AFoCO Project Document

Project code	*AFoCO/015/2020*

Project Profile	
Project title	**Model Forest for Livelihood Improvement of Forest Dependent Communities through Development of Community-based Enterprise and Forest Conservation**
Project duration	Estimated start date: 1st October 2020 Estimated end date: 30th September 2023
Implementing Agency	Forest Research Institute, Yezin
Participating countries	Myanmar
Project site	Taunggyi District, Shan State; Pyay District, Bago Region
Main objective	To establish model forest villages to improve rural livelihood and ensuring sustainable landscape To develop the community-based enterprise in the Shan State
Target Area[1]	Primary Target Area: Priority 1. Initiating customized restoration and reforestation models Secondary Target Area: Priority 4. Local Livelihood improvement and community-based enterprise development
Budget and source of finance	Total: US$ 952,000 - AFoCO: US$ 952,000 - National: US$ _____ - Others: US$ _____ (to be specified)
Proponent Profile			
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[1] Refer to the list of target areas which is in accordance with the objectives and prevailing strategic plan of AFoCO (provided by the Secretariat).

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Abbreviation and Acronyms

AFoCO	Asian Forest Cooperation Organization
ASEAN	Association of South East Asian Nations
CF	Community Forest
CSO	Civil Society Organization
GDP	Gross Domestic Product
INGO	International Non-governmental Organization
MRRP	Myanmar Rehabilitation and Restoration Program
NGO	Non-governmental Organization
NTFPs	Non-Timber Forest Products
RETC	Regional Education and Training Center, AFoCO
SC	Shifting cultivation
UNREDD	The United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation

SUMMARY

Deforestation and forest degradation is rapidly proceeding in Myanmar. The estimated forest cover decreased from 58 % (39.3 million ha) in 1990 to 46 % (31.2 million ha) in 2012 (FAO, 2015). Myanmar had third highest annual rate forest reduction in the world according to FRA 2015 report. One of the root causes of deforestation is local people heavily depend on forests for household consumption, fuel for small scale cottage industry, livelihood income and changes of forest land into agricultural purposes because of the poverty.

In order to facilitate balance of rural people and biodiversity conservation, it is necessary to fill the gaps for rural development such as limited alternative job opportunities, reduced productivity of crops because of climate change as well as limited initial support and technology and limited market access. Meanwhile, it is also needed to enhance knowledge on forest conservation by promoting existing extension activities by the Forest Department. As such, it is a good timing to implement the project entitled 'Model Forest for Livelihood Improvement of Forest Dependent Communities through Development of Community-based Enterprise and Forest Conservation' through people participation for rural development.

The specific objectives of the project are:
(1) To establish model forest villages to improve rural livelihood and ensuring sustainable landscape; and
(2) To develop community based tourism and community-based enterprise.

It is expected to achieve three outputs:
(1) Improvement of community forest (CF), homegarden, sustainable shifting cultivation (a shifting cultivation practice that has a defined rotation and a well prepared plan) and community based tourism;
(2) Development of community based tourism and community based enterprise; and
(3) Improved knowledge on updated forestry techniques, management and policy of the Forest Department. The outcomes of this project will also address rural development policy of Myanmar drafted in 2019.

SECTION A. PROJECT CONTEXT

1. Background

In the East Asia and Pacific Region, Myanmar is one of the countries with the lowest gross domestic product (GDP). Decades of underinvestment and inattention have taken a toll on public institutions and the civil service, limiting the reach of government and its ability to provide services in rural areas. Limited access to and the poor state of existing infrastructure are major impediments for the provision of basic health and education services, and for economic development. Consequently, rural areas lag significantly behind urban areas in their socio-economic development. According to 2014 Myanmar census data, rural population occupies 70% of the total population and their livelihood mainly rely on forests and forest products. As the rural population heavily depends on the forest due to certain limitations such as lack of alternative livelihood options, limited access to market opportunities, poverty and underdevelopment, etc. in combination with the unsystematic use of forest products, most of the forests areas have been degraded. With this, the limited knowledge and awareness on forest conservation forced to deforestation and forest degradation more severely. The recent reports also show the major drivers that force to deforestation and forest degradation in Myanmar are relating to those activities. According to FRA 2015, Myanmar had third highest deforestation rate in the world. Therefore, implementation activities that can reduce deforestation and forest degradation through the promotion of rural livelihood development, generating alternative income generating opportunities and community participation in forest conservation are urgently and timely required in Myanmar.

For this, the government as well as Forest Department has been emphasizing on restoration and rehabilitation programs with the inclusive of local livelihood improvement and community participation since a decade ago. One of the six imperatives in Forest Policy has been stated to support basic needs of local people through sustainable management of forests. According to the sections 3.4 and 3.10 of forest policy, it is necessary to enhance people participation and public awareness program in order to provide people based development and, promote the export of value-added forest products. The revised new forest law (2018) highlighted to enhance the sustainable forest management in order to support sustainable development of local livelihood as one of the objectives under section 3 (g-i). Along with this, several rules, regulations and instructions have been developed in which Community Forestry Instruction (2016) is aimed to get win-win achievement for forest conservation, rehabilitation and poverty reduction at the same time. The international coordination for forest conservation, capacity development and poverty reduction has been enhanced in the forest policy.

Establishment of model forest village is an ideal approach that can maintain a balance for sustainability of forests and local people's livelihood through generating alternative income generating opportunities and community participation in forest conservation, development of community forestry and agroforestry, and systematic management of land use practices. Therefore, demonstration of model forest village is timely required to set for forest conservation in Myanmar.

