SCANDIACONSULT NATURA

THE REGIONAL ENVIRONMENTAL CENTER

for Central and Eastern Europe

STRATEGIC ENVIRONMENTAL ANALYSIS OF ALBANIA, BOSNIA & HERZEGOVINA, KOSOVO AND MACEDONIA

Final Report

Study prepared for Sida
by
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and
The Regional Environmental Center for
Central and Eastern Europe

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EXECUTIVE SUMMARY

In May 2000 Sida commissioned Swedish consultants Scandiaconsult (SCC) Natura and the Regional Environmental Center for Eastern and Central Europe (REC) to undertake a Strategic Environmental Analysis (SEA) of Albania, Bosnia and Herzegovina, Kosovo and Macedonia.[1]

The principle aims of the SEA were to: (i) recommend how Sida can integrate environmental considerations into the reconstruction process in the Western Balkans; (ii) identification of possible areas for Swedish support targeting specific environmental problems linked to sectors and project areas to which Sida is presently giving support.

In the SEA of Albania, Bosnia and Herzegovina, Kosovo and Macedonia, a host of indicators were employed to verify the relationship between driving forces and environment; building upon conventional SEA the concept of 'linkages' was introduced into the analysis.

One of the more striking features of linkages identified in the SEA is the high degree of commonality between Albania, Bosnia and Herzegovina, Kosovo and Macedonia.

Some of the more prevalent linkages include: land and biodiversity degradation, caused by economic activity and population migration, linked to haphazard disposal of solid waste; water pollution, caused by poverty and economic activity, linked to inadequate waste water discharge and treatment; land and biodiversity degradation, caused by poverty and economic activity, linked to domestic and commercial deforestation; biodiversity loss, caused by poverty and economic activity, linked to illegal fishing; land degradation caused by poverty and population migration, linked to abandonment of rural settlements; air pollution, caused by poverty and population migration, linked to burning of waste.

Thus far environmental matters have not played a major role in Swedish development assistance to the Western Balkans. There is, however, considerable commitment within Sida to incorporate these matters into ongoing projects, and to consider areas where environmental problems are most prevalent, for future development co-operation in the Western Balkans.

To assist in this process, the following provides a typology of linkages (deforestation, poor agricultural practices, air emissions, solid waste, waste water, institutional incapacity, public awareness) common in Albania, Bosnia and Herzegovina, Kosovo and Macedonia; recommendations concerning areas for Sida action.

[1] While reference is made in this report to "countries" we acknowledge the UN Security Council Resolution 1244 which recognises Kosovo as a province of the Republic of Serbia under the auspices of the Federal Republic of Yugoslavia.

Deforestation

- Support to communities dependent on forest resources: e.g. awareness raising of forestry issues, community forestry development, afforestation programmes;
- Support to forestry departments and ministries: e.g. development of a national forest sector master plan, technical and on-the-job training on environmental aspects of sustainable forest management;
- Protected forest area's programmes: e.g. proper management of existing forest parks and reserves, bio-diversity inventories.

Poor agricultural practices

- Support sustainable development of agriculture: e.g. introduction of ecological agricultural practices, promote trade with ecological products from agriculture, education of local farmers on sustainable agriculture.

Air emissions

- Clean energy production: e.g. application of emission reduction technologies (filters, etc.), modernisation of production technologies;
- Alternative energy production: e.g. investigating and testing suitable alternative energy sources.

Solid waste

- Waste management programmes: e.g. municipal waste programmes, development of institutional incentives to reduce waste.

Waste water

- Waste water programmes: e.g. municipal wastewater programmes, development of institutional incentives to reduce waste;
- Water resources projects: e.g. design and introduction of watershed management models.

Institutional incapacity

- Governmental institution development programmes: e.g. support development of environmental laws and regulations, support environmental training of institution's officials, develop strategies and programs for environmental monitoring, support development of enforcement strategies;
- Non-governmental institution (NGO) development programmes: e.g. training NGOs on environmental awareness creation, support NGOs carry out local environmental projects.

Lack of public awareness

- Education for sustainability: e.g. environmental training in schools, rural community projects, support NGOs;
- Availability and dissemination of information: e.g. environmental education of journalists.

To ensure Sida's future actions concerning SEA are cost-effective, there is a need to develop further Sida's 'SEA Guidelines' to include linkages. While SEA emphasises the importance of identifying driving forces, tailoring recommendations around indirect causes, alone, tends to over look those factors which contribute directly to environmental degradation.

1 INTRODUCTION

In May 2000 Sida commissioned Swedish consultants Scandiaconsult (SCC) Natura and the Regional Environmental Center for Eastern and Central Europe (REC) to undertake a Strategic Environmental Analysis (SEA) of Albania, Bosnia and Herzegovina, Kosovo and Macedonia.[2]

The SCC team comprised Tomas Hertzman (Team Leader), Dan Vadnjal, Aleksandra Savic and Anders Nordstrom; the REC team was headed by Jerome Simpson.

The aim of this study is to recommend how Sida can integrate environmental perspectives into the reconstruction process in the Western Balkans and to identify possible areas for Swedish development co-operation.

This report provides a SEA based on four country studies, undertaken by REC, in Albania, Bosnia and Herzegovina, Kosovo and Macedonia. The report is divided into 5 sections. The approach and method are described in Section 2, followed by presentation and discussion of the linkages between driving forces and environment in Section 3. In Section 4, international donor - including Sida - and domestic responses to address environmental problems and their causes are described. The report is concluded and recommendations made concerning possible future environmental activities by Sida in the Western Balkans, in Section 5. The country reports are presented in Annex 1 – 4.

[2] While reference is made in this report to "countries" we acknowledge the UN Security Council Resolution 1244 which recognises Kosovo as a province of the Republic of Serbia under the auspices of the Federal Republic of Yugoslavia.

2 APPROACH AND METHOD

The purpose of this section is to provide a brief overview of SEA, followed by the aims and objectives of the study and the scope of work.

2.1 Strategic Environmental Analysis

Strategic Environmental Analysis (SEA) is an important component of Sweden's sustainable development programme, aimed at surveying environmental issues, to facilitate the targeting of development assistance.

It is important to understand that the purpose of a SEA is not to provide a shopping-list of environment-oriented projects, but rather to identify areas in which (Sida) development assistance can be targeted that will have maximum impact on reducing or minimising environmental degradation.

There are four principle components which are normally described in a SEA: (i) environmental status – existing state of environment; (ii) driving forces – causes or forces driving each country's environmental problems and the obstacles for sustainable development; (ii) verifiable indicators – linkages between existing state of environment and the driving forces; (iv) responses – measures taken by the partner country to address environmental problems and their causes.

The exact nature of these components are described and exemplified in the following sections of this report.

2.2 Aims and Objectives

The rationale underpinning Sida's commissioning of the SEA of Albania, Bosnia and Herzegovina, Kosovo and Macedonia, is based on its recognition that environmental concerns have not been a priority within the framework of Swedish aid given in support of the peace, reconciliation and reconstruction process in Southeast Europe. Sida strongly believes that significant environmental benefits can be achieved as long as environmental issues are properly integrated into projects supporting the reconstruction process. And those environmental considerations will support the process of reaching sustainability in the region.

