

Inclusive Green Financing initiative Monitoring and Evaluation Plan

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Contents

1. Intro	duction	3
1.1	Background of the program	3
1.2	Purpose of Monitoring and Evaluation Plan.	4
1.3	Project Overview	4
1	3.1. Logical Framework	6
1	3.2. List of indicators	6
1	3.3. Monitoring and Evaluation Schedule	8
2. Mon	itoring and Evaluation Framework	8
3. Data	Flow and Management.	11
4. Mon	itoring, evaluation and reporting arrangements	12
4.1.	Program Monitoring	12
4.2 F	Project Evaluation	13
4.3 F	Program Reporting	14
5. Desc	ription of the Theory of Change	15
6. Long	g-term Vision of the project	18
7. Outc	comes of the project	18
8. Outp	outs of the project	18
9. Appe	endices	21
9.1.	Activities	22
9.	1.1 Innovative Financing facilities through IGREENFIN project	22
9.	1.2 Recommended solution to resolve the imperfect policy and regulation support	25
9.	1.3. Proposed solution for inadequate organizational capacity	26
9.2.	Budget	29
9.3.	Indicator Reference Sheets Template	31



1. Introduction

1.1 Background of the program

Ethiopia is endowed with abundant natural resources and has diverse agro-ecological zones for agricultural production, which is the mainstay of its economy. Ethiopian government has identified prior intervention areas to increase agricultural productivity of smallholder farmer's commercial farms. The GOE has renewed emphasis to develop the agriculture sector and ensure food security. The country's economy is dependent on agriculture, which accounts for 40 % of the GDP, 80 % of exports, and 75 % of the country's workforce (www.usaid.gov/eth, 2021).

Currently different factors decreased the natural resources of the county. Among the constraints, climate-induced problems are ranked in the front. To combat those challenges, Ethiopia is implementing different climate resilient (adoption) and low-carbon emission (mitigation) projects via the support of different global initiatives like the Great Green Wall, which aims to face one of the biggest challenges of Sahel region – desertification. To support GGW, The Inclusive Green Financing initiatives for climate resilient and low-carbon emission for smallholder farmers (an "IFAD-green finance brand" and the first Green Climate Fund (GCF) lending regional program to be implemented at GGW) is planned a five-year program to eleven countries. (https://www.greatgreenwall.org/about-great-green-wall).

Ethiopia is among the countries that are planned to be counted in by IFAD/GCF. Therefore, to set up a program in country, IFAD-Ethiopia planned to establish a team of consultancies that will develop the proposal for the initiative. Among the consultancies, social, monitoring and evaluation consultant will developed the monitoring and evaluation plan and schedule for the proposal.

This document is an M & E plan, which aims to design the monitoring and evaluation system and schedule for the new proposal planned by IFAD /the Inclusive Green Financing phase II/ program proposal that will be submitted to GCF/co-founders. The social, monitoring and evaluation consultant will developed the M &E plan and submitted to the IGREENFIN proposal coordinator, as part of the proposal. Furthermore, the document comprises Theory of change, logical framework analysis, result framework measurement and allocated budget to the monitoring and evaluation plan.

3



1.2 Purpose of Monitoring and Evaluation Plan

The purpose of the M&E plan is to ensure the effective progress of the IGREENFIN program in accordance with the identified objectives, outputs, outcomes (impacts) and within an agreed timescale. As a result, the following arrangements are made by the plan:

- Define indicators of success to obtaining project objectives.
- Plans the collection, analysis, usage, and quality of data and outlines various roles and duties for the IGREENFIN program's monitoring and evaluation.
- Establish a framework so that stakeholders and partners may provide feedback on the program's performance as well as improvement ideas.
- Involves all partners and stakeholders in M&E so that it becomes an essential component of stakeholder's responsibilities.

1.3 Project Overview

The **IGREENFIN** Program for climate resilient and low emission smallholder agriculture is an "IFAD-green finance brand" and the first green climate fund(GCF) lending regional program to be implemented at scale up across Green Great Wall(GGW), including a needs assessment and project design were completed based on IGREENFIN I.

General Objective:

To strengthened vulnerable smallholder farmers' climate resilience in terms of agriculture production systems, natural resources and the well-being of FOs, MSMEs, and cooperatives.

Specific Objectives:

- To design an innovative and/or adoption technologies, integrated model to a fundamental shift towards low-carbon and climate-resilient sustainable development through the main criteria of efficiency, effectiveness and sustainability and by building on the outcomes of the initiatives.
- To validate the model based on existing systems and services targeting climate vulnerable smallholder farmers and different organizations.
- To assess the potential for the adoption/replication of the model in different region organizational contexts, and to identify the conditions for its sustainability and replicability.
- To promote the dissemination of the results with a focus on the strategic decisionmakers at regional and national level, to support the adoption of effective policies for the climate technology practices.



IFAD-Ethiopia and different regional and federal authorities will execute this initiative. The main outcomes of the project will be a shared model of references on climate technology practices, and a toolkit for the prediction of climate technology practices by level of executing. In addition to project coordination, monitoring and evaluation, and the dissemination of project results, the main components of the project are:

Component 1A: establishing fund window for climate resilient agriculture(adaptation) as input for climate technology practices in the targeting area

Activity 1: Funding for climate smart agronomic technologies and practices

Activity 2. Funding for Climate smart livestock production and management technologies

Activity 3: Funding for hillside irrigation development in the highland and midland

Component 1B: establishing fund window for low-carbon emission (mitigation) and natural resources rehabilitation as an input for climate technology practices, RETs and innovative extension system in the targeting area

Activity 4. Funding Farmers' Managed Natural Regeneration (FMNR) technologies

Activity 5: Fund for solar water pump irrigation

Component 2: conducting capacity building and technical assistance for credit providers and credit beneficiaries

Activity 1. Funding towards awareness raising and strengthen capacity of credit providers (DBE, MFIs and RuSACCOs) on how to design and implement business plan and marketing of loan finance to promote climate technology practices

Activity 2. Funding towards increasing readiness and capacities of FOs, Coop &MSMEs to seize market opportunities of credit providers creating awareness to smallholder farmers how to obtain loan by investing in climate technology practices

Activity 3. Funding towards improved challenging policy via dialog, advocacy and learning, knowledge management, information dissemination and stakeholder engagement

Activity 4. Cross-Cutting Activities regarding Capacity Building and Knowledge Exchange (managed by TA): Monitoring and evaluation of the Programme, Funding of gender strengthening measures at subproject level More women and youth entrepreneurs engaged in EbA,

Component 3: forming incentive scheme to encourage FOs, Cooperatives, MSMEs and exemplary smallholder farmer household

Activity 1. Fund to incentivized and promote woman or youth led FO, MSMEs and cooperatives

Activity 2. Fund to incentivize and promote smallholder household who agreed to adopt the climate technology practices as exemplary for others.

Component 4: fund for GCF-GGW support unit



1.3.1. Logical Framework

Monitoring of IGREENFIN program will be oriented towards following the activities foreseen in the Grant/Loan agreement with funders, to verify whether its deliverables and milestones are appropriately achieved. Additionally, Evaluating IGREENFIN program will be focused on assessing to what extent the objectives are achieved. The results of the evaluation should then be interpreted in the light of the results of the monitoring, to help analyze if and how are the outcomes associated to the implementation of planned activities.

Therefore, IGREENFIN M&E plan aims mainly to enable the assessment of program implementation and performance of activities, constituting a continuous process of revision and improvement, to help partners to achieve expected results by identifying and solving emerging constraints.

To do so, the M&E plan of the IGREENFIN project puts in place a framework for measuring the accomplishment of planned inputs, processes, and to what extent the resulting outputs have contributed to appropriate outcomes (impacts), and thereby objectives. It will be measured through qualitative and quantitative indicators and related data collection instruments and procedures.

1.3.2. List of indicators

Indicators will be measurable, achievable, useful and will take the values or purpose of outputs and outcomes with regards to the project. This framework is set out below in the M&E matrix, including frequency of data collection and responsibilities. For the purpose of this document, **Outputs** refer to concrete project deliverables of Work Packages (e.g. climate technology practices), while **Outcomes** refer to the quality of the outputs produced. Outcomes will be measured against specific criteria identified. The core indicators under adaptation and/or mitigation will be.

- Fund-level impacts: the aggregate changes the project will achieve in one or more of the GCF's eight strategic impact areas;
- Fund-level outcomes: the appropriate outcomes to be reported for the project, as well as the changes that need to be in place for the Fund-level impacts to be achieved;
- Project performance indicators: performance indicators that should be reported on during implementation; and
- Activities: the significant deliverables that will be implemented under the project.



