars, Gaborone, Botswana, *SADCC SWCLUS Co-ordination Unit*, Report Series 37, May 1995

1994 November Applied Research in Conservation and Land Management, Seminar Report, Gaborone, Botswana, *Department of Environmental Science, University of Botswana/ SADC ELMS Co-ordination Unit*, May 1995

1996 November Urban Environmental Quality in the SADC Region, 5th Seminar Report, Windhoek, Namibia, *Department of Environmental Science, University of Botswana/ SADC ELMS Co-ordination Unit*, May 1996

Annual and Semi-Annual Programme Reports

1992 Annual Progress Report, *SADC ELMS Co-ordination Unit*, December 1992

1993 February Agreed Minutes from the Annual Sector Review on Support to the Natural Resources Management Sector in Lesotho

1993 November Agreed Minutes from Mid-Term Review of the SIDA Sponsored SADC Environment and Land Management Sector Co-ordination Programme, Maseru, November 1993

1994 Annual Progress Report, January-December 1994, *SADC ELMS Co-ordination Unit*, December 1994

1994 Agreed Minutes from the Annual Review of the SIDA Sponsored SADC Environment and Land Management Sector Co-ordination Programme, Maseru, February 1995

1994 EIS Workshop Report

1995 EIA Workshop Report

1995 Annual Progress Report, January-October 1995, *SADC ELMS Co-ordination Unit*, October 1995

1995 November Agreed Minutes from Mid-Term Review of the SIDA Sponsored SADC Environment and Land Management Sector Co-ordination Programme 1 January-31 October 1995, Maseru, November 1995

1996 March Agreed Minutes from the Annual Review of the SIDA Sponsored SADC Environment and Land Management Sector Co-ordination Programme, Maseru, March 1996

1996 January Specific Agreement Between the Government of Sweden and the Government of Lesotho on SADC Environment and Land Management Sector Co-ordination Unit 1996-1997

Evaluation Studies

1990 December Evaluation of the SIDA Supported Co-ordination Programme of the SADCC Soil and Water Conservation and Land Utilisation Sub-Sector, Report to the Swedish Development Authority and the Government of Lesotho, *IIED*, December 1990

1991 May SIDA/GOL Workshop on the IIED Evaluation Report, *SADCC SWCLUS Co-ordination Unit*, May 1991

1995 April Report on Special Audit of SADC ELMS, *RAX Consulting AB*, Stockholm, April 1995

1995 April Final Report on Short Term Consultancy on Financial Management and Accounting at SADC ELMS, *RAX Consulting AB*, Stockholm, January 1996

Other Documents

Caring for Southern Africa's Resources, *SADC ELMS*, 1996

Southern African Development Community Handbook, 1994

People and Their Land — The Production Through Conservation Approach in Lesotho, *Ministry of Agriculture, Co-operatives and Marketing*, Lesotho, 1995

State of the Environment in Southern Africa

SADC PROGRAMME FOR ENVIRONMENT & LAND MANAGEMENT SECTOR

EVALUATION MISSION, SEPTEMBER-OCTOBER 1996

Draft Summary of Initial Findings and Conclusions

Introduction

1. The present draft summary is primarily based on the outcome of mission discussions in Lesotho, Botswana, Zimbabwe and Malawi. The review period encompasses 1985-1995 for assessment of the impact and 1991-1995 for assessment of other aspects. There has as yet been little time to utilise the large body of documents made available in Lesotho and in the other countries. The intended coverage of the First Draft Evaluation Report to be submitted to Sida on 15 October is indicated in Appendix 1.

Some Perceptions of SADC ELMS

2. The following statements applying to ELMS as a whole were sampled during the discussions in Botswana, Zimbabwe, Malawi and Lesotho:

- The role of ELMS in the development of, and support for, regional training in Natural Resource Policy Assessment, Land Husbandry and ICFS is highly valued;
- ELMS is seen as having played a key role in promoting participatory approaches to land management at the community and farm household levels within the region;
- The role ELMS is perceived among natural resources ministries as having a high profile while not always being able to match expectations;
- The current environmental agenda is too wide;
- ELMS has had limited impact on rural communities;
- Its responsibilities and activities are still not well known outside the sphere of Contact Points, natural resource ministries and former trainees;
- The demarcation between ELMS activities and those of other FANRS has not always been clear;
- ELMS activities have "cooled down" in recent time;
- ELMS CU should be able to provide more data and information on natural resources subject matters;
- There are too many isolated/uncoordinated workshops;
- It is useful to learn about the experiences of other countries; and
- ELMS has done a good job in sensitising about Agenda 21.

The Impact of ELMS Activities

2. Generally, it is difficult to gauge the impact of the activities of an organisation like ELMS, whose mandate is largely synonymous with institution building and supportive activities. This inherent difficulty is compounded by an absence of verifiable indicators[1] in relation to impact as well as to outputs specified at the planning stage or at implementation inception. Similarly, the recognised trend towards more participatory approaches to land management is difficult attribute conclusively to ELMS or other programmes.

Institutions—the Direct Target Group

5. *Training*. Surprisingly, after more than ten years of training of staff of Government organisations through seminars, workshops and courses, there are no guidelines/routines established by ELMS to follow up the effect of the provided training on the performance by the trainees or the secondary effects of their acting as trainers for colleagues at different levels in the benefiting organisations.