In accordance with the Terms of Reference (ToR), the aim of the SEA is to recommend how Sida can integrate environmental perspectives into the reconstruction process. This

means that environmental components can or should be included in running as well as planned programmes and projects. The aim is further to target specific environmental problems in the region, in order to support sustainable reconstruction and development.

The objectives are:

- To give proposals on how to integrate environmental considerations into the reconstruction process to ensure sustainable development, through the analysis of the current state of the environment and the process of change;

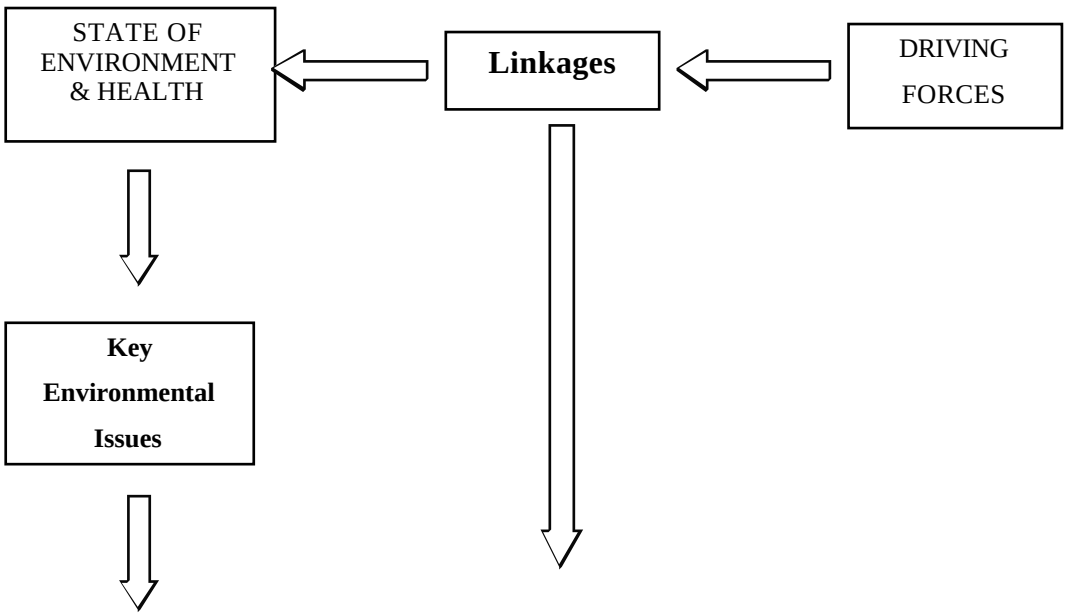
- To identify possible areas for Swedish development co-operation, targeting specific environmental problems as well as developing legal frameworks and building institutional capacity to encourage and enforce environmental protection.

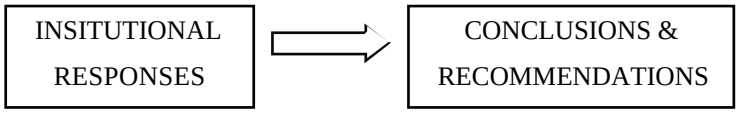
The SEA should be consistent with Sida's overall goals in the areas of poverty reduction; peace, democracy and human rights; environmentally sustainable development and gender equality.

2.3 Scope of Work

The specific components of the SEA, in accordance with the "scope of work" detailed in the ToR, are summarised in Figure 2.1, and explained in more detail below, in Sections 2.3.1 – 2.3.3.

Figure 2.1: Components of the SEA




INSITUTIONAL RESPONSES
CONCLUSIONS & RECOMMENDATIONS

2.3.1 Inception Phase

The inception phase began with an initial workshop at REC headquarters in Hungary during May 5 – 6. REC representatives from Albania, Bosnia and Herzegovina, Kosovo and Macedonia attended the workshop together with consultants from REC Headquarters and SCC Natura. The principle purpose of the workshop was to elaborate upon the various linkages between the driving forces and state of environment and health, by drawing upon the expertise and experiences of the country representatives, to arrive at a working list of "verifiable indicators". And the workshop served to create a common and agreed upon structure for the country reports.

As an important first step, for the sake of clarity, and in anticipation of the forthcoming country studies, several important elaborations were made upon the ToR:

i. a standardised categorisation of environmental issues has been adopted, relating to land, water, air and biodiversity;

ii. human health is interpreted as being subject to the forces of change (e.g. poverty, economy, population) rather than a force that is driving change; health is therefore treated alongside and within the state of environment (see Figure 2.1);

iii. institutions are dealt with in both the driving forces section (where failure to *enforce* legislation rather than legislation per se is deemed to be an important cause of changes in the state of environment and health) and the institutional responses section;

iv. risks associated with the scarce natural resources or environmental degradation in the Western Balkans cannot be viewed as a driving force of conflicts but rather take account of the political and ethnic tensions in the region; a section on *risks, conflicts and environment* is included in Section 3.

v. given possible data constraints and in light of changes that have occurred in the Western Balkans the analysis spans the period 1990 – 2000.

Following these elaborations, a workable list of verifiable indicators, capable of describing (qualitatively and quantitatively) the linkages between state of environment and health, and the driving forces, was constructed during the course of the workshop. Given the large range of possible indicators, during this part of the inception phase, the workshop sought to draw upon the day-to-day experiences of the in-country REC representatives.

Several factors underpinned selection of the verifiable indicators:

i. *consistency* and *comparability* – ensuring indicators are consistent between countries that will enable comparisons to be made between Albania, Bosnia and Herzegovina, Kosovo and Macedonia;

ii. *relevance and effectiveness* – ensuring indicators are relevant to the project objectives, and Sida's action programmes in general, enabling effective recommendations to be made concerning Sida's integration of environmental perspectives into the reconstruction process in the Western Balkans;

iii. *good practice* – ensuring the indicators are sensitive to social, economic, cultural and environmental circumstances found in the Western Balkans while simultaneously adhering to institutional guidelines (i.e. Sida guidelines for Strategic Environmental Analysis; EC Environmental Indicators).

iv. *reliability and accuracy* – ensuring the indicators would enable reliable and accurate measurement of the linkages between the state of environment and driving forces.

v. *availability* – ensuring data would be available so as to provide, as much as possible, a comprehensive list of indicators.

A full list of verifiable indicators, including an indication of their availability, is provided in Appendix I.

2.3.2 Country Studies Phase

The country studies phase took place during May 8 – 26 in Albania, Bosnia and Herzegovina, Macedonia and Kosovo. REC representatives in each of the participating countries had primary responsibility for the country studies. The purpose of the country studies was to describe the state of environment (land, air, water, biodiversity) and health in each country, and applying the verifiable indicators, describe the forces driving changes in environment and health; document the institutional responses.

The country studies were based on face-to-face interviews with relevant personnel within national and international agencies, including governmental and non-governmental organisations, as well as inter-governmental organisations (i.e. World Bank, United Nations, European Union) and drawing upon secondary data sources. The interview phase spanned a period of three weeks and concluded with the production of a country report (see Annex 1 – 4).

