

## Annex 11. Monitoring and evaluation plans

Monitoring				
Data/Source	Collection Tool	Frequency	Indicator	Indicative Budget <sup>1</sup> (USD)
Data on production volume in UPAs (potatoes)	Farm surveys Field inspections	Baseline - Mid term and final	Agricultural productivity, measured in potato crop yield per hectare	22421
Data on technologies for adaptation to climate change in agricultural areas (greenhouses, anti-hail nets, thermal blankets, hydrogel and other soil moisture retention practices)	Farm surveys Field inspections	Mid-term and final	Area of farming systems where climate-resilient agroecological management and management have been adopted	18732
Data on associative productive enterprises in the project area	Farm surveys Field inspections	Mid-term and final	Number of farmers (male/female) members of developed operational community and associative productive enterprises.	15812
Data on water reservoirs and water tanks implemented	Farm surveys Field inspections	Baseline - Mid term and final	Number of new water reservoirs	21309
Data of agricultural area under irrigation systems	Farm surveys Field inspections	Mid-term and final	Area of farms with improved, on-farm climate-proofed irrigation systems	16304
Data on trained community promoters	Pre-training and post-training assessments	Mid-term and final	Number of community promoters whose capacity on irrigation management have been strengthened	19528
Data on ecosystem restoration plans	Survey, field visits	Mid-term and final	Number of ecosystem restoration plans implemented <sup>2</sup>	17460
Data on implemented agricultural risk early warning information systems	Online operational verification	Mid-term and final	Number of tools (online webpage) for monitoring, consolidation and dissemination of information (on climate, weather conditions, food production, water availability and others)	17763
Data on climate risks, financial mechanisms	Operational information	Mid-term and final	Climate risk assessment tool adopted by defined institutions to scale up climate resilient management financial mechanisms for small scale farmers.	16439
Data on technicians from municipalities and organizations trained in	Pre-training and post-training assessments	Mid-term and final	Number of technicians from local organizations and municipalities whose capacities have been strengthened on climate-resilient agricultural and integral water	16461

<sup>1</sup> All the expenditure lines detailed in this table are in Annex 4 – Budget differentiated for Monitoring

<sup>2</sup> An implemented ecosystem restoration plan means to: a plan approved by the local government with a budget being executed as planned.

climate change and resilient agriculture			management practices (including the use of tools like CROPWAT and MOSAICC)	
Data of financial mechanisms with non-conventional guarantees	Surveys	Mid-term and final	Number of people in farming households with access to a financial mechanism	16743
Data on climate change adaptation platforms incorporated	Minutes of operating consultative territorial platforms	Mid-term and final	Number of territorial platforms who have incorporated climate change adaptation mainstreaming in the implementation of policies and strategies	17734
Data on deforested area (fires, affection of the agricultural frontier)	Field inspection	Mid-term and final	Co-benefit 1: Total area avoided deforestation	17381
Data on GHG emission	Field inspection and calculation using EX-ACT	Mid-term and final	Co-benefit 1: Reduced (sequestered) GHG emission.	17644
Data on youth disaggregated gender	Household survey	Mid-term and final	Co-benefit 2; Number of youth engaged in the agriculture sector disaggregated by gender	16769
Data analysis on multidimensional poverty for the Valleys Macroregion linked to the PREGIPs	National Household Survey Information and monitoring system for territorial planning, economic and social development.	Baseline - Mid term and final	Core indicator 2: Direct and indirect beneficiaries reached, disaggregated by gender	35000
Data on monitoring information on climate change adaptation practices	National Household Survey Farm surveys	Baseline Mid-term and final	Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options, disaggregated by gender	40000
Data on beneficiaries of the early warning systems that use the application and is updated periodically	Information and monitoring system for territorial planning, economic and social development.	Final	Supplementary indicator 2.4: Beneficiaries (female/male) covered by new or improved early warning systems, disaggregated by gender	17800
Data on Index of Water vulnerability	National Index of Water Vulnerability Information and monitoring system for territorial planning, economic and social development.	Mid-term and final	Supplementary 2.3: Freshwater withdrawal as a proportion of available freshwater resources (same as SGD 6.4.2, legend: < 25% no stress, 25-50% low stress; 50 - 75% medium stress; more than 75% high stress; more than 100% critical stress).	40200
Data on people who improved their dietary diversity, food frequency and nutritional importance <sup>3</sup> of the food consumed at household level.	National Household Survey Information and monitoring system for territorial planning, economic and social development.	Mid-term and final	Supplementary 2.2: Food Consumption Score <sup>4</sup> (as a proxy indicator of Food Security, approved by the Food Security Cluster).	32501
Data on index of sustainable forest life (methodology compatible with the Valleys macroregion)	NDC indicator of Index of Sustainable Forest Life Farm surveys Field inspections	Mid-term and final	Core indicator 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices'	40000
Data on terrestrial forest, terrestrial non – forest, fresh water and peatlands linked to	Field inspections		Supplementary 4.1: Hectares of terrestrial forest, terrestrial non-forest, freshwater and	30000

