Environmental Assessment and Management Framework of Pilot Projects under the ENPI-FLEG II Program

Complementary measures under FLEG II Program in Georgia and Armenia

APRIL 2014

Environmental Assessment and Management Framework (EAMF)

According to Operational Policy OP 4.01, the EAMF may be used as an environmental assessment (EA) tool in the following cases:

"when a project consists of a program and/or series of sub-projects, and the impacts cannot be determined until the program or sub-project details have been identified" = before project appraised

- EA Category FI (Financial Intermediaries) – subprojects of this category (primarily, identified upon appraisal of the project as a whole) are funded through a financial intermediary (FI), and requirements and procedures for such assessments are laid out in the EAMF

- EAMF sets out guidelines, procedures and measures to promote proper environmental management (risk and impact management) as applied to project-funded activities

EAMF Purpose

- **EAMF** provides guidance for sub-borrowers (subproject sponsors) and financial intermediaries on how to comply with applicable country laws and regulations and operational procedures of OP 4.01
- **EAMF** provides a basis for environmental and social assessment to identify, assess and mitigate potential impact of project activities by the time when all aspects of such impact are fully known
- **EAMF** is used as a reference document for assessing possible environmental and social impact of different investment project alternatives
- **EAMF** is used as guidelines for preparing subproject-/site-specific environmental management plans (EMP), environmental assessment (EA) reports, environmental review and environmental audit reports and other documents
- **EAMF** is an integral part of the Project Operational Manual and is applied in the cases of all investments, involving FIs, regardless of finance sources or implementing agencies

Key objectives

- Establish procedures for assessing all proposed subprojects with a view to identifying potential adverse environmental and social impact of their activities
- Define measures to limit, mitigate and monitor environmental impact of project activities
- Provide a general description of training and managerial and technical capacity building inputs needed to ensure compliance with the EAMF

Roles and responsibilities: Projects with indirect investment

World Bank

Assigns one of the following categories: FI, A, B or C to a proposed project in accordance with the environmental and social safeguard policies

Assesses the FI's capacity to comply with the social and environmental safeguard policies

Advises the FIs on the social and environmental policies and frameworks; gives its 'no objections' for framework documents

Discloses all documents related to the social and environmental safeguards in the Infoshop, and as required, submits them to the Board

Undertakes prior and/or post reviews of EA/EMP/RAP

Supervises the implementation jointly with the FI

Grant beneficiaries

Prepares EA/EMP, RAP* based on the FI's guidance

Discloses the EMP/RAP and holds required public consultations

Performs its functions related to the implementation of the EMP/RAP* (including selection of contractors; integration of the EMP into contracts; and EMP enforcement)

Contract-based relations

Implementing Organizations (IOs):

Prepares framework papers for the project (Environmental Management Framework; Resettlement Framework Policy)

Discloses framework documents and holds required public consultations

Undertakes screening of subprojects, classifies them into categories, assesses, approves and monitors the subprojects, based on the framework documents (this includes causing acceptable EA/EMP; RAP to be prepared *)

Subproject EA, review and approval

- Project identification
- Preparation of the statement/application to IOs
- Funding and preparation of the EA or EMP
- Receipt of required authorizations/permits or licenses
- Approval of the subproject by local and regional environmental authorities (if needed)
- Subproject implementation in compliance with the EMP
- Reports to the IOs in the cases of non-compliance with any EMP provisions

- An EA study in compliance with WB's requirements
- Review of the subproject readiness statement/application
- Subproject appraisal
- Environmental compliance monitoring based on the EMP
- Reports to the World Bank in the cases of non-compliance with any EMP provisions
- Safeguards records and documentation keeping for all subprojects

Subproject proponent

IOs

EAMF Subproject screening, review and approval

- The project screening form to be completed by the subproject proponent

  Subproject name, location (map), type of activity, physical data, environmental information, potential environmental impact, EA category (B or C), pollution mitigation measures, required environmental studies (EIA – environmental impact assessment or EMP), required public consultations and information disclosure requirements.
- Screening criteria include: site-specific environmental risks and impact; land zoning requirements, environmental license/permit; “negative” list of investments not allowed for financing under the project
- Reviewer decides the level of impact to be assessed through EIA or EA/EMP Checklist for category B
- The subproject is approved on the basis of environmental and social review findings (or denied/approved with some changes)
- Disclosure/public meeting is a function of the implementing agency of the subproject subject to EA

Note: no category A will be supported under the FLEG Program

EA-BASED SUBPROJECT IMPLEMENTATION

The FI will bear main responsibility for preparing the EA and monitoring the application and use of this document. Under the subproject supervision, the FI will:

- Be responsible for assessing the sub-borrowers' capacity to comply with the EA safeguards and more generally to cope with environmental and social management
- Make site supervision visits to check compliance with the EA safeguards
- Collaborate with local environmental authorities to address compliance with the EA safeguards, including receipt of valid authorizations/permits
- Cause the sub-borrower to hold required public consultations with due diligence, and to this end, review minutes of such public consultations
- Jointly with the sub-borrower, evaluate the overall environmental performance of the investment project, including any taken critical mitigation measures and significant environmental incidents
- Prepare quarterly and annual EA safeguards implementation reports

Environmental Assessment : Main Sections

Screening/scoping – identification of potential issues to be considered, including identification of other triggered (social and environmental safeguard) policies with subsequent decision on the type and level of assessment for a given project

Assessment– confirmation and evaluation of the significance of the issues to be considered

- Environmental baseline (valued environmental components)
- Identification/assessment of potential impact
- Acceptable changes versus environmental baseline

Mitigation – identification of measures to avoid/reduce/compensate for adverse impact, including expected results (e.g., standards to be achieved); appointment of persons to be responsible for this, and confirmation of their adequate capacity and resources

Monitoring – monitoring of mitigation measures to confirm the achievement of expected results (in the case of failure to achieve them, appropriate modifications should be made – **adaptive management**)

OP 4.01 – with a focus on the process.

Refer to other environmental and social safeguard policies and the Environmental, Health and Safety (EHS) Guidelines for technical details

Like most laws and regulation on EA, OP 4.01 gives the first priority to EIA needs assessment based on project screening to identify potential environmental (and associated social) impact ...

Potential significant adverse environmental impact; the whole range of issues to be addressed; substantial mitigation measures and monitoring are needed

A full EIA is required

Category A

Moderate impact; only the most evident issues to be addressed; some standard mitigation measures and monitoring are needed

A limited EA and/or an Environments Management Plan are required

Category B

The likelihood of adverse impact is at a minimum or equals zero; even if there is a need to take mitigation measures, they are only the most simple ones

No EIA is required

Category C

"Indicative list" of Category B projects :

- Small-scale infrastructure projects: power transmission and distribution networks, rural electrification, mini (run of the river with no major water impoundments) or micro-hydropower projects, small-scale clean fuel fired thermal power plants, renewable energy (other than hydropower), energy efficiency and energy conservation, rural water supply and sanitation, road rehabilitation, maintenance and upgrading; telecommunications, etc.;

- Health care service delivery, HIV-AIDS, education (with limited expansion of existing schools/buildings), repair/rehabilitation of buildings when hazardous materials might be encountered (e.g., asbestos, stored pesticides); and

- Small-scale irrigation, drainage, agricultural and rural development projects, rural water supply and sanitation, watershed management and rehabilitation, and small-scale agro-industries, tourism (small-scale developments).

The "indicative lists" are not equivalent to Annexes I and II to the EU Document!

OP 4.36 – Forests: Scope and Objectives of the policy

Scope of the Policy, - it is applied to the following types of Bank-financed investment projects:

(a) projects that have or may have impacts on the health and quality of forests;

(b) projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests; and
(c) projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned.

Policy objectives:

(a) The management, conservation, and sustainable development of forest ecosystems and their associated resources are essential for lasting poverty reduction and sustainable development, whether located in countries with abundant forests or in those with depleted or naturally limited forest resources. The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and global environmental services and values of forests.

(b) Where forest restoration and plantation development are necessary to meet these objectives, the Bank assists borrowers with forest restoration activities that maintain or enhance biodiversity and ecosystem functionality. The Bank also assists borrowers with the establishment and sustainable management of environmentally appropriate, socially beneficial, and economically viable forest plantations to help meet growing demands for forest goods and services.

Forestry projects not financed by the Bank

- Projects that would involve significant conversion or degradation of critical forest areas or related critical natural habitats;
- Projects that contravene applicable international environmental agreements;
- Plantations that involve any conversion or degradation of critical natural habitats, including adjacent or downstream critical natural habitats;
- The Bank may finance commercial harvesting operations only when the Bank has determined, on the basis of the applicable environmental assessment or other relevant information, that the areas affected by the harvesting are not critical forests or related critical natural habitats.