In addition to the studies undertaken by REC representatives, SCC Natura consultants visited Macedonia, Albania, Bosnia and Herzegovina and Kosovo. The purpose of the

visits were to gain an overview of the main environmental issues in each country, there causes, and country responses. While the relevant topics are covered in more detail below, and in the individual country reports, several key issues emerged and are worthy of mention at this stage. First, given the recent conflicts in the Western Balkans, there remains a dearth of data concerning environmental issues, making the SEA rather more difficult than might be the case in other countries. Secondly, political instability more or less remains prevalent in the Western Balkans, with environmental and other administrative departments and ministries within the (interim) Government's undergoing rapid and often rather turbulent change. Generally it would appear environment is a low priority (for instance evidenced by budgetary allocations) in Albania, Bosnia and Herzegovina, Kosovo and Macedonia.

2.3.3 Reporting Phase

The reporting phase began with a final workshop (including a preliminary presentation to Sida) in Stockholm during May 29 – 30 attended by REC representatives from the REC headquarter and Albania, Bosnia & Herzegovina, Kosovo and Macedonia, as well as SCC Natura consultants. The purpose of this workshop was to report on the preliminary findings of the field studies, to draw out the similarities and differences between Albania, Bosnia and Herzegovina, Kosovo and Macedonia, and to feed these into the conclusions and recommendations.

2.4 Outputs

The principle outputs of the SEA, in accordance with the ToR, comprise recommendations concerning:

- integration of environmental considerations into the reconstruction process in the Western Balkans;

- identification of possible areas for Swedish support targeting specific environmental problems linked to sectors (and project areas) to which Sida is presently giving support.

In addition, the conclusions of this report (see Section 5) comprises a commentary on relationship between driving forces on the one hand and linkages (depicted by the dashed arrow in Figure 2.1) on the other. The nature of this relationship is discussed below.

3 LINKAGES: ENVIRONMENTAL STATUS AND DRIVING FORCES

The purpose of this section is to provide a brief overview of state of environment and driving forces followed by a detailed presentation of key linkages between state of environment and driving forces.

At this stage an important definitional distinction needs to be made between driving forces on the one hand and linkages on the other. *Driving forces* are treated as indirect causes (i.e. poverty, economy, population, institutions and gender) and *linkages* as direct causes of environmental degradation.

There is evidence in the Western Balkans, for example, of soil erosion being caused by poverty that is linked to intensification of agricultural practices; polluted water being caused by migration of population to urban areas that is linked to inadequate waste water disposal and treatment systems. In this instance poverty and population are the driving forces; intensification and migration of population are the linkages; soil erosion and water pollution are the environmental impacts.

In the following discussion, Section 3.1 and Section 3.2 provide an overview of the main results presented in the country reports. In Section 3.3, the analysis endeavours to go beyond the country reports by separating out driving forces and elaborating upon linkages. Section 3.4 deals with risks, conflicts and environment.

The distinction between driving forces and linkages is considered an important component of this analysis, and SEA in general, most notably, when it comes to forming recommendations concerning integration of environmental considerations into the reconstruction process; identifying possible areas for Swedish environment and development co-operation. Thus the analysis that follows is intended to feed directly into the conclusions and recommendations presented in Section 5.

3.1 State of Environment

The main environmental problems in Albania, Bosnia and Herzegovina, Kosovo and Macedonia relate to land, water, air and biodiversity.

Land

The territory of the four countries covers an area of 116.201 km^2 (approximately one-quarter size of Sweden). Most of the countries are relatively rich in forestland. In Bosnia

and Herzegovina forestland covers 52% of the territory, while in Albania, Macedonia and Kosovo it covers between 36% and 39%. This can be compared to Sweden where forestland covers around 55% of the total country area.

Soil erosion, due to deforestation, poor land management practice and overgrazing of livestock is an important contributor to environmental degradation in all countries. In several localities of Albania (Kerraba, Mallakarstra) the erosion limits are extreme (above 150 tons/ha/year). And some 20% of the Albanian territory are subject to severe erosion (approximately 30 tons/ha/year) while 10% of the territory of Bosnia and Herzegovina is badly damaged by erosion. Soil is additionally degraded by industrial and household waste dumps. By the beginning of 1990's, for instance, annual industrial waste production amounted to over 1 million tons of solid industrial waste in Macedonia and Albania.

Industrial waste presents a major threat to the land in all countries. There has been little if any substantive rehabilitation of former chemical and fertiliser plants (Albania, Kosovo, Bosnia and Herzegovina), open pit coal and other mines (Bosnia and Herzegovina, Kosovo) and industrial waste dumps.

A specific post-conflict situation in Bosnia and Herzegovina and Kosovo concerns land mines and UXOs (unexploded ordinances). It is estimated that there are between 3 to 6 million land mines in more than 16,000 minefields on the territory of Bosnia and Herzegovina. In Kosovo alone, 232 casualties were caused by land mines, of which 40 were fatal, between two summer months of 1999. Until land mines are cleared, the opportunities for reconstruction and agriculture work will be severely limited.

Use of pesticides in agriculture has declined in Macedonia (from 2.706 tons in 1983 to 659 tons in 1993) and Bosnia and Herzegovina. Almost 45% of the current stock of 1000 tons of expired pesticides in Albania are classified as hazardous and have not been deposited in the adequate disposal facilities.

Water

While Albania and Macedonia, in terms of water resources, are relatively rich by European standards, consumption remains low. In Kosovo only urban areas are connected to a water supply, while not more than 32% of the urban population in Bosnia and Herzegovina is supplied with safe and treated water. Specific data on the quantity of lead, pesticides, nitrates and microorganisms in drinking water samples is limited or not available in Bosnia and Herzegovina and Kosovo, while there is no recent data (post-1981) for groundwater quality in Macedonia.

Groundwater remains polluted, in all four countries, with uncontrolled use of fertilisers and chemicals, untreated sewage and leaching from contaminated soils. The contamination of surface waters downstream of towns, by household waste and faecal pollution, pose a

serious risk to health, particularly, in Kosovo and Bosnia and Herzegovina. Post-war, mortality due to infectious intestinal diseases have been increasing rapidly in Kosovo (from 390 to 1420 cases per 100,000 inhabitants); in Bosnia and Herzegovina there was a rise from 1875 to 7421 cases of Hepatitis A, and from 3411 to 21,937 cases of diarrhoea.

One of the major threats to water in all four countries concerns inadequate treatment of industrial (cement, leather, textile, wood processing, chemical, fertiliser, oil and gas processing, mining) pollutants. Between 1997 and 1998, 15,790 tons of liquid wastes were discharged into Albanian rivers, lakes and water resources. Data shows that only 3% of all rivers in Bosnia and Herzegovina are clean and free of pollution, while 30% of rivers suffer from varying levels of eutrophication.

Air

There are only few specific data on air quality available within the countries. Air quality has not been measured systematically for many years in Kosovo, while the first efforts to monitor air pollution are in the process of being initiated in Albania.

Air quality problems have been observed in major urban and industrial areas in all four countries. Air pollution from five biggest Macedonian towns is affecting some 600,000 people or 30% of the total population. Emissions above maximum allowable concentration (MAC) limits, in the early 1990s, were not uncommon within the vicinity of mining, industrial and energetic complexes in Kosovo. The atmospheric lead concentrations in central Mitrovice exceeded MAC limits on daily basis for between 62% and 87% of the time, while in Pristina, dust pollution exceeded these limits (on average) 31% of the time.