6. *Dissemination of Information.* The impact of the information and data disseminated through ELMS CU to the recipient organisations and individuals is equally hard to comprehend in the absence of targets and explicit ambitions.

7. ELMS has lagged behind compared to the Forestry Sector in terms of the development of an effective information service for the institutions within the region. It has yet to develop comprehensive computerised databases for the storage and retrieval of bibliographic, technological and institutional information.

8. The newsletter *SPLASH* has been the main means for disseminating information on ELMS to potentially interested parties within the region. Failure to produce this on a regular basis has led to the perception amongst many institutions that it has ceased production. Proposals to charge a subscription fee for *SPLASH* can be expected to significantly reduce its readership within the region.

Rural Communities—the Ultimate Target Group

9. The ultimate beneficiaries are intended to be the rural households of the SADC member countries that largely depend on utilising their local natural resources in order to meet their needs for food, cash and energy and shelter (this represents the large majority of the population within the SADC region). It is not possible for a regional pro-

[1] We understand that this deficiency is being corrected through measures which include internal workshops on logical framework techniques.

gramme to directly target such beneficiaries; this is the responsibility of national and field level programmes. However, a regional programme can improve the ability of national institutions to provide the requisite support services required to enable rural households to adopt productive and environmentally sustainable land management practices.

10. *Training.* So far, the mission has not learned about examples of how skills or knowledge acquired by institutional staff through training promoted by ELMS has benefited rural community members.

Members of Public

11. The general public may be regarded as indirect beneficiaries of the SADC ELMS work programme as enhanced environmental awareness in the region can be expected to lead to the implementation of polices and programmes to combat existing environmental degradation, prevent future degradation, and promote sustainable and equitable development and utilisation of the region's natural resources.

12. There is a general feeling among the respondents met by the mission that the impact of ELMS sponsored training, education and information dissemination has been largely limited to Government officials while the demand for education and information on land management and environmental issues among the general public has not yet been met.

Regional Co-operation and Integration

13. *Conventions and Protocols.* Pending further assessments, it appears that one of the most appreciated contributions by SADC ELMS is its efforts to facilitate or bring about conventions and protocols addressing common concerns among two or more SADC member countries (i.e. Namib-Kalahari Project, ZACPLAN, Convention on Desertification, Protocol on Shared Water Course Systems).

14. *Other Areas of Co-operation.* ELMS appears to have been less successful in other matters of regional co-operation and integration. Although it has issued regional guidelines on land husbandry, use of pesticides and remote sensing, it has so far been unable to take a lead in the sharing of information on EIA standards and common architectures for databases on the institutional and personnel resources in the region which potentially also have high pay-offs.

15. It is surprising, given the focus of the IRALAs programme on documenting successful land management practices, that ELMS has not entered into co-operation with the WASWC WOCAT programme.

ELMS Strategies and Policies

Comparative Advantages

16. ELMS has at least two distinct advantages over national organisations and institutions: (a) it can frequently offer more cost-effective solutions to common problems and concerns than can individual countries by virtue of economies of scale; and (b) it can use its position as a regional organisation by taking the lead in setting uniform standards in areas of common concerns and by acting as a broker of information and best practices among the SADC countries.

17. The advantages attributable to superior cost-effectiveness appear to apply to the following areas: (i) training and education—design and production of training and teaching materials, identification and provision of resource people, identification and provision of trainers, and curriculum development; and (ii) backstopping on specialist subject matters which may be out of reach for individual countries.

18. The "positional" advantages should apply to: (iii) drafting and moving conventions and protocols; (iv) setting of standards in areas where ease of data interchange or direct joint control is important—water (sanctions), air (sanctions) and wildlife (incentives); and (v) facilitation of exchange of information by acting as a broker of information and knowledge on natural resources and technology—i.e. "disseminating what each country is good at"—among the member states.

19. Neither the above advantages nor other rationales for ELMS to undertake a particular programme or activity rather than other regional or international organisations, appear to be routinely reflected in the planning write-ups.

Targets Group Focus

20. Clearly defined target groups (end users), based on explicit criteria, appear to be lacking for many of the ELMS programme activities. Consequently, the required problem analysis, as a basis for formulating objectives and support activities, is frequently wanting in precision.

21. ELMS has yet to develop a gender policy framework for its activities. As a result, gender considerations are not adequately addressed in programme formulation and implementation.

Technical Focus

22. Training in participatory techniques appears to be highly appreciated in both the land management sub-sector and the environmental field. With the departure of the economist, less attention appears to have been given to the financial aspects of land management.

23. Although the policy and strategy document defines broad categories for future support, more substance is required before its significance can be fully appreciated.

24. The recent priority emphasis given to environmental policy and strategy at the national and regional level has resulted in a marginalisation of programmes in the land management sector that have a grassroots/field level focus.

25. As the technical mandate has expanded ELMS is in danger of following behind the member countries rather than providing a technical lead, most notably in the area of environmental impact assessment.

Institution Building Role

26. There appears to have been a turning point in 1993 when the ELMS programme went from planning/implementation of projects to institution building, awareness creation, initiation, approval and ratification of protocols while future years may entail increased benefits to rural and urban communities.

27. Lack of specific training of trainers component in the various training activities to date to enable regional ELMS supported initiatives to be replicated at the national level: assumption has been that who have received training would have the teaching skills to train others on return to their work stations. Several technical guideline manuals have been produced for specific training workshops/courses but as yet no guideline manuals have been produced on how to conduct such training.