2. Conformity with AFoCO's objectives and strategic priorities

The project will be addressed specifically in consistent of the objective of AFoCO "to undertake projects and translate sound forest policies and proven technologies into action with a mission to rehabilitate degraded forest land to prevent deforestation and forest degradation in the context of sustainable forest management as well as under scope of addressing the impact of climate change. The project can fulfill the AFoCO's objectives such as increase in forest cover, enhancing adaptive capacity of forest dependent community, and improving local livelihood and income through forest related activities. Regard with priority area, this project is in line with strategic priority area no. 4 "Local Livelihood improvement and community-based enterprise development'. The project will also contribute to the priority area no. 1, 'Initiating customized restoration and reforestation models', and the priority area no. 2, 'Climate change adaptation', in some extent. The Project proposal focuses on the strategic priority areas of AFoCO, especially the project will cover the following areas:

- Sustainable forest management, biodiversity conservation, maintenance and enhancement of ecosystem services as well as reforestation and forest rehabilitation;

- Capacity building of stakeholders through research and development, sharing experiences, and the transfer of technology as well as education and exchange programs;

- Reduction of deforestation, forest degradation and the mitigation of the impact of forest-related disasters;

- Livelihood improvement and poverty reduction through model forest approach.

3. Rationality

Trees and forests are essential for tackling the challenges that confront in the Southeast Asia Region, and they are a source and factor of resilience in the face of global change. Large areas of forests and other wooded lands in the Region are being degraded, however, and there is an urgent need for action through community based approach. Restoration and sustainable forest management actions range from on-the-ground activities such as habitat protection, assisted natural regeneration, soil conservation and stabilization and tree-planting to policy improvements, the provision of incentives for livelihood improvement, climate-smart and good agricultural practices, capacity development, and continuous monitoring and learning. To be effective and sustainably managed forests, community-based forest management activities as well as model forest approach should be applied at the landscape scale.

The project focuses on Livelihood Improvement of Forest Dependent Communities through Development of Community-based Enterprise and Forest Conservation. It will demonstrate as a Model Forest which fully reflects the key environmental, social and economic values and concerns of the region. The project is also a pilot implementation and demonstration of innovative, sustainable approaches to the management of forests for a range of different benefits. The project will also enhance agroforestry-based community forest using ASEAN agroforestry guidelines adopted in 2019. The project plans to coordinate technical assistance and trainings from experts of World Agroforestry Centre. The activities and outputs of the

Project will be helpful for other countries in Asian Region that, in the course of this work, the techniques or model forest village participatory management plan will have been evolved that can be used for other relevant regions and the south-south learning approach in Asian countries could also be useful for the implementation of model forest approach. AFoCO Regional Education and Training Center (RETC) is established in Yangon, Myanmar, and currently organizing trainings and course works in the training center. The outputs of the project can be shared in some trainings and on-ground visits to the project site could be done during the training period so that it creates another opportunities to share experiences among AFoCO member countries. The Project is also very much in line with the *Strategic Plan of Action for ASEAN Co-operation in Forestry (2016-2025) particularly direct related to*

*(i) **Strategic Thrust 1-** Enhance quantity and quality of production with sustainable, "green" technologies, resource management systems, and minimize pre- and post-harvest losses and waste;*

*(iii) **Strategic Thrust 3-** Ensure food security, food safety, better nutrition and equitable distribution;*

*(iv) **Strategic Thrust 4-** Increase resilience to climate change, natural disasters and other shocks;*

*(vii) **Strategic Thrust 7-** Promote sustainable forest management.*

Through the improvement of homegarden, upland farming and shifting cultivation as well as the establishment of community forests and agroforestry of the project, the project could not only enhance the sustainable production, resource management system and sustainable forest management but also increase resilience to climate change, natural disasters and other shocks. The project will support the techniques and guidelines for agroforestry and CF, to ensure food security, food safety, better nutrition, equitable distribution, minimize pre- and post-harvest losses and waste, and promote sustainable management. Additionally, the community-based enterprise could be helpful for poverty reduction and sustainable development of local communities. Thus, the model forest approach could contribute in achieving the strategic thrusts 1, 3, 4, and 7 of the Strategic Plan of Action for ASEAN Co-operation in Forestry (2016-2025).

4. **Information on project target area**
    4.1. Geographic information

The principal target project site would be Paukkhaung Township (Pyay District); Ywarngan Township (Taungyi District) and Pindaya Township (Taungyi District) in Myanmar.

Paukkhaung Township is situated in Pyay District of Bago Region (between the latitude 18° 20' to 19° 22' N and longitude 95° 06' to 97° 66' E. The area covers 1914 km^2. The altitude of the project site (Paukkhaung Township) is between 300 m and 800 m. Tropical monsoon climate is found in this region. The average annual temperature is 30.2°C and average annual rainfall is 1,101 mm. The geographical formation consists mainly of tertiary sedimentary rock,

and some consists of sandstone. The sandstone varies from a yellow soft stone, which appears to yield a soil very suitable for Teak, to dark orange color. Most of the forest soils on the top are a skeletal nature. On the lower slopes, the soils are deeper because of accumulation of wash from the top and slopes, moister and more fertile. Most of the mountainous areas have soil with poor fertility.