The operating thermal power plants in Albania have discharged into the air 1,650 tons of ashes, 7,100 tons SO_2, 1,320 tons of dust between 1997 and 1998. It has been estimated that 10,000 tons of SO_2 is emitted from the largest plants in Macedonia (Veles smelter, iron plant).

Air quality is also accentuated by soot, slag, barren soil, and ash owing to inadequate disposal and treatment of industrial waste, as well as traditional burning of household waste in some countries.

The last decade witnessed an increase in the pollutant emissions from non-stationary sources, specifically from traffic. The content of lead in gasoline is 0.6 g/l in Macedonia, compared to the EC standard of 0.15 g/l. Local air in all countries is further degraded by emissions from the buses and heavy vehicles using low quality diesel.

Biodiversity

All countries are well known for their rich and varied flora and fauna. Approximately 30%

of European flora occurs in Albania, with about 3200 flora species, and 756 fauna species. There are 3500 higher plant, 55 known fish, 78 mammal and 330 bird species in Macedonia. More than 2000 species of vascular flora have been found on the territory of the only National Park in Kosovo (Sar Planina).

Despite the high diversity of ecosystems and habitats, areas preserved as National Parks or Protected Areas are relatively small. In Kosovo and Bosnia and Herzegovina, 0.5% of the country is under protection. Kosovo has one National Park, two regional parks, 11 nature reserves, and 32 monuments of nature with an abundant diversity of both flora and habitat. Sar Planina is included in the list of assets proposed for the UNESCO Heritage Status and Biosphere Parks. In Macedonia 6.6% of the territory is under some kind of protection, including three national parks (108,000 ha), three areas with special characteristics (2,338 ha), 14 special animal and plant reserves and 48 natural monuments (56,850 ha). In Albania, 5.8 percent of the whole country area is under protection with only one site covered under the RAMSAR Convention.
Transboundary lakes Ohrid (shared by Albania and Macedonia), Shkodra (shared by Albania and Montenegro), and Prespa are points of floristic and fauna exchange, including different species of fish, and many types of unique and endangered aquatic vegetation. Shkodra Lake is hosting over 250 registered waterfowl and waterbird species including 73 migratory nesting species and many endangered and rare birds such as pygmy cormorants and Dalmatian pelicans.

Despite its richness in biological and landscape diversity, Albania has a very high rate of biodiversity loss. At least two species of plants and four species of mammals are extinct, while 17 bird species no longer nest in Albania. Lake Dojran, on the border between Macedonia and Greece, has lost 109 out of 257 algae taxons because of excessive water abstractions for agriculture. National Park Sar Planina in Kosovo, Mountain Vlasic in Bosnia and Herzegovina, have been exposed to deforestation activities despite having biodiversity of global significance. This includes members of KFOR in Kosovo carrying out unauthorised works (opening quarries and construction work for military purposes) while the large areas of land have been mined.

3.2 Driving Forces

The main driving forces of environmental problems in Albania, Bosnia and Herzegovina, Kosovo and Macedonia relate poverty, economy, population, institutions, gender and risks.

Poverty

Poverty is a feature common to all countries. For instance, some 77% of Albanian population is below the poverty line, and 60% of the population of Bosnia and

Herzegovina is deemed to be in a state of poverty. In Macedonia, those below the poverty line have risen from 9% in 1994 to a little over 18% in 1996. Official unemployment figures are comparatively high, ranging from approximately 18% in Albania, through to 20% in Bosnia and Herzegovina, 34.5% in Macedonia and 70% in Kosovo.

Economy

Over the last decade, rapid industrialisation, extractive industries and urbanisation has been responsible for displacing agricultural land in Albania, Bosnia and Herzegovina, Kosovo and Macedonia. Prior to conflicts in Bosnia and Herzegovina and Kosovo, economic activities were concentrated on extractive industries, production of raw materials, chemicals and fertilisers. The major branches of the Albanian economy comprise food and chemical production, oil refining, cement production, copper smelting and wood and paper industries. Macedonia is a producer of ores, cement, wool yarn, cotton fabric, tobacco, steel and basic chemistry products. Agriculture is an important sector in the region.

Population

The total population of Albania, Bosnia and Herzegovina, Kosovo and Macedonia is 11,397,076 (comparable to the combined population of Sweden and Norway). With the exception of Bosnia and Herzegovina's with 9.8% decrease in population since 1991, the population in other countries has increased. Compared with 50 years ago, the Albanian population nearly tripled. Over the same period of time, migration of population towards urban centres has accelerated. In Macedonia, 80% of households (comprising an average of four family members) depend on less than 3 hectares of agricultural land per household. Population density in urban areas has increased rapidly in Albania (from 82.4 inh/km2 in 1960 to 179.3 inh/km2 in 1997). In Macedonia, 59% of the total population lives in 29 cities. According to data from Kosovo, approximately 30% of the population lives in urban areas, while the remaining population lives in over 2000 villages.

Institutions

In some countries governments attach low priority to environmental matters (partly evidenced by budgetary constraints). In Albania the environmental sector's share in the total state budget in 2000 amounted to no more than 0.01%. The majority of funds, moreover, comprise expenditure for wages and other administrative expenses, while as little as 14% is invested in direct environmental actions. In Kosovo the interim government (UNMIK) has been relatively slow in setting-up a working environmental administration. In other countries, inter-entity conflicts have prevented co-operation on environmental matters. In Bosnia and Herzegovina, the Federation of Bosnia and Herzegovina and Republika Srpska has failed to agree on a preferred format for a joint National Environmental Action Plan. Macedonia, by contrast, has an active Ministry of Environment (established in 1998) comprising 81 full-time employees.

In the case of NGOs, particularly in Bosnia and Herzegovina and Kosovo, there has been a tendency to concentrate activities on social development issues (e.g. education and training, human rights, civil society, humanitarian issues) rather than on environment exclusively. In Albania and Macedonia, by comparison, there are 60 and 200 environment-dedicated NGOs respectively.

Gender

The connection between environment and gender is perhaps the weakest of the driving forces. As a general observation men tend to dominate decision-making positions with women remaining relatively inactive in politics and government.

3.3 Linkages

The main linkages are tabulated on a country-by-country basis in Appendix II. These include linkages between poverty, economy, population, and land, water, air and biodiversity; linkages associated with governmental and non-governmental institutions.

Some of the more common linkages are summarised below.

Albania

Land degradation, caused by economic activity and population migration, linked to haphazard disposal of solid waste; water pollution, caused by poverty and economic activity, linked to inadequate waste water discharge and treatment; land and biodiversity degradation, caused by poverty and economic activity, linked to domestic and commercial deforestation; biodiversity loss, caused by poverty and economic activity, linked to illegal fishing; land degradation caused by poverty and population migration, linked to abandonment of rural settlements; air pollution, caused by poverty and population migration, linked to burning of waste.

