Sida

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Knowledge for environmentally sustainable development

Integrating the environment

The purpose of this booklet is to provide an overview of the knowledge of environmental issues that is necessary to have when working with international development cooperation. The booklet is intended for use in different training programmes, but can also be used for self-instruction.

The text has been produced by Lage Bergström on behalf of, and in close cooperation with, Sida's Environment Policy Division.

The environmental concept

When we refer to the environmental perspective and consideration of the environment in this booklet, we include the two aspects that are emphasised in Swedish international development cooperation: the problems of environmental degradation (pollution etc) and the sustainable use of natural resources.

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Author: Lage Bergström
Photographs: Mats Segnestam/N
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Foreword

This booklet summarises what all members of staff at Sida must know – at the very least! – about the environment.

However, it does not by any means contain all the knowledge that exists on the environment. And not what many members of staff at Sida know about the environment, which – all in all – is a great deal.

This booklet reminds us that all development shall be sustainable development and that Sida has a highly specific environmental assignment.

Therefore we must, as professionals, understand what the environment is all about. When we examine existing data – and new data are being produced every day – we can state that:

- Poverty reduction is impossible in the long term unless we give consideration to the natural resources and the environment on which people are dependent and shall build their livelihoods upon.
- Environmental issues are of decisive importance for sustainable production, for food security and for economic growth.
- Human health is dependent on the state of the environment and the sustainable use of natural resources.
- Democratic systems are threatened when degradation of the environment and lack of resources make it impossible to lead a normal life.

This booklet describes a number of changes in the right direction – we have called them "steps on the way". It would also be possible to present a great number of other examples of positive measures that have been taken. It is important to remind ourselves that it is possible to approach sustainable development in reality too – not just in abstract terms – and that many people around the world are working on this today.

In other words, environmental issues are not marginal but fundamental. For us at Sida it is necessary to have sufficient awareness and knowledge to give attention to the environmental perspective in our daily work – regardless of our sector or geographical focus.

It is not possible for this booklet to include everything that can be said on the importance of the environment for development and for poverty reduction, but it makes references to further sources of information. And it is intended to be a living document and will be revised whenever necessary. The Environment Policy Division would therefore be grateful for any comments and suggestions for improvements.

Mats Segnestam
Head of the Environment Policy Division

Contents

All development shall be "sustainable development"

Why is the obvious not so obvious?

Question: How many of us working with development cooperation are in favour of unsustainable development?

Answer: None!

Nevertheless, it is quite obvious that development patterns in almost all countries in the world are not sustainable in the long term.

What is the reason for this – why is it so difficult to adopt an environmental philosophy that is permitted to intervene in decisions of vital importance to society? The world community has stated in several contexts that it understands that consideration of the environment in the broad sense of the term is a prerequisite for sustainable long-term growth, for successful poverty reduction and for prosperity in general. For example at the Rio conference in 1992 it was agreed that the most important causes of the destruction of the global environment are unsustainable consumption and production patterns, particularly in industrialised countries[1]. This was further underlined at the world summit meeting in Johannesburg in 2002 where it was laid down that all development should be sustainable development and that sustainable development should be regarded as a governing principle for all work in the UN. If anything is to be called development, it must be sustainable in the long term.

In other words, there is no longer any disagreement on the main ideas in the concept of sustainable development and its economic, social and environmental dimensions. Support has been considerable in terms of words – but much remains to be done to transform these words into action.

Obstacles to environmental thinking

On World Environment Day in 2001, the Secretary General of the United Nations, Kofi Annan, maintained that unsustainable habits were deeply rooted in our everyday lives. His remarks were addressed to both rich and poor countries.

If we pursue Annan's train of thought to its logical conclusion, we can note that there are a number of obstacles to the integration of

[1] Agenda 21, point 4.3

environmental thinking and the transformation of the idea of sustainable development into practice:

- Our own background – our education, our professional experience, our general experience.
- Short-term thinking in combination with the time lag of environmental problems – the environment does not "object" immediately.
- Ecological differences – environmental preconditions vary in different parts of the world.
- The traditional division of the social apparatus into sectors.
- Injustices in and between countries have been institutionalised and are regarded as "natural".
- The varying degree of transparency in societies – information on actual conditions, for example environmental impacts, are not always made available to those concerned.
- The greed, obsessions and convenience of human beings.

All these obstacles are also apparent in development cooperation, even if it should be clearly stated that those of us working in Swedish development cooperation have made considerable progress in our general, intuitive understanding of the importance of these issues and our acceptance of their importance.

But nonetheless, Kofi Annan's words on unsustainable habits also concern us at Sida and others participating in programmes and projects financed by Sida. None of us really wishes to contribute to unsustainable development but, despite this, the linkages between environmental issues and other central development issues are not always a matter of course. They are not a natural component in economic analyses. They are not always included in the discussions on poverty reduction. Environmental impact assessments are sometimes merely "added on", after the focus of the programme or project has already been decided. We tend to protect ourselves against complexity.

Read more
– *Sustainable Development Update*, newsletter, www.sida.se

Development in the industrial world offers little guidance

One difficulty for a person who takes the idea of sustainable development seriously is that there are no standards against which comparisons can be made in order to assess the type of measures that are most successful. Developments in the industrial world cannot provide guidance – we have not succeeded in achieving environmentally sustainable development. Thus every development problem must be analysed in its own context in order to find the best possible sustainable solution.

Steps on the way

There are still many obstacles but the situation is not impossible. Quite the reverse! In both the poor and rich parts of the world there are people who are working for sustainable development. Much progress has been made on the way. In developing countries new, positive initiatives are being taken all the time and it has been possible for Sida to provide an ever-increasing amount of support.

The focus of this booklet lies in showing the extent and gravity of environmental issues. However, in the text below we also provide a number of examples of current efforts designed to stop environmental degradation and to use natural resources in a sustainable manner.

In considerations of this type, it is not always possible to obtain scientific proof of the extent of environment hazards and environmental problems. Every assessment will always contain a certain degree of uncertainty. Therefore the so-called "precautionary principle"[2] was formulated at Rio in 1992. In broad terms the precautionary principle is that lack of scientific evidence may not be used as an excuse for postponing cost-efficient action to prevent destruction of the environment.

[2] Rio Declaration, principle no. 15.

The environment – a critical issue of our time

Environmental issues are not of marginal importance!

In 2003, the Swedish Parliament decided on a new global development policy, an integrated policy for equitable and sustainable development. Sweden's efforts to combat poverty are to be coordinated so that the goal of contributing to an equitable and sustainable global development will apply to all areas of policy. Among the central component elements that will govern and permeate the policy is the sustainable use of natural resources and protection of the environment.

If we examine data on the environmental situation in the world, there is no doubt about its gravity. Spend a few minutes thinking about the selection of environmental problems in the world in the boxes below.

Some facts on the environmental situation in the world today

In northern China the ground water level is sinking rapidly. Under Beijing the level sank by 2.5 metres in 1999. Since 1959 it has sunk by as much as 59 metres. Under the nearby extensive agricultural plains, which account for 40 per cent of China's production of grain, the groundwater level has sunk to the same extent. One effect of this in the short term could be a global increase in food prices. In the long term there may possibly be food shortages in China and the rest of the world?

Source: *State of the World 2001*, Worldwatch Institute

A dense brown pollution haze has spread over large parts of southern and eastern Asia. The haze is the result of emissions from forest fires, cars, industries, power stations and inefficient ovens fuelled by wood and cow dung. It contains sulphates, organic particles and a great deal of soot (about 14%). One direct effect is diseases of the respiratory tract. Since the haze shuts out sunlight, food production is declining. It also affects the winter monsoon, which can lead to both drought and floods. The haze has existed for several years and it is known that its effects are serious, but as yet no action programme is in place to stop it spreading further.

Source: *www-indoex.ucsd.edu*

Some 40 per cent of farming land in the world has been affected by degradation, mainly through various forms of soil erosion. The soil has mostly been washed away by water or carried away by the wind. The total area affected is larger than the USA and Mexico combined. Merely through water erosion alone, some 25 billion tonnes of soil are lost each year. If this degree of degradation is allowed to continue, yields from farming in Africa will be halved within 40 years.

Source: *Global Environment Outlook 3*, UNEP, 2002

More than one billion people lack access to safe drinking water and three billion lack the possibility to take proper care of wastewater and sewage. One of the consequences of this is that 3–5 million people die each year from water-borne diseases. Many countries continue to solve the water shortage problem with short-term solutions, but this also has the effect that the problem is being exacerbated. It is estimated that two-thirds of the world's population will be affected by water shortages in 2025.

Source: *Global Water Supply and Sanitation Assessment 2000 Report*, WHO, 2000

Approximately 75 per cent of the genetic diversity of agricultural crops has been lost since the beginning of the 1900s, and the number of livestock species is declining just as rapidly (at present by 5% per year). This threat to diversity in agriculture is a critical issue, both for food security in the world and for success in making the adjustments that will be necessary as a result of local and global changes.

Source: *A Framework for Action on Biodiversity and Ecosystem Management*, WEHAB Working Group 2002 and *Human Nature: Agricultural Biodiversity and Farm-based Food Security*, FAO, 1997.

The examples given in the boxes are not special cases. Unfortunately they reflect the general picture and the magnitude of the problems is serious. Regardless of the type of development from which we choose to take examples, the picture is the same.

One vital conclusion is that *environment issues are not of marginal importance* in relation to other development issues.

Natural resources are being depleted more rapidly than ever before

If we summarise global development in the last few decades, we can note that the world has apparently become a better place to live in. Living standards in both poor and rich countries have improved dramatically for many people. But, and this is serious, at the same time the natural resources have never been depleted as rapidly as is happening today!

One very clear example is the rapid economic growth achieved by China. During the last decade, GDP growth has been high and many economists have been impressed. However, this growth has been achieved at the price of extensive degradation of the country's natural resources, for instance the example given in the box above: the groundwater level under the vast farming plains in northern China has sunk considerably. The Chinese leaders have now started to become aware of the problem but it is a race against time to change the course of development in a sustainable direction.

