**Sector Guidelines and Generic TORs for**

**Environmental and Social Impact Assessment**

**Biodiversity**

**Sector Guidelines[[1]](#footnote-1)**

Biodiversity refers to the full range and variety of the world’s biota, and its living organisms. Biodiversity is usually considered at three levels: (i) generic, (ii) species, and (iii) ecosystem diversity. Conservation of biological diversity aims at maintaining global biological resources to meet the needs of humanity today while ensuring their availability for future generations - fundamental criterion of sustainable development.

Natural resource management which tries to preserve biodiversity is largely focused on the management of protected areas. In certain cases, the areas involved are unprotected by legislation, but they are known to include biologically important ecosystems. National parks and other types of protected areas take first place in efforts to conserve biological diversity. Biodiversity and protected area management are, therefore, two closely linked concepts. However, the traditional “fence-it-off” approach to protecting “biodiversity” is increasingly seen as not sufficient. In addition, rural communities view this type of approach negatively because it often deprives them of their traditional livelihoods. Hence, this should be supported by the adoption of “eco-agriculture” - strategies based on the premise that natural ecosystems can be managed to simultaneously protect threatened and/or economically important species and help to feed poor rural communities.

Whereas protected areas serve to maintain biodiversity, many of these areas are also essential for maintaining the livelihood of local (indigenous) people. As a result, development projects that include or influence protected areas may in fact be a dilemma of people versus nature. How to reconcile conservation efforts with people’s needs is a key environmental and social management issue for which site-specific ad hoc solutions need to be developed, tailored to local circumstances, opportunities and needs (e.g. sharing of revenue from eco-tourism with local communities).

Biodiversity conservation ultimately is in the hands of the rural communities who live around “protected areas” or in other natural ecosystems with high biodiversity. Unless these rural communities derive benefit from the existence of these “protected areas” etc, biodiversity conservation is unlikely to succeed in the long term, in spite of any regulatory framework. Hence biodiversity conservation & the development of rural livelihoods must go hand in hand. Thus extensive community consultations & involvement and “community ownership” are essential for biodiversity conservation and sustainable rural development.

**1. Potential Environmental Impacts**

Biodiversity should be identified at an early stage of project preparation to allow for optimum integration of conservation and development objectives. The following is a list of the most common potential issues for use in the identification of biodiversity issues:

a. Ecosystems – does the proposed project drastically change the existing ecosystems or agroecosystems? What is the nature of the change (i.e. positive or negative)?

b. Biological specificity – what are the important biological features of the affected ecosystems?

c. Protected areas – does the proposed project directly or indirectly affect formally protected areas or zones of well-known ecological significance?

d. Project components with significant direct impacts – identify the project components that directly negatively and/or positively affect biodiversity (e.g. expansion of agricultural land into wildlands, change of water regime in wetlands, and development of irrigation in drylands).

e. Project components with significant indirect impacts – identify the project components that indirectly affect biodiversity (e.g. migration of people to or from protected areas, promotion of different land use systems).

f. Quantification of impact – determine the extent and degree of the impacts and the cumulative effects of various project components over time, taking into account impacts brought about by future climate changes.

g. People – identify local mechanisms for management of biodiversity resources and traditional practices which have a bearing in this regard (e.g. what is the role of local biodiversity with regard to the livelihoods, food supply & income generation of the local rural communities? Will the project lead to a loss of livelihoods of any segment of the rural poor?).

**2. Project Alternatives**

Measures for protection of biodiversity must ensure that local populations are not adversely affected and/or actually benefit from environmental opportunities, i.e. through Rewards for Environmental Service (RES) mechanisms. Mitigation measures for those projects which have potentially adverse impacts on biodiversity generally include the following possibilities:

a. Project cancellation – the project as proposed may require drastic change or may be ultimately inappropriate.

b. Community involvement – the project should promote the participation of local people in the identification of suitable alternatives, sustainable management and preservation of protected areas to prevent or reduce negative impacts. Moreover, projects should strive to respect, protect and maintain knowledge, innovations and practices of indigenous and local communities that are relevant for the conservation and sustainable use of biodiversity.

