

## **Improving Climate Resilience of Vulnerable Communities and Ecosystems in the Gandaki River Basin, Nepal**

### **Annex 11: Monitoring and Evaluation Plan**

#### **Introduction**

The project's performance monitoring and evaluation (PMF) consists of five distinct mechanisms, each with their own operational features and time frames. As summarized in Funding Proposal Section E, these include:

- Fund level Impact – Assessed at the mid-term and at the end of the project by external consultants on the basis of a baseline status established at the start of the project. This mid-term and end-of-project evaluation is supervised by IUCN/AE.
- Fund level outcome - Assessed at the mid-term and at the end of the project by external consultants on the basis of a baseline status established at the start of the project.
- Project/programme
- Outcome level – Annual assessment conducted by the PMU who will submit their findings to the Project Steering Committee (PSC) to monitor trends and potential need for adaptive action. While progress towards outcomes will be reviewed regularly as part of project monitoring, the mid-term and end-of-project evaluations will assess whether outcomes are being or have been achieved.
- Output level - Annual Review is conducted by Project Management Unit (PMU). This is an internal review in which, the beneficiaries, project executing partners and local authorities participate in project reviews and work plan preparation.
- Activities level - On going monitoring of day-to-day activities and transactions performed by the project service providers and reviewed on a regular basis by the PMU.

## Monitoring

**Monitoring Approach:** Performance will be monitored on two aspects of interventions: 1) inputs delivered leading to tangible results, and 2) delivery processes resulting in best practice models for climate change adaptation that can be replicated and scaled-up.

**Focus of monitoring:** The focus will be climate vulnerability of the project communities and ecosystems.

Table 1: Monitoring plan				
BASELINE STUDY				
The project requires baseline studies to be done as noted in the logframe. These baseline studies will be conducted as per the logframe at the start of the project There are three areas where baseline data is to be established. i) First is to generate baseline data and map of vulnerability, hazard sites, ecosystem services and facilities in communities based on risk profiles. ii) Second generation of Fund level outcome baseline for indicators: A.8.1, (Number of males and females made aware of climate threats and related appropriate responses); M.9.1 (tCO2 e sequestration) iii) Third is generation of Project/Programme level baseline for indicators for Component 2: Water infiltration rate; Improvement in recharge of restored wetlands; Improvement in soil fertility resulting from applying nature based solutions; and for Component 3: Increase in area of community managed spring-shed and water source protection				US\$ 20,000
Monitoring Fund Level Impacts				
Data/Source	Collection Tool	Frequency	Indicator	Budget for data collection and analysis (US\$)
Government data/records; Project Progress reports Community and local governments	<i>Government data/records</i>	Twice (mid-term and end-term)	A1.1 Change in expected losses of lives and economic assets (US\$) due to the impact of extreme climate-related disasters	US\$ 105,422
Community and community level collaborators; local governments	<i>Survey/questionnaire</i>	Twice (mid-term and end-term)	A1.2 Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options (including fisheries, agriculture, tourism, etc.)	
Community and community level collaborators; local governments	<i>Survey/questionnaire</i>	Twice (mid-term and end-term)	A2.2 Number of food secure households (in areas/periods at risk of climate change impacts)	
Communities residing in the field <sup>1</sup>	<i>Field observation visits</i>	Twice (mid-term and end-term)	A4.1 Coverage/ scale of ecosystems protected and strengthened in response to climate variability and change	
Maps/ Remote Sensing	<i>GIS data</i>			

<sup>1</sup> The mid-term and end-term monitoring results will be observed by the PSC members. PSC members will visit the project site and observe the project impacts on the ecosystems by interacting with the communities residing in the field. They will have visual inspection of the ecosystems on the ground and discussion with the communities on the coverage/ scale of ecosystems protected and strengthened in response to climate variability and change.

