



# ENVIRONMENTAL MANAGEMNET FRAMEWORK (REVISED)

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<b>Content</b>	<b>Page</b>
<b>1. Introduction</b>	<b>1</b>
1.1. Background	1
1.2. Need for Revised Environment Management Framework	1
1.3. Preparation of Revised Environment Management Framework	2
1.4. Revised Environment Management Framework	3
<b>2. Revised Screening Procedures</b>	<b>4</b>
2.1. Screening Process	4
2.2. List of Available Guidelines for Sub-projects	5
2.3. Projects Requiring IEE According to Environment Protection Rule, 1997	6
2.4. Projects Requiring EIA According to Environment Protection Rule, 1997	7
<b>3. PAF Operations in Protected Areas</b>	<b>8</b>
3.1. Background	8
3.2. Legislative and Institutional Context	8
3.3. PAF Operations in Protected Areas	10

**Attachment 1:** PAF Environmental Guidelines (in English)

**Attachment 2:** PAF Environmental Guidelines (in Nepali)

**Attachment 3:** PAF guideline for Assessment of Quality of Drinking Water

## Abbreviation

BZDC	Buffer Zone Development Council/ Committee
BZMR	Buffer Zone Management Rules
CO	Community Organization
DNPWC	Department of National Park and Wildlife Conservation
EA	Environmental Agency
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
EPR	Environment Protection Rules
ESA	Environmental and Social Assessment
GoN	Government of Nepal
IEE	Initial Environmental Examination
MoEST	Ministry of Environment, Science and Technology
MoFSC	Ministry of Forest and Soil Conservation
NPWPA	The National Park and Wildlife Protection Act
NTFPs	Non-Timber Forest Products
PAF	Poverty Alleviation Fund
PM	Portfolio Manager
PO	Partner Organization
REA	Rapid Environmental Appraisal
UC	User Committee

# **Chapter 1**

## **Introduction**

### **1. 1. Background**

The Poverty Alleviation Fund (PAF) has adopted the community driven approach, in which the communities themselves, identify the development interventions that are necessary for reducing their poverty. The communities develop these interventions as sub-projects, and submit proposals to the PAF for assistance. Prior to the approval, PAF evaluates the proposal based on four approval criteria as specified in the PAF's Operational Manual. These criteria are related to:

- 1) Target of the subproject,
- 2) Technical soundness of the proposal,
- 3) Financial appropriateness of the proposal, and
- 4) Environmental and social concerns of the proposal.

Environmental and Social Assessment (ESA) process is being internalized in the PAF's sub-project procedure to address the issues arising from sub-project implementation. Integration of ESA aspects in the development initiatives is a mandatory requirement under Environmental Protection Act 1996 of Government of Nepal (GoN). Furthermore, it is also the World Bank's requirement in accordance with its operational procedure 4.01.

The Community Organizations (COs) together with the Partner Organizations (POs) should fill out a simple screening questionnaire, as a part of subproject proposal. The answer to the questions provides an opportunity for obtaining an initial insight on environmental and social concerns of the proposed sub-projects. Since most the sub-projects are small to micro scale, the completed questionnaire provide basis for approval of the sub-projects on the environmental and social ground. In case of complexity, and the size of sub-projects, it can also recommend for further assessments, such as an application of Initial Environmental Examinations (IEE) and Environmental Impact Assessment (EIA).

Environment Management Framework for the PAF's sub-projects has been designed to provide the methods to identify the environmental and social problems associated with the implementation of subprojects and ways to mitigate such problems.

### **1.2. Need for Revised Environment Management Framework**

The review of the pre-existing REA Checklists that were filled by POs/COs and submitted along with the proposal has found a number of shortfalls in the way REA Checklists were filled.

In most of the cases the checklist was not filled completely. Much information asked in the checklist was missing. It was also noticed that most of the REA checklists have stated that there will be no possibility of adverse effects from sub-project implementation. Furthermore, during monitoring and evaluation of PAF sub-projects which are being implemented at various districts, it was noticed that the COs and POs lack proper awareness to identify environmental problems which were raised due to the sub- projects and the ways to cope with them. The review of filled pre-existing checklist and result of monitoring and evaluation of the sub-project indicates that:

- Understanding of POs and COs and PMs about the environmental and social implications of the project implementation was found to be inadequate. This could be due

to complex matrix form of pre-existing ESA guideline for the sub project which was found to be difficult to be understood by POs and COs.

- COs POs and PMs often considered the filling of complex matrix form of REA as an unnecessary burden imposed by World Bank and PAF Secretariat.

