



Environmental Integration Handbook

for EC Development Co-operation

- › Part One | Rationale and concept
- › Part Two | Programming
- › Part Three | Aid Delivery Approaches
- › Annexes



Cataloguing data can be found at the end of this publication

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List of acronyms and abbreviations

ACP	Africa-Caribbean-Pacific
ADB	Asian Development Bank
AFDB	African Development Bank
CCLIP	Conditional Credit Line for Investment Projects
CDM	Clean Development Mechanism
CEA	Country Environmental Analysis
CEP	Country Environmental Profile
CFC	Chlorofluorocarbon
CIDA	Canadian International Development Agency
CITES	Convention on International Trade and Endangered Species
CO ₂	Carbon dioxide
CSP	Country Strategy Paper
DAC	Development Aid Committee
DANIDA	Danish International Development Agency
DCI	Development Cooperation Instrument
Del	Delegation
Dev	Development
DFID	Department for International Development (UK)
DG	Directorate General
DIIS	Danish Institute for International Studies
DPSRI	Driver - Pressure - State of the Environment - Response - Impact
EC	European Commission
EDF	European Development Fund
EFR	Environmental Fiscal Reforms
EIA	Environmental Impact Assessment
EMAS	Eco-Management and Audit Scheme
EMP	Environmental Management Plan
ESI	Environmental Sustainability Index

EU	European Union
EUEF	European Union Energy Facility
EUWF	European Union Water Facility
FAO	Food and Agriculture Organisation
FLEGT	Forest Law Enforcement, Governance and Trade
FSC	Forest Stewardship Council
GBS	General Budget Support
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GFN	Global Footprint Network
GHG	Greenhouse gas
GMO	Genetically-modified organism
GNP	Gross National Product
HDI	Human Development Index
HQ	Headquarters
IAIA	International Association for Impact Assessment
IADB	Inter-American Development Bank
ICZM	Integrated Coastal Zone Management
IF	Identification Fiche
IGNARM	Network on Indigenous Peoples, Gender and Nature Resource Management
IGWIA	International Working Group for Indigenous Affairs
IISD	International Institute for Sustainable Development
ILO	International Labour Organisation
iQSG	Inter-service Quality Support Group
ISO	International Organisation for Standardisation
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organisation
IUCN	World Conservation Union
KULU	<i>Kvindernes U-landsudvalg</i> (Women and Development)
LS	Large-scale

MBS	Macro-economic Budget Support
MEA	Multilateral Environmental Agreement
MDG	Millennium Development Goal
MS	Medium-scale
MSC	Marine Stewardship Council
MTEF	Medium Term Expenditure Framework
NAP	National Action Plan
NEAP	National Environmental Action Plan
NGO	Non-governmental organisation
NIP	National Indicative Programme
NSSD	National Strategy for Sustainable Development
NTFP	Non-timber forest product
OECD	Organisation for Economic Co-operation and Development
OVI	Objectively Verifiable Indicator
PAF	Performance Assessment Framework
PCM	Project Cycle Management
PIC	Prior Informed Consent
POP	Persistent Organic pollutant
PPP	Policy, Plan, Programme
PRSP	Poverty Reduction Strategy Paper
PSR	Pressure State Response
REC	Regional Environmental Center for Central and Eastern Europe
REP	Regional Environmental Profile
RIP	Regional Indicative Programme
RSP	Regional Strategy Paper
SEA	Strategic Environmental Assessment
SIA	Sustainability Impact Assessment
SIDA	Swedish International Development Agency
SMART	Specific, Measurable, Accurate, Realistic, Timely
SPS	Sanitary and Phytosanitary Standards

SPSP	Sector Policy Support Programme
SS	Small-scale
ToR	Terms of reference
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
WB	World Bank
WCED	World Commission on Environment and Development
WCMC	World Conservation Monitoring Centre
WHO	World Health Organisation
WRI	World Resources Institute
WSSD	World Summit on Sustainable Development
WWF	World Wildlife Fund for Nature

Fig. 1. Overview of the Handbook Structure

Part One | Rationale and concepts

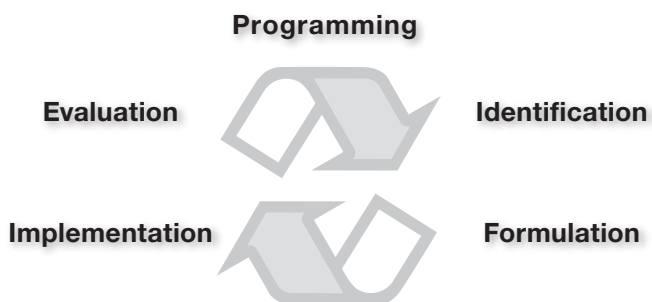
- 1. Introduction
- 2. Why mainstream the environment?

Part Two | Programming

- 3. Environment in the programming phase

Part Three | Aid Delivery Approaches

- 4. Environment in Sector Policy Support Programmes (SPSP)
- 5. Environment in General Budget Support (GBS)
- 6. Environment in the Project Approach



Annexes

Executive Summary

This handbook defines an operational framework for integrating the environment into EC development cooperation. The handbook is divided into 6 chapters: Chapters 1/2 illustrate the **rationale and concepts** along with the policy framework. Chapters 3 to 6 focus on programming and aid-delivery modalities and illustrate main **tools and procedures**. Annexes contain sector fiches (highlighting the main links between the environment and the individual areas of co-operation), screening questionnaires, and **standard terms of references** for Country Environmental Profiles and environmental assessments.

Rationale and Concepts (Chapters 1 and 2)

Environment is one of the three pillars of sustainable development and is particularly important for the poor, who are more vulnerable to natural resource degradation, pollution and ecological disasters. Environment is thus crucial for the overall objectives of co-operation: sustainable development and poverty reduction. Both environmental conditions affecting development actions and impacts resulting from them should thus be taken into account in development areas and activities. These include for example health, as many diseases are caused by pollution, and areas directly involved in the use of natural resources, such as fisheries, agriculture and forestry. However, because sectors are interdependent, all are influenced in some way by the environment. This rationale for environmental integration is reflected in the policy and legal framework for EC development co-operation, including Article 6 of the Amsterdam Treaty.

Environmental integration in programming (Chapter 3)

To enhance the efficiency of development activities, it is crucial to consider environmental issues from the very start of the cycle of operations. Consequently preparation of the Country Strategy Paper (CSP) and National Indicative Programme (NIP) has to address this topic. In order to adequately inform this process, the key tool is the **Country Environmental Profile (CEP)**. The CEP is a report that contains a description and broad assessment of a country's environmental situation, policy and regulatory framework, institutional capacities and environmental co-operation. The CEP is primarily meant to facilitate the integration of the environmental dimension in the country analysis, response strategies and multi-annual programming. The CEP should also be used to underpin policy dialogue.

Environmental integration in Sector Policy Support Programmes (Chapter 4)

A Sector Programme may depend on environmental factors or result in significant environmental impacts. It is thus important to ensure that the Sector Programme is environmentally sound. For this purpose, assessments to be undertaken during the identification and formulation of an SPSP, including the assessment of the Sector Programme, of the regulatory and institutional framework and of performance indicators, should integrate environmental considerations.

The key environmental tool in the assessment of the Sector Programme is the **Strategic Environmental Assessment (SEA)**. The SEA should identify and assess the key linkages between the environment and the Sector Programme and provide recommendations for SPSP formulation and to enhance the Sector Programme. The SEA should be undertaken at the formulation stage, in close coordination with development partners, for sectors that have important links to the environment and in particular circumstances for other sectors, as determined by an **SEA screening procedure**.

For sectors not requiring an SEA, general guidance to integrate environmental considerations during formulation is proposed in the handbook. Based on the SEA or environmental assessment in the formulation study, the SPSP design may include environmental performance indicators and complementary actions (e.g. technical co-operation, capacity building, specific projects) to enhance the country's environmental institutional and regulatory framework.

The conclusions of the environmental assessment should also be used to feed into the policy dialogue focusing on sector reform. Finally evaluation should check the overall process of environmental integration.

Environmental integration in General Budget Support (Chapter 5)

GBS supports a National policy / strategy or Poverty Reduction Strategy (PRS). Being a very particular aid delivery mechanism, it is subject to all EC commitments regarding environment integration but deserves specific treatment and poses new challenges in terms of environment integration. In these circumstances any SEA process of the policy/strategy /PRS foreseen in the CSP-NIP should be led by the Government in co-ordination with donors and be supported by the EC in parallel to the GBS cycle.

Environmental integration in projects (Chapter 6)

Under the project aid delivery approach, it is important that:

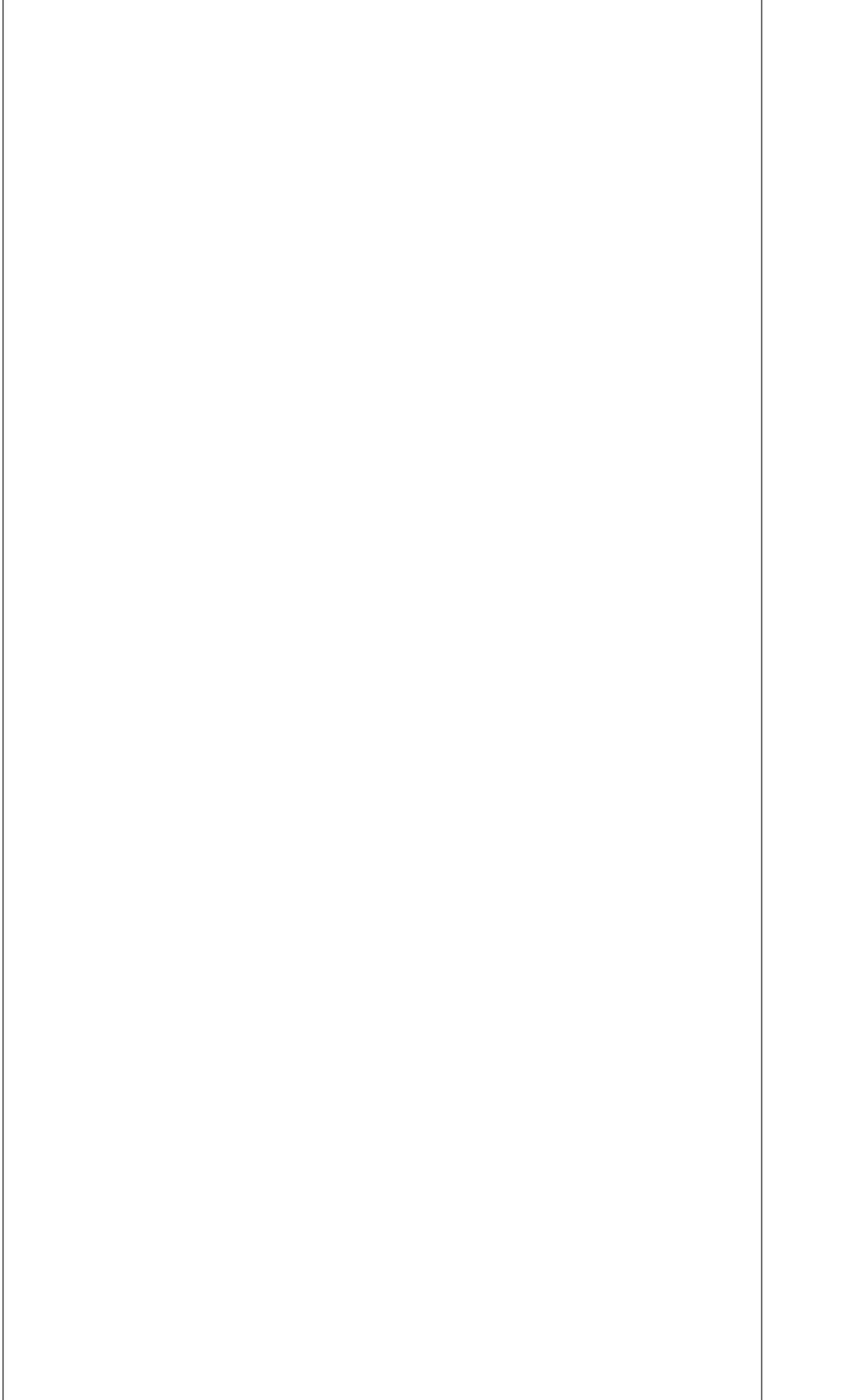
- the problem analysis and the strategy analysis in the logical framework approach take into account the linkages between the social and economic conditions and the environment;
- the formulation of the project takes into account the environmental conditions affecting project performance such as efficiency and sustainability;
- the project is designed in such a way that it will use available opportunities to enhance the positive impacts and ensure that it will not result in significant negative impacts on the environment when implemented;
- implementation include good environmental practices (which can be identified by an Environmental Performance Review);
- monitoring checks that the project's specific objectives are not being achieved at the expense of the environment;

- the evaluation of the projects also addresses linkages with the environment as part of the evaluation criteria.

The **Environmental Impact Assessment (EIA)** is a key tool to assess the potential environmental impacts of a project before implementation and identify measures to mitigate negative and enhance positive impacts. **An EIA screening** warns when an EIA must be undertaken, most likely for large scale infrastructure. An important output of the EIA is an Environmental Management Plan (EMP), which aims at ensuring that the required mitigation and enhancement measures are implemented in an effective way.

For projects not requiring an EIA general guidance to integrate environmental concerns during formulation is provided in the handbook.

Part One
Rationale and Concepts



1. Introduction

1.1. Why do we need this handbook¹?

The human impact on the natural environment has increased rapidly over the past century in response to population growth, rapid technological development, industrialisation and agricultural expansion. Unless we change our relationship with the environment, these increasing pressures will limit the planet's capacity to supply the world's economies with sufficient water, energy and other basic resources, and bring about substantial change that will create uncertainties and instabilities.

The undesirable environmental consequences of our activities can no longer be compensated for by the benefits of growth. Instead of increasing wealth, economic activities now risk creating a progressively less habitable planet, with diminishing natural resources and rising environmental management costs. These threats are global, but the impacts are most severe in the developing world. Any development model which ignores these consequences will fail to ensure continuing prosperity, particularly for the poorest communities.

This is especially relevant for the European Union's external policies and assistance programmes as the EU is the most important² donor worldwide. For these reasons the EC has long undertaken an obligation to *mainstream* the environment into its development cooperation activities. However, progress accomplished remains modest in comparison with the scale of the commitments made and expectations raised, and to the existing opportunities to both reduce poverty reduction and improve the environment.

This handbook is part of the measures designed to fill this gap. It provides an introduction to the rationale and concepts for environmental integration and **outlines an operational framework for EC staff working in development co-operation** covering the three main aid delivery modalities. While opportunities to incorporate environmental concerns exist throughout the various phases of the cycle of operations, emphasis is put on the *upstream* stages of programming, identification and formulation, which is where the key decisions are made.

The objective is to enhance the capacity of non specialist staff to identify the key links between the environment and the main areas of development cooperation so as to enable an early consideration of environmental sustainability concerns in country programming and in the preparation of planned operations. This should lead to the identification of appropriate measures to be taken at formulation and implementation. Guidance in this handbook is to be complemented by environment Helpdesk support.

1 This handbook replaces the 2001(Draft) Edition of the EC Environmental Manual and preceding environmental manuals.

2 Including member States responsible for some 55% of global development assistance.

This handbook does not intend to be comprehensive in terms of environmental analysis and integration tools. It rather concentrates on those that **the EC has already committed to apply in the framework of development cooperation**, in line with defined orientations within the international donor community. This has involved some simplification in an otherwise complex subject, where validated practices are not yet available in some areas (particularly in relation to the “new” forms of aid-delivery) and where part of what is done internationally still falls under the *work in progress*.

This handbook is therefore evolving in nature and its contents will be reviewed and completed as experience is accumulated and assessed, in close coordination with EU donors and development partners. Indeed, it is only through the consistent application of this guidance that practical experience will be generated on a sufficiently large scale to feed into the ongoing reflection on appropriate integration instruments.

1.2. What is environmental mainstreaming?

In the EC, **mainstreaming** is “the process of systematically integrating a selected value/idea/theme into all domains of the EC development co-operation to promote specific (transposing ideas, influencing policies) as well as general development outcomes”³.

In this handbook the **environment** is considered to include those bio-physical resources and conditions on which human lives and activities depend, and which in turn they influence (Box 1).

Mainstreaming involves an iterative process of change in the culture and practices of institutions. Mainstreaming the environment in EC development co-operation implies **integration** of environmental tools and approaches in the cycle of operations in order to bring about a better harmonisation of environmental, economic and social concerns.

3 iQSG (2004) *Putting Mainstreaming into Practice*.

Box 1 | The world environment: some facts and figures

The world environment currently supports 41.9 million square kilometres of forest and woodland⁴, 35.3 million square kilometres of cultivated land⁵, 14 million species of plants, fungi and animals⁶, and 6.46 billion people⁷.

The world environment is rapidly changing and in a 'business as usual' scenario, without additional measures to protect the environment, these trends will intensify.

A third of the world's land area (4 billion ha) is threatened by desertification, directly affecting 250 million people. 24 billion tons of topsoil are eroded each year⁸. 10% of arid lands are degraded⁹.

14 million ha of tropical forest are destroyed each year¹⁰: rapid deforestation is particularly common in poorer countries.

Globally a quarter of commercial fish stocks are overexploited¹¹.

10% to 30% of mammals, birds and amphibians are threatened with extinction¹².

The Earth's temperature is likely to rise from between 1.4 and 5.8°C in the course of the century with profound repercussions on water cycles, natural catastrophes, agriculture, disease and biodiversity¹³.

3 million people die each year as a result of air pollution (1.6 million as a result of indoor pollution in developing countries)¹⁴.

1.1 billion people do not have access to safe drinking water. 1 to 2 billion people suffer from a lack of water¹⁵. 5 million people die each year as a result of contaminated water.

The 1999 estimate of 25 million environmental refugees is expected to double by 2010 and to reach 150/200 millions by 2050¹⁶. Sea level rise alone could create 10 million new environmental refugees in the next decade.

4 Millennium Ecosystem Assessment, 03/05: <http://www.millenniumassessment.org>

5 *idem*

6 UNEP-WCMC (2002) World Atlas of Biodiversity. Available at: <http://stort.unep-wcmc.org/imaps/gb2002/book/viewer.htm>

7 UN Population Division (2004) World Population Prospects - the 2004 Revision. Available at: <http://esa.un.org/unpp/>

8 Source: <http://www.wateryear2003.org> consulted 09/06/04.

9 Millennium Ecosystem Assessment, 03/05 <http://www.millenniumassessment.org>

10 FAO data, 1990-2000, in WWF, UNEP, WCMC and GFN (2004) *Living planet report 2004*, WWF: Gland.

11 Millennium Ecosystem Assessment, 03/05 <http://www.millenniumassessment.org>

12 *idem*

13 *idem*

14 WHO (2005) *Indoor air pollution and health*, WHO Fact Sheet 292, <http://www.who.int/mediacentre/factsheets/fs292/en/>

15 Millennium Ecosystem Assessment, 03/05 <http://www.millenniumassessment.org>

16 Myers, N (2005) *Environmental refugees: an emergent security issue*, 13th Economic Forum, Prague 23-27 May.

2. Why mainstream the environment?

2.1. The environment and sustainable development

2.1.1. Environmental services and external costs

Policies for development have generally concentrated on production and economic growth, without taking heed of the environment and the hidden functional services it provides. The result has been severe environmental damage with some of the poorest countries being worst affected. Amongst the poorest communities, natural resources such as fuel-wood and water are essential to life. The irony is that these common-property resources were depleted, annexed, or subject to over-exploitation, even while the country's economy appeared to be growing vigorously. This helps explain the resilience of poverty in the face of demonstrable economic growth¹⁷.

The Millennium Ecosystem Assessment¹⁸ highlights, on a global scale, that environment - through the goods and services it provides to the society and the economy - plays a critical role in our livelihoods. The natural environment provides four categories of service: provisioning (e.g. food, water, and fibre), regulating (e.g. climate, water and disease), cultural (e.g. spiritual, aesthetic, recreation and education) and supporting (e.g. primary production and soil formation). According to one estimate, the annual value of ecosystem services (US\$33 trillion) is twice that of the combined GNP of all the world's countries put together¹⁹.

Changes to these services as part of a development process appear as "invisible transactions", or externalities, because they have no price in any recognised market. In the development process, an externality is an unintentional effect of aid intervention that is external to the intervention logic, as defined by the Logical Framework Approach. In other words, it is the consequence of activities other than the expected results or the objectives (see Annex 6). Undesirable external environmental effects such as pollution, diminished natural resources, and adverse effects on third parties or on future generations, have been the rule rather than the exception.

17 Dasgupta, P (2004) *Human Well-being and the Natural Environment*, Oxford University Press: Oxford.

18 Millennium Ecosystem Assessment, 03/05 <http://www.millenniumassessment.org>

19 Costanza, R *et al.* (1997) The value of the world's ecosystem services and natural capital, *Nature*, 387: 253-260.

The Rio declaration signed at the Earth Summit in 1992, states that: “*National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution...*” The principle of internalisation should encourage macro-economic and institutional reforms in developing countries, such as Environmental Fiscal Reforms²⁰. It also influences the way co-operation is conducted by explicitly focussing attention on development-induced environmental impacts. It also leads to the idea that environmental concerns should be integrated with economic and social concerns, as defined in the concept of Sustainable Development.

2.1.2. Sustainable development

The principles of sustainable development, one of the EU development co-operation objectives²¹, have arisen from a growing recognition that the needs of current generations must be reconciled with those of the future²², and that this requires dealing with economic, environmental and social policies in a mutually reinforcing way²³. Respect for future needs means safeguarding the natural resource base (or natural “capital”) likely to be required to sustain future needs. In this sense the environment plays a central role since the question of sustainability arises as a direct response to concerns about issues of pollution, irreversible changes to ecosystems and climate, and the degradation of forests, fisheries, water supplies, biodiversity and other natural resources. Sustaining these resources into the future is also necessary to underpin social reforms that respect the rights of women, children and indigenous peoples, and which provide a more equitable distribution of wealth.

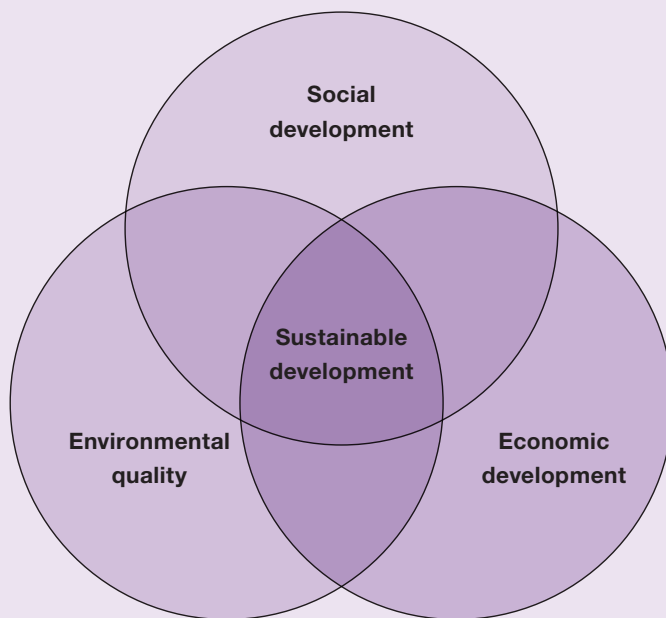
The three dimensions (Fig. 2) of sustainable development (environmental, economic and social) are referred to as the “pillars” of sustainable development. The pillars are distinct but closely interdependent. This means that the environmental pillar has links, which should be enhanced, with the economic and social pillars as explained hereafter.

20 EFR are promoted by OECD DAC. See OECD DAC (2003) *Working Party on Development Co-operation and Environment, Scoping Workshop on “Reducing poverty through environmental fiscal reform (EFR)”*, OECD: Paris (available online at: <http://www.oecd.org/dataoecd/47/35/2505525.pdf>) and OECD DAC (2005) *Environmental Fiscal Reform for Poverty Reduction*, OECD DAC: Paris (available online at: <http://www.oecd.org/dataoecd/14/25/34996292.pdf>).

21 Article 177 of the European Community Treaty as modified in Amsterdam in 1997.

22 Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

23 Presidency Conclusions to the Gothenburg European Council of 15-16 June, 2001.

Fig. 2. The three dimensions of sustainable development.

Environment and the economic pillar

Environmental services and economic goods can be interchanged to a certain degree, which can justify limited environmental losses in exchange for economic growth. But it is important to remember that these substitutions have their limits; neither aspect should outweigh the other. Environmental services are not less valuable than economic goods. Breathing clean air, finding firewood for cooking, drinking clean water and being safe from floods.... all provide for essential human needs. So, despite the fact that the environment has suffered from unbalanced economic growth, the economic and environmental pillars play a complementary role in satisfying human needs. They also are interrelated. For instance, economic development can reduce our direct dependence on nature, and yet depends on the environment in several ways:

- Raw materials used in the production of goods come from nature, as does the energy needed for production and transport;
- The cost of extracting raw materials tends to increase when natural resources become rare or degraded;
- Environmental services have a crucial importance but are not included in national budgets because they are difficult to measure in financial terms;
- Adverse environmental effects (e.g. pollution, floods or fires) can damage or destroy economic goods and equipment;

- Labour productivity is linked to the nutrition and health of workers, two variables which are directly influenced by the environment;
- Sound environmental management and mainstreaming can reduce costs, through increased efficiency or through prevention, with an important potential for further development in this field;
- High quality environment is an important asset for tourism (as shown e.g. by the growth in ecotourism); it is also the basis for some indigenous peoples livelihoods, and for an important share of pharmaceutical production.

Environment and the social pillar

Environment is also closely linked to the social pillar. It affects people and especially the poor, who are particularly vulnerable to reduced availability of resources such as clean water, fertile soils, fuel-wood, wild foods, medicinal plants and other natural products. People are also vulnerable to unhealthy or unsafe environmental conditions. For example chronic respiratory diseases of people exposed to indoor air pollution in rural areas and to atmospheric air pollution in urban areas; diseases resulting from the consumption of contaminated water, poisoning due to the consumption of contaminated fish and shellfish (e.g. bio-accumulation of heavy metals). The impact can also be indirect. For example, soil erosion may lead to reduced land productivity, and thus to a decrease in nutrient in-take by the population; similar effects may be derived from the depletion of sources of protein (e.g. fish stocks, game) or medicinal plants. Just as a degraded environment will impact negatively on health, safety and livelihood, opportunities to enhance the environment will result in a positive impact on the poor.

Because social groups (women, minorities) may be affected differently by the environment, environmental changes may also have an impact on social relationships. For instance mercury used in gold washing pollutes rivers and may generate conflicts with fishermen. Similarly a development projects with adverse negative impacts on particular groups may face difficulties in implementing participatory approaches, which are considered as key conditions for sustainability. Moreover the depletion of shared resources may also exacerbate conflicts, as mentioned below under 2.3. On the other hand, sound environmental management is strongly dependent on institutional and social factors, such as legislation, decentralisation, good governance, land tenure, property rights, participation, conflicts, gender equity and empowerment of traditionally less represented groups.

Because of their particular importance in respect with EC co-operation, poverty, human rights and security issues are further developed in Sections 2.2, 2.3 and 2.4. of this handbook.

Culture can be considered as a particular, but important, component of the social pillar. Human cultures are often deeply rooted in a relationship with their environment, built on a particular vision of nature. Sacred sites and emblematic or totemic species often have strong cultural importance, providing the local communities with vital social continuity. This is especially true for indigenous peoples, who have a long history of co-adaptation with their local environment and participation in the functioning of the ecosystem.

These peoples have usually achieved a sustainable use of their natural resources, based on a deep and specialised knowledge of their environment and its biodiversity. They are particularly vulnerable in all aspects of their economic, cultural and social life to external pressures on their environment. Development co-operation should be aware of the exceptional value that indigenous peoples have invested in their environment, and recognise their rights regarding land use, natural resources use, and intellectual property.

Guiding Principles for Sustainable Development

The EC has proposed the following Guiding Principles for Sustainable Development²⁴: promotion and protection of fundamental rights; intra- and intergenerational equity; open and democratic society; involvement of citizens; involvement of business and social partners; policy coherence and governance; policy integration; use of best available knowledge; precautionary principle²⁵; and make polluters pay (see 2.1.1).

In addition to these principles, several important lessons on sustainability have emerged from experience in development co-operation, as follows.

Prevention and upstream decision making

Prevention is usually better than cure, and reducing future damage is an inherent objective of sustainable development. With respect to development co-operation, this principle implies a duty to take action in the face of unfavourable trends, and to integrate environmental considerations at an early stage of decision making. The optimum approach is thus to integrate environmental considerations upstream at the policy making and programming stage, and in the first phases of the cycle of operations. Integration of the environment early in the decision making process has however certain limitations: in particular the uncertainty of the real impacts of decisions taken. Follow-up monitoring is therefore necessary.

Local resource ownership

The management and harvest of natural resources implies some mixture of traditional, private or government involvement. A key lesson from studies of natural resource use is that sustainability requires long-term secure control and ownership of the resource²⁶. A user only has the incentive to conserve a resource if they feel that they or their descendants will reap the benefit of this moderation in the future²⁷. An example of this may be provided

24 Communication to the Council and the European Parliament, *Draft Declaration of Guiding Principles for Sustainable Development*, COM (2005) 218 final (25.5.2005).

25 Principle contained in the Rio declaration but debated in Europe following a series of food crises: refer to the Communication from the Commission *On the precautionary principle*, COM(2000) 1 (02.02.2000).

26 Murray, M (2003) Overkill and sustainable use, *Science* 299: 1851-1853.

27 Millner-Gulland, EJ & Mace, R (1998) *Conservation of Biological Resources*, Blackwell Science: Oxford.

by community forestry, where forest land previously managed by State services is allocated to communities or decentralised institutions, creating incentives for sustainable management practices. Similarly studies suggest that secure property rights over land can be considered a precondition for pro-poor and sustainable economic growth²⁸.

Participation

Sustainable development also advocates clear principles relating to transparency, participation and accountability in decision-making. Participation of stakeholders is recognised as a key sustainability factor in development co-operation. This should involve not only target beneficiaries (men and women), but also stakeholders potentially affected by environmental impacts, including traditionally less represented groups. The EC has also particular obligations under the Aarhus Convention²⁹, which requires it to allow the public and stakeholders to have a say in the decision-making process with respect to all environmental issues, including in development co-operation.

An ecosystem perspective

The ecosystem perspective takes a broader view of natural resources to look at the effects of use on supporting processes (nutrient and hydrological cycles and soil formation) and downstream on non-target species or neighbouring ecosystems. Accidental harvesting of non-target species can be sufficiently great to cause concern over their conservation. This is particularly true of the by-catch in fisheries. Land-based actions, such as fertiliser run-off and sewage disposal, can impact on neighbouring bodies of water. Frequently the whole watershed and river system is the appropriate ecological unit for assessment. Stakeholders from many sectors (e.g. agriculture, forestry, transport and town planning) need to be involved because different sector policies and activities impact on the same ecosystems, and policies need to be coherent³⁰.

28 Cotula, L, Toulmin, C and Hesse, C (2004) *Land tenure and administration in Africa*, IIED: London.

29 UNECE (1998) *Convention on access to environmental information, public participation in environmental decision making and access to justice in environmental matters*. <http://www.unece.org/env/pp/>

30 Biodiversity in Development Project (2001) *Guiding Principles for Biodiversity in Development, lessons from field projects*, EC/DFID/IUCN.

2.2. The environment and poverty reduction

The eradication of poverty in the context of sustainable development is the fundamental objective of EU development policy, as stipulated in European Consensus on Development³¹. Because the environment plays a key role in the livelihoods of the poorest communities, it should be managed in such a way that it contributes to this overall objective of poverty alleviation.