Monitoring Fund Level Outcomes				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Provincial and Local Government	<i>Government data/records</i> <sup>2</sup>	Twice (mid-term and end-term)	A5.1 Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation	US\$ 100,422
Provincial and Local Government	<i>Government data/records</i>	Twice (mid-term and end-term)	A6.1 Use of climate information products/services in decision-making in climate sensitive sectors	
Community and community level collaborators; local governments	<i>Survey/questionnaire</i> <sup>3</sup>	Twice (mid-term and end-term)	A7.1 Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools instruments, strategies and activities to respond to climate change and variability	
Community and community level collaborators; local governments	<i>Document review</i>	Twice (mid-term and end-term)	A8.1 Number of males and females made aware of climate threats and related appropriate responses	
Maps/ Remote Sensing	<i>Survey/questionnaire</i>	Twice (mid-term and end-term)	M9.1 Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions	
	<i>GIS data</i>			
Project Performance Indicators				
Outcome 1: Enhanced resilience of livelihoods of the vulnerable communities through adapting to climate change sustainably				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Community and community level collaborators	<i>Survey/questionnaire</i>	Twice (mid-term and end-term)	Change in area planted under climate resilient crop varieties	US\$ 68,363
Local governments (Agriculture Section)	<i>Government data/records</i>			
Community and community level collaborators	<i>Survey/questionnaire</i>	Twice (mid-term and end-term)	Increase in per capita income from upgraded value chain options	
Local governments (Economic Affairs and Planning Section)	<i>Government data/records</i>			
Community and community level collaborators	<i>Focus groups</i>	Twice (mid-term and end-term)	Increase in agricultural cropping intensity	
Local governments (Agriculture Section)	<i>Government data/records</i>			

<sup>2</sup> As government records are maintained in different agencies and in different formats, they will be collected from all agencies of the three provinces (Provinces 3, 4, and 5) and compiled and processed by the project with respect to institutional and regulatory systems that improve incentives for climate resilience and their effective implementation.

<sup>3</sup> For all kinds of surveys, the required questionnaires for the survey will be designed by the Project team (PMU) and the survey of community and community level collaborators will be conducted by the Field Execution Office (FEO).

Outcome 2: Strengthened climate resilience of ecosystems				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Community Forest Users' Groups	Field observation visits	Twice (mid-term and end-term)	Hectares of community forests under improved management	US\$ 68,363
	Focus groups			
Communities residing in the field	Key informant interviews			
Water infiltration areas on the ground <sup>4</sup>	Others (Field verification by IE and FE)	Twice (mid-term and end-term)	Change in water infiltration rate	
Restored wetlands <sup>5</sup>	Others (Field verification by IE and FE)	Twice (mid-term and end-term)	Improvement in recharge of restored wetlands	
Areas where nature based solution has been applied for Soil fertility improvement <sup>6</sup>	Others (Field verification by IE and FE)	Twice (mid-term and end-term)	Improvement in soil fertility resulting from applying nature based solutions	
Outcome 3: Strengthened climate governance and institutional framework to sustain climate				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Provincial and Local Government	Document review	Twice (mid-term and end-term)	Increase in area of community managed spring-shed and water source protection	US\$ 63,363
Provincial and Local Government	Document review	Twice (mid-term and end-term)	No. of integrated sub-riverine watershed and water resource management plans	
Local governments and community forest user groups	Document review			
Provincial and local governments	Document review	Twice (mid-term and end-term)	Incorporation of ecosystem based approaches in integrated development plans	

<sup>4</sup> Water infiltration on the ground will be measured by the Project Team and compared with the baseline figures for verification

<sup>5</sup> Water recharge in the restored wetland areas will be measured by the Project Team and compared with the baseline figures for verification

<sup>6</sup> Soil fertility improvement in areas where nature based solution has been applied for soil fertility improvement will be measured by the Project Team and compared with the baseline figures for verification

Output 1.1: Climate resilient agroforestry and livelihood improvement actions implemented for coping with extreme events				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Community and community level collaborators; local governments	Key informant interviews	Annual	Establish agroforestry in vulnerable area.	US\$ 38,612
Community and community level collaborators; local governments	Key informant interviews	Annual	Construct bamboo check dams, plantations of grass and trees at the highly and very highly vulnerable locations.	
Community and community level collaborators; local governments	Key informant interviews <sup>7</sup>	Annual	Identify and introduce flood tolerant rice and wheat varieties	
Output 1.2: Interventions for water availability and water use efficiency from irrigation systems and improved water sources implemented				
Data/Source	Collection Tool	Frequency	Indicator	
Community and community level collaborators; local governments	Field observation visits	Annual	Support small and micro irrigation schemes 320 schemes	
Community and community level collaborators; local governments	Field observation visits	Annual	Construct water conservation ponds and reservoirs for storing harvested water vulnerable locations.	
Community and community level collaborators; local governments	Field observation visits	Annual	Construct and maintain waterholes in vulnerable community grasslands.	
Output 2.1: Natural ecosystem restoration based actions implemented for reducing impacts of landslides and floods				
Data/Source	Choose an item.	Frequency	Indicator	Indicative Budget (US\$)
Community and community level collaborators; local governments	Field observation visits	Annual	Construct green belts conduct enrichment planting	US\$ 38,612
Community and community level collaborators; local governments	Field observation visits	Annual	Carry-out plantation along rural road	
Community and community level collaborators; local governments	Field observation visits	Annual	Create and compile a standard operating procedure (SOP) for maintaining climate resilient infrastructures	
Communities residing in the field	Focus groups	Annual	Train CFUGs	