Unfortunately the situation in China is not uncommon. Economic growth that is actually unsustainable is perceived far too often as something positive. This is due to the fact that it there is often a time lag

Read more

- *Global Environment Outlook 3*, UNEP, 2002
- *State of the World 2002*, Worldwatch Institute
- *World Resources 2002–2004*, World Resources Institute
- *The Little GREEN Data Book 2003*, The World Bank
- www.unep.org
- www.iucn.org
- www.iied.org
- www.wri.org

All in all, in China, India, North Africa, Saudi Arabia and the USA, 160 billion tons of so-called fossil water are used each year. This is water that has remained stored for thousands of years and which is not replaced by rain. In other words this is "water mining". The effect will be that any progress made with the aid of these water resources, for example in agriculture, will not be sustainable.

Source: *State of the World 2001*, Worldwatch Institute

Water shortages increase the risk of conflict. Rivers, lakes and inland seas are often shared by different states. The greater the shortage of water, the greater the risk that conflicts can arise. Today 40 per cent of the population of the world live in areas where fresh water resources are shared by two or more states. In the unsettled Middle East the struggle for water is well known. The same applies to the Nile. If Ethiopia uses more water for irrigation purposes, the water in the river will decrease – with direct effects for Sudan and Egypt.

Source: *Transboundary Water Management as an International Public Good*, Ministry for Foreign Affairs of Sweden, 2001.

Coastal areas in different places in the world are being over-exploited. Mangrove forests, coral reefs and seagrass beds are the nurseries of the fish species of the seas. When these ecosystems are upset or destroyed, the production of primary protein in the seas decreases. During recent decades, 60 per cent of the mangrove forests in Southeast Asia have been exploited for various commercial reasons. In the same area over a billion people are dependent on fish and seafood for their intake of primary protein. Their living situation has been seriously affected and will deteriorate further unless present trends are reversed.

Source: *State of the World 2001*, Worldwatch Institute

Today malaria is the cause of death for some two million people each year. The increase in temperature as a result of the ongoing climate change has the effect that malaria is being spread to new regions.

Source: *Climate Change, Vulnerability and Social Justice*, SEI, 2001

Air pollution indoors is mainly due to the use of fuel wood, charcoal and other forms of biomass for cooking and heating. Sulphur dioxide, carbon dioxide, nitric oxides and soot particles lead to infections of the respiratory tract, damage to the lungs, cancer and pregnancy problems. It is the cause of death of two million women and children each year.

Source: *Pollution Management in Focus*, World Bank, 1999

Overfishing in Lake Victoria

At present, population growth in the Lake Victoria region in East Africa is amongst the highest in the world. Poverty is widespread. Traditionally, fish have been the main source of protein.

In the 1950s Englishmen introduced the Nile perch into Lake Victoria. This was a foreign species, a predator, and after just two decades the 400 species in Lake Victoria had been reduced to about ten. However, a little fish called *omena*, similar to the sardine, survived. Omena is very nutritious and has traditionally been important as a source of protein for poor people.

In the 1990s large investments were made in commercial fishing. These mainly focused on exports of Nile perch, for example to the EU. The development of the fishing industry was made possible by the support received from development banks and donor agencies. The fishing industry rapidly made fishing more efficient and increased the size of the catches. However, the result has been unemployment among fishermen and a reduction in the quantity of Nile perch in Lake Victoria. Therefore, some of the fish factories that were built relatively recently have a lack of raw material.

However, the industry also saw the commercial value of omena as hen feed (on account of its high protein value). Therefore, much more omena are now being caught with methods that have the result that small fish are also caught and reproduction of the species is threatened.

Today, it is difficult for the local population to obtain omena. This mainly has a negative effect on children. Several donor organisations have therefore started to import protein supplement, which is distributed at health stations….

A very small part of the profits made by the fishing industry during the highly profitable ten-year period has been reinvested in the Lake Victoria region.

Source: *Big Fish Small Fry*, Centre for Development and the Environment, Oslo, 2001.

before the environmental problems appear. The connection between economic growth and destruction of the environment is not understood before the damage has been done. The cost of rectifying the damage often has to be borne by others than those who profited from the economic growth. The list of examples of this type can be made long. One can be seen in the box.

Today environmental degradation – which sometimes takes place in the name of poverty reduction – is rapid. This results in a dramatic situation for us working with development questions. Awareness and systematic efforts are needed to reverse the trend and to create sustainable development instead. The challenge is to succeed with this, despite ongoing global changes which point in the other direction and which are exacerbated by strong interests.

The environmental conventions offer a tool in development work

The so-called environmental conventions, most of which came into being during and after the Rio conference in 1992, are one of the ways used by the world community to emphasise its opposition to further environmental degradation. They are thus also important for concrete development work. Some examples:

- The UN Framework Convention on Climate Change (Climate Convention) takes up issues that concern the energy and transport sectors as well as the fields of agriculture and forestry.
- The Ramsar Convention on Wetlands of International Importance (Wetlands Convention) and the UN Convention on Biological Diversity take up issues of central importance for our future food supplies.
- The Stockholm Convention on Persistent Organic Pollutants (or POPs Convention) has the objective of limiting the use of certain chemicals, the so-called persistent organic pollutants. See also box on the next page.
- Transport and trade in waste hazardous to the environment are issues

taken up in the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and the Rotterdam Convention on the Prior Informed Consent Procedure.

– The Convention on Biological Diversity implies that countries are committed to preserve, use sustainably and distribute equitably the benefits of the world's biological diversity. This is an issue of crucial importance for the survival of mankind and for the possibilities for realising the development goals relating to poverty reduction.

Read more
- *Sida and the Eight Multilateral Environmental Agreements (MEAs): Their Implementation in Development Cooperation*, pm, Sida 2002
- *Joint Brochure on Environmental Conventions in Development Cooperation*, The Foreign Ministry/The Ministry of Environment/Sida, 2004

For eight of the environmental conventions Sida has drawn up special action plans. The most important issue in this context is to assist our partner countries to integrate the ideas behind the conventions into their regular development efforts.

The environmental conventions take up matters that are important in the work for sustainable development and of decisive importance for the possibilities of reducing poverty. They are thus also important tools in the dialogue with the partner countries, both in the country strategy process and in regular cooperation in respect of ongoing contributions.

Protection against hazardous POPs[3]

The countries that have signed the so-called POPs Convention (or Stockholm Convention) undertake to limit their use of, or totally ban, a number of chemicals listed in the convention. These are chemicals that circulate in the air and water in a repetitive process of evaporation and storage, and which can be transported in the atmosphere or in the seas far from their original source. They are stored in the tissues of living organisms and can cause damage to foetuses, cancer, and/or affect immune defence. These chemicals can be found for example in pesticides currently being used in agriculture.

Important tasks for development cooperation are, for example, to help partner countries to dispose of existing stores of insecticides of this type, to contribute to spreading know-how on environment-friendly cultivation methods, and to contribute to the development of control systems and institutions, for example to enable the countries to show that products offered for export have not been exposed to these types of chemicals.

Sweden has made specific undertakings in several contexts to contribute to global sustainable development. In line with this, the Swedish Parliament has given Sida the assignment – within the framework of the overall goal of poverty reduction – of working for the sustainable use of natural resources and protection of the environment.

With this assignment as its point of departure, Sida has drawn up a policy for its environmental work. The policy describes goals, approaches, principles and working methods. It is linked to a basic idea that is common to all Sida's work. This is to strengthen and develop the capacity of the partner countries to analyse and deal with matters relating to the environment. In Sida Looks Forward (1997) it is stated that: *"Sida's task is to create the conditions necessary for sustainable development, and thus make development assistance superfluous in the long run"*.

[3] POPs stands for Persistent Organic Pollutants.

The developing countries themselves are responsible for combating poverty in their countries and for managing their natural resources in a sustainable way. But the world community has the responsibility for contributing to their efforts in various ways, including development cooperation. Sida and other donors can contribute by creating the conditions to make it possible. The most important working method is the development of know-how and capacity.

Sida's point of departure is that capacity development is not a generic term for a number of activities such as seminars, study visits and courses. Instead it is an approach to development – that individuals, organisations and systems of organisations improve their capacity to contribute to the ability of people to make a living, to influence their own situation and to improve their security.

The needs of the partner countries form the basis of development cooperation and the local conditions play an important role. In other words, we cannot talk about *one* form for sustainable development, but we can state that consideration of the environment is always a central criterion.

One principle of decisive importance for Sida is that the environmental perspective shall be integrated in all contributions and in the work of all Sida's departments, i.e. it shall be "mainstreamed". This requires knowledge both at Sida and among those who participate in the implementation of the contributions. Everyone must be aware of the magnitude of the environmental problems and understand their basic importance.

Read more

- *Sida's Environmental Management System (environmental policy and action plan),* Sida, 2004
- *Sida's Policy for Capacity Development*, Sida, 2001
- *Donor Support for Institutional Capacity Development in Environment: Lessons Learned,* OECD, 2000

Steps on the way:

Environmental agency in Tanzania
Since 1986 Sida has participated in building up the Tanzania environmental agency, the National Environment Management Council, NEMC. The focus has been placed on developing the skills of the staff, for example for making environmental impact assessments. This has contributed to raising environmental awareness in the country, both in the government administration and in non-governmental organisations.

End of ozone-depleting emissions in China
Half of the global emissions of chemicals that deplete the ozone layer originate in China. To help us solve this problem, Swedish experts in technological development and human resource development are providing assistance in Chinese companies. The aim is to exert an influence on all of the 4 000 Chinese companies that are currently using ozone-depleting solvents.

Environmental education
In Sida's international training programme, a large number of courses are provided that are based on issues relating to environmentally sustainable development. This is the main theme in more than one-third of the courses. In a further 22 per cent of the courses, environmental questions are integrated into the programmes, for example environmental impacts in electricity distribution and community planning.