28. Provision has been made in the budget for supporting at least two national ICFS/Land Husbandry training courses but as yet there are no examples of ELMS supported regional training being replicated at national level.

Approach to Improved Sustainability

29. The initial impression is that there are too many activities supported by ELMS in relation to the resources commanded by the Government of Lesotho.

30. The role of ELMS has been evolving in direct response to the demands of the member states without the benefit of an model institution. Sub-programmes have in the past been designed with the expectation of donor funding with little attention paid to sustainability aspects.

Programme Outputs

31. As with the anticipated impact, there is a lack of verifiable indicators for the expected outputs.

Upgrading of Manpower Capabilities

32. As a result of the SADC ELMS programme, the University of Zimbabwe has been assisted to develop a regional capability to provide training in natural resource management assessment. Similarly, Sokoine University of Agriculture has been assisted to develop a regional land husbandry training course: In the case of the Land Husbandry Training Centre in Malawi, SADC ELMS has enabled a national ICFS training programme to be made available to participants from the other member countries.

33. Between 1991 and 1995 some 44 regional meetings, seminars, workshops and training activities were conducted under the auspices of SADC-ELMS. For the same period there are only 9 actual published reports in the SADC-ELMS report series. It is unclear as to why there are no published reports for the others. The annual progress report for 1991 records that a decision was taken not to publish the proceedings of the Third Workshop on Economics of Conservation (held in Francistown, Botswana, November/December 1989) due to the unsatisfactory standard of the material available. A similar fate may have befallen draft reports for the other activities. If so this begs the question why are the materials presented at these meetings by the resource persons, consultants and country participants of such a low quality as to be unworthy of publication and why has nothing been done to improve the situation?

34. Where particular training activities have been undertaken on behalf of the SADC-ELMS CU by another institution on the basis of an MoU, it is understood that a report is prepared by the collaborating institution and submitted to the CU. The CU has yet to edit these and have them published as part of the SADC-ELMS report series. Given the innovative nature of the subject matter and teaching methods used in the ICFS, Land Husbandry and Resource Policy Assessment SADC-ELMS training courses published reports of each activity would be valuable for disseminating information about the approaches and training experience to others who may wish to undertake similar work.

Dissemination of Information and Knowledge

35. This is currently by means of: (a) distribution of SADC-ELMS publications notably the newsletter *SPLASH* and various workshop reports; (b) press releases; and (c) Regional Seminars, Workshops and Expert Consultations convened to facilitate the exchange of experience on environment and land management related issues between subject matter specialists in the SADC member countries.

36. At present the majority of people within the SADC region who have heard about the activities of SADC-ELMS have heard about them via *SPLASH*. The present recognition profile of the SADC-ELMS amongst soil and water conservation and environmental specialists within the region (and internationally) is in large part due to the past distribution of the newsletter. Any decrease in its cir-

culation (already down from a high of 4000+ a couple of years back to approx. 1,300 at present) will reduce the profile of the CU and could have an adverse effect in terms of reducing its effectiveness as a co-ordinating and catalytic agent. It is difficult to co-ordinate activities if people do not know you exist. During the visit to Botswana, Zimbabwe and Malawi several of those met said that they used to read *SPLASH* but had not seen any recent issues and were under the impression that it had ceased production.

37. There are proposals to charge for all SADC-ELMS publications as a means of cost recovery. Whereas a case can be made for charging for SADC-ELMS reports, manuals, directories etc. it is believed that charging for *SPLASH* will be counter productive. *SPLASH* is targeted at the district level subject matter specialist/extension worker given their present low salary levels it is doubtful if more than a handful would be prepared to pay out of their pockets for a personal subscription. Particularly if this had to be paid in hard currency, i.e. US dollars. Note even if the fee is kept low as proposed (US$4 per year for 2 issues), the bank charges associated with transferring that sum to the CU in Maseru would equal if not exceed the cost of the subscription. A mechanism for paying in local currency might encourage more to subscribe but many of the present subscribers can be expected to balk at paying for something that over the last few years has come out on a very irregular basis.

38. There is scope for the CU to explore ways of reducing the present high production and distribution costs. Currently printing costs in Maseru work out at over US$2.00 per copy of *SPLASH*. It could well be much cheaper to print it elsewhere eg. South Africa. Postage charges have risen dramatically in Lesotho (over 400%) particularly with the abolition of the printed paper rate. Alternative ways of distributing the newsletter could be explored such as: (a) sending bulk orders by freight carrier to the national contact points and have them distribute individual copies to subscribers within the country; or (b) subcontracting the production and distribution to an NGO or private sector company in a country with cheaper printing and postage charges.

Implementation Performance

Development of Training Facilities

39. It appears that there is a lack of pre-training criteria (needs assessment) at mational level for deciding on training participation. Similarly, there appear to be few guidelines for a post-training routine for transfer of skills or knowledge by trainees through opportunity to apply skills/knowledge in appropriate projects or disseminating skills/knowledge with the help of ELMS special training and training materials.

40. *Comments by Trainees.* The following comments on implementation efficiency were obtained by staff who had undergone training sponsored by ELMS:

- "getting reports too late";
- "no follow-up on course evaluations(?)";
- "annual training programmes are required"; and
- "no workshop reports were received".