Ywar Ngan township, "salty village", is located in Taunggyi District of Shan State (between 20 15' to 20°45'N Latitude and 96 49' to 96° 48' E Longitude) Myanmar. The area covers 2,982 km^2. The altitude of the project site is 1244 m. Humid subtropical climate is found in this region. The average annual temperature is 20.3°C and average annual rainfall is 1,758 mm. The State extends from approximately basic rocks of the Shan plateau are Limestone. Granite and Shale can be found in some areas. Soil found in the Taungyi District is mountainous brown and yellow brown, classified as Cambisol and Ferrasols as per FAO classification.
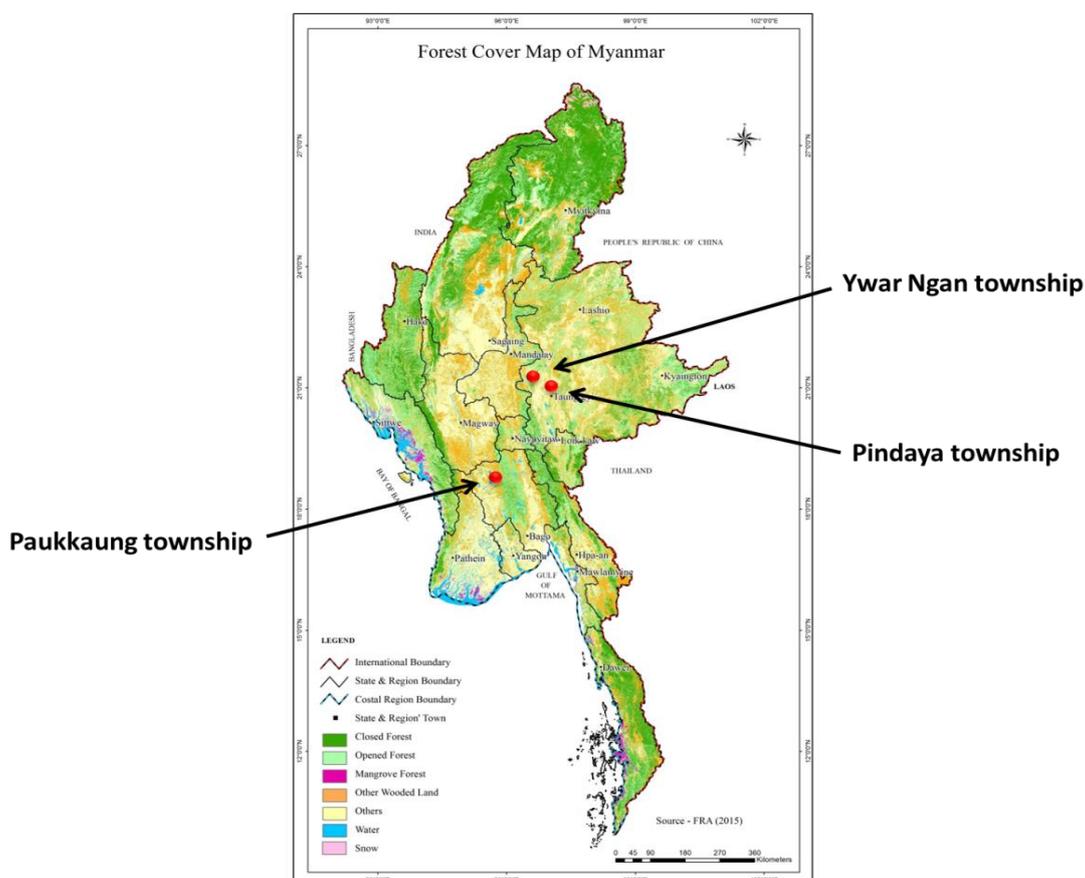
Figure 1. Location map of the project sites

Pindaya township is located in Taunggyi District of Shan State. It lies between the latitude of 20° 42' to 21° 13' North and the longitude of 96° 25' to 96° 57' East. The area covers 660.2 km^2. It is situated 1200 m above sea level. The climate is warm and temperate in this region. The average annual temperature is 19.5°C and average annual rainfall is 1,921 mm.   Occupying more than half of the land is productive and cultivated areas. Pine forests could be found in this

region. Red earth soils are the most dominating soils in Pindaya township, especially in mountainous areas and plateau. The following map shows location of three project sites in Myanmar.

4.2. Environmental information

The project site In **Paukkhaung** Township has a tropical monsoon climate with a rainy season and a pronounced dry season. There is pronounced rainy season from May to October with ample rainfall coming from the Bay of Bengal. There are 6 well-marked dry months from November to May in the study site while wet from the end of May to October with a maximum rainfall in July and August. The average temperature is about 30.2 ℃. Deciduous forest is a major forest type and it is found semi-evergreen forest and patches of dry deciduous forest areas. The different forest types and dense forest cover contribute to the biological diversity and enhancing ecosystem services. Forest area covers about 66 % of total land use.

In **Ywar Ngan** township, climate is a broad summation of temperature, humidity, rainfall and wind velocity. The ambient temperature and rainfall are main factors, which influence the environment. The minimum temperature occurs in December around 13˚ to 24 C while maximum temperature occurs during April within a range of 21˚-32 C. The humidity ranges from less than 40% in March to 90% in August. In summer, the prevailing winds are southwesterly warm tropical winds, originating from the Bay of Bengal. The Rainy Season occurs during the period from April to November, with maximum rainfall occurring from August to September. Local people are used to conserve the forest around their village traditionally for sustainable water supply. Dry hill forest is a major forest type and forest area covers about 62.72 % of total land use.

Pindaya township has the humid subtropical climate and the number of raining days range from 90 to 120 days per year. Thunderstorms struck the area in the rainy season (May to October). The temperature varies from 7°-23.5°C in the cold season to 16.4°-29.6 °C in the hot season. The minimum temperature occurs in December and January around 7˚ to 8.3˚ C while maximum temperature occurs during April with an average of 29.6˚ C. The average humidity is 67%. Several limestone caves are found in this region. Shifting cultivation and agricultural expansion are the major drivers of deforestation and forest degradation. The forest covers over 19.65% of total land use.