Table 1: Indicators under fund-level Impact, outcome and outputs

Description	Expected result	Indicator		
Impact/ Goal	Adaptation – improved resilience of: The most vulnerable people, communities and regions and their enhanced livelihoods	Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options (including fisheries, agriculture, tourism, etc.) Number of Fund funded projects/programmes that supports effective adaptation to fish stock migration and depletion to climate change		
	Adaptation – improved resilience of: Ecosystems and ecosystem services	Coverage/scale of ecosystems protected and strengthened in response to climate variability and change		
	Mitigation – tCO2e reduced or avoided: Strengthened institutional regulatory systems Mitigation – tCO2e reduced or avoided Improved management of land or forest areas contributing	Institutional and regulatory systems that improve incentives for low- emission planning and development and their effective Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions		
outcome	to emissions reductions Adaptation – improved resilience of: Strengthened institutional and regulatory systems for climate-responsive planning and development	Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation		
	Increase productivity, enhanced soil fertility and resilient selected crops through climate smart agronomic technologies	Number of households that adapted climate smart agronomic technologies		
	Developed the production of selected livestock via climate smart livestock production technology	Total number of households that adapted climate smart livestock production		
	Increase production and sustainability of selected crop production through hillside irrigation development in the highland and midland	Number of households that adapted climate smart agronomic technologies		
	increase the implementation of Farmers' Managed Natural Regeneration (FMNR) technologies as mitigation for carbon emission	Total sum and size of agro-forestry area and farmers' managed natural resources constructed and protected		
	increase the use of solar water pump for irrigation and potable water as mitigation for carbon emission	Number of solar water pumps distributed to FO, MSMEs and Cooperatives		
	Developed innovative agricultural financing at DBE, MFI and RuSACCOs	Number of MFI, RuSACCOS, FOs, MSMEs and cooperatives that use innovative agricultural financing		
Output	strengthened capacity of credit providers (DBE, MFIs and RuSACCOs) to designing and implementing business plan and marketing of loan finance for CTP	Number of experts participated in the capacity building from MFI and RuSACCOs		
	strengthened the capacity of readiness & capacities of FOs, Coop &MSMEs to seize market opportunities in order to obtain loan to invest in CTP	Experts participated in the capacity building from FO, MSMEs and cooperatives		
	improved challenging policies via dialog, advocacy and learning, knowledge management, information dissemination and stakeholder engagement	Number of dialogs conducted with policy advisors, lessons learned / best practices are documented and published in renowned regional and international media		
	incentivized and promoted woman or youth led FO, MSMEs and cooperatives	Total number of incentivized and promoted woman or youth led FO, MSMEs and cooperatives		
	Incentivized and promoted smallholder household who agreed to adopt the climate technology practices as exemplary for others.	Number of Incentivized and promoted smallholder household who agreed to adopt the climate technology practices as exemplary for others.		

The M&E matrix and the data flow plan below respectively establish how data will be collected and transferred so that the project management and stakeholders are able:

- i. To track at regular time intervals of the activities achieved (compare planned versus achieved) and assess effects of both external factors and internal project operations;
- ii. To assess results (outputs), lessons learnt, and solutions to keep project on track.



1.3.3. Monitoring and Evaluation Schedule

The monitoring activities of the initiative will take place periodically during the project implementation (Monthly), culminating with a mid-term, and a final evaluation at the end of the project. The periodic assessment of program results will determine the extent to which outputs are being realized across the project (monitoring) and whether and how the outputs contributed to appropriate outcomes (impacts), and therefore towards achievement of the objectives (mid-term, final evaluation), providing constructive recommendations to address key problems identified. Therefore, the monitoring and evaluation plan will:

- review the effectiveness and timeliness of program implementation;
- > analyze effectiveness of implementation and partnership arrangements;
- identify issues requiring decisions and remedial actions;
- identify lessons learned about project design, implementation and management;
- ➤ analyze whether the program is on track with respect to achieving the expected;
- ➤ Propose any mid-course corrections and/or adjustments to the Work Plan as necessary.

At the same time, in order to strengthen the initiative's capacity, through information sharing and periodic assessment of the activities performed, results of monitoring activities will be shared in concurrence with periodic local dissemination events.

The **final evaluation** will take place prior to completion of the program and will focus on the same issues as the Mid-Project Evaluation. In addition, the final evaluation will assess the program impact, intended especially as the identification of the conditions determining the applicability, transferability and sustainability of the model, related good practices and tools on climate technology practices within different organizational context.

2. Monitoring and Evaluation Framework

Following a logical framework approach, the M&E matrix below summarize the program's monitoring and evaluation procedures and criteria, through a selected set of indicators for each program objective (work package), and expected results.

The indicators identified for the IGREENFIN program are classified into three categories: Goals/Impact indicators (related to paradigm shift or transformation change), output indicators (related to Climate technology practices activities, and expected results) and outcome indicators (related to objectives of the initiative). Indicators are partially quantitative (number, %), and in some cases qualitative (opinions, meetings, minutes, consensus, etc.), the latter mainly corresponding to the outcomes.



Table 2: IGREENFIN M&E FRAMEWORK

Desc.	INDICATOR	DEFINITION (How is it calculated?)	BASELINE (What is the current value?)	TARGET (What is the target value?	DATA SOURCE (How will it be measured?)	COLLECTION TOOLS	FREQUENCY (how often will it be measured?)	RESPONSIBLE (Who will measure it?)	REPORTING (where will it be reported?)
	Number of households benefiting from the adoption of diversified, climate-resilient (climate technology practices)	Total number of households (from all regions) that are benefited from the program	Zero HH	230,700 HH 1,153,500 HH	Program completion report, stakeholder survey, project report	Public expenditure reporting	Once at the projects expost evaluation	Independent Evaluation consultant	Ex-post Program Completion report to IFAD/Funders
GOAL/Impact	Tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided as a result of IGREENFIN-funded program	Sum of tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided as a result of the intervention's (IGREENFIN) CTP	Zero t CO2eq	2 Mill. t CO2eq	Project reports, annual mitigation outcomes verification	Public expenditure reporting	Once at the projects expost evaluation	Independent Evaluation consultant	Ex-post Program Completion report to IFAD/Funders
	Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions	Coverage/scale of ecosystems protected and strengthened in response to climate variability and change	Zero hector	100,000 hector of forestry	Mapping of areas, legal demarcation of new areas, surveys, photographs, GPS	Public expenditure reporting	Twice at mid-term & completion of the project	Self- Assessment & Independent Evaluation consultant	Mid-term & Program completion Reports
OUTCOMES	Number of Institutional and regulatory systems that improve incentives for low-emission planning and development	Total number of Institutional and regulatory systems that improve incentives for low- emission planning and development	Zero document	Four Documents	Revised planning documents, new legislation/regulati on.	Public expenditure reporting	Twice at mid-term & completion of the project	Self- Assessment & Independent Evaluation consultant	Mid-term & Program completion Reports
	Number of households that adapted climate smart agronomic technologies	Total number of households that are willing to practices to CSAT	Zero HH	230,700 HH (Five districts)	Different reports from targeting area agriculture office	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of households that adapted livestock production and management technologies	Sum of households that are willing to practices to LPMT	Zero HH	230,700 HH (Five districts)	Filed visit reports and focus group discussion	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
OUTPUTS	Number of households that adapted Hillside irrigation development in the highland and mid highland	Total Number of households that are willing to practices to HID	Zero HH	230,700 HH (Five districts)	Different reports from targeting area agriculture office	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports



Desc.	INDICATOR	DEFINITION (How is it calculated?)	BASELINE (What is the current value?)	TARGET (What is the target value?	DATA SOURCE (How will it be measured?)	COLLECTION TOOLS	FREQUENCY (how often will it be measured?)	RESPONSIBLE (Who will measure it?)	REPORTING (where will it be reported?)
	Number and size of agro- forestry area and farmers' managed natural resources constructed and protected	Sum of households that are willing to practices to FMNR	Zero Community	230,700 Community (Five districts)	Documentation and mapping area of constructed agro-forestry	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of solar water pumps distributed to FO, MSMEs and Cooperatives	Total Number of households that are willing to practices to SWP	Zero HH	230,700 HH (Five districts)	Annual report from targeting area administration	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of MFI, RuSACCOS, FOs, MSMEs and cooperatives that use innovative agricultural financing	Sum of MFI, RuSACCOS, FOs, MSMEs & cooperatives that use innovative agricultural financing	Zero MFI,FOs MSMEs& RuSACCO	20 MFIs, 50 MSMEs 100 RuSACC	monitoring and evaluation report from implanting agencies	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of experts participated in the capacity building from MFI and RuSACCOs	Total Number of households that are willing to practices to CSLP	Zero experts trainee	50 experts trainee	monitoring and evaluation report from implanting agencies	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
OUTPUTS	Number of members participated in the capacity building from FO, MSMEs and cooperatives	Sum of all experts participated in the capacity building	Zero members trainee	500 members trainee	monitoring and evaluation report from implanting agencies	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of dialogs conducted with policy advisors, lessons learned / best practices are documented and published in renowned regional and international media	Total number of dialogs conducted with policy advisors, lessons learned / best practices are documented and published in renowned regional and international media	Zero/No Dialogues	Four Dialogue with MOF Four Dialogue with MOA	National and Project report	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of incentivized and promoted woman or youth led FO, MSMEs and cooperatives	Sum of all incentivized and promoted woman or youth led FO, MSMEs and cooperatives	Zero/No incentivi zed organizat ion	10 incentiv ized organiz ation	monitoring and evaluation report from implanting agencies	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports
	Number of Incentivized and promoted smallholder household who are willing to adopt the climate technology practices as exemplary for others.	Total number of Incentivized and promoted smallholder household who are willing to adopt the climate technology practices as exemplary for others.	Zero/No incentivi zed HH	1,000 incentiv ized HH	monitoring and evaluation report from implanting agencies	Public expenditure reporting	Quarterly, biannual and Annually	Program M&E Specialist and other staffs	Quarter, annual and survey reports



3. Data Flow and Management

Table 3: The table below illustrates the M&E data-flow from source to use.