41. *Mission Observations.* The mission's impression that there are delays in preparing and distributing reports from seminars and workshops.needs to be verified.

Technical Capabilities and Programme Management

Technical Committee

42. TC meetings fora for policy and priority discussions?

43. TC members not always consulting on local needs when discussing training curriculum?

44. There are no SADC restrictions on the number or composition (private sector) of technical sub-committees that can work under the TC.

Planning and Management

45. There is considerable variation in the performance and efficiency of individual Contact Points. Some Contact Points have chosen to delegate key tasks to their colleagues in their own and other institutions, thus improving co-ordination at the national level.

46. High demands on the time of the SADC-ELMS CU staff to attend meetings at the regional and international level related to their sector co-ordinating role as opposed to their human resource development and information exchange roles. The SADC mode of operation requires the participation of SADC-ELMS staff in meetings which total some 10 weeks per year. SADC-ELMS has also been invited to be represented on the governing councils/steering committees of a number of international bodies (eg. UNEP, IUCN-ROSA). In addition SADC-ELMS is invited to participate each year in a number of international technical committees, workshops and conferences.

47. There is scanty documentation available on the various SADC meetings for which the CU has primary responsibility for organising. In the case of the Technical Committee meetings the only materials available to the evaluation team were the recorded minutes rather than a proper report of the meeting. It is normal practice for a report to be prepared for such important co-ordinating and

consultative meetings containing the meeting agenda, the minutes and as annexes copies of all the relevant background documentation.

48. The minutes as written may be of value as a brief record to those who attended a specific meeting. However they are not sufficiently informative for anyone not present should they need to subsequently monitor and review the deliberations and decisions taken at individual meetings. This is important where there are changes in the staff within the CU in order for new TA and counterpart GOL staff to be able to understand the background to what they are asked to undertake. Likewise it is difficult for supervisory and evaluation missions sent in by donors to follow the rationale for specific activities and changes in work plans if the documentation is not available.

Relevance of ELMS Activities

49. In addition to the demarcation against national activities and responsibilities (cf. para 17 , above), ELMS needs to define its responsibilities in relation to other regional organisations and international organisations with a strong presence in the region. For instance, IBRD/IDA is commanding a dominant regional position in advising on environmental policies and strategies, drafting and application of EIA legislation and design and introduction of EIS components.

Some Preliminary Suggestions/Recommendations

50. *General.* There is a need to reduce the dependency on donor funding.

51. ELMS should attempt to undertake fewer core activities in a more effective manner.

52. Additional training of CU staff to build up and maintain leading edge competence in strategic areas.

53. All TA staff to have local counterparts..

54. Contact Points at departmental rather than ministerial level(?). Two Contact Points for land management and environment sub-sectors, respectively? Regular formalised meetings CP - representatives of concerned departments and ministries?

55. *Training.* More emphasis on institution building, per se. The aim should be to institutionalise training programmes within selected national institutions, suitably supported. Training schedules should be published well in advance, preferably at the beginning of the training year (minimum half a year in advance). Notes on workshop proceedings to be issued initially in "flash" form immediately upon completion of the event.

56. Suggested future training features: (a) improved precision in identification of target groups (categories, priorities and numbers); (b) priority to training of trainers who can impart skills or knowledge on colleagues and others—pointing to need for additional standard module on communication techniques; (c) early opportunities to apply acquired knowledge or skills; (d) routine follow-up on training effectiveness; (e) refresher training through residential programme or outreach programme; (f) maintenance of contact with participants through flyers; and (g) training quality maintained through supervision by joint ELMS-training institution unit.

57. Within the component activities of the SADC-ELMS work programme training should be treated as a cross cutting activity. Hence the training officer should see his/her role as providing appropriate support to the technical staff engaged in programmes in both the environment and land management sectors.

58. *Information Service.* Consider developing a SADC Environment and Land Management Information Service (ELMIS) involving the following:

- expansion of the existing documentation centre;
- development of a regional information network of collaborating and participating institutions and individuals;
- detailed assessment of the environment and land management information requirements of the various potential user groups;
- initiation of the documentation of field experience (indigenous knowledge and project experience) with the principles and practice of improved land management (better land husbandry) for crop, livestock and tree production;
- collection and collation of additional information related to environment and land management issues within the SADC region;
- development of computerised databases for the storage and retrieval of bibliographic, technological and institutional information related to environment and land management;
- development of computerised geographic information systems for the storage and retrieval of environmental and natural resources data sets that can be used for monitoring the state of the environment at the SADC regional level;
- thematic literature searches;
- periodic dissemination of information, extracted from the documentation centre and databases, in the form of published documents and/or on diskette; and
- responding to ad hoc requests from individuals and institutions for information on specific topics.

59. *SPLASH* should go back to being published three times per year. Twice a year is insufficient to create in

subscribers the expectation that another issue will be shortly be forthcoming. .

Outstanding Questions and Issues

- Lesotho able to handle three major areas?;
- Any Sida comments/reaction to ELMS Policy and Strategy document?;
- Trust Funds—advance payments by donors?;
- How can ELMS become more demand oriented (in order to facilitate increased cost recovery)?;
- Staff attachments/secondments to ELMS CU from other SADC countries?; and
- Long term strategy for research on natural resources.