Bosnia and Herzegovina

Land and biodiversity degradation, caused by economic activity, linked to domestic and commercial deforestation; waste pollution, caused by poverty, economic activity and population migration, linked to inadequate wastewater discharge and treatment.

Kosovo

Land and biodiversity degradation, caused by poverty and economic activities, linked to domestic and commercial deforestation; water pollution, caused by poverty, economic activity and population migration, linked to inadequate waste disposal and treatment; air pollution, caused by economic activity and population migration, linked to burning of waste.

Macedonia

Air pollution, caused by poverty, economic activity and population migration, linked to vehicle emissions; water pollution, caused by economic activity and population migration, linked to inadequate waste disposal and treatment.

Governmental and Non-Governmental

There is a general lack of awareness, in all countries, concerning environmental matters. Poorly trained and inexperienced central government staff is prevalent (with the exception of Macedonia) as is the failure of governments to undertake monitoring and enforce environmental legislation. Also, with the exception of Macedonia, curricula concerning environmental matters in secondary and tertiary education remains poorly developed. In the case of NGOs, there is a general lack of experience, and limited capacity to impact on decision-making and public opinion.

3.4 Risks, Conflicts and Environment

In general environmental degradation or competition for natural resources in the Western Balkans cannot be viewed as a driving force for conflicts. The risk for conflict caused by those factors must be seen as very low if at all. Rather political and ethnic tensions have been a catalyst for conflicts in the recent past and this has in turn impacted negatively on the environment.

Environmental effects of recent conflicts are evident. The bombing in Bosnia Herzegovina and Kosovo has obviously lead to environmental damage influencing both land and waters. Further environmental pressure has been caused by concentrations of refugees in certain areas. This has resulted in deforestation and in pollution of soil and water. The need for firewood, building material etc. has also lead to violation of protected areas. The impact of the international community (international aid and military forces) particularly in Kosovo and Bosnia and Herzegovina is also evident. The large number of people and vehicles has probably resulted in a rise in air and water pollution The already strained waste management systems has been set under further pressure because increased volumes of as solid waste, oil spillage etc.

Finally, land mines and UXOs are a serious impediment to rehabilitation and development of agriculture and forestry, as well as resulting in human casualties.

4 RESPONSES

The purpose of this section is to document and analyse measures taken by international donors - including Sida - and domestic responses to address environmental problems and their causes.

4.1 Domestic responses

An overview of the main governmental bodies responsible for environmental protection in each of the four countries is presented in the table 4.1 below.

Table 4.1: Governmental institutions responsible for environmental protection in Albania, Bosnia and Herzegovina, Kosovo and Macedonia

Albania	Bosnia and Herzegovina	Kosovo	Macedonia
National Environmental Agency (since 1998)	Ministry of Physical Planning and Environment (Federation of Bosnia and Herzegovina) Ministry of Urbanism, Physical Planning, Construction and Environment (Republika Srpska)	Department for Environmental Protection (UNMIK) since 1999	Ministry of Environment (since December 1998)

The National Environmental Agency (NEA) established in 1998, is the highest governmental body responsible for environmental issues in Albania. It is responsible for defining the Government's strategy on environment, organising and co-ordinating national environmental protection measures, and proposing steps to be taken for the protection of land, air, water, and biodiversity. NEA also co-ordinates activities with other agencies or ministries responsible for environmental protection. The General Directorate of Forests and Pastures, within the Ministry of Agriculture and Food, is an example of one agency with important environmental responsibilities with regard to biodiversity.

In Bosnia and Herzegovina, there are two different organisational bodies responsible for environment. In the Federation, the main governmental body responsible for environmental matters is the Ministry of Physical Planning and Environment, while in Republika Srpska, responsibility lies with the Ministry of Urbanism, Physical Planning, Construction and Environment. Two Steering Committees (water; environment) were

established in 1998 at the state level with responsibility for co-ordination and co-operation between the responsible Ministries in each entity. There is no governmental body responsible for environment on the state level.

The main body responsible for environment in Kosovo is the Administrative Department of Environmental Protection (ADEP), which is headed by two co-heads, one international, and one local (yet to be appointed). ADEP includes five to six international staff. The Department for Agriculture and Forestry is another institution with responsibility for environmental matters.

The Macedonian Ministry of Environment was established as a separate institution in December 1998 (formerly it was part of the Ministry of Urban Planning, Construction and Environment). Strong pressure from the World Bank and IMF to reform public administration and decrease the state budget in Macedonia continues to threaten the Ministry's livelihood. The Ministry currently has 81 full-time employees. The main responsibilities of the Ministry are environmental protection (air, water, landscape, forest, wildlife), regional development, national research, and heritage education. Other institutions with an environmental responsibility include, among others, the Ministry of Forestry, Agriculture and Water Management, Ministry of Health, Ministry of Urban Planning and Construction.

At present there is little on-going regional co-operation addressing common environmental concerns. However, there is a regional initiative called Regional Environmental Reconstruction Program (REReP), which is an initiative by participants in the Stability Pact for South Eastern Europe. This program is currently in the starting phase. REReP's areas of priorities are institutional strengthening and policy development, environmental civil society building, emergency assistance for combating war damage, reinforcement of existing co-operative mechanisms and structures, development of regional cross-border projects and support to priority national and local environmental projects.

National considerations on international environmental conventions and protocols in Albania, Bosnia and Herzegovina, Kosovo and Macedonia are presented in table 4.2 below.

Table 4.2: Overview of environmental conventions and protocols in Albania, Bosnia and Herzegovina, Kosovo and Macedonia

Convention/Protocol	Albania	Bosnia and Herzegovina	Kosovo	Macedonia
Barcelona Convention (Protection of Mediterranean Sea against Pollution)	A			
Convention on Long-range Transboundary Air Pollution	Under Preparation		R by Yugoslavia	R
Vienna Convention for the Protection of the Ozone Layer	-	-	R by Yugoslavia	R
Ramsar Convention	R	-	-	-
Montreal Protocol on Substances that Deplete Ozone Layer		-	R by Yugoslavia	R
Bern Convention (Protection of Flora and Wildlife Fauna of the Natural Environment in Europe)	R	-	-	-
United Nations Framework Convention on Climate Change	-	R	-	R
Convention on Biological Diversity	-	-	-	R
Arhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters	S	-	-	R
Convention on the Protection and Use of Transboundary Waters and International Lakes	R	-	R by Yugoslavia	Initiative for Ratification
ESPOO Convention on Environmental Impact Assessment In a Transboundary Context	R	-	R by Yugoslavia	R
Convention on Transboundary Effects of Industrial Accidents	R	-	R by Yugoslavia	
Bonn Convention (Protection of Migratory Species of Wildlife)	Under Preparation	-	-	R
Basel Convention (transboundary movement of hazardous waste and its destruction)	Under Preparation	R	-	R
CITES	Under Preparation	-	R by Yugoslavia	-

R = Ratified; A = Accession; S = Signed

4.2 Swedish Support to Sustainable Development

Thus far environmental issues have not had top priority in Swedish development assistance to the Western Balkans. There is, however, considerable commitment within Sida to incorporate environmental issues into on-going projects, and to consider specific environmental, or environment-oriented, projects for future development co-operation in the Western Balkans.