In order to address possibility of the deficiencies in above points, it was recommended that the Environment Agency (EA) prepare complete, simpler and more user-friendly guideline compared to pre-existing guideline for more effective integration of environmental and social concerns into PAF's sub-projects. In order to make the guidelines simple and user friendly, it was decided to prepare the guidelines specific to the types of the sub-projects undertaken by PAF. However, it was also realized that preparation of the guidelines for all categories of subprojects is impractical because numerous types of subprojects are being undertaken under PAF. Therefore, it was decided to develop guidelines for common types of subprojects. It was decided to increase the number guidelines for subprojects to include more subprojects than those covered by the previous guidelines. It was also decided to apply ring binder approach so that guidelines for other necessary sub-projects could be added to the environment management framework whenever necessary. This approach will also be helpful in amending the ESA guideline for specific subprojects if it is found impractical or not fruitful to the purpose.

In order to address the possibility of simplifying the previously used REA Checklist it was recommended to prepare a simpler and more user-friendly screening method of assessing the level of environmental and social assessment required for the particular sub-project.

In addition, PAF operation in the first Phase excluded support to activities within a national park or activities that are likely to cause damage to wildlife sanctuary. Proposed scaling-up in PAF II include expansion of its operation to communities in and around protected areas also. According to the current proposal, PAF II will operate in and around at least five protected areas in the mountain districts of Nepal (table 3.1). PAF operation procedure in protected area is, therefore, necessary.

### **1.3. Preparation of revised Environment Management Framework**

The revised Environment Management Framework was prepared by incorporating the experiences of applicability of ESA guidelines and REA checklist in previous sub-projects and using the feedback from the experiences gained during Monitoring and Evaluation of Sub-projects.

New set of Environmental and Social Assessment guideline was prepared for 30 common sub-projects under PAF. A one-day workshop was undertaken on 19 June 2007 to discuss on the proposed guidelines and finalize the guideline. The workshop was participated by the PAF officials, Portfolio Managers and experts in the field. The workshop was facilitated by the consultants of Environmental Agency (EA). All relevant comments and suggestions received from the workshop are incorporated in the final version of guidelines.

To prepare the guideline for PAF sub-projects to be implemented inside the protected areas rules and regulations of Protected Areas were reviewed. Discussions regarding such activities in Protected Areas were held with the Department of National Parks and Wildlife Conservation, IUCN, WWF and the National Trust for Nature Conservation. Relevant comments and suggestions received from the discussions are incorporated in the final version of guidelines.

### **1.4. Revised Environment Management Framework**

Based on experiences, efforts have been made to simplify the guidelines. Practical guidelines to improve environmental management in the more common PAF sub-projects have been

developed and added in Revised Environment Management Framework. Complex matrix form of pre-existing ESA guidelines has been replaced by simpler statements. The first part of the statement in this version of simplified guideline informs the user of the guideline about the possible environmental and social impacts likely to be produced due to the project activities. The mitigation measures for such impact are described in the second part. Hence, the guideline can serve the user in two ways firstly, by helping him/her in identifying the possible adverse impact due to project activities and secondly by providing the mitigation measures to mitigate the impact.

Changes have been made in screening procedures. Simpler and more user-friendly screening method of assessing the level of environmental and social assessment required for the particular sub-project has been designed. This was accomplished by replacing the previously used REA Checklist with few questions that guides the COs/POs on the type of environmental assessment to be performed before the implementation of project.

PAF operation in the first Phase excluded support to activities within a national park or activities that are likely to cause damage to wildlife sanctuary. Proposed scaling-up in PAF II include expansion of its operation to communities in and around protected areas also. According to the current proposal, PAF II will operate in and around at least five protected areas in the mountain districts of Nepal (table 3.1). PAF operation procedure in protected area is, therefore, necessary. Hence, this framework also provides operation procedures to implement sub projects in Protected Areas.

## Chapter 2

# Revised Screening Procedures

### 2.1 The Screening Process

The revised screening process is based on the following questions:

Q. 1. Is there the relevant ESA guideline for the proposed sub-project provided to you by PAF? (Please refer to the list of available guidelines).

Yes      ?                                      No      ?

If the answer to Question 1 is No, Please contact PAF, Chakupat, Lalitpur for further help.

If the answer to Question No 1 is 'yes', please study the relevant guideline for the proposed sub-project carefully and answer question no 2.