SADC-ELMS Training Courses/Workshops and Seminars 1991 - 1995

1991

Training Course/Workshop/Seminar Title	Date	Host Country
1st Practical Workshop on Integrated Land Use Planning	11 Feb - 2 March	Tanzania
4th Economics of Conservation Action - Learning Seminar	18-23 March	Malawi
Rapid Rural Appraisal Pilot Exercise (Lesotho nationals)	22-30 April	Lesotho
1st SADC Seminar on Applied Research on Environment & Land Management	2-4 October	Botswana
1st SADC Course on Integrating Conservation Into the Farming System	2-27 September	Malawi
ZACPLAN Steering Committee and Review Workshop	29 November - 6 December	Zambia

1992

Training Course/Workshop/Seminar Title	Date	Host Country
Participatory Rural Appraisal	2-14 February	Lesotho
Remote Sensing Workshop in Portuguese	20-30 April	Angola
2nd Practical Workshop on Integrated Land Use Plannimng (for Semi-Arid Areas)	11-30 October	Botswana
Climate Change	2-6 March	Namibia
Kalahari-Namib Action Plan Progress Review Workshop	20-24 July	Zambia
2nd SADC Seminar on Applied Research on Environment & Land Management	9-11 November	Swaziland
ZACPRO Data Modelling Training Workshop	6-10 July	Lesotho
Workshop on the Revision of the Resource Policy Analysis Course Manual	19-28 May	Zimbabwe
Workshop on New Directions in Rangeland Policy (referred to in the 1992 Annual Progress Report but unclear as to whether this was a SADC-ELMS organised/sponsored activity)	13-17 Jamuary	Zimbabwe
SADC Training Course on Soil and Water Conservation (organised by the CSWCRTI Dehra Dun India on behalf of SADC-ELMS sponsored by the Commonwealth Secretariat, reference is made to it here as was the forerunner of the Tanzanian based course on Land Husbandry)	15 January - 10 March	India
Note. The report of the 3rd SADC Regional Workshop on Environmental Information Systems refers to the first one having been held in 1992, but there is no record in the annual reports of such a workshop having taken place that year. The July 1995 - June 1996 Annual Progress Report states that in 1992 SADC-ELMS together with UNEP and GTZ convened a workshop on geographic information systems for natural resource management. It is assumed that this must be what is subsequently thought of as the 1st SADC EIS workshop.	?	Zimbabwe

1993

Training Course/Workshop/Seminar Title	Date	Host Country
Participatory Rural Appraisal Workshop	19-23 April	Zambia
Water Harvesting Practical Workshop	10-28 May	Namibia
1st Natural Resource Policy Analysis Course	4-24 July	Zimbabwe
2nd SADC Course on Integrating Conservation Into the Farming System	5 Sept - 2 Oct	Malawi
Workshop on Water Quality Monitoring	15-26 November	Zimbabwe
Workshop to train Namibia nationals in data collection & analysis for Erosion Hazard Mapping	5-10 July	Namibia
3rd SADC Seminar on Applied Research on Environment & Land Management	8-12 November	Zambia
Workshop of Legal and Water Resources Experts on Protocol on Shared Water Course Systems	24-26 April	Zambia
Consultative Meeting on the Impact of Soil Erosion on Crop Yield Experiments by the 4 implementing countries (Botswana, Lesotho, Mozambique & Tanzania)	1-4 November	Lesotho
Pre-implementation seminar to revise and further develop the Natural Resource Policy Analysis Course	8-13 March	Zimbabwe
Meeting of SADC Experts on the International Convention to Combat Desertification	9-10 June	Botswana
Regional Conference on the State of the Environment in Southern Africa (organised by SARDC with SADC-ELMS support)	31 May - 3 June	Zimbabwe

1994

Training Course/Workshop/Seminar Title	Date	Host Country
2nd Natural Resource Policy Analysis Course	9-29 January	Zimbabawe
3rd SADC Course on Integrating Conservation into the Farming System	2-29 September	Malawi
Workshop on Environmental Monitoring of Pesticides	16-27 May	Tanzania
Workshop on Water Resources	May	Zambia
1st SADC/SUA Short Course on Land Husbandry	20 June - 30 July	Tanzania
Environmental Education for Youth	14-18 March	Namibia
Regional Policy and Strategy Formulation	24-28 October	Zimbabwe
2nd SADC Regional Workshop on Environmental Information Systems	6-9 September	Zimbabwe
4th SADC Seminar on Applied Research on Environment & Land Management	21-24 November	Botswana
Workshop to Review Status of Land Use Planning	15-17 August	Namibia
Workshop to Review Guidelines to Better Land Husbandry	28 February - 9 March	~~Tanzania~~ Lesotho
Lesotho National IRALAs Workshop	18-21 April	Lesotho
Malawi National IRALAs Workshop	26-29 September	Malawi