4.3. Socio-Economic information

According to 2018 statistics, the total population of Paukkaung Township is 124,856. Among which, 88% is in rural areas. There are 125 villages in this Township. Educational status is low; an average of 60% in elementary school and 5% in illiterate. Main economy of project site is subsistence farming by shifting cultivation and farming. The major food crops grown are rice, variety of beans, sugarcane, groundnut and sesame. Rural communities in the area are largely dependent on forest resources for their livelihood. Most of local people collect fuelwood, poles and posts, non-timber forest products (NTFPs), bamboos, medicinal plants, etc. from the forests for subsistence consumption. Moreover, the communities living around and close to the forest areas are directly involving in forest-based jobs such as logging activities, planting

establishment and other restoration activities. In fact, the economy of the project site is mixed consisting of large traditional agricultural sector made up of mostly small-scale peasant farmers, also dependent on NTFPs harvesting and processing, a growing informal sector of small business, artisans and technicians and an insignificant proportion in the processing and manufacturing sector.

The total population of Ywarngan township is about 82,532 with total number of 125 villages and 31 households. About 94% of the population is in rural areas. Shan and Danu are the major ethnic groups. Educatio nal status is low; an average of 57% in elementary school and 7% in illiterate. Lately, Ywarngan township has been having attention from all over the world because of its beautiful waterfalls, caves and the blue lake lagoon (Yay-pyar Lake) which can attract for nature based tourism. Ywar Ngan is especially known for the quality of its coffee. The coffee product of Ywar Ngan is being exported to five foreign countries. Ywar Ngan coffee beans are of the costa Rican variety and are grown as a substitute for poppy. The coffee is currently rated at a level of 85 in the global market under the recommendations from American Coffee specialists. Any grade of 80 or above is considered as a special coffee. Over 700 tons of coffee are produced from the coffee plant located in Ywar Ngan Township in Southern Shan State. Out of 125 villages in Ywar Ngan Township, about 90 are engaged in coffee plantation, with 7,300 acres of coffee farms.

The total population of Pindaya township is 79, 303. About 86.4% of the population is in rural areas. Major ethnic groups are Danu, PaO and TaungYo, which make more than 80 % of population. An average of over 80% is in elementary school level, dropping down the school attendance after age 11, and 6.6% is illiterate. The major economy is agriculture (about 45 % of township population). The farmers plant rice, corn, wheat, peanut, beans, sunflower, sesame, potato, flowers, coffee, tea, and tomato. Avocado, damson and seasonal fruits are widely found. People trade in "Every-Fifth-Day-Markets", which are famous trading places in this region. People also trade in brokers' sales centers. A lot of beautiful landscape could be seen in this area. The spectacular limestone caves can be found in this area. Pindaya cave is the most popular for tourist attraction and carvings of Buddha all around created by devotees are found in the cave. The cave is situated at 5000 metres above sea level and it has a length of 490 feet long. Ponetaloke lake is another popular attraction in Pindaya township. Annual pagoda festivals are also popular trading places. 86.7% of households mainly use firewood for cooking.

SECTION B. RATIONALE AND OBJECTIVES

1. Rationale

1.1. *Stakeholder analysis*

The key stakeholders were identified based on potential beneficiaries, impacted or affected groups, supporter, relationship among stakeholders, etc. Then the interests of stakeholders and potential impact of the project on those interests were assessed; followed by assessment of influence and importance of stakeholders; and then we planned and outlined the stakeholder participation strategy/ involvement.

The initial stakeholder consultation meetings were done either by on-ground meeting or through phone call and online discussions with relevant organizations. The institutional arrangement or coordination with relevant stakeholders was done with the help of township forest department office to lead to contact the stakeholder organizations in a faster way. The organizations are willing to contribute in the project. Again, the stakeholder analysis will be conducted thoroughly when starting the project.

Table 1. Stakeholder analysis table

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
Primary stakeholders				
Villagers	Key element in model forest establishment	Limited off farm income	-Income enhanced - Participation in forest conservation - Reduced rely on the forest - Greening	All proposed project activities
Village Administration organizations and monk	Key element for organizing villagers	Interest in village development but weak interaction with departments/ organizations	- Participation in forest conservation - Improved capacity on leadership, village development and forest conservation -Rural development	Facilitation and organizing

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
Forest Research Institute	Key element in the technical aspect of whole project	-Limited human resource capacity, limited technology, limited budget, need to upgrade researcher's capacity and to develop model forest village -Interest in enhancing forest based livelihood through international cooperation	Key role in research and educational development in forestry sector	-Leading organization -All proposed project activities
Forest Department	Key element in implementing model forest participatory management plan and facilitating with relevant line departments for trade	Interest in greening Supporting basic needs of local communities from forest	-Working with community - Enhanced capacity on establishing model forest village - Experience from abroad through exchange visit	Technical cooperation
Secondary stakeholders				
Department of agriculture	Knowledgeable person who can support farmers for improving agricultural techniques	Interest in development of agriculture and extension	-Increased awareness on model forest village -Understanding on Constraints and opportunities of local farmers	Technical cooperation and coordination

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
			for crop production	
Department of rural development		Rural Development	- Rural Development - Increased awareness on model forest village	Coordination and Information sharing
Small and Medium Enterprise (SMEs), Ministry of Industry	Key element in producing value-added products	Less contact with villagers	SME development	Involve in technical assistant to produce value-added products
Private sector	Key element in networking market and technical support for producing value-added products	Less contact with villagers and departmental staffs	Producing and marketing value-added products (e.g bamboo)	Involve in networking market
INGO/NGO/ CSO	Key element in sharing knowledge	-Poor knowledge in model forest village establishment -Interest in livelihood development	Technical exchange	Involve in sharing knowledge and networking market
Tourism department	Key element in community based tourism	-Limited coordination with community forest user group -Interest in rural livelihood through tourism development	- Establishment of community based tourism with participation of multi-stakeholders	Involve in the formation of community based tourism
Tertiary and other stakeholders				

