



FOREST CARBON PARTNERSHIP FACILITY (FCPF)

READINESS FUND

COMPLETION REPORT

COUNTRY: FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

PROJECT: REDD+ READINESS PREPARATION SUPPORT(P124074)

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Ethiopia

REDD+ READINESS PREPARATION SUPPORT

Completion Report

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Abbreviations/Acronyms

AD	Activity Data (Area of forest cover change)
AFOLU	Agriculture, Forestry and Other Land Uses
AGB	Above-ground Biomass
BFAST	Breaks for Additive Season and Trend
BGB	Below-Ground Biomass
CRGE	Climate Resilience Green Economy
EF	Emission Factor
FREL	Forest Reference Emissions Level
FRL	Forest Reference Level
GEE-API	Google Earth Engine- Application Program Interface
GHGI	National Green House Gas Inventory
GIS	Geographic Information Systems
IPCC	Intergovernmental Panel on Climate Change
IT	Information Technology
LULC	Land Use/Land Cover
LULUCF	Land Use, Land Use Change and Forestry
MEFCC	Ministry of Environment, Forest and Climate Change
MRV	Measurement, Reporting and Verification
NCCAC	National Climate Change Advisory Committee
NFI	National Forest Inventory
NFM	National Forest Monitoring
NTE	Not to Exceed
OFGT	OpenForis Geospatial Tool
OFWE	Oromia Forest and Wildlife Enterprise
QA	Quality Assessment
QC	Quality Control
REDD+	Reducing Emissions from Deforestation and Degradation-plus
REL/RL	Reference Emission Level/Reference Level
RFII	Regional Forest Inventory Intensification
RRCU	Regional REDD+ Coordination Units
RS	Remote Sensing
SU	Sampling Unit
TA	Technical Assistance
UNDAF	United Nations Development Assistance Framework
UNFCCC	United Nations Framework Convention on Climate Change

1. Overall Assessment Achievement of Project Development Objective

Ethiopia's REDD+ Readiness has been supported by two financial instruments:

- (1) Forest Carbon Partnership Facility (FCPF) grant to the REDD+ Readiness process in which the GoE entered into a Grant agreement with the World Bank (US\$3.6 million) in October 2012 to implement part of the readiness activities: management arrangement at federal level, preparation of the national REDD+ strategy, preparation of the safeguards instruments including the grievance redress mechanism. This grant has been completed and a Completion Report has been submitted to the FCPF in September 2016.
- (2) **The BioCF Additional Funding for the REDD+ Readiness Preparation Support in Ethiopia ('Additional Grant')**: This grant to the REDD+ Readiness process in Ethiopia was provided through the BioCarbon Fund Technical Assistance Fund (BioCF Plus). These funds allowed the GoE to complete its REDD+ Readiness process, and complemented the activities financed by the FCPF. The activities financed under the Additional Grant are those identified in Ethiopia's R-PP that were, not covered by the FCPF grant.

Ethiopia has successfully finalized the activities under the National REDD+ Readiness by utilizing the two financial instruments.

Overall, the Additional Grant has been able to achieve its PDO and indicators. REDD+ Readiness has achieved readiness milestones expected of the countries by the FCPF Readiness Assessment Framework and the UNFCCC decisions related to REDD+. The Readiness Package milestones were achieved: i) Safeguards Instruments prepared; ii) Training and Consultations held all over the country, with more than 500,000 people consulted; iii) REL submitted to the UNFCCC; and iv) MRV system in place (but will continue to be strengthened); v) The National REDD+ Strategy, which is a key component of the Readiness phase, has been endorsed in June 2018.

Ethiopia's REDD+ Readiness progress has also been assessed by an independent reviewer during the preparation of its R-Package. Further, Ethiopia's REDD+ Readiness-Package (R-Package) has been formally endorsed by the Forest Carbon Partnership Facility Participants Committee on the 26th of September 2017 at Luang Prabang in Laos PDR, with great recognition of the efforts made on Readiness implementation.

Ethiopia has by now completed its envisioned REDD+ Readiness activities successfully and fully;

- (i) Extensive consultations and outreach to over 500,000 people have been made;
- (ii) The national REDD+ strategy has been prepared in a very participatory manner and endorsed by the Ministry of Environment, Forest and Climate Change in June 2018;
- (iii) Forest reference level/forest reference emissions level set and verified by UNFCCC technical assessment process and accepted;
- (iv) MRV system developed and institutionalization finalized with a further effort of conducting the first ever standard national forest inventory (NFI) at national level; and
- (v) The required safeguards instruments were completed and approved and several public consultations were held.