Consideration of the environment is essential for effective poverty reduction

A far too frequent error in thinking: "First development, then consideration of the environment…"

Sometimes it is possible to hear the argument: "In Europe you didn't start to take the environment into consideration until you had solved the poverty problem; in the developing countries we cannot afford to do it in another way – even if this means that we further damage the environment when we improve our living standards and acquire more knowledge."

Sida's position in this question is the opposite. Today development issues are of such a character that it is not possible to remedy poverty (in the short term or long term) if environmental issues are not taken seriously at the same time. The harm done to the environment (for example in the form of lower groundwater levels) often has the effect that the opportunities for future production are lost for ever. The goal of halving the proportion of poor people in the world by the year 2015 will be impossible to achieve if we do not give due consideration to the natural resources and the environment that we are dependent on and shall build our livelihoods on.

But it is also true that the environment must be given serious consideration in both poor and rich countries. We have a joint responsibility!

The poor are severely affected by the destruction of the environment

Sida's analysis of the relationships between the environment and poverty have been summarised in the publications *"The Environment and Poverty"* and *"The Environmental Dimensions of Poverty"*. Questions of the following type are taken up. What is the relationship between air pollution, poverty and effective development work? Is consideration of the environment a luxury that threatens projects that are needed to provide livelihoods for the poor? Do environmental projects take away resources from projects that could have given a better return in the form of improvements to living standards and more job opportunities for the poor?

The conclusions show that poverty can be

- a result of;
- a cause of, and
- a symptom of destruction of the environment.

Poor people are those who are most severely affected by the ongoing destruction of the environment, often caused by others and not themselves.

Poor people are also most severely affected when natural resources are depleted, since they are often directly dependent on renewable natural resources for their livelihoods.

Poor people can also be forced to overexploit their immediate environment in order to survive – and thereby cause soil erosion, deforestation and overgrazing – which depletes the natural resources and thereby their future livelihoods. Often the poor are very much aware of the effects on the environment, but lack the necessary resources to prevent them.

Read more
- *The Environment and Poverty,* Thomas Sterner & Mats Segnestam, Sida, 2001
- *The Environmental Dimensions of Poverty,* pm, Sida, 2002
- *Linking Poverty Reduction and Environmental management"*, DFID, EC, UNDP and the World Bank, 2002

A holistic poverty analysis

The overall goal for Swedish international development cooperation – to help create conditions that will enable the poor to improve their lives – has been given new emphasis through the major initiative for poverty reduction on which the international community has reached agreement in connection with the major UN conferences of recent years. In the so-called *Millennium Declaration*[3] there is a united front to achieve the goal of eradicating extreme poverty and hunger.

Sida has participated actively in the international discussion on poverty and has summarised the experience gained by the agency and its future ambitions in *"Perspectives on Poverty"* (Sida 2002). The publication presents a position on poverty that shall guide all Sida's work. One basic idea is that poverty is dynamic, multi-dimensional and dependent on its context. Therefore, a holistic approach and a goal-oriented poverty analysis are needed.

"Perspectives on Poverty" emphasises the environmental dimensions of poverty reduction (together with political, social and economic dimensions): "Poor people are particularly – and directly – dependent on natural resources for their survival (e.g. because of their limited assets and their greater dependence on commonly held resources for their livelihoods). Good quality soils, productive forests and aquatic systems, and clean water and air are necessary assets for ensuring food security, energy, shelter and good health. Sustainable use of natural resources and protection of the environment is therefore a prerequisite for effective poverty reduction. Overuse of natural resources and environmental degradation not only reinforce today's poverty, but also put sustainable livelihoods of future generations in peril."

The overall assessment bears repetition: *Sustainable use of natural resources and protection of the environment is therefore a prerequisite for effective poverty reduction.*

Read more
- *Perspectives on Poverty*, Sida, 2002

Voices of the Poor

Through an initiative financed by the World Bank, *Consultations with the Poor*, a compilation was made of poor people's accounts of their experience of poverty and what they feel is necessary to achieve change. The environmental perspective is also included in these descriptions. (Read more in *"Voices of the Poor series"*, World Bank, 2000-2001.)

"We know that cutting down trees will cause water shortages and that making charcoal can cause forest fires, but we have no choice."

A resident, Vietnam

"Sometimes… the water is brown. We call it tea, but we drink it anyway."

Anonymous, Cameroon

"I wanted a loan, but they are requiring the land title, and I can't provide it."

A man, Ecuador

[3] See, for example, www.un.org or www.developmentgoals.org

Economic growth and the environment

Read more
- *Growth and the Environment*, Thomas Sterner, Sida 2003
- *Instruments for Environmental Policy*, Thomas Sterner, Sida 2003

A myth that is still in existence

The relationships between poverty reduction and consideration of the environment presented above are not always recognised, partly since there is a myth, still in existence, that economic growth, regardless of what it is based on, solves both environmental and poverty problems.

But economic growth as an indicator of development is an obsolete and inadequate definition, since most traditional economic models do not take the costs of growth into consideration. In order to obtain a better measure of sustainable development, it is important that the point of departure is that the content of growth is of vital importance – and that both revenues and expenses are included.

What is the cost of consumed natural resources?

How much does it cost when the water in a river is polluted? Or when wetlands are filled and drained? How can economic policy instruments be used to contribute to sustainable development?

One weakness of most of the current economic models is that they do not capture the ecological services provided by nature and ecosystems which, most often, are not possible to replace if they have been destroyed. However, in the analyses made of these questions, it is nonetheless quite clear that growth of the traditional type involves costs that are in no way marginal – the example of coastal forests in the Philippines (see box) is probably fairly typical.

Coastal forests in the Philippines

An environmental-economic analysis of a forest area on the island of Palawan in the Philippines showed that felling an area of forest near the coast was an inferior solution from the economic perspective than allowing it to remain intact. Soil erosion would increase many times over with the effect that more sludge would end up in the rivers and, slowly but surely, find its way down to the coast.

If this were to happen, it was estimated that the effects on the coral reefs near the coast would result in a decline in income for both fishing and tourist activities in the area. The cost of these effects was assessed at twice as much or more than the profit the timber would give on the market. Yet an estimate had only been made of a small part of the resources and ecosystem services produced by the forest and the coral reef.

Source: *Logging versus Fisheries and Tourism: Economic Dimensions*, G Hodgson & J A Dixon, Honolulu, 1988.

If environmental costs are taken into consideration, it can be shown that economic growth in both rich and poor countries is less than people in general believe – including many economists. For example GNP growth in Indonesia decreased during the period 1970-1985 by almost 50 per cent if certain environmental costs are included[4]. In actual fact, many countries had negative economic growth if the costs of environmental degradation and the depletion of natural resources are included in the calculations.

"Genuine national savings" (GNS) is an indicator that has been developed to correct the traditional indicator for savings by making adjustments for the use of coal, oil, gas, forests and minerals, emissions of carbon dioxide, wear and tear of buildings and infrastructure.

GNS is still an uncertain indicator since there are no certain statistical data on many of the aspects that are included. Neither is it a fully comprehensive indicator since it does not capture the effects of, for example, deterioration in ecosystem services, reductions in biological diversity, air and water pollution, over-exploitation of fish resources and soil erosion. Nevertheless, this information provides valuable international comparisons between countries in respect of actual savings[5].

Negative GNS means that the country is consuming its capital. If this takes place over a long period of time in combination with population growth, the economic prospects for future generations will be undermined. It is a strong signal that the country's economic growth is unsustainable.

Development within the framework provided by nature

For Sida these thoughts are challenging. We have the assignment to contribute to economic growth but we cannot allow ourselves to continue to work with economic models that disregard the environmental costs. We need working models for development that takes place within the framework provided by nature, rather than at the expense of nature and the environment. Without doubt, a poor fishing family need more food on the table and more income but it is not self-evident that larger nets and faster boats provide more – on the contrary they can lead to the eventual disappearance of fish and greater poverty.

Ethiopia has negative GNS

Officially Ethiopia saves 9.1% of its GNP, but the GNS indicator, genuine savings, are –7.3%, i.e. negative. This figure corresponds to USD 44 million and the factor mainly responsible for the negative figure is deforestation.

In 2000,deforestation amounted to 12.4% of GNP, which corresponds to USD 720 million. The figures only include the value of the commercial timber extracted and do not consider the ecosystem services and the biological diversity that were lost, or the costs that arose as a result of an increase in soil erosion. The reasons for deforestation have their origins in poverty, the lack of alternative sources of energy and cultivable land, and weak ownership rights. With its strong population growth and negative savings, the possibilities available to Ethiopia to provide for itself are being undermined and, if nothing is done, development will be unsustainable – economically, socially and environmentally.

Source: *World Development Indicators Report,* World Bank, 2002.

[4] "Wasting Assets", World Resources Institute, 1989

[5] The GNS indicator is presented by the World Bank in "World Development Indicators Report", see http://www.worldbank.org/data/wdi2002/index.htm

Steps on the way:

Development of environmental indicators

Information on the costs of countries' consumption of natural resources between 1970 and 2000 is available at *www.worldbank.org/environmentaleconomics/*. This information helps to illustrate the sustainability of countries' economic savings and use of natural resources. These new types of environmental indicators have proved to be extremely useful in the dialogue with the partner countries, in strategic environmental analyses, and in the development of country strategies. The work done by the World Bank in this field has been largely made possible by Sida support over a number of years. The support has also contributed to giving prominence to issues concerning the environment and sustainability in the World Bank.

Relationships between macroeconomic decisions and poverty

Sida gives support to the programme "Macroeconomics for the Sustainable Development Programme Office", run by WWF International. The aim is to investigate relationships between macroeconomic decisions and their effects on poverty and the environment, both locally and globally. The results are used, for example, to give information to decision-makers on effects of different economic and political decisions on the environment and poor people. Among other things, the programme has produced a guide to environmental impact assessments in connection with macroeconomic reform programmes.

