

AFoCO Project Document

Project code	AFoCO/038/2023
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Project Profile	
Project title	Advancing Restoration of native Agarwood - <i>Aquilaria crassna</i> and <i>A. malaccensis</i> – for Sustainable Use and Management in Southwestern Cambodia
Project duration	Estimated start date: 01 May 2023 Estimated end date: 30 April 2026 (three years)
Implementing Agency	Department of Wildlife and Biodiversity (DWB) of the Forestry Administration (FA), Ministry of Agriculture, Forestry and Fisheries (MAFF)
Participating countries	Cambodia
Project site	Cardamom Mountain Ranges of Southwestern Cambodia: four provinces of Koh Kong, Pursat, Battambang, and Pailin
Main objective	<ol style="list-style-type: none"> 1. Rehabilitation of former Agarwood ecosystems as the country piloting areas. 2. Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia. 3. Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.
Target Area	<p>Primary Target Area: Initiating customized restoration & reforestation models.</p> <p>Secondary Target Area: Local livelihood improvement & community-based small enterprise development.</p>

Budget and source of finance	Total: KRW 806,535,240 equivalent to US\$ 713,748 <ul style="list-style-type: none"> - AFoCO: KRW 743,820,240 equivalent to US\$ 658,248 - National: KRW 62,715,000 equivalent to US\$ 55,500 (In-kind) 		
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Abbreviation

AFoCO	Asian Forest Cooperation Organization
ASEAN	Association of South-East Asia Nations
ASOF	ASEAN Senior Officials on Forestry
CF	Community Forestry
CITES	Convention on International Trade in Endangered Species of fauna and flora
DFC	Department of Forests and Community Forestry
DPP	Department of forest Plantation and Private forest development
DWB	Department of Wildlife and Biodiversity
FA	Forestry Administration
FAC	Forestry Administration Cantonment
IA	Implementing Agency
IUNC	International Union for Nature Conservation
MAFF	Ministry of Agriculture, Forestry and Fisheries
MoE	Ministry of Environment
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Product
PA	Protected Areas
PDOE	Provincial Department of Environment
RGC	Royal Government of Cambodia
RUA	Royal University of Agriculture

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SUMMARY

The native Agarwood species used to be widespread abundant in the forest areas of Southwestern Cambodia, the Cambodian Emerald Wild Agarwood, up until the early 2000s. Two native Agarwood species, *Aquilaria crassna*, and *Aquilaria malaccensis*, thrive in those areas. Most of the wild Agarwoods nowadays exist in deep forest areas of Protected Areas (PA) while some remaining regrowth Agarwood are available in Community Forestry sites. Likewise, native Agarwood species have been planted in agricultural lands of local villages, as Family-scale plantations. The two species are classified as endangered species by IUCN Red List, CITES, and national regulations like ministerial order (MAFF, 2005) and primer Sub-Decree No. 53 (RGC5, 2006). Being treated as regulated species, harvesting and trading of Agarwood are legalized through the issuance of corresponding permits from Forestry Administration or MAFF, as deemed necessary.

Even though the Family-scale native Agarwood plantations have been tried, the owners are facing serious challenges as they lack scientific techniques and skills in sustainable production from the plantations such as inoculating the trees to form Agarwood resins. These challenges had led to diminishing interest in the establishment of plantations in Community Forestry sites coupled with unsustainable harvesting in natural habitat. The core problem is “loss of viable naturally reproductive populations of Agarwood in Community Forestry areas”. Three main causes are 1) ineffective management of Agarwood in the CF areas; 2) overexploitation due to past illegally export trade; and 3) lack of coordination and technical skills among stakeholders in Agarwood plantation management.

In order to counter the worsening problems, the goal of the project is to restore native Agarwood species in their former habitats of the target Community Forestry sites of the Southwestern Cambodia thereby contributing to the country National Forest Program (2010 – 2029). In order to fulfill the restoration success, the specific objectives of the project are:

1. Rehabilitation of former Agarwood ecosystems as the country piloting areas.
2. Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia.
3. Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.

It is worth noticing that previous experiences and lessons learned from the past AFoCO supporting projects such as Output 1 of the “*The registration of Small-Scale Private Forest Plantations in Cambodia*” (2020 - 2021), will be replicated or adjusted for the proposed project.

Having seen threat of extinction of the wild Agarwood, and with the legal supports of ministerial regulations, specifically on forest restoration with the Community Forestry (CF) management and development, there is time to establish piloting restorations of the species, one site in each of the four

provinces of the Southwestern Cambodia. There are 19 CF sites, with legal supports of MAFF/FA, located within the Southwestern Cambodia, Cardamom Mountain range, where are well-known of former habitats of wild native Agarwood.

