AFoCO Project Document

Project Code	AFoCO/026/2021

Project Profile			
Project Title	Re-greening the bare lands through promotion of locally customized restoration models		
Project Duration	Estimated start date:1 October 2022 Estimated end date: 30 September 2026		
Implementing Agency	General Directorate of Forestry, Coffee and Industrials Plants, National Directorate of Forest, Watershed and Mangrove Areas Management, Department of Reforestation		
Participating Country(ies)	Timor-Leste		
Project Site	1. Manatuto Municipality – 1 site 2. Aileu Municipality – 1 site		
Main Objectives	To implement Locally appropriate Forest Landscape Restoration (FLR)initiativeprovide socio-economic and environmental benefits for households, communities, private actors and government authorities in Timor-Leste		
Target Area	1st Priority Area: Primary Target Area: Initiating customized restoration and reforestation models. 2nd Priority Area: Local Livelihood improvement and community based small enterprise development.		
Budget and source of Finance	Total : US$ 1,050,000 • AFoCO : US$ 1,000,000 • National Contribution : US$ 50,000		
Proponent's Contact Information			
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Table of Content

Summary

1.1 Problems to be addressed:

Timor-Leste, the youngest southeast country, has about 64% of its 1.2 million population dependent upon agriculture and natural resources for their livelihoods. Due to traditional agriculture practices, such as slash and burn activities, land degradation is a serious problem in many parts of the country and because of a lack of capacity for appropriate management practice in local communities, these practices continue. Lack of clear land tenure, shifting cultivation and heavy dependence upon firewood for energy are other reasons which exacerbate land degradation. Moreover, governmental institutions in Timor-Leste have lacked the capacity, knowledge nor resources to implement sustainable land management practice.

Locally customized Forest Landscape Restoration (FLR) is essential to restore the ecological and economic value of these critical landscapes. However, to date, limited progress has been realized due to lack of appropriate business model and financing opportunities, low economic opportunities for local communities and smallholders, and associated low level of stakeholder participation. To achieve restoration goals, actions will be needed to scale up from current models based on government funding or donor driven projects to engaging large-and small-scale private sector investors whilst ensuring that restoration efforts also integrate the needs of local people and provide local economic opportunities.

1.2 Summary of the Proposed Strategy

This project would engage a range of stakeholders to ensure better understanding of the degraded forest and restoration priorities in East Timor and employ a combination of methods such as participatory approaches, geo-spatial analysis, and participatory action research. Based on the stakeholders' interests and priorities, we will develop and demonstrate locally appropriate restoration and business models that address the climate and development goals of East Timor. The focus will be on restoring degraded lands with mixed species that have both economic and ecological functions. Training and capacity strengthening of key partners in the technical aspects of restoration planning and implementation, business development, and field-based research will be carried out to ensure sustained engagement and continuity of project activities into the future. The results both technical and research will inform and shape key development of policy processes and goals, such as restoration policy, forest-based livelihood improvement and achievement of sustainable development goals. Lessons from this project can be applied elsewhere in the target countries and other parts of South.

1.3 Goal and Objectives

Goal:

To implement the locally appropriate Forest Landscape Restoration (FLR) initiatives which can provide socio-economic and environmental benefits for households, communities, private sector and government authorities in Timor-Leste

Specific Objectives:

1. To establish database of the forestland degradation and to build capacity of farmers in the project sites
2. To develop a business model for tradeoff of key ecosystem goods and services through a network of community-based enterprises

Expected outputs at the end of the project will be:

1. Generated and analysed Information on degraded landscapes (geospatial datasets) and on the socioeconomic conditions of the population living in the project sites
2. Enhanced capacity of farmers in the project sites in implementing FLR initiatives
3. Identification of mixed species of high economic value and restoration of 150ha of the degraded areas in the project sites by using locally appropriate FLR initiatives
4. Development of thea business model for trade-off of ecosystem goods and services to increase livelihoods
5. Dissemination of knowledge and lessons learned about trade-off and synergies of key ecosystem goods and services and socioeconomic and environmental impacts on FLR initiatives

In order to achieve the objectives and outputs, the project will implement a number of activities. These outputs will be used as **success criteria** at each stage of the project to ensure that progress is monitored and managed effectively.

Activity A.1: Spatially explicit mapping and database of the state of forest land degradation and assessing restoration opportunities in the selected municipalities in two geographic regions
Activity A.1.1Collate existing geospatial datasets and analyze for land use and land cover change
Activity A.1.2Conduct rapid rural appraisal (RRA) to determine social economic information of the local communities on selected site as well as history of land use change the selected municipalities.
Activity A.1.3 Produce spatially explicit mapping of forest land degradation in the selected municipalities
Activity A.1.4 Identify and assess forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives
Activity A.1.5Analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use, including FLR
Locally appropriate FLR initiatives that integrate mixed species of high economic value and ecological function are identified, customized, and piloted, which are monitored and evaluated.
Activity A.2Stakeholders engagement and capacity building of communities, their initialization and good governance for FLR initiatives

Activity A.2.1Conduct a series of trainings, workshops and study tours for MAF, NGOs and local research organizations staff to enhance their knowledge and transfer skills related to FLR initiatives, monitoring and reporting.

Activity A2.2 Conduct a series of training, workshops and study tours for farmers and participating communities to enhance knowledge and transfer skills related to FLR initiatives.

Activity B.1Restore the degraded are in the project sites by utilizing the appropriate FLR initiatives

Activity B.1.1Identify mixed species of high economic value and ecological functions, in consultation with stakeholders

Activity B.1.2 Restore 150ha of degraded areas at pilot scale in the project sites by using locally appropriate FLR initiatives

Activity B.2 Develop the business model related to the community-based enterprise with private sectors

Activity B.2.1Identify private actors and most suitable network of enterprises to work with community groups in the project sites

Activity B.2.2 Identify the key ecosystem goods and services relevant to stakeholders

Activity B.2.3 Analyze trade-offs and synergies of key ecosystem goods and services

Activity B.2.4Develop business models for tradeoff key ecosystem goods and services in consultation with identified enterprises, community groups and interested stakeholders

Activity B.3Share knowledge of trade-off and synergies of key ecosystem goods and services and evaluate the social, economic and environmental impacts and contributions of FLR initiatives

Activity B.3.1Knowledge sharing through the advocacy activities about the impacts of FLR initiative in the availability of ecosystem goods and services

Activity B.3.2Evaluate the social, economic and environmental impacts and contributions of FLR initiatives for supporting the livelihoods of the target villages.

1.4 Expected Results

Anticipated results in Timor-Leste include assessment of degraded lands and conditions, institutional and livelihood conditions, and the production of spatially-explicit suitability maps for a variety of timber, non-timber and biofuel species and ecosystem services. The project will also develop FLR business models that include: i) farmers' capacity building in selecting appropriate species and management practices, ii) inclusive approaches to land restoration planning, iii) increased private sector investment, and iv) linking value chain actors including farmers, new technology providers, investors and other stakeholders. Investors will benefit from new and sustainable investment and technology opportunities, while local communities (women, men and youth) will benefit through increased investment in local forest landscape restoration and provision (and sale) of ecosystem goods and services. Local industries will benefit from increased supply existing and new resources and new market and economic prospects.

SECTION A. PROJECT CONTEXT

1. Background

Since independence in 2002, Timor-Leste has experienced significant deforestation and land degradation due to increased pressure from a growing population resulting in 20% of forest cover lost between 2003 and 2012. Approximately 60% of the population are agriculture dependent subsistence farmers. These farmers experience annual food shortages and drought during the dry season and are driven to clear more forested land for shifting agriculture, firewood for household use and sale, and burning grasslands and forests so fresh regrowth can feed free grazing livestock. The rate of deforestation and degradation is 1.3% per year and as a result, watersheds which cover 70% of the country, have reduced water absorption leaving them prone to floods and significant soil erosion. This has resulted in poor soils unable to support the current unsustainable agricultural practices.

Subsistence farmers have limited knowledge or skills to implement more sustainable agriculture practices, limited understanding of the value of forests and the benefit in conserving biodiversity within these forests. There is little understanding of the impact on deforestation and climate, both locally and globally, with a limited understanding of the link between forests and climate resilience or the drought and flood cycles which they experience. As a result, they clear ever greater areas of forested land, cultivate steep slopes and continue to practice grassland and forest burning for short term benefits. This is exacerbated by a growing population putting more pressure on the land to feed a greater number of people.

The Government of Timor-Leste has highlighted these issues in its medium-term development plan and Ministry of Agriculture, Forestry and Fisheries (MAFF) strategy with the aim for Land Degradation Neutrality. However, due to limited budget, human resources and expertise, the MAFF is unable to provide extension services to communities required to build awareness and train local farmers in sustainable practices and do not possess their skills to map watersheds and produce suitable agroforestry plans in orderto overcome deforestation and land degradation.

As a result, the General Directorate of Forestry, Coffee and Industrial Plants (GDFCIP) has invited the Centre for International Forestry Research (CIFOR) to work in partnership with GDFCIP to design long-term sustainable reforestation strategies through practical agroforestry solutions to overcome the current problems in Timor-Leste. GDFCIP and CIFOR held a participatory workshop in Bali on 1st – 2nd of November 2019, to identify target sites out of the 29 prioritized watersheds and design the action to support MAFF achieve its medium-term strategy. CIFOR, recognized as a world leading expert on reforestation of tropical forest landscapes, brings community-based agroforestry solutions and technical expertise on suitable species maps to will work closely with GDFCIP to build capacity of government extension service providers to produce GIS maps of watershed areas, develop suitable species maps for the targeted sites and implement locally customized Forest Landscape Restoration (FLR) plans which will restore ecological and economic value to the sites which local communities can

derive a livelihood from. GDFCIP and CIFOR will develop guidelines and processes for watershed assessment and rehabilitation which can be used by MAFF for other watersheds throughout the country.

The project will focus on 2 villages in two (2) different geographic and geophysical locations:

- Maabat village in Manatuto Municipality in the East of Timor-Leste
- Fahiria village in the Aileu Municipality in the highlands of Central Timor-Leste

2. Conformity with AFoCO's objectives and strategic priorities

The project fulfills the core values of the AFoCO by responding to the specific needs of the GDFCIP and local communities living in Laclo watershed areas of Timor-Leste. The project brings together community-based forestry strategies, in cooperation with international partners and the knowledge and policies of the GDFCIP to meet the needs of local communities through equity and sustainable practices.

Additionally, the project supports the achievement of the AFoCO Strategic Plan (2019-2023) by supporting the achievement of increasing forest cover by 3% worldwide, as the project will be reforesting 150 hectares of degraded watershed land through active and passive reforestation. The project is designed to develop locally appropriate Forest Landscape Restoration (FLR) initiatives in participation with local communities, using a range of high value forest species and intercropping methods to improve the livelihoods and income of the agricultural dependent communities in each of the target sites. Finally, as the project supports the implementation of the Paris Agreement through developing the skills and competency of local forestry officials and extension workers, developing appropriate forest assessment and reforestation practices improving economic and ecological services provided by forests and institutionalizing these into the Ministry of Agriculture, Forests and Fisheries in Timor-Leste.

As the project will assess and analyze the specific conditions in the 2 targeted municipality in the watershed areas, producing suitable species maps and developing locally customized FLR plans for each site, this adheres to the strategic priority of 'Initiating customized restoration & reforestation models' and applies a balanced and integrated approach for the benefit of local communities and the natural habitats and forest ecosystems upon which they depend. The FLR plans will work with local community members to identify and incorporate food, fuel and fodders species of trees and plants as well as high value species. The project will work with communities and local businesses to develop community-based enterprises which will provide income and alternative livelihood strategies to build their resilience to climate and environmental risks. This will support the achievement of strategic priority 'Local livelihood improvement & community-based small enterprise development.' The project will assess the success of the different strategies to identify which should be incorporated into policy in MAF.

In addition to 1 target priority area, the project will apply reforestation strategies which train local communities on fire management practices, replant degraded watershed areas and reduce the number of free grazing animals in the area. These practices should reduce the number of

forest related disasters through the incorporation of these practices into local watershed/village councils' rules and thus reduce and control forest fires, floods, landslides and soil erosion, helping to achieve strategic priority 'Introducing systematic management on forest-related disasters.' Finally, the project enables collaboration and capacity building among stakeholders, strengthening partnership between the GDFCIP and international organizations, enabling collaboration and capacity building among stakeholders. As a result, the partners will have strengthened institutional capacities to address the socio-economic needs of the communities. The lessons and learned from the project will be shared by the Government of Timor-Leste, one of the AFoCO official members, promoting the strategy to other member countries. This will support the achievement of Strengthening institutional capabilities, diversifying resources, & promoting regional actions.

3. Regionality

The project will focus on dealing with the significant and unusual issues related to highly degraded watershedareas, deforestation and livelihood issues in the country. Furthermore, the project will learn from various activities by sharing successful stories and experiences in cooperation with other member countries.

4. Information on project target area

4.1. Geographic information

Timor-Leste (8°50 S and 125°55 E) covers the eastern half of the Timor Island, sharing its border with Indonesia and the north-west boundary of Australia. Timor-Leste also includes the islands of Atauro and Jaco, and covers an area of 15,007 km2, with a coastline of 706 km. The lowest points are the Savu, Timor, and Banda Sea's, and the highest is FohoTatamailau (2,986 masl). The capital of Timor-Leste is Dili. The country is divided into 13 municipalities of which one, Oecusse, is a coastal enclave sitting within the western part of the Timor Island. The majority of Timor-Leste is steeply sloped (gradients greater than 40%). The country extends from east to west and is very narrow from north to south. Three (3) sides are surrounded by the sea with a mountainous central ridge where the elevation rises to almost 3,000 meters above sea level at Tatamailau (Mount Ramelau).

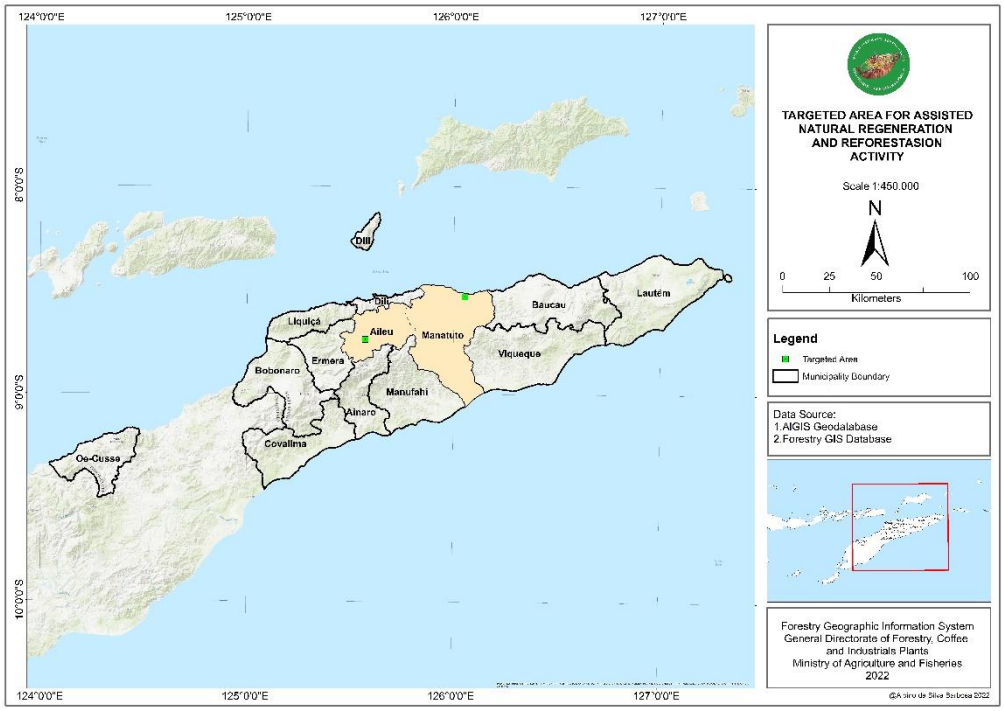
Timor-Leste has a hot tropical climate with a dry season, May-November, and a wet season, December-April. The temperature on the coast is usually between 25-35°C and in the mountains at higher elevation it is much cooler, sometimes wet and misty and at other times clear. There are many different micro-climates from dry barren hill sides to thickly forested peaks interspersed with cultivated areas.

Most of Timor-Leste's large rivers completely disappear in the dry season, but after heavy rain, they can turn into raging torrents with flash flooding. Lake Ira Laloro is the only lake of any size. There are also smaller salt lakes and along the south coast marshes teeming with wildlife. Bubbling mud pools can be viewed in Oecusse and there are geothermal hot springs at Marobo, WaicanaUatoCarbau and on Atauro to name a few.