SOURCE	COLLECTION	COLLATION AND STORAGE	ANALYSIS	REPORTING	USE
(What are we collecting) Identifying the data that will be collected from different sources. This data will vary depending on the indicator being measured. Ex: Data that will be collected from households that are willing to practice CTPCooperatives that took capacity building/trainings by IGREENFIN.	(Who collects this data, from where, and how often?) The Personnel and data gathering tools will also vary according to the data required. Ex: In this program, Data willbe collected and sent regularly from FOs, MSMEs, MFI & RuSACCOs to Woreda Agriculture office focal person. Then, the woreda agriculture office delivered to Regional IGREENFIN focal person then the focal person sent to M&E Leader at IGREENFIN/IFAD. Data will be collected, aggregated and sent according to the IFAD, MoA, MoF and DBE.	(How are data aggregated?) (Where are the data stored?) Data will be stored in a data storage system that allows online input, managed by the M&E leader in IFAD. The storage system will consist of different modules capable of storing different data sources. The storage system will be backed-up regularly. Data will be stored according to the IFAD, CSA and MoA privacy laws.	List any possible opportunities to transform the data into Data will be analysed according to specific quantitative and qualitative techniques. Ex: Data will be analyzed by utilizing database network systems like -Microsoft power BI/ Dashboards -structured queries language (SQL) -and other software that are planned to be developed by the initiative.	To whom will this information be reported? M&E specialist in collaboration with IGRENFIN Coordinator will developed/ send reports to IFAD/funders. The reports will be formed the basis of discussion of annual meetings and submitted as reports to co-financers.	How can this information be used to make informed decision? Data will be used to provide information on the success of inputs in producing outputs, and the success of outputs in achieving outcomes, impact and sustainability. This will enable decisions to improve future program /projects actions.

For both monitoring and evaluation activities, it is the responsibility of all partners to gather necessary information (including that which is provided by stakeholders with whom they have contact) and feed it into the monitoring and evaluation process. A comprehensive table available for all program partners will enable partners to follow a monitoring and evaluation task checklist. Information gathered will be the basis of interim monitoring and evaluation reports/ by focal persons in regions/ regarding issues encountered and lessons learnt. The interim reports will support the M&E specialist in IGREENFIN and to experts in Ministry of agriculture to give feedback to IFAD/GCF and other co-financers.



4. Monitoring, evaluation and reporting arrangements

Following the signing of program agreement with the government of Ethiopia, a program kick off workshop will be organized. The goal of the workshop will be to increase the program stakeholder's awareness on the program's strategy and implementation arrangements, developing baselines, deciding roles and responsibilities and the M and E plan. The Project Manager will complete the kickoff/ inception Report in one month after the inception session. The CPM and RCES will review and clear the report and submit it to the IFAD/CPM/, which aims to be submitted to the co-financers.

Program-level monitoring, evaluation, and reporting will be undertaken in compliance with IFAD/IGREENFIN, MoA and DBE's internal monitoring and evaluation policies and in accordance with the arrangements agreed upon in the M&E Plan. Under the close supervision of IFAD/IGREENFIN Program/, the Program Management Unit (support unit) will set up a M&E system to ensure smooth program implementation and identify constraints. Therefore, timely corrective action will be taken to monitor results against indicators and ensure timely reporting.

4.1. Program Monitoring

The IGREENFIN Program Manager is primarily responsible for the day-to-day monitoring of program implementation in close collaboration with the IFAD Country Program Manager (CPM) and Regional Climate and Environment Specialist (RCES) for approval by the Program Steering Committee. The program Manager will develop annual and quarter work plans with allocated budget to ensure the efficient and optimal implementation of the Program, working in coordination with MoA focal person and DBE Bank's appropriate Managers. Furthermore, Any delays or difficulties in project implementation will be reported to the Ministry of Agriculture, Development Bank of Ethiopia, the IFAD CPM, the Country Director, and the RCES so that technical assistance may be provided and corrective steps can be given.

Under the technical supervision of the Ministry of Agriculture, the program will be implemented according to the IFAD Country Program approach. The program will be integrated into the country's IFAD infrastructure program (Participatory Agriculture and Climate Transformation), which includes coordination units in the target regions and woredas that will provide technical, and



financial support for the planned activities by the program. Additionally, the experts that are assigned by the regional and district agriculture offices to support this program will assist and create awareness to district that are not included in the IFAD country program approach or PACT.

Every month, the focal person that are assigned by different offices will conduct Monitoring at project level. Additionally, IFAD (the CPM and RCES) will offer implementation and technical assistance as needed, as well as assess program progress throughout its term. The CPM and RCES will use IFAD supervision missions organized on a six-month basis to supervise the project. By using interviews and focus groups, the mission will conduct different meetings with all stakeholders and potential beneficiaries (FOs, MSMEs, cooperatives, RET, private operators, and MFIs). The M&E reports that are developed by the focal experts monthly and by adding the information gathered by the missions monitoring will be used to develop quarter and biannual reports that will be submitted to IFAD.

4.2 Project Evaluation

Around half of the program's life span, an impartial mid-term review will be conducted. Summative evaluations will be undertaken halfway through and at the end of the project to determine whether the project's outcomes meet the stated objectives. To conduct this independent consultant(s) will be chosen and deployed by IFAD/IGREENFIN and approve the TOR and review procedure, and reimburse expenditures through the AE fee. The PMU will hire the independent consultant. The Steering Committee will offer strategic direction on program progress and findings will be used to improve program implementation.

In compliance with the IFAD Evaluation Manual and procedures, an independent terminal evaluation will be conducted. The IFAD CPM and RCES will review the Terminal Evaluation Report. The IFAD Office of Independent Evaluation will review the report's quality and validate the results and ratings. DBE, the Ministry of Finance/Agriculture, NDA, and other members of the National Steering Committee will get the terminal evaluation report published in English. The supervision mission will be funded by the IFAD, while the MTRs (midterm reviews) and final evaluation will be funded by the IFAD/GCF.



4.3 Program Reporting

Monitoring of implementation progress will be the responsibility of the M&E Leader in collaboration with task participants, IGREENFIN program coordinator, as set out in the M&E Plan. Monitoring of the activities will be performed every month, in the way to match the results with deliverables and milestones foreseen by the program operational plan. Evaluation will be done every year, to provide the necessary elements for the interim and final evaluation report.

The Program Manager will provide quarterly program progress and financial reports to the CPM, who will distribute them to the appropriate IFAD divisions. The IFAD Finance Officer in charge of Ethiopia will review the financial reports. The Annual Performance Report (APR) and six-monthly financial reports that IFAD will submit to the co-financers will be based on these quarterly reports.

The Program manager will keep an eye on the indicators in the outcomes framework and ensure that program progress is accurately reported in the APR. The IFAD CPM and/or RCES will coordinate the NDA's input to the APR. The National Steering Committee, the NDA, and other key stakeholders will receive the APR. ECG will examine and submit the APRs to the co-financers/GCF within 60 days of the end of the calendar year. IFAD will provide to co-financers with 6-month financial reports using the template given by the financers/GCF.

Results of monitoring and evaluation will be reported jointly with the periodic reporting of the activities, according to the schedule indicated above. Partner (in every position) will be responsible to collect data on the activities performed through a monitoring and evaluation checklist provided by the M&E Leader/program/. Data will be provided periodically from first task participants to district and regional focal experts then to M&E Leader, which is responsible for data analysis and reporting.

The information collected with the monitoring and evaluation checklist will be integrated into the "Internal Activity Report" template, detailing the following information:

- a. the achievement of outputs and progress towards program/project outcomes, based on the indicators indicated in the M&E matrix;
- b. an identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation;
- c. Clear recommendations for corrective actions in addressing key problems.



5. Description of the Theory of Change

The proposed program (IGREENFIN) will seek to transform the country's green agricultural financing and building smallholder farmers resilience to climatic variabilities and the adverse effects of climate change. Consequently, it will strengthen the financial and technical capacity of both the financial sector (including DBE Bank, MFI and RuSACCOs) and the green credit beneficiaries (farmers' organizations, smallholder farmers and agricultural value chain actors), a situation that will in turn support livelihoods, health and the sustainability of the environment. Furthermore, the program will foster the adaptation of various climate technological practices to increase resilience to vulnerable smallholder farmers by climate change in Ethiopia. In addition, adoption of renewable energy technologies (solar water pumps) for mitigation of low-carbon emission along agricultural value chains will be conducted by removing financial and technical barriers.

In Ethiopia, the initiative will utilize the development bank will use to set up a concessional loan to green credit line. The bank will provide attractive conditions, in particular terms of interest rates and longer tenures, will serve to incentivize green agricultural investments. The initiative for the country seeks a total of EUR 8.5 million from GCF and/or co-financers resources in the form of loans with zero interest rate (0.00%) and grants. From the secured budget, EUR 5.95 million will be set aside for a financing facility and the remaining EUR 2.55 million will be utilized to finance technical assistance, capacity-building, incentive and project management costs.

Geographically, this funding proposal will be intervene in different regions of the country. Primarily, Regions that are in the ecological zone of sahle (under the GGW) are selected. Then, the initiative provide the chance to regions that are currently supported by different IFAD's programs (PASIDP II, PCDP and RUFIP) to implement the new program with the existing IFAD's programs. Thirdly, Somali region will be included in the program up on the demand of the government of Ethiopia. However, the regional government will conduct the selecting criteria for districts in regions by setting priority criteria to most vulnerable areas to climate change, poverty, gender inclusion, youth employment, and opportunity for global environmental benefits.