Q. 2. What are the possible adverse environmental and social impacts of sub-project implementation and what are the mitigation measures being followed in the sub-project. Please fill following table 2.1.

**Table 2.1.**

S. N.	Activities	Possible Adverse Impacts due to activities	Mitigation measures adopted to mitigate the impact	Total Budget required for the mitigation measure
1				
2				
3				
4				
5				
6				
7				

Q3. Is the sub-project located in a protected area (national parks, sanctuaries, conservation areas, buffer zones and environment conservation zones) or does it require any resources from the protected area?

Yes      ?                                      No      ?

If Yes, please follow PAF guidelines for operations in protected areas .

Q. 4. Does the proposed sub-project require IEE or EIA? (Please go through the list of projects requiring IEE or EIA).

Yes      ?                                      No      ?

If the ESA guideline for the proposed sub-project (List is provided in Sections 2.2 of this document) is not available or if any difficulty in identifying possible environmental problems and ways for their mitigation is faced, please contact Environment specialist in PAF.

## **2.2. List of Available Guidelines for Sub-projects**

ESA guidelines for following projects has been prepared in both English and Nepali language and attached to the Revised Environmental Management Framework .

<b>SN Project</b>	<b>Page</b>
1. Micro Hydro Projects	1
2. Micro Irrigation Projects	5
3. Drinking Water Supply Projects	9
4. Surface and Sub-surface Drainage Projects	13
5. Tube Well and Dug Well Projects	16
6. Deep Well (Boring) Projects for Irrigation	18
7. Village Road Projects	21
8. Landfill Site Projects	25
9. Toilet Latrine Project	28
10. Rural Electricity Extension Projects	29
11. Community Building (School, Health Post etc) Projects	31
12. Culvert (Slab, Pipe, Box) Projects	33
13. River Training Projects	35
14. Bridge (RCC, Wooden, Suspended, Suspension, Truss) Projects	37
15. Carpet and Garment Project	40
16. Bird Farming (Pigeon, Duck, Poultry etc) Projects	42
17. Dairy, Ice cream and Milk Chilling Project	44
18. Fibre and Nepali Paper Production Projects	46
19. Fishery Project	48
20. Small Enterprises like Tailoring, Madal, Shoe, Umbrella, Sarangi	

Making Projects	50
21. Watch, Electrical Equipments, Electronic Equipments etc, Repairing Projects	52
22. Furniture Industry and Saw Mill Projects	54
23. Welding Workshop Projects	56
24. Pottery/ Tiles/ Improved Cooking Stoves Projects	58
25. Local Level Hotel and Restaurant Projects	60
26. Vehicle Repairing and Maintenance Projects	62
27. Rice Mill, Chiwra Mill, Masala Mill Projects	64
28. Vegetables, Fruits, Herbs, Medicinal Plants, Asparagus, Mushroom Projects	65
29. Animal Husbandry Projects	67

### **2.3. Projects Requiring IEE According to Environment Protection Rules, 1997**

The list of interventions needing IEE according to EPR, 1997 and which are potential to be undertaken by PAF are given below:

- Clear felling or rehabilitation of national forests with an area of not more than 5 hectares
- Collection of 5-500 tons of forest products other than timber per year
- Extraction of the roots of trees which have been felled, removal of leaves (in such a manner as to turn trees into stumps), extraction of seeds of lichens or orchids from trees, and collection of Sal (*Shorea robusta*) seeds.
- Commercial collection or industrial processing of non-polluting medicinal herbs and aromatic plants.
- Construction of forest paths up to 5 kilometer long, and of fire protection lines up to 10 km long
- Collection of boulders, gravel and sand extraction of coal and other minerals from forest areas.
- Processing of hides not more than 5000 sq. ft. per day
- Establishment of boulder crusher industries
- Establishment of dairy processing industries
- Establishment of thread and clothes dyeing, printing and laundry industries (including carpets) except traditional cottage industries.
- Establishment of industries relating to auto workshop (except 2 wheelers)
- Production of cigarettes, bidi (tobacco rolled in leaf), tobacco beetle rults
- Slaughter house
- Relating to metal (including remelting, rerolling and fabrication).
- Cold storage
- Herbal processing
- Cold storage
- Herbal processing
- Construction of rural roads and small feeder roads
- Construction of 1 to 5 kilometers long ropeways
- Construction of 1 to 5 kilometers long cable car routes