Poverty can be described as the condition when basic human needs are unsatisfied. The poor lack capital and are often subject to an inequitable distribution of wealth; consequently their livelihoods are closely dependant on the productivity of natural resources and their own labour. This makes them vulnerable to any decline in the productivity of natural resources and to any unhealthy conditions (including unclean water, indoor air pollution, and toxic chemicals) that affect their capacity to work. Thus degraded environmental conditions have a direct and important relationship with poverty. The poor are also the most vulnerable to natural disasters such as floods, droughts, crop pests and environmentally-related conflicts.

Poor people lack the financial capital to invest and so often use any available natural “capital” to survive. For populations who depend on natural resources this process of consuming them often results in increasing poverty. Managing the environment to deliver pro-poor benefits (such as improved water supply and sanitation, improved management of local fisheries, or interventions in forestry and protected areas that involve local people) should be part of poverty alleviation strategies. This does not mean that what is done in the name of the environment is necessarily and by definition good for the poor but it does mean considering the effects of environmental changes on the poor and the factors affecting environment-poverty relationships. These include land tenure; access rights to natural resources; participation in land and resource management and the share of work between men and women with respect to the collection of basic resources like firewood and water. An analysis by major development partners (including the EC) comprehensively addresses the links between poverty reduction and environmental management³².

In certain cases however the question arises of whether safeguarding environmental services of global significance is compatible with poverty alleviation concerns. For example, choosing solar energy technology over coal or diesel fuel reduces GHG emissions, but may be more costly. Similarly protecting natural habitats for the conservation of biodiversity may require reducing the access of local communities to natural resources. As far as possible, conflict should be reduced or avoided, for example by promoting controlled eco-tourism or sustainable harvesting so as to provide revenue and local employment. Some mechanisms, such as the Global Environmental Facility (GEF³³) grants cover the incremental costs associated with transforming a project with national benefits that may have global environmental costs to one with both national and global benefits.

31 Joint Statement by the Council and the representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission on European Union Development Policy: “The European Consensus”, *Official Journal of the European Union*, 2006/C 46/01, 24.02.2006.

32 DFID, EC, UNDP and WB (2002) *Linking Poverty Reduction and Environmental Management -Policy Challenges and Opportunities*. http://ec.europa.eu/comm/development/body/theme/environment/docs/full_linking_poverty_en.pdf

33 See: http://www.gefweb.org/Operational_Policies/Eligibility_Criteria/Incremental_Costs/incremental_costs.html

2.3. The environment and security

Mainstreaming environment in development co-operation activities may also contribute to stability and peace. There is a clear link between environment and security, and more precisely between the management of scarce or abundant natural resources and conflict.

Stress and competing demands on scarce environmental resources (e.g. drinking water, fertile soil - essential for food production and basic livelihood for large segments of the population), and the fight for access to and control over abundant and financially valuable environmental resources (e.g. timber, gum arabic) may lead to tensions, instability, and violent conflict. Stress on such resources (brought about by pasture and soil degradation, drought, or population growth and migration) can exacerbate tensions over access and lead to violent conflicts (e.g. second civil war 1983-2004 in Sudan which was fuelled by the dispute between the South and the North over oil and water; tension on water issues between India and Bangladesh).

Migration is a natural consequence of environmental stress: people are forced to leave their homelands because of the degradation or lack of environmental resources needed for their survival. It is estimated³⁴ that up to 50 million people will be displaced due to environmental degradation by 2010 and the effects of global warming (floods, droughts and expansion of desertification), and this figure could rise to 200 million by 2050. Environmental refugees can have an important impact on security and on the environment in the host areas. Refugee camps often create environmental problems and disputes between the refugees and the local population related to access to, control over and management of resources, which can lead to civil disorder, insecurity and violent conflict. It is crucial that environmental considerations are taken into account during post-conflict reconstruction processes, both to ensure that these efforts do not adversely impact the environment and that environmental pressures do not fuel renewed conflict.

On the other hand, it is important to note that environmental co-operation can be an extraordinary element of stability and peace and even of reconciliation. It is therefore essential to promote sustainable development and sustainable shared management of natural resources with the objective to protect the environment and at the same time to contribute to poverty reduction and stability. An interesting example comes from confidence building activities when two or more parties seek cooperative solutions to manage shared natural resources (e.g. water) that could otherwise become sources of conflict. Another instrument is the establishment of transfrontier conservation areas, sometimes known as "Peace Parks" which promote regional co-operation and biodiversity conservation. These usually extend far beyond designated protected areas and can incorporate a wide range of community-based natural resource management programmes.

34 Myers, N (2005) *op.cit.*

2.4. Human rights, good governance and the environment

The EU is founded on the principles of liberty, democracy, respect for Human Rights and fundamental freedoms, and the rule of law. These principles should also underline the objectives for EC co-operation. Human rights are also a precondition for sustainable development and proper environmental protection. Rights to life and security, as established by the Universal Declaration of Human Rights and the right to health, as established by the Convention on the Rights of the Child cannot be fulfilled or are being violated when people become exposed to life-threatening environmental hazards such as toxic wastes, pollutants or hazardous radiations. The rights to have access to a means of subsistence and be free from hunger are also violated when land, water, or other natural resources become highly polluted or degraded.

A violation of a fundamental human right, such as the right to participate in the conduct of public affairs can also lead to environmental degradation. In a well-functioning democracy where good governance prevails, any plans or programmes that may have adverse environmental impacts will be shared openly with citizens, public government bodies and civil society. By allowing for transparency and participatory processes, citizens can voice their concerns and alternative solutions or remedial actions can be pursued to safeguard the environment and the public interest. It is therefore not surprising that human rights violations, including that of suppressing information, free media and the participation of people in decision-making processes are associated with many environmental catastrophes³⁵.

As a consequence of the broad acceptance of the interdependence between the enjoyment of human rights and a healthy environment³⁶, the more recent human rights instruments³⁷ define the right to a healthy environment as a human right in itself. Similarly environmental instruments, such as the aforementioned Aarhus Convention³⁸, attach importance to important civil and political human rights principles such as access to information, participation and effective remedies.

Finally, these normative developments are also confirmed in the EC Communication on Governance and Development³⁹, where the inter-relatedness and the synergies between human rights protection, environmental protection and sustainable development are duly recognised.

35 Another archetypical example is unsustainable logging and the ensuing harmful deforestation as a consequence of the non-respect and violation of the rights of forest dependent peoples and communities who are often indigenous peoples or ethnic minorities.

36 For more on the interrelatedness and the interdependence between Human Rights and the Environment go to <http://www.unhchr.ch/environment/index.html>

37 These instruments are The Convention on the Rights of the Child (1989), ILO Convention No. 169 on Indigenous and Tribal Peoples in Independent Countries (1989), and the following regional instruments: The African Charter on Human and Peoples' Rights (1981) and the Protocol of San Salvador to the American Convention on Human Rights (1988).

38 The Convention on Biological Diversity (1993) is another such example.

39 Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee, *Governance and Development*, COM(2003) 615 final (20.10.2003).

2.5. Environmental sustainability is a high level commitment and obligation for the EC

2.5.1. Global commitments

Global concerns for linking environment and development have already quite a long history. Key steps include the 1972 United Nations Conference on the Human Environment held in Stockholm⁴⁰, the 1987 Brundtland Report⁴¹, *Our Common Future*, and the United Nations Conference on Environment and Development, held in Rio⁴² in 1992, which reaffirmed and built on the Stockholm conference with the goal of establishing an equitable global partnership through the creation of new levels of co-operation by working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system. This led to the definition by OECD of international development objectives of “environmental sustainability and regeneration”⁴³ in 1996 and to a global commitment in 2000 for the “**Millennium Development Goals**” (MDG)⁴⁴; the seventh of which (**MDG 7**) is “to ensure environmental sustainability” through three specific targets⁴⁵:

- **Target 9:** Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
- **Target 10:** Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.
- **Target 11:** Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers.

In 2002 at the World Summit on Sustainable Development the Johannesburg Plan of Implementation was initiated, which builds on the achievements made since the United Nations Conference on Environment and Development in 1992. The plan includes a commitment to enhance international co-operation and promotes the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and mutually reinforcing pillars^{45a}.

40 Stockholm, 1972, Report of the UN conference on the human environment <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&ArticleID=>

41 World Commission on Environment and Development (WCED), 1987, Brundtland Report, http://www.are.admin.ch/imperial/md/content/are/nachhaltigeentwicklung/brundtland_bericht.pdf

42 Rio Declaration on Environment and Development, 1992 <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163>

43 OECD (1996) *Shaping the 21st Century, The contribution of development co-operation*. OECD: Paris. <http://www.oecd.org/dataoecd/23/35/2508761.pdf>

44 The Millennium Development Goals were endorsed by world leaders in September 2000 at the UN Millennium Summit. The first one consists of eradicating extreme poverty. See <http://www.un.org/millenniumgoals/>

45 See corresponding indicators in Annex 10.

45a See: http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm

2.5.2. The policy and legal basis for environmental integration in EC development co-operation

The European Community has a longstanding commitment to address environmental concerns in its development programmes and projects, as part of a wider commitment to sustainable development.

Article 6 of the Amsterdam Treaty stipulates that “environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities (...) with a view to promoting sustainable development”, as enshrined in the spirit of Agenda 21 of the 1992 Rio Earth Summit⁴⁶. The systematic consideration of environmental aspects into EC development co-operation, as in other policies, is part of a *Cardiff process*, launched in 1998 by the Council⁴⁷. Consequently the EC’s **Development Policy**⁴⁸ of 24 April 2000 identified the environment as a key cross-cutting issue to be mainstreamed into all priority themes and on 31 May 2001 the Council endorsed the EC proposed **Strategy on Integrating the Environment into EC Economic and Development Co-operation**⁴⁹.

The **European Consensus on Development** explicitly recognises the links between development and environment, and highlights the need for a *strengthened approach to mainstreaming of cross-cutting issues*, by making *systematic and strategic use of all resources* available to this effect.⁵⁰ This is in line with the 2005 **Paris Declaration on Aid Effectiveness**, where donors committed to work towards harmonised approaches on environmental assessments at the sector and national level. Furthermore, the 2005 development policy identifies *environment and sustainable management of natural resources* as well as *water and energy* (integrated water resources management and improving access to sustainable and clean energy services) as two of the nine areas for community action.

In this context the Coherence Communication⁵¹, prepared for the 2005 UN Summit, building on earlier results from the WSSD in 2002, contains a number of specific commitments with respect to environment and efforts needed to achieve the MDGs, including MDG-7. In line with these commitments the European Council adopted in June 2006 a renewed EU Sustainable Development Strategy (building on the Gothenburg Strategy of 2001) which emphasizes the need to meet international responsibilities, reflecting the importance of the external dimensions of the three thematic pillars, including the environment, in EU policies⁵².

46 <http://www.un.org/geninfo/bp/enviro.html>

47 See: Commission Working Document, *Integrating environmental considerations into other policy areas - a stocktaking of the Cardiff Process*, COM(2004) 394 final, and Report of the Cardiff process.

48 Communication from the Commission to the Council and the European Parliament, *The European Community’s Development Policy*, COM(2000) 212.

49 Commission Staff Working Paper, *Integrating the Environment into EC Economic and Development Co-operation, a global strategy*, SEC (2001) 609.

50 § 102. It also includes reference to carry out *strategic environmental assessments* (SEA) on a systematic basis, including in relation to budget and sector aid.

51 Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee, *Policy Coherence for Development - accelerating progress towards attaining the Millennium Development Goals*, COM(2005) 134 final.

52 Review of the EU Sustainable Development Strategy - Renewed Strategy; EU Council 10117/06, 9 June 2006.

Building on the *European Consensus*, the new instrument for development cooperation (DCI, replacing a long series of individual legal bases regulating a large number of individual cooperation programmes), foresees that environment and natural resources shall be addressed both under the geographic programme and under a dedicated thematic programme. In addition to supporting dedicated actions, the latter will aim at enhancing environmental integration efforts, including through global actions in support to partner countries⁵³. Finally but very importantly, the DCI requires environmental screening and impact assessments to be undertaken as appropriate for project and sector level interventions.

2.5.3. Multilateral Environmental Agreements

Most Developing countries are parties to Multilateral Environmental Agreements (MEAs) and therefore have also obligations to fulfil these frameworks. The EC is determined to help them meet these obligations. The EC is a strong advocate for the mainstreaming of MEAs National Action Plans of developing countries in their national development strategies. Often referred to as the “Rio Conventions”, the three main MEAs are the UN Convention to Combat Desertification⁵⁴ (UNCCD), the UN Convention on Biological Diversity⁵⁵ (UNCBD) and the UN Framework Convention on Climate Change⁵⁶ (UNFCCC).

Developing countries are highly interested in the implementation of the UNCCD as this convention addresses an issue which is affecting mainly developing countries and is most directly related to development. Most of the African continent is affected by desertification and land degradation, as are important parts of Latin America and Central Asia. Developing country parties to the Convention have to develop a National Action Plan (NAP); an important effort in this direction has been made recently and most affected parties now have designed their NAP, but little progress has been made so far towards implementation. A central problem lies in the fact that these NAPs have been drafted as stand alone strategies, while most of the countries’ efforts are geared towards the implementation of national development strategies. A key issue is thus to link and integrate the UNCCD NAP into the national development strategies, in order to secure adequate funding to address the desertification problem. The Commission is supporting initiatives in this direction and is calling affected parties to mainstream these issues into their national strategies.

Loss of biodiversity has increased exponentially during the last decades and it is increasingly urgent to take decisive action in order to halt this loss. The UNCBD has been adopted to address this issue and includes texts on related problems (i.e. the Cartagena protocol on bio-safety). There is often a perception that biodiversity loss is not of great

53 Communication from the Commission to the Council and the European Parliament, *External Action: Thematic Programme for environment and sustainable management of natural resources including energy*, COM(2006) 20 final (25.01.2006).

54 <http://www.unccd.int/>

55 <http://www.biodiv.org/>

56 <http://unfccc.int/>

importance to development, therefore limiting action at that level. Increasing scientific evidence that biodiversity is at the basis of several economic and social sectors should help revert this thinking. The EC has put into place the “Biodiversity Action Plan for Economic and Development Co-operation”⁵⁷ with the strategic objectives to mainstream biodiversity objectives into co-operation strategies, plans and programs as well as in policy dialogue with developing countries. It also aims at supporting sustainable use of natural resources, particularly in relation to forests, grasslands and marine/coastal ecosystems, strengthening the capacity of relevant agencies involved in conservation and sustainable use of biodiversity and co-ordinating the implementation with third countries’, other donors’ and international institutions’ own biodiversity strategies.

The UNFCCC and the related Kyoto Protocol are increasingly key issues in international relations. Climate change is seen by many developing countries as a result of industrialised countries’ activity. In many cases they see themselves as victims of climate change and rightly point out the responsibility of developed countries. But many developing countries are now middle-income countries and their rising economic activity is progressively becoming an important source of greenhouse gas (GHG) emissions. This is especially the case for countries like China, India or Brazil. The EC has put forward an “EU Climate Change Strategy for support to partner countries”⁵⁸. It is aiming on one hand to support developing countries to adapt to the effects induced by climate change (adaptation activities) and also to support efforts to mitigate the effects of climate change by limiting the emission of GHG through e.g. cleaner energy, transportation, production processes. Apart from this Strategy, it is also essential that EC development strategies take climate change into account in order to design and implement adequate strategies, plans and programs.

Other Multilateral Environmental Agreements address other important international environmental issues. Amongst these are the Stockholm Convention on Persistent Organic Pollutants (POPs⁵⁹), the Rotterdam Convention on Prior Informed Consent (PIC⁶⁰) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal⁶¹.

57 Communication from the Commission to the Council and the European Parliament, *Biodiversity action plan for economic and development co-operation*, COM(2001) 162 final.

58 Included in the Communication from the Commission to the Council and the European Parliament on *Climate Change in the Context of Development Cooperation*, COM(2003) 85 final (11.03.2003).

59 <http://www.pops.int>

60 <http://www.pic.int>

61 <http://www.basel.int>

2.6. All sectors are involved: environmental opportunities, constraints and impacts

Because environment plays a key role in human well-being and activities several sectors are particularly and directly dependent on the environment. These include for example health, as many diseases are caused by pollution or other degraded environmental conditions, and areas directly involved in the use of natural resources, such as fisheries, agriculture and forestry. However, because sectors are interdependent, all are influenced in some way by the environment. In this Handbook, environmental conditions are referred to as environmental **opportunities** if they have a positive influence on a sector (or a sector policy), and **constraints** if the influence is negative.

In turn human activities in all sectors produce effects or consequences on the environment (e.g. deforestation, biodiversity loss, soil erosion, air pollution, water contamination), which are usually referred to as environmental impacts. **Impacts** may be positive or negative, direct or indirect, visible or not. For example, sectors such as transport, energy, agriculture and industry directly pollute and consume natural resources. Other sectors, such as education, governance or macro-economic reform have more indirect impacts, through changing behaviour and practices affecting the environment (both positively and negatively). Depending on their intensity, duration, frequency, reversibility, cumulative or synergic nature and socio-economic consequences, potential impacts can be (or not) considered to be significant, important enough to justify mitigation or enhancement measures. Addressing issues related to these significant impacts may be part of the EC support to sector policies.

Some sectors are more vulnerable to environmental changes, others produce higher impacts, and all sectors have the potential for environmental integration. Using governance and institutions as an example, potential environmental integration entry points include: environmental institutions and capacities; legislative capacity; environmental law; environmental statistics; participation of civil society and decentralisation programmes. Issues that many sectors hold in common include: institutional environmental management, energy efficiency, waste minimisation and planning. A more comprehensive list of environmental entry points and guidance for a range of sectors/areas is given in Annex 1.



Sector Guidance

When a decision is made to work in a particular focal sector, the specific linkages of this sector with the environment should thus be identified. These linkages between the environment and all sectors are the reason why the environment is considered a “cross-cutting” issue, in addition to being a sector in itself.

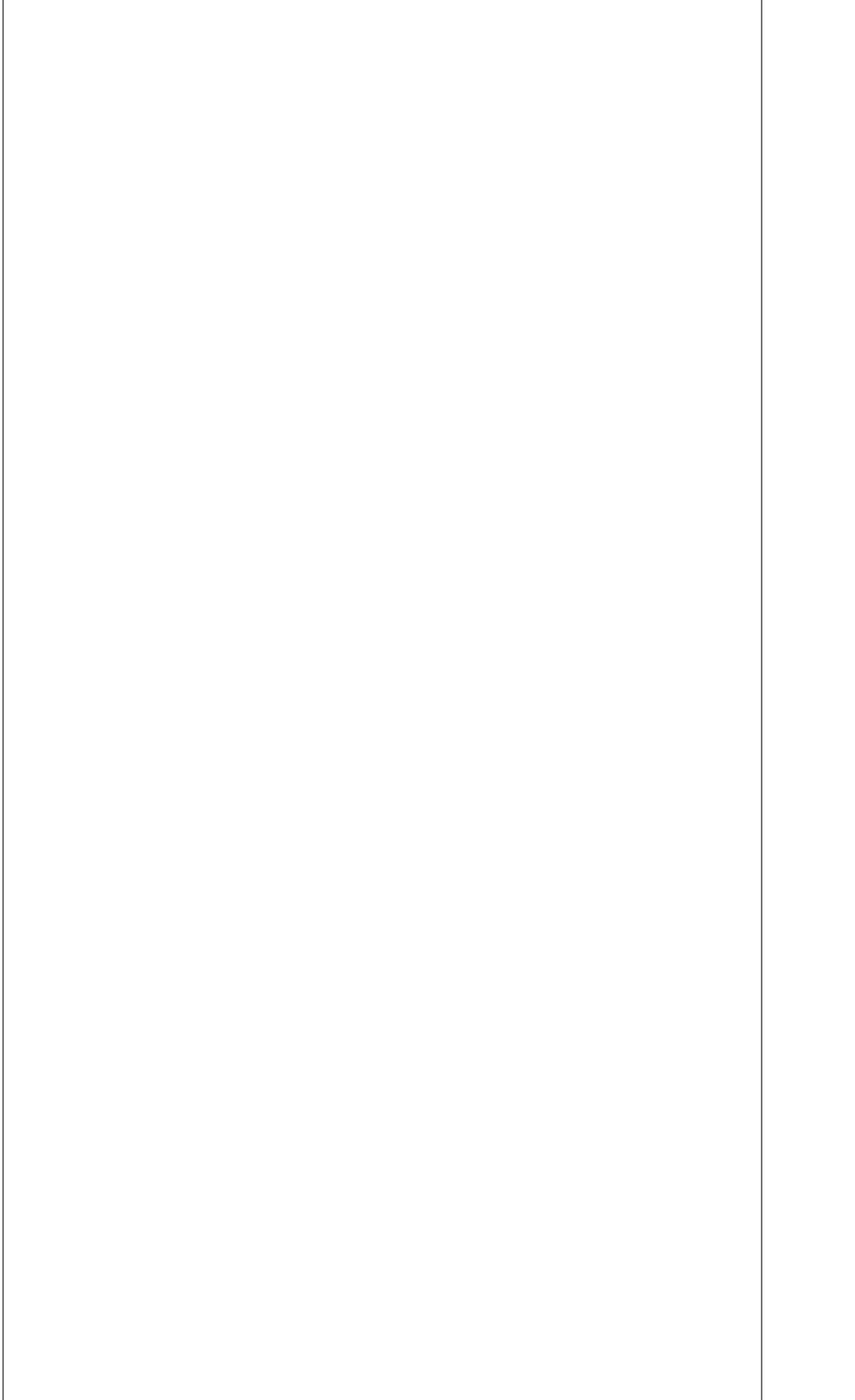
2.7. The added value of environmental mainstreaming

As a conclusion to this chapter environmental mainstreaming is not considered as a goal in itself but as a means to bring added value in the following ways:

- Addressing environmental aspects will improve the efficiency and effectiveness of poverty reduction efforts.
- Because co-management of the environment by all involved stakeholders means peaceful co-operation, peace and security will be strengthened too.
- The risk of environmental disasters and social crises caused by environmental degradation will be mitigated.
- The need for emergency aid will be reduced, as well as social, economic and financial costs saved by preventive action.
- Balanced and win-win solutions can be found between different concerns, including global and local, economic, social and environmental, material and cultural.
- Taking “externalities” into account will increase the economic performance of co-operation projects (even when financial performance is less favourable).
- Environmental awareness and capacity building for environmental management can have a tremendous empowerment potential for the poor, for women, for indigenous peoples and for all citizens in general in that they foster a culture of shared democracy, participation and rights-awareness.
- The interest of future generations will be respected resulting in increasingly sustainable development.

These expected benefits provide a reminder and general guide to environmental integration in development co-operation. In order to help achieving these benefits, practical guidance is provided in the following chapters on programming and Aid Modalities.

Part Two
Programming



3. Environment in the programming phase

The programming phase is crucial for environmental integration because key decisions concerning the overall co-operation process are made that might be difficult to adjust in later phases. Under geographical co-operation instruments, programming generally culminates in the production of Country Strategy Papers (CSP) and National Indicative Programmes (NIP)⁶². The main environmental integration tool at this stage is the **Country Environmental Profile (CEP)**.

The integration of environment during this phase serves two objectives:

- “To identify and **avoid** any **harmful direct and indirect environmental impacts** of the co-operation programme which can undermine sustainability and counteract achieving the development co-operation objectives of poverty reduction.
- To recognise and **realise opportunities for enhancing environmental conditions**, thereby bringing additional benefits to development and economic activities and advancing environmental issues which are a priority for the EC”⁶³.

A comprehensive country analysis is an initial step in programming. This analysis focuses on the national situation and policies and includes an overview of past and ongoing co-operation with the EC as well as with other donors. Integrating the environment in this analysis provides opportunities to undertake policy dialogue and programming on a better understanding of the challenges posed by sustainable development, which is the long term objective of EC co-operation. The Country Environmental Profile provides the necessary information to integrate environmental concerns in the country analysis.

62 Source: iQSG -Programming Guide for Country Strategy Papers (Update 07/04/05).

63 *Idem*.

Table 3.1. The contents of a Country Environmental Profile

Summary	Brief presentation of the main environmental problems, the main conclusions and recommendations.
State of the environment	A presentation of the state and trends of the environment in relation to development, including an identification of the main environmental problems to solve or avoid. This section addresses the relationship between the environment and the social and economic situation, and more particularly between poverty and environment.
Environmental policies and institutions	A presentation of the main features of the institutional, policy and regulatory framework leading to the identification of weaknesses and constraints on the capacity to address main environmental concerns. This section should include a review of the legislation and procedures regarding impact assessments and a review of the international obligations in the area of environmental protection.
Environment in the main policies and sectors	An identification of links between the main government policies (overall development and reform policies and strategy, such as a PRSP, and sector policies) and environmental sustainability issues, providing indications on the extent of existing environmental mainstreaming with a special attention paid to the “focal sectors” of EC intervention.
Analysis of aid	A description of past and ongoing aid from the EC and other donors in the field of the environment, incorporating lessons learnt from major evaluations. Assessment of opportunities to collaborate with other donors in pursuing common goals and seeking complementarities.
Conclusions and recommendations	Recommendations on how environmental issues can be most effectively addressed in EC co-operation, their relative priority and the implementation challenges. These must particularly relate to potential focal sectors and may include measures such as capacity building and institution strengthening, further analysis and impact assessment or potential indicators to be used in the NIP. These environmental integration measures may go along with recommendations concerning specific actions targeting the environment as a co-operation sector, i.e. having environmental improvements as the main objective.

The CEP is based on a compilation of available environmental information, the validity and consistency of which should be determined. The cost and amount of work involved in preparing a CEP will depend on the existence and the quality of any previous versions or of other (non EC) profiles such as national “State of the Environment” reports, the CEA (Country Environmental Analysis) of the World Bank⁶⁴, which focus on institutional causes and macro-economic aspects, and the Environmental Profiles of UNEP⁶⁵, the FAO⁶⁶ and the WRI⁶⁷. Information on the environment is also provided in national sustainable development strategies⁶⁸ or national environmental strategies.

Although such documentation may provide useful state of the environment information, it will be unlikely to provide tailor-made indications to fit into (EC) country strategies (e.g. seeking complementarities with actions by other donors, recommendations for specific focal sectors, or for additional analyses). Depending on available information and in-house capacities up-dating a good existing CEP can be carried out in-house while preparing a new CEP will mainly be commissioned to consultants. Model ToRs for a CEP are provided in Annex 2.



ToR CEP

The Regional Environmental Profile (REP)

Regional Environmental Profiles should be prepared to inform regional co-operation strategies (Regional Strategy Paper - RSP). The REP focuses on environmental issues common to a group of neighbouring countries (including transboundary issues) such as those linked to the shared management of ecosystems, which can be more effectively addressed at the regional level. The REP should also consider issues linked to regional co-operation areas such as regional integration and trade. An existing REP does not mean that individual CEPs for the countries concerned will not be required. Individual CEPs should still be prepared for CSP purposes, using country-specific data required to address environmental issues at the national level.

64 See footnote 82 below

65 See: <http://www.unep.net/profile/>

66 See: <http://www.fao.org/countryprofiles/default.asp?lang=en>

67 See: <http://www.earthtrends.wri.org/>

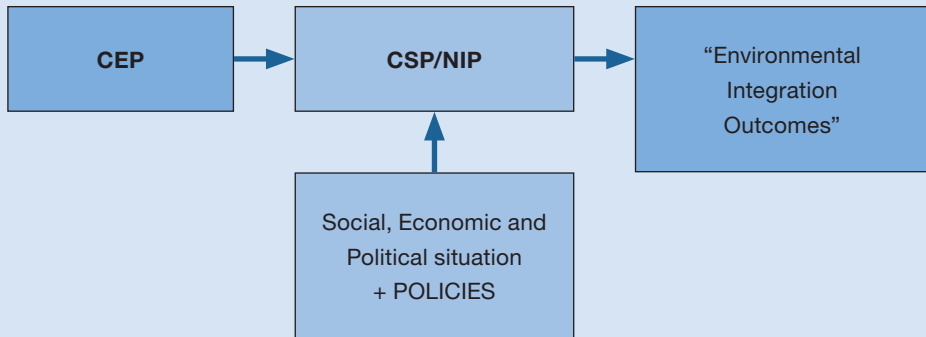
68 See: <http://www.un.org/esa/sustdev/natlinfo/nsds/nsds.htm>

Box 2 | Country Environmental Profile (CEP) - key points

What is it?	A description of the country's environmental situation, current policies, institutional capacities and environmental co-operation experience including recommendations for the integration of the environment during CSP preparation.
What needs to be done by EC staff?	Undertake or contract consultants to undertake the study involving either the preparation of a new CEP or the revision/update of an existing CEP. If consultants are commissioned, the Del / Dev/ Relex prepare ToR.
Under what conditions?	A CEP is required for all beneficiary countries.
When is it needed?	Before the end of the preparation of a CSP.
How long does it take?	The duration and cost of preparing a CEP varies considerably as a function of the data availability, the size of the country and the complexity of the environmental issues. Using consultants from inception to final report takes typically +/- 4 months.
Where is it used?	The CEP is used in the preparation of the CSP/NIP, for policy dialogue and reference. A summary of the CEP must be annexed to the CSP.

Integrating the environment in the CSP and NIP

The CEP provides the necessary environmental information to prepare a balanced EC country strategy, incorporating social, economic and environmental considerations. The CSP in turn informs the National Indicative Programme. The response strategy (of the CSP) and the NIP will include "environmental integration outcomes" for the subsequent phases of the cycle of operations (Fig. 3). The environment should be considered in the response strategy as **a cross-cutting issue** influencing the specific interventions for different focal sectors and may also be considered as **a possible focal sector** which merits consideration in itself.

Fig. 3. The CEP as an input to the CSP-NIP.

Various entry points should be considered in the CSP structure for integrating information from the CEP, as shown in the Table 3.2 below.

Table 3.2. Entry points for environmental integration in the Country Strategy Paper

Entry points	Issues
Description of the EC co-operation objectives	Policy objectives regarding sustainable development, environmental protection and the reversal of environmental degradation should be outlined ⁶⁹ .
Analysis of the (economic, political, social and environmental) situation	<p>Based on the CEP the analysis of the overall situation of the country should identify the main environmental challenges and articulate their links with social and economic issues. Particular attention should be paid to the poverty-environment linkages. This section could include for example:</p> <ul style="list-style-type: none"> - Environmental resources (e.g. biodiversity, forests) providing opportunities for sustainable development; - Environmental constraints and problems, for instance resource degradation (deforestation, desertification, soil erosion, depletion of fish stocks...), air, water and land pollution, contributing to social, economic and political problems (e.g. food security, health, conflicts, employment, migration, exports, incomes); - The dependency of the country's economy on local natural resources, such as forests, water or fisheries and the sustainability of patterns of natural resources exploitation; - Major pressures and impacts, on the national, regional and global environment, resulting from social, economic and political trends (e.g. GHG emissions coupled with growth; deforestation resulting from population growth or land reform policies). - Vulnerability to natural disasters and prospected consequences of climate change.
Policy agenda of the beneficiary country	Environmental policies identified in the CEP should be mentioned, including commitments undertaken under Multilateral Environmental Agreements.
Outline of EC and other donors' co-operation	Incorporate the results of the CEP regarding the "analysis of aid", including lessons on environmental integration learnt from evaluations of past actions.
Annexes	A Summary of the CEP ⁷⁰ should be attached, excluding the recommendations.

69 This information together with an overview of the partner country environmental policy can be presented in the "Policy coherence/mix" section and supporting Annex.

70 This summary has been usually referred to as **the** Country Environmental Profile. It should more correctly be referred to as a Summary of the CEP.

Taking into account the relationships between the main sectors and the environment in designing the strategy does not mean that only sectors with less negative environmental impacts should be supported by the EC. It means that opportunities should be used to mitigate the negative impacts and to enhance positive impacts thereby ensuring the sustainability of EC support. These opportunities can be identified as part of the analysis of the risks associated with the strategy⁷¹ and by using Annex 1 for guidance.