The Program concept is tailored by the greening agricultural financing to address the identified local barriers for a higher resilience of vulnerable populations with respect to climate change. The



program will assist in reducing the current prevalence of high financing costs and short-term loan periods by incentivizing MSMEs, cooperatives, and farmers organizations to adopt long-term low-emission business models for adaptation and mitigation. Therefore, the initiative will build a resilient agricultural and water resource management to present and future climate risks in the targeted areas.

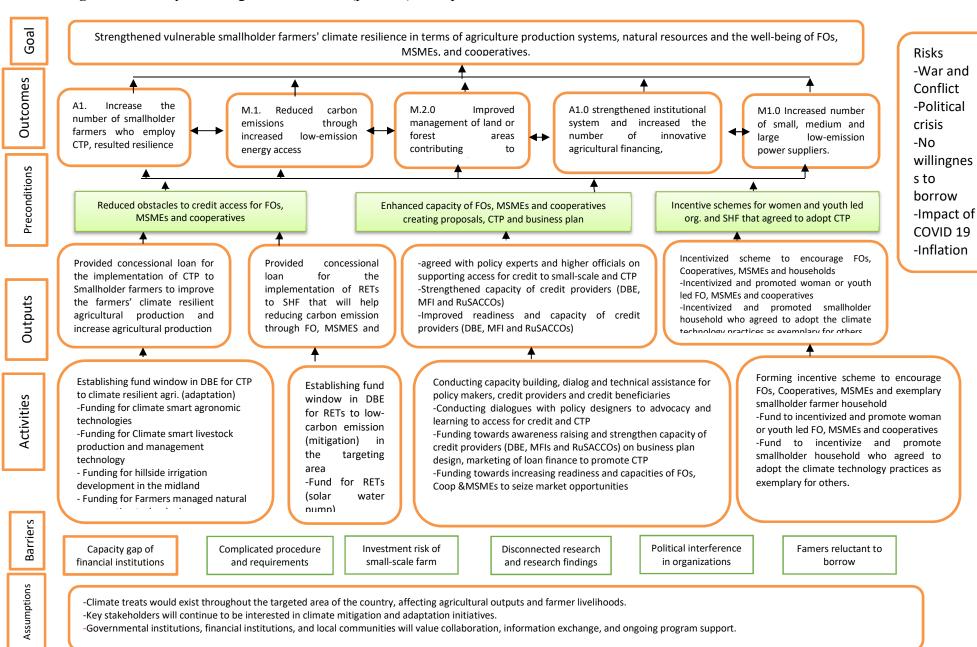
The IGREENFIN program will be the first in the country to offer 0% interest loans with a 40-year maturity, via providing improved access to a very concessional market while also contributing to NDCs, the Paris Climate Agreement, the SDGs, and the finance inclusion for Sustainable Development. The running costs will be partially financed by the GCF/co-financers grant proceeds and recipient DBE and others contributions in order to preserve the 0% interest rate to pass on to end users. The program will work with DBE (a credit provider to MFIs and RuSACCOs) to improve their governance and lending products, and breaking down barriers to innovative climate finance.

Sub-loan terms will be set to encourage smallholder farmers who are willing to adopt CTPs in the implementation. This will be defined as part of the incentives in the protocols during the first year of the program. Additionally, the financing facility will dedicate part of the funds to women or youth-led SMEs and FOs as per the program criteria. To strength, MSME's capacity, different trainings that aims to improve the capacity gap will be given through the grants. Successful CTPs will be propagated all over the country as part of the initiative, bringing them to scale. The program's innovative project concepts and best practices will be spread to other regions with similar adaptation needs. These concrete local practical experiences will be the entry point for raising awareness and developing capacities among key stakeholders to integrate CTP methods. The initiative will provide important tools and methodologies needed for this mainstreaming process. Finally, a national exchange of experiences and best practices will enhance mutual learning on how to use best CTP approaches in the country. The well-established grant funding mechanism of the climate resilient will provide opportunities for future implementation of CTP projects and to scaling-up the outcomes.

At the program level, an operational manual (POM) will be developed with a program's context, role of the main stakeholders, investment eligibility, and operational monitoring schemes. Additionally, a grant/loan operational manual will be prepared in particular considering of the GCF (IGREENFIN phase II) with specific objectives, the logical framework, impact indicators, and the indicative list of climate technologies practices eligible for investment and in line with COVID-19.



Diagram 1: Theory of Change: IGREENFIN (phase II) Ethiopia





6. Long-term Vision of the project

Strengthened vulnerable smallholder farmers' climate resilience in terms of agriculture production systems, natural resources and the well-being of FOs, MSMEs, and cooperatives.

Paradigm shift: Green finance will be developed and transformed the country's agricultural financial systems; additionally, the program will promote the adoption of innovative climate technologies practices and related business models.

Impact potential: The program will help 280,400 smallholder farmer households (with 1,356,600 indirect beneficiaries) to strengthen their adaptive capacities and climate resilience to agricultural production by encouraging them to adopt climate technology practices. Furthermore, these technology practices are expected to reduce or avoid the emission of approximately 2.0 million tCO2e (to be confirmed at the designed stage) over the course of the program's lifetime.

7. Outcomes of the project

Outcome 1: Increased the number of smallholder farmers who employ climate technology practices that resulted climate resilient agricultural production.

Outcome 2: Reduced carbon emissions through increased energy access /solar water pump

Outcome 3: Improved management of land/forest areas contributing to carbon emission.

Outcome 4: strengthened institutional system and increased the number of innovative agricultural financing.

Outcome 5: Increased number of small, medium and large low-emission power suppliers.

8. Outputs of the project

The implementation of the IGREENFIN phase II program will directly contribute to the GCF GGW UP's stated five pillars. In the following section, the precise contributions of each component are harmonized and linked with the pillars.

Component 1: Innovative Financing Facility (\$\sum \text{million} concessional GCF/co-financers loan) to promote selected climate technology practices and renewable energy technologies along agricultural value chains.

Implementing this component will contribute to the GCF-GGW UP's pillars 1 (agricultural), 2 (natural resources), 3 (RETs), and 4 (crosscutting) at once. The Development Bank of Ethiopia



(credit provider) will run this facility by providing loan finance to MFs and RuSACCOs (credit provider to FO, MSMEs and Cooperatives). Smallholder farmers (including agribusiness dealers) will be able to access affordable (e.g. zero interest rate) and adequate (longer tenure, grace periods, etc.) loans across agricultural value chains based on the eligible criteria of each FOs, women and youth organizations, cooperatives and MSMEs (beneficiaries from MFIs and RuSACCOS).

Output 1.1: Climate technology practices, which are particularly relevant for climate resilient agriculture (adaptation) are funded via revolving fund window 1 (\$--- million highly concessional GCF loans) and resulted an increased climate resilience and sustainable agricultural productivity

Different activities/CTPs/ will be carried out to accomplish this output by providing financial inputs. Climate smart agriculture such as Climate smart agronomic practices, livestock production and hillside irrigation development in high and mid land technologies will be practiced and funded to increase agricultural production of smallholder farmers. As a result, farmers who are agreed to use the CTPs will be trained to these innovative extension method.

Output 1.2: Climate technology practices, which are particularly relevant for low-carbon emission and to rehabilitate natural resource, are financed through revolving fund window 2 (\$---million highly concessional GCF loans) and decreased carbon emissions.

The use of RETs, in particular solar energy solutions for agricultural production (solar water pump) will be included as an activity to achieve the above output. Furthermore, activities like funding for Farmers' Managed Natural Regeneration (FMNR) technologies will help in rehabilitating natural resources of the targeted area. To support the practices, smallholder farmers who agree to use the technologies will be capacitated to use the solar energy.

Component 2: Enhancing knowledge, expertise and capacity of credit providers, credit beneficiaries and different governmental institutions on how to support and provide green loan finance to climate technology practices (\$-- million GCF Grant).

This component will contribute directly to the pillar 5 (capacity building) of the GCF GGW UP, and indirectly to the pillars 1 (agriculture and RETs). This component aims to increase the capacity and technical capabilities of credit providers (DBE, MFIs and RuSACCOs), in order to expand green financing in the agricultural sector by introducing climate technologies, with a



focus on women and youth led FOs, MSMES and cooperatives.

Output 2.1: Improve capacities of FOs, cooperatives and MSMEs' to understand climate change threats and climate technology practices (implement adaptation and mitigation solutions), design business plans, improve finance utilization, business management and access to green loans from banks and other MFIs.

Through these capacities building, the outcome will improve the implementation of diversified, climate technologies practices (climate resilient livelihood options). Furthermore, increased output aims to restore 13.2 million ha (country level) of degraded land and increase production yields of the following crops: Teff, Wheat, Barely, Maize, Faba-bean, Chickpea, Haricot bean, soybean, Mung bean, Sesame and fruit and vegetable (Potato, Avocado, banana, Onion and Tomato).

Output 2.2: Increased preparedness and capacity of DBE, MFIs and RuSACCOs (Credit providers), to capture market possibilities for lending to FOs, women and youth groups, cooperatives, and MSMEs investing in climate technology practices.