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
Township Administrative Organization	Authorized body to monitor and coordinate every affair including forestry-related matters	Limited knowledge, low level of awareness about model forest village, need to understand measures and management system	Key player to coordinate relevant Ministries, organizations and stakeholders	Involve in the coordination mechanism among different stakeholders
AFoCo RETC/ Central Forestry Development Training Centre	Prominent institutions in the development of technologies, methodologies, capacity building center	Limited capable resource persons, need to access to updated information and resource persons to teach trainees	Important role to provide training on forest conservation	Involve in the development and sharing technology required for model forest village development
Primary/Middle and High Schools in West Bago Yoma Region	Active participation in environmental conservation	Limited knowledge, low level of awareness about tree planting	High potential, new generation to learn and love forests	Involve in forests and education programs

[Attachment-A]

1.2.   Problem analysis
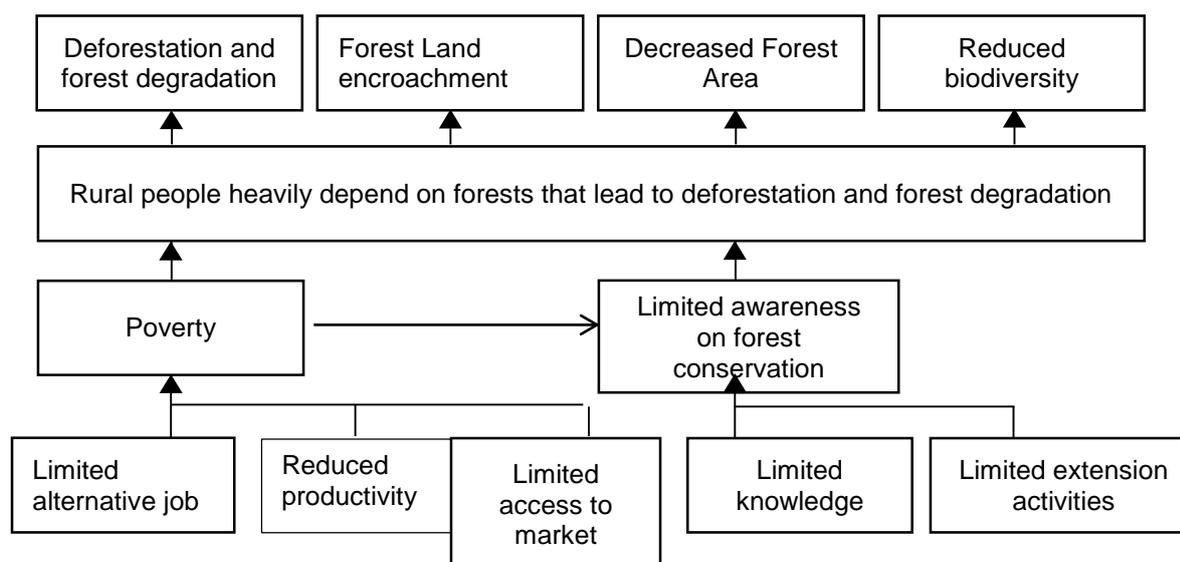
Figure 2. Problem tree

1.3.   Logical framework matrix

Table 2. Logical framework matrix

	Narrative	**Objectively Verifiable Indicators**	**Means of Verification**	**Assumptions**
Activities	1) Development of income through improvement of community forest (CF), homegarden, sustainable shifting cultivation (SC) (a shifting cultivation practice that has a fix (defined) rotation and a well prepared	- Increase annual income - Demonstration plots for homegarden, agroforestry based community forest and sustainable shifting cultivation - Development/setting up of Community-based tourism - Visitors to the sites	- Assessment report on annual income - No. of demonstration plots (homegarden; agroforestry based community forest; sustainable shifting cultivation) - Mid-term and annual reports	Full and effective participation of villagers and relevant stakeholders in each activities of this project - (20-30% of households in a village will increase annual income) - (At least 20 ha of CF/ homegardens and upland farming

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	Narrative	Objectively Verifiable Indicators	Means of Verification	Assumptions
	plan), community based tourism		- Setting up Community based tourism site in Ywar-Ngan and Nyaung-Cho Township - Number of visitors to the sites	established: six demonstration plots will be set up) - (Two community based tourism developed/set up)
	2) Governance of Market for development of community-based enterprise development	- Feasibility studies (including technical, socio-economic, financial, organizational and sustainability aspects) - Community-based enterprise - Agroforestry-community based enterprise development plan - Number of market based agroforestry products	- Report of feasibility study - No. of community-based enterprise - Report of agroforestry-community based enterprise development plan - Lists of the number of market based agroforestry products	- All relevant stakeholders are willing to participate in market analysis and creating enabling conditions to develop community-based enterprise (Three community based enterprises developed)
	3) Knowledge and information sharing activities	- Human resource and capacity development for men and women (gender aspect consider) (Trainings, workshops, seminars, awareness raising programs, exchange visits) - Before and after	- No. of trainings, workshops, seminars, awareness raising programs, exchange visits - No. of men and women participated in training/worksh op, etc. - Assessment	-All relevant stakeholders are supportive and cooperative -Related intuitions are participated in developing curriculum - Gender balance would be respected and addressed. (At least 75% of community in each