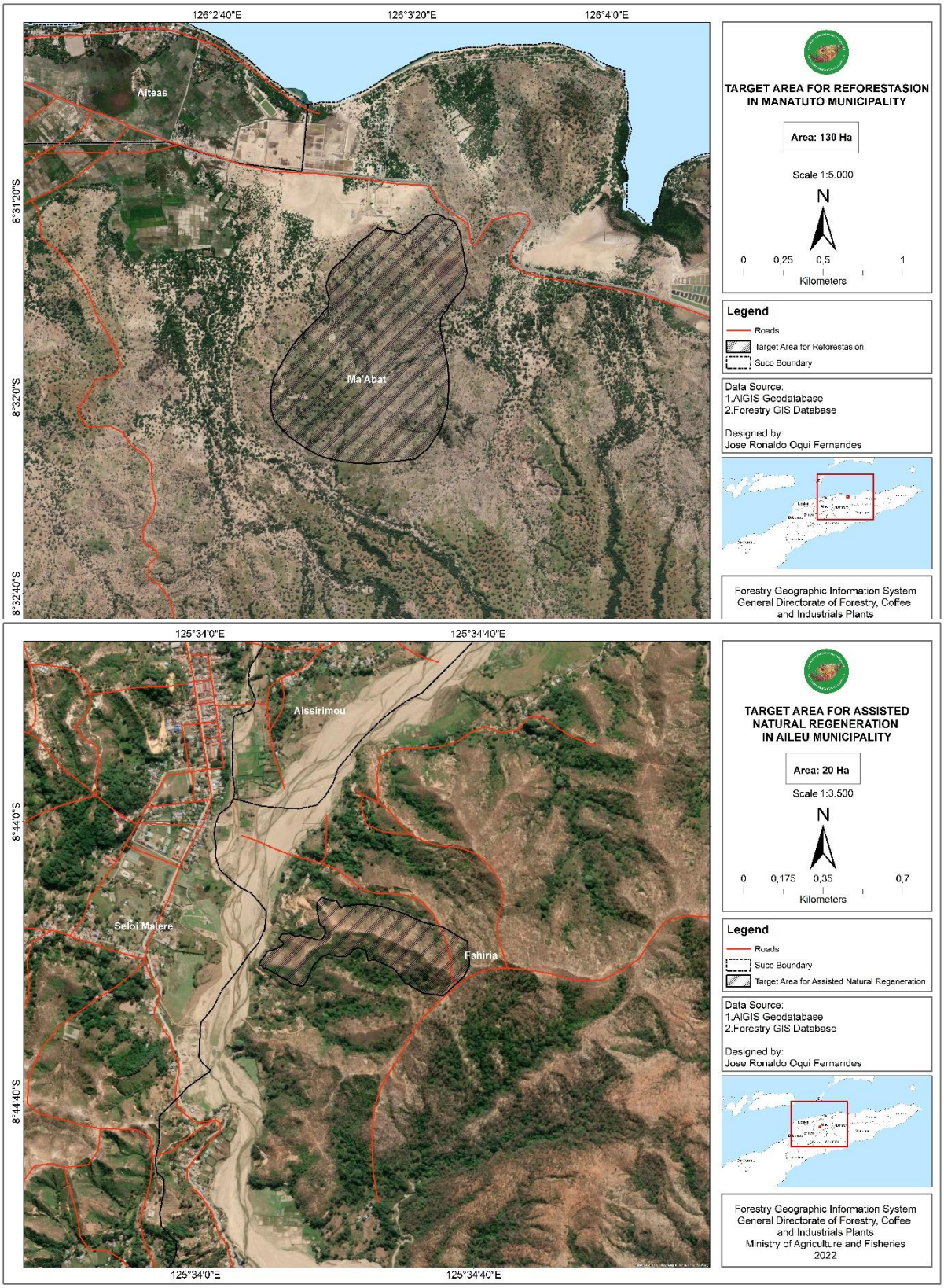
The geographic characteristics of Timor-Leste make it less than ideal for agricultural production: rugged, erosion-prone terrain, poor soils, and varying, often unpredictable rainfall. Nonetheless, the economy is predominantly agricultural, with more than70 percent of the population living in rural areas. Even though the agriculture sector contributes to only 30 percent of the GDP, it is estimated that it provides subsistence to 70 percent of the population. Households heavily rely on the cultivation of staple crops such as maize, rice, cassava, and sweet potato. Crop yields are well below the average of East Asia, leading to problems of food security in many communities. These low crop yields significantly impact communities during the country's dry seasons.

The project will focus on 2 villages in two (2) different geographic and geophysical locations as stated in the maps of the project sites;

- Maabat village in Manatuto Municipality in the East of Timor-Leste
- Fahiria village in the Aileu Municipality in the highlands of Central Timor-Leste



<Figure 1. Timor-Leste Government map of the locations>



<Figure 3. Map of Fahiria village in Aileu municipality>

4.2. Environmental information

Timor-Leste belongs to the Wallacea Biodiversity Hotspot which is situated between the Sunda and Sahul continental shelves and includes a large part of the Indonesian archipelago. Wallacea is comprised of 3 biogeographic sub-regions: Maluku, Sulawesi and Lesser Sundas (of which Timor-Leste is a part). The area is known for high levels of biodiversity and endemicity.

Timor-Leste is alsopart of the Coral Triangle which offers rich marine biodiversity. The Coral Triangle holds some 76% of the world's coral species, six of the world's seven marine turtle species, more than 3,000 species of reef fish and a wide diversity of marine mammals (including whales and 22 species ofdolphin). The marine basins between the island arcs may be several thousand meters deep and are swept by powerful currents forming a barrier to the dispersal of terrestrial species and an obstacle to the dispersal of marine species. This results in a high level of endemicity on the island.

Forest area in Timor-Leste has decreased from 966,000 ha in 1990, to 854,000 ha in 2000, to 697,200 ha in 2014, which is a cumulative 27.8% reduction over 25 years, or an annualized average loss of approximately 1.1%. Over this same time period, agricultural land has increased from 318,000 ha in 1990 to 380,000 ha in 2014, and other land, mainly degraded unproductive land, has more than doubled, with 409,800 ha in 2014 compared to 203,000 ha in 1990. The annualized average 1.1% of forest loss is a particularly high rate, considering that globally the net annual rate of forest loss has slowed from 0.18 percent in the early 1990s to 0.08 percent during the period 2010-2015. The calculated loss of dense forest areas, defined as having crown cover of 60-70%, in Timor-Leste is even more alarming, at a rate of 3.92% per year over the period of 2003 to 2012. Roughly half of the land area in the country is categorized under the mosaic land use classification. 2 indigenous tree species produce valuable timber, suren (*Toonasureni*) and sandalwood (*Santalum album*). Extensive areas of Ai ru (*Eucalyptus urophylla*) occur in moderately dense forest, and Ai bubur (*E. alba*), is found in open forest and savannah woodlands. The tropical dry monsoon forests include a mixture of species, of which the most important is Ai na (*Pterocarpusindicus*). Teak (*Tectonagrandis*) is also a significant timber tree, first established in Timor more than 100 years ago.

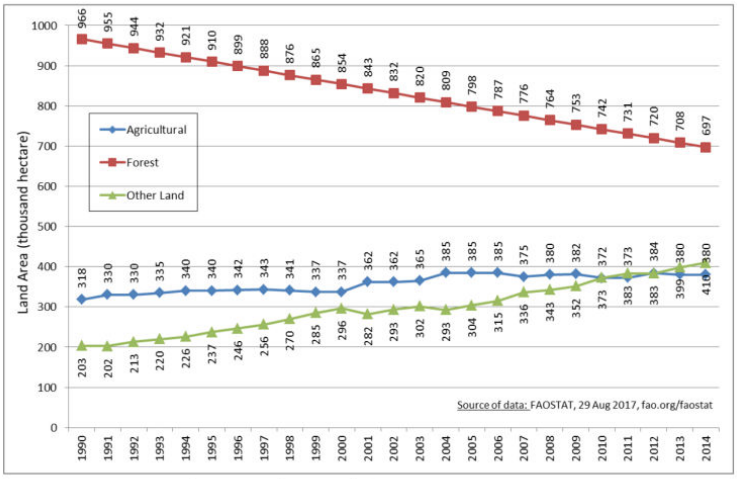


Figure 6: *Land use trends in Timor-Leste 1990-2014*

Timor-Leste has thin soils which means that they tend to have low to medium fertility and are typically fragile and highly susceptible to erosion (especially with the heavy rainfalls experienced during the rainy season). The country's significant altitudinal range plays an important role in modifying soil formation through temperature and rainfall variation leaving four major soil units and creating 5 distinct forest areas:

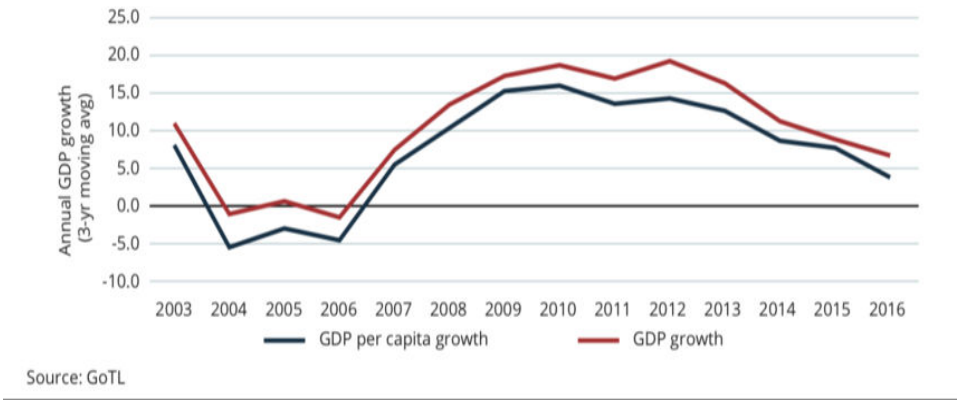
a. The eastern region contains the majority of primary forest within the Nino Konis Santana National Park;
b. The Northern area contains mainly drought-resistant tree species and is also where the widest stretches of mangrove are located;
c. The central area is dominated by coffee plantation, sparse, dry forest and mosaic land-use (remaining mountain forests here are located in steep gullies or rocky locations);
d. The western region contains smaller areas of primary forest;
e. The southern area contains mostly coastal forest including swamp and mangrove.

Timor-Leste's mostly mountainous environments have experienced significant destruction of natural capital and ecosystem services caused variously by deforestation, poor farming practices, wildfires and overgrazing. Most worryingly, the country now experiences extended periods during which water is not available in rural communities. In total only 3 of the 29 main river catchments in Timor-Leste are now considered to be perennial. This lack of water flow, over already shallow soil, is directly influenced by the reduced vegetative cover which would otherwise allow for deeper permeation of water into the shallow soils.

- **4.3. Socio-Economic information**

Since independence, Timor-Leste has made strides towards securing lasting peace and stability, improving security and living standards and starting the process of strengthening institutions in the country. However,poverty levels remain very high, and in a context where secure peace

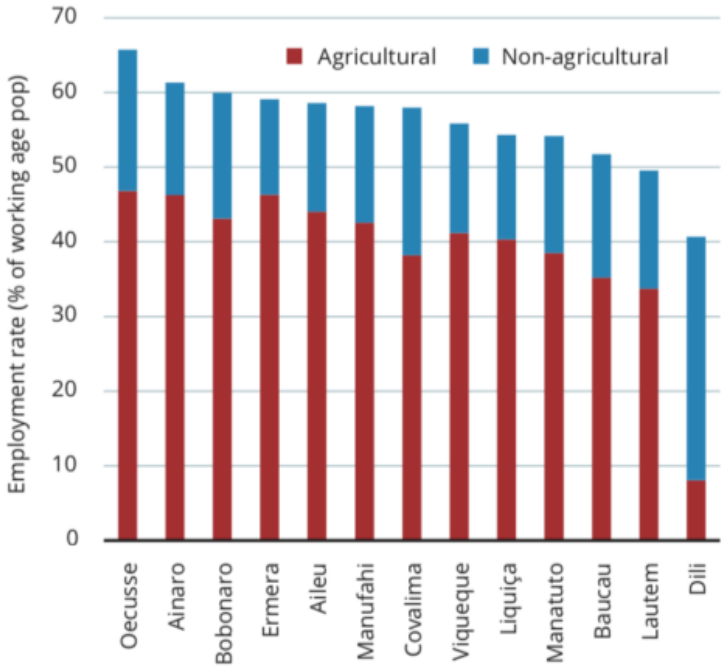
and inclusion is only just emerging, there remains risks that can hold back further development progress, or even move the country backwards. Current trends in the economy have shown a reduction in GDP over the last 5 years.



Source: GoTL

Timor-Leste experiences very high levels of extreme poverty, hunger and child malnutrition as well as low levels of formal education. Over40 percent of the population are estimated to lack the resources needed to satisfy basic needs, based on the latest Survey of Living Standards (2014/15), and 30 percent of the population still live below the international poverty line of $1.90 a day. Many surveys indicate that half of all children suffer from stunting due to a lack of adequate nutrition and calorie consumption across the population is very low. In order to overcome this, Timor-Leste will need to engage the private sector to create jobs for its fast-growing working age population. Most of the jobs created over the last decade have been through the expansion of the public sector. The development of sustainable jobs by the private sector is now more urgent than ever, so to avoid the possible negative social impact of a large and growing number of unemployed youths and adults. In Timor-Leste, approximately 50% of employment is dependent on agriculture and thus, private sector engagement in this field is imperative to improve livelihoods, increase income and the development of value-added activities for raw materials.

As seen from the graphic below, employment in the 2 municipalities of Manatuto and Aileu areheavily dependent on agriculture, with over 40% of the populationsengaged in the agricultural sector.In order to ensure economic growth in thesemunicipalities, it is vital that degraded lands are regenerated through agroforestry practices using the locally customized Forest Landscape Restoration methodology.



Source: Census 2015

Section B. Rationale and Objectives

1. Rationale

1.1. Stakeholder analysis

Table 1. Stakeholder analysis table

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
Primary stakeholders				
Target households/ communities	Individual households living close to the degraded forest land and who rely upon and used the forest land for various forest products and other ecosystem services; Use unsustainably agricultural practices and experienced the negative impacts of forest degradation; no community or group activities for forest land rehabilitation yet	**Problem:** Deforestation and forest degradation changed forest cover to grasslands and denuded hill slopes. Soil erosion and landslides; Overexploitation of forest resources impacting on the availability of timber and fuelwood supply; Overgrazing; Reduced productivity of farmland; Lack of resources to apply forest landscape rehabilitation approach. **Needs, Interests:** Realize negative impacts of deforestation and forest degradation, soil erosion and landslides. Keen to use FLR approach for economic benefits and ecological services.	Interested households organized into community group, Apply the selected FLR approach to reverse the process of deforestation and forest degradation, Control soil erosion and landslides; Assimilate and enhance local knowledge and improved forest management; Ensure sustainable supply of forest products and other ecosystem services; Improved economy of households and local communities;	Participating households/ communities involved identifying the problem, identify and select appropriate species for FLR initiatives; plan, implement and monitor the change following the interventions
Private Sector or enterprises	Individual or private registered or unregistered company; involved in the collection and processing of forest or agro-based products and the marketing of the products.	**Problem:** Unsustainable and uncertain supply of the forest and agro-based raw materials; no access to land resources for their production **Needs, Interests:** Require sustainable supply of the forest and agro-based raw materials; Interested to continue, diversify and expand the local enterprises.	Access to the forest and agro-based raw materials and produce value added products to market, Support the financial viability of the FLR initiatives; Generate local employment and support to local economy	Private sector/ enterprises are consulted in the FLR initiatives design and plan phase to identify the raw materials they need.