Technical assistance will be provided to DBEs, MFIs, and RuSACCOs loan providers on green agricultural lending approaches (especially for the Climate Technologies Practices Fund) as well as the development of appropriate tools, instruments, procedures, and governance systems. Green loan design and structure, climate risk management and climate-smart lending instruments, environmental and social risk management systems, and gender policies are among the training that will be given to financial institution.

The program will also assist FOs, cooperatives and MSMEs in designing and upgrading environmental, climate change, and associated strategies and plans in order to promote portfolio alignment with NDCs. In addition, the initiative will assist DBE, MFIs, RuSACCOs FOs, cooperatives and MSMEs' in implementing GCF-standard ESS and Gender protections, based on its specific needs. IGREENFIN will assist them based on their individual requirements. The commitment of top management of such participating banks will be required in order for financial institutions to qualify for support in developing greener policies and investment plans.

Output 2.3: Improved policy related to climate resilient agricultural production via dialogue, advocacy, training, information dissemination and stakeholder management.

The initiative will build government officials' capacity to promote climate-smart agriculture,



green lending and renewable energy, with a focus on the benefits to women and youth, allowing the program's investments to be scaled up. A stakeholder engagement plan will be designed and implemented to assist stakeholder engagement. A regulatory framework will be developed to ensure that the system is promoted, regulated, and supported beyond the project's life cycle.

Component 3: Incentives scheme to encourage credit recipients depending on the initiatives to adopt climate technology practices (\$--- million GCF grant). This component will contribute to the pillars 1 (agriculture), three (RETs), and five (capacity building).

Output 3.1: The women and/or youth-led MSMEs, FOs, and cooperatives will be incentivized according to the MoA's technology incentive criteria. Women and youth in agricultural value chains are rewarded for using climate technologies and RET. The program's key beneficiaries will be women and youth, as they are the most vulnerable social groups to climate change.

Output 3.2: Employing climate technology on agricultural production will take 2-4 years to harvest its outputs. As a result, smallholder farmers who agree to employ the climate technology practice will be rewarded incentives for implementing new technologies.

Component 4: Establishing GCF GGW Support Unit (us\$----millions GCF grant, to be validated during PPF implementation) at national, regional and district level. This component will directly contribute to the pillar # 5 of the GCF GGW UP, focused on capacity building.

At national level, the Support Unit will assist DBE, Ministries of Agriculture, Environment protection authority to foster cross sectorial policy dialogue to support the elaboration of national investment frameworks aligned with the country overall development vision, NDC and GGW objectives. Additionally, it will also support NDAs in organizing national forum to share information for agencies. The "GCF GGW support unit" will provide guidance to AEs on the causal pathways to demonstrate activities that lead to climate change impact, on harmonization of indicators to promote consistency. Furthermore, reporting of results at project/programme level, on indicating clear timeframes for achievement of reporting on expected results, and on ensuring sufficient budgetary provisions to ensure credible monitoring, evaluation and reporting of results.

9. Appendices



9.1. Activities

The country's financial institutions do not have adequate funds to give credit. This could be tied to the country's economic situation. However, certain development partners are interested in assisting in the provision of small-scale farm access, which benefits the country's economy. As a result, the Ethiopia's government, IFAD and co-financers must design programs that can benefit to smallholder farmers. Therefore, this program proposal proposed different solutions that will solve to limited financial resources and promote climate technology practices.

9.1.1 Innovative Financing facilities through IGREENFIN project

One of the initiatives goals is to introduce new agricultural financing system to green agriculture. This project proposal designed, to delegate the proposed designed finance system to the Ethiopian Development Bank as the main credit provider. The bank will provide the concessional loan as a repayable loan to MFI and RuSACCOs, which will be distributed to farmer organizations, cooperatives, women or youth associations, MSMEs in the targeted areas to support in solving problems related to access to credit for Smallholder farmers. Based on the agreement, the interest rate on the concessional loan will be nil.

A. Promoting selected climate technology practices (for climate resilient)

Climate technology practices, which are particularly relevant for climate resilient agriculture (adaptation) will be funded via revolving fund window 1 with highly concessional GCF loans and this will result sustainable increase agricultural productivity. Different activities will be carried out to accomplish this CTP output by supplying financial inputs via IGREENFIN. Climate smart agriculture such as Climate smart agronomic practices, livestock production and management technologies, hillside irrigation development in the high and mid land, and Farmers' Managed Natural Regeneration (FMNR) technologies will be practiced and funded for different agro-ecologies.

Climate smart agronomic technologies: Climate smart agricultural technologies is defined as agricultural practices that reliably and sustainably increase productivity and system resilience while reducing greenhouse gas emissions. CSA helps ensure that climate change adaptation and mitigation are directly incorporated into agricultural development plan and investment strategies. CSA is sustainable agriculture, based upon integrated management of water, land and



ecosystems at landscape scale. CSA can benefit smallholder resource poor farmers directly by increasing efficiency of precious inputs such as labor, seeds and fertilizers and opportunities for income generation. CSA comprises management practices and technologies for climate change adaptation and mitigation. It covers practices with an explicit focus on adaptation to specific climatic stressors, and practices that simultaneously reduce production risks and lower greenhouse gas emissions. Most of these practices prevent soil damage that releases carbon into the atmosphere; enhance soil and water conservation and increase productivity.

Livestock production and management technologies: The climate change risks in Ethiopia is not limited to crop production and productivity. The increase in temperature, drought and heavy rainfall resulting into flooding have far reaching consequences in the livestock production too. High temperature coupled with extended period of drought results into livestock death, negatively affects growth of forages and fodder production, destroy grazing rang lands, increases occurrence and dissemination of pests and diseases. Consequently resulting in reduction of livestock reproduction rates, feed intake, milk production and longevity. It is therefore, important that implementation of climate smart livestock production practices are urgently required.

Hillside irrigation development in the highland and mid highland: In the dry season, crops that are not drought resistant could not be cultivated because no supplementary irrigation possibilities existed for the dry season. Such lack of water in the dry seasons for the hillside agriculture has drastically affected productivity and vigor of the perennial agricultural crops especially for high value fruit crops.

The mission of this project is supporting model innovative water harvesting and hillside irrigation from which organized rural farmers of Ethiopia learn in most of the hillside areas and reverse the situation by revolutionizing irrigated-agriculture at hillsides. This project will also enhance all year-round production of highly economical and high value (HVC) crops such as mangoes, avocado, banana and apple based on agro-ecological zones.

Moreover, hillside irrigation is to be practiced at bench terraces to be constructed along the contour and will be used as soil and water conservation measures. Covering the hillside with high value crops will contribute as carbon sequestration.

Farmers' Managed Natural Regeneration (FMNR) technologies:



Agroforestry systems and/or other innovative ways to foster stakeholder engagement and awareness and forest monitoring and protection activities, and diversify smallholder farmers' income. Ethiopia is included in the GGWI, which ambition is to restore 13.2 million hectares of currently degraded land in three GGW regions of Tigray, Amhara and Afar out of the total area of 156 million hectares of GGWI.

Agroforestry is a sustainable land use system with a promising potential to sequester atmospheric carbon into soil. This system of land use distinguishes itself from the other systems, such as sole crop cultivation and afforestation on croplands only through its potential to sequester higher amounts of carbon (in the above- and belowground tree biomass) than the aforementioned two systems. This practice is a win-win situation for the farming community and for the environmental sustainability. The role of agroforestry in climate change mitigation worldwide might be recognized to its full potential by overcoming various financial, technical, and institutional barriers. Reforestation (occasionally, Re-afforestation) is the natural or intentional restocking of existing forests and woodlands (forestation) that have been depleted, usually through deforestation, but also after clearcutting.

B. Promoting renewable energy technologies (for carbon emission) through IGREENFIN

Climate technology practices, which are particularly important for low-carbon emissions and natural resource rehabilitation, are financed through the revolving fund window 2 with highly concessional GCF loans and will result in lower carbon emissions. To accomplish the above output, the usage of RETs, namely solar energy solutions for agricultural production (solar water pump), will be included as an activity.

Renewable Energy (Solar Water pump): Renewable energy resources and technologies are a key component of sustainable development, because they generally cause less environmental impact than other energy sources. Therefore, the use of renewable energy resources almost certainly can provide a cleaner and more sustainable energy system than increased controls on conventional energy systems. A solar water pump system is essentially an electrical pump system in which the electricity is provided by one or several PhotoVoltaic (PV) panels.

The proposed climate technology will introduce solar water pump (renewable energy technologies). Solar water pumps can supply water to locations, which are beyond the reach of power lines. Commonly, such places rely on human or animal power or on diesel engines for



their water supply (Omer, 2001). Solar water pumps can replace the current pump systems and result in both socio-economic benefits as well as carbon emission. The water supplied by the solar water pump can be used to irrigate crops, water livestock or provide potable drinking water.

9.1.2 Recommended solution to resolve the imperfect policy and regulation support

Often the most binding constraint for smallholder farmers is like lack of support, establishing and maintaining links between policy makers and support Services for FOs and Markets. Currently, Limited access to credit for small-scale farmers is not backed by the government policy. To support for improving the imperfect policy and regulation to limited access to credit for smallholder farmers, policy dialog will be conducted with government higher officials by this initiative. Additionally, training to preparedness for financial institutions and farmer organization will be conducted to improve the capacity of deigning and requesting concessional loan.