The environment is not a sector

Complex relationships

Something that we have wanted to give prominence to in the chapters above is that the problems must be analysed with the aid of a holistic perspective – with local conditions as the point of departure, but in the light of general knowledge on the causes of poverty and the importance of environmental issues.

The inputs required often concern several different sectors simultaneously, and the relationships are often complex. The problems and the causes are of a transboundary nature and cannot always be solved through inputs in one sector and in one individual country alone. What is required is cooperation between countries and between different sectors. Therefore, coordination and network contacts are necessary, both at Sida and in our partner countries.

Ill health is often related to the environment

The WHO's list of the most serious health risks in developing countries have a strong bias towards environmental factors. The list includes malnutrition, polluted water, shortcomings in sanitary conditions, unsafe sex, iron deficiency and indoor smoke from wood fires.

Statistics show that a third of all cases of sickness in the world are due to environmental factors, and that this proportion is larger in developing countries. For example, 1.7 million people in the world die each year from polluted water, above all in diarrhoeal diseases. Nine of ten deaths of this type affect children and almost all of them occur in developing countries.[6]

Health and the environment – some examples

– Ozone, soot particles and other forms of air pollution have led to an increase in risks to health during recent decades since they can trigger off or exacerbate problems in the respiratory passages and heart. The risks are greatest for children and the elderly.

Source: *Global Environment Outlook 3*, UNEP, 2002.

– The extensive use of chemical pesticides and antibiotics has resulted in greater resistance in the bacteria, parasites and insects that spread infections that the chemicals are designed to check. One consequence is some 30 new infectious diseases (for example Ebola and Lassa). The effects are reinforced by other environmental changes, for example deforestation (and the ongoing desalination in mangrove areas) has contributed to increasing the incidence of malaria in Africa.

Source: *World's Resources 1998–99*; *Environmental Change and Human Health*, WRI, 1998.

[6] "The World Health Report 2002", WHO, 2002.

Read more
- *Health and Environment,* Marianne Kjellén, Sida, 2002
- *Health is Wealth,* Sida, 2002
- *The World Health Report 2002*, WHO, 2002

It is the poor who are affected in the first place, since they are exposed to more health risks in their immediate environment. They also have fewer opportunities to protect themselves from hazardous emissions that affect air and water – it makes no difference whether the pollution is a result of industrial emissions or lack of sanitation in housing areas.

Health statistics also illustrate clear consequences of the distorted consumption and production patterns in the world. Today, in the poor countries, there are some 170 million undernourished children, of whom three million will die this year. At the same time, half a million adults in North America and Europe will die as a result of pathological fatness – caused by overconsumption. Malnutrition and pathological fatness are not regarded as environment-related diseases but they have a definite relationship with shortcomings in the economical management of the world's natural resources.

The measures required are both political and technical and are not merely restricted to the health sector. The solutions require improvements to toilets, housing, water supplies, purification plants, uses of chemicals, farming methods etc.

HIV/AIDS and the environment

One of the most serious social problems in the world today is the HIV/AIDS epidemic. HIV/AIDS leads to sickness and death, above all among people in productive ages – what does this mean for environmental work?

One immediate effect for households and local communities is a reduction in the labour force. The consequence is often that there is a reduction in the area of land under cultivation and in the numbers of crops, that crops cannot be protected against noxious insects and diseases, and that necessary soil conservation work cannot be done. This means that production and incomes decrease rapidly, while the need of resources increases rapidly (for medicines, funeral expenses etc). If households are also forced to sell land, cattle or tools, the situation is further exacerbated. The acute need of ready cash also necessitates the use of short-term solutions to the problems, for example felling trees in order to sell timber or to manufacture charcoal which can contribute to deforestation and soil degradation.

Another immediate consequence is that knowledge disappears when people in productive ages die from AIDS. This has the effect, for example, that the transfer of knowledge on farming methods and local cultivation

Steps on the way:

Ecological sanitation
For many years Sida has supported methods development work in the field of ecological sanitation, i.e. low cost sanitation systems based on the principle of recycling nutrients (from faeces and urine) to farming land. Experience gained has now been put into practice in the programme *EcoSanRes* which has projects in 18 countries and has the aim of developing capacity and of further disseminating know-how.

Networks for rainwater
Developing methods for utilising rainwater is important, both as a sustainable supply of drinking water of high quality, and for making use of rainwater in farming as effectively as possible. Sida has participated in building up a network of persons and organisations working with rainwater issues. The network is to be found in 12 countries in Africa and five in South Asia. It functions in each country and for cooperation purposes between countries.

conditions from one generation to the next is made difficult. The same applies to other knowledge and experience on the environment and economical use of natural resources.

If well-educated and experienced persons in national environmental agencies fall ill and die of AIDS, this can exacerbate problems, leading to bottlenecks in the administration and a loss of know-how that is difficult to replace in the short term. Another consequence is that, when there are more acute problems to be solved, environmental issues can be pushed to one side. Resources that could have been used for environmental work must be used to overcome the effects of HIV/AIDS.

The type of inputs that could be expected to have positive effects are support for labour-saving measures in farming and soil conservation, and help with fast-growing trees for fuel-wood and incomes. HIV is spread most rapidly among the most vulnerable, particularly young women and girls. Contributions that increase the incomes of women lead to diminishing their vulnerability and contributions of this type can also contribute to checking the HIV/AIDS epidemic.

Read more
- *The environment, natural resources and HIV/AIDS*, Sida, 2003
- *Health is Wealth*, Sida, 2002

The environment and gender equality

It is important to apply a gender perspective in all development cooperation. Equality between women and men is laid down as one of the fundamental values of Swedish international development cooperation, and was emphasised in the political declaration made at the world summit meeting in Johannesburg. "*We are committed to ensuring that women's empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium development goals and the Plan of Implementation of the Summit*".

What, then, is important to take into consideration when gender and environment perspectives are to be integrated? One central point of departure is that all use of natural resources is dependent, to a greater or lesser degree, on the relations between the men and women in the environment in question. Therefore, any analysis of development opportunities must always include an analysis of the effects of relations between women and men on decision-making and implementation. The point of departure is that environmental work is almost never neutral from the gender perspective.

In order, for example, to stop soil erosion and thereby maintain or increase yields from farming, the type of soil conservation measures that can be effective are fairly well known today. However, in order to implement them it is important that questions relating to ownership, rights to ownership and access to credits are specified and recognised, so that the farmers in question dare to think in a long-term manner. When conditions of this type are analysed and assessed, it is necessary to examine any differences between women and men.

Read more
- *Gender and the Environment in Development Cooperation*, Irene Guijt, Sida 1997
- *Equality Prompt Sheets 1–17*, Sida, 1998
- *Gender Equality Tipsheets*, OECD/DAC, 2001

Step on the way: Network for women
Sida has supported the development of a network between women's organisations in Kenya, Tanzania and Uganda with the aim of giving the women the opportunity to exchange experience and give each other support. The goal is to strengthen women in their role of income-earners and to increase awareness of the importance of preserving the resources provided by nature. Through the network the women are given a stronger influence in the corridors of power and greater opportunities to exert an influence over the use of natural resources.

Biological diversity is essential for economic growth

Biological diversity[7] is the foundation of all human life – it plays a decisive role for the survival of mankind and for sustainable development. It is crucial for success in combating poverty.

There is a direct link between biological diversity and the possibilities available to ecosystems to function properly and to supply ecosystem services. Ecosystem services can be described as all the services provided by nature that benefit the mankind. They include, for example, the production of food, stabilisation of the climate, ecocycle of nutrients, water purification and degradation of pollutants.

It is thanks to biological diversity that agricultural production continues to function and the seas continue to contribute to our supplies of food. The box below contains some examples of calculations of the economic consequences of these services.

The researchers responsible for the studies point out that there is a large element of uncertainty in the economic values, but they also say that the figures are probably underestimates of the real value. The relationship between biological diversity and international trade has been given high priority in the discussions at, for example, WTO. Control over genetic resources and the distribution of benefits that arise from their use will be one of the critical issues of the future.

Unfortunately it is the case that development hitherto has constituted a drain on biological diversity and many ecosystems have been weakened. Today plants and animals are disappearing – both wild species and cultivated species – at an ever-faster pace. If present trends are permitted to continue, it has been assessed that 15–20 per cent of existing vertebrates will become extinct during this century.[8] (For other species – for example those that are even more important for medicines and food – there are no estimates.) However, through the Convention on Biological Diversity, which was adopted in 1993, the world community has clearly indicated that a change is necessary. Maintaining current levels of biological diversity is essential for further economic growth, in a global perspective.

Since Sweden is one of the 186 states that have ratified the Convention, we have undertaken to take action nationally and to cooperate internationally to achieve three goals: preservation, sustainable use and equitably distribution of the benefits arising from the use of the world's biological diversity.

Read more

- *Integrating Biological Diversity*, Sida, 2004
- *Sida and the Convention on Biological Diversity*, Sida, 2000
- *Diversity not Adversity: Sustaining Livelihoods with Biodiversity*, DFID, 2001

Ecosystem services in economic terms

Approximately 40 per cent of the global economy is based on biological products and processes. Insect pollination is, for example, an ecosystem service that we take for granted, but its global economic value for agriculture has been estimated in the region of at least USD 117 billion. In the same way nitrogen-fixing microorganisms are of great benefit for agriculture – each year they fix 90 million tons of nitrogen at an estimated value of USD 50 billion. The entire global ecosystem services have been valued by some researchers at USD 33 trillion per year (which can be compared with the global GNP per year which is approximately half as large).

Sources: *Conserving Biological Diversity in Agriculture/Forestry Systems*, Pimental et al, 1992, and *The value of the world's ecosystem services and the natural capital*, Constanza et al, 1997.

[7] "Biological Diversity" means the variability among living organisms from all sources and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

[8] "Global Environment Outlook 3", UNEP, 2002

For us at Sida this is a major challenge since it is a multi-dimensional question that will be of great importance in our future work with poverty reduction. The preservation of biological diversity is of central importance for food security, health, human rights, culture and trade.