Sector Guidance

When appropriate, the intention to carry out a **Strategic Environmental Assessment** (SEAs)⁷² will be announced in the CSP⁷³. If the CSP includes sector support, the decision to promote an SEA should be based on the likely environmental impacts of the programme considered for support, according to an SEA *screening* (see Chapter 4). If the CSP includes GBS, the decision to promote an SEA should be based on the extent to which the environmental issues are identified as a key concern under national policies/strategies. In this context, an SEA may be particularly useful where these national policies/strategies rely on the promotion of economic growth that is overly dependent on the use of natural resources or potentially polluting activities, as well as those which include macro-economic or fiscal reforms, or which include important components in environmentally sensitive sectors⁷⁴. The decision and commitment to prepare an SEA should also take into account if effective mechanisms have already been put in place to integrate the environment in an appropriate manner into the policy/strategy.

71 As required by the Common Format for Country Strategy Papers: Communication from the Commission to the Council and the European Parliament, *Increasing the Impact of EU Aid: A Common Framework for Drafting Country Strategy Papers and Joint Multiannual Programming*, COM(2006) 88 final (02.03.2006).

72 As required by the Common Format for Country Strategy Papers: COM(2006) 88 final. For ACP countries see also the Note to Delegations (of 23/02/2006) and the Programming Guidelines for the 10th EDF. Under the *Paris Declaration on Aid Effectiveness*, donors have committed to apply common approaches for SEA at the sector and national level. The European Consensus on Development establishes a commitment, which builds on the 2001 Environmental Integration Strategy and Council Conclusions, to prepare SEAs for budget and sectoral aid. As a follow up to the Paris Declaration a *Good Practice Guidance on applying SEA in Development Cooperation* has been finalised by OECD-DAC ENVIRONET in 2006. <http://www.oecd.org/dataoecd/4/21/37353858.pdf>

73 In the last (2004) Mid Term Review of CSPs several ACP countries already committed to prepare SEAs.

74 Environmentally-sensitive sectors include: transport, energy, water, rural development, agriculture, food security, fisheries, tourism, and mining. Refer to Annex 3 for more details.

Box 3 | Strategic Environmental Assessment (SEA) - General Concept

A Strategic Environmental Assessment is a “systematic process for evaluating the environmental consequences of proposed policy, plan or programme (PPP) initiatives in order to ensure they are fully included and appropriately addressed at the earliest stage of decision making on a par with economic and social considerations”⁷⁵. The SEA provides recommendations feeding back into the planning process to optimise its environmental impacts (minimising negative effects and enhancing positive ones). Compared with the better known Environmental Impact Assessment (EIA), SEA provides for impacts to be taken into consideration at an earlier stage, prior to the definition of PPP, and allows a better control over interactions or cumulative effects. However it is less precise as many of the details of specific actions and locations are possibly not defined.

For SEA to be most efficient it should be integrated into the PPP preparation process from the first stages, and this process should take into consideration its recommendations. The following stages can typically be distinguished for the SEA process⁷⁶:

SEA screening

Screening refers to the decision to undertake an SEA. SEAs are necessary for all PPPs that, when implemented, are likely to produce significant negative impacts on the environment.

SEA scoping

Scoping refers to the **identification and clarification of issues to be addressed** by the SEA. Scoping should identify and take into consideration the concerns and value judgements of stakeholders, in order to ensure that these are addressed in the SEA study.

SEA study

The SEA study is more elaborate and comprises several stages.

The **environmental baseline** provides information for a general understanding of the state of the environment and trends in order to be in a position to assess the potential environmental effects of a PPP. The SEA should then **identify and assess the potential environmental impacts** of implementing the different PPP alternatives under study, in order to inform the selection of an alternative, propose measures to mitigate negative environmental impacts and optimise positive effects. The **consistency analysis** identifies any elements of the PPP that may be in conflict with or hinder the achievement of environmental policy objectives. The SEA should produce **recommendations** for the implementation of the preferred and improved alternative, as well as **monitoring indicators**. The results of the SEA should be presented in the form of a concise **SEA report**.



75 Sadler, B and Verheem, R (1996) *SEA: Status, Challenges and Future Directions*, Report 53, Ministry of Housing, Spatial Planning and the Environment: The Hague.

76 For measures in force in the EU refer to Directive EC/2001/42. The EC is also signatory to the *UNECE Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context*, which will impose certain obligations with regards to SEA in the context of development co-operation.

Box 3 | Strategic Environmental Assessment (SEA) - General Concept (continued)**Public participation**

The involvement of stakeholders in the SEA process is a key success factor. Environmental impacts cannot be dissociated from their relationship to social, economic and cultural factors. Engaging stakeholders in an SEA, including women and other traditionally less represented groups, is important in order to adequately integrate their knowledge and concerns in assessing the impact significance and acceptability of proposed actions and mitigation measures.

The preparation of an SEA (or provision of support to that end), can be complemented by actions to strengthen national capacities (institutional, regulatory) to carry out impacts assessments, implement mitigation measures and manage environmental impacts including remediation action, which will allow the Government to pursue a higher degree of environmental integration into sector policies in a most effective manner⁷⁷, i.e. based on principles of ownership and participation.

Table 3.3 below provides more guidance on possible environmental integration outcomes.

77 Guidance on capacity development for SEA can be found in Chapter 7 of the OECD DAC SEA guidance (see OECD DAC, 2006).

Table 3.3. Environmental integration outcomes as anticipated in the EC response strategy and the indicative programme.

Environmental outcomes	Aspects
Selection of focal sectors	Because environmental concerns should receive the same attention as social and economic concerns, the country analysis and CEP recommendations should influence the selection of focal sectors, resulting in some circumstances in the selection of “environment and sustainable management of natural resources” as a specific area of intervention. The selection of other focal sectors will still provide opportunities to integrate the environment as a crosscutting issue.
Objectives, approaches, strategies for focal sectors	Opportunities to integrate the environment into focal sectors should be developed ⁷⁸ using Annex 1 for guidance. SEAs should be considered for sensitive focal areas. If such an SEA does not exist, is not recent or is not satisfactory, then its preparation, update, or improvement should be put on the agenda for dialogue with Government and other donors, and the commitment to do so should be made in the CSP.
Non focal areas	Specific support to environmental institutions and the building of environmental capacities within non environmental institutions, may be envisaged here, along with support for the improvements of regulatory frameworks and environmental standards.
Work programme and Budget	Adequate flexibility, budget and schedule should be provided for the identification and formulation phases to accommodate further environmental integration steps, including additional environmental assessments and their results.
Policy dialogue	Environment may be identified in the CEP as the basis of a “sectoral policy dialogue”. Sometimes where social or economic dialogue is difficult, environment may provide an opportunity for more constructive dialogue.
Indicators	A key aspect is the selection of an appropriate set of indicators, reflecting the main environmental and sustainability concerns which can be influenced by the EC support, especially in the focal areas. The MDG ⁷⁹ indicators and any indicators that may have been identified by the CEP may be appropriate. See Annex 10.

78 For example the 2007-13 CSP of Malaysia (final draft) identifies “Trade and Investment Relations” as a priority and following a CEP recommendation there is an emphasis on the promotion of Europe’s strengths in environmental technologies to improve the application of best know-how for environmental management in Malaysia.

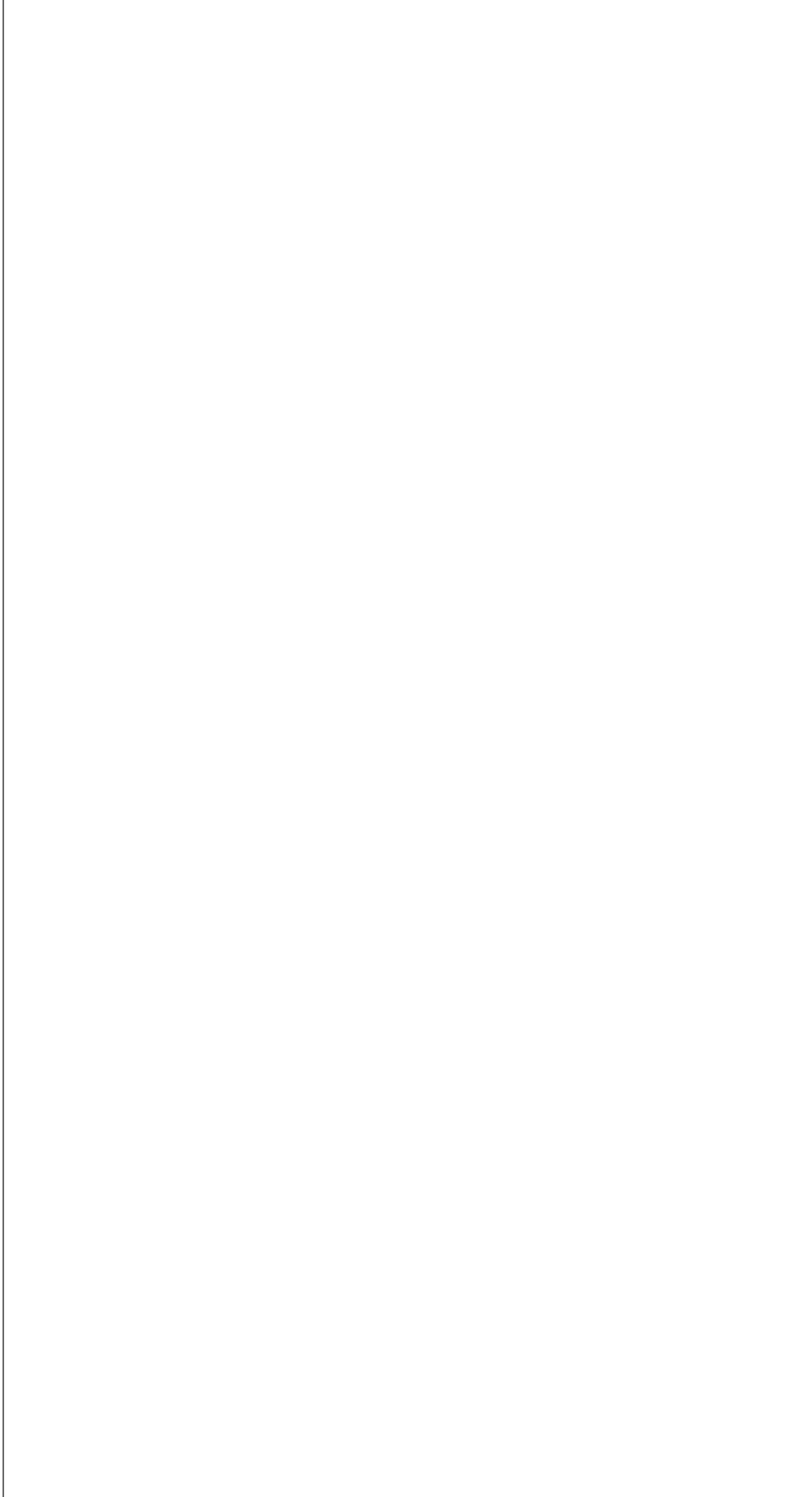
79 See <http://www.undp.org/mdg/>

The Regional Strategies and Indicative Programmes (RSP-RIP)

The same principles should be followed while preparing a Regional Strategy Paper and a Regional Indicative Programme, informed by the REP. At this level, regional integration and trade are frequent focal areas, for which guidance can be found in Annex 1, Box 2. In case trade agreements or Economic Partnership Agreements are negotiated, Sustainability Impact Assessment⁸⁰ is an appropriate tool for environmental integration. The RSP and RIP also provide an appropriate framework to address regional or transboundary environmental issues, which can be considered as opportunities to build regional co-operation.

80 http://ec.europa.eu/comm/trade/issues/global/sia/index_en.htm

Part Three
Aid Delivery Approaches



4. Environment in Sector Policy Support Programmes (SPSP)

Although the consequences of Sector Programmes on the environment may be less immediately visible than the environmental impacts of an individual project, their influence can nevertheless be very significant. For example, a Sector Programme on agriculture may trigger fiscal incentives that promote the use of more polluting pesticides, or contemplate subsidies based on production output that may provide incentives to use environmentally degrading practices which provide higher yields in the short term. It is thus important that the EC promotes the environmental sustainability of the Sector Programmes it supports through Sector Policy Support Programmes (SPSP)⁸¹.

When reviewing/assessing sector policies attention should be paid to identifying the linkages with the environment and whether policies and measures are in place or are required to address their potential negative effects. This should be based on information contained in the Country Environmental Profile (CEP, see Chapter 3 above), any available Strategic Environmental Assessments (SEA) or equivalent analytical work that might be available from other development partners⁸².

The **Strategic Environmental Assessment** (see Boxes 3 and 4) is a key tool to determine whether the Sector Programme is consistent with the country's and EC's environmental policy objectives, and assess the likely environmental impacts of Sector Programme implementation. On the basis of this analysis it provides feedback to the Government to enhance the environmental dimension of the Sector Programme, and also enables improved integration of the environment into SPSP formulation. In many cases, **the decision and commitment to prepare such an SEA have been taken at the programming stage.**

An SEA should be carried out when relevant, i.e. for Sector Programmes in environmentally sensitive sectors (having important links to the environment and thus the potential to bring about significant impacts⁸³). An SEA may also be relevant in some cases for Programmes in non-sensitive sectors when, due to the specific characteristics of the SPSP or of the Sector Programme itself, significant environmental impacts may be expected. In order to determine if a Sector Programme requires an SEA a screening procedure is provided in Annex 3⁸⁴.

81 This chapter is based on the SPSP process as described in EuropeAid Co-operation Office (2003) *Guidelines for European Commission Support to Sector Programmes*.

82 Such as the World Bank's Country Environmental Analyses (CEA). For the World Bank approach, see World Bank (2004) *Good Practice Note on Environmental and Natural Resources Aspects of Development Policy Lending - DPL*, October, available on the WB website. <http://0-siteresources.worldbank.org.library.vu.edu.au/PROJECTS/Resources/GPNChapter4Environment.pdf>

The Bank conducted a First Year Review of implementation of the environmental aspects of DPL which also attaches a list of CEAs carried out by December 2005.

83 For the notion of "significant impact" see 2.6 above.

84 In circumstances where a sector SEA, or equivalent assessment, already exists its quality should be assessed using the guidance provided in Section 4.2.2 (4) and, if its quality is acceptable, it should be used to formulate or improve the SPSP. To determine if a sector SEA exists, a useful source of information can be OECD DAC Network on Environment and Development Co-operation "Survey of agencies' country level activities".

The main steps for environmental integration in SPSP are covered in this chapter and illustrated in a flow chart in Figure 4.

4.1. Identification

Environmental considerations can initially be addressed in the **preliminary review** of the seven assessment areas initiated in the identification phase of an SPSP, as shown in Table 4.1 below.

Table 4.1. Environmental mainstreaming entry points for SPSP assessment (identification)

The seven assessment areas	Entry points for environmental mainstreaming
1. Sector policy and strategic framework	Consider the level and quality of environmental integration in the policy and strategic framework, drawing from the Country Environmental Profile, as well as the commitment to carry out a SEA at due time for the SPSP formulation. In case there is no commitment, assess the need for an SEA referring to the “SEA screening” guidance in Annex 3.
2. Macro-economic assessment	No specific environmental recommendations.
3. Medium Term Expenditure Framework for the sector	Consider environmental expenditure in the sector and the availability of resources for implementation of the mitigation/optimisation measures identified by an existing SEA.
4. Accountability and Public Expenditure Management	No specific environmental recommendations.
5. Donor co-ordination	Check other donors’ environmental requirements/ activities.
6. Performance monitoring and consultation process	Assess the environmental relevance of the performance indicators used or proposed to monitor major environmental concerns.
7. Institutional and capacity analysis	Assess the capacities of institutions with environmental responsibilities in the sector, the relevant environmental legislation, and the existing environmental monitoring system in the sector (the Country Environmental Profile may provide useful information in this regard).

As part of the first assessment (sector policy and strategic framework), the Sector Programme needs to be screened to decide if an SEA is required (see Annex 3). In case no SEA exists and no commitment has been taken to have the SEA before formulation, there are two possible situations:

- For the most environmentally-sensitive sectors (e.g. infrastructure and transport, water and energy, rural development, land management, agriculture, food security), an SEA of the Sector Programme should be prepared.
- For other sectors, the programme must be assessed on the basis of a screening questionnaire to decide if it requires an SEA. This screening takes into account any particular vulnerability of the local environment or specific concerns on the linkages between the sector and the environment.



Screening for SEA

The last step during identification consists of completing the Identification Fiche, following the entry points provided in Table 4.2 below.

Table 4.2. Environmental mainstreaming entry points in the SPSP Identification Fiche (IF)

Sections in IF	Entry points for environmental mainstreaming
Consistency with EC policy and programming	Check consistency with CEP analysis and recommendations.
Issues and state of play in the seven key areas of assessments	Assess the sector strategy/policy framework, MTEF for the sector, indicators (performance measurement) and institutions from an environmental perspective.
Next steps	The work plan should consider three main options: existence of a satisfactory SEA, need for an SEA or need for environmental integration in the feasibility study.

4.2. Formulation

Based on the SEA screening completed during identification, there are two major options for environmental integration in the formulation phase:

- Sector Programmes not requiring an SEA
- Sector Programmes requiring an SEA.

4.2.1. Sector Programmes not requiring an SEA

In this case environmental concerns can be addressed in the formulation study using the guidance provided in Annex 4. The conclusions should feed into the seven assessment areas and into the SPSP design as appropriate, which may include:

- Selecting adequate support actions or complementing sector budget support with Technical Assistance for environmental capacity building/institutional strengthening,
- Suggesting adequate indicators and criteria to be used for the monitoring and performance assessment of the SPSP. Indicators may reflect institutional development objectives with respect to the environment, and suggestions could also be made to ensure that non-environmental indicators are not closely linked to negative environmental trends. More guidance on indicators is provided in Annex 10.



SPSP formulation

4.2.2. Sector Programmes requiring an SEA

If the SEA screening establishes that an SEA is required, this will be prepared (unless it already exists⁸⁵) with the primary aim of contributing to SPSP formulation and providing recommendations to enhance the Sector Programme. Although the process described below is EC-driven, all efforts must be accomplished to co-ordinate with other donors, particularly EU donors, so as to maximise the coherence and efficiency of the proposed approach⁸⁶. Partner Governments should be closely associated to the exercise. Involvement of key stakeholders will be a crucial success factor.

The specific steps for commissioning an SEA are as follows:

85 If a (recent) SEA exists, go directly to step 4.

86 As foreseen in the *Paris Declaration on Aid Effectiveness* of 2005.

1. Preparation of the SEA ToR and contract

The SEA should be commissioned to independent consultants according to the Model ToR provided in Annex 5, which should be adapted (based on the Country Environmental Profile) to the particular context (issues to be covered, extent of the expected analysis).



ToR SEA

2. SEA scoping

As a first step the consultants will prepare a scoping report, defining the scope of the EIA study, and submit it to the EC/Partner Government for approval. This should provide a deeper consideration of issues; the geographical area to study; level of detail required; methods; stakeholders and their concerns; a clearer definition of the alternatives to be studied; areas where more detailed assessment is required (i.e. key Sector Programme-environment interactions); and impact identification and evaluation tools. A key output of scoping is a proposed calendar of activities for the SEA study, on the basis of which the detailed time table and budget can be planned.

3. The SEA study

The SEA should provide answers to the following questions:

- Is the Sector Programme consistent with the national and EC environmental policies and objectives?
- What environmental impacts are anticipated from the implementation of the Sector Programme?
- What are the groups that will be affected and what are their environmental concerns?
- How can adverse impacts be mitigated?
- Can the legal, institutional and policy framework effectively respond to these environmental impacts?
- What opportunities exist to enhance environmental benefits?
- How can the SPSP be formulated to address weaknesses in the policy, legal and institutional framework? (e.g. identifying areas where environmental technical assistance may be required or where a project approach may be appropriate in terms of minimising environmental impacts).
- What indicators should be used in the SPSP to monitor, from an environmental perspective, the implementation of the Sector Programme?
- What recommendations can be provided to the EC to be addressed in the policy dialogue with the partner Government to enhance the Sector Programme?

Box 4 | Strategic Environmental Assessment (SEA) for an SPSP- key points

What is it?	An assessment of the potential environmental impacts of implementing a Sector Programme with a view to mitigate negative and enhance positive impacts, and with recommendations for SPSP formulation.
What needs to be done by EC staff?	Advocacy of the benefits of strategic environmental assessment, in dialogue with partner Government and in close coordination with other donors. Prepare ToR and commission an SEA.
Under what conditions?	An SEA should be prepared when an SPSP is envisaged to support a Programme that is likely to have significant environmental impacts. This is determined by an SEA screening (Annex 3).
When is it needed?	At the formulation phase of an SPSP.
How long does it take?	This will depend on the scope of the SEA, but useful results can be produced in 6-8 months.
Where is it used?	SEA outputs are used to promote the environmental sustainability of a Sector Programme with partner Governments and to prepare the SPSP.

4. Appraising an SEA report

When a draft report is submitted to the EC its quality should be assessed against the ToR and the following check-list⁸⁷:

- Is the environmental baseline complete? Does it allow a comparison of all major effects on the environment with the initial state of the environment?
- Is the study balanced, does it address the main linkages between the Sector Programme and the environment?
- Is it independent and neutral?
- Are the conclusions clear and understandable?
- Have the stakeholders been adequately consulted? Does the study take their interests and concerns into account?
- Are the assumptions, choices, value judgements and uncertainties clearly identified?
- Are all realistic alternatives assessed and compared?
- Are the recommendations an appropriate response to the identified impacts?
- Does the report provide adequate guidance on monitoring (indicators)?

⁸⁷ Further guidance for reviewing the quality of an SEA can be found in Chapter 6 of the OECD DAC SEA guidance (see OECD DAC, 2006).

5. Using the SEA report

Once the report is accepted, its recommendations can be incorporated in the seven assessments and in the SPSP design and considered in policy dialogue with the Government. Table 4.3 below provides guidance for the use of the SEA in the seven assessments.

Table 4.3 Using an SEA in the seven assessments (SPSP formulation)

The seven assessment areas	Entry points for environmental mainstreaming
1. Sector policy and strategic framework	Consider the environmental impacts and linkages identified by the SEA and the degree to which the policy/strategy framework is (or is expected to be) adapted to the SEA recommendations.
2. Macro-economic assessment	No specific environmental recommendations.
3. Medium Term Expenditure Framework for the sector	Consider potential environmental expenditure in the sector and the availability of resources for implementation of the mitigation/optimisation measures identified by the SEA.
4. Accountability and Public Expenditure Management	No specific environmental recommendations.
5. Donor co-ordination	No specific environmental recommendations.
6. Performance monitoring and consultation process	Assess the environmental relevance of the performance indicators used or proposed to monitor major environmental concerns (including the implementation of recommendations made by the SEA and the environmental impacts identified by it).
7. Institutional and capacity analysis	The assessment will incorporate information from the SEA regarding the institutions with environmental responsibilities in the sector, the relevant environmental legislation, and the existing environmental monitoring system in the sector. Special attention should be paid to the capacity to address the impacts and implement the mitigation/optimisation measures identified by the SEA, even if those measures are not the responsibility of the sector institutions.

Integrating the conclusions in the content and design of the SPSP includes:

- Selecting support that follows the SEA recommendations and will contribute to sustainable development.
- Addressing specific weaknesses in environmental management capacities and environmental institutions by complementing sector budget support with Technical Assistance for environmental capacity building/institutional strengthening (including improvement of regulations and standards), or incorporating projects to solve specific weaknesses (e.g. environmental monitoring systems, EIA procedures including screening criteria).
- Suggesting indicators and criteria to be used for the monitoring and performance assessment of the SPSP (indicators addressing institutional development objectives with respect to the environment and also suggestions to ensure that non-environmental indicators are not closely linked to negative environmental trends - see Annex 10 for further guidance on indicators).

The suggested performance criteria and indicators may be included as conditions within the budget support component of the SPSP, applicable to the release of tranches. When specific conditions on environment are included as disbursement conditions they may either form part of a fixed tranche (the tranche is disbursed only upon meeting *all* the conditions for disbursement) or a variable tranche (all or part of the tranche is disbursed in function of the degree to which the conditions for disbursement have been met, on the principle of partial disbursement for partial performance).

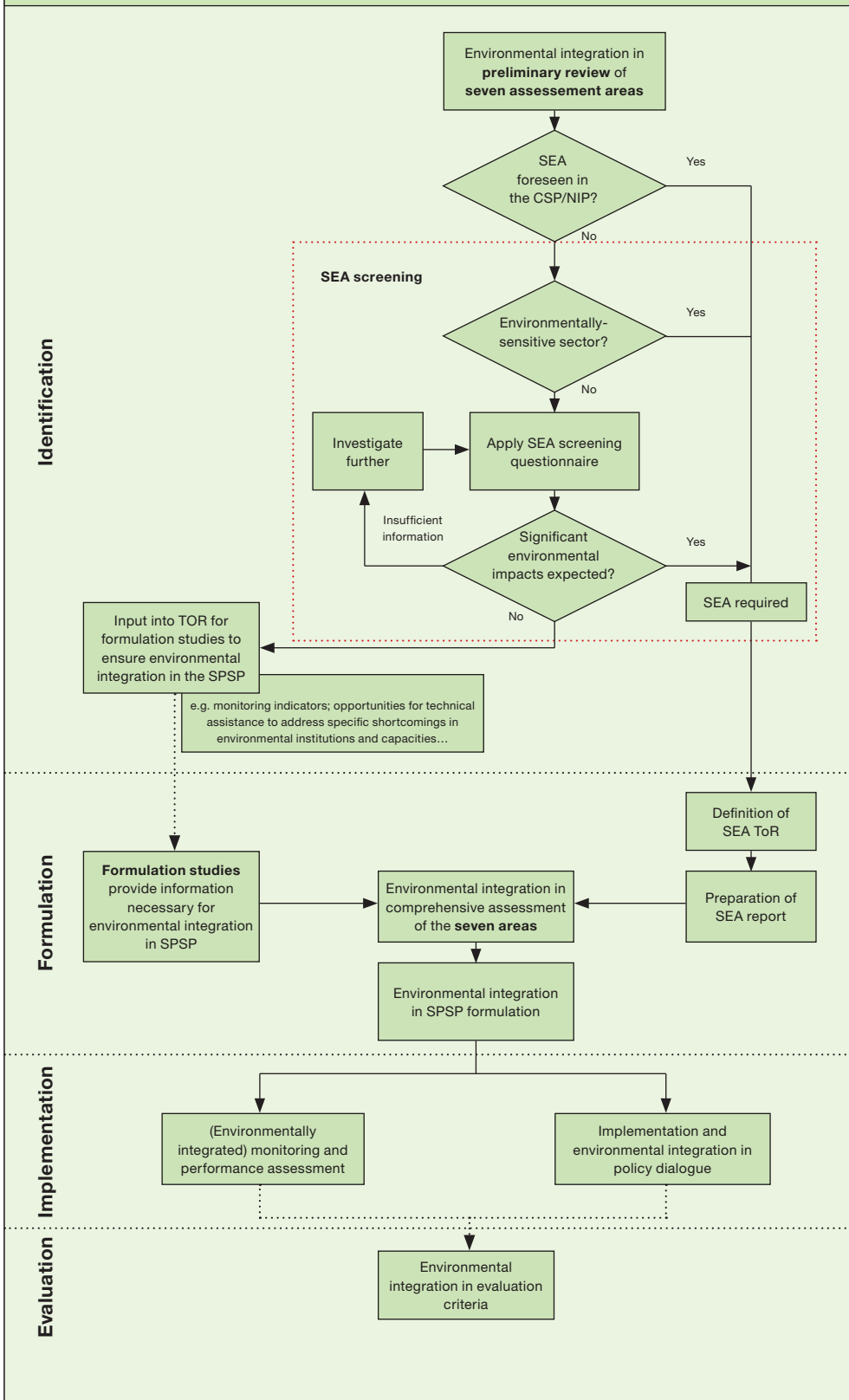
4.3. Implementation

The identified environmental indicators must be regularly monitored and assessed against agreed benchmarks. The ongoing policy dialogue should also address any outstanding environmental issues identified in the CEP and SEA.

4.4. Evaluation

During evaluation, it should be assessed if the SPSP effectively contributed to sustainable development and that the causal links between its inputs and development outcomes/impacts (including the environmental impacts) have performed as expected, in order to learn lessons for the future. The evaluation should also assess whether the process of integrating the environment has been successful. It should identify whether a SEA was required and, if so, whether it has been carried out and its recommendations been successfully implemented. These requirements should be included in the ToR for the evaluation study, which should ideally specify appropriate expertise on the environment-development linkages in the sector.

Fig. 4 Environment integration in SPSP



5. Environment in General Budget Support (GBS)

General Budget Support⁸⁸ (GBS) contributes to national development policies/strategies (such as Poverty Reduction Strategies). Such policies/strategies may have significant environmental consequences and the sustainable achievement of their development objectives will often depend on environmental conditions or resources. It is thus important, at the time of preparing the CSP, to consider the extent to which the national policy/strategy to be supported addresses key environmental and sustainability concerns

Examples of linkages between national policies/strategies and the environment (see also Annex 1, Box 1), include:

- The dependence of the country's economy on local natural resources, such as forests, water or fisheries.
- The overall impact of economic growth on energy and resource consumption and on pollution.
- The degree to which reforms reduce environmentally damaging subventions⁸⁹ and address market failures regarding environmental externalities, notably through EFR (Environmental Fiscal Reforms)⁹⁰.
- The allocation of resources for the operation of environmental institutions and the rate of investment in natural capital.
- The effects of promoting exports and competitiveness (e.g. through reducing labour costs or, currency exchange rate, building transport infrastructure) on pollution and pressures upon natural resources.
- The impact of unemployment and poverty on natural resources and on the use of marginal land.
- The vulnerability of the national economy to extreme climatic events or to other impacts of climate change, especially for small islands.
- The environmental impacts of sector strategies, such as transport infrastructure development, that are incorporated in national development or poverty reduction strategies.

88 This chapter is based on information given in European Commission (2006) *Aid Delivery Methods: Guidelines on the Programming, Design and Management of General Budget Support*.

89 For instance subsidies to promote higher agricultural production may also promote environmentally degrading practices such as the uncontrolled clearance of forested areas and reduced fallows.

90 For instance, EFR is supported by GTZ in the forestry sector in African and Central American countries. See GTZ (2005) *Environmental Fiscal Reform and National Forest Policies*. See also footnote 20.

Some of these effects will be indirect, through changes in forms of taxation and tariff structures or values. For example, macro-economic and tax reforms affecting the price of key inputs may influence the use of fuel-wood compared to other energy sources. Shifts in exchange rates may affect the feasibility of recycled products compared to importing low cost products. Export policies may increase logging and mining activities, with considerable damage to forest biodiversity and water quality. Macro-economic or tax reforms (e.g. through Environmental Fiscal Reforms⁹¹) can provide opportunities for *decoupling* human well-being from the overuse of natural resources or the emission of pollutants (including greenhouse gases) or for ensuring, e.g. through budget allocation, adequate investment towards sustainability, especially in case growth is predominantly based on the consumption of natural resources.

As mentioned above, it is therefore important, starting from the preparation of the CSP, to consider the extent to which the national policy/strategy to be supported may lead to detrimental environmental externalities, resource exhaustion, or damaging distortions through e.g. tax, expenditure and regulatory policies. When reviewing/assessing national policies/strategies attention should therefore be paid to identifying and understanding the linkages with the environment and whether policies and measures are in place or are required to address their potential negative effects. This should be based on information contained in the Country Environmental Profile (CEP, see Chapter 3 above), any available Strategic Environmental Assessment (SEA) or equivalent analytical work that might be available from other development partners⁹².

A Government-driven SEA, with the involvement of stakeholders and in close coordination with other donors may be promoted to this end if it is considered that environmental issues are a key concern for the EC programme of support to the national policy/strategy (see Section 3.2 above) This commitment would normally be made at the Programming phase, but might be agreed at a later date.