Three key results of the Additional Grant were:

- (i) Support to the National Readiness Management Arrangements: REDD+ Management Arrangements in all Regional States operational.

- (ii) Establishment of a Monitoring, Reporting and Verification System and a Reference Emissions Level for REDD+ in Ethiopia. An operational national-level MRV system and a national Reference Emissions Level for REDD+ are established.
- (iii) Preparation of REDD+ jurisdictional Pilot programs. Pilot proposals are prepared, ready for implementation, and generating lessons to the national REDD+ process.

The Project Development Objective (PDO) of both the FCPF REDD+ Readiness and the Additional Grant is to strengthen the capacity of Ethiopia's institutions dealing with land use on REDD+. The overall PDO has been achieved. The Additional Grant has not only financed additional capacity building targeted at the National REDD+ Secretariat and at other stakeholders, but it has also engaged FAO, an internationally recognized leader on MRV issues, to provide a large package of technical assistance to the GoE. Further, the regional states have been constantly requesting capacity building at the decentralized level, as a way to be further involved in the REDD+ process, and resources from the Additional Grant have been committed to support decentralized REDD+ structures and designing concrete implementation REDD+ pilot projects.

Accordingly, (1) four decentralized structures have been put in place and made operational in the four forest regional states (Oromia, Southern National, Nationalities and Peoples-SNNPR, Amhara and Tigray); (2) the national forest monitoring system (NFMS), including REDD+ MRV has been designed and institutionalized, with a further effort of undertaking the first national forest inventory across the country; and (3) two jurisdictional REDD+ implementation programs have been designed and are being implemented. The two REDD+ projects are the Oromia Forested Landscape Project (OFLP) supported with an upfront investment fund of USD 18 million from the BioCarbon Fund (World Bank) which is implemented in Oromia regional state, and the REDD+ Investment Project (RIP) generously supported with USD 80 million by Norway, and is being implemented in five regional states (Oromia, SNNPR, Amhara, Tigray and Gambella). The BioCF additional funding grant financed the preparatory activities of designing REDD+ pilot programs in the 4 RIP intervention regional states (with exception of Gambella regional state).

2. Implementation and Output by Component

2.1. Component 1: Support to the National Readiness Management Arrangements (US\$ 1.2M)

With the Additional Grant, the REDD+ Readiness process has been decentralized by creating the REDD+ structures in Ethiopia's 4 regional states (Oromia, SNNPR, Amhara and Tigray): 4 Regional REDD+ Coordination Units have been established with the corresponding Regional Steering Committees, and REDD+ Technical Working Groups. Financial support has been delivered for staff and communication costs; supplies and equipment; and training and consultation workshops. Encouraging institutional upgrading for the forest have been made in Oromia, SNNPR and Amhara regional states by establishing regional Environment, Forest and Climate Change Authorities, perhaps triggered by raising level of awareness created on the importance of forest and green growth in Ethiopia. Capacity building and institutional strengthening were promoted at the *woreda* (municipalities) and *kebele* (village) levels.

During the REDD+ Readiness phase, intensive consultations have been made reaching a total of 502,146 people from federal, regional, *woreda* and community levels on various issues (climate change and the role of forestry, green growth/CRGE strategy, national REDD+ strategy, MRV, benefit sharing mechanism, safeguards, etc). Targeted trainings and capacity building, and inter-regional experience sharing were among the main activities supported with this funding. Among those reached out, 45,029 have been female and 457,117 male participants. All consultations and training are available at: <https://ethiopiareddplus.gov.et/redd-readiness/reddsafeguards/consultation-participation/summary-report-of-consultation-and-participation/>

Awareness campaign on the new forest proclamation (Proc. No 1065/2018 ratified by the Parliament) has been made to key stakeholders in the four REDD+ focus regional states. This massive national awareness raising campaign on Green Economy strategy, REDD+ and the new forest vision for Ethiopia, and the new forest proclamation involved a total of 4,755 (355 women and 4,400 men) government officials drawn from the justice, police, judges, prosecutors, sector office heads in all woredas, zones and regions of Oromia, SNNP, Amhara and Tigray. The new forest law has addressed legal gaps in the sector and that has also considered emerging issues such as climate change. This will have a significant effect on law enforcement related to reducing deforestation across these regional states.

A follow up action to the forest proclamation is the drafting of the new forest regulation detailing certain aspects of the proclamation, including benefits sharing mechanism and carbon rights is going on. Very useful comments have been gathered during the campaign made with the law enforcement entities.