Projects supported by Sida to-date have been in areas of humanitarian assistance,

reconstruction, psychosocial support, human rights and democracy, business and infrastructure, institution building and culture. The scale and intensity of these projects have varied between Albania, Bosnia and Herzegovina, Kosovo and Macedonia.

During 1999, Sida allocated around 203 million SEK (25,4 million USD) for Bosnia and Herzegovina; 72 million SEK for Kosovo (9 million USD); 56 million SEK for Albania (7 million USD); 9 million SEK for Macedonia (1,1 million USD).

Country strategies have been developed for Bosnia and Herzegovina and for Kosovo (FRY); the latter has also been approved by the Swedish government. In the case of Albania, and especially for Macedonia, Sida has not provided much development assistance in recent years, and is currently investigating possibilities for future co-operation. As for Macedonia, Sida is currently investigating how to enlarge the overall programme. Concerning Kosovo, the majority of development assistance has been concentrated on humanitarian assistance and reconstruction. Sida has indicated plans for long-term assistance, which will focus on sustainable development rather than on humanitarian assistance.

Given recent conflicts in the Western Balkans, not surprisingly, Swedish and international assistance has concentrated mainly on humanitarian and reconstruction assistance, which have generally low immediate environmental impacts. Peculiar to Swedish support, however, is the requirement for Environmental Impact Assessment (EIA) to be carried out prior to commencement of projects. Sida encourages the use of environmentally friendly and locally produced material, with a view to minimising negative impacts on the environment.

One notable exception to Sida's emphasis on environment concerned its contribution to the reconstruction of the coal-fired Kosovo B thermal power plant. This decision was due to the acute need for heating during the winter of 1999 and the fact that Kosovo B had a filter system and reasonable production efficiency compared with the older Kosovo A plant.

Thus far, Sida has not implemented any specific environmental projects, although, there have been some modest efforts to tackle certain environmental problems (see Appendix III). These efforts have been concentrated in Albania and Macedonia and have produced mixed results.

4.2.1 Local Initiatives

In Albania, Sida support has not yet incorporated environmental matters, nor has it given adequate consideration to Albanian priorities (i.e. urban waste management, wastewater treatment and industrial pollution).

In Bosnia and Herzegovina, a National Environmental Action Plan (NEAP) does not exist. There are plans for development of a NEAP for the country and several initial scoping meetings have been held between the Federation of Bosnia and Herzegovina and Republika Srpska.

In Kosovo, in December 1999, a transitional environmental strategy was prepared as an UNMIK strategy document. The objective of the document is to provide a framework for UNMIK to set out environmental priorities and provide guidelines to promote a sustainable economic reconstruction and development process for Kosovo. The UNMIK strategy has not been enacted to-date.

The Macedonian NEAP was completed in 1997. It defines policy and priority actions as well as identifies areas that pose a threat to human health and the environment. Sida is familiar with the environmental work and the NEAP of Macedonia and it is understood will take priorities into consideration when creating and discussing future development co-operation.

4.2.2 Donor Co-ordination

While Sida has not yet integrated its efforts with the work of other donors in Albania, it is currently tracing their activities. The co-ordinating body for in-country international development assistance in Albania is the Ministry of Economic Co-operation and Trade.

In Bosnia and Herzegovina, the main co-ordinating body is the Office of the High Representative (OHR), to whom all international donors must report their in-country activities. However, Sida has expressed concern about insufficient co-ordination by the OHR.

Sida does not find the international development assistance in Kosovo to be well co-ordinated. The main co-ordinating body is UNMIK, which co-ordinates UNHCR (humanitarian assistance), UN Civil Administration, OSCE (democracy and human rights) and EC (reconstruction). There are plans within the EC section to map all donor-activities within all sectors.

In Macedonia, at present, there is no organised co-ordination of foreign development assistance, although in some sectors, donors are acting as de facto co-ordinators, taking it upon themselves to gather information concerning other donor's activities. And according to Sida, the Macedonian Government does not currently have the capacity to co-ordinate incoming foreign assistance. At present Sida is mapping the efforts of other donors in Macedonia.

4.3 Other Donors

Common to the Western Balkans, and especially Bosnia and Herzegovina and Kosovo, is the large number and variety of international donors. In this section, therefore, only those activities of the largest international donors will be reviewed.

4.3.1 EC Development Co-operation[3]

OBNOVA Programme

In Bosnia and Herzegovina, the EC has the following priorities: integrated refugee assistance; economic regeneration; transport; energy; agriculture; institutional strengthening; management.

The former Yugoslav Republic of Macedonia currently benefits from Phare funding aimed at refugee related expenditure in areas of health, education and social assistance, following the inflow of Kosovo refugees.

The initial areas of intervention in Kosovo were demining, procurement of essential supplies for rehabilitation of housing and local infrastructure, village employment and rehabilitation, support for local administration, transport and the rehabilitation of Mitrovica Hospital.

Phare

Phare is currently the main channel for EC financial and technical co-operation with the countries of central and Eastern Europe.

HYPERLINK

For Albania, Bosnia and Herzegovina and Macedonia, Phare provides support for their transition to democracy and a market economy. Phare support has traditionally focused on a number of key priorities sectors in which reform and changes have been required in the transition from a centrally planned to a market-oriented system. Other areas of interest in Albania, Bosnia and Herzegovina and Macedonia are: public administration and institutional reform; local community development; large-scale infrastructure development and agriculture.

4.3.2 World Bank

The main areas of the World Bank's (WB) involvement in Albania, Bosnia and Herzegovina and Macedonia are in supporting the continuation of the reform process; reducing poverty and improving social services; social protection; health; privatisation

[3] Source: EC home page

and financial sector reforms; reforming agriculture; developing infrastructure and energy sectors; supporting anti-corruption measures.

4.3.3 World Bank and EC – Regional Approach

Building on the existing collaborative work on a country-by-country basis in the region, the EC and WB have operated under a special mandate to lead co-ordination efforts of all bilateral and multilateral aid to the Balkans. Under this mandate, the two institutions are responsible for "co-ordination of matters related to the economic recovery, reform, and reconstruction of the South-East Europe region" including mobilising donor support, providing economic analysis, developing appropriate conditions and implementing projects.[4]

[4] www.seercon.org

5 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this section is to conclude the main findings of the SEA, followed by recommendations concerning possible future environmental activities by Sida in the Western Balkans, and possible limitations of the study.

5.1 Conclusions

The aim of this report was to make recommendations concerning Sida's integration of environmental matters into the reconstruction process in the Western Balkans; to identify possible areas for Swedish Development co-operation. Following Sida guidelines, and drawing upon the experiences of other institutions, SEA provided the conceptual tools for this purpose.

In the SEA of Albania, Bosnia and Herzegovina, Kosovo and Macedonia, a host of indicators were employed to verify the relationship between driving forces and environmental degradation; the concept of 'linkages' was introduced into the analysis.