Note: the FLEG II Program will not support any commercial harvesting operations, including those to be conducted by local communities

Critical forest areas

- Critical forest areas are the subset of natural forest lands that cover:
- (i) existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of The World Conservation Union (IUCN) classifications), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environmental assessment process); or
- (ii) sites identified on supplementary lists prepared by the Bank or an authoritative source determined by the Regional environment sector unit. Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for biodiversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species. Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species; representativeness; and integrity of ecosystem processes.

Natural Habitat Safeguards and Policies: OP 4.04

- promotes and supports natural habitat conservation and improved land use by financing projects designed to integrate conservation of natural habitats, maintenance of ecological functions and rehabilitation of degraded natural habitats into national and regional development projects;
- does not support projects that involve significant conversion or degradation of critical habitats
- does not support projects that involve significant conversion of natural habitats unless:

  - there are no feasible alternatives for the project and its siting ,
  - comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs, and
  - the project includes proper environmental management/mitigation measures

ADA FLEG Operation and projects involving Natural Habitats

- *ADA FLEG Operation:*

- Will not support any activities in critical natural habitats (NHs). For that purpose during the screening the implementing organizations (IOs) will consult national and forestry authorities, and eliminate such activities from financing;
- Might support subprojects located in NHs, but only in the case they will not generate their significant conversion, there are no feasible alternatives, if they project benefits are much higher than associated costs and if they have been subject to a proper EA process having site specific EMP with relevant avoidance, mitigation and monitoring measures.

Note: see next slides with main definitions and screening criteria for NHs and types of projects that might trigger this OP.

Definitions*

- **Natural habitats** are land and water areas where
  - the ecosystems' biological communities are formed largely by native plant and animal species, and
  - human activity has not essentially modified the area's primary ecological functions
- **Critical habitats*** are natural habitats of high value for biodiversity conservation, e.g., those which:
  - Are critical for rare, vulnerable, migratory, or endangered species;
  - Are of particular importance for endemic species or restricted-range species;
  - Support high concentrations of congregatory species;
  - Have unique species representation or are associated with key evolutionary processes
  - Support biodiversity of high social, environmental and cultural value for local communities;

    OR
  - Are protected by local legislation and/or international agreements

*Rephrased definitions of the WB and IFC

Definitions (ii)

- **Significant conversion/degradation** is elimination or severe diminution of the integrity of a natural habitat caused by a major, long-term change in land or water use (or short-term change with a long period of restoration) or severe pollution/contamination. It may be a direct or indirect consequence of a project.
- **Appropriate conservation and mitigation measures** are measures to avoid or reduce adverse impact, keeping such impacts **within socially defined limits of acceptable environmental change**. They may include:
  - ✓ full or partial strategic habitat retention within the project site;
  - ✓ restriction of conversion or modification only to unsubstantial elements of the ecosystem
  - ✓ restoration of degraded habitats/reintroduction of species
  - ✓ establishment and maintenance of an ecologically similar (identical) protected area of suitable size and contiguity ("similar areas")
  - – Such mitigation measures should always provide for their monitoring and evaluation with subsequent adaptive management.

Screening and steps for projects, affecting natural habitats

- Identify the geographical/environmental Project **Impact Zone**;
- Find out whether the project impact zone includes an area classified as a natural habitat

Natural habitats have, among other things, the following characteristics:

- vegetation is fully or predominantly represented with wild species
- there are no cattle breeding farms
- water-adjacent areas are intact or almost intact
- there are few or no permanent dwellings, important buildings, infrastructure sites (except for short-distance dirt and wood-strip roads)
- there are no substantial economic activities, except for hunting and wild plant gathering in reasonable amounts
- there are no significant sources of pollution (to disturb the ecosystem functions)
- the above listed characteristics refer to environmentally important areas (the geographical coverage varies by ecosystem)

- If so, undertake a desk review, field study and a series of consultations in order to:
  - assess the biodiversity baseline and conservation value;
  - find out whether the area is a critical habitat or a natural habitat

- If the project may have impact on a natural (but not critical) area:
  - An EA, including a special review, is required;
  - It is necessary to cause respective stakeholders (NGOs, groups of natural resource users) to be involved in the consultation process

Important points to remember :

Application of Operational Policy OP 4.04 (Natural Habitats) is not limited to Protected Areas. It applies to all natural habitats (including terrestrial, aquatic, marine and aerial ones).

The EIA should inform whether the proposed investment project is likely to have impact on a critical and/or natural habitat. To find it out, it is often necessary to undertake field studies, covering several seasons (it is not admissible to confine to literature reviews and consultations with experts).