A. Improved policy dialogue, government technical and institutional capacity

The policy and regulatory flaws will be addressed through policy dialogue, advocacy, training, knowledge management, information dissemination, and stakeholder management. The effort will increase the ability of government officials to promote climate-smart agriculture, green lending, ecosystem-based adaptation, and renewable energy, with an emphasis on the benefits to women and youth, allowing the program's investments to be scaled up. A stakeholder engagement plan will be designed and implemented to assist stakeholder engagement and capacity building on green lending. To ensure that the system is marketed, regulated, and supported beyond the project's life cycle, a regulatory framework will be designed.

B. Increased preparedness and capacity of DBE, MFIs and RuSACCOs (Credit Providers)

Increased preparedness and capability of DBEs, MFIs, and RuSACCOs will increase market opportunities for lending to FOs, women and youth groups, cooperatives, and MSMEs engaging in climate technologies. Technical assistance will be provided to DBEs, MFIs, and other loan providers on green agricultural lending approaches (especially for the Climate Technologies Practices Fund) as well as the development of appropriate tools, instruments, procedures, and governance systems to increase the preparedness and capacity of financial institutions.

C. Improve capacities of FOs, women and youth organizations, cooperatives and MSMEs'



Increased capacity of FOs, women and youth organizations, cooperatives, and MSMEs to comprehend climate change challenges and the need for climate technology practices will increase. As a result, FOs, MSMEs, and cooperatives will ask the government to amend its ineffective policies and regulations in order to help smallholder farmers. Capacity building and institutional strengthening widen the pool of qualified service providers and ensure strong links with and modernization of the various components of the utilizing CTP, thus, although costly at first, capacity building at all levels is critical.

9.1.3. Proposed solution for inadequate organizational capacity

Poor leadership is a critical issue in the FOs, MSMEs, and cooperatives strategic and day to day activities. Organizations work the way they do because of the people who work there, and the way they work is frequently a reflection of their leadership (Heaver 2012). People expect leaders to show personal commitment to the organization's vision and provide conceptual clarification as to the direction of the organization; however, all members have an essential role in increasing the capacity of the organization. The project proponent advocated for increasing the capacity of organizations, particularly those led by women and youth, as well as offering an incentive for SHF who agree to implement CTP to improve smallholder farmer's agricultural production.

A. Incentive to women and youth led organizations

Women and youth led organizations in the initiative's agricultural value chains will be rewarded for utilizing climate technologies practices and RET. In program's key beneficiaries will be women and youth, as they are the most vulnerable social groups to climate change. To address the women and youth-led MSMEs, FOs, and cooperatives in the targeted area, different mechanisms will be utilized by the woreda's women and children affaire's office.

B. Incentive to smallholder farmers agreed to adopt CTP

In this program, to see the result of climate technology practices on agricultural production it may takes 2-4 years. As a result, smallholder farmers that agreed to implement the climate technology practice will be rewarded as incentives to promote for others.



Table 4: Activities: the activities that the project will implement via utilizing different inputs to result different outputs

Activity	Description	Sub-activities	Deliverables
Component 1A: establishing fund win	ndow for climate resilient agriculture(adaptation) as input for climate	technology practices in the targeting	ng area
Activity 1: Funding for climate smart agronomic technologies and practices	Actions eligible for financing towards supporting local communities that agreed to adapt climate smart agronomic technologies include (i) Use of improved, high yielding adapted quality crop varieties, (ii) use appropriate planting dates & methods, seeding rate and ploughing type (iii) Crop diversification/Intercropping, (iv) Integrated soil fertility management (v) Integrated pest management and others	In cooperating with government and private sectors,(NGOS) Supply of improved crop seeds, technical expertise and consulting	 ✓ Technical expertise and consulting for review of existing climate smart agronomic technologies practices in the country ✓ Develop participatory approach for comanagement of the CSA ✓ Consultancies for identification of main determinants on adapting climate smart agronomic technologies
Activity 2. Funding for Climate smart livestock production and management technologies	Activities eligible for funding Climate smart livestock production and management technologies include: (i) hybrid livestock breed (ii) Improved feeding practice (iii) Better Manure Management,	Providing hybrid livestock breed, supply of health equipment, consultancy, technical expertise and studies	 ✓ Review of existing livestock production drawbacks and proposal for improvements; planning of improving activities. ✓ Advisory services to assist community climate smart livestock production
Activity 3: Funding for hillside irrigation development in the highland and midland	Measures eligible for financing towards supporting local communities that agreed to adapt hillside irrigation development in the highland and midland may include (i) Construction of water wells (ii) Bench terraces or raised beds and dripple pipes (PVC or HDPE). (iii) improved seedlings materials	Construction of water wells, terraces or raised beds and pipes (PVC or HDPE).	Advisory services to assist communities in the site selection and planning of hillside irrigation development in the highland and midland Advisory for designing the construction of water well Conduct workshops on how to design and develop hillside irrigation development in the high & midland
	v for low-carbon emission (mitigation) and natural resources rehabilitation as an in		
Activity 4. Funding Farmers' Managed Natural Regeneration (FMNR) technologies	Activities eligible for funding agro-forestry and farmers' managed natural technologies include: (i) Agroforestry-Planting multi-purpose trees, fruit crops with annual crops (ii) seedling for reforestation (iii) Agrosilvicultural systems (crops: e.g. annual crops) (iv) improved fallow, taungya, and plantation—crop combinations	or other woody perennials, crops or forage, so advisory services seeds; installation/service for nursery, transplanting	 Review existing agro-forestry and farmers management to natural resources Advisory for transplanting and o&M Consultancy for review, identifying appropriate agroforestry options and assist in improving, adapting and designing agroforestry systems
Activity 5: Fund for solar water pump irrigation	Actions eligible for financing towards supporting local communities that agreed to adapt solar water pump irrigation include -the centrifugal pump (based on the water source submersible or surface pump) -the positive displacement pump(submersible or surface pump)	voltaic(PV) panel, pumper(submersible or surface pump), batteries and storage tank	Advisory service in procurement, installation and use of solar water pumps Review existing solar water pump system in the country and implement the lessons learnt
	ailding and technical assistance for credit providers and credit benefic		
Activity 1. Funding towards awareness raising and strengthen capacity of credit providers (DBE,	-Develop training manuals on designing business plan, marketing strategies and customer handling -identify best practices and organize exchange visit to best MFIs	Platforms for information exchange, organize different workshops and consultancies	Organize training Organize experience sharing and visit and conduct workshops



Activity	Description	Sub-activities	Deliverables
MFIs and RuSACCOs) on how to design and implement business plan and marketing of loan finance to promote climate technology practices	and RuSACCOs on how to provide credit to FOs, Cooperatives and MSMEs		Evaluation regarding trainings and experience sharing
Activity 2. Funding towards increasing readiness and capacities of FOs, Coop &MSMEs to seize market opportunities of credit providers creating awareness to smallholder farmers how to obtain loan by investing in climate technology practices	-Develop training manuals on to seize the credit providers market and to capacitate the members on climate technology practices -identify best practices and organize exchange visit to best FOs, MSMEs and cooperatives on how to seize the credit providers market	Platforms for information exchange, organize different workshops and consultancies	Organize training Organize experience sharing and visit and conduct workshops Evaluation regarding trainings and experience sharing
Activity .3 Funding towards improved challenging policy via dialog, advocacy and learning, knowledge management, information dissemination and stakeholder engagement	Conducting different studies for consolidation and systematization of experiences and lessons learnt of on problems related to climate induced in policies;	Workshops, stakeholder consultancies studies; consultancy; printing materials, etc.	 ✓ Organization of workshops for stakeholder consultancies ✓ Elaboration of communication and learning materials, folders, etc. to stakeholders
Activity 4. Cross-Cutting Activities regarding Capacity Building and Knowledge Exchange (managed by TA): - monitoring and evaluation of the Programme - Funding of gender strengthening measures at sub-project level More women and youth entrepreneurs engaged in EbA, energy climate resilient agriculture including at decision making	Monitoring and Evaluation of the Programme by specialized experts Consulting services for the Elaboration of a Guide to Gender Mainstreaming of BAF Procedures Funding of gender promotion measures at sub-project level	Specialized expert services (such as IUCN for monitoring and evaluation); Consulting Services Specific gender promotion activities: capacity development, coaching support to women groups, etc	✓ Organize the program support to conduct different monitoring and evaluation
Component 3: forming incentive sche	eme to encourage FOs, Cooperatives, MSMEs and exemplary smallho	lder farmer household	
Activity 1. Fund to incentivized and promote woman or youth led FO, MSMEs and cooperatives	for woman and youth led FOs, MSMEs and cooperatives	Promote the incentive methods to all credit providers	Conducting different workshops to create awareness of the incentives
Activity 2. Fund to incentivize and promote smallholder household who agreed to adopt the climate technology practices as exemplary for others.	Designing and implementing different mechanism to incentives for households that agreed to adopt climate technology practices as exemplary for others.	Promote the incentive methods to all credit beneficiary households and organizations	Conducting different workshops to create awareness of the incentives
Component 4: fund for GCF-GGW support unit	The support unit will support Development Bank of Ethiopia, ministry of Agriculture, Environment commission and others	Fostering cross sectional and cross ministerial policy dialog and discussion	Organize and conduct meetings, workshops, monitoring and evaluation