<sup>3</sup> As per the food consumption group.

<sup>4</sup> The Food Consumption Score is an indicator to determine food security improvement. The data to be collected is the diversity in the diet, the amount of times food is consumed, and the nutritional importance of what is consumed, defined by a dietary group.

a monitoring information system for reporting and verification of the NDCs		Mid-term and final	peatlands brought under restoration and/or improved ecosystems	
Field monitoring assistants (4)				360000
Monitoring System				60000
Monitoring Assistant				108000
Monitoring Specialist (PMC)				150000
Cofinance M&E (MMAyA – PMC)				150000
Total				1332001

Evaluation			
Type	Timing	Independent/Self-evaluation	Indicative Budget
<i>Process</i>	<b>Mid-Term evaluation</b> (Within six (6) months after (30) thirty months from the Effective Date)	<b>Independent</b>	<b>USD 120000<sup>5</sup></b>
<i>Process</i>	<b>Final evaluation</b> (Within six (6) months after project completion)	<b>Independent</b>	<b>USD 120000<sup>6</sup></b>

In its role as Accredited Entity, FAO (specifically the FAO-GCF project supervision team) will oversee and supervise the implementation of this project in accordance with the Accreditation Master Agreement (AMA) signed between FAO and the GCF. As per the GCF Monitoring and Accountability Framework, and in accordance with the AMA, FAO will provide the GCF with an Inception Report, Annual Performance Reports, an independent Mid-term Evaluation report, a Project Closure Report, an independent Final Evaluation report and an Impact Evaluation report. FAO will also provide semi-annual and annual Financial Reports throughout project implementation.

FAO has a standard M&E procedures which is compliant with the GCF performance measurement framework. FAO will manage and coordinate reporting to the GCF according to its standards and procedures.

The project monitoring will be conducted by one Monitoring Specialist (from PMC), and 4 monitoring assistants to collect/generate data.

The monitoring and evaluation will take place under the following three levels:

Project execution level:

The project will include an implementation of a monitoring system to understand efficacy, targeting and verifying the assumptions that the program is making as well as implementing a learning plan so elements emerging from the monitoring systems can feed back into the project implementation and planning Outcomes

The Monitoring at this level will be coordinated by the Technical Committee (TE) and the Executive Committee (EC). Data will be stored in a database accessible to the GCF, the counterpart as well as to FAO. Georeferencing will enhance both TC, EC and FAO monitoring and evaluating as well as official counterpart to closely monitor outcomes, development and assess impacts and contribution to approved targets at midterm and completion. Additionally, it will allow to improve the capacity of the program to

<sup>5</sup> Covered by the AE fee.

<sup>6</sup> Covered by the AE fee.

provide technical assistance to beneficiaries and monitor advancements and impacts. Georeferenced activities and resulting intervention areas will be also analyzed via remote sensing and photointerpretation techniques so to ensure Result Based M&E and support Result Based Management of the project. Results of the different analysis will be presented annually via a dedicated "Project's Implementation Atlas". Data, supervision reports and conclusions obtained by the above-mentioned process will be presented annually to the Green Climate Fund as well as to the other stakeholders.

#### Supervision, Support level:

FAO will support the TC and EC in reviewing and analyzing progress reports and to assess performances against baseline and targets. FAO will also, secure according to its rules and regulations, financial control and midterm evaluation and final evaluation phases via an independent and external evaluation expert.