Implementing agency: Department of Forest, Coffee and Industrial Plants (DFCIP	DFCIP is a national technical directorate of Ministry of Agriculture and Fisheries (MAF) and employs professional, mid-level technical and field staff in sectors including forestry, coffee and industrial plants.	**Problem:** Acknowledges deforestation and forest degradation as a major problem with huge negative impacts on ecological services; Facing challenges due to lack of financial resources and inadequate knowledge and skill of technical staff. **Needs, Interests:** Financial resources; Capacity building of the technical staff to address deforestation and forest degradation.	Contribute to the Bonn Challenge <http://www.bonnchallenge.org/content/challenge> through addressing deforestation and forest degradation	DFCIP collaborates with international partners for securing funding from AFoCO to assess and pilot FLR initiative in the selected sites in Timor-Leste. Support the capacity building of field level staff; Monitor the change following the interventions
Other National Directorates of MAF	Other National Directorates of Ministry of Agriculture and Fisheries (MAF) including agriculture, horticulture, livestocks and fisheries	**Problem:** Acknowledges deforestation and forest degradation as a major problem with huge negative impacts on ecological services; Facing challenges due to lack of financial resources and inadequate knowledge and skill of technical staff. **Needs, Interests:** Financial resources; Capacity building of the technical staff to address deforestation and forest degradation.	Contribute to the Bonn Challenge <http://www.bonnchallenge.org/content/challenge> through addressing deforestation and forest degradation. Achievement of MAF medium tern development plan.	Collaborate with DFCIP to plan, implement and monitor FLR initiative in the selected sites in Timor.
MAF Municipality Office	Field level office of the MAF with technical staff and responsible for implementation of the MAF policies and programs	**Problem:** Acknowledges deforestation and forest degradation as a major problem with negative impacts on ecological services; Facing challenges due to lack of financial resources and inadequate knowledge and skill of technical staff. **Needs, Interests:** Financial resources; Capacity building of the technical staff to address deforestation and forest degradation.	Contribute to the Bonn Challenge <http://www.bonnchallenge.org/content/challenge> through addressing deforestation and forest degradation. Achievement of MAF medium tern development plan.	Facilitate the communities to identify the problem, identify and select FLR initiatives; plan, implement and monitor the change following the interventions in the selected sites in Timor.
NGO	National or Local Non-	**Problem:** Acknowledges deforestation	Avoid duplication of the	Engaged at the national,

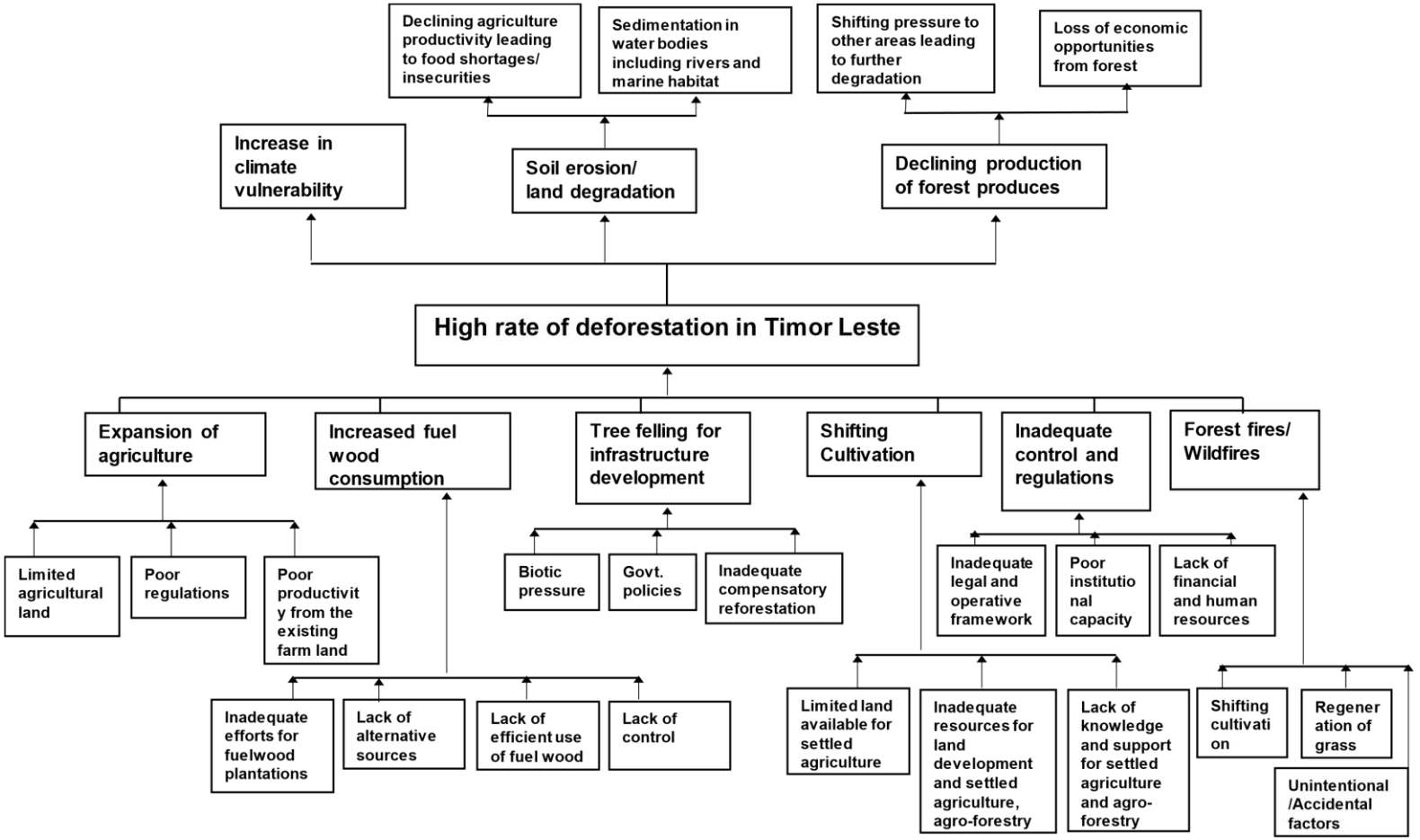
	government Organization working in forestry and agriculture sectors	and forest degradation as a major problem with negative impacts on ecological services. NGOs do not have the methods or skills to implement FLR strategies. **Needs, Interests:** Intend to collaborate at national, regional or local level and facilitate local people/communities to address deforestation and forest degradation. Training on skills in agroforestry and FLR methodologies	programs focusing on addressing deforestation and forest degradation, Knowledge and skill transfer to their field staff and communities.	regional or local level to identify problems, identify and select FLR initiatives; plan, implement and monitor change following the interventions in the selected sites in Timor
Secondary stakeholders				
International partners: Center for International Forestry Research (CIFOR)	A non-profit international research institution focusing on sustainable use and management of tropical forests in developing countries.	**Problem:** Acknowledges deforestation and forest degradation as a major problem with huge negative impacts on ecological services **Needs, Interests:** Facilitate and support DFCIP staff and other stakeholder to tackle deforestation and forest degradation	Knowledge sharing through publication of research on the FLR approaches and the provision of ecosystem goods and services to wider audiences	Undertake research on geographic extent and condition of degraded forest land, develop FLR approaches and provide capacity building support to DFCIP staff to design, plan, implement and monitor the FLR initiatives.
Development Partners (DPs) and INGOs	Bilateral or multilateral aid agencies and international NGOs working Timor-Leste in natural resource sector including forestry and agriculture	Problem: Acknowledges the significant loss and continuing threat to natural resources and their negative social, economic and environmental impacts Needs, Interests: Intend to collaborate at national, regional or local level and facilitate local people/communities to address issue.	Avoid duplication of the programs focusing on addressing deforestation and forest degradation, Knowledge and skill transfer to the communities and field staff.	Engaged at the national, regional or local level to identify the problem, identify and select FLR initiatives; plan, implement and monitor the change following the interventions in the selected sites in Timor.
Tertiary and other stakeholders				

- **1.2. Problem analysis**

  Subsistence farmers in the 2 villages of rural Timor-Leste practice the bad agricultural practices listed above; clearing forests, slash and burn agriculture, illegal collection of firewood and livestock graze freely. There is little understanding of the relationship between deforestation, bad practices and its impact on soil erosion and decreasing land fertility. There is a lack of understanding of how deforestation leads to droughts and floods. Additionally, rural subsistence farmers have limited access to markets, have a low level of understanding of market factors and limited knowledge of the advantages of group negotiation or how to run businesses. Thus, farmers are at the mercy of local traders who provide them with market access buying their produce, but also fall foul of price manipulation and debt traps when food is short or have financial requirements outside harvest time.

  The agricultural extension services provided by the government and national CSOs have limited technical and capacity building ability to develop appropriate agricultural or agroforestry models and to affect behavioral change. Also, both actors have limited financial resources to produce high quality, reliable GIS maps of the regions, design and plan the required extension services and implement these services to rural communities in Timor-Leste. To overcome these problems DFCIP and CIFOR have partnered to provide services to the stakeholders listed above. The design process is informed by the needs and solutions of subsistence farmers in the 3 villages, with the design of the project devised to ensure local ownership of the project and its results at all levels of government and the local communities.

Problem tree (source from MAF)



1.3 Logical framework matrix

Output/activities	Narrative	Objectively Verifiable Indicators (OVIs)	Means of Verification	Important Assumption
Goal: To implement appropriate forest landscape Restoration (FLR) initiatives which can provide socio-economic and environmental benefit for household, communities, private sectors and government authorities				
Outcome(s): 1. Established 2 geospatial dataset and maps of 2 targeted municipalities and disseminated the type of the database to other municipality in Timor-Leste. 2. Restored 150ha of the degraded land in 2 municipalities using the FLR initiatives and became the greening model in Timor-Leste. 3. Enhanced capacity of at least 300 farmers in 2 municipalities and promoted the knowledge and lessons & learned to the project sites and other municipality. 4. Experienced a net positive income changes of 300 households up to USD 100 based on the developed business model and expanded the model to other municipality in Timor-Leste.				
Objective 1: To establish database of the forestland degradation and to build capacity of farmers in the project sites				
Output 1. Generated and analyzed Information on degraded landscapes (geospatial datasets) and on the socioeconomic conditions in the project sites				
A1.1 Collate existing geospatial datasets and land use and land cover change	A.1.1.1 Analysis of Land Use and Land Cover Change with Remote Sensing and A.1.1.2 Review verification to validate the data analysed from Remote sensing by technical consultants under the guidance of the IA	Existing geospatial datasets and land use and land cover change in 2 target municipalities will be collated by 1st quarter of 2023.	Mid-term report and final report of a contract (2 reports from each municipalities)	Geospatial information is available and accessible. The regulations of Timor-Leste Government are considered.

A1.2 Conduct rapid rural appraisal (RRA) to determine social economic information of the local communities on selected site as well as history of land use change the selected municipalities.	A.1.2.1 Organize 4 meetings with stakeholders in 2 municipalities for a rapid rural appraisal A.1.2.2 National consultative workshop to validate the RRA report	4 meetings with 100 stakeholders from 2 municipalities are organize by the 1sr quarter of 2023. A national consultative workshop with 150 participants in the 1st quarter of 2023 will held to validate the RRA report.	RRA report Participants list Meeting minutes workshop report	
A1.3 Produce spatially explicit mapping of forest land degradation in the selected municipalities	A.1.3.1 Survey and identification of forest land degradation in 2 municipalities A.1.3.2 Processing data and mapping the results of identification of forest land degradation in the selected municipalities	2 geospatial datasets and 2 maps of forest land degradation in 2 municipalities will produce by the 1st quarter of 2023.	Progress report and final report of a contract	Local communities enumerators can be hired and trained to collect RRA data The regulations of Timor-Leste Government are considered.
A1.4 Identify and asses forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives	A.1.4.1 Identification and assessment to implement FLR initiatives A.1.4.2 Organize consultative 4 meetings/workshop in 2 municipalities (2 workshops x 2times)	Forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives will be identify and assess by 2nd quarter of 2023. 4 consultative workshops with 60 participants from 2	Progress report and final report of a contract	Geospatial and degraded land information is available and accessible.

		municipalities will organize by 2nd quarter of 2023.		
A1.5 Analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use and FLR	A.1.5.1 Conduct a study to analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use including FLR A.1.5.2 Organize National consultative workshop to validate the study and report	Socio-economic drivers of forest degradation will analyze by the 4th quarter of 2022 and 1st quarter of 2023. A national consultative workshop with 60 participants will organize by 2nd quarter of 2023	Socio-economics study report Workshop report	Information of national categories for degraded land is available.
Output 2. Enhanced capacity of farmers in the project sites in implementing FLR initiatives				
A 2.1 Conduct training and study tour for MAF, NGOs and local research organizations staff to enhance their knowledge and transfer skills related to FLR initiatives, monitoring and reporting	A.2.1.1 Organize 2 training courses for MAF, NGOs and local research organizations staff A.2.1.2 Conduct 1 study tour for MAF	2 training course for MAF, NGOs and local research organizations staff and a study tour for MAF will be conduct by the 4th quarter of 2023 and 1st quarter of 2024.	Training materials Training report Study tour report Event evaluation forms	Technical officers at DRSWC have skills and capacity for undertaking monitoring of the project
A 2.2 Conduct a series of training and study tours for farmers and participating communities to enhance knowledge and transfer	A.2.2.1 Organize 2 trainings for the farmers from each municipality A.2.2.2 Conduct one (1) study tour for farmers	2 trainings course for the farmers will be conduct by 2nd quarter of 2024 and conduct 1 study tour for the farmers from each municipality will be conducted by 4th quarter of	Training materials Training report Study tour report Events evaluation forms	Community groups include households interested to be part of the project

skills related to FLR initiative		2024.		Training modules and capacity building activities align with community needs
Objective 2: To develop a business model for tradeoff of key ecosystem goods and services through a network of community-based enterprises				
Output 3.Identification of mixed species of high economic value and restoration of 150ha of the degraded areas in the project sites by using locally appropriate FLR initiatives				
B.1.1 Identify mixed species of high economic value and ecological functions, in consultation with stakeholders	B.1.1.1 Organize 2 consultation meetings with stakeholders and development partners B.1.1.2 Organize 6 consultation meetings with communities from 2 municipalities B.1.1.3 Launching and traditional ceremony 2 municipalities	2 consultation meetings with stakeholders and development partners will be organize with stakeholders and communities from 2 municipalities in 3rd quarter of 2023. 6 consultation meetings with stakeholders and development partners will be organize with stakeholders and communities from 2 municipalities by 4th quarter of 2023. 2 traditional ceremonies and 2 launching ceremonies in each munincipality by 1st quarter of 2023.	Meeting minutes	
B1.2 Restore 150ha of degraded areas at pilot scale in the project sites by using locally appropriate FLR	B.1.2.1. Establish nursery and planting plots including fencing 130ha in Manatuto	Nursery for 130 and 20ha in 2 municipalities will establish by 4th quarter of 2023 and 124,993 seedlings	Progress report and completion report	Land is available to manage or stablish tree nurseries Local farmers are willing to plant out their land with

initiatives	B.1.2.2. Establish planting plots (130ha) B.1.2.3 Establish nursery and planting plots including fencing 20ha in Aileu Municipality for Support assisted natural regeneration B.1.2.4 Establish planting plots (20ha) for ANR B.1.2.5 Survival/growth assessment and monitoring	will prepare by 1st-4th quarter of 2024 and 2025. 130ha for reforestation and 20ha for ANR Assessed survival/growth in the planting sites and conducted a supplementary planting every year		mixed species agroforestry plots based on FLR initiative
Output 4Development of the business model for tradeoff of ecosystem goods and services to increase livelihoods				
B 2.1 Identify private sectors and most suitable network of enterprises to work with community groups in the target villages	B.2.1.1 Organize 4 consultation meetings with stakeholders and communities	4 consultation meetings with stakeholders and communities will organize by 3rd quarter of 2023.	Meeting minutes Participants list	The project facilities are effective for communication and coordination between the community groups and other stakeholders through encouraging regular meetings, interactions and sharing experience events.
B 2.2 Identify the key ecosystem goods and services relevant to stakeholders	B.2.2.1 Conduct a survey and study to identify the key ecosystem goods and services relevant to stakeholders	A survey and study to identify the key ecosystem goods and services will conduct by 2nd quarter of 2023.	List of ecosystem goods and services	The policy of Timor-Leste government will be applied.