If the EA produces evidence of potential impact of the project on a natural (non-critical) habitat, it may be financed but must include mitigation measures acceptable to the WB. Such measures may include conservation of an identical natural habitat (compensation/establishment of a similar PA).

When OP 4.04 is triggered, it is often necessary to involve a Panel of Experts in project preparation / assessment / design.

Projects affecting natural forests trigger both the Natural Habitats Policy and the Forests Policy.

Project types which are likely to trigger the Natural Habitats OP

Infrastructure :

- Transportation construction (roads, railways, ports, etc.)
- Power (hydroelectric, wind, thermal, transmission lines, access roads)
- Water (reservoirs, diversions, canals)
- Urban or rural development (large land conversion, wetland drainage or filling...)

Agriculture/livestock: land clearing, fencing, pesticides, irrigation

Fisheries: conversion of wetlands or near-shore habitats for aquaculture, destructive/over fishing

Forestry/wood : intensive logging of natural forest; conversion to plantation

Industry: pollution of terrestrial and aquatic habitats, land clearing, access roads

Tourism: land clearing, wetland drainage or filling, excessive disturbance

Telecommunications: transmission lines and towers (often on mountain tops)

Privatization: sale of state-owned lands, water rights

Types and categories of FLEG subprojects and their potential impact

Subproject type	Potential environmental and social impact /mitigation measures	Category
Forestry projects		
Forest plantation and forestation	- Loss of biodiversity, converted land cover may impact wildlife migration and foraging habitats, disruption to fragmented wildlife corridors -Threat to ground water supply associated with certain plantation crop selection	A/B
Reforestation	Selection of tree species, endemics and proven reforestation practices	B
Nursery/ seedlings		B/C
Fire control	Avoid undue impact to crops, households and natural habitats	B
Woodlots	Proper community consultation and agreement rights for resource use	B/C

Types and categories of FLEG subprojects and their potential impact (cont.)

Energy Projects to Decrease Wood fuel harvesting and Use		Category
Bio-mass, bio gas, bio fuel power development	Degradation of natural vegetative cover, pressure to convert more land into fuel sources	A/B
Micro hydro	Hydrological flows, water quality, maintain ecosystem services Relocation, compensation and/or resettlement	B
Wind turbines	Proper siting, Noise, bird and bat mortality	A/B
Solar energy	Assure reduced indoor air pollution	B
Charcoal production	Ensure energy efficient process Support sustainable production from legal sources wood	B
Brick making	When feasible, energy supply substitution to more efficient fuels for production	
Improved cooking stoves	Cause indoor air pollution to be reduced	B/C

Types and categories of FLEG subprojects and their potential impact (cont.)

Infrastructure/Social Services		Category
Forest roads	Displacement of housing or farms or involuntary resettlement Loss of natural areas, important habitats, biodiversity Increased soil erosion leading to sediment in runoff and, possibly, gully formation	A/B
Bridges and culverts		
Rural electrification		
Water Supply	Contamination of water source supply, groundwater or surface water	
Improve d Crop Production		
Crop production for subsistence needs and for sale	Water pollution and water quality deterioration; extraction and water rights, land loss and resettlement, natural habitats, species loss, land degradation	B
Agro-forestry	Maximize food production with environmental steward practices Choose species to improve biodiversity Maintain soil cover to prevent erosion and loss of soil nutrients	B
Aquaculture	Avoid conversion of natural aquatic habitats and wetlands Choose nutrient inputs based on need and season to avoid eutrophication	A/B

Types and categories of FLEG subprojects and their potential impact (cont.)

Animal Production		
Small animal husbandry	Use of untreated wastewater for irrigation can cause the decline of soil quality. Potential health issues associated with bird flu and other diseases Proper siting of animal sheds/pens regarding drinking water supply, homestead heath issues related to animals	B
Beef, goats, chickens		
Agro-Processing		
Processing fruits & vegetables, and sources, oil seed crushing	General good housekeeping standards and EMS program, worker safety, proper emissions and discharge control, potential air, surface and groundwater contamination, processing and solid waste disposal	B
Bee keeping, honey manufacturing		B/C
Grain & seed storage facilities, cold storage		A/B
Horticulture	Contamination due to disposal of pesticides/insecticides containers, Health and Safety, Uncontrolled cultivation of genetically modified varieties, Crop residual disposal, Waste generation and disposal including plastics and non-biodegradables	B
Fruits, berries, nuts, vegetables		B
Floriculture		A/B

Environmental Management Plan for a project involving afforestation of degraded agricultural lands