9.2. Budget

Table 5: Allocated budget for monitoring and evaluation work plan

		get for monitoring and e		_ *	
S	Type of Key M&E activity/	Responsible Parties	Budget from	Frequency / Time	Documentation/
•	meetings		IGREENFIN	Frame	Dissemination
N			Excluding staff		
A	Monitoring				
1	Inception Meeting	Program Manager, prog. M&E	Indicative cost:	Within 2 months of	MoU b/n stakeholder
		officer IFAD county director	10,000	program start-up	will be signed
2	Inception Report	Program Manager, program	With above	1 month after	Reports and docs
	26	M&E officer	T 1 1 1 1 1 1	inception meeting	delivered to all
	Measurement of program indicators (outcome, progressand performance		To be determined	Outcome indicators:	Submitted reports for outcome and
	indicators, IGREENFIN tracking	assign the specific delegate	as part of the Annual Work	At start, mid and end	output indicators.
	tools) at national and regional level		Plan's preparation	of program, Output Indicators:	output marcators.
	,	members.	r ami s proparation	annually	
2.1	0.4 1 1 1 1 4			amidany	
	Outcome level indicators			1	
	Achievement of the number of	Program M&E officer, program manager and focal experts from	Indicative cost:		Produced and
1	households that use innovative	regional & woreda agriculture office	10,000	term of internal evaluation.	disseminate the IE to
	agricultural extension system Number of Institutional and regulatory	Program M&E officer, program		At mid-term and end-	stakeholders Produced and
	systems that improve incentives for	manager and focal experts from regional		term of internal	disseminate the IE to
	low-emission planning and developmen	& woreda agriculture office		evaluation.	stakeholders
	and their effective implementation				
	Checked hectares of land or	Program M&E officer, program			Produced and
	forests under improved and	manager and focal experts from regional & woreda agriculture office		term of internal	disseminate the IE to
	effective management that contributes to CO2 emission	agriculture errice		evaluation.	stakeholders
	Quality and percentage of low-	Program M&E officer, program		At mid-term and end-	Produced and
	emission power supply (Solar	manager and focal experts from regional		term of internal	disseminate the IE to
	water generators) in a market.	& woreda agriculture office		evaluation.	stakeholders
3.2	Output level/ progress and perfo	ormance indicators			
3.2.1	Checked the number of	Program M&E officer, program	Indicative cost:	Monitoring visits to field	
	households that adapted	manager and focal experts from regional & woreda agriculture office	10,000	sites(in a month after each end of quarter, Joint	
	climate smart agronomic	& woreda agriculture office		technical stakeholders visit)	
3.2.2	Oversee number of households	Program M&E officer, program		Monitoring visits to field sites(in	
	that adapted livestock	manager and focal experts from regional		a month after each end of quarter, Joint technical stakeholders visit)	
	production and management	& woreda agriculture office		,	
	Number of households that adapted hillside irrigation development in	Program M&E officer, program		Monitoring visits to field sites(in a month after each end of quarter,	
	highland and midland	manager and focal experts from regional & woreda agriculture office		Joint technical stakeholders visit)	
	Achievement of number of	Program M&E officer, program		Monitoring visits to field sites(in	
	households that adapted farmers	manager and focal experts from regional		a month after each end of quarter, Joint technical stakeholders visit)	
	managed natural regeneration	& woreda agriculture office		Sim common surcholders visit)	
	technology Number of household that	Program M&E officer, program		Monitoring visits to field sites(in	
	adopted renewable energy	manager and focal experts from regional		a month after each end of quarter,	
	technology (solar water pump)	& woreda agriculture office		Joint technical stakeholders visit)	
	Oversee the number of MFI and	Program M&E officer, program		Monitoring visits to field sites(in	
	RuSACCOs that are benefited from	manager and focal experts from regional & woreda agriculture office		a month after each end of quarter, Joint technical stakeholders visit)	
	IGREENFIN	E .		Manifestina minima (C.11) (2.7)	
	Checked the number of FO, MSMEs and Cooperatives that are	Program M&E officer, program manager and focal experts from regional		Monitoring visits to field sites(in a month after each end of quarter,	
	benefited from IGREENFIN	& woreda agriculture office		Joint technical stakeholders visit)	
3.2.8	Achievement of number of experts	Program M&E officer, program		Monitoring visits to field sites(in	
	participated in the capacity	manager and focal experts from regional		a month after each end of quarter, Joint technical stakeholders visit)	
	building from MFI & RuSACCOs	& woreda agriculture office		,	



participated in the capacity building from FO and Cooperatives 3.2.10 Number of dialogs conducted with policy advisors, lessons learned / best practices are documented and published in renowned regional 3.2.11 Achievement on the number of incentivized and promoted woman or youth led FO, MSMEs and cooperatives 3.2.12 Oversee the number of Incentivized and promoted who manager and focal experts from regional wored agriculture office manager and focal experts from regional wored agriculture office manager and focal experts from regional wored agriculture office manager and focal experts from regional wored agriculture office program M&E officer, program manager and focal experts from regional wored agriculture office manager and focal experts from regional in a month after quarter, Join stakeholders vis wored agriculture office manager and focal experts from regional wored agriculture office manager and focal experts from regional in a month after quarter, Join stakeholders vis manager and focal experts from regional wored agriculture office 3.2.12 Oversee the number of Incentivized and promoted smallholder household who manager and focal experts from regional manager and focal experts from regional wored agriculture office	sit) isits to field onth after each quarter, Joint eholders visit) its to field sites(ter each end of int technical sit) isits to field
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7 Program Implementation Program Manager and team Review • Program Manager and team In None Annually, reporting repo	
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B Evaluation	
1 Mid Term Review/Evaluation • Program manager and Indicative cost: • External Consultants (i.e. evaluation team)	disseminate mid-term
2 Terminal Evaluation • Program manager and Indicative cost: end of program manager and igreen implement cost: a 2,000 implement implement cost: a 2,000 implement cost: a 2,	
3 Audit/External/ • External Auditor • Project manager and team Indicative cost peryear: 2,800 (total 14,000) Annually	Develop, produce and disseminate External Audit document to all stakeholder
4 Project Final Report • Program Manager and team • IFAD-Ethiopia and all stakeholders Within 2 m project condate	nonths of the Develop, produce and disseminate Project Final Report document to all stakeholder
5 Co-financing report • Program Manager and team • IFAD-Ethiopia and all stakeholders Within 1 mo PIR reporting i.e. on/before	ng period, disseminate mid-term
6 Publication of Lessons Learnt and other projectdocuments • Program Manager and team annual report annual report stakeholders • Program Manager and team stakeholders • IFAD-Ethiopia and all stakeholders	rts disseminate mid-term evaluation document to
Total M&E Plan Budget Excluding project team staff time and UNEP staff andtravel expenses US\$ 119,000	all stakeholder



Table 6: costed Monitoring and Evaluation plan

S.N	Activity/Meetings	Stakeholders	Number of	Expenses		Total Cost	
			participants	Hotel related Ex.	Personal/Perdium	Transport/Fuel	1
A	Monitoring Cost						
		-IFAD, IGREENFIN and Co-financers	10				
1	To conduct	-Financial Institutions	15				
	Inception meeting	-Governmental and private stakeholders	25				
2	Field Visit to	-IFAD &IGREENFIN team		-Every 6 month in Five years (10 times)			
	oversee the outcome indicators	-Focal experts from federal, regional and district team		years (10 times)			
3	Conducting Field	-IFAD &IGREENFIN team to conduct monitoring for CTP		-Every 6 month in Five years (10 times)			
Visi	Visit to oversee the output or	-Focal experts from federal, regional and district team to conduct monitoring for CTP					
	performance indicators -IFAD &IGREENFIN team to conduct monitoring for financial institutions -Every 6 month in Five years (10 times)						
		-Focal experts from federal, regional and district team to conduct monitoring for financial institutions					
4	Program Steering	-IFAD, IGREENFIN and Co-financers					
	Committee meetings and National Steering	-Financial Institutions					
	Committee meetings	-Governmental and private stakeholders					
5	Program	-IFAD, IGREENFIN and Co-financers	10				
	implementation Review	-Financial Institutions	15				
		-Governmental and private stakeholders	25				
В	Evaluation Cost						
1	Mid Term Review/Evaluation	External Consultants firm (i.e. evaluation team)	Consultant firm	At mid-point of the project implementation			
2	Terminal Evaluation	External Consultants firm (i.e. evaluation team)	Consultant firm	At terminal of the project implementation			
3	Audit/External/	External Auditor firm	Audit firm	At the Ex-post of the project implementation			
	01 0	f time and UNEP staff and travel					



9.3. Indicator Reference Sheets Template

Indicator Reference Sheet : Number 01

Name of Indicator: Number of households that adapted climate smart agronomic technologies

Result to Which Indicator Responds: family that are agreed to adopt CSAT will respond the queries related to the initiative

Is this a performance plan and Report indicator/ Level of Indicator: under plan

A) Description

Definition: the number of smallholder farmers HH that are willing to adopt CSAT in their properties/ Ex: farmland

Unit of Measurement and Desegregations: Number of HH Date Last Reviewed: Last review /discussion of this indicator: 1st time

Data Type: Number Disaggregated by: Age, sex of respondent, family head Method of calculation: counting number of respondents

B) Plan for Data Acquisition

Data Collection Method: Conducting field visit to project sites to collect Primary data from smallholder HH and secondary data from FOs, Cooperatives and women and youth led MSEs and organizations. All stakeholders will collect the data every quarter to the program.