- New irrigation system irrigating 25 to 2000 hectares in the Tarai, those irrigating 15 to 500 hectares in hill valley, and those irrigating 10 to 200 hectares in the hill and mountain areas with steep gradient
- Control of floods through dams in the Tarai
- Supply of drinking water to a population ranging between 2,000 and 20,000.
- Waste management activities to be undertaken with the objective of providing services to a population ranging between 2,000 and 10,000
- Operation of sewerage schemes
- Clearing of national forest covering not more than 1 hectare in the hills and 5 hectares in the Tarai and using them for agricultural purposes.
- Construction of 1 to 5 kilometers long agricultural roads
- Any proposals with a cost of Rs 10 millions to hundred millions

#### **2.4. Projects Requiring EIA According to Environment Protection Rules, 1997**

The list of interventions needing EIA according to EPR, 1997 and which are potential to be undertaken by PAF are given below:

- Establishment of saw -mills, bricks and tiles factories and tobacco processing industries within 5 km from the forest boundaries
- Establishment of resorts, hotels, safaris, educational institutions, hospitals and industries or other construction activities inside forest areas, national parks, sanctuaries, conservation areas, buffer zones and environment conservation zones
- Construction of more than 5 kilometers long agricultural roads
- If any proposal is to be implemented in the following areas:
  - Historical, cultural and archeological sites
  - Environmentally weak and wet areas.
  - National Parks and Wild Life Sanctuaries and Conservation areas.
  - Semi-arid, mountainous and Himalayan regions.
  - Flood prone and other dangerous areas.
  - Residential, school and hospital areas.
  - Areas with main sources of public water supply.

## Chapter 3

### PAF Operations in Protected Areas

#### 3.1 Background

PAF operation in the first Phase excluded support to activities within a national park or activities that are likely to cause damage to a wildlife sanctuary. Proposed scaling-up in PAF II includes expansion of its operation to communities in and around protected areas. According to the current proposal, PAF II will operate in and around at least five protected areas in the mountain districts of Nepal (Table 3.1). A PAF operational procedure for protected areas is, therefore, necessary.

**Table 3.1: Protected areas located in PAF II proposed districts.**

Protected area	District	Village Development Committee
Lantang National Park	Rasuwa	Bhorle, Daibung, Yarsa, Laharepouwa, Ramche, Syanbrubesi, Dhunche, Chileme, Bridhim, Saramthali, Langtang
Rara National Park	Mugu	Shreenagar, Karkiwada, pina, Rara, Seri
	Jumla	Malikabota
Shey Phoksundo National Park	Dolpa	Pahada, Phoksundo, Raha, Tripurakot
	Mugu	Dolphu
Khaptad National Park	Bajhang	Dhangaji, Parakatne, Kotbhairav, Koiralakot, Pawagadhi, Lamatola, Majhigaon, Kalukheti, Patadevi
	Bajura	Kanda, Jaya Bageswori, Dogadi
	Doti	Gairagaun, Kadamandu, Daud, Toleni, Waglekh
	Achham	Khaptad, Devisthan
Dhorpatan Hunting Reserve	Rukum	Ranmakot, Kankari, Takshara

#### 3.2 Legislative and Institutional Context

The National Park and Wildlife Protection Act (NPWPA) and its Rules, particularly the Buffer Zone Management Rules (BZMR), and the Environmental Protection Act (EPA) and Environmental Protection Rules (EPR) are the basic legal instruments that are pertinent for PAF operations in and around the protected areas in Nepal.

Relevant Provisions of EPA/EPR: EPR Schedule-II Clause K (3) requires Environmental Impact Assessment (EIA) for any proposal to be implemented in the National Park, Wildlife Sanctuary and Conservation Area. However, according to the EPR Schedule –I Clause A (12), Initial Environmental Examination (IEE) would be sufficient in the case of “preparation of management

plans of National Parks, Wildlife Sanctuary, Conservation Areas, and their buffer zones, or launching of development and construction activities specified in such plans”.

EIA is a long and costly process for the type of small-scale activities supported by PAF. Any EIA Report has to be cleared by the Ministry of Environment, Science and Technology (MoEST) following a defined review and disclosure procedures. EPA/R authorizes the concerned ministry to approve IEE reports of the sector, and the Ministry of Forest and Soil Conservation (MoFSC) is the concerned ministry for protected areas. Therefore, MoFSC is responsible for approving the IEEs of Management Plans of Protected Areas as well as their buffer zones. The MoFSC has delegated this authority to Department of National Park and Wildlife Reserve (DNPWR) in the case of IEEs related to protected areas and their buffer zones management plans.