The environment and human rights

If the clearing of a mangrove swamp has the effect that the local population lose their fishing and thereby suffer from malnutrition, this can be described as a violation of these people's human rights. It is namely the case that the right to life and personal security and the right to food that is sufficient for health and well-being is taken up in the Universal Declaration of Human Rights of 1948.

It is easy to show many relationships of this type – it is fairly obvious that the right of people to reasonable living conditions, for example food, water and housing, is negatively affected by phenomena such as deforestation, desertification and depletion of renewable raw materials.

There are also relationships in the other direction. The strengthening of human rights is essential for protecting the environment and for preserving natural resources. This is emphasised in a powerful way in the final declaration of the Rio conference in 1992. The right to life and security, protection before the law, democratic governance and freedom of opinion and expression are given as being intimately associated with environmental work.

Despite the fact that these relationships between consideration of the environment and human rights are in fact quite obvious, the question has not been discussed to any great extent. There is a lack of familiarity and a degree of uncertainty, among both representatives of the environment and of human rights, to demonstrate the relationships and to make deliberate use of them as points of departure in analyses and development projects. This is unfortunate, since the selection of a strategy to exert an influence varies depending on the perception and description of the problem. Those persons with a pure environmental perspective perceive the main problem as the destruction of the world we live in, while those with a traditional human rights perspective tend to focus on violations of the right to a livelihood.

Read more

– *The Environment and Human Rights – Links and Conflicts*, Elisabeth Abiri, Sida, 2001

Environmental degradation and conflicts

In recent decades we have seen an increasing number of civil wars in the world. Conflict researchers give several different reasons for this. Among other things they point out that in societies where living conditions have deteriorated rapidly, people become more receptive to ideas to solve the problems with violence – there is a greater risk that young men lose their hope of having a "normal life" and can be attracted to join armies or groups of rebels in order to kill and rob.

Many conflicts are described in terms of ethnic conflicts, but one underlying cause is often that referred to as environment-related scarcity of resources. This is a combination of scarcity of resources, population growth and increased inequalities. Agriculture has a key role in this, since half of the population of the world earn their living from agriculture – compare the example of Rwanda.

Rwanda where the land ran out and there was nowhere to go

The genocide in Rwanda in 1994 was not an anarchistic outbreak of violence or a war of everyone against everyone to the verge of collapse. It was genocide prepared by an elite group of powerful persons with the intention of ensuring their further control over the country. How could this be possible?

Rwanda is one of the most fertile countries in Africa. But it is also densely populated. At the beginning of the 1990s, there was insufficient cultivable land for everyone. At the same time the country had failed to create a modern sector with alternative ways of earning a living. The problems were exacerbated by the fact that the land was beginning to become impoverished through environmental degradation and that it was also inequitably distributed.

The lack of land and job opportunities created the desperation that power-hungry politicians could channel into the ethnic hatred that led to genocide.

Source: *Livelihood Conflicts: Linking poverty and environment as causes of conflict*, Leif Ohlsson, Sida, 2000

Read more

- *Livelihood Conflicts: Linking poverty and environment as causes of conflict*, Leif Ohlsson, Sida, 2000
- *EDC News – Environment and Development Challenges*, newsletter, www.sida.se

In order to check future conflicts, it is of great importance to be able to create and maintain the possibilities available to people to make a living. This makes it necessary to maintain the environment and natural resources over and above a level that can secure human livelihoods in the long-term.

Another dimension of the links between the environment and conflicts is the environmental degradation that often occurs in countries at war, for example in the form of ruthless exploitation of forests and minerals/diamonds.

The environmental perspective is needed in international trade!

It is of the greatest importance for developing countries to strengthen their trade capacity to enable them to be fully integrated into world trade. It is of equal importance that increases in production and exports in developing countries do not take place at the expense of the environment and natural resources.

The question of where and how the environment shall be taken up in the multilateral trade policy regulations is controversial. The North and South often adopt polarised positions in which many countries in the North, including Sweden, are interested in putting the environment on the agenda. Many developing countries have a sceptical attitude to this and fear that it can mean "green protectionism", i.e. that trade rules are introduced under the semblance of protecting the environment but that, in reality, they constitute trade barriers. Where trade-related intellectual property rights (for example patents) are concerned, many developing countries demand that it should not be possible to take out patents on living organisms. In the WTO, questions relating to links between trade and the environment are processed in a special committee, but the work of the committee is very long-winded and only limited progress has been made.

Where Sida is concerned, it is important to contribute to improving the possibilities available to developing countries to participate actively in the general trade policy negotiations, and to improving their export potential.

Step on the way:
promoting an unbiased dialogue

Sida is supporting the project "Linkages – Consumer Unity and Trust Society" which has the aim of increasing understanding of the complex linkages between trade and the environment among representatives of states and companies in both the North and South. The goal shall be achieved through research, dialogue, meetings and the dissemination of information.

The effects of corruption on sustainable development

One issue that has not been given a great deal of attention is the link between corruption and the depletion of natural resources. However, studies that focus specifically on this issue have been produced in recent years, for example a study made in 2001 that showed that low priority is given to environmental concerns in countries with a high level of corruption.[9]

The reasons for corruption are the same in the environmental field as in other fields: inadequate legislation, lack of respect for existing legislation, weak democratic structures, broad decentralisation of decision-making powers to civil servants, lack of accountability and non-transparent decision-making processes, for example in procurements. The most common forms of corruption are bribes, extortion, nepotism and favouritism, fraud and embezzlement. As a consequence of this, financial gains become the decisive factor, without any consideration being given to effects on the environment.

In order to counteract corruption, rules are necessary, for example for the protection of vulnerable areas and in respect of standards for pollution. Today, laws and rules are often far too weak, which creates scope for subjective interpretation. In addition, there is often a lack of systems to follow-up observance of the rules. When this is combined with low wages and shortcomings in accountability in the system, the question of financial gain can often be a stronger incentive than consideration of the environment.

In general Sida sees corruption as an effect of poor governance. Strategies to counteract and reduce the risk of corruption have consequently focused on developing strong social institutions. What is necessary is, among other things, national legislation that is more specific and more concrete in its aims of counteracting the negative effects of corruption on the environment. International conventions in the field are also of importance in this context, mainly on account of the fact that they can give prominence to the corruption perspective and clearly draw attention to its effects on environmental degradation.

Read more

- *Anti-corruption regulation,* Sida, 2001
- *Acting on suspicions of Corruption – a guide*, Sida, 2003

Illegal logging and bribes in dam construction

- Illegal logging in Russia is extensive. It varies from one area to another and amounts to between 20 and 50 per cent of total logging. This is particularly troublesome in eastern Russia with its special climate and unique plants and animals. The Illegal logging taking place here is leading to a rapid and accelerating weakening of biological diversity.

Source: *Illegal logging in the Southern Part of the Russian Far East: Problem Analysis and Proposed Solutions, Kotlobay & Ptichnikov,* WWF, Russia, 2002.

- In 1999, a bribery scandal was revealed in connection with the construction of dams within the framework of the Lesotho Highlands Water Project. Those involved were project management and twelve of the world's largest dam construction companies, including the half Swedish ABB. When the scandal was revealed, it proved to be the case that there was no national control system in place in Lesotho to counteract corruption. At the same time it became obvious that, in this case, corruption had resulted in damage to the environment that will have a negative effect on thousands of people in years to come.

Source: *International Rivers Network*, www.irn.org/programs/lesotho/index

[9] Global Corruption Report 2001: "Corruption and the 2001 Environmental Sustainability Index". Transparency International.

Different points of departure must be combined in the analysis

Sida has the ambition to apply a holistic perspective, based on a poverty analysis, in all development work. Therefore, it is important to make an active effort to combine different points of departure in the analysis.

One important dimension in this respect is a question of access to information. One of the central ideas at the Rio conference in 1992[10] was that information on the environment must be made accessible for both decision-makers and other citizens with the aim of ensuring that well-founded conclusions are reached for different standpoints. This is also relevant for use at Sida. A holistic perspective is necessary and requires a conscious effort to obtain relevant information on which decisions for sustainable development can be based – from environmental, social and economic points of departure.

Step on the way: Spreading information on the environment

Sida gives support to the work being done by the World Resources Institute on "Information for Environmental Governance", a global programme that has the aim of spreading information on the environment in different ways, and of finding new ways to do this, to different parts of society. The aim is to give people access to information on the environment as well as information on decisions taken by those in power on the use of natural resources and environmental matters. The support includes the work of producing and spreading environmental statistics and environmental indicators, and analysing them.

[10] See principle no.10 in the Rio Declaration.

Challenges in international development cooperation

Population growth means a greater strain on the environment

Global population growth is currently 75–80 million people per year. In 1950 the world population was 2.5 billion and in 2050 it is estimated that it will amount to 9.4 billion. At that point in time the proportion in Europe will have decreased and that in Africa will have increased. According to the forecasts, India will have the largest population.

In countries where the population is growing, the increase constitutes a considerable barrier to success with poverty reduction and to aspirations for sustainable development. Almost one billion people were added to the world population in the 1990s alone, and almost all of this increase took place in developing countries. If we look at Tanzania for example, the population of the country was about the same size as Sweden's at the time of independence 40 years ago, approximately 7 million. Today Sweden's population has grown, but only to some 9 million, while Tanzania's has increased dramatically to about 30 million.

It is obviously a great challenge to countries with such large increases in population to eradicate poverty. What often happens instead is that development efforts lead to the overexploitation of natural resources. This creates temporary advantages for a few people but leads to greater vulnerability for poor groups and creates a downwards spiral. Further overexploitation of natural resources leads to greater poverty which leads to even greater exploitation…

Read more

– *EDC News – Environment and Development Challenges*, newsletter, www.sida.se

Step on the way: Partnership for development of the Lake Victoria region

Lake Victoria and its natural resources are threatened by environmental degradation. The intensive exploitation of natural resources and the considerable population growth in the region exacerbate the situation. (See also box on page 10 where the vicious circle of overfishing is described.)