One of the more striking features of these linkages is the high degree of commonality between Albania, Bosnia and Herzegovina, Kosovo and Macedonia. Some of the more common linkages identified in the SEA included, for instance, land and biodiversity degradation, caused by economic activity and population migration, linked to haphazard disposal of solid waste; water pollution, caused by poverty and economic activity, linked to inadequate waste water discharge and treatment; land and biodiversity degradation, caused by poverty and economic activity, linked to domestic and commercial deforestation; biodiversity loss, caused by poverty and economic activity, linked to illegal fishing; land degradation caused by poverty and population migration, linked to abandonment of rural settlements; air pollution, caused by poverty and population migration, linked to burning of waste.

The identification of linkages, in this way, forms a pivotal component of the SEA of the Western Balkans. Unlike driving forces, which deal with indirect causes (i.e. poverty, economy, population, institutions and gender) linkages go beyond the conventional analysis, enabling identification of the root or direct causes of environmental degradation. And this in turn provides the necessary foundations for targeting specific environmental problems and making recommendations concerning Sida actions in the Western Balkans.

5.2 Recommendations

As a matter of practice, EIA should be undertaken in the preparation phase of all reconstruction projects, and attempts should be made to incorporate environmental considerations into those ongoing projects (e.g. using environmentally friendly building

material, introducing ecologically sound production methods into agricultural production).

A more strategic approach, which aims to integrate environmental considerations into the reconstruction process in the Western Balkans, and identify possible areas for Swedish environment and development co-operation, requires a SEA that identifies the direct causes, or linkages, associated with environmental degradation.

In the table below are linkages, which are common to Albania, Bosnia and Herzegovina, Kosovo and Macedonia listed as well as recommended areas for Sida action.

Table 5.1: Recommendations for Sida Action

Linkages	Recommendations
Deforestation	· Support to communities dependent on forest resources: e.g. awareness raising of forestry issues, community forestry development, afforestation programmes; · Support to forestry departments and ministries: e.g. development of a national forest sector master plan, technical and on-the-job training on environmental aspects of sustainable forest management; · Protected forest area's programmes: e.g. proper management of existing forest parks and reserves, bio-diversity inventories.
Poor agriculture practices	· Support sustainable development of agriculture: e.g. introduction of ecological agricultural practices, promote trade with ecological products from agriculture, education of local farmers on sustainable agriculture.
Air emissions	· Clean energy production: e.g. application of emission reduction technologies (filters, etc.), modernisation of production technologies; · Alternative energy production: e.g. investigating and testing suitable alternative energy sources.
Solid waste	· Waste management programmes: e.g. municipal waste programmes, development of institutional incentives to reduce waste.
Waste water	· Waste water programmes: e.g. municipal wastewater programmes, development of institutional incentives to reduce waste; · Water resources projects: e.g. design and introduction of watershed management models.
Institutional incapacity	· Governmental institution development programmes: e.g. support development of environmental laws and regulations, support environmental training of institution's officials, develop strategies and programs for environmental monitoring, support development of enforcement strategies; · Non-governmental institution (NGO) development programmes: e.g. training NGOs on environmental awareness creation, support NGOs carry out local environmental projects.
Lack of public awareness	· Education for sustainability: e.g. environmental training in schools, rural community projects, support NGOs; · Availability and dissemination of information: e.g. environmental education of journalists.

Linkages refer to the most common causes of environmental degradation in the Western Balkans, and areas where Sida development assistance should be targeted to have maximum impact on minimising this degradation.

Recommendations cover those specific actions that Sida might undertake in addressing environmental problems in the Western Balkans. These actions include supporting communities and governmental institutions in managing forest resources, contributing to sustainable agricultural practices, developing cleaner and alternative energy production, assisting in solid waste and waste water management, contributing to capacity building amongst governmental and non-governmental institutions, and finally, increasing levels of public awareness concerning environment and sustainability.

To ensure Sida's future actions concerning SEA are cost-effective (i.e. maximise impact and minimise cost) we recommend, moreover, developing further Sida's 'SEA Guidelines' to include linkages. While SEA emphasises the importance of identifying driving forces, tailoring recommendations around indirect causes, alone, tends to over look those factors which contribute directly to environmental degradation.

5.3 Limitations

In identifying linkages between driving forces and environmental degradation we recognise the probability of over-simplifying environmental problems in the Western Balkans. While facilitating comparison between countries in a consistent and coherent manner, should the reader seek more detail on a country-by country basis, we refer to the country reports appended to this report.

The nature of SEA dictates that indicators verifying the relationship between cause (driving forces and linkages) and effect (environmental degradation) are indicative rather then conclusive. In this report, apart from a careful selection of indicators, we recognise that in the absence of statistical analysis, there is the risk that the relationships we have described are rather more spurious. Thus SEA might be treated as first step in the analysis of environmental problems.

APPENDIX I

A full list of verifiable indicators, including an indication of their availability, is presented in the table below. The left-hand side of the table lists the individual categories and the right-hand side of the table depicts the availability of verifiable indicators based on the in-country field studies.

Verifiable Indicators

	Albania	Bosnia and Herzegovina	Kosovo	Macedonia
POVERTY				
· purchasing power	Yes	Yes	Yes	Yes
· population above or below poverty line	Yes	Yes	No	Yes
· population receiving social transfers	Yes	Yes	No	Yes
· unemployment	Yes	Yes	Yes	Yes
· population with without sanitation	No	Yes	Yes	Yes
· infant mortality	Yes	Yes	Yes	Yes
ECONOMY				
Agriculture and livestock				
· livestock	Yes	Yes	No	Yes
· fertiliser consumption	Yes	Yes	No	Yes
· irrigated land	Yes	Yes	Yes	Yes
· pesticide consumption	Yes	Yes	No	Yes
· agriculture in protected areas	Yes	No	No	No
· red listed species	Yes	No	Yes	No
Forestry				
· deforestation rates (legal and illegal)	Yes	No	No	No
· damage caused by diseases	Yes	No	Yes	No
· forests in protected areas	Yes	No	Yes	Yes
· red listed species	No	No	Yes	No
Energy				
· energy sources	Yes	Yes	No	Yes
· energy production and emissions	Yes	Yes	No	Yes
· hydropower potential and utilisation	Yes	Yes	No	No
Transport				
· number of vehicles	Yes	Yes	Yes	Yes
· average age of vehicles	No	Yes	Yes	Yes
· fuel type and quality	Yes	Yes	Yes	Yes
· public transport demand	No	No	No	No
· level of emissions	No	Yes	No	Yes
· modifications (catalytic converters)	No	No	No	Yes