This SEA (see Boxes 3 and 5) should answer the following questions:

- Is the assessed strategy consistent with the national environmental and sustainable development objectives and principles? What are the linkages between the proposed strategy and the environment?
- What is the best alternative (mix of actions) in environmental terms to achieve the development objectives?

91 See footnotes 20 and 90.

92 See footnote 82.

- How can the expected adverse impacts be mitigated and the positive effects optimised? How best can opportunities be used in order to improve the sustainable development outcomes?
- Which indicators can be used to monitor the environmental impacts of the policy/strategy implementation⁹³?

Box 5 | Strategic Environmental Assessment (SEA) of National policy/strategy (e.g. PRSP, Reform Programme)- key points

What is it?	An assessment of the key linkages between the environment and the national policy/strategy with a view to ensure adequate incorporation of the three pillars of Sustainable Development.
What needs to be done by EC staff?	Advocacy of the benefits of strategic environmental assessments in dialogue with partner governments and in co-ordination with other donors. Envisage supporting the SEA process, as a particular project or as part of the “complementary support” of a GBS.
Under what conditions?	For national policies/strategies supported by the EC under the GBS approach, the EC may require a commitment by the Government to prepare an SEA.
When is it needed?	Ideally during the development of the policy/strategy, although it could be carried out during its implementation as long as there are real opportunities to influence it via the results of the SEA. For the EC the best time is before the formulation phase of GBS, but the national schedule has priority.
How long does it take?	Due to the stakeholder engagement process, 10-12 months may be necessary.
Where is it used?	SEA outputs are used to revise the national policy/strategy of the Government.

When assessing the national policy/strategy, such an SEA may already exist⁹⁴. Where it exists, its findings should be used to inform the assessment. The following sections of this chapter describe good practice for environmental integration in the GBS cycle of operations.

⁹³ It is possible to see environmental issues being taken into account in the choice of performance criteria and indicators, referring for instance to required institutional developments with respect to the environment or to the MDG 7 indicators, such as carbon dioxide emissions, energy efficiency, forest cover and protected areas.

⁹⁴ One useful source of information is the OECD-DAC Survey of SEAs <http://www.oecd.org/dataoecd/54/24/36057013.pdf>

5.1. Identification

Environmental considerations can be addressed in the **preliminary review** carried out in the identification phase of GBS, which focuses on assessing the fulfilment of the “eligibility criteria” for receiving budget support. This should be based on existing information (CEP, SEA when it exists or any additional analysis that might be available from other development partners). The depth of analysis of environmental issues will depend upon the extent to which these issues have been identified as a key concern in the CSP.

For the GBS Identification Fiche (IF) environmental issues are to be addressed in four main areas:

- National development or reform policy and strategy: evidence should be provided that a well defined national policy and strategy is in place or under implementation (or will be by the end of formulation). In this context the quality of the policy and strategy is to be assessed including from an environmental point of view.
- Budget and Medium Term Financial Perspectives: The GBS IF calls for an analysis of the “...consistency of the budget and budget execution with declared policies including those relating to cross-cutting issue of ...the environment”. This issue does not have to be addressed during identification if the information is not available, and can be considered under next steps (see below).
- Implementation issues: as appropriate, the GBS IF should make a short preliminary description of issues such as complementary support, annual dialogue, or disbursement conditions related to environment.
- Next steps: the need for further work should be determined on the basis of the previous analysis. Requests for support from HQ should be specified here.

5.2. Formulation

The formulation of a GBS involves a more **comprehensive assessment** of the eligibility criteria for budget support, the seven areas of assessment (Table 5.1), as well as the practical implementing modalities for the GBS operation.

Attention⁹⁵ may be specifically devoted to environmental considerations, developing the following information:

- An overview of major environmental challenges and issues that might be influenced by the policy/strategy (in case there is no SEA the CEP and Box 1 in Annex 1, should be used);
- An overall assessment of how the macro-economic framework and reform addresses: (a) major market failures regarding environmental externalities (b) environmentally damaging distortions (such as some subsidies) and (c) institutional constraints;
- An assessment of the available indicators, to ensure they reflect the linkages to the environment⁹⁶; the indicators should reflect key environmental/sustainability concerns (identified by the CEP or an SEA) and the implementation of mitigation/optimisation measures; as far as possible, they should also be able to track the causal links between the measures taken and the final impacts in order to check that the reforms produce their expected benefits;
- Specific recommendations for the formulation of the EC GBS Programme (e.g. environmentally adequate performance indicators in the Performance Assessment Framework (PAF) and environmental integration in complementary measures, such as support for capacity development), for the impact monitoring and for the policy dialogue.

95 The formulation mission should ideally include environmental expertise (or expertise in environmental economics) and be provided with available relevant information, such as the CEP and any existing SEA.

96 Example: macroeconomic support to Tanzania in the 2001-2006 CSP.

**Table 5.1 Good practice for environmental mainstreaming -
Entry points for GBS assessment**

The seven assessment areas	Entry points for environmental mainstreaming
1. National development or reform policy and strategy	Assess how the policy/strategy that the EC envisages supporting integrates environmental issues and policies. Identify whether an SEA has been carried out or is under preparation. Consider the environmental impacts of the policy/strategy and how it addresses environmental challenges (use the SEA if it exists).
2. Macro-economic assessment	Based on the CEP, the analysis of the environmental situation in the CSP (or the SEA), consider the linkages between the environment and the major aspects of the macro-economic situation and trends (see examples of linkages in the introduction to this chapter and line 2 in Table 3.2).
3. Budget and Medium Term Financial Perspectives	Consider environmental expenditure, including an assessment of the availability of resources for environmental institutions and for the implementation of environmental measures identified by the SEA.
4. Public financial management	The financial flows may have environmental implications to be taken into account, such as the impact of subsidies and taxes. Refer to the Environmental Fiscal Reform ⁹⁷ and the “green budgeting” concept.
5. Performance measurements and results indicators	Assess the monitoring system and the environmental relevance of the performance indicators used, as well as their ability to monitor major environmental concerns. Refer to “green accounting” approaches.
6. Donor co-ordination	Consider donor co-ordination in relation to the use of indicators and the SEA.
7. Institutional and capacity analysis	Attention should be paid to the capacity to monitor and regulate environmental changes and to implement the recommendations of the SEA. If appropriate recommend strengthening the environmental monitoring and management systems.

⁹⁷ See footnote 20.

Performance (PAF) indicators for the GBS may reflect institutional development objectives with respect to the environment (e.g. a law on SEA, an EFR, a reform in the forestry sector, the establishment of new Protected Areas or of an environmental fund). From an environmental perspective it is also important to check that the non-environmental indicators are not closely linked to negative environmental trends. Table 5.2 below provides examples of environmental outcome/impact indicators, which are mostly suitable for long term monitoring and can be used in the policy dialogue. More general guidance on indicators is provided in Annex 10.

Table 5.2 Examples of sustainability indicators for national development policies/strategies (see also Annex 1, Box 1).

Key questions	Potential outcome/impact indicators
Does the country save enough resources for its future development?	Adjusted Net Saving (World Bank). Investments in natural capital.
Does the country conserve its natural assets for future needs?	Rent from unsustainable use of natural resources (component of the Adjusted Net Saving). MDG 7, target 9, indicator 25 “Proportion of land area covered by forest”. Envisage adding country-specific indicators, such as area covered by particular ecosystems or proportion of land under risk of erosion or desertification.
How efficient is the country in achieving development with low environmental costs and low consumption of natural resources?	Energy efficiency - MDG7, target 9, indicator 27 “Energy use (kg oil equivalent) per \$1000 GDP”. Envisage adding country-specific indicators, such as efficiency in the use of water or agricultural inputs.
What are the overall pressures on the environment?	MDG 7, target 9; indicator 28 “CO ₂ emissions per capita and consumption of ozone-depleting CFCs”. Envisage adding country-specific indicators, such as pollutant emissions, expansion of agricultural land, urbanisation, and other components of the Ecological Footprint.
Are the living conditions of the population, especially the poor, improving?	MDG 7, target 10, indicator 30 “Proportion of people with sustainable access to an improved water source, urban and rural”. MDG 7, target 11, indicator 31 “Proportion of population with access to improved sanitation, urban and rural”. MDG 7, target 11, indicator 32 “Proportion of households with access to secure tenure”. Envisage adding country-specific indicators, such as proportion of population living in polluted or particularly unsafe environments.

If the CSP has identified the environment as a key concern for a GBS programme, and this has subsequently been confirmed during identification and formulation, it would normally lead to the identification of suitable performance criteria and indicators that would be included as general and specific conditions within the GBS programme.

General conditions would be applicable to all tranches release decisions, whilst specific conditions would be applicable to one or more individual tranches. When specific conditions on environment are included as disbursement conditions they may either form part of a fixed tranche (the tranche is disbursed only upon meeting *all* the conditions for disbursement) or a variable tranche (all or part of the tranche is disbursed in function of the degree to which the conditions for disbursement have been met, on the principle of partial disbursement for partial performance).

5.3. Implementation

During implementation, environmental issues may be considered in the policy dialogue, in the co-ordination with other donors, in capacity building activities and in the monitoring of impact indicators in order to verify that the macro-economic reform or policy makes a positive contribution to sustainable development.

As already mentioned, an SEA may be on the agenda for the policy dialogue and donor co-ordination. The implementation phase may also include the preparation and completion of the SEA. In this case, the results of the SEA should be used to revise the seven assessments (see Table 5.1) as well as the policy/strategy being supported. There are at least two opportunities when this may be done, during the review of the CSP or during the review of the PRSP.

A key part of implementation will be the monitoring of disbursement conditions that may include performance criteria and indicators related to the environment.

5.4. Evaluation

During evaluation, it should be assessed if the GBS and the supported policy/strategy effectively contributed to sustainable development. It should be checked if the causal links between the GBS inputs and development outcomes (including the environmental impacts) have performed as expected, in order to learn lessons for the future. The impact of the GBS and related policy dialogue on the national policy should thus be assessed. The evaluation should also assess if the process of integrating the environment (e.g. through an SEA) has been successful.

These requirements should be included in the ToR of the evaluation study, which should ideally foresee adequate expertise in the field of environmental economics or environment-development linkages.

6. Environment in the Project Approach

This chapter⁹⁸ provides guidance on integrating the environment under the “project approach”. Whereas room for integration measures exists throughout all the main stages of the operations cycle, emphasis is put on the initial phases of design and preparation as they are of key importance.

This guidance has been drafted having in mind projects, in the identification and formulation of which the EC plays a direct role. Nonetheless, the principles and some of the tools illustrated in this chapter and related Annexes can apply to other actions supported by the EC such as those under *call for proposals* procedures, where identification and formulation are the main responsibility of applicant organisations (this refers in particular to Annexes 6 and 9 but also to Annex 7).

6.1. Identification

It is considered good practice to integrate the environmental dimension in the logical framework approach, particularly in problem and strategy analysis. In strategy analysis the identification of objectives and expected results takes into account environmental opportunities and constraints as well as impacts. Environmental opportunities/constraints are defined here as factors or conditions that affect (positively or negatively) the feasibility of the project, and environmental impacts are positive or negative consequences going beyond the expected objectives. More detailed guidance on how to integrate the environment in the Logframe approach is provided in Annex 6.



Environment in the Logframe approach

In most cases a project concept/idea is submitted to the EC without clear evidence that a log-frame approach has been followed. Proposals can therefore be appraised at this stage based on the questions presented in Table 6.1 below, if sufficient information is available.

98 Based on the process described in European Commission (2004) *Project Cycle Management Guidelines, Aid Delivery Methods Vol. 1*.

Table 6.1 Environmental appraisal of project proposals

Criteria/Aspects	Environmental questions
Relevance to the particular needs and constraints of the country or region	Does the project fit with the recommendations of previous environmental assessments (CEP)? Does it adequately address the environmental problems that have an impact on the overall objectives?
Needs of target groups	Does the project affect the environmental needs/concerns of beneficiaries, including potential “negative” beneficiaries (affected by negative impacts)?
Strategies and activities	Are the strategies and activities environmentally sound? Are there alternatives that produce a better environmental impact with the same project effectiveness?
Involvement of stakeholders	Are the groups potentially affected by the project impacts involved?
Feasibility	Are environmental opportunities (such as adequate resources), constraints (e.g. disaster risk) and assumptions affecting the project’s feasibility taken into account?
Objectively Verifiable Indicators	Do the OVIs adequately reflect the environmental concerns?
Impacts	Is the expected overall impact, including undesirable side-effects acceptable?

Unless this preliminary assessment leads to the rejection of the project proposal (or to a request to amend it), the next step is to carry out the pre-feasibility study with adequate environmental integration, considering that this is the key stage where project alternatives are discussed and selected⁹⁹. The environmental impacts, opportunities and constraints that differentiate the project alternatives should thus be assessed, taking into account the different characteristics and sensitivity of potential project sites (in case of location alternatives). This should be done using the guidance provided by Annex 9.

⁹⁹ In general terms “alternatives” refers to different ways of achieving the same ends. “Alternatives” will necessarily be of a broader (or more strategic) nature at the pre-feasibility than at the feasibility stage. For example for the case of an agriculture project the “alternatives” studied at pre-feasibility may include enhancing paddy production through irrigation and securing of agrochemical inputs, or the introduction of new crops and techniques to enhance production on the hills. If the pre-feasibility study selects the rice production project, then the “alternatives” studied in formulation (and thus from an environmental point of view in the EIA and/or feasibility study) could be, for example, the irrigation system to use, the specific agrochemicals (inputs) to be used, or the rice varieties to be grown.

The pre-feasibility study could also lead to the decision on requiring an **Environmental Impact Assessment (EIA)** at the formulation stage. EIA is an *ex-ante* environmental assessment of a project, involving a systematic evaluation of its potential environmental impacts (i.e. effects or consequences) in order to propose appropriate measures to mitigate its negative impacts and optimise its positive ones.

The operation where project proposals are assessed in order to decide whether an EIA should be carried out at the formulation phase is called “**EIA screening**”. EIA screening of projects supported by the EC should be based on national legislation and procedures and on EC criteria. Under EC criteria (see Annex 7) individual projects are classified into three categories:

- Category A projects always require an EIA.
- Category B projects - as well as projects that are not clearly classified - require further information to decide if an EIA is required or not. Annex 7 provides detailed guidance on screening and especially on how to assess Category B projects.
- Category C projects do not require an EIA.

The pre-feasibility study and the EIA screening process will provide information useful for the preparation of the ToR for the EIA and formulation studies.

The same screening criteria should be used for single projects included in programmes or in complex projects¹⁰⁰. Nevertheless the process should be adapted as follows:

- In programmes or complex projects that include or may include Category B or A projects to be identified after the conclusion of a Financing Decision, the EIA of these projects should be carried out in the programme implementation phase¹⁰¹.
- In programmes that include already identified projects¹⁰² which require an EIA, these should be carried out at the Programme formulation phase¹⁰³.

100 Some interventions categorised as “projects” cover a wide geographical area and consist of various smaller projects, often not identified until implementation. These complex “projects” should be treated as programmes.

101 An SEA of the programme (or complex project, see footnote above) may also be carried out during formulation. This would allow the subsequent EIAs for the individual projects to focus on specific issues aimed at enhancing the project design. It may also eliminate the need to prepare EIAs for some Category B projects if it is judged that the key environmental concerns have already been addressed by the Programme SEA.

102 In the “programme/package” approach.

103 Nevertheless, if the same area or ecosystem is expected to be affected by more than one of the projects, the final impact cannot be adequately assessed through individual EIAs. In this case an SEA of this set of projects is recommended. The ToR for this SEA should be carefully drafted in order to focus on assessing the cumulative impacts of the individual projects and assessing whether that mix of projects is the best option, from an environmental point of view, to achieve the Programme objectives. Depending on the level of detail at which the individual projects have been defined, the environmental assessment may integrate elements of the EIA methodology (Annex 8).

Box 6 | When is an EIA required?

An EIA is required for projects that are likely to have significant impacts on the environment.

It should be prepared if:

- Required for this type of project under national legislation;
- The project is classified as Category A (see Annex 7);
- The project is classified as Category B but, considering the particular vulnerability of the recipient environment, the screening process in Annex 7 recommends an EIA;
- An existing SEA clearly recommends an EIA for this kind of project.

**EIA screening**

Based on the preceding steps, the Identification Fiche can be completed.

Table 6.2. The Identification Fiche and environmental entry points

Sections of the Identification Fiche	Entry points for environmental integration
Consistency with EC policy and programming framework	Refer to the CEP and its incorporation in the CSP.
Development objectives and cross-cutting issues	Consider environment among the cross-cutting issues.
Problem analysis	Include environmental aspects.
Stakeholders analysis	Include groups potentially affected by environmental impacts.
Strategy analysis	Take into account major environmental linkages (impacts, opportunities and constraints as explained above) in the strategy analysis.
Proposed project description	Based on the above steps, integrate the environment in the logical framework structure (see also Annex 6).
Resources and cost implications	Adapt formulation costs according to the results of the screening.
Implementation issues	Select environmentally adequate indicators (see Annex 10).
Assumptions and risks	Consider environmental uncertainties, e.g. risk of natural disasters.
Sustainability	Assess environmental sustainability.
Next steps	Include the results of screening: mention whether an EIA is needed or not.

6.2. Formulation

Based on the EIA screening completed during identification, there are two major options for environmental integration in the formulation phase¹⁰⁴:

- projects not requiring an EIA
- projects requiring an EIA.

6.2.1. Projects not requiring an EIA at the formulation phase

If an EIA is not required, the ToR for the feasibility studies should ensure that:

- The environmental conditions, positive (opportunities) and negative (constraints, including potential environmental disasters) that may affect project effectiveness, efficiency, sustainability or development impact are assessed and that the project is adapted to these conditions.
- Any potential environmental effects, especially those which may have been identified when applying the EIA screening are addressed, that appropriate measures are outlined and that the project design adapted (including indicators and monitoring) if needed to minimise negative environmental effects and enhance positive ones.

In the case of Category B projects, the EIA screening carried out in the identification phase assists in addressing these aspects. Annex 9 provides further guidance on identifying the environmental issues that should be taken into account in the preparation of ToR for the feasibility study. It will also help determine if environmental expertise should be included in the formulation mission team.



Feasibility study

¹⁰⁴ For guidance on Programmes or complex projects see section 6.1.

6.2.2. Projects requiring an EIA

When an EIA is required, it is important to define how it will be incorporated in the different steps of the formulation phase. There are four issues to consider:

- A clear definition of the scope of studies to be carried out at formulation is necessary to ensure complementarity and to avoid overlap between the EIA and other studies. Close co-ordination is therefore required in the preparation of the different ToR for these studies if they are not prepared by the same persons. Usually the technical feasibility studies will focus on the environmental factors (opportunities and constraints) that may affect the feasibility of the project, while the EIA will focus on the project's external effects (environmental impacts). Further guidance for environmental integration in the feasibility study is provided in Annex 9.
- Consistency should be maintained during formulation, this means that the same alternatives¹⁰⁵ are considered in the different assessments (e.g. environmental and economic).
- It should be ensured that the EIA is based on sufficient technical information and assesses realistic options, and that it can have an influence on the selection of project alternatives and final project design.
- Ideally the EIA should precede the economic analysis, which has to incorporate the project's environmental impacts and mitigation measures.

105 See footnote 99.

Box 7 | Environmental Impact Assessment - General concept

EIA¹⁰⁶ is an *ex-ante* environmental assessment of projects¹⁰⁷. The EIA of a proposed project is a systematic assessment of the potential environmental impacts of this project and its alternatives, in order to propose appropriate measures to mitigate negative environmental impacts and optimise positive effects, and assist the decision-making process. The main stages can be distinguished as follows:

EIA screening

Screening refers to the decision to carry out the EIA, based on legislation, the nature of the project and the sensitivity of the environment.

EIA scoping

Scoping is the operation used to define the aspects that need to be covered in the EIA study. The views and concerns of key stakeholders should be taken into account in defining the scope of the EIA.

EIA study

A **baseline study** describes the initial state of the environment within the selected boundaries of the study area. It also includes the description of the “no project” scenario, based on assumptions regarding future changes. Another important step is the **identification and evaluation of environmental impacts**. The impacts are the differences between the situation with, and the situation without the project. The identification and evaluation of impacts are necessary for all alternatives¹⁰⁸ under study, in order to compare them and provide recommendations on the selection of the most environmentally sound alternative. It may be decided to undertake a more detailed assessment of a preferred alternative. The last part of the study provides **recommendations, mitigation/optimisation measures and the Environmental Management Plan (EMP)**. Measures should be proposed to mitigate negative impacts (mitigation measures), as well as to optimise positive effects. The EIA recommendations must be organised in an Environmental Management Plan (EMP), specifying the way the proposed measures should be implemented, and a monitoring plan.

Decision

Based on the EIA the project, or the preferred alternative, can be approved without changes or conditions; approved with minor changes; subjected to major changes that justify new studies; or judged unacceptable, even with corrective measures, and therefore refused.

Public participation

Participation and consultation of stakeholders must be integrated in this process within the local institutional framework. Particular care should be taken to (a) make full use of the experience and know-how of the population living in the environment being studied, (b) take into consideration the needs, values and interests of the population concerned, including women and marginalised social groups. Public participation should be provided for from the earliest stages of the process.

106 For measures in force in the EU refer to Directive 85/337/EEC as amended by Directives EC/97/11 and 2003/35/EC.

107 *ex-post* Environmental Impact Assessment will be referred to as *ex-post* EIA. Prior to the common use of the term SEA, EIA was sometimes also considered as applying to plans and programmes.

108 See footnote 99.

For the EIA process the preferred approach is to follow national procedures (ideally information on EIA legislation in the country concerned will be contained in the Country Environmental Profile). Where this is not possible or where additional safeguards are considered necessary the general concept described in Box 7 can be used as a guide to good practice and the process of commissioning an EIA should be based on the following steps:

1. Preparation of the EIA ToR and contract

The study should be commissioned to independent consultants based on the Model ToR provided in Annex 8. The Model ToR must be adapted to the particular context of the project on the basis of the questions raised by the screening questionnaire as well as on available information regarding the design of the project (e.g. pre-feasibility studies) and previous environmental assessments (e.g. the CEP and any available SEAs in the sector). The EIA specialists should be provided with all relevant documents, and be given an explanation on the links with other formulation studies and with the decision-making process.



ToR EIA

2. EIA scoping

As a first step the consultants prepare a scoping study and submit it to the EC Del/ Government, identifying aspects to be covered by the EIA study (i.e. key project-environment interactions); the geographical area to study; time-frame; level of detail required in the EIA study; impact identification and evaluation tools; stakeholders and their concerns; and defining the alternatives to be studied. A key output of the scoping study is a proposed calendar and activities for the EIA study, on the basis of which the final time schedule and budget can be prepared.

3. The EIA study

After approval of the scoping study by the EC and the Government, the EIA study is carried out.

The EIA study report should provide conclusions and recommendations regarding:

- The environmental acceptability of the project;
- The best alternative in environmental terms;
- The measures that should accompany this alternative to mitigate negative environmental impacts and increase positive effects.

These measures should be organised in an Environmental Management Plan (EMP), including a monitoring programme, and should mention expected results, activities, indicators, schedule, responsible parties and budget. The EMP should be reflected in the project's contractual documents. In infrastructure projects the EMP will provide clauses to be incorporated in the specifications of the tender documents and the final works contract, including the obligation to prepare its own EMP at the start of the project.

4. Appraisal of the EIA report

When a draft EIA report is submitted to the EC a quality assessment should be based on the following questions:

- Does it comply with legal requirements and the ToR?
- Is the study balanced, does it not omit important aspects of the environment?
- Is it independent and neutral?
- Are the conclusions clear and understandable?
- Have the stakeholders been adequately consulted? Does the study take their interests and concerns in account?
- Are the assumptions, choices, value judgements and uncertainties clearly identified?
- Is the study rigorous and scientifically based?
- Are all realistic alternatives assessed and compared?
- Are the recommendations an appropriate response to the identified impacts?
- Are the recommendations acceptable and realistic, taking into account the constraints of technical, financial, economic and social feasibility?
- Are the recommendations organised in an operational Environment Management Plan? Do they include clear recommendations for monitoring by the EC Delegation or national partners?
- Are the residual impacts clearly identified and assessed?

Box 8 | Environmental Impact Assessment (EIA) for EC projects - key points

What is it?	A study that assesses the potential environmental impacts of a project before its implementation and recommends measures to mitigate negative and enhance positive impacts.
What needs to be done by EC staff?	If agreed with the national partners, the EC prepares the ToR and commissions consultants. In case the EIA process is led by the national partner, the EC approves the scoping, checks the quality of the study and incorporates the results in the Financing Proposal.
Under what conditions?	When a project is likely to have significant environmental impacts, according to national legislation supplemented by the results of an EIA Screening (Annex 7).
When is it needed?	In the formulation phase, preferably before the economic analyses.
How long does it take?	The duration of the study is very variable and will depend on its scope. For smaller projects the EIA could take +/- 4 months, whereas for larger and more complex projects, it could take 12-18 months to prepare.
Where is it used?	The conclusions of the EIA are incorporated in the Financing Proposal and in the relevant contracts.

6.2.3. Integrating the environment in the Financing Proposal

At the end of the formulation phase, the Financing Proposal (and Financing Decision) should be based on a careful review of the environmental mainstreaming process to this point, as well as an appreciation of the acceptability of the project with respect to the negative impacts that cannot be mitigated (residual impacts). The logical framework should be finalised taking into account any existing EIA and the guidance provided in Annex 6(c). Table 6.3 below provides a useful checklist.

Table 6.3. Environmental integration checklist for project financing proposals

Key points for environment integration	Environmental considerations
Logical Framework	The Logical Framework should integrate the environment as described in Annex 6.
Problem analysis	Check that the environmental problems, including negative trends have not been neglected (see Annex 6).
Stakeholder, equity, ownership	Consider groups potentially affected by the environmental impacts and their involvement if an EIA was undertaken.
Project purpose	Check consistency with the problem analysis.
Assumptions	Consider potential assumptions on external environmental factors.
Environmental impact analysis	Check the EIA process, and assess the acceptability of the residual impacts.
Technical feasibility	Consider environmental conditions (constraints and opportunities), which might influence project effectiveness, cost-effectiveness and sustainability.
Monitoring	Integrate environment in the indicators (as environment-specific or integrated into other indicators) and provide operational guidance for monitoring by the EC.



Environment in the Logframe approach

6.3. Implementation

Notwithstanding that this handbook is prepared mainly for EC staff, it is important at this stage to describe the respective roles of the key parties: the EC, the national partners and the project management/implementation team.

EC staff

For EC staff in Delegations, it is important to see to it that the EMP is adequately reflected in the project's contractual documents. They also have a key role in **monitoring project implementation**, including compliance with the requirements resulting from environmental integration in the previous steps. This should be based on the EMP (including its monitoring plan) provided by the EIA or on the feasibility study.

The EC may also promote the idea of an “environmental performance review”. Such a review examines an on-going project with the aim of identifying areas where environmental performance can be improved, independent from the degree and quality of environmental integration in the previous steps. The review can be based on the checklist of good practice provided in Table 6.4 below.

National Partners

The National Government has a major role in project monitoring and management, particularly under the European Development Fund. Environmental authorities and civil society representatives may also be involved in environmental monitoring and control, especially when an EIA has been carried out.

Project management/implementation team

The contractors in charge of project implementation are responsible for:

- Developing the operational aspects of the EMP during the project inception phase;
- Implementation of the project activities, including those included in the EMP or influenced by the EIA recommendations;
- Monitoring of the environmental OVs of the logical framework and EMP, and adjusting project management accordingly;
- Complying with applicable environmental legislation, as an obligation and a minimum condition;
- Ensuring best practice or improving practice (based on Table 6.4 below and possibly on an environmental performance review).

Table 6.4. Good practice in project implementation¹⁰⁹

Land and location	<p>Reduce land use</p> <p>Avoid disturbing sensitive areas</p>
Energy and transport	<p>Use energy efficient appliances</p> <p>Use renewable sources of energy</p> <p>Purchase electric and electronic appliances with low energy consumption</p> <p>Design or select energy-efficient buildings (e.g. in relation to insulation, orientation, use of solar energy)</p> <p>Purchase vehicles with low fuel consumption</p> <p>Promote car pooling for transport related to the project</p>
Paper use	<p>Use of recycled paper</p> <p>Promote 2-sided printing of documents</p> <p>Promote policy to only print necessary documents</p>
Water	<p>Reduce water consumption</p> <p>Install toilets with low water consumption</p> <p>Capture and use of rainfall</p> <p>Ensure proper treatment of waste water</p>
Chemicals	<p>Reduce the consumption of chemicals or other polluting substances</p> <p>Use biodegradable cleaning products</p>
Waste management and recycling	<p>Reduce waste production, use products with less or recyclable packaging, use washable dishware and cutlery in offices and canteens</p> <p>Use recycled or environmentally preferred products</p> <p>Increase waste separation and recycling, ensure all wastes generated by the project can receive adequate treatment and disposal</p>
Project management	<p>Implement carefully the EMP or environmental measures identified in the project design</p> <p>Use all available opportunities to enhance local environmental conditions at low cost and to reduce pollution or negative impacts</p> <p>Use the project for environmental training/awareness raising</p> <p>Select sub-contractors based on their possession of an Environmental Management System</p>

109 Useful ideas on good environmental practices can be found in the EC's web site on Green Purchasing: <http://ec.europa.eu/environment/gpp/>

6.4. Evaluation

Evaluation is normally commissioned to independent consultants. When commissioning an evaluation study, the EC should ensure, through adequate ToR, that:

- The evaluation examines how the environment has been mainstreamed in the previous steps of the project cycle, especially in Category A and B¹¹⁰ projects (even if an EIA has not been undertaken);
- If an EIA has been undertaken the evaluation looks at whether the EIA predictions regarding residual impacts occurred and that the EMP and environmental monitoring were effective. For large projects a specific *ex-post* EIA may be beneficial in this context;
- The environment is taken into account in applying the main evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact as shown in Table 6.5.