c. Land use plan – develop an environmentally sound and sustainable regional plan, with participation of local communities that integrates biodiversity protection with the requirements of agricultural practices. Projects should include components which enable local communities to manage intact natural forests sustainably to provide multiple alternative livelihoods & income.

d. Compensatory measures[[2]](#footnote-2) – in association with local community groups, to establish new or improved management systems (or strengthening of existing traditional management) for existing protected areas; restore damaged habitats; and offset unavoidable losses of the habitat by ensuring increased benefits to the affected communities.

e. Mitigation measures – establish wildlife corridors and/or protected areas; and improve existing management of biodiversity through training and institutional strengthening programmes. Environmental education of rural communities, especially on issues such as the links between forest destruction, biodiversity loss, climate change and desertification are vital.

**3. International Legal Context**

At the 1992 UNCED Conference, 156 countries signed the Convention on Biological Diversity. Its objectives are “the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.” China signed the Convention on Biological Diversity at the United Nations Conference on Environment and Development in 1992, and ratified the Convention in 1993.

**Generic Terms of Reference**

These generic terms of reference are used when commissioning an assessment of impact on biodiversity as part of the environmental and social impact assessment (ESIA) and should be adapted and tailored to each specific situation. The actual scope and depth of the assessment will be determined by the nature, complexity and importance of the issues studied, as identified in the screening process.

**Introduction and Background**

1. Introduction. This section should state the purpose of the terms of reference, identify the development project to be assessed, and explain the executing arrangements for the ESIA.

2. Background information. Pertinent background for potential parties who may conduct the ESIA, would include a brief description of the major components of the proposed project, a statement of the need for it and the objectives it is intended to meet, the implementing agency, a brief history of the project (including alternatives considered), its current status and timetable, and the identities of any associated projects. If there are other projects in progress or planned within the region which may compete for the same resources, they should also be identified here.

3. Objectives. This section will summarize the general scope of the ESIA and discuss its timing in relation to the processes of project preparation, design, and execution.

4. ESIA requirements. This paragraph should identify any regulations and guidelines which will govern the conduct of the assessment or specify the content of its report. They may include any or all of the following:

* FECO Environmental and Social Safeguards Standards;
* National or provincial laws and/or regulations on environmental reviews and impact assessments;
* ESIA regulations of any co-financing organizations involved in the project.

**Required Qualifications and Expertise**

The expert or team of experts should have solid experience in biodiversity conservation, with special expertise on species conversation, ecosystem conservation, and protected area management (particularly the species and ecosystem occurring in the area in question). A deep understanding of relevant national and local laws and regulations is essential. Expertise in public participation is also required.

**Scope of Work**

**Task 1. Legal, political and institutional context**

This chapter should provide relevant information about the legal, political or institutional context – at international, national and site level. It should include reference to permanent sector policies, biodiversity and environmental laws, regulations and standards as well as explore issues regarding institutional arrangements and institutional capacity.

**Task 2. Description of baseline information**

Baseline data on biodiversity present at the site – in terms of detailed species, and habitat presence plus any known information on sub-species or even population level as well as genetic resources of importance is important in order to describe and map the project site and to understand its sensitivity. These data are also key for protecting impact and exploring possible mitigation measures. Data provided should include a description of the project site and the current biodiversity values. The data needs to be focused and relevant for further decision making – e.g. for supporting decisions about project design such as project location, technology , and mitigation measures.

To establish sufficient knowledge of the project site the assessment should compile the following information through biodiversity (encompassing relevant bio-physical information) assessments:

a. Defining specific species and habitats/ecosystems of the project site, for example, peatland, grassland, arid or semi-arid; coastal or freshwater; forest; mountain, and determining whether the site is considered to be a key biodiversity area at global, regional or national level.

b. Identifying any protection site or other legal or regulatory mechanism determining the use of the land.

c. Identifying dominant components of the land use system in relation to crop production, biophysical attributes, socio-economic attributes, water resources, forest resources; and the main form of land use: conservation, croplands, rangelands, grasslands, forest/woodlands.

d. Identifying key socio-economic information that has impact on land use with respect to, but not exclusively: population growth, development interventions, institutional structures, tenure regimes, livelihood strategies.

e. Developing an understanding of status and trends with respect to: effects of current land use on species and habitat status and trends, land degradation on livelihoods and socio-cultural services; current management regime and land use; soil health and erosion status and trends; water resources status and trends; and the effects of land degradation on biodiversity and ecosystem services beyond the project site.