B 2.3 Analyze tradeoffs and synergies of key ecosystem goods and services	B.2.3.1Conduct a study to analyze trade-offs and synergies of multiple ecosystem goods and services	A study to analyze trade-offs and synergies of multiple ecosystem goods and services will conduct by 2nd quarter of 2023	Study report	
B 2.4 Develop business models for tradeoff key ecosystem goods and services in consultation with identified enterprises, community groups and interested stakeholders	B.2.4.1Organize 2 consultation meetings with NGO and enterprises, Communities and interested stakeholders and develop business models in target villages	Organized 2 consultation meetings with NGO and enterprises, Communities and interested stakeholders Developed business models in target villages by 4th quarter of 2023.	Participants list Meeting Minutes Business models	Local farmers are willing to plant out their land with mixed species agroforestry plots based on FLR initiative.
Output 5. Dissemination of knowledge and lessons learned about tradeoff and synergies of key ecosystem goods and services and socioeconomic and environmental impacts on FLR initiatives				
B 3.1 Knowledge sharing through the advocacy activities about the impacts of FLR initiative in the availability of ecosystem goods and services	B.3.1.1 Organize national seminar and exhibition booth for Municipal level to sharing information on the impacts of FLR initiatives	National seminar and exhibition booth for Municipal level is organize by 2nd quarter of 2025.	Seminar report Photos for an exhibition booth	
B 3.2 Evaluate the social, economic and environmental impacts and contributions of FLR initiatives for supporting the livelihoods of the target villages	B.3.2 Evaluate the social, economic and environmental impacts and contributions of FLR initiatives for supporting the livelihoods of the target villages	Evaluation on the social, economic and environmental impacts and contributions of FLR initiatives for supporting the livelihoods of the target villages will conduct by 1st quarter of 2025.	Evaluation report Interview list	AFoCO M/E Guidelines is applied and Project impact and best practiceisconsidered.

B 3.3 Publish knowledge, lessons learned and achievement of the project	- Publish project-related information and achievements	Project-related information and achievements will publish every year	Publication	AFoCO Communication guidelines is considered.

1.4 Justification

Subsistence farmers in isolated rural areas have had limited educational opportunities, receive no or little service provision from relevant government institutions, due to a limited budget and a lack of appropriate skills and have a very low understanding of markets and how they function. As a result of this, farmers have inherited bad agricultural practices from their ancestors and communities, which were sufficient in times when land was plenty and a smaller population. However, with increasing population pressure and unsustainable agriculture practices, rural farmers experience annual food shortages, driving them to open more forested land, further exacerbating their situation. The communities do not have the skills or knowledge to apply sustainable agroforestry approaches or have access to the extension services to build their capacity. These smallholder farmers manage multiple crops on very small land holdings. Cropping systems are diverse with 50% of households growing maize, cassava, sweet potato, vegetables, legumes and coconut trees. Farm fields are small due to difficult terrain, as rocky soil or mountains surround arable land. Timor-Leste's production per hectare is lower than other small island nations falling below average for low-income food-deficit countries. Yields of nutritious crops such as fruits, vegetables, beans and other pulses are low, as are yields of roots and tubers, which are of importance for rural poor as they supply food reserves during lean season. A combination of poor-yielding varieties, depleted soils, poor weed control, steep slopes, and highly variable rainfall, contribute to low productivity.

On top of this, deforestation destroys forest habitat and its biodiversity, leading to soil erosion. Forest fires result in loss of habitat, loss of organic matter, reduction in soil fertility, soil erosion and sedimentation of rivers. Nearly half of the country has a slope of 40 percent or more. Steep slopes and shallow soils are susceptible to erosion, which exacerbates the bad agricultural practices and free grazing livestock. The degradation of natural resources combined with the country's vulnerability to climate change requires an integrated agriculture and rural development approach.

The project directly impacts 800-1000 farmers in the Maabat and Fahiria, including 150 female farmers and 40% of the total number of farmers to be the youth. The project employs 3 clusters of activities around its intended outcomes to overcome these challenges.

Firstly, the project will assess and map the local characteristics of each site and produce a species suitability map for each of the locations. Consultation with local farmers will then take place to agree the particular species which are felt have economic and ecological value to said site. The consultation process will inform rural subsistence farmers on the impact of their current practices and raise awareness on issues such as reforestation and its effect on soil, water and biodiversity conservation, climate change and the mitigation effects of reforestation and how mixed species agroforestry practices can provide the food, fodder and fuel they need as

well as grow forests. From this farmer will understand the benefits of reforestation using mixed species agroforestry. The mixed species agroforestry practices will use suitable species for intercropping in years 1 and 2 with ginger, cassava, other root tubers. The plantations will yield fruit, fodder and firewood in years 3 –4 and high value commercial species of trees from year 4 onwards which have high financial benefits to the community enterprises.

The second cluster of activities focuses on training rural groups, and particularly their female members, on the importance of establishing community-based enterprises to aggregate, market and sell agroforestry products. These entrepreneurs will negotiate with traders, develop business models and agree profit-sharing mechanisms so individual farmers and their communities get a benefit from reforestation practices. The rural groups will be trained to understand the long-term benefits of conserving and protecting high value hard wood species of trees for commercial and environmental benefits.

The third cluster of activities focuses around building long term capacity of forestry-relatedstakeholdersin the country to continue to provide the essential services developed in this action to other subsistence farming communities. The applicants and partner are very aware that changing ancestral habits and poor agricultural and forestry practices is a major challenge, but it is the only way to rehabilitate watershed health in Timor-Leste. The community-based watershed management system has been built on a participatory community-based approach whereby farmer groups agree on plans, practices and rules for reforestation and agriculture. This has been a very successful approach in changing ancestral and community norms for better practices.

Consultations will be a ‘top down’ expert assessments which feeds into a ‘bottom up’ participatory planning process with rural groups to produce FLR plans. To support the implementation of the agroforestry plans, 15 forestry extension officers from local and national government will be trained in implementing and supervising community-based agroforestry approaches. The outcome will be improved knowledge, capacity and skills for the GDFCIP staff to apply and manage climate smart agroforestry practices.

The Project aims to achieve reforestation in Timor-Leste through locally customized, long term sustainable mixed species agroforestry practices to build resilience in subsistence farmers. The farmers will understand the benefits of reforestation using mixed species agroforestry and how community enterprises can improve their livelihoods and drive reforestation.

2. Objectives

2.1 Main objective

The overarching goal of this project is to investigate and demonstrate locally appropriate restoration models for both improving livelihood and income of local communities as well as environmental outcomes through harnessing public-private partnerships in Forest Landscape Restoration (FLR)activities. The main objective for this project isto: 1) implement locally

appropriate Forest Landscape Restoration (FLR) initiatives which can provide socio-economic and environmental benefits for households, communities, private actors and government authorities in Timor-Leste 2) obtain benefits for multiple stakeholders, including small holder farmers, local communities, industry actors and other investors, and government authorities.
After the project is completed, at least 300farmers (150female farmers and 60% of the total are youth) will be practicing sustainable agroforestry practices as agreed in the locally customized FLR initiatives and will have improved livelihoods and increased income as a result of marketing their agroforestry produce with local and national entrepreneurs. In addition to this, MAF staff members will have the capacity to assess and record the local characteristics of degraded land in Timor-Leste, develop GIS and suitable species maps for these areas and agree FLR plans with local community members. These MAF officers will provide ongoing and high-quality extension services to the targeted communities, in order to implement and monitor their FLR initiatives effectively.

2.2 Specific objective(s) and success criteria & indicators

Specifically, the project aims to achieve the following:

1. To establish database of the forestland degradation and to build capacity of farmers in the project sites;
2. To develop a business model for trade-off of key ecosystem goods and services through a network of community-based enterprises.

Success Criteria and Indicator(s):

Objective 1: To establish database of the forestland degradation and to build capacity of farmers in the project sites;

Collating existing geospatial datasets and land use and land cover change, the project will product spatially explicit mapping and database of the state of forest land degradation and assess restoration opportunities in the selected municipalities in the project sites. Stakeholders in 5 villages are engaged in capacity building, initialization and good governance for FLR initiatives. Spatially explicit mapping and database of the state of forest land degradation and assessing restoration opportunities in the selected municipalities in three geographic regions.

Criterion:

Output 1: Development of database of the forestland degradation
Social economic conditions

Output2: Capacity building of farmers in the project sites

Indicators:

Output 1: Geospatial 2 maps and database of the project sites, 1 rapid rural appraisal report&1 socioeconomic study report, 6 meetings with stakeholders and 1 national consultation workshop

Output2: At least 300 participants for 5 training courses and 2 study tours

Objective 2: To restore degraded areas in the project site and to develop a business model for trade-off of key ecosystem goods and services through a network of community-based enterprises

The 150 ha degraded area in the project sites will be restored by planting mixed species of high economic value and ecological functions based on the appropriate FLR initiatives. In order to develop a business mode for for trade-off of key ecosystem goods and services, private sectors and most suitable network of enterprises to work with community groups will be identified in the project sites.During the project period, knowledge of trade-off and synergies of key ecosystem goods and services will be shared and the social, economic and environmental impacts and contributions of FLR initiatives will be evaluated.

Criterion:

Output 3: Restoration of degraded areas in the project sites

Output 4: Development of a business model for trade-off of ecosystem goods and services

Output 5: Dissemination of knowledge and lessons learned

Indicators:

Output 3: Number of mixed species of high economic value and ecological functions, 150ha restoration of degraded areas in the project site, areas of support assisted natural regeneration, rate of survival and growth of the plants in the project sites
Output4: Number of identified private sectors and suitable network of enterprise, number of key ecosystem goods and services, business model for trade-off of ecosystem goods and services
Output 5: 1 seminar and exhibition booth, number of publications on project achievements and evaluation report on social, economic and environmental impacts and contribution of FLR initiatives

SECTION C. DESCRIPTION OF PROJECT INTERVENTIONS

(Section C will be composed of two (2) matrices without narrative descriptions.)

1. Work Plan and Schedule Please rearrange by Objectives and Output

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Inception meeting by Zoom																			
	DSA (Senior level)																			
	DSA (Technical level)																			
	DSA (Villagers and technical level)																			
Objective 1. To establish database of the forestland degradation and to build capacity of farmers in the project sites																				
A.1	Generated and anyalyzed Information on degraded landscapes (geospatial datasets) and on the socioeconomic conditions in the project sites																			
A.1.1	Collate existing geospatial datasets and land use and land cover change	*geospatial dataset and maps*	DGFICP																	
A.1.1.1	Analysis of Land Use and Land Cover Change with Remote Sensing	*Existing geospatial datasets and land use and land cover change in 2 target municipalities will collated by 1st quarter of 2023.*																		
	DSA for Technical Consultant(s)																			
	Hiring Technical Consultant(s)																			
A.1.1.2	Review and verification to validate the data analyzed from Remote sensing	*Existing geospatial datasets and land use and land cover change in 2 target municipalities will collated by 2nd quarter of 2023.*																		
	DSA for Technical Consultant(s) - (2person x 15days x 2sites)																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	DSA for Technical staff - (4person x 15days x 2sites)																			
A.1.2	Conduct rapid rural appraisal to determine social economic information of the local communities on selected site as well as history of land use change the selected municipalities.	RRA report	DGFICP																	
A.1.2.1	Organize 6 meetings with stakeholders in 2 municipalities for a rapid rural appraisal	*4 meetings with 100 stakeholders from 2 municipalities will organize by the 4th quarter of 2022.*																		
	Meals / Snacks (1meeting/village x 50persons x 2villages)																			
	DSA for Project personnel (3 senior officials x 7days)																			
	DSA for Project personnel (6 technical staff x 10days)																			
A.1.2.2	Organize National consultative workshop to validate the RRA report	*A national consultative workshop with 150 participants in the 1st quarter of 2023 will held to validate the RRA report.*																		
	Venue fee including equipment																			
	Meals																			
	Tea Breaks (2times)																			
	DSA (Senior level)																			
	DSA (Technical level)																			
	Workshop materials																			
A.1.3	Produce spatially explicit mapping of forest land degradation in the selected municipalities	maps	DGFICP																	
A.1.3.1	Survey and identification of forest land degradation in 2 municipalities	*2 geospatial datasets and 2 maps of forest land degradation in 2 municipalities will produce by the 1st quarter of 2023.*																		
	DSA for Technical Consultant(s)																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Hiring Technical Consultant																			
	DSA for Technical project staff																			
A.1.3.2	Processing data and mapping the results of identification of forest land degradation in the selected municipalities	*2 geospatial datasets and 2 maps of forest land degradation in 2 municipalities will produce by the 1st and 2nd quarter of 2022.*																		
	Hiring Technical Consultant																			
	Communication fee																			
A.1.4	Identify and assess forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives	*maps and databases*	DGFICP																	
A.1.4.1	Identification and Assessment to implement FLR initiatives	*Forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives will be identify and assess by 2nd quarter of 2023.*																		
	Hiring Technical Consultant (Intl)																			
	DSA for Technical Consultant(s)																			
	DSA for Technical project manager (1person)																			
	DSA for Technical project staff (3person)																			
A.1.4.2	Organize consultative 4 workshops in 2 municipalities (2 workshops x 2times)	*4 consultative workshops with 60 participants from 2 municipalities will organize by 2nd quarter of 2023.*																		
	Meals (60 persons)																			
	Tea Breaks (2times)																			
	Incentive including transporation, accommodation & incidental (Stakeholders)																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Incentives including transporation, accommodation & incidental (Technical level)																			
	DSA for Senior Management (5persons)																			
	DSA for Technical staff (15person)																			
A.1.5	Analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use including FLR	*Socioeconomic study report*	DGFICP																	
A.1.5.1	Conduct a study to analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use including FLR	*Socio-economic drivers of forest degradation will analyze by the 4th quarter of 2022 and 1st quarter of 2023.*																		
	Hiring Technical Consultant																			
	DSA for Technical Consultant(s)																			
	DSA for Technical project manager (1person)																			
	DSA for Technical project staff (3person)																			
A.1.5.2	Organize National consultative workshop to validate the study and report	*A national consultative workshop with 60 participants will organize by 1st quarter of 2023.*																		
	Venue fee including equipment																			
	Meals																			
	Tea Breaks (2times)																			
	DSA (Senior level)																			
	DSA (Technical level)																			
	Workshop materials																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Output 2	Enhanced capacity of farmers in the project sites in implementing FLR initiatives																			
A.2	Stakeholders' engagement and capacity building in 5 villages, their initialization and good governance for FLR initiatives																			
A.2.1	Conduct a training and study tour for MAF, NGOs and local research organizations staff to enhance their knowledge and transfer skills related to FLR initiatives, monitoring and reporting	Training / study tour	DGFICP																	
A.2.1.1	Organize 2 training courses (30persons x 5days x 2times)	*2 training course for MAF, NGOs and local research organizations staff.*																		
	Venue fee including equipment																			
	Meals																			
	Tea Breaks (2times)																			
	DSA for Senior Management																			
	DSA for Technical Level																			
	Training materials																			
	Trainers																			
A.2.1.2	Conduct one (1) study tour for MAF	*a study tour for MAF were conducted by the 1st quarter of 2024.*																		
	Transportation (Dili - Bali- Bogor)																			
	DSA for Senior Management																			
	DSA for Technical level																			
	Training fee																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
A.2.	Conduct a series of training and study tours for farmers and participating communities to enhance knowledge and transfer skills related to FLR initiatives	Training / study tour	DGFICP																	
A.2.2.1	Organize 2 trainings for the farmers from each municipality (50persons x 2days x 2trainings)	*2 training course.*																		
	Meals																			
	Tea Breaks (2times)																			
	Incentives for farmers																			
	DSA for Progect Manager																			
	DSA for Project staff																			
	Incentives for each Municipality staff																			
	Training materials																			
A.2.2.2	Conduct one (1) study tours for farmers	*Conduct 1 study tour for the farmers from each municipality will conduct by 4th quarter of 2024*																		
	Transportation																			
	DSA for farmers																			
	DSA for Senior Managerment																			
Objective 2. To restore degraded areas in the project site and to develop a business model for trade-off of key ecosystem goods and services through a network of community-based enterprises																				
Output 3	Identification of mixed species of high economic value and restoration of 150ha of the degraded areas in the project sites by using locally appropriate FLR initiatives																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Output 3	Restore the degraded are in the project sites by utilizing the appropriate FLR initiatives																			
B.1	Restore the degraded are in the project sites by utilizing the appropriate FLR initiatives																			
B.1.1	Identify mixed species of high economic value and ecological functions, in consultation with stakeholders	No. of species	DGFICP																	
B.1.1.1	Organize 2 consultation meetings with stakeholders and development partners (JICA-CBNRM, UNDP, FAO, CI, GIZ)	*2 consultation meetings with stakeholders and development partners will be organize with stakeholders and communities from 2 municipalities.*																		
	Venue fee including equipment																			
	Meals																			
	Tea Breaks (2times)																			
	Meeting materials																			
B.1.1.2	Organize 6 consultation meetings with communities from 3 municipalities	*6 consultation meetings with stakeholders and development partners will be organize with stakeholders and communities from 2 municipalities.*																		
	Meals																			
	Tea Breaks (2times)																			
	DSA for Senior level																			
	DSA for Technical staff																			
	Meeting materials																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
B.1.2	Restore the degraded areas in the project sites by utilizing the appropriate FLR initiatives																			
B.1.2.1	**Establish nursery and planting plots including fencing 130ha in Manatuto**	*Nursery for 130 and 20ha in 2 municipalities will establish by 1st quarter of 2023 and 124,993 seedlings will prepare by 1st-4th quarter of 2024 and 2025.*																		
	Establishing nursery in Manatuto municipality - local materils (organic soil, seeds, bamboo) planting distance 2x3 m (124,430 seedlings)																			
	Nursery materials (paranet, polybag, water splash, water hose .., hoes, shovel, wheelbarrow) 1 site																			
	maintenance yr1 = 40% = 57,777 seedlings																			
	Nursery materials																			
	maintenance yr2 = 35% = 50,551 seedlings																			
	Nursery materials																			
B.1.2.2	**Establish planting plots (130ha)**	*130ha for reforestation*																		
	Land preparation (labour cost, land clearence,)																			
	- Year 1 of maintenance 40%																			
	- Year 2 of maintenance 35%																			
	Planting (labour cost, seedlings transportation, fertilizer application)																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	- Year 1 of maintenance 40%																			
	- Year 2 of maintenance 35%																			
	Fencing for 130 ha																			
	Fencing maintenance 15%																			
	~~Maintenance (filling gap during yr1=35% & yr2=15%; fire control once a year; weeding, fertilzer,) 3 sites~~																			
B.1.2.3	**Establish nursery and planting plots including fencing 20ha in Aileu Municipality for Support assisted natural regneration**	*20 ha for Supported ANR in Aileu*																		
	Establishing nursery in Aileu municipality - local materils (organic soil, seeds, bamboo) planting distance 3x3 m (22,220 seedlings)																			
	Nursery materials (paranet, polybag, water splash, water hose .., hoes, shovel, wheelbarrow) 1 site																			
	maintenance yr1 = 40% = 8,888 seedlings																			
	Nursery materials																			
	maintenance yr2 = 35% = 7,777 seedlings																			
	Nursery materials																			
B.1.2.4	**Establish planting plots (20ha)**																			
	Land preparation (labour cost, land clearence,)																			
	- Year 1 of maintenance 40%																			
	- Year 2 of maintenance 35%																			
	Planting (labour cost, seedlings transportation, fertilizer application)																			
	- Year 1 of maintenance 40%																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	- Year 2 of maintenance 35%																			
	Fencing for 20ha																			
	Fencing maintenance 15%																			
B.1.2.5	**Survival/growth assessment**	*Assessed survival/growth in the planting sites and conducted a supplementary planting every year*																		
	DSA for project manager (5 days X $60 x 3 persons x 3 sites x 3times)																			
	DSA for Project staff ($40 x 6 persons x 5days x 3sites x 3times)																			
Output 4	Identify the key ecosystem goods and services relevant to stakeholders																			
B.2	Identify private sectors and most suitable network of enterprises to work with community groups in the project sites																			
B.2.1	Identify private sectors and most suitable network of enterprises to work with community groups in the project sites	No. of private sectors and suitable network	DGFICP																	
B.2.1.1	Organize 9 consultation meetings with stakeholders and communities (3meetings x 3times)	*9 consultation meetings with stakeholders and communities will organize by 2nd quarter of 2022.*																		
	Meals																			
	Tea Breaks (2times)																			
	Incentives for communities																			
	Incentives for municipality staff																			
	Meeting materials																			
B.2.2	Identify the key ecosystem goods and services relevant to stakeholders	No. of key ecosystem goods and services	DGFICP																	