**Relevant provisions of NPWPA, Wildlife Protection Rules and BZMR:** NPWRA Clause 5, Wildlife Protection Rules Clause 6, and BZMR Clause 17 prohibit the following activities in the National Park or Wildlife Reserve including their buffer zones unless written permit has been obtained from the competent authority to do so.

- a. Hunting wildlife
- b. Construction of house, shed, shelter etc of any material and or shape or using them
- c. Occupation of land, cleaning, clearing, cultivation, growing crops or harvesting
- d. Grazing or watering domestic animals or birds
- e. Cutting, felling, removing, obstructing trees, bushes, plants or other forest resources, or activity that results in dying of forest resources or setting fire or any other damaging activities
- f. Quarrying, stone extraction, or removal of minerals, gravels, soil or similar materials
- g. Damage to forest products or wildlife, birds or land
- h. Bringing or use of weapons, explosives, or poison
- i. Taking domestic or other animals or animal products into the area except by the authorized person
- j. Damming or diverting river, stream or other water sources, or using weapon or explosive in these water sources.
- k. Camping or spending night or use of fire

**Buffer Zone and Buffer Zone Management:** The NPWPA and BZMR empower the Government of Nepal (GoN) to declare a buffer zone with defined boundary around a national park or wildlife reserve. A special feature of Nepal’s protected areas in the mountains<sup>1</sup> is that there are settlements within the protected area’s outer boundary. Territories of these settlements are usually also declared buffer zones of that protected area. PAF expansion in the second phase will support communities in the buffer zones of the protected areas listed in Table 3. 1.

Activities in a buffer zone are guided and controlled by the Buffer Zone Management Plan (BZMP) of the protected area. The Plan usually consist of four components: i) conservation, ii) income generation, iii) community development (including small scale infrastructure such as micro-irrigation, trails, suspension bridges etc), and iv) awareness. The Plan is prepared considering the environmental sensitivity as well as needs of the communities living in the buffer zone; and the buffer zone communities are actively involved in the Plan preparation process. A Buffer Zone Management Plan is revised every five years.

**Institutional Arrangements for Buffer Zone Management :** Buffer Zone of a protected area is divided into a number of units considering topography/ natural features, extent of area, settlements, and suggestions of local bodies and people living in the zones. A Users Committee (UC) is formed in each of the units. A Buffer Zone Development Council/ Committee (BZDC) is

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<sup>1</sup> There is no settlement within the protected area in the Tarai (plain area).

formed consisting of the chairs of the UC, and members of the BZDC chose a chairperson from among themselves. The warden of the protected area acts as its member-secretary. A UC may constitute a sub-committee or "functional group", if necessary, in order to implement some specific activity.

A UC in its territory within the buffer zone is authorized, under the approved Management Plan, to issue permits such as grazing and access to Non-Timber Forest Products (NTFPs etc) and associated revenue collection, as well as implementation of community development activities. In the case of the core area of the protected areas, however, only the protected area authority is authorized to issue permits for grazing in or for access to forest products (collection of NTFPs, fodder, etc).

The legislation requires that 30 to 50 % of the revenue earned from the protected area be invested in community development in the area: distribution of this amount to different UCs is decided by BZDC (NPWPA Clause 25A and BZMR 26).

### **3.3. PAF Operations in Protected Areas**

In protected areas, as far as possible PAF will work within the system and institutional structure of the Buffer Zone Management program. PAF targeted groups will be formed as sub-committees (or functional groups) of the UC as provided for in the BZMR. Besides harmonizing with BZMR and the protected area's management plan, this will also ensure the group's access to financial resources allocated to the UCs as per the legislation.

PAF will sign a Memorandum of Understanding (MoU) with the Department of National Parks and Wildlife Protection in order to implement PAF in the buffer zones of the protected areas. This will simplify the administrative procedures avoiding the need for the Department's approval for each activity in the buffer zones and also avoiding the need for separate environmental investigations for those PAF activities which are already included in the approved Protected Area Management Plans, for which IEEs have already been prepared. At present, Management Plans of four of the protected areas listed in Table 3.1 (except Dhorpatan Hunting Reserve) are at different stages of review and approval, and their IEEs are also under review.

In the case that PAF activities fall outside the approved management plan, PAF will consult with the protected area authority and DNPWP in order to determine the level and type environmental investigation required.

## **Attachments**

Attachment 1 – PAF Environmental Guidelines (in English).

Attachment 2 – PAF Environment Guidelines (in Nepali).

Attachment 3 – PAF Guideline for Assessment of Quality of Drinking Water.