The National REDD+ Strategy has been refined based on several consultations at various levels, including 2 national workshops (one for government (28 men and 2 women) and another for NGOs – 36 men and 4 women), 9 regional workshops in all major regional states (400 men and 27 women), and several community consultation workshops in 24 woredas involving 3,254 people (483 women and 2,771 men). All consultations are available at: <https://ethiopiareddplus.gov.et/redd-readiness/reddsafeguards/consultation-participation/summary-report-of-consultation-and-participation/>

REDD+ Readiness awareness campaign to the public has also used the mass media (Ethiopia TV, Fana TV, Fana FM radios, EBS TV (e.g., <http://www.ebstv.tv/website/ebstube/watch.php?vid=3abd8a83d>), ENN TV, and national Radio). Millions have been reached and raised awareness on the significance of forest on Ethiopia’s economic development and environmental integrity to the public (<https://ethiopiareddplus.gov.et/wpcontent/uploads/2017/02/Media-analysis-Final.pdf>). Investment on awareness, consultation workshops and general public sensitization has been higher than planned, and it is worth investing given its historic transformation on the significance of forestry for Ethiopia’s development. Due to this effort, the forest has become a national agenda much different from the earlier times.

Exposure visits in the framework of South-South exchange, participation international meetings such as COPs have also been covered by the AF grant with a view to attracting the attention of higher government officials to forestry, REDD+ and climate change (e.g., regional state presidents).

The table below summarizes the main activities and outputs under component 1.

Activity	Grant Amount (in US\$ 000)	Actual Expenditures (in US\$ 000)	Output
Consultancy and Audits	160,000.00	100,054.12	Enhanced financial management
Training and Workshops	639,700.00	1,568,999.22	Increased national capacity and knowledge on forestry, REDD+ Climate change, and CRGE strategy
Goods	437,500.00	607,114.30	Enhanced capacity on project management support for readiness and design of investment projects
Non-		22,096.05	Increased level of awareness of the

Consultancy	23,000.00		public on forestry and climate change.
Operational Costs	348,000.00	948,850.32	Enhanced capacity on project management support for readiness and design of investment projects by making available the required financing
Total¹	1,150,400.00	3,247,114.01	Strong readiness management

2.2. Component 2: Establishment of a Monitoring, Reporting and Verification System (MRV) and a Reference Emissions Level (REL) for REDD+ in Ethiopia (US\$ 4.4 M)

Given the high level of skills required and the importance in REDD+ readiness, the Government of Ethiopia sought a technical assistance from FAO, international recognized institution on forest resource assessment and monitoring, in the planning, development and implementation of its NFM and MRV system for REDD+ readiness. This Component, was structured around five key outputs which have been satisfactorily achieved as summarized below.

- a) Institutional capacity is built with the following indicators:
 - MRV institutional arrangement is in place with well-elaborated roles, responsibilities and functions embedded within the Ministry of Environment, Forest and Climate Change structure for suitability.
 - One operational national MRV laboratory and four regional MRV labs have been established (one in each of the four REDD+ pilot regions)
 - Field equipment (including six vehicles for the national forest inventory-NFI, measuring and camping equipment) and office equipment (high-capacity servers, desktop computers, laptops, multipurpose printer, interactive whiteboard, furniture and others) have been delivered to the regions.
- b) Human capacity in MRV activities is increased at federal and regional levels:
 - 170 forest technicians have been trained in forest inventory and analysis and are now capable of undertaking forest resources monitoring activities.
 - 74 technicians have been trained in forest change assessment and construction of Forest Reference Level (FRL).
- c) Establishment of forest reference level for the country:
 - National Forest inventory (NFI) is completed including forest information to serve as future reference.
 - National FRL is established and the FRL document has been endorsed by the UNFCCC that is found at: https://redd.unfccc.int/files/ethiopia_frel_3.2_final_modified_submission.pdf.
 - Regional FRL established for Oromia Region. In addition the other regional states have been involved in the MRV capacity building activities, and were able to set their respective FRLs.

Achievements at each output level are described in detail in the section below.

Output 1: Establishment of institutional arrangements and data management systems to support the national Measurement, Reporting and Verification (MRV) system are in place and fully operational

¹ Slight excess expenditure as compared to the original plan (USD 6,084,652) in the Additional Grant occurred due largely to gain in USD-ETB exchange rate and some resource shifts from consultancy service to purchase of vehicles according to the FM Specialist

Study on the MRV institutional arrangements in the context of the ministry has been undertaken and provided a recommendation to establish the MRV Unit under the Directorate General of Forest Inventory and Management Plan Preparation, which is responsible for Forest Inventory, Geographic Information Systems/Remote Sensing (GIS/RS) and Carbon Measurement activities in the country. The recommendation has been implemented and the MRV Unit is established with two technical teams dealing with forest inventory and GIS/RS activities. Each team is staffed with appropriate technicians who are trained by the MRV sub-project.