For the last few years, several international donors have been cooperating in order to achieve a permanent improvement in life quality for the 30 million people who live around Lake Victoria. Sweden, Norway, France, the World Bank and the East Africa Development Bank have concluded a partnership agreement with the East African Community and its member states: Tanzania, Kenya and Uganda. Support to civil society, better farming methods, private sector cooperation, exchanges between researchers and cooperation between towns around Lake Victoria and the Baltic Sea are some of the points in the Swedish programme of support.

Environmental assets – who benefits?

It is important to remember that production and consumption patterns in the rich countries are of vital importance for environmental problems in a global perspective. Over-consumption on the part of the rich is a more serious threat than population growth in the poor countries.

- During his lifetime, a child who is born in an industrial country will contribute more to consumption and environmental degradation than 30-50 children in the developing world.
- In the rich part of the world consumption per person has increased by some two per cent per year during the last 25 years. On the other hand, an average African household consumes 20 per cent less than it did 25 years ago.

All statistics show the same picture. If everyone in the world consumed as much of the natural resources as people living in the rich part, it would require five to eight globes to produce sufficient resources. A vital global issue in the future will be the discussion on how the environmental assets can be shared between people and states.

Several environmental organisations have discussed the possibility of developing instruments to measure the amount of the environmental assets enjoyed by individuals and states. In other words the idea is to create more "objective" indicators as a basis for influencing opinion, discussions and negotiations. Concepts that are taken up in the debate include, for example, "equitable distribution of environmental benefits", ecological footprints", "ecological debt" and "factor 10".

The proposed environmental indicators all have a political dimension containing issues relating to power sharing and justice. Everything would appear to indicate that these issues will become increasingly important in the international debate in the future. Those of us who work with development questions have reason both to take part in the debate and to learn from it in order to be able to conduct the dialogue with our partners in cooperation.

Read more
- *Sustainable Development Update*, newsletter, www.sida.se

Local and global links

When a local environmental problem, for example polluted water in a lake, is solved, it is not uncommon that the solution contributes to creating new environmental problems. When Europe changed its refrigeration technology from ammonia to CFCs several decades ago, an obvious local health hazard was done away with, but it proved to be the case that the CFCs caused global damage to the ozone layer instead.

In other words, the question is: where do the pollutants "go" when we "solve" a local pollution problem? Sometimes they are diluted and sometimes they are replaced by less hazardous substances or processes, but it is often the case that the pollutants are transported in one way or another and affect people or ecosystems far away.

It may be more difficult to solve problems arising from regional and global pollutants (for example sulphur dioxide and carbon dioxide) than local pollutants, and one of the reasons for this is that there is a tendency to shift, rather than actually solve, the environmental problems.

Accordingly, there are links between the global and the local, small-scale problems. One example of many is the very extensive damage suffered by coral reefs in the world in recent years. The causes are both local, in the form of harmful fishing methods, regional in the form of shipping traffic and pollution, and global through the greenhouse effect with resultant higher water temperatures.

The ability to analyse these types of links is important for those of use working with poverty reduction. Those primarily affected when the global environmental problems interact with different local factors are the very poorest people. Coral bleaching has the effect, for example, that the poor people living by the coast have less fish, shells and seafood that are their main source of protein. On the other hand, it is the rich who are the cause of the global environmental problems.

We do not yet possess all the knowledge required to analyse these types of linkages, but everything indicates that it will be increasingly important to give them as much attention as possible. With that aim in mind, it is also important to request local knowledge and to exert an influence so that this knowledge also has an impact in the work of developing global policies.

Step on the way: Research based on an active dialogue

In Laos, Sida is supporting a research project to improve the use of natural resources in highland areas. The research project is based on an active dialogue and cooperation with the local population, which often consists of ethnic minorities. Important aspects are, for example

- distribution of land, i.e. how the land is distributed between and within villages,
- importance of "wild" food resources (such as insects, mushrooms, frogs and roots) in the surrounding forests for the economy and survival of households, and
- development of local systems for the use of forests and land.

The research project has clearly demonstrated weaknesses in several of the measures (for example concentration of villages, and resettlement of people which leads to greater pressure on the forests), which the Laotian government is implementing today in the highland areas, and can hopefully lead to changes.

Growing cities for better or worse

Today the largest population growth is taking place in the cities, mainly as a result of the extensive migration to the cities. Today, over half of the people living in the world live in urban areas. It is also in these areas that the majority of the poor people live. By 2015 it is estimated that the population of cities in developing countries will increase by 907 million inhabitants (while the increase in the rural areas will be limited to 165 million). Most live in medium size cities, but the so-called mega cities (i.e. cities with more than 10 million inhabitants) are also growing rapidly. Today, most of the mega cities are to be found in developing countries.[11]

In other words, the world is in the middle of a period of extensive urban expansion, but hitherto the infrastructure of the cities has not been extended at the same pace as the needs. The lack of housing, water, toilets, refuse collection etc creates serious problems, above all for the poor part of the urban population.

The cities are of vital importance for economic growth and employment and it is in the cities that most of the countries' GNP is created. But

[11] "Global Environment Outlook 3", UNEP, 2002.

An ever-increasing amount of food is being transported to an ever-increasing number of people in the cities

Yields from farming land in Africa are steadily declining. There are several reasons for this but one major reason is connected with urbanisation: since an ever-increasing amount of the food that is being produced is being transported to the cities, the waste products from agriculture remain in the urban environment instead of being recycled to farm land.

Organic material and nutrients disappear out into the seas or up into the atmosphere instead of functioning as cornerstones in the production of food in the future. An ever-decreasing amount of the waste products from agriculture are being recycled to the land with the result that it is further impoverished and requires fertilisation of other types in order to provide further yields. If, instead, it were possible to recycle organic waste from the cities to the rural areas it would be possible to reduce the mountains of waste and to complete the biological ecocycle.

Source: *Fattigdom och miljö – ett bidrag till Sidas fattigdomsutredning*, Sida, 1995.

chaotic traffic systems, inadequate supplies of electricity, water shortages etc act as a brake on development. Now, when the consequences of the ongoing urbanisation process are more clearly understood, the investment needs are enormous – and far more extensive than would have been the case if the development of the cities had taken place at the same rate as the movement of people to them. Managing these investment needs in an environmentally acceptable way will require a great deal of awareness on the part of planners and decision-makers. But, if the environment is not taken into consideration, the conditions for the poor part of the population would be further exacerbated.

One issue that is important for economic growth and is also important from an environmental perspective is the question of water in the cities. This includes questions relating to supplies of drinking water, pollutants, tariffs, institutional framework, sewage and sanitation, surface water etc. These questions must be handled without any negative effects on the groundwater, water courses, lakes and coastal zones.

Questions relating to urbanisation always have consequences for the surrounding rural areas and the biological ecocycle in general. This is true of, for example, water and waste management, transport and air pollution, as well as agriculture. See the example in the box.

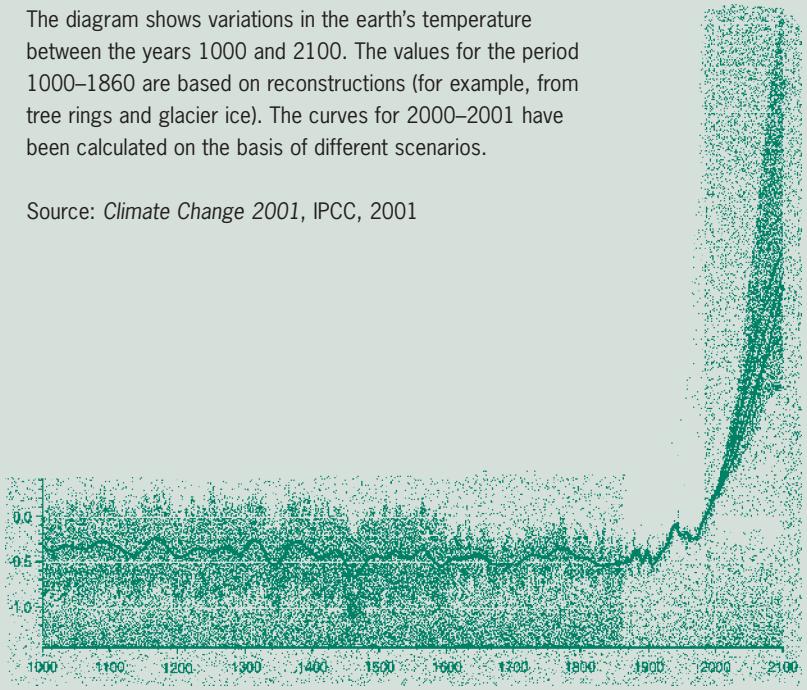
Step on the way: Water purification in Klaipeda

The discharge of untreated wastewater into the Baltic Sea has constituted a considerable environmental problem. At the beginning of the 1990s, a study was made to identify the worst sources of pollution. This resulted in the identification of 132 so-called "hot spots", including the Lithuanian port of Klaipeda. Since then considerable efforts have been made to solve the problem.

In Klaipeda, the water supply has been improved through the restoration and extension of the distribution network. Wastewater purification has been extended with a completely new treatment plant that combines mechanical and biological processing. After the treatment plant was commissioned, total discharges of biochemical oxygen demand (BOD) have decreased by 90 per cent and discharges of phosphorus by 65 per cent. Discharges of nitrogen have decreased by 40 per cent. Sweden, Finland, the EU and the World Bank have provided support amounting to SEK 218 million for the development of the treatment plant.

The diagram shows variations in the earth's temperature between the years 1000 and 2100. The values for the period 1000–1860 are based on reconstructions (for example, from tree rings and glacier ice). The curves for 2000–2001 have been calculated on the basis of different scenarios.