	Narrative	Objectively Verifiable Indicators	Means of Verification	Assumptions
		assessment (men and women) - Number of people come to learn and make visit - Number of cases apply key lessons from the project - Documentations of knowledge drawn from the demonstration	report	village will be effected)
Outputs	1. Establishment of model forest villages in Shan State and Bago region 2. Improvement of community forest, homegarden, sustainable shifting cultivation and community based tourism 3. Development of community based tourism and community based enterprise Improved knowledge on updated forestry techniques, management and policy of the Forest Department			
Objectives	1. To demonstrate model forest villages by improving rural livelihood and ensuring sustainable landscape 2. To develop the community-based enterprise in the Shan State and Bago region			
Goal	Local livelihood improvement and community- based enterprise development			

1.4. Justification

In order to achieve the objectives of the project, the activities are designed to address the key problem for rural people heavily depend on forests due to the poverty that lead to deforestation and forest degradation. When the poverty is stacked with the limited knowledge and awareness of local people on forest conservation, the impact is deeper and greater as it has been considered as one of the major root causes of deforestation and degradation in Myanmar. According to the drivers analysis, that problem is widely occurred in the regions where the project sites are located. The major underlying causes of poverty is due to the limited alternative job opportunities; reduced productivity and limited access to market for selling local products (crops & forest products) while limited awareness on forest conservation is related to limited knowledge and the limited extension activities by Forest Department.

Therefore, the project will create the alternative job opportunities and increase productivity based on the existing and enabling conditions of the sites. Homegarden will be developed in backyards for saving money and getting income from selling the products as commercial purposes. The project will develop community based tourism in the project sites in Shan state because those areas have the potential to attract visitors by the natural resources scenarios and

village tracking experience, showing culture of ethnic groups and traditional practices and home stay as well. Even now, the Ministry of Tourism emphasized on community based tourism (nature based tourism) and Shan state is one of the priority areas. It is very timely to develop the community based tourism. To increase the productivity, reduce unsystematic shifting cultivation and conserve forests, the project will develop a sustainable shifting cultivation that has a defined rotation and a well-prepared plan of technique, cultivation and commercial crop based on the market demand.

On the other hand, the establishment of community forests (including agroforestry) will be conducted for economic and ecological value. Market networking and the formation of community based enterprise will be done in order to get more commercial profits by reducing gaps of value chains from the production area to the market and expanding the market availability of the products such as coffee, avocado, mushroom, medicinal plants, fruits, agricultural crops, yam, etc. Livelihood improvement trainings such as bamboo handicrafts and value added bamboo products trainings will be given and those value added products will be introduced to the existing market through community base enterprise. CSOs, NGOs and small commercial groups as well as governmental organizations will collaborate in market networking and knowledge sharing. Local people will engage or participate in small economic groups and microfinance organizations as a community empowering effort. The community will get experiences and lesson learnt from successful stories through exchange visits to different regions of Myanmar and any relevant neighboring countries. Knowledge and information sharing activities will also be conducted in order to improve the awareness on environmental conservation and livelihood improvement. Based on the analysis of the drivers of deforestation and forest degradation conducted by UNREDD and Forest Department, one of the three main drivers of deforestation and forest degradation in the project areas is fuelwood consumption because almost all of the households in the village used fuelwood for cooking at home for daily, festivals and ceremony. Therefore, efficient cook stoves that save 40% of fuelwood usage will be distributed to local communities with the aim to reduce fuelwood consumption from the forests.

The project will reduce poverty by enhancing income and enhance participation in forest conservation through improvement of community forest, homegarden, sustainable shifting cultivation; development of community based tourism and community based enterprise and improved knowledge on updated forestry techniques, management and policy of the Forest Department. The project will not be succeeded without the support of local communities. For this, the involvement of local communities will stream as a main role all project activities (from planning of the project design to implementation stages) through Participatory Rural Appraisal approach and Participatory Action Research methods such as mapping, multiple loop learning, timelines (history), participatory observation, community meetings, problem identification and visioning, transect walks, public dialogues, etc. The project will encourage the local communities in the engagement with governmental organizations / investors / NGOs, trainings, and implementing project works and events to reflect and learn from these. The project will also support the community exchange program for sharing and polishing knowledge from different experiences and regions.

The establishment of CF by this project will contribute to the national strategy/target of CF development (2000-01 to 2030-31) in Myanmar through increasing CF areas. Model forest village development, community based tourism and community based enterprise as well as CF establishment can fulfill the objectives of Myanmar Rehabilitation and Restoration Program (MRRP). The experiences and outputs from the project will support in upgrading CF instruction in coming years and polishing MRRP strategies. The lesson learnt and output of the project could help the participatory forest management approach running in Forest conservation and livelihood development in Myanmar.

As Myanmar is going to revise and upgrade National law, regulations and strategies in forest management in near future, the outputs from the project could timely support on those processes.

2. Objectives

2.1. Main objective (development objective)

The main objective is to establish Model Forest Village for Livelihood Improvement of Forest Dependent Communities through Development of Community-based Enterprise and Forest Conservation.

2.2. Specific objective(s) and success criteria & indicators

The specific objective of this project is:

> (i) To establish model forest villages;
>
> (ii) To improve rural livelihood and ensuring sustainable landscape; and
>
> (iii)To develop the community-based enterprise in selected villages.

The project will conduct base line assessment on forest conditions, biodiversity, livelihood and land use changings using participatory and scientific approach. Based on baseline assessment, participatory management plan will be developed to establish model forest village. Assessments on enabling conditions for developing the community-based enterprise will do.