Data Source: source of data for this indicator will be primary data and documents from agriculture office and cooperatives

Frequency and Timing of Data Acquisition: This program will be able to report in this indicator from focal experts at project level to regional focal experts to Ministry of Agriculture and to the IGREENFIN program m&e specialist and program coordinator. This will be conducted every quarter and the program will track its performance progress using a special survey every year.

Individual Responsible: The program coordinator will give direction to program m&e expert alongside to the representatives from Ministry of Agriculture, regional and district agricultural offices every quarter.

Location of Data Storage: The IGREENFIN program in the IFAD-Ethiopia will be responsible for data storage. Furthermore, the data will be stored in Ministry of Agriculture, regional and district agriculture offices.

C) Data Quality Issues Known Data Limitations and Significance (if any): assessments will be conducted in every quarter.

Actions Taken or Planned to Address this Limitation: If data limitations occurred, quick measurement will be taken.

Internal Data Quality Assessments: This will be determined in consultation with all stakeholders.

D) Plan for Data analysis, Reporting and Review (schedule, methodology, responsibility)

Data Analysis: Data collected from a recent information will be compared with previous data to determine overall IGREENFIN program performance. Review of performance progress will be done comparing the initiative's data.

Review of Data: The IGREENFIN coordination office will review the data every quarter and consequently in each level.

E) Performance Data Table: Key to table: SS = Special survey PHS = Participated and Not HH Survey (data from FO and MSMEs)

Year	Targeted/planned	Actual	Comments	Year	Targeted/planned	Actual	Comments
2023(Baseline)		10.1%(PHS)		2026	14.6%		
2024	11.6%			2027	16.1%		
2025	13.1%			2028	17.6%(PHS)		



Indicator Reference Sheet: Number 02

Name of Indicator: Number of households that adapted climate smart agronomic technologies

Result to Which Indicator Responds: family that are agreed to adopt CSAT will respond the queries related to the initiative

Is this a performance plan and Report indicator/ Level of Indicator: under plan

A) Description

Definition: the number of smallholder farmers HH that are willing to adopt CSAT in their properties/ Ex: farmland

Unit of Measurement and Desegregations: Number of HH Date Last Reviewed: Last review /discussion of this indicator: 1st time

Data Type: Number Disaggregated by: Age, sex of respondent, family head Method of calculation: counting number of respondents

B) Plan for Data Acquisition

Data Collection Method: Conducting field visit to project sites to collect Primary data from smallholder HH and secondary data from FOs, Cooperatives and women and youth led MSEs and organizations. All stakeholders will collect the data every quarter to the program.

Data Source: source of data for this indicator will be primary data and documents from agriculture office and cooperatives

Frequency and Timing of Data Acquisition: This program will be able to report in this indicator from focal experts at project level to regional focal experts to Ministry of Agriculture and to the IGREENFIN program m&e specialist and program coordinator. This will be conducted every quarter and the program will track its performance progress using a special survey every year.

Individual Responsible: The program coordinator will give direction to program m&e expert alongside to the representatives from Ministry of Agriculture, regional and district agricultural offices every quarter.

Location of Data Storage: The IGREENFIN program in the IFAD-Ethiopia will be responsible for data storage. Furthermore, the data will be stored in Ministry of Agriculture, regional and district agriculture offices.

C) Data Quality Issues Known Data Limitations and Significance (if any): assessments will be conducted in every quarter.

Actions Taken or Planned to Address this Limitation: If data limitations occurred, quick measurement will be taken.

Internal Data Quality Assessments: This will be determined in consultation with all stakeholders.

D) Plan for Data analysis, Reporting and Review (schedule, methodology, responsibility)

Data Analysis: Data collected from a recent information will be compared with previous data to determine overall IGREENFIN program performance. Review of performance progress will be done comparing the initiative's data.

Review of Data: The IGREENFIN coordination office will review the data every quarter and consequently in each level.

E) Performance Data Table: Key to table: SS = Special survey PHS = Participated and Not HH Survey (data from FO and MSMEs)

Year	Targeted/planned	Actual	Comments	Year	Targeted/planned	Actual	Comments
2023(Baseline)		10.1%(PHS)		2026	14.6%		
2024	11.6%			2027	16.1%		
2025	13.1%			2028	17.6%(PHS)		



Indicator Reference Sheet: Number 03

Name of Indicator: Number of households that adapted climate smart agronomic technologies

Result to Which Indicator Responds: family that are agreed to adopt CSAT will respond the queries related to the initiative

Is this a performance plan and Report indicator/ Level of Indicator: under plan

A) Description

Definition: the number of smallholder farmers HH that are willing to adopt CSAT in their properties/ Ex: farmland

Unit of Measurement and Desegregations: Number of HH Date Last Reviewed: Last review /discussion of this indicator: 1st time

Data Type: Number Disaggregated by: Age, sex of respondent, family head Method of calculation: counting number of respondents

B) Plan for Data Acquisition

Data Collection Method: Conducting field visit to project sites to collect Primary data from smallholder HH and secondary data from FOs, Cooperatives and women and youth led MSEs and organizations. All stakeholders will collect the data every quarter to the program.

Data Source: source of data for this indicator will be primary data and documents from agriculture office and cooperatives

Frequency and Timing of Data Acquisition: This program will be able to report in this indicator from focal experts at project level to regional focal experts to Ministry of Agriculture and to the IGREENFIN program m&e specialist and program coordinator. This will be conducted every quarter and the program will track its performance progress using a special survey every year.

Individual Responsible: The program coordinator will give direction to program m&e expert alongside to the representatives from Ministry of Agriculture, regional and district agricultural offices every quarter.

Location of Data Storage: The IGREENFIN program in the IFAD-Ethiopia will be responsible for data storage. Furthermore, the data will be stored in Ministry of Agriculture, regional and district agriculture offices.

C) Data Quality Issues Known Data Limitations and Significance (if any): assessments will be conducted in every quarter.

Actions Taken or Planned to Address this Limitation: If data limitations occurred, quick measurement will be taken.

Internal Data Quality Assessments: This will be determined in consultation with all stakeholders.

D) Plan for Data analysis, Reporting and Review (schedule, methodology, responsibility)

Data Analysis: Data collected from a recent information will be compared with previous data to determine overall IGREENFIN program performance. Review of performance progress will be done comparing the initiative's data.

Review of Data: The IGREENFIN coordination office will review the data every quarter and consequently in each level.

E) Performance Data Table: Key to table: SS = Special survey PHS = Participated and Not HH Survey (data from FO and MSMEs)

Year	Targeted/planned	Actual	Comments	Year	Targeted/planned	Actual	Comments
2023(Baseline)		10.1%(PHS)		2026	14.6%		
2024	11.6%			2027	16.1%		
2025	13.1%			2028	17.6%(PHS)		



Indicator Reference Sheet: Number 04

Name of Indicator: Number of households that adapted climate smart agronomic technologies

Result to Which Indicator Responds: family that are agreed to adopt CSAT will respond the queries related to the initiative

Is this a performance plan and Report indicator/ Level of Indicator: under plan

A) Description

Definition: the number of smallholder farmers HH that are willing to adopt CSAT in their properties/ Ex: farmland

Unit of Measurement and Desegregations: Number of HH Date Last Reviewed: Last review /discussion of this indicator: 1st time

Data Type: Number Disaggregated by: Age, sex of respondent, family head Method of calculation: counting number of respondents

B) Plan for Data Acquisition

Data Collection Method: Conducting field visit to project sites to collect Primary data from smallholder HH and secondary data from FOs, Cooperatives and women and youth led MSEs and organizations. All stakeholders will collect the data every quarter to the program.

Data Source: source of data for this indicator will be primary data and documents from agriculture office and cooperatives

Frequency and Timing of Data Acquisition: This program will be able to report in this indicator from focal experts at project level to regional focal experts to Ministry of Agriculture and to the IGREENFIN program m&e specialist and program coordinator. This will be conducted every quarter and the program will track its performance progress using a special survey every year.

Individual Responsible: The program coordinator will give direction to program m&e expert alongside to the representatives from Ministry of Agriculture, regional and district agricultural offices every quarter.

Location of Data Storage: The IGREENFIN program in the IFAD-Ethiopia will be responsible for data storage. Furthermore, the data will be stored in Ministry of Agriculture, regional and district agriculture offices.

C) Data Quality Issues Known Data Limitations and Significance (if any): assessments will be conducted in every quarter.

Actions Taken or Planned to Address this Limitation: If data limitations occurred, quick measurement will be taken.

Internal Data Quality Assessments: This will be determined in consultation with all stakeholders.

D) Plan for Data analysis, Reporting and Review (schedule, methodology, responsibility)

Data Analysis: Data collected from a recent information will be compared with previous data to determine overall IGREENFIN program performance. Review of performance progress will be done comparing the initiative's data.

Review of Data: The IGREENFIN coordination office will review the data every quarter and consequently in each level.

E) Performance Data Table: Key to table: SS = Special survey PHS = Participated and Not HH Survey (data from FO and MSMEs)

Year	Targeted/planned	Actual	Comments	Year	Targeted/planned	Actual	Comments
2023(Baseline)		10.1%(PHS)		2026	14.6%		
2024	11.6%			2027	16.1%		
2025	13.1%			2028	17.6%(PHS)		



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