Table 6.5 Evaluation criteria and related environmental issues

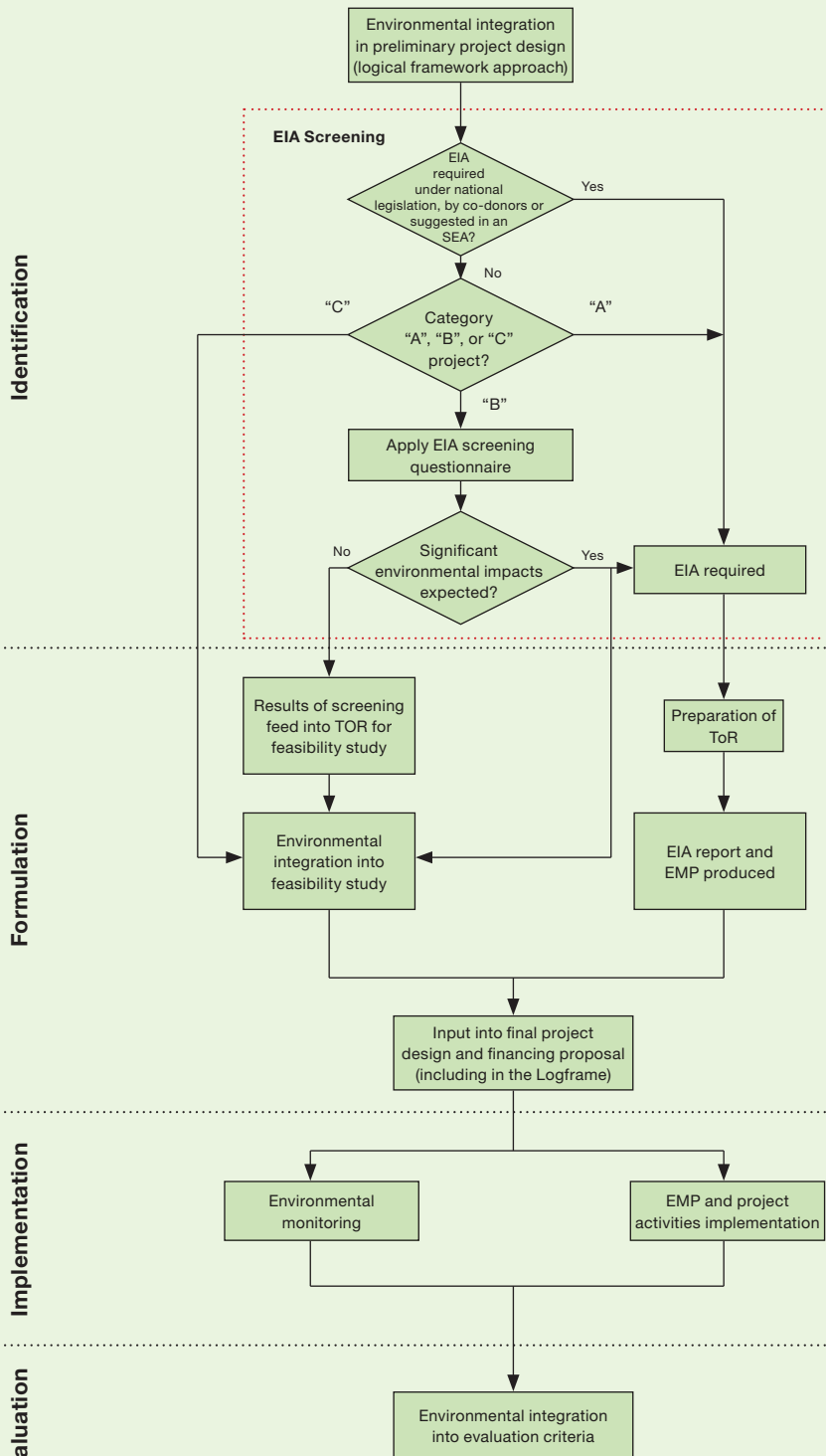
Criteria	Issues
Relevance	Did the project address the environmental issues identified in the Problem Analysis? If not, are there good reasons for giving priority to other problems? Does it incorporate environmental objectives (e.g. in its EMP) addressing its potential environmental impacts?
Effectiveness	Did the project comply with its environmental requirements and objectives? Did the environmental protection measures produce the expected results?
Efficiency	Has the project made efficient use of environmentally damaging means? Have adequate resources or efforts been invested in mitigating/optimising impacts? Has the project been handicapped by under-estimated environmental constraints?
Sustainability	Are project outcomes threatened by environmental degradation (or resource impoverishment) or disasters?
Impact	What are the project's contributions to sustainable development? Could these have been improved? What are the social and environmental effects external to project objectives? What have the impacts been compared to those predicted by the EIA?

¹¹⁰ See Annex 6.

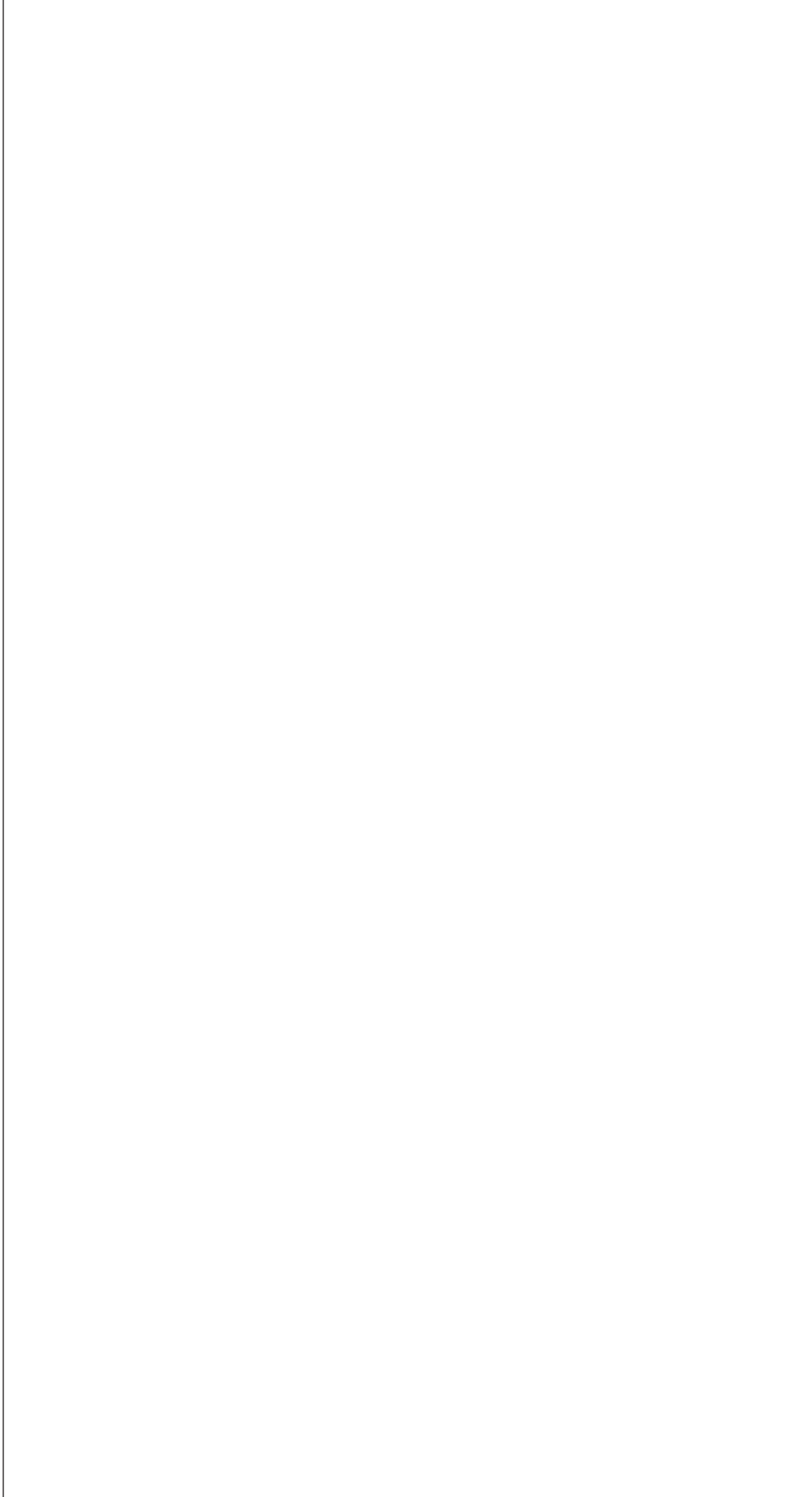
According to the project category (A, B) and the project history (EIA or not) adequate environmental expertise may be included in the evaluation team.

As usual results of mid-term evaluations should feed back into the project so as to enhance its quality and lessons learnt from final and *ex-post* evaluations should be used to inform the design and formulation of future interventions. They should also contribute to building the knowledge base and the practical experience required to enhance, on a larger scale, the quality of CEPs and response strategies.

Fig. 6. Environment integration in projects



Annexes



Annex 1 | Specific environmental issues in co-operation focal areas

This Annex provides guidance for environmental integration in the nine current EC development co-operation areas. It gives:

1. Environmental pressures¹¹¹ and impacts, that should be mitigated or enhanced (and can be used for the scoping of SEAs);
2. Environmental factors, that should be taken into account in order to enhance the effectiveness, efficiency or sustainability of the programme or strategy;
3. Entry points, where opportunities can be found to include environmental considerations in the programme or strategy;
4. Examples of indicators;
5. Additional sources of information.

¹¹¹ Environmental pressures are human actions affecting the environment (e.g. logging), impacts are the result of pressures (e.g. deforestation).

1. Governance, democracy, human rights and support for economic and institutional reforms

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

This co-operation area usually has important indirect consequences on human activities affecting the environment, for example:

- Pressures on natural resources (including mining, land clearing, illegal logging and poaching) and associated impacts (e.g. pollution from mining, soil erosion, resource depletion, biodiversity losses).
- Energy consumption and GHG emissions (impact on climate change).
- Land use, urbanisation, and trends in agricultural intensification.
- Pollution and wastes.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Availability, exploitation costs and sustainability of natural resources, which are important for the national economy, including soils, water, forests, tourism assets (e.g. landscape, recreational water, scenic features, National Parks).

Environmental factors affecting migration, health, labour productivity, gender division of labour.

Disasters and environmental damages causing economic costs and affecting human life.

3. Entry points for environmental integration in sector programmes or strategies

Environmental fiscal reforms and market-based mechanisms of environmental management (introducing or adapting environmental taxes, removal of environmentally damaging subsidies).

Environmental integration in PRSP, Development Policies, Macro-economic reforms; use of SEA.

Consistency in sector policies and environmental mainstreaming as a cross-cutting issue in different sectors.

Environmental statistics, monitoring and geographical information systems; green accounting (using environmental and sustainability indicators in the overall macro-economic accounting framework).

Legislative reform and law enforcement: environmental legislation, EIA and SEA procedures; FLEGT initiative; Multilateral Environmental Agreements (ratification, implementation).

Access rights to natural resources and environmental rights for men and women (especially of vulnerable groups, including ethnic minorities and indigenous peoples); land tenure system.

Tackling corruption (including in the natural resources sector).

Civil society participation; access to environmental information.

Decentralisation and community participation (including less represented groups) in natural resource management and land use planning.

Environmental institutions (centralised, decentralised) and capacities.

4. Examples of environmental indicators

Adjusted Net Saving and natural resource rents.

Investment as a % of GDP in environmental sector/institutions.

GHG emissions as a % of GDP or GHG / HDI.

Waste generation/GDP or waste generation (kg/capita/year).

Land use (proportion of urban/agricultural/forest land).

Efficiency in natural resources use.

Monetary damage of pollution.

State of key natural resources (e.g. forest).

Energy use (kg oil equivalent) per \$1000 GDP (MDG 7, ind. 27)

See also Table 5.2

5. Additional guidance

OECD (2005) *Environmental Fiscal Reform for Poverty Reduction*, OECD DAC: Paris.

Available online at: <http://www.oecd.org/dataoecd/14/25/34996292.pdf>.

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf> Provides checklists of opportunities and constraints for National development plans (pp. 27-29), Economic growth (pp. 30-33) and Governance (pp. 37-41).

2. Trade and regional integration

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Pressures on shared or exported resources (e.g. timber, species, minerals, water, fish), risk of exhaustion.

Pollution from imported commodities (e.g. cars, agricultural inputs) and wastes.

Indirect impacts due to economic changes (e.g. crop substitution, agricultural intensification, land use patterns, changes in industrial and mining sectors, human migrations, urbanisation, waste production, employment rate, exports diversification).

Impacts from processing and transport.

Risk of environmental dumping; impacts from harmonisation of the regulatory framework.

Improved management of shared resources.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Transboundary pollution or impacts resulting in regional disputes (e.g. impacts of dams or water extraction on downstream flows).

Illegal transboundary exploitation of natural resources and illegal trade.

Distributional pattern of natural resources (affecting trade or migrations).

State of shared resources (e.g. fisheries, water).

Environmental damage caused to transport and communication systems (e.g. by storms, floods).

State of natural resources producing export goods (e.g. state of fish stocks and forests).

3. Entry points for environmental integration in sector programmes or strategies

Carrying out Sustainability Impact Assessments (SIA) of Economic Partnership and trade agreements¹¹² and implementing their recommendations.

Harmonisation of environmental legislation and quality standards (e.g. SPS: sanitary and phytosanitary standards).

Eco-labelling, certification (e.g. organic farming label, forest certification¹¹³, marine certification¹¹⁴).

112 See http://ec.europa.eu/comm/trade/issues/global/sia/index_en.htm.

113 See Forest Stewardship Council <http://www.fsc.org>

114 See Marine Stewardship Council <http://www.msc.org>

Considering environmental aspects in Economic Partnership Agreements, in relation with the product coverage and calendar/rhythm of liberalisation (for instance an agreement in fisheries can be linked to a regional policy for the sustainable use of the resource).

Using EFR principles while developing new budgetary resources in case export taxes and import duties should be reduced.

Exchanges of clean technologies know how and experiences in common environmental issues.

Promoting import of clean technologies.

Regulating the trade of environmentally sensitive commodities (e.g. timber, wildlife).

Promoting local transformation of rough material.

Promoting local patents on biodiversity resources.

Regulating the private sector and supporting environmental management capacities of the private sector.

Co-management of shared resources, transboundary protected areas or watershed management.

Regional or transboundary co-operation in environmental law enforcement.

SEA of regional programmes and EIA of regional infrastructure.

Regulating the transport or export of hazardous wastes or materials.

Management of transboundary impacts.

Regional environmental agreements and fishing agreements.

International environmental agreements: CITES, ITTA, Bamako, Basel, Rotterdam Conventions.

4. Examples of environmental indicators

Trends in shared resources (such as fish stocks).

Exports of environmentally sensitive commodities (such as timber): physical flows.

Transboundary Protected Areas (total area, proportion of the border line, quality of the management).

Rate of local transformation of rough material (e.g. timber).

Proportion of enterprises certified ISO 14001.

Proportion of organic agricultural products.

Proportion of certified forest or marine products.

Indicators of transboundary pollution.

5. Additional guidance

SIA: http://ec.europa.eu/comm/trade/issues/global/sia/index_en.htm.

SIDA (2002) *Sustainable Development: Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides a checklist for Trade and Commerce (pp. 83-85).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides a checklist of opportunities and constraints for Trade and foreign direct investment (p 33).

3. Infrastructure, communications and transport

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Direct impacts of infrastructure: soil erosion, changes in water regime, pollution, ecosystem fragmentation, access to vulnerable resources.

Impacts of traffic and transport: energy consumption, air pollution (e.g. GHG, toxics, dust), noise, vibrations, accidents, accidental pollution.

Impacts of physical flows: transfers (e.g. loss of natural resources, transfer of soil nutrients, accumulation of wastes), introduction of alien species.

Indirect impacts through social and economic changes, including concentration of economic activities (e.g. harbours) and impacts of induced economic activities (e.g. mining, industry).

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Variability in water level and streams, affecting river transport.

Indirect impacts from land use pattern and distribution of natural resources.

Floods, erosion, and soil stability affecting road viability.

Climate change.

3. Entry points for environmental integration in sector programmes or strategies

Combined use of SEA and EIA and implementation of their EMP (Environmental Management Plan).

Considering alternative transport modalities and routes.

Considering environmental externalities in economic analyses of infrastructure projects.

Use of environmental audits and environmental management systems in the private sector.

Consideration of intermediate means of transport.

Inter-modality; development of rail or water transport; reduction of road traffic and related impacts; promotion of public transport.

Reduce need to travel through land use planning.

Spatial planning of the infrastructure network.

Legislation.

Technical control; security, speed control, regulations for transport of hazardous materials.

Fuel taxes; transport pricing.

4. Examples of environmental indicators

Energy efficiency of transport (T.km/Energy consumption)

Pollution or GHG efficiency (T.km/CO₂ emitted).

Fragmentation of vulnerable habitats (forests, protected areas) (km crossed).

Proportion of railway and water transport versus road or air transport.

Consumption of biofuels as a % of total fuel consumption in transport.

Percentage of less polluting vehicles.

Use of unleaded petrol.

5. Additional guidance

EC Environmental Manual (2001) *Sector guide: transport*. Available online: <http://www.environment-integration.org/2001Manual/envman-1232.html>

SIDA (2002) *Sustainable Development?: Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides checklists for Transport and communications (pp. 63-66) and Building and construction works (pp. 67-70).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides checklists of opportunities and constraints for Infrastructure (pp. 46-47) and Urban development (p 48).

World Bank (1995) *Environmental Assessment Sourcebook, Volume II. Sectoral Guidelines*. Provides guidance on Transport (pp. 168-195).

4. Water and Energy

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Water pollution; eutrophication, salinisation.

Wetland drainage.

Biodiversity losses in (and around) wetlands.

Surface water regime, changes in groundwater resources, depletion of water resources.

Direct and indirect impacts from dam building, including transboundary impacts.

Pollution from oil, gas or coal industry.

GHG emissions; air pollution (indoor and ambient) and acid rain.

Deforestation by excessive consumption of fuel wood.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Depletion of water or energy resources: fuel wood, water, dam siltation resulting from soil erosion.

Water quality.

Flooding affecting clean water supply (notably).

Climate change.

3. Entry points for environmental integration in sector programmes or strategies

Referring to the Dublin principles on sustainable water management¹¹⁵.

Combined use of SEA for water/energy programmes and EIA for infrastructure.

Taxes and tariffs, economic incentives, fuel pricing policies; taxes on GHG emissions; differentiated taxes according to the energy source; lower import tariffs for appropriate equipments.

Regulation framework for private sector.

Integrated water management; watershed management.

Regional co-operation in water management.

Infrastructure development with environmental benefits (e.g. for water treatment, sanitation, clean energy supply).

¹¹⁵ <http://www.wmo.ch/web/homs/documents/english/icwedecce.html>

Climate Change Convention and Kyoto Protocol; use of the Clean Development Mechanism.

Ramsar Convention on wetlands.

Improving energy efficiency, for example in power generation, in the transport sector, in manufacturing industry and at the end-user level.

Fuel wood saving, promoting energy-efficient stoves, improving efficiency while producing charcoal.

Use of renewable energy sources (e.g. wind, solar, hydro-electric, fuel wood from sustainable forestry).

Energy production from wastes.

Research and development on clean technologies.

Energy and water savings in order to reduce the demand of energy (e.g. by adequate urban planning and transport development) or water (e.g. by dry farming or promoting water-efficient irrigation).

4. Examples of environmental indicators

Energy efficiency: Energy use (kg oil equivalent) per \$1000 GDP (MDG 7, ind. 27); or energy use/HDI.

CO₂ emissions per capita (MDG 7, ind. 28).

Share of renewable energy.

Consumption of biofuels as a % of total fuel consumption in transport.

Energy intensity of manufacturing industry.

Proportion of population using solid fuels (MDG 7, ind. 29).

Water efficiency (e.g. in agriculture: irrigation).

Water abstraction as a percentage of renewable resources.

Proportion of water use from fossile aquifer.

Water pollution indicators (e.g. proportion of sample plots complying with quality standards).

Proportion of people with sustainable access to an improved water source, urban and rural (MDG 7, ind. 30).

Time spent (especially by women) in collecting water and firewood.

Proportion of population and industrial facilities with adequate wastewater treatment systems.

Proportion of population with access to improved sanitation, urban and rural (MDG 7, ind. 31).

5. Additional guidance

EC Environmental Manual (2001) *Sector guide - Water supply and sanitation*. Available online: <http://www.environment-integration.org/2001Manual/envman-1232.html>

EC Environmental Manual (2001) *Sector guide - Energy*. Available online: <http://www.environment-integration.org/2001Manual/envman-603.html>

SIDA (2002) *Sustainable Development? Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides checklists for Energy (pp. 59-62); Water-related activities (pp. 44-48); and Dams (pp. 54-58).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides a checklist of opportunities and constraints for Water resource management (p 43).

World Bank (1991) *Environmental Assessment Sourcebook, Volume II. Sectoral Guidelines*. Provides guidance on Water (pp. 227-244).

World Bank (1991) *Environmental Assessment Sourcebook, Volume III. Guidelines for Environmental Assessment of Energy and Industry Projects*. Provides guidance on Energy projects (pp. 25-89).

5. Social cohesion and employment

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Indirect impacts from changes in activities resulting from employment policies (e.g. lower pressures on natural resources resulting from higher employment in the formal sector).

Changes in the environmental pressures resulting from social conflicts (including fires and illegal activities).

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Resource degradation, externalities affecting particular groups or unequal distribution of resources may exacerbate social conflicts.

Resource depletion may lead to loss of jobs.

3. Entry points for environmental integration in sector programmes or strategies

SEA of policies and strategies in the sector; considering social issues in SEA and EIA in other sectors; involving public and civil society in all SEA and EIA processes.

Participation of stakeholders to the management of natural resources and the environment; community forestry (including participation and empowerment of traditionally less represented groups).

Compliance with labour protection (and non discrimination) standards (ILO conventions).

Providing decent alternative employment in areas with excessive pressure on natural resources.

Providing decent employment in environmental and natural resources sector.

Promoting transformation of natural resources (increasing the added-value/unit of resource use).

Equitable and secure access to land and other natural resources.

Good governance and justice in natural resources and environmental management.

Fair compensation of victims of environmental damages.

4. Examples of environmental indicators

Proportion of households with access to secure tenure (MDG7, ind. 32).

Proportion of persons employed in environment and natural resource sectors.

Number of land or natural resources related disputes.

Proportion of people with sustainable access to an improved water source, urban and rural (MDG 7, ind. 30).

Proportion of population with access to improved sanitation, urban and rural (MDG 7, ind. 31).

6. Human development

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Wastes from social facilities; bio-medical and pharmaceutical wastes.

Contamination through vector control (pesticides).

Increased resistance of vectors and pathogen organisms.

Water pollution (chemical, biological).

Overexploitation (or decreased exploitation) of biodiversity resources for medicinal purposes.

Impacts from facilities (e.g. construction and operation of schools, hospitals).

Indirect impacts due to population growth, migration, environmental education, modified activities and consumption practices.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Environmental quality in human settlements and work places: waste management (including domestic waste) and sanitation; noise; clean water, air quality (ambient and indoor); exposure to chemicals and heavy metals; occupational health hazards; vectors and water-borne diseases; overcrowding.

Idem in health/education facilities.

Environmental causes of malnutrition (e.g. poor soils, over-fishing, over-hunting).

Biodiversity resources used as medicines.

Environmental components used as a support for education and training.

Climate change (impact on health and safety) and ozone depletion.

Environmental disasters (impact on health and safety).

Environmental constraints on school attendance (e.g. time spent by girls in wood or water collection).

3. Entry points for environmental integration in sector programmes or strategies (and in related sectors)

SEA of sector programmes and strategies; EIA for construction/rehabilitation of education/health facilities.

Considering health (e.g. HIV/AIDS) and social impacts in environmental assessments (EIA, SEA), including in other sectors.

Compliance with labour protection (and non discrimination) standards (ILO conventions).

Environmental education (e.g. quality, level, relevance to country environmental problems); environmental issues in vocational training; capacity building in environmental management; awareness raising.

Using green construction principles while designing infrastructure.

Research and training for appropriate technologies.

Managing wastes in education and health facilities; saving and recycling paper at school; hygiene and health conditions in education/health facilities; management of bio-medical wastes.

Collaborating with other sectors for inclusion of environmental issues in health programmes; reducing air pollution; developing access to clean drinking water, sanitation, improved hygiene; promoting health and hygiene education.

Urban environment: urban planning, waste disposal systems, sanitation, urban and peri-urban parks.

Equitable valorisation of biodiversity and local environmental knowledge.

Gender equity, rights of indigenous peoples and other social issues in environmental and natural resource management.

Population, family planning, reproductive health and rights and migration policies.

4. Examples of environmental indicators

Environment in education curricula.

Proportion of teachers trained in environmental education.

Proportion of population living in unhealthy or polluted environments.

Proportion of population using solid fuels (MDG 7, ind. 29).

Air and water quality indicators.

Proportion of hospitals with adequate waste management system.

Proportion of bio-medical wastes adequately managed.

Morbidity rate in environmentally-related diseases (e.g. pulmonary diseases, diarrhoea, malaria).

Number of victims of natural disasters.

Proportion of people with sustainable access to an improved water source, urban and rural (MDG 7, ind. 30).

Proportion of population with access to improved sanitation, urban and rural (MDG 7, ind. 31).

5. Additional guidance

SIDA (2002) *Sustainable Development?: Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides checklists for Institutional development and capacity building (pp. 100-101); Health and medical care (pp. 90-92); and Education sector (pp. 97-99).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides a checklist of opportunities and constraints for Human development (pp. 34-36).

World Bank (1991) *Environmental Assessment Sourcebook, Volume II. Sectoral Guidelines*. Provides guidance on Public health and safety (pp. 145-152) and Water supply (pp. 227-230).

7. Rural development, territorial planning, agriculture and food security

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Contamination by pesticides.

Water pollution, eutrophication, decreased water availability for other uses, water-borne diseases.

Soil degradation, desertification, erosion, acidification, siltation of reservoirs.

Deforestation - reforestation, land clearance for agriculture, habitat fragmentation, excessive timber or wood harvesting.

Water regime changes, floods.

Fire.

Overgrazing.

GHG emissions (e.g. carbon dioxide, methane from livestock or paddies), carbon sequestration (in vegetation and soil).

Decrease (or increase) in fish stocks, wildlife, non-timber forest products, timber.

Biodiversity decline, introduction of alien species or GMOs.

Increased pest resistance.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Availability and quality of water resources.

Forest area and production.

Rangeland.

Fire.

Fish stocks.

Hydrological changes.

Biodiversity, agrobiodiversity, pests, weeds.

Land degradation and erosion, desertification; loss of land through urbanisation.

Pollution.

Climate and climate change.

3. Entry points for environmental integration in sector programmes or strategies

SEA of sector programmes and strategies, EIA of sector projects.

Cross-sector dialogue and integration; links with urban areas and transport/trade/industry sectors.

Promotion of technical approaches: Integrated Pest Management, organic and low input farming, agroforestry, efficient irrigation, water conservation techniques, land conservation measures, use of local knowledge and local agro-biodiversity, maintenance of corridors for wild species.

Economic approaches: diversification, access to markets, rural infrastructure, agro-industry and development of transformation activities adding value to natural resources and decreasing losses; reducing damaging subventions, implementing agro-environmental schemes and incentives or taxes (polluter pays principle).

Support services; research - training - extension.

Eco-labelling; certification, quality standards (SPS), awareness and demand of consumers, standards and regulations for the use and handling of pesticides and GMOs.

Land tenure reforms; secure and fair property rights; equal land distribution; property rights on biodiversity; access rights to natural resources.

Community and producers organisation.

Payment for environmental services.

Policies regarding agro-biodiversity conservation (*in situ*, *ex situ*).

Protected areas; buffer zone management; eco-tourism: see 8.

Alternatives to excessive exploitation of natural resources (e.g. hunting).

Forestry and other natural resource management: see 8.

Conventions on Desertification, Biodiversity, Persistent Organic Pollutants¹¹⁶ (Stockholm).

4. Examples of environmental indicators

Land used by agriculture.

Share of area occupied by organic farming in total utilised agricultural area.

Use of selected pesticides.

Percentage of land area at risk of soil erosion or desertification.

Deforestation rate; proportion of land area covered by forest (MDG7, ind. 25).

Round wood production.

116 <http://www.pops.int>

Fish catch; fish stocks; fishing quotas; size of spawning stocks.

Intensity of use of forest resources.

Intensity of use of fish resources.

Fishing capacity and size of fishing fleet.

Intensity of use of land.

Intensity of use of water in agriculture.

Intensity of pesticide and fertiliser use.

Ratio of area protected to maintain biological diversity to surface area (MDG7, ind. 26) (and qualitative indicators/criteria).

5. Additional guidance

EC Environmental Manual (2001) *Sector guide - agriculture and food security*. Available online: <http://www.environment-integration.org/2001Manual/envman-432.html>.

EC Environmental Manual (2001) *Sector guide - fisheries and aquaculture*. Available online: <http://www.environment-integration.org/2001Manual/envman-694.html>.

EC Environmental Manual (2001) *Sector guide - forestry*. Available online: <http://www.environment-integration.org/2001Manual/envman-762.html>

SIDA (2002) *Sustainable Development? Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532> Provides checklists for Agriculture (including livestock farming) and forestry (pp. 40-43); Coastal zone related activities (pp. 49-53).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides checklists of opportunities and constraints for Rural development (p 42); Fisheries (p 44); and Forestry (p. 45).

World Bank (1991) *Environmental Assessment Sourcebook, Volume II*. Provides guidance on Agriculture and rural development (pp. 1-143).

8. Environment and sustainable management of natural resources

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

While pursuing an environmental objective, side-effects should always be taken into account.

Examples:

Resource use displacement: protected areas may increase the pressure on other resources;

Pollution displacement: waste disposal may pollute the water table, hospital incinerators produce dioxins;

Competing uses: managing a resource for a particular purpose (e.g. water for human or agricultural uses) may compete with other uses (e.g. wetlands and biodiversity conservation).

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

By definition, environmental problems are addressed, but external environmental factors should be taken into account: impacts from other sectors and impacts from abroad (including climate change and transboundary pollution).

Deforestation - forestation, land clearance for agriculture.

Pollution.

Fires.

Overgrazing, over-fishing, over-hunting, excessive timber or wood harvesting.

Biodiversity decline, introduction of alien species or GMOs.

3. Entry points for environmental integration in sector programmes or strategies

By definition, all activities in this area are entry points for environmental considerations, including:

Land use planning and urban planning;

Integrated Coastal Zone Management (ICZM);

Integrated watershed management;

Water resources planning;

Protected areas (including buffer zones);

Natural resource management plans;

Forest policy and regulatory framework;

Promotion of sustainable (low impact) forest/fishing practices;

CDM (Clean Development Mechanism) as an opportunity to fund forestation;

ITTO guidelines for the sustainable management of natural tropical forests and for the establishment and sustainable management of planted tropical forests¹¹⁷;

FLEGT;

Forest Certification (FSC¹¹⁸ principles and criteria);

Marine Certification (MSC¹¹⁹);

Sanitation, waste management, water treatment, recycling;

Environmental disaster prevention measures;

Compliance with Multilateral Environmental Agreements (e.g. UNCBD, UNCCD, Ramsar, CITES, Bonn);

Community participation in natural resource management and decentralisation; capacity building of appropriate institutions;

Environmental legislative and institutional framework;

Environmental integration strategies in different sectors (environment as a cross-cutting issue).

117 <http://www.itto.or.jp>

118 <http://www.fsc.org>

119 <http://www.msc.org>

4. Environmental indicators (examples; specific indicators are to be developed on a case by case basis)

Specific outcome indicators related to the objective.

Specific impact indicators related to the side-effects.

Ratio of area protected to maintain biological diversity to surface area (MDG7, ind. 26) (and qualitative indicators/criteria).

Deforestation rate; Proportion of land area covered by forest (MDG7, ind. 25).

Round wood production.

Fish catch; fish stocks; fishing quotas; size of spawning stocks.

Intensity of use of forest resources.

Intensity of use of fish resources.

Fishing capacity and size of fishing fleet.

Intensity of land use.

5. Additional guidance

EC Environmental Manual (2001) *Sector guide - protected areas and conservation*.

Available online: <http://www.environment-integration.org/2001Manual/envman-900.html>

EC Environmental Manual (2001) *Sector guide: forestry*. Available online: <http://www.environment-integration.org/2001Manual/envman-762.html>

EC Environmental Manual (2001) *Sector guide: fisheries and aquaculture*. Available online:

<http://www.environment-integration.org/2001Manual/envman-694.html>

EC Environmental Manual (2001) *Sector guide: solid waste management*. Available online:

<http://www.environment-integration.org/2001Manual/envman-1009.html>

SIDA (2002) *Sustainable Development?: Guidelines for the Review of Environmental*

Impact Assessments. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides checklists for: Quarrying and underground

mining (pp. 75-78) and Tourism (pp. 86-89).

World Bank (1991) *Environmental Assessment Sourcebook, Volume II*. Provides guidance

on Fisheries (pp. 42-56), Flood protection (pp. 57-66), Forestry (pp. 67-93), Solid waste

(pp. 208-222), and Waste water (pp. 231-240).

9. Conflict prevention and State fragility

1. Environmental pressures and impacts from the sector (to mitigate or to enhance)

Impacts and pressures resulting from conflicts (e.g. fires and forest destruction, pollution, abandonment of environmental and natural resources management, illegal and predatory activities).

Increased pressures on natural resources or vulnerable areas due to population displacements.

Water pollution, wastes, and unhealthy conditions in refugee camps.