1995

Training Course/Workshop/Seminar Title	Date	Host Country
4th SADC Course on Integrating Conservation into the Farming System	15 August - 16 September	Malawi
3rd Natural Resource Policy Analysis Course	5-25 February	Zimbabwe
Workshop on ZACPRO 6 Phase I Database	20-24 February	Lesotho
2nd SADC/SUA Short Course on Land Husbandry	17 June - 28 July	Tanzania
Project Monitoring and Evaluation Workshop	2-15 July	Swaziland
3rd Regional Training Course on Hydrological Technique	18-28 July	Namibia
3rd SADC Regional Workshop Workshop on Environmental Information Systems	20-23 June	Botswana
Workshop on Regional Manpower and Training Needs Assessment Study	12-27 November	Mozambique
Workshop on EIA Procedures and Training Needs	13-16 March	South Africa
5th SADC Seminar on Applied Research on Environment & Land Management	27-30 November	Namibia
Tanzania National IRALAs Workshop	21-26 August	Tanzania
1st Workshop on Environmental Information Exchange	24-26 July	Lesotho
SADC-ELMS British Council training Workshop on Environmental Impact Assessment	4-9 September	Lesotho
Regional Review Workshop on Erosion Hazard Mapping	22 November - 1 December	Lesotho
Consultative Evaluation Meeting on the Impact of Soil Erosion on Crop Yield Experiments by the 4 implementing countries (Botswana, Lesotho, Mozambique & Tanzania)	18-23 June	Mozambique
Regional Workshop on Soil Erosion and Land Degradation, Monitoring Methods and Techniques	4-7 December	Zimbabwe

List of Memoranda of Understanding Entered Into Between SADC-ELMS and Institutions Within the SADC Region

Name of Institution	Date MoU Signed	Area of Cooperation
University of Botswana, Department of Environmental Sciences, Gaberone Botswana	1992	Organisation of an annual SADC-ELMS Applied Research Seminar
University of Botswana, Department of Environmental Sciences, Gaberone Botswana	?	Regional training on the use of Geographic Information Systems
University of Zimbabwe, Dept. of Agricultural Economics and Extension, Harare Zimbabwe	1992	Development and conducting of a regional training course on Natural Resource Policy Analysis
University of Lesotho, Department of Geography, Roma Lesotho	1988	Conduct of field experiments to measure the Impact of Soil Erosion on Crop Yield
University of Eduardo Mondlane, Faculty of Agronomy and Forestry Engineering, Maputo Mozambique	1988 (but implemented 1994)	Conduct of field experiments to measure the Impact of Soil Erosion on Crop Yield
Sokoine University of Agricultural Sciences, Department of Soil Science, Morogoro Tanzania	1990	Conduct of field experiments to measure the Impact of Soil Erosion on Crop Yield
Sokoine University of Agricultural Sciences, Institute of Continuing Education, Morogoro Tanzania	1993	Development and conducting of a regional training course on Land Husbandry
Land Husbandry Training Centre, Zomba Malawi	1993	Conduct of a regular SADC regional training course on Integrating Conservation into the Farming System
Zambesi River Authority, Lusaka Zambia	1995	Day to day implementation of ZACPRO 6
SACCAR Gaberone Botswana	1988	
World Conservation Union Regional Office for Southern Africa (IUCN-ROSA) & Southern African Research and Documentation Centre (SARDC), Harare Zimbabwe	1995	Environmental information sharing
Umgeni Valley Project, Wildlife Society of South Africa	to be signed	A proposal in the area of Environmental Education is currently being formulated

ANNEX 5

Summary of SADC-ELMS Institutional Strengthening Activities 1991-1995

Institution	Address	Training of Trainers	Staff Fellow-ships	Curriculum Develop-ment	Training Materials	Equipment	Buildings	Operating Funds	Publicity
Land Husbandry Training Centre	P.O. Box 233 Zomba Malawi								
University of Botswana	Gaberone, Botswana								
Sokoine University of Agriculture	Sokoine, Tanzania								
Dept. of Agricultural Economics & Extension, University of Zimbabwe	Harare, Zimbabwe								

Summary of Human Resource Development Through SADC-ELMS/SIDA Sponsored Fellowships

Nature & Subject Matter of the Fellowship	Date	Number of fellowships provided to personnel from the:			Remarks
		Coordination Unit	MoU Institutions	Other Institutions	

ANNEX 4

ENVIRONMENTAL APPRAISAL

All proposals for implementing development activities within mountain ecosystems should be screened at the outset to determine whether they should be subjected to detailed environmental appraisal and if necessary a full environmental impact assessment. Environmental factors need to be taken into consideration from the earliest stage of a project and followed through all stages - from identification, design, implementation and monitoring through to evaluation. Primary responsibility for taking account of the environment rests with those designing the project. At the project appraisal stage environmental factors should be part of an interdisciplinary appraisal that embraces the full spectrum of economic, social, cultural, political, ecological, legal and technical issues. Those involved in project implementation and monitoring are likewise responsible for ensuring that environmental concerns are adequately addressed both during and post project. Project and programme proposals in which the environmental or social concerns have been dealt with inadequately, or are thought likely to have unacceptable environmental or social costs should be identified, and rejected, before they reach the funding and implementation stage.

Initial Screening

An initial environmental screening of a development proposal should be undertaken at the project idea or identification stage, when it is easiest and least costly to expand, reject or substantially modify a proposal. This initial screening is intended to highlight any significant environmental impacts. It involves viewing the proposal from four main standpoints:

- What kind of area will it be located in?
- What sort of development is being proposed?
- How could it affect the environment? and
- How serious could the impact be?

Note the more times a proposal registers according to the following checklists of potentially significant impacts the more substantial should be its subsequent environmental appraisal.

What Kind of Area?