Source: *Climate Change 2001*, IPCC, 2001



The climate issue

In the summer of 2002, Europe was affected by floods. For example, the River Moldau rose to such a high level that 50 000 people had to be evacuated from Prague, the capital of the Czech Republic. At the same time, on the other side of the globe, preparations were being made to evacuate people from the small island state of Tuvalu. The island was on the way to be completely submerged by rising sea levels. The authorities in Tuvalu appealed to Australia and New Zealand for assistance with the full evacuation of all its inhabitants.

Can the examples be interpreted as a sign of an ongoing climate change? Yes, says the Intergovernmental Panel on Climate Change, IPCC. IPCC consists of climate researchers from the entire world who are trying to compile and evaluate the research available today on the climate issue. In its latest report, IPCC confirms that there are clear signs that the climate is undergoing a process of change. See the diagram below. For example, it is a fact that the mean temperature on earth rose by approximately 0.6 degrees Centigrade during the 1900s. The IPCC is also of the opinion that the ongoing process of change cannot be explained by natural causes. Instead the causes must be sought in the emissions of greenhouse gases.

Read more

- *Climate Change, Vulnerability and Social Justice*, R Kasperson & J. Kasperson, SEI, 2001
- *Climate Change 2001. An Assessment of the Intergovernmental Panel on Climate Change*, IPCC, 2001

An increasing number of natural disasters, but decreasingly natural

If statistics on natural disasters in the 1970s and 1990s are compared, it can be seen that the number of people affected increased threefold. In the 1990s 2 billion people were affected by natural disasters, which are estimated to have cost USD 629 billion.

Each year the International Red Cross publishes the "*World Disasters Report*" which provides instructive and dramatic reading. One conclusion

drawn in the report for 2002 is that natural disasters continue to constitute devastating obstacles to development in poor countries. Another conclusion is that all "natural disasters" are not merely "natural" in the real meaning of the word, but are increasingly often caused by environmental degradation and/or reinforced by it.

In particular, it is the global environmental problems that affect climatic conditions and changes in the weather. Everything indicates that the increase in the frequency of severe storms and floods that we have seen in recent years will increase further. The patterns in the climate of the future will probably be a higher degree of unpredictability and shifts between extreme situations – rather than proximity to mean values.

The effects of global environmental changes are often reinforced by local environmental problems. One example is that the felling of mangrove forests reinforces the negative consequences of the increasing number of hurricanes and storms. Mangrove namely functions as a buffer against ocean storms and reduces extremely dangerous waves to harmless centimetre high ripples. Accordingly, replanting mangrove can be an effective way to alleviate natural disasters in the future.

Regardless of the causes of the increasing number of "natural disasters", it is necessary for the world community to both increase its preventive efforts in forthcoming years and to raise levels of preparedness to deal with disasters when they occur.

Read more

– *World Disasters Report 2002*, International Federation of Red Cross

Two examples: Mitch and forest fires in Indonesia

– The hurricane Mitch, which swept across Central America in 1998, took thousands of lives and left over a million people homeless. The financial losses were estimated at SEK 8.5 billion, which is the same amount as the GNP of Honduras and Nicaragua combined. The fact that the devastation was so extensive was not only due to the rain, it was also due to shortcomings in soil conservation in the efforts to get the economy in the area to flourish. For example, in the 1990s there was large-scale felling of forests in the area – in Honduras alone 112,000 hectares had been cleared each year.

Source: *Environment and Poverty Times*, special issue for the Johannesburg Summit, UNEP, 2002.

– In 1997, smoke from forest fires in Indonesia spread over a large area of Southeast Asia. Fires are used traditionally as a method to clear farming land before a new planting season. However, severe winters in combination with drought had the effect that, in many places, people lost control of the fires. The fires have exacerbated the effects of ongoing deforestation – on Borneo, for example, there is now not much forest left. But the smoke from the fires also caused respiratory problems for more than 20 million people. In Malaysia, for example, measurements of harmful air pollution showed levels that correspond to smoking far more than 100 cigarettes a day. The forest fires are estimated to have led to an increase of some USD 1.4 billion in health care costs. Costs in the form of deforestation and other environmental consequences have not been estimated.

Source: *Global Environment Outlook 2000*, UNEP, 1999

Sida at work – on the environment

Greater awareness and more expertise in environmental issues at Sida

The last ten years have involved important steps forwards where working with the environment at Sida is concerned. There is both environmental expertise and a positive attitude in Sida's divisions. There is a willingness to understand. Programme officers and management staff dare to question the traditional development philosophy. We are starting to accept and understand the existing frameworks – both those given by the limitations of nature and those determined by economic conditions. We have the courage to abstain from contributions that are unsustainable in the long term but which we have previously supported.

And possibly most important of all: we are in a process of transition from a simplistic view of environmental issues to dealing with a complex reality. This is both good and necessary. When we speak about "mainstreaming" we mean that environmental aspects should be integrated as much as is necessary to understand environmental sustainability. But not too much – then it would be a theoretical end in itself, which would be burdensome and would not be accepted.

Sida's environmental management system

In its follow-up work after the Rio conference, the Swedish government has taken several steps to introduce environmental thinking in the Swedish government administration. One step of this type has been the requirement that every government agency should develop an efficient environmental management system. Sida participated in the pilot project for this programme and, since 1996, has had an environmental management system consisting of three parts:

- environmental policy and goals
- action plan
- follow-up and reports

The environmental management system encompasses both development cooperation contributions and the administrative work at Sida's Stockholm office and at the embassies. A report shall be submitted each year on Sida's environmental management work.

Read more

- *Sida's Environmental Management System (environmental policy and action plan)*, Sida, 2004

Principles for Sida's environmental work

Development cooperation for environmentally sustainable development channelled via Sida shall:

- help the partner countries to identify and implement activities that protect and preserve the partner countries' natural resources and environment,
- emphasise and support long-term sustainability,
- follow the principle that prevention is better than a cure,
- make it possible for the partner countries to have a longer planning perspective.

This has the following consequences:

- environmental aspects must be included in Sida's overall development analysis and in its analyses of countries, sectors, programmes and projects,
- Sida shall refrain from providing contributions that make sustainable development difficult to attain,
- environmental awareness and environmental considerations shall be integrated in the work of all Sida's departments.

Aspects of the environment are handled in all Sida's departments

As early as in 1988, in connection with the discussions on the fifth goal of Swedish international development cooperation, Sida made the decision not to establish a special department for environmental support. It was realised then that environmental issues should be integrated with other development issues in each sector. There are environmental aspects in all sectors of society and they can best be analysed and remedied if environmental matters are integrated into the work of all Sida's departments.

Special environmental policies have been drawn up in several areas. There is a good deal of experience – for example in the fields of environmental statistics and energy – of how an environmental perspective within the framework of a contribution in one sector has been of great significance for the overall effect of the contribution. This is the case, for example, in the education sector where a focus on environmental education is not only of significance for promoting awareness of the environment and knowledge of the environment in the partner country's education system. Environmental education is also of importance for the possibilities of developing problem-oriented teaching methods that give students a more active role in the learning process.

Read more

- *Environmental Education Handbook for the Education Sector,* Sida 1999
- *Policy for Sida's Assistance to a Sustainable Energy Sector,* Sida, 1996

A decentralised organisation makes demands

The responsibility for environmental aspects is decentralised at Sida. For example, it was established in the action programme for sustainable development (1996): "All heads of departments/divisions and programme officers are answerable for the integration of environmental issues within their particular areas of responsibility, and all heads of departments must ensure that sufficient expertise exists in their departments. The central Environment Policy Division is generally available to provide advice and support and is also responsible for general policy and methods development in this field."

This division of work and responsibilities places considerable demands on managers and programme officers. In addition to having expertise in their own subject area, they shall also have adequate knowledge in the environmental field.

There are clear demands on each member of staff: each and every one must assume a *professional responsibility* for ensuring that Sida's contributions promote development that is sustainable – environmentally,

socially and economically. It is therefore important that we all acquire a common approach to development questions and how the environmental perspective shall be taken into consideration in our operational areas.

This view on how Sida best transforms the environmental perspective into practical action is described in "Sida at Work". The handbook lays down among other things that sustainability shall be one of three criteria that shall always be used in the assessment of contributions, in parallel with relevance and feasibility.

Read more
- *Sida at Work – A Guide to Principles, Procedures and Working Methods*, Sida, 2003
- *Sida at Work – A Manual on Contribution Management*, Sida, 2003

Strategic environmental and sustainability analysis

An economic analysis or a poverty analysis that does not give consideration to degradation of the environment and depletion of natural resources in a country is misleading. Therefore, it is a requirement that a strategic environmental analysis shall always be made in connection with each country strategy. But how this can best be done differs from one country to another in respect of scope and content – what is important in this respect is to include all the issues related to the environment that are vital for the country's development from the perspectives of poverty and sustainability. A help-desk is at the disposal of the departments when necessary (see below under "Environment Policy Division provides support").

The aim of the environmental analysis is to enhance the quality of the country analysis and the conclusions of the country strategy – not necessarily to identify environmental contributions as a special area of development cooperation. A good environmental analysis ensures that vital aspects relating to the environment are not excluded in the country analysis and that Sida does not support social development that is environmentally unsustainable. The central strategic issue is "*How shall future support be designed to permit it to contribute to environmentally sustainable development and the reduction of poverty in the partner country?*"

Read more
- *Country Strategies – Guidelines for Strategic Environmental and Sustainability Analysis*, Sida 2002

Participation is essential

Ownership and participation are two key concepts in Sida's work. Our approach is based on the concept that each country is responsible for its environment and natural resources and that the needs of the partner in cooperation form the basis of development cooperation. The partner in cooperation shall "own" the goals of development cooperation and shall govern the work with change.

Sida also emphasises participation by those who shall ultimately benefit from the contributions, in other words the poor. Sida's partners are either government agencies in the partner country (at central and/or local level) or parties in civil society. In the dialogue with these partners in cooperation, methods for participation must be given prominence as one of the central issues.

Participation is a goal in itself – for strengthening a democratic culture in the partner country. Participation is also an instrument for reaching other development goals, for example the environmental goal.