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
B.2.2.1	Conduct a survey and study to identify the key ecosystem goods and services relevant to stakeholders	*A survey and study to identify the key ecosystem goods and services will conduct by 2nd quarter of 2022.*																		
	DSA for Technical Consultant(s)																			
	Hiring Technical Consultant																			
	DSA for Technical staff																			
B.2.3	Analyze trade-offs and synergies of key ecosystem goods and services	Study report	DGFICP																	
B.2.3.1	Conduct a study to analyze trade-offs and synergies of multiple ecosystem goods and services	*A study to analyze trade-offs and synergies of multiple ecosystem goods and services will conduct by 3rd quarter of 2022*																		
	DSA for Technical Consultant(s)																			
	Hiring Technical Consultant																			
	DSA for Technical project staff																			
B.2.4	Develop business models for tradeoff key ecosystem goods and services in consultation with identified enterprises, community groups and interested stakeholders	No. of business model	DGFICP																	
B.2.4.1	Dissemination of knowledge and lessons learned about tradeoff and synergies of key ecosystem goods and services and socioeconomic and environmental impacts on FLR initiatives	*Organize 2 consultation meetings with NGO and enterprises, Communities and interested stakeholders and develop business models in target villages*																		
	Venue fee including equipment																			
	Meals																			
	Tea Breaks (2times)																			
	DSA for Communities																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	DSA for senior management (3persons x 2days x 2sites)																			
	DSA for Technical staff (4persons x 2days x 2sites)																			
	Meeting materials																			
B.2.4.2	Junior Project Assistence																			
	~~Hire national Junior Project Assistance (36months)~~																			
Output 5	Publish Informaion and achievements																			
B.3	Share knowledge of trade-off and synergies of key ecosystem goods and services and evaluate the social, economic and environmental impacts and contributions of FLR initiatives																			
B.3.1	Knowledge sharing through the advocacy activities about the impacts of FLR initiative in the availability of ecosystem goods and services	Report/ publication	DGFICP																	
B.3.1.1	Organize seminar and exhibition booth for Municipal level to sharing information on the impacts of FLR initiatives	*National seminar and exhibition booth for Municipal level will organize by 2nd quarter of 2025.*																		
	Venue fee including equipment																			
	Booth rental																			
	Meals																			
	- Tea Breaks (2times)																			
	- Seminar Materials & Publication																			
	- Promotional items																			
B.3.1.2	Publish Information and achievements	Publications	DGFICP																	
B.3.2	Evaluate the social, economic and environmental impacts and contributions of FLR intiatives for supporting the livelihoods of the target villages	Evaluation report	DGFICP																	

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	- DSA for Technical Consultant(s)																			
	- Hiring Technical Consultant																			
	- DSA for Technical project staff																			
C.1	Project management																			
C.1.1	*Monitoring and audit*	Report	DGFICP																	
	Annual project monitoring (3persons x 2times/year x 3years)																			
	External audit																			
C.1.2	*Management support for operations*	Report	DGFICP																	
	Procurement of motorbikes																			
	Procurement of project vehicles																			
	Procurement of Laptop																			
	Procurement of Desktop																			
	Procurement of Printer																			
	Procurement of GPS																			
	Procurement of UPS																			
	Camera																			
	Projector																			
	Annual Technical Workshop (ATW)																			
	Office supplies																			
	External Hardisk Toshiba 1 TB																			
	Documentation and reporting																			

Items	Expected Output and Activity	Performance Indicator	Responsible body	Annual Timeline																		
				Year0 (2022)		Year1 (2023)				Year2 (2024)				Year3 (2025)				Year4 (2026)		
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Sound system																			
	Communication fee																			
	Fuel																			
	Transportation maintanance																			
	Water harvesting (ground water tank with capacity of 70,000 lt)																			
	Office/warehouse (in Manatuto 6 x 8 m; Aileu 4 x 6 m)																			
	Electricy instalation																			
	Miscellaneous																			
C.1.2	*Management support for operations*																			
	Field facilitator																			
	Field Asistance																			
	Driver																			
	Security guard																			
	DSA for Field facilitator																			