Given the steep slopes and ecologically fragile nature of most mountain ecosystems development activities in mountainous areas can be expected to require special attention with regard to their potential environmental impact. Within mountain regions development proposals within, or affecting, the following areas will require even more close attention:

- tropical, sub-tropical and montane natural woodlands and forest (especially primary forest);
- habitats providing important resources for vulnerable groups (eg. indigenous or tribal peoples);
- national parks, nature reserves, all other conservation areas, and the areas immediately bordering on them;
- areas containing endangered species of fauna and flora, or high concentrations of bio-diversity;
- areas of unique historic, archaeological or scientific interest.

What Sort of Development?

Among the main categories of project proposals with a significant impact on the environment in mountain areas are the following:

- important policy initiatives likely to affect the environment eg. changes in agricultural subsidies, modifying the conditions for granting timber licences, deregulation of the tourism sector;
- major changes in land tenure;
- major changes in land use and exploitation of renewable natural resources eg. logging in primary forests, establishment of tree plantations, conversion of forests and/or montane pastures to crop land, opening virgin areas to settlement, changes in farming practices, introduction or intensification of pesticide and fertilizer use;
- substantial changes in water resource use eg. river basin management, damming water courses, river flow extraction/diversion;

- major infrastructure development eg. dams and hydropower development, road construction;
- non renewable resource use eg. rock quarrying, sand and gravel extraction, mining of mineral deposits;
- industrial processes that may contaminate air, soil and water with toxic and hazardous waste and by-products eg. paper and pulp mills, mining and smelting installations, and leather tanneries.

How Could it Affect the Environment?

The repercussions of development on the environment in mountain areas can be grouped as follows:

- **Socio-economic impact**: Falling living standards, particularly of the poor, could precipitate a further vicious downward spiral of environ-mental degradation as they exploit the land to meet their immediate survival needs. Living and working conditions may deteriorate as a result of resettlement, cultural shock, loss of traditional livelihood systems, and risk to health and safety. Impacts may vary between men and women, or between different social groups, especially where property rights to land and other natural resources are so differentiated.
- **Land degradation**: Deforestation, soil erosion, overgrazing, sediment-ation are some of the danger signs.
- **Water pollution**: This can result from uncontrolled sewage discharge from human settlements, effluent from local industries, contamination from agricultural and forestry chemicals etc.
- **Air pollution**: May locally be a problem in urban settlements. and in the vicinity of industrial processors.
- **Damage to wildlife**: The impoverishment of fauna and flora by loss of habitat, bio-diversity, and/or individual species, or genetic erosion of economically or scientifically important groups.
- **Cultural, historic and scientific losses**. Damage to sites of cultural, historic and/or scientific importance.
- **Climate**: adverse changes especially of the hydrological cycle.
- **Beneficial aspects**: Development may be beneficial, eg. reduce pressure on natural resources, restore and protect key areas, and prevent soil erosion and floods.

How Serious Could the Impact Be?

The main factors to take into account in mountain areas are:

- Would the impact be positive, mainly benign or harmful?
- What would be the scale of the impact, in terms of area affected (on- and off-site), numbers of people or animals etc?
- What would be the expected intensity of the impact?
- What would be the duration of the impact? Effects may be delayed.
- Would the impact be cumulative?
- Are the effects likely to be irreversible?
- How certain or uncertain are the effects (what level of confidence is there in forecasting these effects)?
- Are the effects politically controversial?
- Are any laws, conventions, regulations, or directives infringed?
- Have the main economic, social and ecological costs been quantified?
- Would the effects have a different impact on men and women, or on particular social groups?
- Would the project have an indirect impact on the economic, social and ecological conditions of the area?
- Are there investments, policy changes or management initiatives which could reduce any adverse environmental impact?

Environmental Appraisal Tasks

Where the initial screening indicates that there is potential cause for concern then the proposals would need to be subjected to a more detailed environmental appraisal. This appraisal should:

- focus on the main areas of potential environmental sensitivity touched on by the proposal (ie. those identified during the initial screening) and assess how far the proposal impinges on these and any other concerns;

- identify what the main impacts of the proposal are likely to be and the linkages with the ecological and human systems affected;
- determine the main benefits and costs (damage) to the environment;
- assess the importance of these effects (including indirect and long term effects and externalities) by, where possible, quantifying and attaching economic or monetary values to them, or by applying objective judge-ments about their severity. This analysis should involve the mountain communities, take account of qualitative as well as quantitative para-meters, and consider the impact according to social group and gender;
- consider whether more can, or should, be done to prevent or mitigate any or all of the effects;
- identify where such action is required eg. at the field level (technical changes in land use or management practice), at the community/village level (changes in the community organisation and structure, education, information), and at the government level (changes in national policy and the mandate and operation of institutional support services);
- analyze the implications of such actions on the economic, financial and technical viability of the proposal, the timing of its start and the impact on public finances.
- come to a judgement on the overall result of the environmental appraisal ie. can the proposal proceed as formulated, does it require modification and reappraisal before implementation, or should it be rejected outright as environmentally unacceptable?

Full Environmental Impact Assessments

A full Environmental Impact Assessment (EIA) is a process of systematic study used to predict the environmental consequences of a proposed major development activity. Its aim is to ensure that potential risks are foreseen and necessary measures to avoid, mitigate or compensate for environmental damage are identified and costed. In some cases (eg. dam development) a full EIA would normally be undertaken as part of the decision-making process. Also in many countries an EIA is a legal requirement before certain categories of development proposals can be approved, for instance large scale power generation, major industrial developments, airports and mineral extraction activities.