Pressures on resources for reconstruction (such as timber or wood for as fuel for the production of bricks).

Risks from efforts to improve security (e.g. secured villages, forest clearance).

Overall positive impact of strengthening state institutions.

2. Environmental factors affecting sector objectives or activities (problems to be addressed or opportunities/constraints to be taken into account)

Scarcity or low productivity of shared natural resources.

Unequal availability to resources (or unequal access).

Valuable resources in disputed areas (border areas).

Environmental negative impacts with insufficient compensations.

3. Entry points for environmental integration in sector programmes or strategies

Conflict prevention in general (usually beneficial to the environment both local and global).

International and Regional Co-operation on common environmental management issues.

Establishing and managing “Peace parks” (transboundary protected areas).

Encouraging open access to environmental information and transparency of decision making processes.

Environmental education programmes for refugees and internally displaced people.

Environmental management of refugees (and internally displaced people) settlements.

Equity, as a contribution to conflict prevention and lower environmental pressures.

Strengthening state environmental institutions and support from the civil society through adequate participation.

4. Examples of environmental indicators

Number or density of refugees (or internally displaced people) requiring fuel wood or water.

Proportion of area (protected areas, forests) under the control of appropriate legal institution.

5. Additional guidance

SIDA (2002) *Sustainable Development? Guidelines for the Review of Environmental Impact Assessments*. Available online: <http://www.sida.se/shared/jsp/download.jsp?f=SIDA1983en.pdf&a=2532>. Provides a checklist for Humanitarian assistance (pp. 93-96).

DFID (2003) *Environment Guide, A guide to environmental screening*. Available online: <http://www.dfid.gov.uk/pubs/files/environment-guide-2003.pdf>. Provides a checklist of opportunities and constraints for: Conflict and humanitarian assistance (pp. 49-51).

Annex 2 | Terms of Reference for a CEP

Note: explanations or sections to be completed according to individual circumstances are given *in italics*.

ToR for the preparation of the Country Environmental Profile of (*Name of the country*)

1. Background

(Give a brief overview of the country, its current socio-political situation, EC co-operation experience on the major environmental concerns and responses by the Government and/or other donors, the interest of the EC in integrating the environment in the CSP and the current timetable with respect to the Programming process).

2. Objective

The main objective of the Country Environmental Profile is to identify and assess environmental issues to be considered during the preparation of a Country Strategy Paper, which will directly or indirectly influence EC co-operation activities (*Please adapt if the CEP is prepared at another stage*). The Country Environmental Profile will provide decision-makers in the partner country and in the European Commission with clear information on the key environmental challenges, the current policy, legislative and institutional framework and the strategies and programmes (including those of the EC and other donors) designed to address them. This information will ensure that the EC co-operation strategies systematically integrate environmental considerations into the selection of focal sectors and co-operation objectives/strategies, and also establish the necessary environment safeguards for all co-operation activities undertaken in the country. The Profile will establish the key linkages between the environment and poverty reduction. It will constitute an important source of baseline information and contribute to focusing political dialogue and co-operation with the country on key areas of concern including sustainable development as well as raising awareness among policy-makers.

3. Results

The profile will deliver the following results:

- An assessment of the state of the environment and key environmental factors and trends influencing the country's development and stability.
- An assessment of national environmental policy and legislation, institutional structures and capacity, and the involvement of civil society in environmental issues.
- An assessment of the integration of environmental concerns in development policy and sectors with key linkages with environmental issues.
- An overview of past and ongoing international (including EC) co-operation in the environment sector.

- Recommendations and, as far as possible, guidelines or criteria for mainstreaming environmental concerns in co-operation areas. These recommendations should support the preparation of the Country Strategy Paper/National Indicative Programme and include guidelines or criteria to be used for environmental mainstreaming in subsequent phases of the cycle of operations.

4. Issues to be assessed

The following issues should be assessed:

(The sub-headings below are the same as the recommended profile format)

4.1. The state of the environment

This chapter should identify the state and trends of key environmental resources or components in the country, including (as relevant), but not limited to:

Themes	Aspects
Mineral resources and geology	Mineral resources Geological risks (seismic, volcanic and related risks)
Land	Soil erosion and degradation Desertification Land use, arable land, losses due to urbanisation or infrastructure building
Water	Water regime Ground water Water quality
Air and climate	Air quality Potential climate changes and vulnerability
Forest, vegetation, ecosystems	Forest cover and volume Pastureland State of particular ecosystems (e.g. savannahs, mangroves, coral reefs)
Biodiversity, wildlife	Local status of globally threatened species/habitats Alien invasive species Fish stocks Species with special value
Landscape	Aesthetic and cultural value of landscape
Living conditions in human settlements	Air and water quality Sanitation Slums Health Vulnerability to disasters

Pressures explaining the main negative trends should be identified, as well as pressures contributing to global environmental problems, using the following Table as a guiding checklist.

Themes	Possible aspects to consider
Mining, extraction of hydrocarbons	Extraction, treatment and transport of minerals and hydrocarbons Water use and management
Water extraction (surface- and ground-water)	Waste water discharges, water treatment Water use
Land management	Land use planning
Forest exploitation, hunting, fisheries, biodiversity	Forest extraction Forest and fisheries management practices Hunting and fishing activities, poaching Use of NTFP (non-timber forest products) Fires Introduction of alien species
Livestock raising	Overgrazing Rangeland management, use of fire, water management
Agriculture	Extension of agricultural land Shifting cultivation Intensification Irrigation and water use Pest control Agricultural practices
Energy production and use	Sources of energy Energy consumption Energy efficiency
Urbanisation, infrastructure and industry	Urban growth and sprawl, urban planning Dams, roads, major infrastructure, polluting industries, tourism
Waste disposal and management	Waste production Waste management Public behaviour and practices, existing systems, hazardous waste management
Atmospheric emissions	Emissions of greenhouse gases and ozone-depleting substances Air pollutants affecting local or regional air quality (point-source and non-point source emissions)

As far as possible the driving forces influencing these pressures should be identified, such as economic incentives, demographic pressure, access rights to natural resources and land tenure systems.

Environmental trends should be assessed with regard to their social and economic impact, including:

- Declines in economic production or productivity (e.g. agriculture, forestry, fisheries);
- Threats to human health;
- Human exposure to environmental disasters (e.g. floods, drought);
- Conflicts and security;
- Impact on poverty, differentiated impact on women and men, impact on vulnerable groups (including children and indigenous peoples);
- Sustainability of resource use;
- Cultural values.

This chapter should lead to the identification of problems, described in terms of situations or trends that are undesirable due to their current socioeconomic consequences (e.g. falling productivity, health problems, natural risks, social crises, conflicts), their future consequences (e.g. decline in natural resources, cumulative pollution) or their contribution to global environmental problems.

If appropriate the consultant could refer to appropriate environmental indicators in order to establish a consistent basis both for comparisons among countries and for monitoring changes in the studied country. Attention should be paid to the MDG 7¹²⁰ indicators, and specific indicators related to the particular environmental issues of the country.

If appropriate, the information could be organised according to eco-geographical subdivisions with the scale (regional, national, local) of the issues indicated.

4.2. Environmental policy, legislation and institutions

A brief description and review should be provided of the strengths and weaknesses of the following aspects, with their associated evaluation criteria given for guidance:

120 See <http://www.undp.org/mdg/>

Aspects	Evaluation criteria
Policies	<p>Existence of national policies, strategies and action plans for the environment, including possible National Strategy for Sustainable Development (NSSD) and National Environmental Action Plans (NEAP).</p> <p>Policy response to global issues, sustainability issues (depletion of natural resources), and specific environmental issues identified above.</p> <p>Policies on gender and environment.</p> <p>Consistency between policies.</p> <p>Environmental integration in sectoral and macro-economic policies and existence of Strategic Environmental Assessments (SEA) of policies or strategies (especially the PRSP if relevant).</p> <p>Important measures taken by the Government to solve environmental concerns.</p> <p>Effectiveness in achieving targets.</p>
Regulatory framework, including EIA and SEA legislation	<p>Ratification status and implementation of MEAs (Multilateral Environment Agreements) such as those concerning climate change, biodiversity and desertification.</p> <p>Adequacy of (current and in preparation) environmental legislation (including land tenure and land reform, access rights to natural resources, management of natural resources, requirements for environmental assessment such as for EIA and SEA, pollution control, development control).</p> <p>Provision and procedures for public participation in environmental issues.</p> <p>Effectiveness of legislation enforcement.</p> <p>Use of other (non legislative) instruments, e.g. “green budgeting” (or Environmental Fiscal Reform) and market-based mechanisms, voluntary schemes (environmental management systems, environmental labelling, industry-government agreements).</p> <p>Potential impacts of non-environmental legislation.</p>
Institutions with environmental responsibilities	<p>Identity, number and quality of institutions (involved in policy making, legislation, planning, environmental protection, monitoring and enforcement).</p> <p>Level of co-ordination and decentralisation.</p> <p>Strength and capacity of individual institutions.</p> <p>Influence on other institutions.</p> <p>Good governance practices.</p> <p>Capabilities, means, functioning of environmental services.</p> <p>Major NGOs, institutes or other organisations involved in environmental management or policy.</p>



Aspects	Evaluation criteria
Public participation	Transparency and access to environmental information. Role of NGOs and civil society in environmental decision-making. Effective participation. Participation by women and traditionally less represented groups. Access to justice in environmental matters.
Environmental services and infrastructures	Protected Areas: number, areas, relevance, and effectiveness. Sanitation and waste treatment infrastructure. Disaster prevention systems. Emergency response mechanisms.
Environmental monitoring system	Relevance of selected indicators (with reference to MDG 7). Measurement of the indicators: periodicity, liability. Integration in the general development indicators.

The analysis should both identify potential institutional/policy/regulatory causes of environmental pressures and the response by the government to solve the environmental problems.

4.3. Integration of environmental concerns into the main policies and sectors

The assessment should examine the integration of environmental concerns in the overall development policy and in sectors/areas that have key linkages with environmental issues and which might be identified for EC support, taking into account the focal areas of the current CSP. This section should examine whether there is a Strategic Environmental Assessment (or similar assessment) for the national development strategy or the Poverty Reduction Strategy and in the sectors. If an SEA exists, it should provide a brief description of it, including its main recommendations. The main legislation and institutional arrangements and measures of the sector which address environmental issues, especially those identified in section 4.1 should be examined.

4.4. EU co-operation with the country from an environmental perspective

This section should review the past and current experience relating to development co-operation interventions with specific environmental objectives as well as the integration of environment into other co-operation areas, including the application of environmental integration procedures (preparation of SEA or EIA in EC funded programmes/projects). Where information is available the environmental impacts or potential risks of EU co-operation should be identified for the benefit of future programmes. The results of existing evaluations/reviews should be incorporated and lessons drawn for the future. The implications for the environment of budgetary support or sector wide approaches should be reviewed if these have been applied. The review should cover both geographical and thematic programmes.

4.5. Co-operation funded by other donors from an environmental perspective

This section should review the past and current involvement of other donors and their experience in the country, and include a list of recent and planned projects/programmes with an environmental focus or anticipated impact. Co-ordination mechanisms between donors and the EC with respect to the environment should be assessed.

5. Conclusions and recommendations

The key aspects of the state and trends of the environment in the country, including policy/regulatory and institutional constraints and challenges, should be clearly stated. These may be presented in a matrix, crossing environmental concerns and the main sectors or policies.

Based on a comprehensive assessment of the available information and on consultations with stakeholders, recommendations should be made on how the Commission and the Government can better mainstream the environment into the next Country Strategy Paper, taking into account current CSP and any pre-identified options for the next one, including the anticipated focal sectors.

Recommendations should address (but not necessarily be limited to) the following:

(1) Recommendations concerning the selection of the focal sectors and response strategies, based on environmental considerations. These recommendations should show how best to address the main environmental challenges identified by the CEP. This might be done by selecting environment as a focal area and/or, more frequently, through environmental safeguards in other areas. These may include, for example, proposals for institutional strengthening and capacity building (including the enhancement of the regulatory framework and enforcement capacities) or recommendations for initiating appropriate Strategic Environmental Assessments (SEA), particularly in relation to SPSP and GBS programmes.

(2) Opportunities to use EC horizontal budget lines (such as Environment and Tropical Forests) and facilities (EU Water Facility - EUWF and the EU Energy Facility - EUEF).

(3) Opportunities for co-ordination on environmental issues with other donors, seeking to achieve complementarities and synergies in order to more effectively deliver development objectives.

(4) Proposals for environmentally-relevant indicators to be used in the NIP (National Indicative Programme) or to be considered during the formulation of a GBS or SPSP (if relevant).

Individual recommendations should be clearly articulated and linked to the problems to be solved and grouped according to the sector concerned or institutional stakeholder. The relative priority of the recommendations and an indication of the challenges to their implementation should be given.

Any constraints to preparing the profile resulting from limited information should be described.

6. Work plan

The work plan should include but not necessarily be limited to the following activities:

- Consultations with EC country desk officers and other relevant officials, EC Delegation, the national environmental authority and a selection of national and local authorities, key international donors, plus key national and international civil society actors operating in the environmental field.
- Review of key documents and reports, including (*include here a list of key documents already identified by the EC Delegation*) previous Country Environmental Profiles (EC and others); the current EC Country Strategy Papers; evaluation reports, existing Strategic Environmental Assessments (particularly those concerning potential focal sectors), EIAs of EC funded projects; environmental literature, environmental policy, environmental legislation and regulations, information on monitoring and environmental performance indicators.
- Field visits to sites of key environmental concern and (if possible) the organisation of a national workshop that national authorities, donors, experts and representatives of civil society should be invited to participate with the aim of clarifying and validating key environmental concerns.
- On the basis of the outline work plan and time schedule given in these Terms of Reference, a detailed work plan should be proposed.

7. Expertise required

The proposed mission shall be conducted by a team of (two) experts who should have the following profile:

- Expert level I or level II with at least 10 years wide experience in environmental issues, including institutional aspects; international environmental policies and management; environmental assessment techniques and experience in rapidly assessing information and developing recommendations. He/she would be the team leader.
- Expert level II with 10 years experience and with an environment background complementary to the team leader.

In addition:

- Previous working experience in the country or the region is requested for at least one team member;
- Experience in undertaking environmental analyses and preparation of development programmes would be an asset;
- Familiarity with Commission guidance on programming, country strategies, PCM, policy mix and integration of environmental issues into other policy areas is desirable;
- Experience of participatory planning processes and gender issues would be an advantage.

The experts should have excellent skills in ... and (knowledge of would be an asset).
... will be the working language although the final report must be presented in

8. Reporting

The results of the study should be presented in the Country Environmental Profile format given in Section 10 of these ToR. The draft profile, in (*number*) hard copies and electronic version (Microsoft Word), should be presented to (...) by (*date*) at the latest. Within (5) weeks, comments on the draft report will be received from the EC. The consultants will take account of these comments in preparing the final report (maximum 40 pages excluding appendices). The final report in (*language*) and (*number*) copies is to be submitted by (*date*).

9. Time schedule (example)

	Expert I	Expert II
Desk analysis, including briefing to the team leader in (<i>place</i>)	5	2
Field phase including travel and possible workshop	15	15
Report finalisation	3	2
Debriefing in (<i>place</i>)-not later than (<i>date</i>)	1	
Final report end (<i>date</i>)	1	1
Total days	25	20

10. Report format for a Country Environmental Profile

Standard Report Format for a Country Environmental Profile

Maximum length (excluding appendices): 40 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by (*name of consultant*) for the ... (*National Institution*) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

1. Summary

The summary should succinctly and clearly present the key issues described in the profile following the order of headings 2 to 5 given below. The Summary should not exceed 6 pages.

2. State of the environment

3. Environmental policy, legislative and institutional framework

- 3.1. Environmental policy
- 3.2. Environmental legislation and institutional framework
- 3.3. Integration of environmental concerns into the main sectors

4. EU and other donor co-operation with the country from an environmental perspective**5. Conclusions and recommendations****6. Country Strategy Paper Environmental Annex Summary**

Comprising the main issues presented in sections 2 to 4 above (excluding section 5) in not more than 4 pages.

7. Technical appendices

- I. Environmental maps of the country
- II. Reference list of environmental policy documents, statements and action plans, and other relevant technical information.

8. Other appendices

- I. Study methodology/work plan (1-2 pages)
- II. Consultants' Itinerary (1-2 pages)
- III. List of persons/organisations consulted with their affiliation and contact details (1-2 pages)
- IV. List of documentation consulted (1-2 pages)
- V. *Curricula vitae* of the consultants (1 page per person)
- VI. Terms of Reference for the Country Environmental Profile

Annex 3 | Screening for SEA

The SEA Screening is used to decide if an SEA is required for the formulation of an SPSP. It consists firstly of applying a screening list and selectively a questionnaire.

SEA screening list for focal areas

An SEA of Sector Programmes in “environmentally sensitive”¹²¹ EC focal areas is recommended when considered for support through an SPSP. The following EC focal areas are considered as “environmentally sensitive”:

- Infrastructure, communications and transport
- Water and energy
- Environment and sustainable management of natural resources (including forestry, fisheries, waste management).
- Rural development, territorial planning, agriculture and food security (including forestry, fisheries)

Sector Programmes in other focal areas usually do not require an SEA but need to be carefully screened:

- Governance, democracy, human rights and support for economic and institutional reforms¹²²
- Trade and regional integration
- Social cohesion and employment
- Human development
- Conflict prevention and fragile States

Some programmes in these focal areas might have significant environmental impacts, in which case an SEA should be prepared. The SEA screening questionnaire below should be used to decide if an SEA is required in a non-environmentally sensitive focal area.

121 There are other “environmentally sensitive” sectors requiring an SEA, but these are not focal areas in EC co-operation: tourism; mining; industry and telecommunications.

122 For “Economic and institutional reforms” see Chapter 5 on GBS.

SEA screening questionnaire

The following questionnaire should be used to screen Sectors Programmes to aid decisions on the requirement for an SEA.

SEA Screening Questions	NO	YES	?
<p>1. Is the Sector Programme likely to include a large number of Category A or B projects that could interact to produce significant cumulative environmental impacts? (see Annex 7 for classification of projects).</p>			
<p>2. Are there any indications at this stage of negative environmental impacts that might be significant and require further study? The possible environmental impacts of Sector Programme implementation can be identified using Annex 1 as a guide. The following characteristics can be helpful to provide an idea of the impact's significance: probability, duration, frequency, reversibility, cumulative nature, magnitude and the affected area and/or population.</p>			
<p>3. Are there indications at this stage that the Sector Programme will have a direct and significant influence on other environmentally-sensitive sectors? (e.g. an Education Programme could target agricultural practice, promoting environmental damaging practices).</p>			
<p>4. Is the Sector Programme likely to significantly affect valued areas or landscapes with national or international protection status? (e.g. Protected Areas, Cultural heritage sites)</p>			
<p>5. Is the Sector Programme likely to significantly affect known vulnerable areas? (e.g. areas under environmental stress).</p>			
<p>6. Does the Sector Programme significantly increase the risk of a negative impact on human health or safety? (e.g. increased vulnerability to natural disasters, significant exposure to hazardous materials).</p>			

Interpreting the answers

- If the answer to all questions is **"No"** based on the information available an SEA is not necessary.
- If the answer to one or more of the questions is **"Yes"** then an SEA is recommended.
- If there are no **"Yes"** answers and one or more **"?"** additional information is required. The support of environmental services (in-house or in the country) should be requested in order to get clearer answers (Yes or No). If one or more **"?"** remain, it will usually be reasonable to incorporate the questions into the ToR of the formulation study.

Annex 4 | Environmental integration in the SPSP Formulation Study

The questionnaire below provides guidance to address environmental issues during the formulation of a Sector Policy Support Programme in a non-environmentally sensitive sector. These questions should be addressed as part of the SPSP Formulation Studies and thus reflected in the respective Terms of Reference.

The Country Environmental Profile (CEP) and the SEA Screening may have already identified some of the key information used here.

1. What are the key environmental issues affecting sector performance?

Environmental factors which may influence the sector activities and outcomes should be taken into account in the Sector Policy and Programme as well as in the SPSP supporting them.

The following guiding questions should help identify these factors:

a) Do the problems in the sector have environmental causes, and which are they?

Some weaknesses in sector development or problems to be solved by the Sector Programme may result from - or be exacerbated by - environmental causes (e.g. unhealthy living conditions may affect the productivity of the working force or, in the health sector, the achievement of the overall objectives of the Sector Programme/Policy).

b) Are sector activities or infrastructure particularly vulnerable to natural disasters or to climate change?

(e.g. flooding and mudslides causing damage to roads and thus affecting trade).

c) Do sector activities depend significantly on the availability of natural resources?

If the sector (or the Sector Programme activities) depend on environmental resources (such as water, land, mineral, biodiversity components), it is recommended that the formulation study assesses whether the resources will be sustainably available at reasonable cost, with the required quality standards.

Examples of environmental factors to be taken into account in focal sectors are provided in Annex 1 (heading 2 of the boxes).

2. Does the Sector Programme address the environmental issues identified above?

The formulation study should assess whether the Sector Programme includes adequate response to the sector-environment linkages identified under Question 1 above and, more specifically, whether:

- It addresses the environment problems affecting the sector (e.g. a Programme in the health sector that aims to reduce the incidence of diarrhoea may include actions for increased water quality);
- It is adapted to the identified opportunities and constraints, or risks such as environmental disasters (e.g. infrastructure or human settlements should not be located in flooding areas);
- It includes measures or strategies in order to ensure or enhance resource sustainability (e.g. improved stoves in order to save wood resources).

This analysis may suggest recommendations for actions to be included in the SPSP or to be addressed in the policy dialogue with the Government.

3. What are the environmental pressures or impacts associated to or influenced by the sector?

The environmental pressures or impacts associated to activities in the sector (or to activities directly influenced by the sector) should be identified. For example, the production of hazardous waste should be identified as an environmental pressure associated to the health sector. Other examples of environmental pressures to be taken into account in focal sectors are provided in Annex 1 (heading 3 of the boxes) and can also be identified by the CEP.

4. What are the potential environmental effects of Sector Programme implementation?**a) Which implementation scenarios can be envisaged?**

In order to be able to identify the potential environmental effects of the Sector Programme it is important to identify the actions (projects, measures) most likely to result from Sector Programme implementation. To get this insight it is useful to consult sectoral national authorities and to look through the key strategies and raise the question: *“How will this (strategy, statement,...) look on the ground when implemented?”*. It is also important to define the potential associated actions with a degree of detail consistent with the level of uncertainty (e.g. construction of primary schools in rural areas in region “x” will suffice, rather than trying to specify locations which may only be highly speculative). If environmental safeguards have already been incorporated in the Programme design, they should be considered as part of the Programme.

b) What environmental consequences are expected from the Sector Programme implementation?

The objective of this analysis is not to assess the overall environmental impacts of Sector Programme implementation but to identify qualitative changes in pressures on the environment. Usually most of the effects are indirect (because we are dealing with “non sensitive” sectors). They may result from changes in consumptive behaviour, from new incentives to action or inaction, from awareness raising, from the application of new legislation etc. (e.g. a Good Governance Programme may have a positive impact on illegal logging and timber trade, which will affect the forest environment). In some cases, impacts may also be more direct (e.g. a Health Sector Programme may generate hazardous clinical wastes in large quantities, for which appropriate disposal/treatment measures should be envisaged).

This analysis is done using the guiding questions “*What changes in behaviours and practices will result from implementing the Sector Programme?*” and “*What effect is this likely to cause on the environment or on environmental pressures?*” Reference can be made to the SEA Screening questionnaire (Annex 3) and the checklists in Annex 1 to support this analysis.

For each potential impact associated with an action or programme component, it is important to identify the conditions under which the impact will be produced or be significant (e.g. due to its duration, irreversibility). For example, promotion of recreational activities in nature may produce a significant impact on biodiversity, if it takes place in sensitive areas and if there is no control of numbers of visitors, environmental awareness campaigns (for locals and tourists) and/or enforcement capacity. This approach allows the recommendation of safeguards that will act on these factors.

c) How desirable are these changes?

A brief assessment of these changes should be made taking into account the following criteria:

- Effects on the poor and vulnerable groups;
- Sustainability and conservation of natural “capital” or resources;
- Consistency with stakeholder concerns;
- Consistency with Government and EC environmental policies and objectives, including those of the major MEAs (e.g. a Sector Programme that promotes polycentric regional development is likely to promote increased travel through commuting, which may enter into conflict with objectives related to the emission of greenhouse gases or the curbing of air pollution from vehicles);
- Differentiated impact on men and women.

This assessment should lead to the identification of the components and actions in the Sector Programme that should be enhanced or corrected.

5. Are there additional opportunities to enhance the environmental performance of the sector?

The sector may provide other opportunities to enhance the environment, as shown by Annex 1 (line 3 of each box). For instance the Human Development sector (Education) may lead to significant environmental outcomes by integrating environmental education programmes. The formulation study may identify similar opportunities that allow increasing the environmental performance of the SPSP at low cost.

6. What are the specific environmental implications of the envisaged SPSP?

According to its preliminary design and to its modality (budget aid or not), the envisaged SPSP may provide a general or a specific support to the Sector Programme. In this second case, it is recommended to review questions 2 and 4 with a more particular focus on the SPSP itself and the components of the Sector Programme supported by it.

7. Are the institutional capacities and legal framework adequate to address the linkages between the environment and the sector?

The analysis should focus on the capacity of the legal and institutional framework to deal with the identified environmental issues, as well as the implementation of any measures identified to mitigate negative and optimise positive environmental effects, using the following checklist as guidance:

- Legal framework (e.g. regarding environmental standards, SEA, EIA);
- Environmental law enforcement;
- Institutional arrangements regarding environment integration in the sector: existence of particular structures, links with other agencies/institutions, level of decentralisation;
- Capacities of these institutions;
- Public participation and role of civil society in environmental decision making and management.

8. Are the Sector Programme indicators environmentally relevant?

Do the Sector Programme indicators reflect adequately the environmental concerns identified above? The analysis should check that the proposed performance indicators are not negatively correlated to environmental performance. The assessment should follow the guidance on indicators provided in Annex 10.

Examples of indicators that might be taken into account in focal sectors are provided in Annex 1 (heading 4 of the boxes).

9. Recommendations

Environmental integration in the SPSP formulation studies should result in recommendations on the following:

- What issues can be addressed by the EC in its dialogue with the Partner Government to enhance the Sector Programme from an environmental point of view?
- What elements should the SPSP incorporate to enhance its impact or address the identified institutional and legal shortcomings in the country (e.g. support actions for capacity building, technical assistance)?
- What indicators can be used to monitor the environmental performance of Sector Programme and SPSP implementation?

Annex 5 | Terms of Reference for an SEA

Note:

The ToR provided here are intended for an SEA to be prepared in the framework for the formulation of an SPSP. They can also be adapted to be used as guidance in the context of GBS¹²³. Explanations or sections to be completed according to individual circumstances are given in *italics*.

Title:

ToR for the Strategic Environmental Assessment of the *(name of the Sector Programme)*
in *(name of the country)*.

1. Background

The European Commission requires a Strategic Environmental Assessment (SEA) to be carried out for the preparation of the *(name of the SPSP)* and as support to *(name of the Sector Programme)*.

The major policy/plan/programme documents to consider are *(mention the main documents and their status or stage of preparation)*.

(Mention other pertinent background information, such as key stakeholders, legal requirements, existing CEP).

(Mention any Sector Programme alternatives that have been agreed between the EC and the Partner Government for assessment; if no alternatives have been defined, state this as well).

(Explain the reasons why an SEA is required and which decisions it might influence).

2. Objectives

The objective of this SEA is to describe, identify and assess the likely significant effects on the environment of implementing the *(name of the Sector Programme)*, to be taken into account in its preparation, review or implementation *(delete or change as appropriate)* and in the preparation of the support to be provided by the EC. The SEA will provide decision-makers in the EC and other donors and in the partner country with relevant information to assess the environmental challenges and considerations with regard to the *(name of the Sector Programme)* and the envisaged SPSP. This information should help to ensure that environmental concerns are appropriately integrated in the decision-making and implementation processes.

123 For example, in the context of a Government-led SEA for a national development strategy it is advisable to devise ample opportunities for the participation of the general public.

3. Results

The SEA is composed of two parts: a scoping study and an SEA study. The scoping study will define the issues that need to be addressed in the SEA study, considering the specific context in which the Sector Programme is being developed and is likely to be implemented. The activities, calendar and budget for the SEA study will be determined on the basis of the conclusions of the scoping study.

The SEA scoping study will deliver the following results:

- A description of the Sector Programme concerned and its alternatives;
- A brief description of the institutional and legislative framework of the Sector;
- A brief presentation of the relevant environmental policy and objectives in the country (taking into account the information provided in the CEP);
- An identification of the key stakeholders and their concerns;
- An identification of the key Sector Programme-environment interactions;
- A description of the scope of the environmental baseline to be prepared;
- An identification of the impact identification and evaluation methodologies to be used in the SEA study;
- An indication of the time-frames, costs and resources needed to carry out the SEA study.

The SEA study will deliver the following results:

- An environmental assessment of the (*name of the Sector Programme*), taking into account the potential environmental impacts of its implementation and its consistency with Partner Government's and EC's environmental policies and objectives;
- Recommendations for SPSP formulation (including performance indicators, use of technical assistance and other aid delivery methods) and for Sector Programme enhancement.

4. Issues to be studied

4.1. Scoping study

a. Overview of the Sector Programme and its institutional and legislative framework

The consultants must describe the Sector Programme under assessment, including any alternatives to be considered and which have been agreed between the EC and the Partner Government. If deemed necessary the consultants may suggest variants to the alternatives, which must be justified.

A description must be made of the Sector Programme's institutional and legislative framework, including the institutions responsible for the implementation of the Sector Programme, for the management of its environmental impacts and for the SEA process, as well as the relevant environmental policy and legislation.

The specific decisions and process that should be influenced by the SEA must be identified, especially aspects of SPSP formulation.

An overview must also be given of the wider policy framework related to the Sector Programme in order to identify other planning or policy documents which will need to be explored in the SEA study.

b. Description of key stakeholders and their concerns

The involvement of stakeholders in the SEA process is a key success factor. The consultant should identify key stakeholders (key groups and institutions, environmental agencies, NGOs, representatives of the public and others, including those groups potentially affected by the likely environmental impacts of implementing the Sector Programme).

Consultants must review records of any national public consultation processes that may have taken place as part of the Sector Programme preparation process. Based on this review and on additional consultations, they should identify key stakeholders' concerns and values with respect to the Sector Programme under consideration. The stakeholder engagement strategy to be employed has to be agreed with the Commission and the Partner Government before being implemented in order to avoid unnecessary conflicts or raising of expectations. The strategy should provide stakeholders an opportunity to influence decisions. If the public is not used to being engaged, particularly at the strategic level, and if there are no precedents, it would be important to include an education component in the stakeholder engagement process.

Due to the large geographical areas that may be covered by the Sector Programme, stakeholder engagement could focus on key stakeholders, especially targeting directly affected and vulnerable groups as well as key stakeholders that may not have been adequately represented in the Sector Programme preparation. Records must be kept of all consultations and comments received.

c. Description of key environmental aspects to be addressed in the SEA

On the basis of the policy, institutional and legislative framework analysis, as well as the participation of stakeholders, the consultants must identify the key environmental aspects that should be addressed in the SEA study. That is, the key Sector Programme - environment interactions that need to be given special consideration and emphasis. Depending on expected impacts on society and the scope of other studies, there is also a need to determine to which extent social impacts should be assessed¹²⁴.

d. Description of the scope of the environmental baseline to be prepared in the SEA study

Also on basis of the information obtained above, the consultants must provide indications on the scope of the environmental baseline needed for the SEA study. This will include a proposal of the geographical units that will need to be addressed. All geographical units identified should be justified.