Read more
- *Participation in Democratic Governance*, Sida, 2002
- *Children's Environmental Rights*, Save the Children Sweden, 2002

In certain contexts, participation is difficult to achieve, particularly perhaps where children are concerned. At the same time it is additionally important to create forms for the participation of children that enable them to exert an influence and to improve the environment in their neighbourhood. As it was formulated in a report prior to the summit meeting in Johannesburg in 2002: "Adults may hold the reins of power but children hold the reins of hope for building a better future."[12]

Environmental impact assessments for all contributions

Today, environmental impact assessments (EIAs) are an established working method, not just in international development cooperation but in practically all work with change throughout the world. Where Sweden is concerned, there is the EU directive of 1987, amended in 1999. Sida's approach coincides with this EU directive.

According to Sida's regulations, an EIA shall be made for all contributions financed by Sida. In other words, not almost every contribution, but every contribution! On the other hand, the scope of the assessment can vary between different types of contributions.

The basic concept in respect of an EIA is that it shall be made during the planning stage of a project, and made at such an early stage that its conclusions can influence the design of the project. The EIA shall contain a systematic review and assessment of the probable positive and negative environmental impacts and provide a clear picture of the size, scope and importance of the environmental impacts. The goal is to achieve a better project with the aid of the EIA.

In Sida's guidelines for the review of environmental impact assessments, three important criteria are given prominence:

1. All Sida's contributions shall include an EIA.
2. Flexibility is maximal – the EIA shall be adapted to the contribution.
3. Both positive and negative aspects shall be taken into consideration.

Sida does not make the EIA – this is the responsibility of the partner in cooperation, sometimes together with an independent consultant. The partner shall own the method and the conclusions that result from the assessment.

Read more
- *Sustainable Development? Guidelines for the Review of Environmental Impact Assessments*, Sida, 2002

The administration of EIAs is not complicated, but considerations of environmental issues – and terms of reference for the special environmental studies that may be necessary – can sometimes be difficult. Therefore, it is possible to discuss the issues with a special help-desk (see page 37 and the box below).

Strategic assessments at sector level increasingly important

There is a clear trend and ambition in development cooperation to go from thinking in terms of projects to thinking in terms of broad programmes, in other words to participate to a lesser extent in, for example, individual power station projects and to support instead the reform of a country's energy policy, etc.

[12] See "Children Speak Out" by J S Kruger & L Chawla, in "Environment & Urbanization, Vol. 14, No. 2, 2002

Ferry link over the Zambezi

The ferry over the Zambezi at Caia is one of the links in the most important north-south road transport route in Mozambique. It functions poorly and has frequent stoppages for various reasons: the engine breaks down, the water level is too low, or the currents in the river are too strong. Pending a permanent bridge connection, the ferry needs to be improved in respect of its capacity, operating safety and the safety of its passengers and goods. There is no doubt about this and Sida has promised to contribute to upgrading the ferry link.

A better ferry link will naturally generate more traffic, which will lead to greater strains on the environment. However, one of the aims of the project is more traffic and safer traffic. There is complete agreement that better transport is one of several factors that are essential for poverty reduction in the country. Today, two-thirds of the river is crossed with the aid of a road bank (with the ferry only over the main channel) which, in turn, causes undesirable dam effects upstream when the water level is high. A better ferry link would involve reinforcing the road bank which will probably cause somewhat worse dam effects since, unlike the existing road bank, it is not expected to collapse during periods of strong currents and high water levels. The dialogue on environmental issues has mainly concerned this issue.

I contacted the EIA help-desk at an early stage in order to discuss the issue. The dialogue resulted among other things in adjustments to the terms of reference for forthcoming consultancy assignments. Parts of the bank can be lowered and dimensioned for high flows in order to avoid, if possible, a deterioration in relation to the present situation. It can also be equipped with culverts in order to improve the turnover of water downstream in the secondary branch of the river.

An in-depth environmental study shall be made in connection with the project in which other aspects than floods shall be taken up, for example the issue of the long-term solution of a bridge and the consequences of operations at Cabora Bassa and a possible new power station downstream of Cabora Bassa.

The dialogue with the EIA help-desk was constructive and fruitful and enhanced the quality of the project. It also had the effect that a reasonable degree of agreement was achieved before the contribution was taken up in the project committee. I therefore warmly recommend that a dialogue is initiated at an early stage. In this way the environmental advisers are given a reasonable amount of time to make balanced judgements, misunderstandings can be cleared up, and foolish ideas remedied in time.

Source: *Interview with Gösta Werner*, INEC programme officer, January 2003.

For contributions that refer to support for reform processes or sector programmes, impact assessments can be different than for contributions at project level. A sector programme is implemented in a gradual process in which goals and strategies emerge over time. Shortcomings, for example, in environmental considerations can then be remedied as a part of the programme instead of constituting a condition for Sida's participation.

What benefit can programme officers have of a strategic environmental assessment in connection with the assessment of a sector programme? The box below provides an example.

Read more

– *Sector Programmes – Guidelines for the Dialogue on Strategic Environmental Assessment (SEA)*, Sida, 2002

"Agriculture Support Programme" (ASP) in Zambia, 2003–2007

An examination of the project proposal at an early stage showed that no environmental impact assessment had been made by the programme owner. Therefore, on Sida's initiative a "strategic environmental assessment", was made before a decision was reached to support the programme. The assessment then formed part of the background material/documentation for the negotiations with the consultants who shall participate in the implementation of the programme.

As a result of the assessment, better information is now available when baseline studies shall be made. It is probable, for example, that it will be necessary to make studies on the socio-economic consequences of HIV/AIDS for the target group.

During the initial period of the programme, the consultant shall develop environmental indicators that will be monitored throughout the project period (2003-2005). In this respect, it is probable that there will be a focus, for example, on biological diversity and on crops that have been cultivated for a long time and which have thereby been adapted to local farming and climate conditions. This was one main recommendation of the strategic environmental assessment.

In addition, the results of the assessment are expected to have a positive effect on policy support, for example by linking the ministries concerned (environment and agriculture) closer to each other and giving the ministries the opportunity for mutual learning. This should, for example, improve the application of the conventions that the country has signed.

Source: *Interview with Torsten Andersson*, programme officer at the Swedish embassy in Zambia, January 2003.)

Green procurement

Materials of various types are used of necessity within the framework of different development programmes. The environmental perspective must permeate the procurements in the same way as other steps in the project cycle. The ambition should be to encourage the purchase of goods and materials that are produced in an environment-friendly way and which are neither detrimental to the health of people nor to nature. Practical ways of doing this within the framework of international trade rules are analysed and described in Sida's policy for green procurement.

Read more
– *Sida's Policy for Green Procurement – for cooperating partners*, Sida, 2002

"The Green Office"

Environmental thinking at Sida is not merely a case of contributions in the partner countries. It is also important to "practise what we preach" and pursue environmental work in our own administrative work, in other words at the Stockholm office and the embassies. "The green office" is both the generic term and the goal of the activity.

Environmental hazards in Sida's internal work are chiefly of three types:

- procurements and purchases (for example of paper, computers and other office materials),
- business trips made by air,
- use of energy.

Sida has the ambition to have the smallest possible negative impact on the environment and to offer, at the same time, a good physical working environment for all members of staff.

Environment Policy Division provides support

If all members of the staff at Sida are to be able to take a professional responsibility for the environmental perspective in their administrative work, it is necessary to provide support in the form of training, guidelines and rules, technical aids and advisory services. Providing this type of support is part of the duties of the Environment Policy Division.

Where advisory services are concerned, Environment Policy Division has engaged two help-desk functions that are at the disposal of the departments and the embassies.

- The Unit for Environmental Economics at Gothenburg University: help-desk for environmental analysis in the country strategies. See Sida's intranet and www.handels.gu.se/econ/EEU/
- The EIA centre at the Swedish University of Agricultural Sciences in Uppsala: help-desk for environmental impact assessments (EIA) and strategic environmental assessments (SEA). See Sida's intranet and www-mkb.slu.se

Experience gained hitherto of the advisory services and training is that the principles must be clearly linked to everyday work in development cooperation. One decisive requirement in respect of the guidance given is that it must be practical and concrete. Expert help is requested by Sida's managers and programme officers – often at the very moment it is needed. Therefore, the help-desk functions have been contracted to be

available immediately and constantly, without any bureaucratic complications.

Sida has also engaged further professional expertise for the provision of advisory services and expert assistance by entering into agreements with:

- The Swedish International Biodiversity Programme (SwedBio) at the Swedish University of Agricultural Sciences in Uppsala.
- Leif Ohlsson at the Institute for Peace and Development Research at Gothenburg University, in respect of questions on the environment and conflicts.
- Stockholm Environment Institute (SEI) for questions on the relationship between the environment and natural resource management and changes in the vulnerability of poor people.

All development shall be “sustainable development”. Sida therefore has a very specific environmental assignment.

When we examine the facts we have today – and new insights arise every day – we can state that:

- Poverty reduction is impossible in the long term unless we give consideration to the natural resources and the environment on which people are dependent and shall build their livelihoods upon.
- Environmental issues are of decisive importance for sustainable production, for food security and for economic growth.
- Human health is dependent on the state of the environment and the sustainable use of natural resources.
- Democratic systems are threatened when degradation of the environment and lack of resources make it impossible to lead a normal life.

In other words, issues concerning the environment are not marginal but fundamental. This publication tries to summarise the knowledge needed by staff in order to deal with the environmental perspective in their everyday work at Sida and provides suggestions for further reading.

Halving poverty by 2015 is one of the greatest challenges of our time, requiring cooperation and sustainability. The partner countries are responsible for their own development. Sida provides resources and develops knowledge and expertise, making the world a richer place.

Sida

SWEDISH INTERNATIONAL
DEVELOPMENT COOPERATION AGENCY

SE-105 25 Stockholm Sweden
Phone: +46 (0)8 698 50 00
Fax: +46 (0)8 698 56 15
sida@sida.se, www.sida.se