The institutional arrangements, duties, responsibilities and linkages between the MRV Unit and the relevant directorates as well as other sectoral /regional institutions are well elaborated. While the duties and responsibilities of regional MRV units are provided, they are expected to be formally established within a period of five years depending on regional context and until that happens, the Regional REDD+ Coordination Units (RRCUs) are suggested to care for regional MRV functions.

An assessment of the existing data storage system has been made leading to a recommendation on how to establish the data storage and management system. Accordingly, the national MRV Laboratory was established with the configuration of the existing data storage system. The Laboratory is fitted with two servers installed in the Information Technology (IT) Directorate of the ministry and accessible through wi-fi. The first server included Open Foris to store forest data, Geoserver to store geospatial data, and MRV portal to host NFI and other data. REDD+ Registry-Module is included to store and display REDD Initiatives. The second server is committed to store documents for system management and MRV wiki for documenting and sharing knowledge and guidelines/manuals. All the NFI data and GIS information and project products (guidelines, manuals, maps and reports) have been transferred to this documentation server. A server operation manual was prepared. Training in data management was provided to eight forest and GIS technicians and seven IT technicians were trained in installation, configuration, operation and maintenance of the MRV labs..

In addition, MRV laboratories have been installed in four REDD+ pilot regional states (Oromia, Amhara, SNNPR, and Tigray) and training has been provided training to MEFCC and regional experts. Further, IT Officers at the ministry also received training in operation and maintenance of the MRV system.

A web-portal was developed and linked with the MRV Database but the portal is not accessible because it is disabled until the ministry develops a protocol for data sharing and decides to make it accessible to the public.

Output 2: A historical land cover change assessment is produced and national MRV institutions have the capacities and systems to monitor Reducing Emissions from Deforestation and Degradation-plus (REDD+) activity data.

The support provided was especially geared towards identifying and training in the methodologies for forest change detection (estimation of activity data and assessment of forest degradation). The training provided are categorized as follows depending on the intensity:

- 52 GIS technicians from MEFCC, Regions, Ethiopian Mapping Agency, Addis Ababa University, Oromia Forest and Wildlife Enterprise (OFWE) and FARM Africa have been trained in LULC accuracy assessment and forest change detection using OpenForis Geospatial Tool (OFGT), Quantum GIS (QGIS) and Google Earth Engine (GEE-API), Collect Earth and R Programming. Eight of them were trained in forest degradation assessment using satellite image in Uganda. These tailor-made trainings were supported by on-the-job skill transfer. The regional participants were able to estimate Activity Data of their respective regions and construct regional FRLs using national emission factors (EFs).
- 22 MRV Task Force members (and relevant experts in this field) were trained in LULC mapping mainly for enabling them to advise on methodology to be used for Ethiopian context. Trainings were

always practical and geared towards facilitating the production of useful data as input to larger deliverables.

- 24 GIS experts from MEFCC and regions were trained for 12 days on introduction to software including ArcGIS10.3(managing ArcCatalog, preparation of geodatabases, ArcMap tools, viewing layer properties, alteration of symbology and creating maps) and introduction to intermediary remote sensing using ERDAS (exploring the main tools and contents of ERDAS, viewer menu to change band composition, exploring characteristics of images, drawing spectral, add spatial profile and other related topics, preparation of satellite images, image stacking, subsetting, mosaicking, georeferencing and enhancement techniques, image classification and post-classification, accuracy assessment using R-shyni tools and extraction of statistical information.
- Further, FAO has provided training on Basic GIS/RS to 35 GIS technicians from nine pilot woredas of Amhara, SNNPR, and Tigray regional states. This one-week training was organized by government using its resources. The training was aimed at forestry sector capacity development of the country to prepare for implementation of REDD+ readiness and covered the basics of ArcGIS managing ArcCatalog, preparation of geo-databases, ArcMap tools, creating maps, extracting online and offline for land use/land cover (LULC) features, geographic coordinate systems and projections, manual and typology editing geographic and associated attributes data features

Three major products are produced by this activity:

- National land use/land cover (LULC) map was initially produced for 2013 with 16 land use classes based on Landsat8 image but the accuracy was low due to difficulty in identifying the different land cover classes for such low-resolution image. Therefore, LULC map was reproduced with aggregated 10 land cover classes including bamboo and plantation for the same year. The LULC classes were further aggregated into forest and non-forest land covers/uses. Accordingly, Forest/Non-Forest map has been produced for 2013. Results from the Forest/Non-forest map indicate a 19% forest cover.
- A forest change assessment has been conducted between periods of 2000-2013. A forest change map is produced showing forest losses, forest gains, stable forest and stable non-forest analysis. The forest change map was overlaid with a map of biomes (vegetation map) to divide the forest loss, gain and forest cover estimates by biome. The assessment shows that Ethiopia lost, on average, about 92,000 ha of its cover per year distributed into the four biomes; Acacia-Commiphora (15,000 ha), Combretum-Terminalia (55,000 ha), Dry Afromontane (5,000 ha), Moist Afromontane (16,000 ha) and others (1,000). In the same period, there is an annual average forest gain of about 19,000 ha distributed to about 2,308 ha, 13,800 ha 2,230 and 62 ha respectively. If the trend continues, the country loses about 73,000 ha per year, alerting to take appropriate measures.
- Activity Data (AD) for deforestation and afforestation/reforestation were estimated and used for the construction of FRL.

Output 3: Capacities to carry out National Forest Inventory (NFI) in the context of REDD+ are enhanced and new information is produced by the NFI to improve carbon measurements and other relevant information on forest use and forest cover.

Ethiopia has undertaken a national forest inventory, and a report has been produced for the first time in a detailed and standardized ways. While it was planned to collect data from 631 sampling units (SUs) across the country, it was possible to access only 539 Sampling Units (SUs) and 2,077 plots. It should be noted that the NFI data does not give the national forest coverage which can be assessed only from satellite image.

The NFI data was entered in the databases using Open Foris Collect Survey and analyzed using OF Calc. The data was then used to calculate emission factors by strata and biome in order to inform the construction of both the national and regional (Oromia) FRL. NFI analysis showed that the sample units covered a total area of 1,029 ha and about 5.6 percent of the sample units fell in forest area. A total of 51,868 trees were recorded from the sample units. About 40.3% of above-ground biomass (AGB) is found in the natural regenerated forests, followed by cultivated lands (28.5%) and other wooded lands (22.8%) indicating that there are considerable numbers of trees in woodlands which dominate Ethiopian landscapes. An independent Soil and Litter Carbon Assessment was undertaken via an LoA with LUKE of Finland in order to assess carbon emissions from soil organic carbon.

- A total of 170 forest technicians were trained in forest inventory.
- Training on field data entry, quality control and analysis was provided at two levels.
- The field data entry, quality control and analysis first level of training was provided integrated with training on forest inventory covering all elements of forest inventory and analysis.
- The project organized special five-day training on field data entry and quality control for 13 forest technicians from all the regions based on the request of MEFCC. The training covered Collect OpenForis database design, data encoding and entry, cleansing and analysis. The national MRV staff provided the training.

Output 4: Capacities of governmental, research and civil society actors on MRV are enhanced at national and regional levels.

This training basically covered NFI (field data collection, analysis and reporting) and GIS/RS (forest change detection or activity data estimate and LULC mapping). Accordingly, the training has been offered as embedded in all the NFI and GIS/RS trainings conducted under Outputs 2 and 3.

Output 5: National RL(s)/REL(s) and relevant policies are endorsed and linked to the national Greenhouse Gases (GHG) inventory process and policy framework.

FAO provided hands-on technical support to construction of Ethiopia's Forest Reference Level (FRL). A technical document outlining the details of the FRL was drafted based on the guidance of the MRV Task Force and using the results of Outputs 2 and 3 and submitted to UNFCCC. This was followed by a technical assessment process for the proposed FRL. A series of technical comments provided by the UNFCCC Technical Assessment Team were treated by the PIT supported by Technical Team at FAO Headquarters. The final document thus resubmitted was endorsed by ministry and approved and uploaded to UNFCCC, MEFCC//REDD+ Secretariat websites for public use.

Further, Activity Data was produced for all regions and two city administrations of Ethiopia based on an output of the GIS/RS and AD trainings. A FRL for the Oromia Region was produced from NFI and RS in order to inform the design of the Oromia Forested Landscape Program.

24 MRV Task Force members and other experts from different government institutions and civil society were trained on the different issues for FRL construction and UNFCCC requirements (biomes, forest definition, allometric equation to adopt, scale, scope and pools). Following training on the different FRL issues, the participants discussed and agreed to include scale, new forest definition, scope/activity-deforestation and afforestation; pools (AGB, BGB and dead wood excluding litter and soil carbon); GHG-CO₂ and forest change (2000-2013) in the FRL document and exclude forest degradation because of non-existence of globally accepted methodology for its assessment and quantification. It was however agreed to mention its significance for emission and to defer it until robust methodology is made available.