(The definition of geographical units will be more relevant for more detailed programmes, and less so for national-level policies. Thus this section should be amended to reflect the nature of the Sector Programme being assessed).

e. Recommendations on specific impact identification and evaluation methodologies to be used in the SEA study

Consultants should provide an indication of the impact identification and evaluation methodologies that will be used in the SEA study. Special attention should be given to identifying those environmental interactions that will merit quantitative analyses and those for which qualitative analyses should be carried out.

f. Indication of the time-frames, costs and resources needed to carry out the SEA study

The consultants must assess the times that need to be allowed for the completion of the SEA study. A description and estimation of the resources required (in terms of budget, person-days) must be provided, including a break down of costs. If at this stage it is considered necessary to integrate other experts with specific skills, this should be proposed for consideration by the EC.

(The EC could give an indication of the maximum budget allocated to the SEA study).

124 In this case, impacts on humans should be disaggregated according to sex, age, or other relevant social criteria.

4.2. SEA study

The scope of the SEA study will be agreed with the Commission on the basis of the results of the scoping study. The SEA study will be based on the results of the scoping stage and include an environmental baseline study, an identification of environmental opportunities and constraints, an identification and assessment of the potential environmental impacts, an analysis of performance indicators, an assessment of the institutional capacities to address environmental challenges and conclusions and recommendations (for SPSP formulation).

4.2.1. Environmental baseline study

A description and appraisal must be made of the current state of the environment, focusing on those key environmental components identified by the scoping study. The trends for the various environmental components must be identified and a projection must be made of the state of the environment on the short-, medium- and long-term in the assumption of no implementation of the Sector Programme. External factors must be taken into account, including the influence of other sectoral policies. If the “no implementation” scenario is unrealistic the most probable “business as usual” scenario should be selected. The geographical (or mapping) units to be addressed should be described, if relevant.

4.2.2. Identification and evaluation of environmental opportunities and constraints

The environmental factors and resources that can affect (positively or negatively) the effectiveness, efficiency and sustainability of the Sector Programme should be identified, described and assessed for each alternative. These factors may include expected impacts from other sectors or policies. This part of the study should also consider the environmental issues that could potentially be addressed by the assessed Programme. The study should assess if the Sector Programme provides an adequate response to these opportunities and constraints.

4.2.3. Identification and evaluation of impacts

The potential environmental impacts and risks from implementing the Sector Programme must be identified and described for each alternative being studied, taking into account the views and concerns of stakeholders. Their significance should be determined according to their characteristics (e.g. duration, probability, magnitude, mitigability, reversibility) and the sensitivity of the environment. Those impacts which are significant should be assessed in detail taking into account:

- the views and concerns of stakeholders,
- the consistency with international commitments (MEAs),
- the socio-economic consequences (especially on vulnerable groups and ethnic minorities),
- compliance with environmental regulations and standards,
- consistency with environmental objectives and policies, and
- their implications for sustainable development.

(More information could be provided on how the methodology presented in the scoping study has been used for impact identification and evaluation).

4.2.4. Analysis of performance indicators

Performance indicators proposed by the Sector Programme (or already envisaged by the EC for the SPSP) should be assessed and revised from an environmental perspective, i.e. their usefulness to identify the environmental effects (positive and negative) of Sector Programme implementation. Proposals should be made for the SPSP performance indicators and monitoring system.

The set of indicators may include:

- “Pressure” indicators¹²⁵;
- “State” indicators, for sectors with a direct and major link with key environmental resources (e.g. fish stocks for fisheries, soil for agriculture, forest resources for forestry)¹²⁶;
- Indicators of other specific issues, such as key institutional weaknesses identified by the SEA¹²⁷.

125 For example: pesticide use in a given area (e.g. Deltamethrin as pour-on for control of tse-tse); hectares of forest cleared for agriculture.

126 For example: % of groundwater samples meeting quality standards.

127 For example: number of annual environmental inspections carried out by local authorities in industrial facilities.

4.2.5. Assessment of the capacities to address environmental challenges

The capacity of regulatory institutions to address the environmental issues, especially the impacts identified, should be assessed. (*Consultants might be requested to incorporate information on the budget availability and the MTEF - mid-term expenditure framework*).

4.2.6. Stakeholder engagement

Stakeholders should be engaged throughout the SEA study according to the stakeholder engagement strategy agreed in the scoping stage.

4.2.7. Conclusions and recommendations

This chapter will summarise the key environmental issues for the sector(s) involved, including policy and institutional constraints, challenges and main recommendations. Recommendations should be made on how to optimise positive impacts and the opportunities to enhance the environment, as well as on how to mitigate environmental constraints, negative effects and risks. They should suggest the selection of an alternative (if more than one alternative is envisaged), potential changes in the Sector Programme design, implementation and monitoring modalities, or co-operation actions.

In view of the preparation of a support programme recommendations should especially be made to support the overall assessment of the Sector Programme (referring to the assessment areas described in the EC guidelines for SPSP) as well as for the SPSP formulation. If the assessed programme includes projects, recommendations should be made on the need to carry out EIAs of those projects.

Recommendations for Sector Programme enhancement should be distinguished from those for SPSP formulation. The recommendations for Sector Programme enhancement should be addressed to the EC for incorporation in its policy dialogue with the Partner Government.

Recommendations to the EC for SPSP formulation must address the possibility of providing technical assistance or the use of other aid modalities (e.g. projects) to address specific weaknesses in the environmental institutional, legal and policy framework. They should also include proposals for indicators.

The limitations of the SEA and its assumptions should be presented. The recommendations should take into account the views presented by the stakeholders and explain how these were integrated. In the case of concerns that were not integrated in the final recommendations, the reasons thereof should be given.

5. Work plan

The work plan should include but not necessarily be limited to the following activities:

Scoping study

- Fact finding/data collection;
- Review of prior public consultations, identification of key stakeholders;
- Engagement of stakeholders;
- Analysis/preparation of recommendations and scoping report.

SEA study

- Fact finding/data collection;
- Field trips;
- Engagement of stakeholders;
- Identification and detailed analysis of the potential environmental impacts;
- Preparation of recommendations to mitigate negative environmental effects (and constraints) and optimise positive effects (and opportunities);
- Preparation of recommendations and draft SEA report;
- Preparation of the final SEA report.

On the basis of this draft proposal and the time scheduled outlined in the ToR, the company must provide their detailed work plan.

6. Expertise required

The consulting company must specify the qualifications and experience of each specialist to be assigned to the SEA study. The company should indicate if/how they intend to use local experts and how they will contribute to the transfer of know-how throughout the study.

Experience in the country and sector concerned will be an asset, as well as knowledge of EC procedures.

For each specialist proposed, a *curriculum vitae* must be provided of no more than (*four*) pages setting out the relevant qualifications and experience.

7. Reporting

7.1. Scoping study

The scoping study must be presented in the format given in Appendix 1.

The detailed stakeholder engagement plan must be presented (*two*) weeks after kick-off; (*number*) copies are to be presented to (*names and organisations*) for comments.

The draft scoping report in (*number*) copies is to be presented to (*names and organisations*) for comments by (*date*). Comments should be expected by (*date*). The company will take account of those comments in preparing the final scoping report. (*number*) copies of the final scoping report in (*language*) are to be submitted by (*date*).

7.2. SEA study

The Commission will provide feedback on the scoping study no later than (*number*) weeks after its delivery, setting the scope of the SEA study. The SEA study will begin no later than (*number*) weeks after this date.

The conclusions of the study must be presented in the SEA report in the format given in Appendix 2. The underlying analysis is to be presented in appendices to this report.

The draft SEA report in (*number*) copies is to be presented to (*names and organisations*) for comments by (*date*). Within (*number*) weeks, comments will be received from (*list the authorities*).

The company will take account of these comments in preparing the final report. (*number*) copies of the final report in (*language*) are to be submitted by (*date*).

8. Presentation of the proposal

The proposal must include an understanding of the Terms of Reference and a description of the general approach to the whole SEA in accordance with these ToR, highlighting the following: the proposed methodology for the participation of stakeholders; the proposed approaches for the definition of the environmental baseline; and the proposed methodologies for impact identification and evaluation.

9. Time schedule

(*Insert indicative time schedule*).

The company should respond to this time schedule and indicate in their proposal how they intend to organise the work for this purpose.

10. Appendices

Appendix 1. Standard Format for the SEA scoping report

Maximum length of the main report (without appendices): 25 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by the (*name of consultant*) for the ... (*National Institution*) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

1. Executive summary
2. Description of the Sector Programme under consideration
3. Overview of the policy, institutional and legislation framework
4. Description of key stakeholders and their concerns
5. Description of key environmental aspects to be addressed in the SEA study
6. Description of the scope of the environmental baseline to be prepared in the SEA study
7. Recommendations on specific impact identification and evaluation methodologies to be used in the SEA study
8. Proposal of time frames and resources needed for the SEA study
9. Technical appendices
 - I. Stakeholder engagement methodology
 - II. List of stakeholders engaged or consulted
 - III. Records of stakeholder participation
 - IV. List of documents consulted

Appendix 2. Standard Format Sector SEA report

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by the (*name of consultant*) for the ... (*National Institution*) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

Maximum length of the main report (without appendices): 100 pages.

1. Executive summary
2. Scope

3. Background
 - 3.1 Sector Programme justification and purpose
 - 3.2 Alternatives
 - 3.3 Environmental policy, legislative and planning framework
4. Approach and methodology
 - 4.1 General approach
 - 4.2 Geographical or environmental mapping units
 - 4.3 Assumptions, uncertainties and constraints
5. Environmental baseline study
6. Impact identification and evaluation
7. Analysis of alternatives
8. Mitigation or optimising measures
9. Indicators and institutional capacities
10. Conclusions and recommendations
 - 10.1. General conclusions
 - 10.2. Recommendations for SPSP formulation
 - 10.3. Recommendations for Sector Programme enhancement
11. Technical appendices
 - Maps and other illustrative information not incorporated into the main report
 - Other technical information and data, as required
 - List of stakeholders consulted/engaged
 - Records of stakeholders' participation
11. Other appendices
 - Study methodology/work plan (2-4 pages)
 - Consultants' itinerary (1-2 pages)
 - List of documentation consulted (1-2 pages)
 - *Curricula vitae* of the consultants (1 page per person)
 - Terms of Reference for the SEA

Annex 6 | Integrating the environment in the Logical Framework Approach

The “Logical Framework Approach” includes three major steps where environment should be integrated: the problem analysis, the strategy analysis and the preparation of the Logical Framework itself.

a. Problem analysis

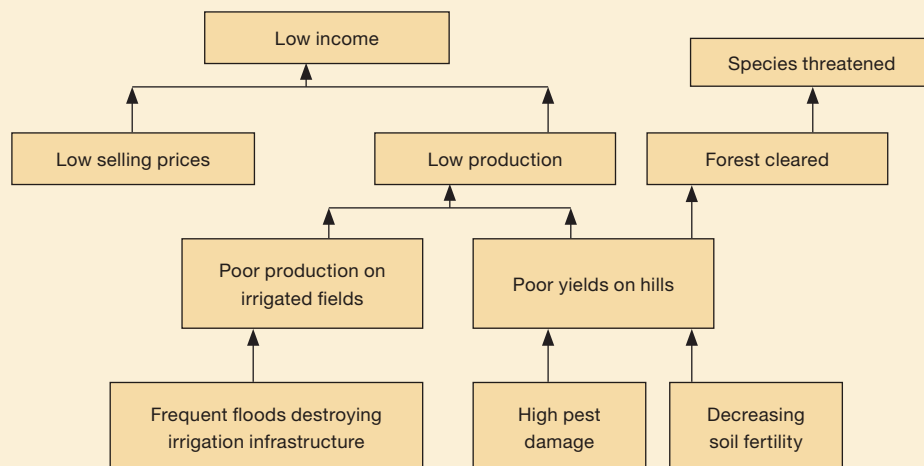
Problem analysis includes the identification of problems (unsatisfactory situations) and their graphic representation in a Problem Tree, which shows the cause-effect links between individual problems. Existing problems should be identified with stakeholder participation (including those of groups potentially affected by project impacts) for all three dimensions of Sustainable Development (economic, social and environmental). Though stakeholders often express problems in socio-economic terms from a subjective perspective, equal attention should be paid to environmental problems and to real cause-effect links.

Environmental problems may include:

- Poor environmental conditions affecting the target population (dependence on unproductive resources or resources that are difficult to access, diseases, vulnerability linked to environmental disasters);
- Current trends which risk compromising the ability to satisfy future needs, or risk creating future difficulties (e.g. deforestation, erosion);
- Local contributions to external or global environmental problems (e.g. biodiversity losses, GHG emissions).

Usually the first type of problems described above will appear in the lower part of the problem tree (because they are the causes of local problems) and the other two categories in the upper part (because they are the consequences). Considering the environment at this stage is critical to ensure that subsequent steps - and especially the strategy analysis will lead to the identification of projects that contribute to sustainable development.

The Figure below shows an example of a simple Problem Tree which integrates environmental problems, including those which have no impact on the main problem. Notice that the environment does not constitute a separate Tree and that the term “environment”, which is too vague, is avoided.



b. Strategy analysis

After the problem tree has been transformed into an objective tree¹²⁸, showing an improved situation for all problems, the strategy analysis involves selecting the objectives and expected results that will be part of the project. This selection is usually based on an assessment of both:

- the feasibility of the strategy - depending on external factors, positive (opportunities) or negative (constraints)
- the desirability of the strategy - which depend on its contribution to the overall development objective(s) but also on side-effects, including environmental impacts.

When a problem tree has incorporated the environmental problems correctly, environmental objectives in the objective tree can be classified in two categories:

- Some environmental objectives contribute (directly or indirectly) to the overall development objective(s). If this seems possible, these objectives can be selected as purpose or expected results for the project. If this does not seem feasible, they will be maintained outside of the project and thus will probably remain unachieved, the related problem should then be considered as a constraint to be taken into account in the selection of a strategy.

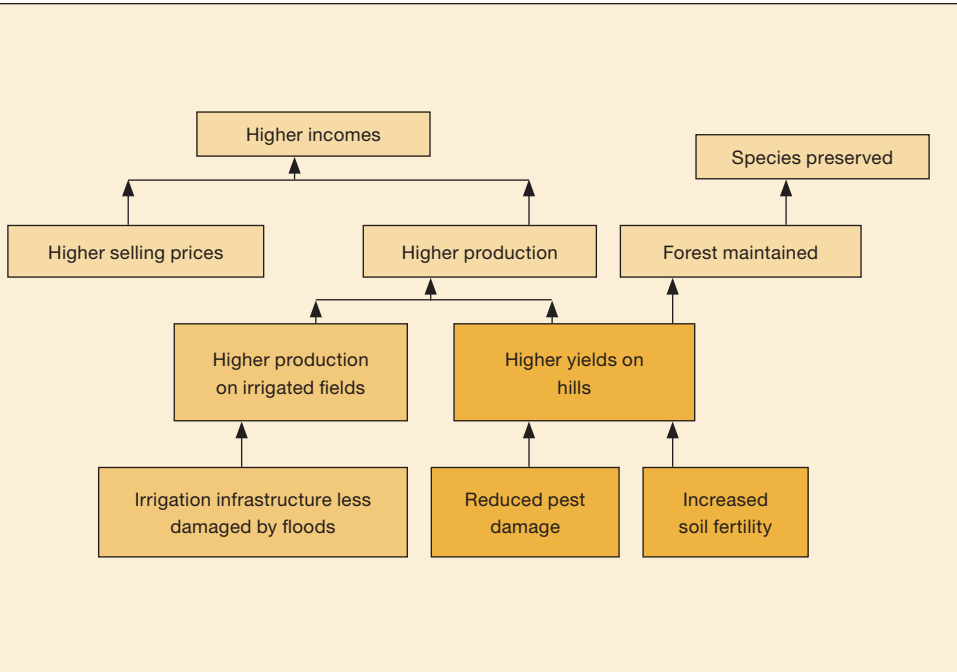
¹²⁸ The objective tree is based on the problem tree, each problem (unsatisfactory situation) being replaced by the corresponding improved situation.

- Other environmental objectives do not contribute to the main development objectives. They constitute an additional outcome of a particular strategy and may justify its selection.

As far as possible the strategy analysis should also take into consideration potential opportunities (positive situations) and consequences that do not appear in the objective tree, such as the negative impacts of the proposed strategies if they can be identified at this stage.

The Figure below shows an objective tree with two strategies to increase production and income:

- a strategy aimed at increasing yield on hills, which will also contribute to forest and biodiversity conservation; and
- a strategy based on production in irrigated fields, which might suffer from flood damage.



In this case, environmental considerations would result in the selection of the first strategy, because of its positive impacts and because of the constraints affecting the alternative. Nevertheless, while designing the project it should be taken into account that some inputs, such as chemicals that can be used to increase yield may result in adverse environmental impacts.

c. Logical Framework

There is no specific box in the Logical Framework structure to incorporate consequences that are external to the objectives, such as environmental impacts. Environmental integration consists of ensuring that contents of the Logical Framework are based on the previous steps (problem and strategy analysis) and of using the following guidance list. This list refers to the Table below, which represents a Logical Framework matrix (see also example of Logical Framework on the last page of this Annex).

	Intervention logic	OVI	Sources of Verification	Assumptions
Overall objective	a	e	h	
Purpose	b	f	h	k
Results	c	g	h	k
Activities	d	Means: (i)	Costs: (j)	k

a. Overall objective: because Sustainable Development should always be an overall objective (explicit or not), key environmental impacts should be referred to; such impacts should (as all objectives) be stated positively. In our example, if we want to contribute both to higher incomes and to forest conservation, without increasing chemical pollution, these environmental concerns should be stated.

b. Purpose (or specific objective): according to the PCM guidance¹²⁹, there should only be one purpose¹³⁰, but this allows for incorporating environmental requirements, standards or conditions that will contribute to the overall objective. In our example, the strategy analysis resulted in the selection of “higher yield on hills” as the purpose and the objective tree shows that this will lead to increased incomes and reduced deforestation rate, but not necessarily to limited chemical pollution: we have thus to revise the purpose, in order to include this environmental concern.

c. Expected Results: results should always be identified in such a way that they produce the purpose, including its environmental concerns: we may thus revise the wording of the expected results or add environmental expected results. In our example we mention the requirement to avoid using chemicals.

¹²⁹ See European Commission (2004) *Project Cycle Management Guidelines*.

¹³⁰ Except in complex projects. As a consequence, the purpose does not have to encompass the three dimensions of Sustainable Development, but it should be selected from an objective tree combining the three dimensions.

- d. Activities:** they should be identified in order to reach the stated expected results, without producing negative side-effects.
- e. OVI (Objectively Verifiable Indicators) for the overall objective:** these indicators should usually reflect the state or trends of the environment and are consequently classified as “State” indicators. They measure the final, usually indirect and delayed impact of the project on the environment as defined in the overall objective. In our example they could include the deforestation rate.
- f. OVI for the purpose:** the environmental concerns incorporated in the statement of this objective should be expressed by the indicators. In our example, the requirement for the absence of chemical pollution results in the selection of a specific indicator: chemical quality standards for drinking water are met in all wells.
- g. OVI for expected results:** the environmental indicators usually reflect “pressures” on the environment (instead of final “state”), this allows for a rapid response in the case of undesirable results. In our example an indicator of the use of chemicals is introduced.
- h. Sources of Verification:** there is no specific comment regarding environmental integration; however the lack of available sources may constitute a particular constraint to the identification of environmental OVIs.
- i. Means:** are based on the activities and expected results, but environmental criteria should be taken into account in the choice of means (e.g. the unnecessary use of 4x4 vehicles should be avoided).
- j. Costs:** are dependant on the means: no specific comment on environmental integration; note that environmental integration may result in additional costs or in reduced costs.
- k. Assumptions:** should include uncertain environmental factors, among social, economic or political assumptions. In our example an assumption may be introduced on extreme climatic events.

For further guidance on how to develop indicators refer to Annex 10.

In our (fictitious) example the Logical Framework would be:

	Intervention logic	OVI	Sources of Verification	Assumptions
Overall objective	Higher income, with reduced deforestation and water pollution.	Average income. Deforestation rate. Proportion of wells with safe drinking water.	Project survey reports. Forest service reports.	
Purpose	Increased yield on hills (with reduced water pollution).	Yield (T/ha/year). Number of chemically unpolluted wells.	Field survey reports. Laboratory analyses.	Unchanged market prices. No biological pollution in wells.
Results	Increased soil fertility. Reduced pest damages with reduced use of chemicals.	Yield (T/ha/year) in fields safe from pest attacks. Level of pest attacks. Reduction rate in the use of chemicals.	Laboratory analyses. Field records.	No exceptional climatic event.
Activities	Collect local knowledge and adequate technical information on organic farming, pest and soil management. Organise participatory research and experiments. Organise training sessions, exchange and dissemination.	Training and office equipment (incl. buildings). Tools and technical equipment. Vehicles (e.g. motorbikes). Staff (2 agr. Engineers, technicians). Operation costs.	2 000 000 €	

Annex 7 | Project EIA screening

Screening a project for EIA (Environmental Impact Assessment) should be based both on the following screening lists and questionnaire.

EIA screening lists

The table below provides lists for the EC co-operation focal areas. These lists are mainly derived from information given in the EU EIA Directive¹³¹ and World Bank¹³² guidance and should be used in combination with national lists in order to determine whether an EIA is required. Reference can be made to Annexes 1 and 2 in the EU EIA Directive for themes that are not covered here (e.g. industrial projects).

The indicative (*) limits between scale categories (LS: large scale, MS: medium scale and SS: small scale) should be adapted to the local environment and may also be defined in the national legislation. Projects that are not clearly classified should be considered as Category B.

131 See <http://ec.europa.eu/comm/environment/eia/eia-legalcontext.htm>

132 World Bank (1996), *Environmental Source Book Update, Environmental Screening*.

	Potentially damaging projects Category A projects, requiring an EIA	Intermediate Category B projects, which require an EIA if they are likely to have significant environmental impacts	Non threatening projects Category C projects, not generally requiring an EIA
1. Governance, democracy, human rights and support for economic and institutional reforms			
			Institutional projects
2. Trade and regional integration			
	Regional infrastructure: see 3 below	Management of shared resources	Institutional projects
3. Infrastructure and transport			
Road transport	Construction or paving of roads of 2 or more lanes (10 km or more) (urban or interurban) Widening or realignment of existing roads to 2 or more lanes (10 km or more) Roads passing through environmentally-sensitive areas	Upgrading or construction of rural roads Construction of roads (< 2 lanes) Widening, realignment or pavement of existing roads (not included in Category A) Bridges	Facilities for pedestrian or non-motorized vehicles New vehicles Road safety
Rail transport	Railway building (10 km or more) (including new large stations)	Rehabilitation	
Water transport and ports	Construction of large ports and waterways (vessels \geq 1250 T)	Upgrading of large ports and artificial waterways Small ports and waterways (< 1250 T)	Services Safety



	Category A projects	Category B projects	Category C projects
Air transport	Airports (runway ≥ 2100 m)	Airports (runway < 2100 m)	Services Safety
4. Water and energy¹³³			
Water	Dams (≥ 10 Mm ³) LS land drainage (> 500 ha) LS flood protection infrastructure (> 500 ha area to be protected) LS wastewater treatment plants (>150 000 population equivalent) Inter-basin transfers (≥ 100 Mm ³ /yr) Groundwater abstraction or artificial groundwater recharge schemes (≥ 100 Mm ³ /yr of water abstracted or recharged)	LS and MS water supply projects Dams (< 10 Mm ³) MS land drainage MS flood protection MS and SS domestic wastewater treatment plants Well boring	
Energy	Laying of pipelines (diameter > 800 mm; length > 40 km) Power lines (≥ 220 kV and > 15 km) Hydroelectric dams (≥ 10 Mm ³) Thermal power stations and other combustion installations (≥ 300 MW)	Laying of pipelines (not included in Category A) Power lines (not included in Category A) Hydroelectric dams (<10 Mm ³) Other generation facilities (< 300 MW) Rural electrification	Energy conservation (including improved stoves)



133 Further guidance also available in 2001 (draft) EC Environmental Manual.

	Category A projects	Category B projects	Category C projects
5. Social cohesion and employment			
			Institutional projects Training
6. Human development			
Education		LS and MS educational facilities (>500* students)	SS facilities Training, schooling, informal education, scholarships, conferences
Health care	LS hospitals and clinics (>500* beds)	MS hospitals and clinics Vector control activities Medical waste management	SS health centres Training Nutrition Medical supplies Primary health care Immunisation
Population			Family planning Statistics
Social			Social protection Legislation Prevention of crime and drug abuse (except crop destruction) Culture
7. Rural development, territorial planning, agriculture and food security¹³⁴			
Agriculture	Land clearing, conversion or reclamation (≥ 500* ha)	MS land clearing or conversion or reclamation (50-500 ha) Watershed management Introduction of new crops or new practices Restructuring of rural land holdings Pest control schemes and introduction of agrochemical products	Research and Development (except GMOs, pesticides) Support services Organic farming

¹³⁴ Further guidance also available in 2001 (draft) EC Environmental Manual.



	Category A projects	Category B projects	Category C projects
Irrigation	LS irrigation (> 500* ha)	MS irrigation (100-500 ha) or SS irrigation in arid zones	
Forest production (see also point 8 below)	LS land conversion or forestation (> 1000* ha) LS Forest management plans (> 10 000* ha)	Introduction of species LS agroforestry Forest roads Forest management plans (not included under Category A)	Support to producers SS agroforestry
Livestock	LS intensive rearing (> 750* cattle, 3000 pigs, 900 sows, 60 000 poultry) LS land conversion for range land or pastures (>1000* ha)	MS intensive rearing LS range management (> 500* ha) Pest control (tse tse fly, predators) Fencing	Water holes SS rearing Support services
Fisheries	LS or industrial fleet fishing Aquaculture in mangrove areas Introduction of new alien species	Introduction of new fishing gear or technologies Aquaculture Fishing harbours Introduction of new species	Support services to fishermen Statistics Monitoring and control

8. Environment and sustainable management of natural resources

Forestry and protected areas	LS land conversion or forestation (> 1000* ha) LS Forest Management Plans (> 10 000* ha)	New protected areas Introduction of alien species Exploitation of new species Forest roads and infrastructure in Protected Areas LS agroforestry Forest and Protected Areas Management Plans (not included in Cat. A)	Support to producers SS agroforestry
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	Category A projects	Category B projects	Category C projects
Waste disposal and treatment	Hazardous waste treatment and disposal facilities LS domestic waste management (>150 000 population equivalent)	Sewerage systems and waste water treatment facilities Recycling plants MS domestic waste management Anti-pollution systems	SS domestic waste treatment Sorting Control and monitoring of pollution Education, awareness raising

9. Conflict prevention and fragile States

			Institutional projects
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EIA screening questionnaire

The questionnaire below provides guidance to decide if a Category B project requires an EIA.

Step 1

Consider the following questions in order to assess whether the project is likely to have significant impacts on the environment. Reply “?” if you have no clear answer. Tick only one box per question and go to 2. Request the support of environmental service/expertise if available.

	Yes	?	No
Will the project affect a Protected Area or other areas classified as vulnerable?			
Will the project require the acquisition or conversion of significant areas of land that are important for environmental services?			
Will the project require (during or after construction) significant amounts of water, energy, materials or other natural resources?			
Are the needs of the project likely to exceed the capacity of existing water supply, sanitation systems, transport or other infrastructure?			
Will the project likely result in the production of significant quantities of wastes? Especially of hazardous or toxic wastes?			
Will the project produce significant volumes of effluents or air pollutants?			
Will the project affect important water bodies or significantly affect water regimes?			
Will the project be located in a site where it can significantly affect surface waters or groundwater (quantity and/or quality)?			
Will the project require significant accommodation or service amenities to support the workforce (during or after construction)?			
Will the project require significant use of fertilisers, pesticides or other chemicals?			
Will the project include the introduction of GMOs or alien species?			
Will the project attract or displace a significant population or economic activities?			
Is there a risk that the project creates suitable habitats for disease vectors or for pests?			
Will the project be located in a densely populated area and likely to produce significant nuisances such as air pollution, noise, vibration and odours?			



	Yes	?	No
Is the project likely to cause important soil erosion or degradation, considering its activities and its location on steep slopes or vulnerable soils?			
Will the project affect particular ecosystems, such as natural forests, wetlands, coral reefs, mangroves or habitats of endangered/threatened species?			
Will the project be located in or close to a site of high cultural or scenic value?			
At this stage, can we identify that opportunities will exist to enhance significantly the project's positive impacts or reduce significantly negative impacts?			

Step 2

Have all the right column boxes ("No") been ticked?	Yes	The project does not require an EIA
	No	Go to step 3

Step 3

Has at least one box in the middle column ("?") been ticked?	Yes	Go to step 5
	No	Go to step 4

Step 4

At this stage can we already identify measures or changes in the project design or location in order to be able to tick all the right column boxes?	Yes	The project does not require an EIA but should be adapted
	No	Go to step 5

Step 5

Considering the number of ticked boxes in the right and middle column (under question 1), the scale of the project (how close it is to a typical Category A), the expected severity of potential negative impacts, and based on the advice of EC or Governmental environmental services, may we consider that addressing these issues in the technical feasibility studies will be sufficient without needing to undertake a more detailed assessment?	Yes	The project does not require an EIA but the environmental impacts should be addressed by the feasibility study
	No	The project requires an EIA

Annex 8 | Terms of Reference for an EIA

Note: explanations or sections to be completed according to individual circumstances are given *in italics*.

ToR for the Environmental Impact Assessment of *(name of the project)*

1. Background

The European Commission requires an Environmental Impact Assessment (EIA) to be carried out for the formulation of the *(state the name/title of the proposed project)*.

The project is described as follows *(insert a short description, referring to the current logical framework, to be attached; provide key information, such as objective, rationale for the project, location, duration, technologies to be employed, life-cycle of the project, etc.)*

The following technically feasible alternatives have been identified... *(provide a description of the alternatives already identified)*.

Existing information on the project and the environment can be found in *(mention already available studies and information including the results of the identification phase, and indicate where/how these documents may be obtained/consulted)*. In addition to this EIA, the following studies are also envisaged *(mention any other studies planned in the formulation phase, including feasibility, economic and financial analyses or social impact assessments)*.

(Mention other pertinent background information, such as potential or known projects envisaged in the same area, key stakeholders, legal requirements and existing SEA in the sector).

2. Objective

The Environmental Impact Assessment will provide decision-makers in the European Commission and the partner country with sufficient information to justify, on environmental grounds, the acceptance, modification or rejection of the project for financing and implementation. It will also provide the basis for guiding subsequent actions, which will ensure that the project is carried out taking into account the environmental issues identified.

3. Results

The EIA is composed of two parts: a scoping study and an EIA study. The scoping study will define the issues that need to be addressed in the EIA study, considering the specific context in which the project will be implemented. The activities, calendar and budget for the EIA study will be determined on the basis of the conclusions of the EIA scoping study.

The EIA scoping study will deliver the following results:

- An overview of the project, the applicable legislative and institutional framework;
- An indication of the project alternatives (proposed by the EC or other alternatives) and their variants to be studied;
- A description of the key stakeholders and their concerns;
- A description of the key environmental aspects and project-environment interactions that should be addressed in the EIA study;
- A description of the geographical area to be considered in the environmental baseline and in the identification of impacts;
- Recommendations on specific impact identification and evaluation methodologies to be used in the EIA;
- An indication of the time frames, costs and resources needed to carry out the EIA study.

The EIA study will deliver the following:

- An identification and assessment of the potential significant environmental impacts of the project in its different alternatives;
- Recommendations, including an Environmental Management Plan (EMP) for the implementation of proposed measures to mitigate negative impacts and optimise positive ones.

4. Issues to be studied

4.1. EIA scoping study

a. Overview of the project and its alternatives.