<sup>7</sup> The required questionnaires for all KIIs will be designed by the Project team (PMU) and the survey of community and community level collaborators will be conducted by the Field Execution Office (FEO).

Output 2.2: Invasive species management actions implemented in priority community forests, grasslands and wetlands				
Data/Source	Collection Tool	Frequency	Indicator	
Community and community level collaborators; local governments	Field observation visits	Annual	Manage invasive species in community forests (20 ha per CF).	
Community and community level collaborators; local governments	Field observation visits	Annual	Manage invasive species in grasslands (10 ha per CG).	
Community and community level collaborators; local governments	Field observation visits	Annual	Create and a standard operating procedure (SOP)	
Communities residing in the field	Focus groups	Annual	Train CFUGs and NGOs 600	
Output 3.1: Community-based mechanism for planning, restoration, monitoring, and maintenance of ecosystems established				
Data/Source	Collection Tool	Frequency	Indicator	Budget (US\$)
Local governments	Document review	Annual	Provide TA on development of planning and management structures and tools for conservation and restoration of ecosystem	US\$ 38,612
Ministry of Forests and Environment (Federal) and Ministries of Industry, Tourism, Forests and Environment (of three provinces)	Document review and Others (Field verification)	Annual	Establish National and GRB level system for collating data and information	
Community and community level collaborators; local governments	Document review	Annual	Train communities to track the restoration and conservation of the ecosystems in target areas through field schools	
Community and community level collaborators; local governments	Field observation visits	Annual	Link upstream and downstream vulnerable communities through climate informed management of spring-shed and water source protection in vulnerable sites	
Output 3.2: Ecosystem-based climate change adaptation approaches incorporated into government policies and plans				
Data/Source	Collection Tool	Frequency	Indicator	
Provincial and Local Governments	Government data/records	Annual	Prepare integrated sub-riverine watershed and water resource management plans and SOPs 21	
Provincial and Local Governments	Government data/records	Annual	Develop a framework for ecosystem valuation and accounting impact of climate change	

Provincial and Local Governments	<i>Government data/records</i>	Annual	Support local governments to develop Integrated Development Plan (IDP) with the incorporation of climate change and environmental issues 50 local governments
<b>Output 3.3: Knowledge management established for climate resilient River Basin Management</b>			
<b>Data/Source</b>	<b>Choose an item.</b>	<b>Frequency</b>	<b>Indicator</b>
Community and community level collaborators; local governments	<i>Focus groups</i>	Annual	Establish National and GRB level system for collating data and information on global best practices, lessons learned, evidence from the field and scientific knowledge
Three Provincial governments (3, 4, and 5)	<i>GIS data</i>	Annual	Create an online platform and associated mobile phone application to facilitate access to information
Communities residing in the field	<i>Baseline study</i>	Annual	Generate baselines data and map vulnerability, hazard sites, ecosystem services and facilities in communities based on risk profiles
Local governments	<i>Others (Field verification)</i>	Annual	Establish climate change adaptation knowledge sharing and learning structures

## Evaluation

An independent Interim Evaluation (IE) will be undertaken at year 4 of project implementation and a Final Evaluation (FE) will be undertaken in year 7. The IE will be supervised by the AE (IUCN). The IE will review progress and effectiveness of implementation in terms of the following:

- **Relevance** – The extent to which the project is contributing to the goal of the project and climate adaptation in the GRB and Nepal.
- **Effectiveness** – The extent to which the planned outputs are being achieved.
- **Efficiency** – The extent to which project and co-funding resources are being used effectively.
- **Impact** – Recognising that assessing impact is often complicated and it is difficult to attribute cause and affect relationships, the evaluation will *attempt* to assess the changes in conditions of people and ecosystems that result from the project.
- **Sustainability** – The extent to which conditions in the GRB and Nepal support replication (scaling up) and continuation of nature based adaptation in the country.