Success criteria indicators are as follows:

- By 2021, Model forest village participatory management plan would has been developed.

- By 2022, Model forest village participatory management plan will being implemented to improve rural livelihood and to develop the community-based enterprise.

- By 2023, Community-based tourism and Community-based enterprise would have been established according to the context of project sites.

SECTION C. DESCRIPTION OF PROJECT INTERVENTIONS

1. Work Plan and Schedule

Outputs	Performance Indicator	Responsible Person/ Body	Annual Timeline																					Remarks
			2020				2021				2022				2023				…			…			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
Objective 1. To establish model forest villages to improve rural livelihood and ensuring sustainable landscape																									
(Output 1. Increased in annual income through improvement of community forest (CF), homegarden, sustainable shifting cultivation (SC), community based tourism)																									
A.1 Improvement of homegarden and upland farming							▓	▓	▓	▓	▓	▓	▓	▓	▓										
A.2 Establishment of demonstration plot		FRI/T/S FD					▓	▓	▓	▓	▓	▓		▓	▓										
A.3 Distribution of efficient cook stoves	villages	FD/FRI					▓				▓	▓			▓										
A.4 Biodiversity assessment on remnant forests	Field survey	FRI					▓	▓	▓		▓	▓													
Objective 2. To develop the community-based enterprise in the Shan State																									
(Output 2. Governance of Market for development of community- based enterprise development)																									
B.1 (Feasibility study and Market networking)							▓	▓		▓	▓	▓	▓	▓	▓										
B.2 (Development of Community-based enterprise)							▓	▓	▓	▓	▓	▓	▓	▓	▓										
Objectives 1+2: To establish model forest villages to improve rural livelihood and ensuring sustainable landscape, and To develop the community-based enterprise in the Shan State																									

Outputs	Performance Indicator	Responsible Person/ Body	Annual Timeline 2020 Q1	Q2	Q3	Q4	2021 Q1	Q2	Q3	Q4	2022 Q1	Q2	Q3	Q4	2023 Q1	Q2	Q3	Q4	…	…	Remarks
(Output 3. Knowledge and information sharing activities)																					
C.1 (Human resource and capacity development)						█	█		█	█	█	█	█	█	█	█	█				
C.2 (Before and after assessment: gender, age, education)	*Report*	*FRI*				█	█									█					
Office (consumable, capital and personal)																					
D.1 Project personal						█	█	█	█	█	█	█	█	█	█	█					
D.2 Consumable items						█	█	█	█	█	█	█	█	█	█	█	█				
D.3 Capital items						█															
D.4 Project monitoring and evaluation									█			█				█					

2. Budget (USD)

Activity	Budget Allocation by Year (USD)								
	Unit	Unit Cost	Quantity	Total	2020	2021	2022	2023	…
Objective 1. To establish model forest villages to improve rural livelihood and ensuring sustainable landscape									
(Output 1 Increased in annual income through improvement of community forest (CF), homegarden, sustainable shifting cultivation (SC), community based tourism)									
A.1 Improvement of community forest (CF), homegarden, sustainable shifting cultivation (SC). (Agroforestry practices included in CF)				*144,000*	*17,000*	*47,500*	*48,500*	*31,000*	
A.2 Establishment of demonstration plot				*91,000*	*13,500*	*44,500*	*20,000*	*13,000*	
A.3 Distribution of efficient cook stoves	village	1,000	3	*3,000*	*0*	*1,000*	*1,000*	*1,000*	
A.4 Biodiversity assessment on remnant forests				*89,000*	*15,000*	*17,000*	*34,000*	*23,000*	
Objective 2. To develop the community-based enterprise in the Shan State									
(Output 2 Governance of Market for development of community- based enterprise development)									
B.1 (Feasibility study and Market networking)				*112,000*	*13,000*	*40,000*	*35,000*	*24,000*	
B.2 (Development of Community-based enterprise)				*125,000*	*10,500*	*49,500*	*47,000*	*18,000*	
Objectives 1+2: To establish model forest villages to improve rural livelihood and ensuring sustainable landscape, and To develop the community-based enterprise in the Shan State									
(Output 3 Knowledge and information sharing activities)									
C.1 (Human resource and capacity development)				*128,500*	*17,500*	*37,500*	*51,500*	*2,2000*	
C.2 (Before and after assessment: gender, age, education)	times	4,000	2	*8,000*	*2,000*	*2,000*	*0*	*4,000*	

Activity	Budget Allocation by Year (USD)								
	Unit	Unit Cost	Quantity	Total	2020	2021	2022	2023	…
Office (consumable, capital and personal)									
D.1 Project personal				43,200	3,600	14,400	14,400	10,800	
D.2 Consumable items				72,500	5,500	24,700	28,600	13,700	
D.3 Capital items				12,800	12,800				
D.4 Project monitoring and evaluation		7,000	3	21,000	0	7,000	7,000	7,000	
Subtotal (All Objective 1~2)				850,000	110,400	285,100	287,000	167,500	
Program Support (12% of subtotal) ** Financial Regulations 3.4*				102,000					
Grand total				**952,000**					
National contribution from Myanmar (land , office, staff				40,860	3,405	13,620	13,620	10,215	
Office place	*month*	500	36	18,000	1,500	6,000	6,000	4,500	
Staffs (FRI) (different level of position)	250 - 185		4 persons x 36 months	22,860	1,905	7,620	7,620	5,715	