In accordance with the AMA between FAO and GCF, the FAO Office of Evaluation (OED) will be responsible for the independent interim and final evaluations. The evaluations will be conducted using a question-driven approach, and may include assessments against the criteria of relevance, effectiveness and sustainability, among others. The interim evaluation will be instrumental in contributing – through operational and strategic recommendations – to improve implementation, setting out any necessary corrective measures for the remaining period of the project. The final evaluation will assess the relevance of the intervention, its overall performance, as well as sustainability and scalability of results, differential impacts and lessons learned. The evaluation should also assess the extent to which the intervention has contributed to the Fund's higher-level goal of achieving a paradigm shift in adaptation to climate change in Bolivia. The evaluation will draw on mixed-methods, using qualitative methods (e.g. participatory rural appraisal) in combination with counterfactual analysis, depending on the existence of reliable control group data from the project's baseline and endline surveys. In addition to primary data collected by the evaluators and secondary national data, both interim and final evaluations will draw on the monitoring reports and activities prepared by project staff. Careful attention will be paid to the disaggregation of data, results and outcomes by gender and cultural groups, considering the high percentage of indigenous peoples in the project area and the different level of vulnerability of project beneficiaries.

#### Strategic level:

Annual results and related analysis, jointly prepared by FAO and TC will provide the base for each annual planning exercise. This will be presented to the EC in order to support its strategic role and to secure transparency and result based strategy development.

The project contemplates and midterm evaluation and a final evaluation. This will be conducted with the OED Unit in FAO in accordance with FAO and GCF rules.

The M&E activities will include an impact evaluation upon project completion that will be performed according to GCF requirements.

#### **Formal Evaluation by Accredited Entity (interim and final)**

To provide an external viewpoint on the progress of the Project and the achievement of its objectives, the FAO Office of Evaluation (OED) will conduct two project evaluations, an interim evaluation and a final evaluation. Cost related to the interim and final evaluation will be covered by the AE fee of the project.

In line with the AMA, the FAO Office of Evaluation (OED) will be in charge of the interim and final evaluation of the project. The evaluations will be conducted using a question driven and according to the GCF evaluation criteria. The interim evaluation will be instrumental in contributing – through operational and strategic recommendations – to improve implementation, setting out any necessary corrective measures for the remaining period of the project. The final evaluations will assess the relevance of the intervention, its overall performance, as well as the sustainability and scaling up of the results obtained, coherence in climate finance delivery with other multilateral agencies, gender equity, innovativeness in results areas and the lessons learned. The evaluation should also assess the extent to which the intervention has contributed

to the Fund's higher-level goal of achieving a paradigm shift in adaptation to climate change in the country. The evaluations will be based on a rigorous evaluation methodology drawing on the most suitable evaluation methods and tools. In addition to the primary data collected by evaluators and the secondary national data available, the interim and final evaluations will be based on monitoring activities and reports prepared by project staff, including surveys to be implemented at baseline, interim and project completion. Careful attention will be paid to the disaggregation of data, results and outcomes by gender.

## **Impact evaluation**

The household survey plays a key role in impact evaluation, in measuring socio-economic changes (outcomes) at the household level, assessing livelihood benefits, and assessing increases in resilience to climate variability and shocks. These capture a range of household parameters, from assets to coping behaviors, adoption of resilient practices, diversification in sources of income, management of productive activities, and even social interactions, and the resulting impacts in terms of food security, employment and overall incomes and their stability.

The design and implementation of impact evaluation of large scale project requires dedicated expertise and independent survey skills and capacity (for more details see under FAO Investment Learning Platform pages guidance on Impact Evaluation). Independent consultants will be hired under the guidance of the M&E expert of the project, who will design the detailed terms of reference and overall indicators and parameters of surveys (based on Logframe and other relevant project indicators), from baseline to end-line. The consultant will be responsible for the detailed design of surveys, sampling structure, and questionnaires, as well as the delivery of surveys and the cleaning processing and analysis of the basic findings in comprehensive reports. They will also share detailed methodology and all data gathered for future access. The consultant will be expected to have experience and expertise in all related survey aspects, and will be able to determine sampling sizes, data quality, statistical tools, and clear presentation of results. While ideally for consistency, the same consultant will deliver the baseline, midterm and in-line survey, this will be dependent on the quality of baseline survey delivery.

While the primary focus of impact evaluation is based on survey data, the independent consultants will also review all relevant reports, and draw on the monitoring system for overall project progress and numbers, such as for inclusion, and project intervention activities reaching farmers. As independent reviewers they will also verify overall project reporting, and monitoring system data, and get active feedback from local stakeholders through focus group discussions and key informant interviews, in terms of the local valid validation of their findings, prior to reporting. The overall Impact evaluation findings, will be thoroughly reviewed and validated with national, regional and local representative stakeholders in a participatory manner, at each relevant stage of the project.