2. Budget (USD)

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Inception meeting will be held in Dili with the presence of secretariat					**1.280**			1.280		**1.280**										**0**					**0**					**0**	**1.280**	
	DSA for Senior level	person	60	12	1	720			720																						**0**	
	DSA for Technical level	person	40	14	1	560			560																						**0**	
Objective 1. To establish database of the forestland degradation and to build capacity of farmers in the project sites																															**0**	
Output 1	Generated and anyalyzed Information on degraded landscapes (geospatial datasets) and on the socioeconomic conditions in the project sites																														**0**	
A.1	Spatially explicit mapping and database of the state of forest land degradation and assessing restoration opportunities in the selected municipalities					**48.798**	**0**	**0**	**0**	**14.360**	**14.360**	**19.528**	**13.410**	**0**	**0**	**32.938**	**1.000**	**0**	**0**	**0**	**1.000**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**48.298**	
A.1.1	Collate existing geospatial datasets and land use and land cover change					9.440	0	0	0	0	0	1.000	7.440	0	0	8.440	1.000	0	0	0	1.000	0	0	0	0	0	0	0	0	0	0	**9.440**	
A.1.1.1	Analysis of Land Use and Land Cover Change with Remote Sensing					2.000	0	0	0	0	0	1.000	0	0	0	**1.000**	1.000	0	0	0	1.000	0	0	0	0	0	0	0	0	0	0	**2.000**	
	DSA for Technical Consultant(s)	Day	0	0	0	0				0	**0**					0					**0**					**0**					**0**	**0**	
	Hiring Technical Consultant(s)	Month	2.000	1	1	2.000					**0**	1.000				1.000	1.000				**1.000**					**0**					**0**	**2.000**	
A.1.1.2	Review and verification to validate the data analyzed from Remote sensing					7.440	0	0	0	0	0	0	7.440	0	0	**7.440**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7.440**	
	DSA for Technical Consultant(s) - (2person x 10days x 2sites)	Day	66	20	2	2.640					**0**		2.640			2.640					**0**					**0**					**0**	**2.640**	
	DSA for Technical staff - (6person x 10days x 2sites)	Day	40	60	2	4.800					**0**		4.800			4.800					**0**					**0**					**0**	**4.800**	
A.1.2	Conduct rapid rural appraisal to determine social economic information of the local communities on selected site as well as history of land use change the selected municipalities.					20.280	0	0	0	9.320	9.320	10.960	0	0	0	10.960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**20.280**	
A.1.2.1	Organize 4 meetings with stakeholders in 2 municipalities for a rapid rural appraisal					18.640	0	0	0	9.320	9.320	9.320	0	0	0	9.320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18.640**	
	Meals / Snacks (2meetings/village x 50persons x 2villages)	pax	10	100	4	4.000				2.000	2.000	2.000				2.000																4.000	
	DSA for Project Senior level (3 senior officials x 7days)	Day	60	21	4	5.040				2.520	2.520	2.520				2.520																5.040	
	DSA for Technical staff (6 technical staff x 10days)	Day	40	60	4	9.600				4.800	4.800	4.800				4.800																9.600	
A.1.2.2	Organize National consultative workshop to validate the RRA report					1.640	0	0	0	0	0	1.640	0	0	0	1.640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1.640**	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Venue fee including equipment	Pax	0	0	0	0						0				0															0	
	Meals	Pax	10	40	1	400						400				400															400	
	Tea Breaks (2times)	Pax	0	0	0	0						0				0															0	
	DSA for Senior level	Persons	60	6	1	360						360				360															360	
	DSA for Technical level	Persons	40	12	1	480						480				480															480	
	Workshop materials	Pax	10	40	1	400						400				400															400	
A.1.3	Produce spatially explicit mapping of forest land degradation in the selected municipalities					4.948	0	0	0	0	0	4.448	0	0	0	4.448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4.448**	
A.1.3.1	Survey and identification of forest land degradation in 2 municipalities					4.948				0	**0**	4.448				4.448															**4.448**	
	DSA for Technical Consultant(s)	Day	66	8	1	528						528				528															528	
	Hiring Technical Consultant (National consultant)	Month	2.500	1	1	2.500						2.000				2.000															2.000	
	DSA for Technical staff (6 persons x 4 days x 2times)	Day	40	24	2	1.920						1.920				1.920															1.920	
A.1.3.2	Processing data and mapping the results of identification of forest land degradation in the selected municipalities					0						0	0			0															**0**	
	Hiring Technical Consultant	Month	0	0	0	0						0	0			**0**															0	
	Communication fee	Month	0	0	0	0						0	0			**0**															0	
A.1.4	Identify and assess forest land degradation, their geographic extent and bio-physical characteristics to implement FLR initiatives					12.210	0	0	0	3.120	3.120	3.120	5.970	0	0	9.090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12.210**	
A.1.4.1	Identification and Assessment to implement FLR initiatives					5.970	0	0	0	0	0	0	5.970	0	0	5.970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5.970**	
	Hiring Technical Consultant (Intl)	Month	3.000	1	1	3.000							3.000			3.000															3.000	
	DSA for Technical Consultant(s)	Day	66	15	1	990							990			990															990	
	DSA for Senior level (3 person)	Day	60	9	1	540							540			540															540	
	DSA for Technical staff (6 person)	Day	40	36	1	1.440							1.440			1.440															1.440	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
A.1.4.2	Organize consultative 8 meetings/workshop in 2 municipalities (2 workshops x 2times)					6.240	0	0	0	3.120	3.120	3.120	0	0	0	3.120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6.240**	
	Meals (60 persons)	Pax	10	240	1	2.400				1.200	1.200	1.200				1.200															2.400	
	Tea Breaks (2times)	Pax	0	0	0	0					0					0															0	
	Incentive including transporation, accommodation & incidental (Stakeholders)	Persons	0	0	0	0					0					0															0	
	Incentives including transporation, accommodation & incidental (Technical level)	Persons	0	0	0	0					0					0															0	
	DSA for Senior level (5persons)	Day	60	32	1	1.920				960	960	960				960															1.920	
	DSA for Technical staff (6person)	Day	40	48	1	1.920				960	960	960				960															1.920	
A.1.5	Analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use including FLR					1.920			**0**	**1.920**	**1.920**																				**1.920**	
A.1.5.1	Conduct a study to analyze the socio-economic drivers of forest degradation and identify the future opportunities for sustainable land use including FLR					0																									**0**	
	Hiring Technical Consultant	Month	0	0	0	0																									0	
	DSA for Technical Consultant(s)	Day	0	0	0	0																									0	
	DSA for Technical (1person)	Day	0	0	0	0																									0	
	DSA for Technical project staff (3person)	Day	0	0	0	0																									0	
A.1.5.2	Organize National consultative workshop to validate the study and report					1.920				**1.920**	**1.920**																				**1.920**	
	Venue fee including equipment	Pax	0	0	0	0				0	0																				0	
	Meals	Pax	10	60	1	600				600	600																				600	
	Tea Breaks (2times)	Pax	0	0	0	0				0	0																				0	
	DSA for Senior level	Persons	60	6	1	360				360	360																				360	
	DSA for Technical staff	Persons	40	9	1	360				360	360																				360	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Workshop materials	Pax	10	60	1	600				600	600																				600	
Output 2	Enhanced capacity of farmers in the project sites in implementing FLR initiatives																														**0**	
A.2	Stakeholders' engagement and capacity building in 5 villages, their initialization and good governance for FLR initiatives					**45.960**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1.040**	**1.040**	**2.080**	**35.653**	**1.133**	**1.133**	**5.960**	**43.879**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45.959**	**0**
A.2.1	Conduct a training and study tour for MAF, NGOs and local research organizations staff to enhance their knowledge and transfer skills related to FLR initiatives, monitoring and reporting					36.600						**0**	**0**	**1.040**	**1.040**	**2.080**	34.520	0	0	0	**34.520**											**36.600**	
A.2.1.1	Organize 2 training courses (20persons x 5days x 2times)					2.080								1.040	1.040	**2.080**																**2.080**	
	Venue fee including equipment	Pax	0	0	0	0								0	0	0															0	
	Meals	Pax	10	20	2	400								200	200	400															400	
	Tea Breaks (2times)	Pax	0	0	0	0								0	0	0															0	
	DSA for Senior level	Persons	60	4	2	480								240	240	480															480	
	DSA for Technical staff	Persons	40	10	2	800								400	400	800															800	
	Training materials	Pax	10	20	2	400								200	200	400															400	
	Trainers	Pax	0	0	0	0								0	0	0															0	
A.2.1.2	Conduct one (1) study tour for MAF					34.520											34.520				34.520											**34.520**	
	Transportation (Dili - Bali- Bogor)	Pax	1.000	10	1	10.000											10.000				10.000											10.000	
	DSA for Senior level	Persons	119	8	5	4.760											4.760				4.760											4.760	
	DSA for Technical staff	Persons	119	8	5	4.760											4.760				4.760											4.760	
	Training fee	Pax	15.000	1	1	15.000											15.000				15.000											15.000	
A.2.2	Conduct a series of training and study tours for farmers and participating communities to enhance knowledge and transfer skills related to FLR initiatives					**9.360**						**0**	**0**	**0**	**0**	**0**	1.133	1.133	1.133	5.960	**9.359**											**9.359**	
A.2.2.1	Organize 2 trainings for the farmers from each municipality (50persons x 2days x 2trainings)					3.400										**0**	1.133	1.133	1.133		3.399											**3.399**	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Meals	Pax	10	100	2	2.000											667	667	667		2.001											
	Tea Breaks (2times)	Pax	0	0	0	0											0	0	0		0											
	Incentives for farmers	person	0	0	0	0											0	0	0		0											
	DSA for Senior level	person	60	4	1	240											80	80	80		240											
	DSA for Technical staff	person	40	4	1	160											53	53	53		159											
	Incentives for each Municipality staff	person	0	0	0	0											0	0	0		0											
	Training materials	Pax	10	100	1	1.000											333	333	333		999											
A.2.2.2	Conduct one (1) study tours for farmers - exchange visit					5.960														5.960	**5.960**									**5.960**	
	Transportation	Pax	500	1	2	1.000														1.000	1.000										
	DSA for farmers	person	40	50	2	4.000														4.000	4.000										
	DSA for Senior level	person	60	4	2	480														480	480										
	DSA for Technical staff	person	40	6	2	480														480	480										
Objective 2. To restore degraded areas in the project site and to develop a business model for tradeoff of key ecosystem goods and services through a network of community-based enterprises																																
Output 3	Identification of mixed species of high economic value and restoration of 150ha of the degraded areas in the project sites by using locally appropriate FLR initiatives																															
B.1	Restore the degraded are in the project sites by utilizing the appropriate FLR initiatives					**436.874**	**0**	**0**	**0**	**86.838**	**86.838**	**57.675**	**23.385**	**6.385**	**82.696**	**170.141**	**37.669**	**10.335**	**3.535**	**35.899**	**87.438**	**25.761**	**9.008**	**13.373**	**37.323**	**85.465**	**11.915**	**0**	**0**	**0**	**11.915**	**441.797**	**0**
B.1.1	Identify mixed species of high economic value and ecological functions, in consultation with stakeholders					23.312				3.020	**3.020**	**14.860**	**420**	**420**	**420**	**16.120**	**640**	**420**	**420**	**420**	**1.900**	**580**	**180**	**420**	**420**	**1.600**	**640**	**0**	**0**	**0**	**640**	**23.280**	
B.1.1.1	Organize consultation meetings with stakeholders and development partners (JICA-CBNRM, UNDP, FAO, CI, GIZ) and launching cerimony					2.400						2.400				**2.400**										**0**					**0**	**2.400**	
	Venue fee including equipment	Pax	0	0	0	0						0				0																0	
	Meals	Pax	10	60	2	1.200						1.200				1.200																1.200	
	Tea Breaks (2times)	Pax	0	0	0	0						0				0																0	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Meeting materials	Pax	10	60	2	1.200						1.200				1.200																1.200	
B.1.1.2	Organize 6 consultation meetings with communities and local leaders from 2 municipalities					13.040				820	820	6.820	420	420	420	**8.080**	640	420	420	420	**1.900**	580	180	420	420	**1.600**	640	0	0		**640**	**13.040**	
	Meals	Pax	10	300	2	6.000					0	6.000				6.000																6.000	
	Tea Breaks (2times)	Pax	0	0	0	0					0					0																0	
	DSA for Senior level	Person	60	18	2	2.160				180	180	180	180	180	180	720		180	180	180	**540**	180	180	180	180	**720**					**0**	2.160	
	DSA for Technical staff	Person	40	36	2	2.880				240	240	240	240	240	240	960	240	240	240	240	**960**			240	240	**480**	240				**240**	2.880	
	Meeting materials	Pax	10	100	2	2.000				400	400	400				400	400				**400**	400				**400**	400				**400**	2.000	
B.1.1.3	Launching and traditional ceremony 2 municipalties					7.872				2.200	**2.200**	5.640				**5.640**															**7.840**	
	Traditional ceremony	pax	1.032	1	1	1.032				1.000	1.000					0															1.000	
	Launching ceremony	Pax	3.000	1	1	3.000					0	3.000				3.000															3.000	
	DSA for Senior level	Person	60	12	2	1.440				480	480	960				960															1.440	
	DSA for Technical staff	Person	40	30	2	2.400				720	720	1.680				1.680															2.400	
B.1.2	Restore the degraded areas in the project sites by utilizing the appropriate FLR initiatives					413.562				81.618	**81.618**	37.175	22.965	5.965,00	82.276,00	**148.381,00**	37.029,00	9.915	3.115,00	35.479,40	**85.538,40**	25.181	8.828	12.953	36.903	**83.865**	11.275	0	0	0	**11.275**	**399.402**	
B.1.2.1	**Establish nursery and planting plots including fencing 130ha in Manatuto**					**107.642,50**			0	0	**0**	28.930,00	16.760,00	4.560,00	11.260,00	**61.510,00**	11.578	7.190	2.310	3.310	**24.388**	10.232	6.393	2.123	2.998	**21.745**				0		**107.643**	
	Establishing nursery in Manatuto municipality - local materils (organic soil, seeds, bamboo) planting distance 3x3 m (144,430 seedlings)	pax	29.190,00	1	1	29.190,00						810,00	16.760,00	4.560,00	7.060,00	29.190					0					0					**0**	29.190	
	Nursery materials (paranet, polybag, water splash, water hose .., hoes, shovel, wheelbarrow) 1 site	pax	28.120,00	1	1	28.120,00						28.120,00				28.120					0					0						28.120	
	maintenance yr1 = 40% = 57,777 seedlings	pax	13.620,00	1	1	13.620,00										0	810	7.190	2.310	3.310	13.620					0						13.620	
	Nursery materials		10.768,00	1	1	10.768,00										0	10.768				10.768					0						10.768	
	maintenance yr2 = 35% = 50,551 seedlings	pax	12.322,50	1	1	12.322,50										0					0	810,00	6.392,50	2.122,50	2.997,50	12.323						12.323	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Nursery materials		9.422,00	1	1	9.422,00										0					0	9.422,00				9.422						9.422	
	DSA (Senior level) 3persons x 2days x 2sites x 3times	Person	60	10	3	1.800									1.800	1.800					0					0						1.800	
	DSA (Technical level) 4persons x 5days x 2sites x 3times	Person	40	20	3	2.400									2.400	2.400					0					0						2.400	
B.1.2.2	**Establish planting plots (130ha)**					**229.390,15**				61.714,25	**61.714,25**	3.400			61.261,00	**64.661,00**	21.410,00			28.054,40	**49.464,40**	11.100,00		7.335	24.610	**43.045,50**	10.505,00				**10.505,00**	**229.390,15**	
	Land preparation (labour cost, land clearence,) (20,000 + 124,430 seedlings)	pax	152.727,00	1	1	71.136,00				9.875,00	9.875				61.261,00	61.261					0					0					0	71.136,00	
	- Year 1 of maintenance 40% = 86.666 seedlings	pax	28.054,40	1	1	28.054,40					0					0				28.054,40	28.054					0					0	28.054,40	
	- Year 2 of maintenance 35% = 75.833 seedlings	pax	24.610,20	1	1	24.610,20					0					0					0				24.610,20	24.610					0	24.610,20	
	Planting (labour cost, seedlings transportation, fertilizer application)	pax	28.300,00	1	1	24.810,00					0	3.400				3.400	21.410,00				21.410					0					0	24.810,00	
	- Year 1 of maintenance 40%	pax	11.100,00	1	1	11.100,00					0					0					0	11.100,00				11.100					0	11.100,00	
	- Year 2 of maintenance 35%	pax	10.505,00	1	1	10.505,00					0					0					0					0	10.505,00				10.505	10.505,00	
	Fencing for 130 ha	pax	51.839,25	1	1	51.839,25				51.839,25	51.839					0,00					0					0					0	51.839,25	
	Fencing maintenance 15%	pax	7.335,30	1	1	7.335,30					0					0,00					0			7.335,30		7.335,30					-	7.335,30	
B.1.2.3	**Establish nursery and planting plots including fencing 20ha in Aileu Municipality for Support assisted natural regneration**					**29.330,00**						4.845,00	6.205,00	1.405,00	3.405,00	**15.860,00**	1.941,00	2.725,00	805,00	1.605,00	**7.076,00**	1.749,00	2.435,00	755,00	1.455,00	**6.394,00**					**-**	**29.330,00**	
	Establishing nursery in Aileu municipality - local materils (organic soil, seeds, bamboo) planting distance 3x3 m (22,220 seedlings)	pax	11.420,00	1	1	11.420,00						405,00	6.205,00	1.405,00	3.405,00	11.420,00					0					0						11.420,00	
	Nursery materials (paranet, polybag, water splash, water hose .., hoes, shovel, wheelbarrow) 1 site	pax	4.440,00	1	1	4.440,00						4.440,00				4.440,00					0					0						4.440,00	
	maintenance yr1 = 40% = 8,888 seedlings	pax	5.540,00	1	1	5.540,00										-	405,00	2.725,00	805,00	1.605,00	5.540					0						5.540,00	
	Nursery materials	pax	1.536,00	1	1	1.536,00										0	1.536,00				1.536					0						1.536,00	
	maintenance yr2 = 35% = 7,777 seedlings	pax	5.050,00	1	1	5.050,00										0					0	405,00	2.435,00	755,00	1.455,00	5.050						5.050,00	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Nursery materials	pax	1.344,00	1	1	1.344,00										0					0	1.344,00				1.344						1.344,00	
B.1.2.4	**Establish planting plots (20ha)**					**42.999,19**				19.903,50	**19.903,50**	-		-	6.350,00	**6.350,00**	2.105,00		-	2.510,00	**4.615,00**	780,00		2.740,69	7.840,00	**11.360,69**	770,00				**770,00**	**42.999,19**	
	Land preparation (labour cost, land clearence,)	pax	6.350,00	1	1	6.350,00					0				6.350,00	6.350					0					0					0	6.350,00	
	- Year 1 of maintenance 40%	pax	2.510,00	1	1	2.510,00					0					0				2.510,00	2.510					0					0	2.510,00	
	- Year 2 of maintenance 35%	pax	7.840,00	1	1	7.840,00					0					0					0				7.840,00	7.840					0	7.840,00	
	Planting (labour cost, seedlings transportation, fertilizer application)	pax	2.105,00	1	1	2.105,00					0					0	2.105,00				2.105					0					0	2.105,00	
	- Year 1 of maintenance 40%	pax	780,00	1	1	780,00					0					0					0	780,00				780					0	780,00	
	- Year 2 of maintenance 35%	pax	770,00	1	1	770,00					0					0					0					0	770,00				770	770,00	
	Fencing for 20ha	pax	19.903,50	1	1	19.903,50				19.903,50	19.904					0,00					0					0					0	19.903,50	
	Fencing maintenance 15%	pax	2.740,69	1	1	2.740,69					0					0,00					0			2.740,69		2.740,69					-	2.740,69	
B.1.2.5	**Survival/growth assessment and monitoring**					**4.200**											**2.100**				**2.100**	2.100				**2.100**					**0**	**4.200**	
	DSA for project manager ($60 x 3 persons x 15 days x 2 sites)	day	60	15	2	1.800											900				900	900				900					0	1.800	
	DSA for Project staff ($40 x 6 persons x 30days x 2 sites)	day	40	30	2	2.400											1.200				1.200	1.200				1.200					0	2.400	
Output 4	Development of the business model for tradeoff of ecosystem goods and services to increase livelihoods																															
B.2	Identify private sectors and most suitable network of enterprises to work with community groups in the project sites					**16.030**					**0**	**0**	**11.790**	**0**	**4.240**	**16.030**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16.030**	
B.2.1	Identify private sectors and most suitable network of enterprises to work with community groups in the project sites					4.000							**4.000**	**0**	**0**	**4.000**										**0**					**0**	**4.000**	
B.2.1.1	Organize 9 consultation meetings with stakeholders and communities					4.000							4.000			**4.000**										**0**					**0**	**4.000**	
	Meals	Pax	10	100	2	2.000							2.000			2.000																2.000	
	Tea Breaks (2times)	Pax	0	0	0	0							0			0																0	
	Incentives for communities	Person	0	0	0	0							0			0																0	
	Incentives for municipality staff	Person	0	0	0	0							0			0																0	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Meeting materials	Pax	10	100	2	2.000							2.000			2.000															2.000	
B.2.2	Identify the key ecosystem goods and services relevant to stakeholders					7.790						**0**	**7.790**	**0**	**0**	**7.790**										**0**				**0**	**7.790**	
B.2.2.1	Conduct a survey and study to identify the key ecosystem goods and services relevant to stakeholders					7.790							7.790			**7.790**										**0**				**0**	**7.790**	
	DSA for Technical Consultant(s)	Day	66	15	1	990							990			990															990	
	Hiring Technical Consultant	Month	5.000	1	1	5.000							5.000			5.000															5.000	
	DSA for Technical staff	Day	40	15	3	1.800							1.800			1.800															1.800	
B.2.3	Analyze trade-offs and synergies of key ecosystem goods and services					0						**0**	**0**	**0**	**0**	**0**										**0**				**0**	**0**	
B.2.3.1	Conduct a study to analyze trade-offs and synergies of multiple ecosystem goods and services					0								0		**0**										**0**				**0**	**0**	
	DSA for Technical Consultant(s)	Day	0	0	0	0								0		0															0	
	Hiring Technical Consultant	Month	0	0	0	0								0		0															0	
	DSA for Technical staff	Day	0	0	0	0								0		0															0	
B.2.4	Develop business models for tradeoff key ecosystem goods and services in consultation with identified enterprises, community groups and interested stakeholders					4.240						0	0	0	4.240	**4.240**	0				**0**					**0**				**0**	**4.240**	
B.2.4.1	Organize 2 consultation meetings with NGO and enterprises, Communities and interested stakeholders and develop business models in target villages					4.240									4.240	**4.240**										**0**				**0**	**4.240**	
	Venue fee including equipment	Pax	0	0	0	0									0	0															0	
	Meals	Pax	10	50	2	1.000									1.000	1.000															1.000	
	Tea Breaks (2times)	Pax	0	0	0	0									0	0															0	
	DSA for Communities	person	0	0	0	0									0	0															0	
	DSA for senior level (3persons x 2days x 2sites)	Person	60	3	6	1.080									1.080	1.080															1.080	
	DSA for Technical staff (4persons x 2days x 2sites)	Person	40	4	6	960									960	960															960	
	Meeting materials	Pax	5	80	3	1.200									1.200	1.200															1.200	
B.2.4.2	Junior Project Assistence					0									0	**0**	0				**0**					**0**				**0**	**0**	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Hire national Junior Project Assistance (36months)	Pax	0	0	0	0									0	**0**	0															
Output 5	Dissemination of knowledge and lessons learned about tradeoff and synergies of key ecosystem goods and services and socioeconomic and environmental impacts on FLR initiatives																															
B.3	Share knowledge of trade-off and synergies of key ecosystem goods and services and evaluate the social, economic and environmental impacts and contributions of FLR initiatives					**35.000**					0	3.000	0	0	0	**3.000**	3.000	0	0	0	**3.000**	7.000	22.000	0	0	**29.000**	0	0	0	0	**0**	**35.000**	
B.3.1	Knowledge sharing through the advocacy activities about the impacts of FLR initiative in the availability of ecosystem goods and services					**30.000**						3.000	0	0		**3.000**	3.000				**3.000**	3.000	21.000			**24.000**	0	0			**0**	**30.000**	
B.3.1.1	Organize seminar and exhibition booth for Municipal level to sharing information on the impacts of FLR initiatives					21.000																	21.000			**21.000**					**0**	**21.000**	
	Venue fee including equipment	Pax	2.000	1	1	2.000																	2.000			2.000					0	2.000	
	Booth rental	Pax	1.000	3	1	3.000																	3.000			3.000					0	3.000	
	Meals	Pax	10	300	1	3.000																	3.000			3.000					0	3.000	
	- Tea Breaks (2times)	Pax	0	0	0	0																	0			0					0	0	
	- Seminar Materials & Publication	Pax	30	300	1	9.000																	9.000			9.000					0	9.000	
	- Promotional items	Pax	4	1.000	1	4.000																	4.000			4.000					0	4.000	
B.3.1.2	Publish Information and achievements	Pax	1.000	3	3	9.000						3.000	0	0	0	**3.000**	3.000				**3.000**	3.000				**3.000**					**0**	**9.000**	
B.3.2	Evaluate the social, economic and environmental impacts and contributions of FLR intiatives for supporting the livelihoods of the target villages					**5.000**																4.000	1.000			**5.000**	0	0			**0**	**5.000**	
	- DSA for Technical Consultant(s)	Day	60	30	1	1.800																1.800				**1.800**					**0**	1.800	
	- Hiring Technical Consultant	Month	2.000	1	1	2.000																1.000	1.000			**2.000**					**0**	2.000	
	- DSA for Technical staff	Day	40	30	1	1.200																1.200				**1.200**					**0**	1.200	
C.1	Project management					**308.915**	**0**	**0**	**0**	**3.000**	**3.000**	**70.341**	**80.541**	**10.041**	**10.541**	**171.464**	**16.541**	**15.041**	**10.041**	**10.541**	**52.164**	**16.541**	**14.541**	**10.041**	**10.541**	**51.664**	**10.041**	**10.541**	**10.041**	**0**	**30.623**	**308.915**	**0**
C.1.1	*Monitoring and audit*					1.800				0	0	1.800				1.800															**0**	**1.800**	
	Annual project monitoring (3persons x 2times/year x 3years)	pax	300	1	6	1.800						1.800				**1.800**																1.800	