SECTION D. IMPLEMENTATION ARRANGEMENTS

### 1. Organizational structure
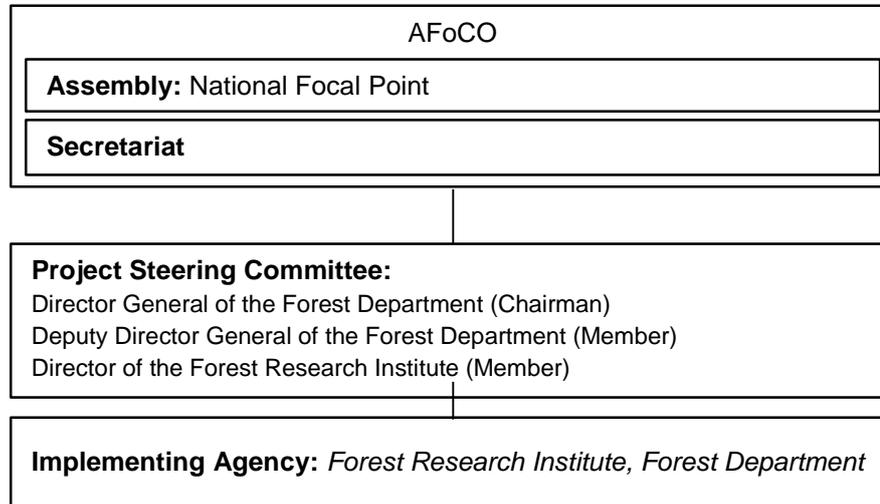
Figure 3. Organizational chart

2. Staff resource plan

Under the supervision of the Project Steering Committee, the project implementation team will be formed with experts and scientists from Forest Research Institute, Local Forest Department, relevant line departments and agencies to achieve the project objectives. The team will be composed of Project management unit; CF/homegarden/SC development unit; Community based tourism and enterprise development unit; and the Research, assessment and extension unit. The project manager will supervise the activities to get smooth and to achieve it with the work plan. FRI team composed of senior and young researchers will carry out assessment activities outlined in the work plan. At least two (2) field-level staff from each township will be involved in the project. As necessary, field volunteer staff who graduated from University of Forestry will be accommodated.

3. Reporting and monitoring arrangements

3.1. Reporting

According to the AFoCO project manual, progress reports to AFoCO will submit twice a year. The project financial reports will be submitted to AFoCO twice a year for the periods from 1 January to 1 June and 1 July to 31 December, no later than 15 January and 15 July each year. The mid-year report will be submitted a mid-year which covers the period from 1 January to 30 June, no later than 15 July each year. The project annual report will be submitted for the period from 1 January to 31 December, not later than 31 January of the next year. Project technical report and workshop proceedings will be submitted during or after completion of the project to the Secretariat. The completion report and the financial audit report to the Secretariat

within three months from the completion date of the project.

Baseline assessment report and technical reports/documents such as model forest village participatory management plan, feasibility study, assessments of biodiversity and ecosystem services, need-based assessment for CBT and community based enterprise development will come out during the project period.

3.2. Monitoring

The project will be subject to monitoring by AFoCO representatives according to the AFoCO guidelines. For regular projects, the PSC is responsible for conducting regular project monitoring. A project monitoring team is comprised of two members; one from external expert and one from member nominated by the Secretariat. Monitoring will be carried out one-month prior to annual PSC meeting. If necessary, on-site monitoring will be conducted.

Process documentation, assessment and impact assessment reports will come out by the project.

4. Risk management and sustainability

4.1. Assumptions and risks

The success of the project will be dependent on a number of assumptions, among them are:

- Full and effective participation of villagers and relevant stakeholders in each activities of this project

- All relevant stakeholders are willing to participate in market analysis and creating enabling conditions to develop community-based enterprise

- All relevant stakeholders are supportive and cooperative for sharing knowledge and experience

- Gender balance would be respected and addressed.

In order to achieve assumptions of this project mentioned in log frame, there is a risk such as late budget allocation, market instability, participation of villagers and climate conditions. In order to minimize it, budget allocation procedures should be processed enough time ahead. To ensure participation of villagers, trust building will be needed through regular contact with villagers, awareness raising, home visit and FPIC for project implementation. Crop variety and collective marketing will be considered one of the options to mediate the risk of market instability. When training/knowledge sharing activities are conducted, gender balance will be considered.

4.2. Sustainability

Project activities will be carried out through inclusiveness of all relevant stakeholders. It is expected that this project will be a good pilot demonstration in Myanmar to advocate of sustainable agri-silvo-forest approach for rural development through policy brief as well as to replicate in other regions.

During the project planning, implementing and monitoring process, principles of sustainable community-based enterprise will be considered to sustain the results and outcome of the project. Development of benefit sharing mechanisms will be formulated for the sustainability of the project outputs. Gender consideration will be taken in all implementation activities and capacity building process. Circulating the community user groups, management team and steering committee, setting up benefit sharing system and the long-term strategic plan, networking with merchants groups, organizations, NGOs and CSOs will be done so that the different benefits will continue to flow to different stakeholders particularly the local communities even after the project completion. Periodical assessment and monitoring of governmental organizations and NGOs after the project period will enhance the sustainability of the project outputs (eg. Forest Department will have to check the CFs, agroforestry, etc in every months or every two months for the progress assessment and can support some seedlings every year).

The project story and outputs will be presented in high level experts group meeting such as Forest Department Executive Committee meeting and regional meetings so that the project initiative can be scaled up in different parts of Myanmar to its impacts at the national level. As the project achievement such as model forest village development, community based tourism and community based enterprise as well as CF establishment will be contributed to the national strategy/target of CF development (2000-01 to 2030-31) and Myanmar Rehabilitation and Restoration Program (MRRP), the project initiative could be scaled up faster and wider to different regions of Myanmar.