25 National and regional government experts were trained in the general concepts linked to the UNFCCC reporting processes and National Greenhouse Gas Inventory (NGHGI) and intensive hands-on NGHGI for LULUCF and agriculture. The training enabled the participants to:

- Understand the main aspects of MRV framework under the Paris Agreement and basic requirements for the GHG Inventory of the AFOLU sector.
- identify the main gaps/barriers in the country to develop the GHG Inventory from AFOLU sector and mitigation actions
- Improve the knowledge and capacity of the participants to calculate GHG emissions and removals for the AFOLU sector through hands-on training with presentations and exercises based on the FAO (MICCA) e-learning materials.

The table below summarizes the financial plan and expenditure for the MRV component: Component 2.

Activity	Grant Amount (in US\$ 000)	Actual Expenditures (in US\$ 000)	Outputs
<p>Activity 1.2: Needs assessment and establishment of institutional arrangements for MRV implementation</p> <p>Activity 1.3: Assess existing data storage and management systems relevant for MRV and Design and implement management solutions for key elements of the MRV system</p> <p>Activity 1.4: Develop a data sharing policy (Guideline) for internal and external usage</p> <p>Activity 1.5a: Procurement of equipment of data management systems, hardware, software and equipment to improve MRV data collection, management, storage, analysis and dissemination</p> <p>Activity 1.5b: Procurement of IT expertise to provide system management and IT support throughout project</p>	424,699	407,782	<p>Output 1: Establishment of institutional arrangements and data management systems to support the national Measurement, Reporting and Verification (MRV) system are in place and fully operational.</p>
<p>Activity 2.2: Undertake trainings on remote-sensing techniques/analysis and open-source Geographic Information System (GIS) software for key mapping institutions</p> <p>Activity 2.4: Perform land cover change assessment with accuracy assessment and assess potential trends, including acquisition of high-resolution images and other proxy data</p> <p>Activity 2.5: Establish and train an operational remote-sensing forest/land-use monitoring unit</p> <p>Activity 2.6: Develop a forest and land use monitoring web-portal to display REDD+ information</p> <p>Activity 2.7: Identify potential technologies to detect forest degradation</p>	821,926	480,348	<p>Output 2: A historical land cover change assessment is produced and national MRV institutions have the capacities and systems to monitor Reducing Emissions from Deforestation and Degradation-plus (REDD+) activity data</p>
<p>Activity 3.1: Purchase of 6 vehicles for the NFI work</p> <p>Activity 3.2: Existing data is analysed to assess accuracy and relevance for REDD+ needs, notably for calculating EFs.</p>			<p>Output 3: Capacities to carry out National Forest Inventory (NFI) in the context of REDD+ are enhanced and new</p>

<p>Activity 3.3: Other relevant data sets are compiled and analysed to assess potential contribution to the development of EFs and other MRV needs</p> <p>Activity 3.4: The relevance of proxy data to assess forest degradation emission factors (e.g. fuelwood usage, small-scale farming, and logging) is tested</p> <p>Activity 3.5: Provide trainings/workshops to field crews on field data collection, GPS/GIS usage for the NFI</p> <p>Activity 3.6: Provide trainings and support on field data entry, quality control and analysis</p> <p>Activity 3.7: Support field work to carry out the national forest inventory (NFI) in key land classes areas</p> <p>Activity 3.9: Field data from NFI is entered, analysed and combined with existing data to produce relevant forest information/analysis, including EFs for key land classes</p> <p>Activity 3.10: Support trainings in new research activities to improve biomass estimates</p>	2,512,192	2,408,754	information is produced by the NFI to improve carbon measurements and other relevant information on forest use and forest cover.
<p>Activity 4.1: Provide trainings and material to trainers on the basics of National Forest Monitoring Systems (NFMS), MRV, field data collection and local-level mapping</p>	42,450	46,176	Output 4: Capacities of governmental, research and civil society actors on MRV are enhanced at national and regional levels
<p>Activity 5.1: Test and calculate different RL/RELS approaches and conduct an analysis of key national circumstances for FREL/FRLs</p> <p>Activity 5.2: Undertake trainings on RL/RELS and facilitate a national dialogue to advance RL/REL(s) adoption and its policy application.</p> <p>Activity 5.3: Provide trainings on Land Use Land Use Change and Forestry (LULUCF)/Agriculture, Forestry and other Land Use sector (AFOLU) GHG inventories software, methods and UNFCCC reporting requirements for REDD+ in coordination with Climate Resilient Green Economy (CRGE) process</p>	114,081	461,946	Output 5: National RL(s)/REL(s) and relevant policies are endorsed and linked to the national Greenhouse Gases (GHG) inventory process and policy framework
Total	3,915,348	3,805,636	

2.3. Component 3: Preparation of REDD+ Pilot Projects (US\$ 4.4 M)

This component has provided support to decentralized REDD+ structures to effectively achieve readiness at regional and lower levels. Accordingly, budgets were planned for REDD+ Pilot design, coordination of the regional REDD+ Steering Committee (RSC) and the regional REDD+ Technical Working Groups (RTWG), placing adequate human, technical and operational resources for the REDD+ Coordination Units have been provided as needed.