Mitigation measures	Time (years)	Responsibility
Use soil protection practices such as contour plowing for planting and technology with minimum soil treatment	1-5	Moldsilva; forest enterprises
Use hydro technical installations where appropriate to reduce erosion and landslides	1-5	forest enterprises
Limit the use of exotic tree species and maximize the use of indigenous tree species , plant mixed species composition to enhance biodiversity	1-5	forest enterprises
Plant 'green' shelterbelts of *Rosa canina, Prunus spinoza* etc. around forest plantings to prevent illegal grazing	1-5	forest enterprises
Schedule thinning and felling operations for late autumn and winter when they have least impact on fauna	5-15 years	forest enterprises
Connect, as feasible, the afforested land areas with one another and with other natural habitats and protected areas through ecological corridors	1-15	Moldsilva; forest enterprises; Ministry of the Environment
Systematically inform local authorities about the project implementation , publish and disseminate public awareness materials in order to get community/public support	1-5	Ministry of the Environment

Project monitoring table for an afforestation project

Indicator	Methodology/data sources	Frequency/evaluation dates	Responsibility
Floral species diversity in the project sites vs control sites	Field surveys of established monitoring plots	In accordance with the carbon monitoring schedule (in spring and in autumn)	Moldsilva; forest enterprises
Bird species within the project area	Field surveys of established monitoring linear transects	In accordance with the carbon monitoring schedule (in spring)	Moldsilva; forest enterprises
Exotic/indigenous plant species ratio	Field surveys of established monitoring plots	In accordance with the carbon monitoring schedule (in spring and in autumn)	Moldsilva; forest enterprises

Projects disclosure and public consultation

- Participants: project beneficiaries, project-affected people, other stakeholders (e.g., local self-governance, local NGOs)
- Purpose:
  - **2-way process: to inform people and enable them to make their inputs into designing the projects, affecting their lives, well-being and environment**
  - **to promote the stakeholder dialogue (among government, communities, NGOs, and implementing agencies)**

Why should stakeholder consultations be held?

- To improve the project design
- To inform people about expected changes which may affect them
- To incorporate their opinions into the development and implementation of project activities
- To identify adverse impact of the project and mechanisms to enhance project benefits
- To identify risks for and from the project
- To enhance support of the project and its reliability
- To comply with the consultation-related requirements of the World Bank and those of the country government

Disclosure and safeguard policies

Two interlinked objectives:

- Disclosure in support of meaningful public consultations
- Disclosure for the World Bank's shareholders and constituents to ensure transparency of its operations

Disclosure and consultation requirements set forth in the following safeguard policies:

4.01 (Environmental Assessment)
4.04 (Natural Habitats)
4.36 (Forests)
4.10 (Indigenous Peoples)
4.11 (Physical Cultural Resources)
4.12 (Involuntary Resettlement)

Documents to be disclosed:

- All impact mitigation plans referred to in the SG Policies:
  - Environmental Assessment/ Environmental Management Plan
  - Resettlement Action Plan, Policy Framework or Process Framework
  - Indigenous Peoples Plan
  - Pest Management Plan*

* Referred to in BP 4.01 Annex C – PMP as part of the Environmental Management Plan

Requirements for EA disclosure and consultation

- The EA documents should be disclosed and consulted in the country before appraisal of the project;
- The disclosure should be done on the IOs/ENPI FLEG website and in the local communities/local councils where the project will be located in about 2 weeks before public consultation;
- The EA documents should be translated into a local language, understandable for potentially affected population;
- The IO takes into account received recommendations and reflect them in the final version of the EA document;
- Minutes of the public briefing should be attached to the EA document.

EAMF implementing arrangements and responsibilities

- Subprojects EA is the responsibility of IOs;
- Each IO will assign a Safeguards Specialist with the following main tasks:

- performing the screening phase based on the TORs in order to identify the pilot projects which need the EA;
- based on the WB' Operational Policies, ensuring the quality of the EA process and compliance with both WB and National requirements;
- performing control of the way of development for EA process done by the subprojects beneficiaries;
- organize and ensure the public participation in all EA phases, which request this;
- revising of the EA documents and ensuring their quality;
- reporting to the WB on the EAMF and EMPs implementation.

World Bank responsibilities

- Providing assistance to the IOs in designing the EAMF and in conducting subprojects screening and EA, if needed;
- Providing “no objection” on conducted by IOs subprojects environmental categorization;
- Revising progress reports on EAMF implementation;
- If needed, conducting supervision of EMPs implementation for subprojects that might cause environmental/social impacts;
- Conducting EA training for IOs and NPACs representatives.