A full EIA would need to be commissioned where:

- certain highly sensitive cases are identified following the initial screening;
- the type of development proposed requires an EIA by law; or
- after an environmental appraisal, the impact is considered large, potentially damaging, or uncertain.

Organisation

If a full EIA is deemed necessary the next step is organisation of the EIA study. This entails:

- commissioning an independent co-ordinator and inter-disciplinary expert study team (the disciplines to be decided at the scoping stage);
- identifying the client ie. who the EIA is for - the key decision-makers responsible for planning, financing, authorising and controlling the proposed project;
- identifying and reviewing laws and regulations that will affect these decisions;
- establishing contact with each of the key decision-makers;
- determining how and when the EIA's findings will be communicated.

Scoping

The first task of the EIA study team is 'scoping' the EIA. The aim of the scoping is to identify the most significant environmental issues, the timing and extent of the analysis required, the type and sources of expertise, how to gather the data and where from. The scoping process can benefit the EIA by identifying the significant environmental issues and the most important consequences of the proposal early on to avoid delay and additional cost at later stages.

The EIA Study

The EIA study involves five basic tasks, namely:

- **Identification**: to identify and assess the effect of the project with regard to its likely environmental impacts - *What would happen as a result of the project?*
- **Prediction**: to predict and characterise the impacts' causes and effects, and their secondary and synergistic consequences for the environment and the local community - *What would be the extent of the changes?*
- **Evaluation**: to evaluate the predicted adverse impacts to determine whether they are significant enough to require mitigation - *Do the changes matter?*
- **Mitigation**: to analyze the situation and determine what (if any) measures can be proposed to prevent, reduce, remedy or compensate for each of the adverse impacts 'evaluated' as significant - *What could be done about them?*
- **Documentation**: to document the study and present its conclusions in a form that is readily comprehensible to those responsible for deciding whether the project should proceed to funding and implementation - *How could decision-makers be informed of what needs to be done?*

Sida Evaluations - 1996/97

96/39 Sri Lankan - Swedish Research Cooperation. Nimal Sanderatne, Jan S. Nilsson
Department for Research Cooperation, SAREC

96/40 Curriculum Development in Ethiopia, A Consultancy Study for the Ministry of Education in Ethiopia and for Sida. Mikael Palme, Wiggo Kilborn, Christopher Stroud, Oleg Popov
Department for Democracy and Social Development

96/41 Sida Support to Environmental Public Awareness and Training Projects through The Panos Institute, Gemini News Service and Television Trust for the Environment. Leo Kenny, Alice Petren
Department for Democracy and Social Development

96/42 Concessionary Credits in Support of Economic Development in Zimbabwe. Karlis Goppers
Department for Infrastructure and Economic Cooperation

96/43 Botswana Road Safety Improvement Projects. Rob Davey
Department for Infrastructure and Economic Cooperation

96/44 Programa de Estudo Pos Draduacao - PEP Guinea Bissau 1992-1996. Roy Carr Hill, Ahmed Dawalbeit
Department for Democracy and Social Development

96/45 Capacity Building and Networking, A meta-evaluation of African regional research networks. Jerker Carlsson, Lennart Wolgemuth
Department for Evaluation and Internal Audit

96/46 Support to the Maritime Sector in Lithuania. Nils Bruzelius
Department for Central and Eastern Europe

96/47 Local Development Programme in Nicaragua, PRODEL. Irene Vance, Jorge Vargas
Department for Infrastructure and Economic Development

96/48 The Planta Nicaragua Rehabilitation Programme. Consulting Services. Judith Muller, Per-Johan Svenningsson
Department for Infrastructure and Economic Development

96/49 Sida Support to the International Institute for Educational Planning, IIEP. Peter Williams, Lees Maxey
Department for Democracy and Social Development

96/50 The Human Factor. Cooperation in Public Administration between Sweden and Mongolia. Lennart Peck, Marianne Hultberg
Department for Infrastructure and Economic Cooperation

97/1 Swedish Consultancy Trust Funds with the African Development Bank. Karlis Goppers, Sven Öhlund
Department for Infrastructure and Economic Cooperation

97/2 Programa de Vivienda Social de FUPROVI, Costa Rica. Lillemor Andersson-Brolin, Bauricio Silva
Department for Infrastructure and Economic Cooperation

97/3 Sida's Assistance to the Environment Protection Training and Research Institute, EPTRI, India. Bo Lundberg, Bo Carlsson, K P Nyati
Department for Natural Resources and the Environment

Sida Evaluation reports may be ordered from:

Biståndsforum, Sida
S-105 25 Stockholm
Phone: (+46) 8 698 5722
Fax: (+46) 8 698 5638

A Complete backlist of earlier Evaluations Reports may be ordered from;

Sida, UTV, S-105 25 Stockholm
Phone: (+46) 8 698 5133
Fax: (+46) 8 698 5610

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
S-105 25 Stockholm, Sweden
Tel: +46 (0)8-698 50 00. Fax: +46 (0)8-20 88 64
Telegram: sida stockholm. Postgiro: 1 56 34–9
E-mail: info@sida.se. Homepage: http://www.sida.se