	Albania	Bosnia and Herzegovina	Kosovo	Macedonia
Industry				
· emissions (air, water, land)	Yes	No	No	Yes
· clean technology; end of pipe technology	No	No	No	No
· quantity of hazardous waste	Yes	Yes	No	Yes
· ownership structure	No	No	No	Yes
· industrial water consumption	Yes	Yes	No	No
Consumption				
· municipal waste	Yes	Yes	No	Yes
· municipal water consumption	Yes	Yes	No	Yes
· recycling; re-using	No	No	No	No
Natural resources				
· extraction (minerals, marine/fish waters)	Yes	Yes	No	Yes
· red listed species in marine/fresh waters	Yes	No	No	No
· tourists	Yes	No	No	No
· area of wetlands	Yes	Yes	No	No
POPULATION				
· urban and rural	Yes	Yes	Yes	Yes
· status (age, gender, etc)	Yes	Yes	Yes	Yes
· density	Yes	Yes	Yes	Yes
· migration (urban, rural, households)				
· population growth	Yes	Yes	No	Yes
· arable land	Yes	Yes	Yes	Yes
· green space per capita	Yes	No	No	No
· consumption of water (safe/not safe)	Yes	Yes	Yes	Yes
· water discharge	Yes	Yes	No	Yes
INSTITUTIONS				
· collection/avoidance (income tax, VAT)	No	Yes	Yes	Yes
· size of grey economy	No	No	No	Yes
· collection of environmental taxes7charges,	Yes	No	Yes	Yes
· budget allocation for environmental management	Yes	No	No	Yes
· NGOs by type	Yes	No	No	Yes
· environmental publications (readership, circulation), TV program	Yes	No	Yes	Yes
· staff by type (inspectors, ministry staff, environmental education, environment, agriculture)	Yes	Yes	Yes	Yes
· Environmental education curricula in secondary, tertiary education	Yes	No	Yes	Yes
GENDER				
· woman headed households	No	Yes	Yes	No
· woman headed institutions (NGOs, media, SME, schools)	No	No	No	Yes
· Tenure security (ownership) - gender, ethnicity, geographical region	No	No	No	No
· Plot size	No	No	No	No

APPENDIX II

Albania Linkages

Poverty	Economy	Population

Land · deforestation caused by firewood collection · agricultural intensification · abandonment of rural settlements	Land · unclear and complex land tenure arrangements · deforestation for terrace construction · deforestation caused by commercial exploitation · abandonment of rural settlements · haphazard disposal of domestic waste inadequate waste treatment facilities	Land · abandonment of rural settlements · agricultural intensification · enlargement of towns · haphazard disposal of domestic waste · inadequate waste treatment facilities
Water · inadequate waste water discharge and treatment	Water · urban and industrial waste water discharge · toxic waste disposal from oil-drilling and extraction activities · urban and industrial waste disposal storage of hazardous chemicals and expired pesticides	Water · inadequate waste water discharge and treatment · inadequate water delivery system inadequate waste disposal and treatment facilities
Air · burning of waste	Air · lignite-powered thermal power plants · increase in vehicle emissions · importing of second hand cars out-dated industrial emission treatment systems	Air · burning of waste
Biodiversity · deforestation caused by firewood collection · illegal fishing and taking of marine and fresh water fauna refugees camps located close to protected or important areas for biodiversity	Biodiversity · deforestation caused by commercial exploitation · forest fires for clearing pastoral areas · flora and fauna of Ohrid Lake under threat from waste from iron ore plant · poor fishing practices illegal hunting	Biodiversity · intensification of fishing and forest-related activities in certain areas · fragmentation of habitats · overgrazing of pastoral areas · abandonment of rural settlements

Bosnia and Herzegovina Linkages

Poverty	Economy	Population

Land · deforestation caused by firewood collection	Land · industrial displacement of agricultural land · deforestation for housing construction/reconstruction · poor agricultural practices · leakage from earlier industrial waste sites · haphazard disposal of domestic and industrial waste	Land
Water · inadequate waste water discharge and treatment	Water · inadequate water delivery system · haphazard disposal of waste · inadequate waste water discharge and treatment	Water · inadequate waste water discharge and treatment
Air · burning of waste	Air · increase in vehicle emissions	Air
Biodiversity	Biodiversity · deforestation caused by commercial exploitation · overgrazing of pastoral areas	Biodiversity

Kosovo Linkages

Poverty	Economy	Population
Land · deforestation caused by firewood collection	Land · urban and urban displacement of agricultural land · deforestation for housing construction · haphazard disposal of domestic and industrial waste · inadequate waste treatment and disposal	Land
Water · inadequate waste disposal and treatment	Water · urban an industrial waste disposal · inadequate waste water discharge and treatment	Water · urban waste discharge · inadequate waste disposal and treatment
Air	Air · lignite-powered thermal power plants · reliance on private versus public transportation · importing of second hand cars · inadequate treatment of industrial emissions · out-dated industrial production technology · burning of waste	Air · burning of waste
Biodiversity · deforestation caused by firewood collection	Biodiversity · deforestation caused by commercial exploitation	Biodiversity

Macedonia Linkages

Poverty	Economy	Population
Land · deforestation caused by firewood collection	Land · out-dated industrial production technology · out-dated agricultural and forestry practices · inadequate landfill facilities · high demand for wood and wood products	Land · increase in amounts of solid waste · agricultural intensification · overgrazing in pastoral areas
Water · inadequate waste disposal in rural areas	Water · industrial waste water discharge · inadequate waste disposal and treatment · toxic waste discharge from extraction activities	Water · inadequate waste disposal and treatment · inadequate water delivery system
Air · vehicle emissions · importing of second hand cars · use of low-quality fuels	Air · vehicle emissions · inadequate treatment of industrial emissions · out-dated industrial production technology	Air · vehicle emissions
Biodiversity · Illegal gathering of plants and herbs	Biodiversity · electricity production from hydroelectric power plants	Biodiversity · tourism (especially on Lake Ohrid)

Institutional Linkages

Governmental	Non-Governmental

Albania	· poorly trained and experienced staff especially on local level in administration · inadequate if any monitoring · low enforcement · limited environmental education · low environmental awareness creation · low respect for institutions and authorities	· lack of experience in field of environment · limited impact on decision making and public opinion · low environmental awareness creation · mainly active in urban centres
Bosnia and Herzegovina	· inadequate institutional framework · no monitoring · no enforcement · lack of trained and experienced staff · lack of respect for institutions and authorities · high level of criminality · lack of environmental education · low environmental awareness creation	· lack of experience in field of environment · limited impact on decision making and public opinion · low environmental awareness creation
Kosovo	· inadequate institutional framework · no monitoring · no enforcement · lack of trained and experienced staff · lack of respect for institutions and authorities · lack of environmental education · low environmental awareness creation	· lack of experience in the field of environment · low environmental awareness creation
Macedonia	· lacking experience in local level administration · limited monitoring · low environmental awareness creation	· lack of experience in the field of environment

APPENDIX III

Environment Oriented Projects in Albania, Bosnia and Herzegovina, Kosovo and Macedonia[5]

Country	Projects*	Description	Duration	Budget
Albania	1. Evaluation of pollution of Fani River	Evaluation of the present magnitude of pollution in Fani river. Modern cleaning technology to be introduced	18 months (delayed due to "disturbances")	4,5 million SEK (0,6 million USD)
	2. Transfer of municipality technology	Elaboration of project documents for potential projects regarding drinking water, waste water treatment and solid waste treatment.	4 months	2,3 million SEK (0,3 million USD)
	3. Prefeasibility study regarding possible technical co-operation on National Air Protection Strategy	Prefeasibility study to assess the possibilities to support the implementation of the proposed project.	1 week	136 000 SEK (17 000 USD)
Bosnia and Herzegovina	None	-	-	-
Kosovo	None	-	-	-

*Projects reviewed refer to Albania from 1998 and 1999, for Bosnia and Herzegovina from 1999, for Kosovo from 1999 and for Macedonia from 1998 and 1999.

[5] Compiled from Sida supplied project lists.