The analysis should also address planned developments and future land use in the site and the region.

Potential data gaps should be identified; in case these constitute critical baseline data needed for the project, recommendations for the collection of these data should be made.

**Task 3. Determination of the potential impacts of the proposed project**

Based on the information sourced above the assessment should consider the following to measure the impact of any continued/new intervention that may result in a negative impact to current biodiversity:

a. Identify relevant environmental “receptors” which may be impacted in and around the project site and assess the potential direct impact(s) of the project on the project site; and whether also potential indirect/induced and cumulative impacts of the project on the receptor should be considered.

b. For each habitat/land use type in the project area identify the main negative impacts on biodiversity considering the following:

* Direct causes: for example management practices for a particular species, habitat, vegetation/ecosystem soil and agricultural management; deforestation and removal of vegetation, disturbance of water cycle /hydrology and/or quality.
* Indirect causes: for example population change; weak tenure arrangements; inputs and infrastructure.

c. For the above causes assess the level of impact as appropriate in relation to:

* Probability of persistence of the “receptor” biodiversity feature (e.g. species, habitat) itself.
* Provisioning services such as food/medicine/timber production, water and land availability.
* Regulating services such as hydrological, soil, biodiversity and climate.
* Socio-cultural services: cultural, livelihood security and health.

d. The impacts should then be analyzed on their significance:

* Severity of impact on the receptor –biophysical and socio-economic,
* Duration of impact/seasonal variations,
* Extent of impact (local, regional, national, transboundary, global),
* Reversibility (no, yes, if the latter – to what cost/effort),
* Probability of impact.

Discuss any impact that might cause non-compliance with applicable regulations (laws and regulations, protection status, mandatory standards).

**Task 4. Analysis of alternatives**

For each significant impact identify opportunities for mitigation to be explored and analyzed in detail below, but also specify those impacts where no mitigation opportunities exist.

The assessment should provide suggestions for project alternatives and opportunities for mitigating impacts which could be through: alternative locations where the negative impact would be less serious; alternative site layout; avoidance of the range of particular species; resource management plans and application of appropriate land use management technologies (such as conservation agriculture, integrated livestock-crop management, agroforestry techniques, sustainable forest management, integrated water resource management).

Details should be provided on cost estimates of the proposed alternatives, their ability to mitigate the impacts, involvement of local communities in the planning and management of land use practices, capacity building needs to implement sustainable land management techniques, legal/policy frameworks that support the interventions, and time frames to implement such work.

Where no opportunities are available for mitigation through avoidance or minimization of impacts, as described above, possibilities should be explored for mitigation through biodiversity reintroduction or ecosystem restoration subsequent to impacts, or through biodiversity offsets.

**Task 5. Environmental and social management plan**

This part should discuss how to manage the project in order to minimize environmental and social impacts. Provide suggestions for mitigation measures, for monitoring project impacts and assessing the effectiveness of mitigation. Also measures for capacity-building and institutional strengthening should be included in the plan.

**Report**

The ESIA report/statement should be concise and limited to significant environmental and social issues; this should include emerging issues. The main text should focus on findings, conclusions and recommended actions, supported by summaries of the data collected and citations for any references used in interpreting those data. Unpublished documents used in the assessment may not be readily available and should also be assembled in an appendix. The ESIA report/statement should be organized according to the outlines in FECO Environmental and Social Safeguards Standards -ESIA.

1. Contents taken reference of IFAD Environmental and Social Assessment Procedures [↑](#footnote-ref-1)
2. FECO would not use GEF funding to finance projects that result in the economic and /or physical displacement or resettlement of people, and the projects would not deprive the right of minorities or ethnic groups who live inside or benefit from natural habitats to access protected areas or a critical biodiversity’s location. [↑](#footnote-ref-2)