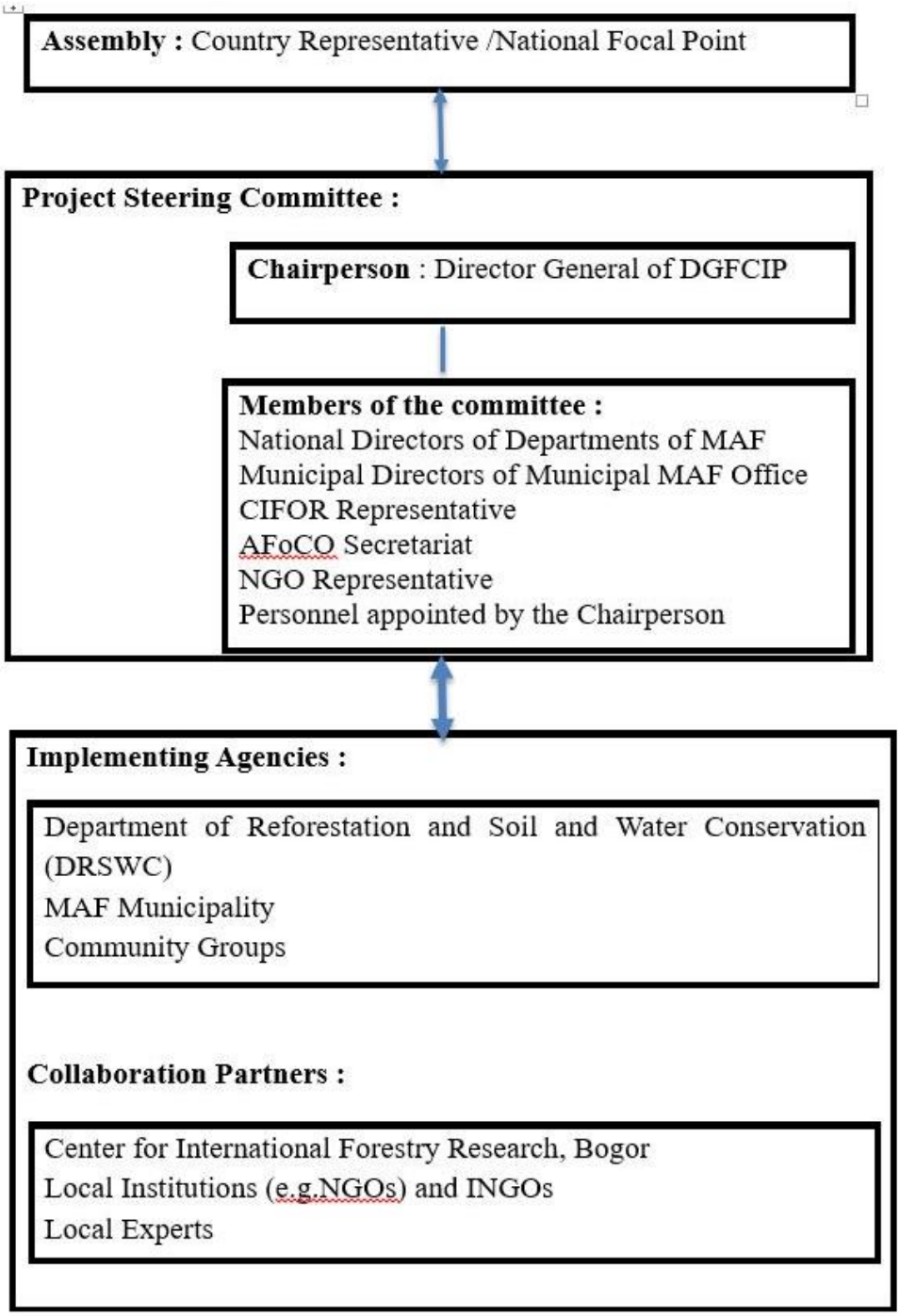
Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	External audit	pax	0	0	0	0				0	**0**																					
C.1.2	*Management support for operations*					**159.500**	0	0	0	3.000	**3.000**	58.700	70.700	200	700	**130.300**	6.700	5.200	200	700	**12.800**	6.700	4.700	200	700	**12.300**	200	700	200	0	**1.100**	**159.500**	
	Procurement of motorbikes	Unit	3.000	3	1	9.000					0		9.000			9.000					0					0						9.000	
	Procurement of project vehicles	Unit	42.000	1	1	42.000					0		42.000			42.000					0					0						42.000	
	Procurement of Laptop	Unit	1.600	5	1	8.000					0		8.000			8.000					0					0						8.000	
	Procurement of Printer	Unit	500	2	1	1.000					0		1.000			1.000					0					0						1.000	
	Procurement of GPS	Unit	500	2	1	1.000					0		1.000			1.000					0					0						1.000	
	Camera	unit	2.000	1	1	2.000					0		2.000			2.000					0					0						2.000	
	Projector	unit	500	1	1	500					0		500			500					0					0						500	
	Semestral Technical Working Group (TWG)	unit	750	1	6	4.500					0		1.500			1.500		1.500			1.500		1.000			1.000		500			**500**	4.500	
	Office supplies	pax	500	1	3	1.500					0		500			500		500			500		500			500						1.500	
	External Hardisk Toshiba 1 TB	unit	100	5	1	500					0		500			500					0					0						500	
	Documentation and reporting	pax	500	1	3	1.500					0				500	500				500	500				500	500						1.500	
	Sound system	unit	1.500	1	1	1.500					0		1.500			1.500					0					0						1.500	
	Communication fee	pax	1.000	1	3	3.000					0	200	200	200	200	800	200	200	200	200	800	200	200	200	200	800	200	200	200		**600**	3.000	
	Fuel	pax	5.000	1	3	15.000					0	5.000				5.000	5.000				5.000	5.000				5.000						15.000	
	Transportation maintanance	pax	1.500	1	3	4.500					0	1.500				1.500	1.500				1.500	1.500				1.500						4.500	
	Water harvesting (ground water tank with capacity of 70,000 lt)	pax	32.000	1	1	32.000					0	32.000				32.000					0					0						32.000	
	Office/warehouse (in Manatuto 6 x 8 m; Aileu 4 x 6 m)	pax	18.000	1	1	18.000					0	18.000				18.000					0					0						18.000	
	Electricy instalation	pax	2.000	1	1	2.000					0	2.000				2.000					0					0						2.000	
	Miscellaneous	unit	4.000	1	3	12.000				3.000	3.000		3.000			3.000		3.000			3.000		3.000			3.000						12.000	
C.1.3	Staff suport for operation					**147.615**						9.841	9.841	9.841	9.841	**39.364**	9.841	9.841	9.841	9.841	**39.364**	9.841	9.841	9.841	9.841	**39.364**	9.841	9.841	9.841		**29.523**	**147.615**	
	Field facilitator	person	272,00	2	45	24.480						1.632	1.632	1.632	1.632	6.528	1.632	1.632	1.632	1.632	6.528	1.632	1.632	1.632	1.632	6.528	1.632	1.632	1.632		4.896	24.480	
	Field Asistance	person	204,00	9	45	82.620						5.508	5.508	5.508	5.508	22.032	5.508	5.508	5.508	5.508	22.032	5.508	5.508	5.508	5.508	22.032	5.508	5.508	5.508		16.524	82.620	

Items	Expected Output and Activity	Unit	Unit Cost (US $)	Qty	Frequency	Total (US$)	Y0/2022				Total Y0	Y1/2023				Total Y1	Y2/2024				Total Y2	Y3/2025				Total Y3	Y4/2026				Total Y4	Grand Total	Original budget
							Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4			
	Driver	person	172,00	1	45	7.740						516	516	516	516	2.064	516	516	516	516	2.064	516	516	516	516	2.064	516	516	516		1.548	7.740	
	Security guard	person	135,00	5	45	30.375						2.025	2.025	2.025	2.025	8.100	2.025	2.025	2.025	2.025	8.100	2.025	2.025	2.025	2.025	8.100	2.025	2.025	2.025		6.075	30.375	
	DSA for Field facilitator	person	40,00	30	2	2.400,00						160	160	160	160	640	160	160	160	160	640	160	160	160	160	640	160	160	160		480	2.400	
Subtotal						**892.857**				**105.478**	**105.478**	**150.544**	**129.126**	**17.466**	**98.517**	**395.653**	**93.863**	**26.509**	**14.709**	**52.400**	**187.481**	**49.302**	**45.549**	**23.414**	**47.864**	**166.129**	**21.956**	**10.541**	**10.041**	**0**	**42.538**	**897.279**	
Program Support Fee (12% x project activity budget)						**107.143**				**12.657**	**12.657**	**18.065**	**15.495**	**2.096**	**11.822**	**47.478**	**11.264**	**3.181**	**1.765**	**6.288**	**22.498**	**5.916**	**5.466**	**2.810**	**5.744**	**19.935**	**2.635**	**1.265**	**1.205**	**0**	**5.105**	**107.673**	
Grand Total						**1.000.000**				**118.135**	**118.135**	**168.609**	**144.621**	**19.562**	**110.339**	**443.131**	**105.126**	**29.690**	**16.474**	**58.688**	**209.979**	**55.218**	**51.014**	**26.224**	**53.607**	**186.064**	**24.591**	**11.806**	**11.246**	**0**	**47.643**	**1.004.952**	
	Staff Resoruces (National contribution)					50.400				16.800	16.800				16.800	16.800				16.800	16.800					**0**					**0**	**50.400**	
	Project focal person/Project manager/project coordinator	person	300	1	36	10.800				3.600	**3.600**				3.600	**3.600**				3.600	**3.600**										**10.800**	
	Program officer	person	250	1	36	9.000				3.000	**3.000**				3.000	**3.000**				3.000	**3.000**										**9.000**	
	Admin officer	person	250	1	36	9.000				3.000	**3.000**				3.000	**3.000**				3.000	**3.000**										**9.000**	
	Finance officer	person	200	1	36	7.200				2.400	**2.400**				2.400	**2.400**				2.400	**2.400**										**7.200**	
	Site counterpart (2 person)	person	200	2	36	14.400				4.800	**4.800**				4.800	**4.800**				4.800	**4.800**										**14.400**	

Section D. Implementation Arrangements

1. Organizational structure

(Organizational structure includes the implementation bodies to be established (e.g. project steering committee and project manager) and decision-making process. As part of implementation, it will also cover how primary and other stakeholders are involved and linked each other in the project structure.)



This project builds on the research partnerships formed under the ongoing projects in Timor-Leste. UNDP and USAID have been implementing various watershed and land management projects in the country. UNDP's project on "strengthening community resilience" has developed a Standard Operating Procedures (SOP) for sustainable land management practices and has successfully piloted in AiliueAinaro, Ermera and Manufahi municipalities. The MAF is keen to replicate and scale up the model in rest of the country.We have discussed project goals, process and outcomes with the key institutions in the target country, and they expressed their strong interest to collaborate since FLR, enhancing business opportunities for SME and rural livelihood and income are all high priority research and development agendas.Project Steering Committee:

Project Steering Committee (PSC) chaired by the Director General of Department of Forest, Coffee and Industrials Plants (DFCIP) oversees the project ensuring successful implementation through providing strategic direction and guidance, policy support, and monitoring and evaluation of the project. The PSC comprises the National Directors of the other departments of MAF, Municipal Directors of Municipal MAF Office. Secretariat from AFoCO, NGO representatives and other members appointed by the Chairperson. The primary roles and responsibilities of the Project Steering Committee are as follows:

1. Review of the project design, framework and logical framework following the research on plausible FLR approaches to restore the provision of a variety of ecosystem services
2. Approve the project sites for piloting the implementation of FLR initiative applying a community-based approach
3. Review and approve the annual work plan and the budget
4. Provide strategic direction and guidance to the National Directorate of Forestry and Watershed Management, Department of Reforestation and soil Water Conservation (DRSWC) and MAF Municipality Offices on design, planning, implementation and monitoring of the project
5. Review of the annual monitoring report and the progress report prepared by the DRSWC and MAF Municipality Offices
6. Evaluate the projects delivery as per the revised logical framework matrix
7. Coordinate among various national department of MAF and other agencies for broader support and collaboration to the project
8. Resolve any conflict arises during the project implementation ensuring timely implementation of the project.

Implementation Agencies:
The DRSWC and MAF Municipality Offices are responsible for implementing FLR initiatives in the selected municipalities by applying community-based approach through organizing

communities and strengthening their capacity and resilience. They follow the directions and guidance provided by the Project Steering Committee and work closely with local institutions, , civil societies, NGOs/INGOs, private sectors, communities and households. The specific roles of the implementing agencies are listed below:

1. Organize stakeholders engagement including individual households, communities, local institutions, civil societies, NGOs/NGOs, private sectors, to recognize and discuss deforestation and forest degradation a significant issue impacting the livelihood of the people and environment

2. Facilitate the interested household to form a community group with an executive committee and assist in preparing a group constitutions for ensuring their participation and decision-making

3. Assist the community to identify the suitable FLR initiative and to develop the project plan, annual and budget

4. Assess the knowledge gap and training need of the community members.

5. Organize capacity building training, and knowledge and technology sharing with others agencies to implement the annual action plan.

6. Assist the research on field data collection and facilitate meeting with the communities.

7. Resolve any conflict arises during the project implementation ensuring timely implementation of the project

8. Undertake monitoring of the project activities and prepare an annual monitoring report and submit to the project steering Committee.

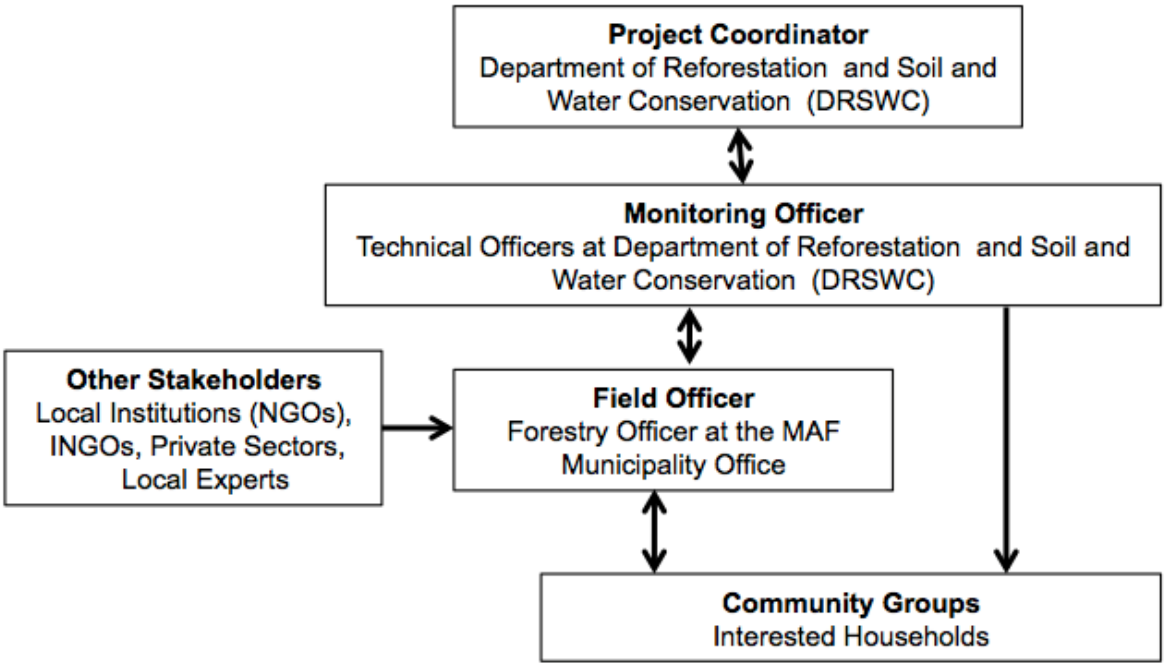
The interested households organize to a community group confirming their free, prior and informed decision at the stakeholder engagement process for implementing FLR initiative. The community group takes the lead on the identification of FLR initiative and develops annual plan and budget with the assistance of the DRSWC and MAF Municipality Office. The specific roles of the community groups are listed below:

1. Participate in the design of FLR initiative and identify the specific activities, develop annual plan and budget with the support of the DRSWC and MAF Municipality Office.
2. Decide on the community-based approach in regards to decision-making, participation and benefit-sharing model among the member households for the project.
3. Implement the FLR initiative as per the annual plan with the support of the DRSWC and MAF Municipality Office.
4. Ensure that the community-based approach is fully applied while implementing the FLR initiative.