Additionally, the portion of the Additional Grant has also financed the design and preparation of REDD+ activities, to generate concrete lessons for the REDD+ Strategy, while demonstrating early wins and

helping keep decision-makers at both national and local levels engaged in the process of investment activities. As a result, the Additional Grant helped in improving the GoE's capacity to develop robust project proposals that are now being implemented with financial sources other than the readiness grants. In this respect, the Additional Grant has been used to finance the following:

- Salary and operational costs for staff hired to strengthen the Regional REDD+ pilots such as Regional REDD+ pilots Coordinators, Senior Foresters MRV specialists, and support staff (Financial Management Specialists, Secretary Cashiers, Drivers. In total 47 staff have been hired in Oromia, Amhara, SNNP and Tigray regional states, and support provided from AF grant until project closure. After the launch of OFLP, the staffs at Oromia REDD+ Coordination Unit have received financial salary and operational costs from the OFLP. In consultation of the Norwegian Embassy and the Ministry, the staffs at the National REDD+ Secretariat and the 3 Regional Coordination Units have been maintained to support the implementation of REDD+ Investment Program (RIP). These structures now receive salaries and operational costs from the new REDD+ Investment Program.
- Capacity strengthening targeted at the members of the regional REDD+ Coordination Units, regional, REDD+ Steering Committee and regional TWGs including the cost of trainings, workshops and the operational costs associated with the meetings of the RSC and RTWG.
- Consultation, awareness raising and other capacity building activities and institutional strengthening targeted at the woreda and community levels. A case in point is the extensive consultations made on the OFLP design process over 2 years period.
- The preparation of Regional REDD+ Program proposals for SNNP, Amhara and Tigray regions

Details of support provided from the AF grant to decentralized REDD+ structures and project design are presented below.

2.3.1 Support to the regional REDD+ Readiness Management Arrangements

Oromia REDD+ Program has been initiated in February 2013. Staffing for facilitating the design of the Oromia REDD+ Program (renamed later as Oromia Forested Landscape Program - OFLP), a national REDD Pilot, has started earlier in May 2014. Three regional states (Amhara, Tigray and SNNPR) have been supported since mid-2015 to realize establishment of REDD+ Regional Offices .

The regional REDD+ coordination units officially started to implement the REDD+ readiness in the year 2016. The regional steering and technical working groups were established aimed to provide oversight over the Regional REDD+ program.,

2.3.2 Organize stakeholders' awareness creation and consultation workshops/Exposure Visits

Ethiopia's REDD+ Readiness has involved various stakeholder for consultation and capacity building. Several meetings at the national and regional levels have been organized, also with forest dwelling communities, local and regional agencies, universities and research institutions,

REDD+ awareness raising and consultation events gathered a total of 493,006 people (male 448,956 and female 44,050) from regional, woreda and community on various issues (Climate change and forestry, CRGE strategy, REDD+ strategy, OFLP design, design of other regional pilots benefit sharing mechanism, safeguards, etc), training and capacity building, inter-regional experience sharing, all consultations, training and awareness raising information is found on the following link: <https://ethiopiareddplus.gov.et/redd-readiness/redd-safeguards/consultation-participation/summary-report-of-consultation-and-participation>

In addition, financial support from the Additional Grant has been allocated to the regional and national readiness budgets to support the following activities

- Consultation activities with stakeholders at regional level on identification and coordination of relevant on-going initiatives,
- Consultative workshops on the potential role and engagement mechanism of the private sector in REDD+ implementation,
- Workshops targeting law enforcement officials on new forest legislation and governance, and
- Exchange visits within the country.

2.3.3 Capacity building

Capacity building activities were provided to key stakeholders. A lot of capacity building activities mainly of trainings, consultations and awareness creation workshops have been organized, and supportive REDD+ communication materials were distributed to stakeholders to ensure that all levels of stakeholder institutions are clear with the REDD+ mechanism.

Significant financial resources from the readiness grants have been committed to purchase vehicles to support the REDD+ institutional at federal and regional levels as well as MEFCC and its line bureaus at the regional levels. In consultation with the World Bank 12 vehicles (6 hard tops and 6 pick-ups) have been purchased from the FCPF grant and 5 vehicles (pick-ups) for the OFLP from the AF gnat. This has played a key role in the facilitation of readiness implementation and design of new projects.