The consultants must describe the project and major project alternatives, especially those which are significantly different from an environmental perspective (e.g. location alternatives affecting different ecosystems). The consultants will also define the constraints to be taken into account in proposing mitigation measures and other changes to the project. Consultants must assess whether variations to the proposed alternatives, or additional alternatives, are worth being studied. The description of such alternatives should be provided under the heading “Variants to proposed alternatives and new alternatives”.

b. Legislative, institutional and planning framework

A description must be made of the institutional and legislative framework relevant to the project and its EIA, including an indication of the key applicable legislation, planning processes (e.g. land use planning), standards and norms that will have to be addressed in the EIA study. Reference should be made to the CEP and to a potential SEA (if relevant).

c. Description of the key stakeholders and their concerns

The engagement of stakeholders in the EIA process is a key success factor. The consultants should identify key stakeholders (key groups and institutions, environmental agencies, NGOs, representatives of the public and others, including those groups potentially affected by the likely significant environmental impacts of the project). Stakeholders will be engaged in order to identify their concerns and values with respect to the project under consideration. This will allow the identification of key project-environment interactions that will need to be addressed in the EIA study. The stakeholder engagement strategy to be employed should be explained in the consultants' proposal and will be revised by the Commission and the Partner Government before being implemented in order to avoid unnecessary conflicts and raising of expectations.

An effort should be made to involve a wide range of possible interest groups (including local authorities, local and regional NGOs, women, and indigenous peoples) in defining issues to be addressed in the EIA. Records must be kept of all consultations and comments received.

d. Description of the key environmental aspects and project-environment interactions that should be addressed in the EIA study

Particular attention should be paid to the (direct or indirect) impacts that are likely to be the most significant, considering the sensitivity of the environment, the pressures resulting from the project and the expectations of the stakeholders. Based on these considerations and on background information on the local environment as well on other environmental assessments (including SEAs), the consultants should identify specific environment issues to be specially considered under the following categories:

- Physical environment, including (micro-) climate, air quality, water resources (surface and groundwater), geology, geomorphology, soil quality and risk of natural disasters;
- Biological conditions: biodiversity (including rare, endangered and endemic biodiversity components), and biological resources of cultural, social, or economic importance;
- Socio-economic conditions: consider the aspects that depend on environmental changes (public health; vulnerability to disasters; access to natural resources and associated conflicts), those that can produce environmental impacts, and, more broadly, all the economic and social conditions that might be affected by the project and are not considered in other studies in the formulation stage¹³⁵.

135 In this case, impacts on humans should be disaggregated according to sex, age, and other relevant social criteria.

e. Description of the scope of the environmental baseline

Also on the basis of the information obtained above and on an appreciation of the areas of project influence, the consultants must provide indications on the scope of the environmental baseline needed for the EIA study. Distinct geographical units can be proposed according to the type of expected impact (including indirect impacts). All geographical units identified must be justified.

f. Recommendations on specific impact identification and evaluation methodologies to be used in the EIA study

Consultants should provide an indication of the most appropriate impact identification and evaluation methodologies to be used in the EIA study. Special attention should be given to those environmental interactions that will merit quantitative analysis and those for which qualitative analyses should be carried out.

g. Indication of the time-frame, costs and resources needed to carry out the EIA study

The consultants must assess the times that need to be allowed for the completion of the EIA study, which should include a definition of the environmental baseline, an analysis of alternatives, impact identification, impact evaluation and preparation of recommendations (including definition of mitigation/optimisation measures and the Environmental Management Plan). Practical considerations must be taken into account, such as allowing for the obtaining of samples in different seasons if required.

A description and estimation of the resources required (in terms of budget, person-days) must be provided, including a break-down of costs. If at this stage it is considered necessary to integrate other experts with specific skills, this should be proposed in the scoping report for consideration by the EC.

(The EC could give an indication of the maximum budget allocated to the EIA study).

4.2. EIA study

The scope of the EIA study will be agreed with the Commission in co-ordination with the partner government and other international partners, on the basis of the results of the scoping study.

4.2.1. Environmental baseline study

a. Existing environment

The environmental baseline study includes a description of the initial state of the environment in the selected boundaries of the study area, focusing on those aspects that can be influenced by the project. If appropriate, the consultant should also consider those conditions that could influence the efficiency or sustainability of the project. As far as possible, indicators (e.g. Environmental Quality Indices) should be identified for all key environmental variables to be studied and their state (environmental quality) established as a baseline for impact identification and future monitoring. All indicators must be adequately explained and justified. If location alternatives are considered, the study should focus on the differences in the appropriateness and sensitivity of the environment to the pressures resulting from the project.

b. Expected future situation without the project

The consultants should describe the expected trends and situation of environmental variables on the short- medium- and long-term, assuming that the project will not be implemented. This 'no project' scenario will be considered as a benchmark for predicting the project's environmental impacts. Nevertheless if the situation without project seems unrealistic, the most probable alternative should be used as a reference. Assumptions used to predict the future situation and trends should be discussed.

4.2.2. Impact identification and evaluation

The consultants will identify and describe the potential significant environmental impacts of the project alternatives, and evaluate them.

Significant potential environmental impacts (direct and indirect) must be identified, making use of impact identification methodologies proposed by the scoping study. Impact identification should take into consideration factors such as the sensitivity of the environment, the legislative framework, the pressures resulting from the project and the expectations of stakeholders. Impact identification must address the environmental aspects listed in Section 4.1d above and identified by the scoping study.

The impact identification should address, but not necessarily be limited to, the following aspects of the project:

- project activities (under construction, operation and decommissioning/abandonment);
- associated activities and structures (e.g. base camps during construction);
- location;
- general layout, size;
- time span of the project;
- means, materials and resources required (e.g. energy and water consumption, hazardous materials);
- polluting discharges and emissions;
- noise and vibration;
- production of odours, luminous emissions;
- solid and hazardous waste production;
- land-take requirements;
- presence of workers;
- access and transport.

(If the EC has preference for the use of particular methodologies, or more attention given to specific components, these should be specified and described here).

The state of the environment resulting in the short, medium and long term from project implementation will be described on the basis of the same indicators or criteria as the baseline study. The impact evaluation must be assessed in comparison with the expected state of the environment under the no-project scenario.

The impacts should be described according to their nature and characteristics (e.g. direct and indirect, temporary or permanent, continuous or intermittent, reversible or irreversible, positive or negative, short- medium- or long-term, their magnitude, their mitigability and compensability, their transboundary nature, accumulation and synergies with other impacts). Impact significance should be assigned, taking into account the local context as well as the views and values of potentially affected groups. Impacts on humans should be disaggregated by sex, age and other relevant social criteria.

Not all impacts need to be quantified. In some circumstances the attempts at quantification may result in meaningless numbers that are of no value to the decision-making process. It is thus important to recognise when a clear description of the impact characteristics and the reasons behind a certain qualification will be more useful (e.g. to propose mitigation measures and base a decision) than attempts to produce less meaningful quantification.

Impacts should be identified for the construction, operation and abandonment/decommissioning phases of the project, and all associated developments should be taken into account (e.g. power lines associated to a hydroelectric dam, management/disposal of ashes generated by an incinerator, extraction of materials for construction activities).

4.2.3. Measures and recommendations

Measures must be proposed to enhance positive effects and to eliminate/mitigate/compensate undesired effects. These measures (generally referred to as mitigation measures) must be technically feasible, economically sound and socially acceptable (must take into account the views of key stakeholders). The consultants must seek ways to optimise such measures, such that one mitigation measure does not reduce the effectiveness of another or, worse yet, cause an undesired impact itself.

The measures can have several distinct aims:

- Reducing the extent, scale or time-scale of activities that produce negative impacts in favour of less damaging activities or activities producing positive effects.
- Changes in the effects of an activity, without changing the activity itself (for example, adding anti-pollution filters).
- Strengthening the protection of the receiving environment with respect to project impacts or other hazards.
- Rehabilitating or restoring damaged resources.
- Compensating for damage, e.g. by achieving improvements to resources similar to the ones affected.

The residual impacts (i.e. the final environmental impact after the application of the proposed mitigation measures) must be identified and assessed. Based on this assessment the alternatives must be compared and recommendations made on the best alternative. The comparison of alternatives must be summarised in tabular form.

4.2.4. *Environmental Management Plan*

The Environmental Management Plan (EMP) is a document that identifies the actions needed to implement the EIA recommendations, including environmental monitoring required during the implementation phase of a project. The EMP should clearly translate the recommendations from the EIA into an operational plan.

The EMP of the project should include:

- A table (logical framework) showing the objectives, expected results, OVI, activities (mitigation/optimisation measures), and responsibilities for the implementation of those activities;
- Institutional arrangements for its implementation and for environmental monitoring: responsibilities, role of the environmental authorities, participation of stakeholders;
- Suggestions for contracts (environmental clauses: standards, potential requirement to prepare an Environmental Management Plan of the enterprise) and contracting modalities (such as payments linked to results);
- A monitoring and supervision plan (including appropriate indicators, frequency of monitoring, means to gather and analyse the data, reporting system);
- A response plan in case of accidents or unexpected results from the environmental monitoring;
- A proposed schedule for activities (monitoring and mitigation/optimisation measures);
- An indication of means (including personnel, vehicles) and costs of implementing the EMP.

4.2.5. *Limitations of the study*

The major difficulties (and therefore the possible weaknesses) of an EIA occur essentially at the level of identification and evaluation of impacts, these difficulties include:

- The identification of impacts being affected by the inherent uncertainty of predictions, especially when the system being studied is complex, poorly understood, dynamic, unstable, and subject to natural disasters or to the interaction with other projects.
- The evaluation of impacts that sets methodological difficulties with respect to grouping of criteria or multi-criteria comparisons between variants.

The consultants should underline all the major limitations, weaknesses and uncertainties of the study. The consultants are required to state any assumptions made in the prediction and assessment of the potential environmental impacts and risks, to highlight areas where information is deficient and to make clear how the assessment of significance has been determined, for example the use of established standards, quality objectives, stakeholder views and professional judgement.

4.2.6. Conclusions

This chapter will summarise the key results of the EIA, the recommendations (referring to the draft EMP to be attached) and the assessment of the residual impacts. The consultants are also required to provide any information relevant for further economic and financial analyses or the feasibility study. The limitations of the EIA and its key assumptions should be articulated.

5. Work plan

The work plan should include but not necessarily be limited to the following activities:

EIA scoping study

- Fact finding/data collection;
- Identification and engagement of stakeholders;
- Analysis/preparation of recommendations and scoping report.

EIA study

- Review of documentation (e.g. CEP, relevant existing SEAs, identification and pre-feasibility reports);
- Review of relevant environmental literature, environmental policy and legislation framework (legislation, regulations and standards);
- Field work and analyses, including engagement of stakeholders;
- Impact identification and evaluation;
- Preparation of mitigation/optimisation measures;
- Preparation of the EMP;
- Preparation of the final EIA report.

On the basis of the proposed work plan and time schedule outlined the consultants must provide a detailed work plan for the EIA study in their proposal.

6. Expertise required

The proposed mission shall be conducted by a team of (...) experts, who should have the following profiles:

- Expert level I or level II with at least 10 years experience in conducting environmental impact assessments. She/He would be the team leader.
- (...) experts level II with (5)10 years experience and with a technical background in ...*(the number of experts and specialities should be identified according to preliminary scoping studies; mention preferably that local experts should be included in order to contribute to the transfer of know-how and have local/regional expertise/knowledge in the team).*

The experts should have excellent skills in (...). (...) will be the working language *(although the final report must be presented in ...)*.

For each specialist proposed, a *curriculum vitae* must be provided of no more than *(four)* pages setting out their relevant qualifications and experience.

7. Reporting

7.1. EIA scoping study

The scoping study must be presented in the format given in Appendix 1.

The detailed stakeholder engagement strategy must be presented two weeks after kick-off; *(number)* copies are to be presented to *(names and organisations)* for comments.

The draft scoping report in *(number)* copies is to be presented to *(names and organisations)* for comments by *(date)*. Comments from the Commission should be expected by *(date)*. The consultants will take account of these comments in preparing the final scoping report. *(number)* copies of the final scoping report in *(language)* are to be submitted by *(date)*.

7.2. EIA study

Feedback on the scoping study will be provided no later than *(number)* weeks after its submission, setting the scope of the EIA study. The EIA study will begin no later than *(number)* weeks after this date.

The EIA report must be presented in the format given in Appendix 2. The underlying analyses are to be presented in appendices to this report.

The draft EIA report in *(number)* copies is to be presented to *(names and organisations)* for comments by *(date)*. Within *(number)* weeks, comments will be received from *(list the authorities)*.

The consultants will take account of those comments in preparing the final report (maximum...pages excluding appendices). *(number)* copies of the final report in *(language)* are to be submitted by *(date)*.

8. Presentation of the proposal

The proposal must include an understanding of the Terms of Reference and a description of the general approach to the whole EIA in accordance with these ToR, highlighting the following: the proposed methodology for the engagement of stakeholders; the proposed approaches for the definition of the environmental baseline; and the proposed methodologies for impact identification and evaluation (including the description of specific tools proposed).

(According to the contracting modality used the EC should indicate the form in which they wish consultants to make their financial proposal, e.g. break-down by categories of costs, as well as indicate the maximum budget for this contract).

9. Time schedule

(Insert time schedule).

The consultant should respond to this time schedule and indicate in their proposal how they intend to organise the work for this purpose. The time schedule can be revised according to the results of the scoping study.

10. Appendices

Appendix 1. Standard format for the EIA scoping report

Maximum length of the main report (*without appendices*): 25 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by the (*name of consultant*) for the ... (*National Institution*) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

1. Executive summary
2. Description of the project under consideration and its alternatives
3. Applicable environmental legislative and institutional framework
4. Key stakeholders and their concerns
5. Key environmental aspects to be addressed in the EIA study
6. Scope of the environmental baseline and areas of project influence
7. Recommendations on specific impact identification and evaluation methodologies
8. Time frames and resources needed to carry out the EIA study

9. Technical Appendices

- I. Stakeholder engagement methodology
- II. List of stakeholders consulted (including contact details)
- III. Records of stakeholder engagement
- IV. List of documents consulted

Appendix 2. Standard format for the EIA report

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by the (*name of consultant*) for the ... (*National Institution*) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

1. Executive summary
2. Background
 - 2.1 Project justification and purpose
 - 2.2 Project location
 - 2.3 Project description and associated activities
 - 2.4 Alternatives
 - 2.5 Environmental policy, legislative and institutional framework
3. Approach and methodology

This chapter must set out the approach and methodology used in the EIA study and how the data and information collected has been incorporated in the findings and recommendations.

 - 3.1 General Approach
 - 3.2 Geographical or mapping units
 - 3.3 Environmental quality indicators
 - 3.4 Assumptions, uncertainties and constraints
4. Environmental baseline study
5. Impact identification and evaluation

Cumulative effects and interaction between effects could form additional subject headings to ensure that these aspects are not overlooked. Table and diagrams should be used to summarise and clarify findings in this chapter.

6. Mitigation/optimisation measures and residual impacts

7. Recommendations

8. Conclusions

8.1. Statement of Impact

This section must include one of the three 'statements of impact' set out below:

The alternative(s) (name or number of the concerned alternatives) will not have a significant environmental impact, providing that measures recommended in the EIA are followed through.

or

The less damaging alternative(s) (name, or number) will have some significant environmental impacts, which cannot be feasibly mitigated. Therefore, it is recommended to identify and assess additional alternatives or to check that the expected social and economic benefits are sufficiently high in order to justify the project despite its environmental impact.

or

Each alternative will have a significant and unacceptable environmental impact irrespective of proposed mitigation and monitoring measures. Therefore, it is recommended that the project proposal is comprehensively re-worked and alternatives re-assessed.

8.2 Conclusions and recommendations

This section must present a clear statement of the conclusions and recommendations on actions to be taken to ensure that environmental issues are adequately addressed in subsequent project preparation, implementation, monitoring and evaluation phases. These conclusions and recommendations must be complete, yet concisely and clearly formulated, so that this section can be incorporated into the project documentation.

9. Technical appendices

- Input into the logical framework planning matrix of the proposed project design - intervention logic, indicators, assumptions and preconditions.
- Maps of the project area and other illustrative information not incorporated into the main report.
- Other technical information and data, as required.
- Records of stakeholder engagement.
- Draft EMP (Environmental Management Plan).

10. Other appendices

- Study methodology/work plan (2-4 pages).
- Consultants' Itinerary (1-2 pages).
- List of stakeholders consulted or engaged (1-2 pages).
- List of documentation consulted (1-2 pages).
- *Curricula vitae* of the consultants (1 page per person).
- ToR.

Annex 9 | Environmental integration in project pre-feasibility and feasibility studies

The questionnaire below provides guidance on deciding the environmental issues that should be addressed by the pre-feasibility and feasibility studies and included in their ToR or be attached as an annex to the ToR.

The level of detail should be adapted to the stage (pre-feasibility or feasibility). In the pre-feasibility study particular attention should be paid to the comparison of alternatives.

1. Does the sustainable and efficient achievement of the project's objectives depend significantly on the availability of environmental resources?

The costs, activities, results, outcomes and the sustainability of the project can depend on the availability and trends of resources such as:

- *water (surface and groundwater) (e.g. for industrial processing, irrigation, drinking water, fish farming);*
- *land (e.g. for agriculture projects);*
- *wood or timber (e.g. for heating or timber industry);*
- *fish or shrimps (e.g. for trade projects);*
- *minerals.*

If the project depends on the availability of natural resources it is recommended that the study assesses whether the resources will be sustainably available at reasonable cost and that the rate of use will not exceed their levels of regeneration (in case of renewable resources), taking into account other pressures on the resource. The risk of conflict with other users should also be taken into account.

2. Do the environmental resources required by the project (see Question 1 above) need to meet certain quality criteria?

Sometimes the quality of the environmental resources is also important for the project performance. For example:

- *water with an acceptable quality for specific uses (e.g. for drinking water, for fish farming, for industrial processes);*
- *soils for agriculture;*
- *pastures for cattle rearing.*

The study should assess whether the required quality of environmental resources is and will remain acceptable, taking into account trends and pressures (including the impacts of the project itself).

3. Is the project directly exposed to particular environmental influences?

Projects can be influenced by direct environmental factors, independent from the use of particular inputs. Examples include:

- *meteorological conditions (e.g. rainfall in sufficient quantities for agricultural projects, wind with sufficient speed and consistency for wind-farm developments, sunshine with sufficient intensity and a minimum annual duration for solar energy projects);*
- *biological environment (e.g. pests or wildlife damage, weeds);*
- *pollution (e.g. air pollution affecting buildings);*
- *periodic fires in savannah areas.*

The study should assess whether these conditions will permit appropriate project performance, taking into account potential changes, caused by the project or by external factors.

4. Is the project vulnerable to natural or environmental disasters?

Due to its location or to a particular vulnerability, the project may be exposed to natural or environmental disasters, for example:

- *Floods;*
- *Droughts;*
- *Unexpected fires;*
- *Insect outbreaks;*
- *Earthquakes and tsunamis;*
- *Geological hazards (e.g. landslides, subsidence);*
- *Extreme climatic events (e.g. tornadoes, hurricanes);*
- *Technological accidents.*

If this is the case, the study should ensure the project design takes these aspects into account, including the specification of the necessary safeguards and protection elements.

5. Will the project work force and stakeholders be exposed to unsafe or unhealthy conditions resulting from the project or from the environment?

The project may expose workers and stakeholders to unsafe or unhealthy conditions. These may be from the project itself or from environmental conditions. For example:

- *Risks associated with the project (e.g. increased exposure to floods or landslides due to clearing of forested areas);*
- *Health hazards associated with the project (e.g. creation of conditions favourable to the breeding of disease vectors, such as increased surface of stagnant water);*
- *Exposure to hazardous substances (e.g. certain agrochemicals) introduced by a project.*

If there are hazards associated with the project that will affect its feasibility, these should be addressed in the (pre-) feasibility study.

6. Is the project likely to produce undesirable environmental impacts? Do project alternatives produce significantly different impacts?

In the pre-feasibility stage, an alternative¹³⁶ should be selected which maximises the positive environmental impacts and minimises the negative ones (except for Category C projects - see screening list in Annex 7). It is thus important to compare the potential impacts of envisaged alternatives, taking into account the comparative vulnerability of the environments in case of location alternatives¹³⁷.

The selected project should then be screened for EIA, which would be carried out in the formulation stage. In case an EIA is required the pre-feasibility study should make preliminary proposals on its scope or, in case EIA is not required, on the impacts to be considered in the feasibility study, taking into account the issues that may arise when responding to the screening questionnaire.

¹³⁶ In general terms “alternatives” refers to different ways of achieving the same ends.

“Alternatives” will necessarily be of a broader (or more strategic) nature at the pre-feasibility than at the feasibility stage. For example for the case of an agriculture project the “alternatives” studied at pre-feasibility may include enhancing rice production through irrigation and securing of agrochemical inputs, or the introduction of new crops and techniques to enhance production on the hills. If the pre-feasibility study selects the rice production project, then the “alternatives” studied in formulation (and thus from an environmental point of view in the EIA and/or feasibility study) could be, for example, the irrigation system to use, the specific agrochemicals (inputs) to be used, or the rice varieties to be grown.

¹³⁷ This analysis should be done in the main pre-feasibility study, except if the national legislation requires a formal (and separate) EIA process at this early stage where broad alternatives have not yet been decided.

Based on the screening process there are two options for the feasibility stage:

- *Where an EIA has been undertaken, its recommendations should be incorporated into the project design.*
- *For Category B projects for which an EIA will not be carried out, the issues identified by the pre-feasibility study (including those that may have arisen when responding to the screening questionnaire) should be considered in the feasibility study: the study should identify and assess the related impacts and propose appropriate mitigation measures.*

In both cases however, it is important to check that the environmental consequences of the project will not affect the project sustainability, with reference to the other questions above.

7. Can we identify opportunities to enhance the environmental impact of the project?

Enhancements can be made by changing aspects of the project design (such as the expected results, activities, schedule, location, means and processes) in order to:

- *Reduce the need or increase the efficiency of energy and particular resources;*
- *Affect less vulnerable environments;*
- *Reduce the consumption of polluting inputs;*
- *Recycling and reducing the production of wastes;*
- *Using opportunities to raise awareness or to achieve other environmentally relevant outcomes.*

See also Table 6.4.

Annex 10 | Indicators

General

Indicators are variables used to measure the achievement of an objective. In addition to the identification of adequate variables, it is important to define target levels (or states of the variable) in order to assess to what extent the objective has been reached.

Indicators are also helpful in defining in concrete terms what the objective really means. This is particularly true for the environment where vague terms like “biodiversity”, “natural resources”, “sustainable development” or the “environment” itself are often used in the formulation of an objective, which limits the understanding of what exactly is behind this objective.

From an environmental perspective it is important both to select adequate environmental indicators and also to **influence the selection of non-environmental indicators**, which otherwise can introduce the risk of encouraging environmentally damageable trends. For instance, if we want to promote transport, traffic (number of vehicles/day) - which is a direct source of pollution - will be less appropriate as an indicator than the number of passengers or the reduction of transport costs. Mixed indicators can also be incorporated, such as energy efficiency in transport. Environmental mainstreaming in a table of indicators is thus more than adding environmental indicators. This is particularly important since it is usually **recommended to limit** the number of monitored indicators.

Classification of Indicators

Indicators are usually classified according to their level: input indicators (which measure the resources provided), output indicators (direct results), outcome indicators (benefits for the target group) and impact indicators (long-term consequences). Regarding environment indicators, the contribution to long-term or overall consequences does not always pass through benefits for a target group and the definition of “outcome” indicators should thus be revised in order to include expected short-term environmental effects (impacts).

Independently from the environmental nature of the indicators, the hierarchy between these levels should always be maintained, especially when the inputs or the outputs are a source of environmental impact. For instance when roads are built (outputs) to allow farmers to sell more and at a higher price (outcome), we should never measure the outcome in terms of “number of km of road” because this is reflecting a cost, including an environmental cost. Similarly, if we want to protect biodiversity (impact), we should be aware that the area covered by the network of protected areas (MDG 7, target 9, indicator 26) measures only an institutional input and implies costs that are not necessarily compensated by a better impact on biodiversity. This is a general rule but it is particularly important for environmental integration because environmental costs are frequently associated with low level objectives.

Environmental indicators can also be classified according to another system: the DPSIR¹³⁸ (Driving forces - Pressure - State - Impact - Response):

- Driving forces relates to drivers, such as population growth, markets, education;
- Pressure refers to the human activities generating impacts, e.g. fishing, logging, emission of pollutants;
- State refers to the situation and trends of environmental resources or parameters, e.g. forest cover or deforestation rate, water quality;
- Response refers to the measures taken in order to address environmental issues, e.g. establishing Protected Areas, preparing new laws;
- Impacts refers to the consequences for human being¹³⁹, ecosystems and man-made capital.

It is important not to mix these categories (notably in assessments like the Country Environmental Profile), but in Logical Framework approaches (for NIP, GBS, SPSP or project) the input-output-outcome-impact system is the most adequate.

SMART indicators

Indicators should wherever possible be “SMART”, that is Specific, Measurable, Accurate, Realistic and Timely. This requirement to be “SMART” should be understood as follows:

- **Specific:** the indicator should reflect the objective and nothing else; this means for instance, that broad indexes such as the Ecological Footprint¹⁴⁰ or the Environmental Sustainability Index¹⁴¹ should not be used to monitor the performance of sector policies or programmes, but that the indicators should reflect their exact objectives.
- **Measurable:** the measurement unit or, in case of percentage, both the numerator and the denominator are to be defined; two different persons measuring the same indicator should find the same result (the indicators are “objectively verifiable” as specified in PCM terminology); the data should be accessible with sources of verification in the Logframe. Because environment is a very complex area, defining measurable environmental indicators requires particular attention; for instance if we want to improve water quality, we have to identify what are the quality criteria, and how to measure it, which units to use, etc.

138 DPSIR is the causal framework for describing the interactions between society and the environment adopted by the European Environment Agency: driving forces, pressures, states, impacts, responses (extension of the PSR model developed by the OECD). See: <http://themes.eea.europa.eu/indicators/>

139 Social indicators should be as far as possible gender differentiated.

140 See Global Footprint Network (<http://www.footprintnetwork.org>) and WWF (<http://www.wwf.org>).

141 See http://www.yale.edu/es/a_methodology.pdf

- **Accurate:** the measure should have a strong correlation with the objective that we want to achieve; if we are concerned by fish stocks we should not monitor fish catch only, since this also depends on the fishing effort and we should ensure that we monitor the right fish population; we also need adequate sampling approaches, avoiding excessive bias or statistical error.
- **Realistic:** it should be possible to collect the data with available resources, based on the principle of “proportionate analysis”; when we want to conserve forest biodiversity, we cannot envisage a census of all species living in the area but we have to identify species or “objects” (like elephant dung) that are easily detectable; relative census methods should usually be preferred, since they are more cost-effective and usually sufficient to track changes in time.
- **Timely:** to monitor changes it is important to select the indicators according to the time-lag between the action and the expected change; when we monitor environmental impacts, we should be aware that the change should be noticed before it is already too late to adapt the intervention; for this reason it is important not to rely on (a) old data, (b) indicators that, having been developed for comparing countries (such as the ESI) or situations, are not suitable for monitoring changes, (c) variables influenced by long-term impacts, (d) variables that are deeply affected by uncontrolled short term changes hiding the expected long-term changes. For sustainable development, a major challenge is to find timely indicators that indicate current progress towards long term or future improvements: these indicators include indicators of “capital” or “stock” (e.g. of natural resources) and, from an economic perspective, the genuine saving rates (adjusted net savings¹⁴²).

Specific Environmental Indicators

Specific environmental indicators are provided and monitored (in Europe) by the European Environmental Agency¹⁴³. Helpful guidance is also provided by OECD¹⁴⁴. In development co-operation special attention should be paid to the MDG 7 (**Ensure environmental sustainability**) indicators, which are presented and commented in the Table below.

142 See <http://lnweb18.worldbank.org/ESSD/envext.nsf/44ByDocName/GreenAccountingAdjustedNetSavings>

143 DPSIR system, see <http://themes.eea.europa.eu/indicators>

144 OECD (2004) *OECD Key Environmental Indicators*, OECD Environment Directorate: Paris.

Targets and indicators	Category I-O-O-I	Category D-P-S-I-R	Comment
Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.			
25. Proportion of land area covered by forest	Outcome	State	The expected “optimal” level can only be assessed on a case-by-case basis: forests should not always or by definition be considered as better than other land covers.
26. Ratio of area protected to maintain biological diversity to surface area	Input	Response	This input indicator should be used in conjunction with (outcome or impact) indicators or with indicators of effectiveness. There is no target level.
27. Energy use (kg oil equivalent) per \$1000 GDP	Output	Driver	The denominator can be replaced by another development index. No target level is defined.
28. CO ₂ emissions per capita and consumption of ozone-depleting CFCs	Output	Pressure	As in indicator 27, this one could be divided by a development index, because CO ₂ emissions per capita are correlated to GDP. No target level is defined.
29. Proportion of population using solid fuels	Outcome Output	State Pressure	Indirect (negative) indicator, measuring the exposure to indoor air pollution and risks of pulmonary diseases or/and the pressure on wood resources; this indicator implies a risk of discouraging improved systems based on fuel wood.
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.			
30. Proportion of people with sustainable access to an improved water source, urban and rural	Outcome	State	Outcome indicator, more social than environmental



Target 11: Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers.

31. Proportion of population with access to improved sanitation, urban and rural	Outcome	State	Outcome indicator, more social than environmental
32. Proportion of households with access to secure tenure	Outcome	State	Outcome indicator, more social than environmental

Nevertheless, the selection of indicators for EC development co-operation should be made on a case by case basis, according to the particular environmental issues of the country (and sector), the availability of timely and accurate data and the co-operation focal areas. Annex 1 suggests indicators in specific co-operation areas. For sustainable development indicators, see also <http://www.un.org/esa/sustdev/publications/indisd-mg2001.pdf>

Annex 11 | Additional sources of information

An important source of information on integrating the environment in EC Development Co-operation is the website maintained by the Environment Helpdesk: <http://www.environment-integration.org>

Environmental Assessment Legislation and International Conventions

Council of the European Communities (1985) - Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, *Official Journal* L175, 05/07/1985, pp. 0040-0048.

Council of the European Communities (1997) - Council Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, *Official Journal* L073, 14/03/1997, pp. 0005-0015.

European Commission (nd) *Implementation of Directive 2001/42 on the assessment of the effects of certain plans and programmes on the environment*, European Commission DG Environment: Brussels. Available online at: <http://ec.europa.eu/environment/eia/home.htm>

European Parliament and Council of the European Union (2001) Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, *Official Journal* L197, 21/07/2001, pp. 30-37.

UNECE (1991) *Convention on Environmental Impact Assessment in a Transboundary Context*, UNECE: Espoo.

UNECE (1998) *Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters*, UNECE: Aarhus.

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Environmental Assessment (in general)

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Information on the EU Eco Management and Audit Scheme (EMAS), http://europa.eu.int/comm/environment/emas/about/summary_en.htm

Practical checklists on energy audits can be found at:

<http://www.energy.wsu.edu/pubs/>

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World Bank, *Country Environmental Analysis (CEA)*, <http://inweb18.worldbank.org/essd/evext.nsf/41ByDocName/AnalyticalandAdvisoryAssistanceCountryEnvironmentalAnalysis>

World Resources Institute *EarthTrends, the Environmental Information Portal*, http://earthtrends.wri.org/country_profiles/index.cfm?theme=3

International Organisations

with country or regional offices that may be able to provide environmental information and / or support

United Nations Environment Programme (UNEP) - <http://www.unep.org>

United Nations Development Programme (UNDP) - <http://www.undp.org>

Food and Agriculture Organisation of the United Nations (FAO) - <http://www.fao.org>

Regional Development Banks

The World Conservation Union (IUCN) - <http://www.uicn.org>

World Bank Group - <http://www.worldbankgroup.org/>

World Health Organisation of the United Nations (WHO) - <http://www.who.int>

World Wide Fund for Nature (WWF) - <http://www.wwf.org>

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