5. Report the progress periodically to the DRSWC and MAF Municipality Office.
6. Coordinate and collaborate with other local institutions such as private sectors, NGOs, local experts in regards to implementing FLR initiative.
7. Participate in the capacity building activities to strengthen to knowledge and skills to implement FLR initiative
8. Resolve any conflict arise between the member households and stakeholders, including other implementing agencies.

2. Staff resource plan

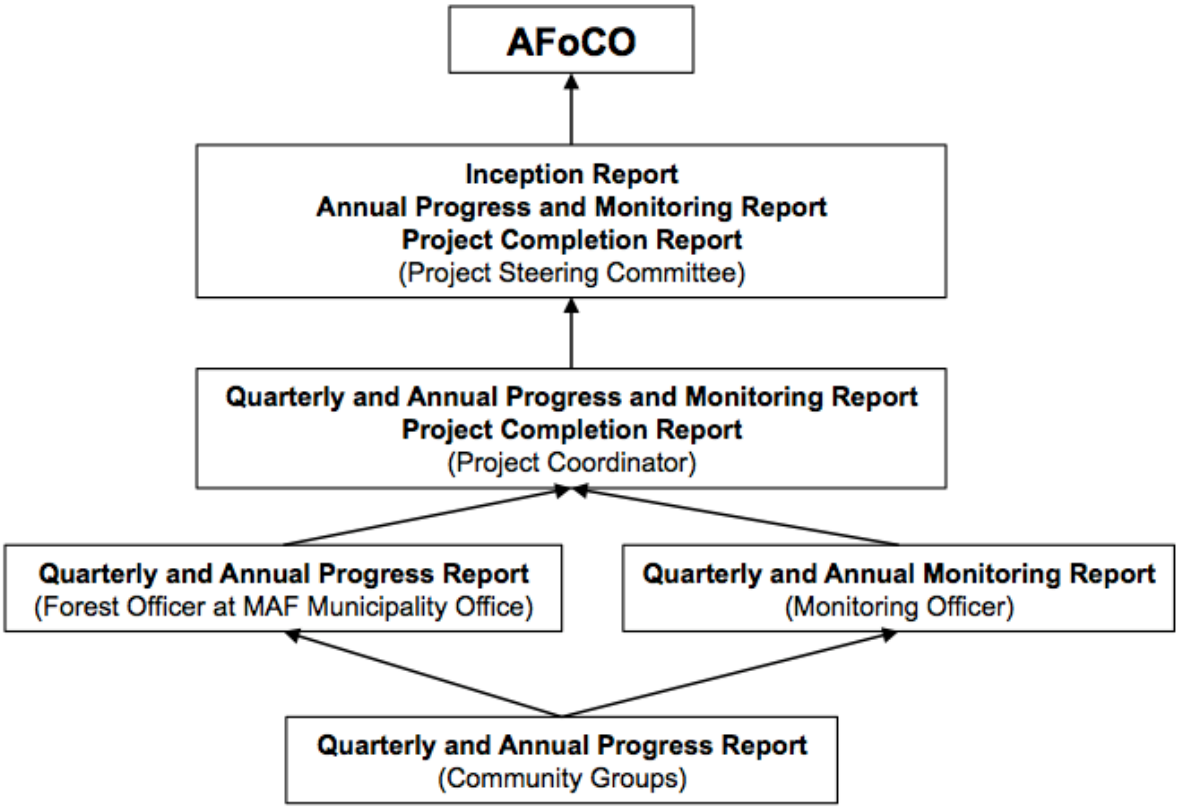
Department of Reforestation and Soil and Water Conservation (DRSWC) will lead the project implementation together with MAF Municipality Offices in the respective project sites. The Director of the DRSWC will be the Project Manager whereas the Technical Officers at the DRSWC will take the project monitoring responsibilities. The Forestry Officer at the MAF Municipality Office will work with interested households and other stakeholders to implement the project on the ground.



Staff Resources Plan

Reporting and monitoring arrangements

(Monitoring arrangements must be in line with logical framework matrix and AFoCO project manual.)



Reporting and Monitoring Arrangements

Reporting Arrangements:

This project emphasizes on timely and accurate reporting at the implementation stages to the completion of the project. The first meeting of the Project Steering Committee will kick start the project implementation and decide to initiate an inception report preparation, the Project Coordinator and other stakeholders. The inception report will outline the project implementation strategies, project activities, implementation schedule and the budget. This report provides a basis for progress monitoring for the project implementation.

Following the project implementation on the ground, each community group will prepare and submit quarterly progress report for the period January to March, April to June, July to September and October to December. The quarterly progress reports are submitted within a month after the quarterly period to the MAF Municipality Office using a progress report

template. The annual progress report is the compilation of the four quarterly reports. The quarterly and annual progress reports include: 1) the activities targeted for implementation, 2) implementation status, 3) outcomes achieved 4) budget allocated and expenditure, 5) Issues/problem and recommendation.

The Forest Officer at the MAF Municipality Officer will review the quarterly and annual progress reports submitted by the community groups. They compile the quarterly and annual progress reports from all community groups within the jurisdiction of the municipality using a progress report template for the municipality and submit to the Project Coordinator. Subsequently, the Project Coordinator's Office will review the report for each municipality and compile into one progress report using the project progress report template and submit to the Project Steering Committee. The Project Steering Committee will review the quarterly and annual report and finally submit the annual progress report to AFoCO. At the end of the project period, the Project Steering Committee will review the project completion report submitted by the Project Coordinator's Office and submit to AFoCO.

Monitoring Arrangements

Monitoring system will be tailored with the program design to fulfill monitoring requirement of the program ensuring accuracy, comprehensiveness, transparency and integrity. The Technical Officers at DRSWC will act as Monitoring Officers and undertake monitoring of the project. The monitoring system aims to:

1. Enhance the effectiveness and efficiency of the program through providing an unbiased assessment of the program implementation and facilitating the review of the program.
2. Strengthen the cooperation and harmonize the relationships among the stakeholders through creating a trusting environment with better communication.
3. Strengthen accountability and governance through transparency and periodic reporting of the project implementation.

Monitoring system will be characterized by:

Independent: Technical Officers at DRSWC are responsible for monitoring of the project and will demonstrate independence, impartiality, and free from bias by not involving in the project implementation.

Accountability and Sustainability: Monitoring system underpins the 'theory of change model' and, therefore, it envisages long-term monitoring that comprises monitoring during the program implementation and assessment of the program's achievement after its completion. The long-term assessment can be instrumental for ensuring accountability and sustainability.

Continuous: Monitoring goes on side by side with project delivery i.e. continuously from the commencement of the project to the end.

Transparent system: Monitoring system is accessible to all parties at all the time. This system will avoid any chance of data manipulation and also minimize corruption.

Comprehensive: Monitoring system provides a complete monitoring of both the organization and performance including the delivery side and changes or improvement in the people's life and their environment.

Accurate: The accuracy of monitoring data or information is ensured through triangulation of data or information among the monitor, implementer and beneficiaries.

Evidence based verification of the data: The verification of monitoring data or information is demonstrated through providing appropriate evidence such as photos, documents etc.

Spatio-temporal data/information: Monitoring data also include spatial i.e. geographic location, as well as temporal i.e. time dependent data.

Quality control and quality assurance: Monitoring system will develop project specific quality control and quality assurance to ensure that data are collected appropriately and accurately using equipment with desired precision.

Flexible: Monitoring system offers a high flexibility to incorporate any changes in the monitoring framework or indicators during the life of the project.

Management of data and custodianship: Monitoring system will ensure the data will be archived for a specified period after completion of the program. Then after, the system will be handed over to the relevant government agency with custodianship of the data so that the data will be available later for use.

The scope of monitoring system can be categorized into the following two levels for a comprehensive monitoring:

1. Organization monitoring

Organization monitoring is conducted at the community group level and encompasses an assessment of the organizational capacity for a successful implementation of the project within the budget and timeframe. This monitoring intends to identify the gaps at the operational level and help the community groups and build their capacity for effective and efficient implementation of the project.

2. Performance monitoring:

Performance monitoring is undertaken at the project implementation level. It will assess whether the program is implemented efficiently and effectively towards achieving the goals and objectives of the project. It involves both qualitative and quantitative analysis that entails how the program is achieving its physical targets, i.e. quantitative, and also the how well is the performance, i.e. qualitative measure.

Roles of stakeholders in the SMS:

1. Community groups:

a. Providing a free access to all data and information relating to the program implementation relevant to monitoring

b. Providing clarification on the data/information relevant to the program, if it is requested by the Monitoring Officer
c. Reviewing of the project activities based on the monitoring findings or feedback

2. Monitoring Officers

The community groups will be responsible for:

a. Designing a monitoring system for the projecting full consultation with the community groups, Forest Officer at MAF Municipality Office and other stakeholders including local NGOs/INGOs, local expert.
b. Organizing monitoring data/information collection through interview of the community members ,Forest Officer and other stakeholders and field visit
c. Quality assurance and validation of the data/information collected.
d. Undertaking a comprehensive analysis of the data/information and present feedback report to the community groups and Forest Officer at MAF Municipality Office
e. Assisting the community groups and Forest Officer at MAF Municipality Office to review the program based on the monitoring feedback.
f. Reporting to the Project Coordinator.
g. Store data/information.

Monitoring Officers (Technical Officer at DRSWC) will commence organizational, and performance monitoring of each community group after receiving the quarterly or annual progress report from the Project Coordinator for the respective reporting period. After completion of the monitoring assignment, they compile the monitoring reports of all community groups within the municipality jurisdiction using a monitoring report template. Subsequently, they submit the municipality level monitoring report to the Project Coordinator. The Project Coordinator's Office will review these monitoring reports and compile into one monitoring report using the project monitoring report template and submit to the Project Steering Committee. The Project Steering Committee will review the quarterly and annual monitoring report and finally submit the annual monitoring report to AFoCO.

4. Risk management and sustainability

4.1. Assumptions and risks

(Assumptions refer to the external conditions such as local regulations and prevailing market, required for the project to succeed while a risk is defined as a probability of not meeting a required assumption. Here, a risk management strategy will be identified and how it will be conducted if certain assumptions are not met.)

In section B, the logical framework matrix has identified the following assumptions for successful implementation of the project and delivery of the expected goals, objectives and outcomes:

1. The government's institutional structure, policies and programs remain supportive to the FLR initiatives addressing deforestation and forest degradation for environment sustainability and support to livelihood of the local people.
2. The FLR initiative accommodates the climate change adaptation strategy to adjust to the possible climate change
3. All agencies timely receive allocated budgets for implementing project activities as stipulated in the project schedule.
4. A smooth transition between the project personnel is needed in case of transfer of the project's key personnel during the project period.
5. An excellent communication and coordination between the organizations(e.g. DFCIP, DRSWC, CIFOR, AFoCO)and personnel assigned to the project.
6. Community groups are formed involving interested households to participate in the project.
7. The implementing agencies (MAF Municipality Office) have staff with technical and social knowledge and skill to organize and provide technical assistance to community groups.
8. The Technical Officers at DRSWC have skill and capacity for undertaking monitoring of the project.
9. Community groups demonstrate good governance in regards to people's participation, decision-making and benefit sharing.
10. An excellent communication and coordination between the community groups and other stakeholders including local NGOs/INGOs, local experts at the field level.

The following risks have been identified based on the above assumptions and their probability and the adapted mitigation measures to address or minimize these risks are provided in Table below:

Possible risks	Probability	Mitigation Measures
Change the government's institutional structures that impacts the project.	Very low	DGFCIP, DRWC and MAF Municipality Office are involved in this project. If there is any change in the government institutional structure the organizations, which take over the roles and responsibilities of these organizations, will be involved.
Change in the government 's policies and programs that impact negatively to the project	Unlikely	A sustainable environment is a top priority for the government, and the latter is committed to addressing deforestation and forest degradation. Unlikely to impact on the project due to change in the policies and programs.
Climate change adaptation is not considered during the design and implementation of FLR initiative	Very low	FLR initiative will include climate change adaptation during the project design and implementation
The implementation agencies will not be paid on time and the project implementation will be delayed	Medium	The implementing agencies submit the project activities and budget activities and budget at least six months before the project activity schedule for implementation with full documentation to the concerning authority
A frequent transfer of the project key personnel during	Medium	A transition plan will be in place in case of the project

the project period		staff transfer so that the out-going staff hand over to the in-coming staff.
A lack of communication and coordination between the organizations (e.g.DGFCIP, DRSWC, CIFOR, AFoCO) and personnel assignment to the project	Low	Since the project design clearly outlines the line of communication and coordination between the organizations and personnel, the chairperson of the project steering Committee and the project Coordinator take responsibility to oversee this issue and resolve before any impact to the project
Community groups do not comprise interested households to participate in the project	Low	Only interested households from a community group through a stakeholder'sengagement process where the participants can make a free, prior and informed decision. Forest Officers at the MAF Municipality Officer will facilitate the stakeholder'sengagement process.
The implementing agencies (MAF Municipality Office) do not have staff with technical and social knowledge and skill to organize and provide technical assistance to community groups.	Medium	The project will organize relevant capacity building training, workshop and study tour to enhance social and technicalknowledge and skill of the staff at MAF Municipality Office. The staff's social and technical knowledge and expertise are assessed to determine the need and areas of capacity development.

The technical Officers at DRSWC have no skill and capacity for undertaking monitoring of the project	Medium	The project will organize training and a follow-up workshop to equip the technical Officers at DRSWC with monitoring knowledge and skill. The staffs social and technical knowledge and expertise are assessed to determine the need and areas capacity development.
Community groups have poor governance in regard to people's participation, decision making and benefit sharing	High	The project will organize relevant capacity building training workshop and study tour to support the institutional development of the community groups and improving good governance.
A lack of communication and coordination between the community groups and other stakeholders including local NGOs/INGOs. Local experts at the field level.	Medium –high	The project will facilitate effective communication groups and other stakeholders through encouraging a regular meeting, interaction and sharing experience events.

4.2. Sustainability

(This will clarify how to sustain the results and outcome of the project in the aftermath of the project and clarify the political support, institutional capacity of the beneficiary, and sustainability in environmental, financial and technological aspects.)

The project aims to institutionalize the project approach and activities to support national development goals in Timor-Leste, i.e., social, economic and environmental objectives for restoration of degraded land for multiple environmental and economic values. As the outcomes of the project are directly related to climate and development goals (i.e., SDGs), it will attract responsible institutional and private sector investors. The project uses two strategies to ensure long term sustainability of the results of the project and the institutionalization of the methods.

Institutional sustainability: Firstly, the project implementer and project partner will work in very close partnership so that the skills and knowledge to assess degraded lands, develop datasets and maps of the sites, design and agree locally customized FLR initiatives and the monitoring and management of these initiatives is passed from the partner of DGFCIP, , . The project incorporates a capacity building element for MAF staff to learn and apply these skills..so that MAF will gain the ability to provide ongoing support to the target communities and be able to replicate the successes and learning from the project to other sites within Timor-Leste.In addition to the handing over of skills and knowledge, the project will produce a number of policy briefs and document good practices, which will be used to influence local and national policy.

Financial Sustainability: Secondly, in terms of sustainability of project results, the action has been designed in such a way as to build local ownership of the FLR plots, form local community based enterprises and will link these local enterprises to local entrepreneurs who can buy and market the products, locally, nationally and internationally. As the community enterprises make a profit, these profits will be disbursed fairly to the members of the community groups and a percentage of the profits willbe used to reinvest in planting out more agroforestry plots for long term sustainability of their businesses. This will ensure the financial sustainability of the project, as local communities will have added incentive to manage their plots for a better livelihood and increased income.

Environmental responsibility: As the project is using agroforestry to restore degraded lands, the species mix which includes high economic and ecologically valuable species, there will be a positive and environmentally sustainable impact from the projecting Timor-Leste. The agroforestry plots will reforest degraded lands in watershed areas, increasing water absorptions, reducing soil erosion and having a positive impact on climate change, locally and globally.