The PSC will consider the findings and recommendations of the evaluation and propose any adjustments to the project design and implementation strategy for the remaining duration of the project.

The FE will be supervised by the AE (IUCN) and follow a similar approach to that outlined above, with a broader remit to assess whether the project achieved its targeted outcomes and recommend lessons for the GCF, the Government of Nepal, project partners and other key stakeholders in terms of future work. The PMU will prepare the terms of reference for the interim and final evaluations in consultation with key stakeholders.

The IE and FE will be conducted in the same project locations using the checklist used to establish the baseline information. The baseline, IE and FE will use the indicators identified in the log frame.

Findings will be compiled and a report using a similar format as the baseline survey will be prepared. On that basis, progress will be analyzed and presented in the final project report.

After the IE findings are received, the PMU will develop a management response to the findings and recommendations for further adaptive management and execution of the project. The management response will be presented to PSC for approval and to AE (IUCN) for endorsement.

Table 2: Evaluation plan

Type	Timing	Independent/ Self-evaluation	Indicative Budget
Outcome	End of project implementation (year 6)	Independent	US\$ 90,845
Process	Mid-way through project (year 4)	Independent	

### Overview of the NPC's National climate change monitoring mechanism

The government of Nepal has instituted a high level commission on Environment Protection and Climate Change Council as part of its climate change monitoring efforts.

The National Planning Commission (NPC) has designed National Evaluation and Monitoring Guidelines (2013) that includes one indicator on climate change - "number of forest user groups having climate change adaptation plan"<sup>8</sup>. This project will include this indicator in the PMF.

The Climate Change Policy 2011 states that 80 per cent of the total budget allocated by the government on climate actions should go to community level. However, a review study conducted by the National Planning Commission in 2013 reported that the share of the climate budget with a local component is only about 11 per cent. This project will support the Provincial governments in the project area to oversee this target set by the Climate Change policy.

### Stakeholder Involvement

The project executing consortium partners and local bodies will need to play key roles in executing elements of the Project Performance Monitoring for which they have direct control and input. Accordingly, the project will need to strengthen the development of M&E capacities of stakeholders and local bodies as an integral part of the PMF.

Collaborating stakeholders and local bodies will need to actively participate with the Project Management Unit (PMU) including:

- Attending periodic joint monitoring of project activities
- Attending and participating in Annual Review and Planning meetings;
- Working closely with the PMU in developing Annual Work Plans.

Project stakeholders will be involved in varying capacities in the further development and/or modification of the Log frame and PMF as required during the implementation of the project. Upon the recommendation of the stakeholders and local bodies, proposed modifications will be presented to the Project Steering Committee (PSC) for approval. Stakeholders will be engaged actively in the PMF through planning meetings and workshops, and by collecting information, monitoring and reporting on project performance indicators as described below.

<sup>8</sup> NPC, 2013. National Monitoring and Evaluation Guidelines. Government of Nepal, National Planning Commission, Kathmandu, Nepal, p 164



**Household level:** Households and target communities will participate in the project by providing information for the baseline, mid-term and end-of-project surveys, and by participating in review and planning exercises through their respective Community Based Organizations (CBOs).

**Partner level:** Project executing partners will be executing project activities through their networks in the field including CBOs and local NGOs who will be responsible for collecting basic information, reviewing and reporting on performance indicators and the achievement of results at the Outcome and Output levels in their respective district.

CBOs and NGOS will report quarterly to executing partners who will be responsible for providing quarterly reports on progress and attending quarterly review meetings.

**PMU level:** The PMU will collect data, and analyse it to monitor project performance at the Outcome and Output levels for each sub-basin of the project. The PMU will involve local bodies and stakeholders at the field level.

The PMU will be responsible for monitoring progress and discussing this progress with both IUCN in its oversight and supervisory role as AE as well as the PSC in terms of technical and financial progress according to the approved plans and budgets. The PMU will engage the provincial level stakeholders in monitoring of project achievements.

**PSC level:** The PSC will be responsible for engaging the policy level stakeholders through field visits, for overseeing project achievements, and for providing policy feedback.