2.3.4 Ensure REDD+ communication, promotion and outreach

As explained above, several of the national and sub-national discussion forums were covered by national and local media outlets including radio, TV and newspaper. Printed Communication material on REDD+ prepared (brochures, caps, T-shirts, posters) has been published and distributed to the general public. REDD+ communication focused on stopping deforestation and awareness creation on forest, climate change and its impacts to whole community of the regions through different communication and promotional materials like Radio broadcasting with local languages were carried out. Communications with multilevel flow of information were used. Examples are mentioned below:

- **Print Media:** 8782 T-shirts, 8550 Caps Prepared and distributed for tree planting promotion; 1000 T-shirts 1000 Caps Prepared and used during bicycle competition to promote REDD+; 2,500 notebooks, 2,500 wall calendars, 2,500 new year postcards, 1,000 booklets, 1,000 pens 100 REDD+ logo stickers and 5750 posters and 28 Roll ups, all with REDD+ logo and distributed to regions; and Brochures (2000 in Amharic, 500 in Afan Oromo and 500 in Tigrigna)

Electronic Media: 12 live Radio talk shows, 33 TV programs, 38 Radio programs, 31 spots, 1 TV Q & A, 2 TV Panel discussions.

Component 3. (\$4.4M as approved / \$ actual)

Activity	Grant Amount (in US\$ 000)	Actual Expenditures (in US\$ 000)	Output
Consultancy and Audits ²		59,077.75	Capacity of experts, community and civil society on REDD+ at regional levels Strengthen the budget monitoring aspect of

² Budget allocated for technical studies at subnational level have been cancelled in consultation with the World Bank and budget shifted to purchase five vehicles for OFLP.

	3,299,797.00		the Project
Training and Workshops	415,000.00	1,432,774.21	Capacities of governmental, research and civil society actors on REDD+ are enhanced at national and regional levels
Goods	422,000.00	581,224.59	Capacities to carry out regional REDD+ pilots projects
Non-Consultancy	40,000.00	50,436.50	Capacity, awareness and skills enhanced
Operational Costs	240,093.00	861,724.68	Regional readiness created
Total	4,416,890.00	2,985,237.72	Strong regional readiness implantation assured

3. Additional Project Outcomes

The readiness project has triggered upgrading the institutional profile at national, and regional and lower levels. The national forest sector had a team of 6 experts at national level before the establishment of MEFCC. Now the forest sector has over 80 experts organized in 4 Director Generals, and 10 Directors. Similarly, the Oromia, SNNP, Amhara, and other regional states have taken steps to upgrade the institutional profile of the forest sector, and create alignment with the MEFCC. The new forest proclamation (No 1065/2018) has also been an indirect result of readiness assessment on enabling environment for REDD+ implementation.

Ethiopia's R-PP Implementation Progress Status

COMPONENTS	SUB-COMPONENTS	PROGRESS STATUS ³
1. Readiness Organization and Consultation	1a. National REDD+ Management Arrangements	Significant Progress
	1b. Consultation, Participation, and Outreach	Significant Progress
2. REDD+ Strategy Preparation	2a. Assessment of Land Use, Land Use Change Drivers, Forest Law, Policy and Governance	Significant Progress
	2b. REDD+ Strategy Options	Significant Progress
	2c. Implementation Framework	Significant Progress
	2d. Social and Environmental Impacts	Significant Progress
3. Reference Emissions Levels/Reference Levels	3a.REL/RLs	Significant Progress
4. Monitoring Systems for Forests, and Safeguards	4a. National Forest Monitoring System	Significant Progress
	4b. Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards	Significant Progress
5. Program Monitoring and Evaluation	6a. Program M&E	Significant Progress

³**Green:** Significant Progress; **Yellow:** Progress well, further development required; **Orange:** Further development required; **Red:** Not yet demonstrating progress; NA: Not Applicable

4. The Sustainability of the Project

Ethiopia has been able to smoothly move from the REDD+ readiness to REDD+ investment by designing and implementation of two REDD+ projects: OFLP and REDD+ Investment Program (RIP). Further, as REDD+ is embedded in the CRGE strategy (national climate policy), the government considers REDD+ as key national program for delivering on CRGE goals and NDC. There is full ownership and support from GoE for REDD+ program. Ethiopia will continue to translate the national REDD+ strategy, aligned with the CRGE vision, into programs and projects so that it will deliver on ambitious forest conservation and restoration plans. The Forest Sector Transformation Unit (FSTU) has been established within the ministry, among other things, to write project proposals that will mobilize financial resources for the implementation of national REDD+ strategy and the Forest sector Development Program (FSDP).