The project will restore 28 ha (or 50,000 seedlings), 12 ha of monoculture and 16 ha of enrichment planting, of native Agarwood species as country demonstration sites. The restoration will contribute to the Royal Government National Forest Program of 2010 – 2029, which targets to restore 50,000 ha of degraded forests every year; and CF is one of the immediate priority areas for restoration. The project conforms to the AFoCO's Strategic Priority Areas (2019 - 2023) by contributing to "Improving livelihoods and incomes through forestry-related activities." In medium term, from year 8 and onward, livelihoods of the project targeted areas, e.g. CF members and Family-scale plantation owners, will be improved through selling high quantity and quality of native Agarwood products. In the long-term, the project will fulfill the AFoCO's Strategic Priority on "Local livelihood improvement & community-based small enterprise development" through initiations of technology transfers from the helps of the AFoCO networks for improvement of oil extraction of the existing local factories.

Section A. Project Context

1. Background

Up to 70% (seventy percent) of the Cardamom Mountain areas are under Protected Areas (PA) established in 1993 by Royal Decree (RGC1, 1993). The management of the PAs are under the mandates of the Ministry of Environment (MOE) while other forest estates such as Production and Community Forests (another 30%) are under responsibility of Forestry Administration (FA) of the Ministry of Agriculture, Forestry and Fisheries. With the technical and financial supports from international donor agencies and non-governmental organizations (NGO), the remaining forests outside the PAs of the Cardamom Mountain (Southwestern Cambodia) were established as Community Forestry sites where local communities have the rights to work with the local FA to manage the forests for their livelihoods and sustainable forest management. The CF areas are legally protected by Sub-Decree (Prime Minister Order) (RGC2, 2003) and Prakas (Ministerial Order) (MAFF, 2006). Total of 19 CF sites are, with legal supports of MAFF/FA, located within the Cardamom Mountain range, where are reported to be the former habitats of wild native Agarwood (FA, 2018). The proposed project restoration plantations of enrichment planting (to the former Agarwood habitats) and monoculture plantations of Agarwood (8 ha or 50,000 native Agarwood seedlings) will contribute to the Royal Government National Forest Program of 2010 – 2029, which targets to restore 50,000 ha of degraded forests every year and CF is one of the priority forest areas for restoration (RGC3, 2010). In addition, the outcomes of the Project will be fed into the National Biodiversity Strategy and Action Plan, the revised NBSAP, (RGC4, 2016). The Cardamom Mountain areas are under geographically administrative management of six provinces of Koh Kong, Kampong Speu, Kampong Chhnang, Pursat, Battambang, and Pailin while four of them are proposed for the project target sites (Map 1).

The native Agarwood species used to be widespread abundant in the forest areas of Southwestern Cambodia, the Cambodian Emerald Wild Agarwood, up until the early 2000s (Ma Sok Tha and Uon Sam Ol, 2011). Ma Sok Tha and Uon Sam Ol (2011) concluded that there are two native species of Agarwood (*Aquilaria crassna*, and *Aquilaria malaccensis*) occurred in those areas. Most of the wild Agarwoods nowadays exist in deep forest areas of PAs while some remaining regrowth Agarwood are available in CF sites. Some native Agarwood species have been planted in agricultural lands of local villages, the Family-scale plantations. They are as old as eight years of plantations.

The two (2) species are classified as endangered species by IUCN Red List, CITES, and national regulations like ministerial order called Prakas. The Endangered species of flora, including the two Agarwood species, are prohibited and listed by Prakas No. 089 (MAFF, 2005) and Sub-Decree No. 53 (RGC5, 2006) (Sub-Decree is the Prime Minister order). The Prakas strictly states that all kinds of Endangered species of flora are prohibited (point 2 of Article 1). On the other hand, the Sub-Decree

notifies that the Ministry of Agriculture, Forestry and Fisheries should classify and re-classify the List of species as needed in accordance with CITES Appendices. The species is, then, legally harvesting and trading with the presence of permits from FA/MAFF, if any.

Traditional collection of Agarwood productions in Southwestern Cambodia has lasted for hundreds, if not thousands, years up until the last ten years for local uses and trade (Ma Sok Tha and Uon Sam Ol, 2011). Some families passed the traditional collection knowledge to their present collectors even though there are not many active collectors because of the scarcity of the product in the wild. While Cambodia has been open to international markets since year 2000, more and more Cambodian, and to some extent Thai and Vietnamese migrant workers, collectors had exploited the species. Because of the high demand from local and international markets, collections of the two Agarwood species had been very much out of control for the last ten years. Anecdotal data reported that the increasing Agarwood products have been exported to Asian and Middle-East regions. The former Agarwood collectors claimed that they have to go farther into the center areas of the Cardamom Mountain range in order to collect a kilogram of Agarwood products and spend about a week in the forests. However, there is no acceptable data have been available from the proposed study site because of illegal activities and trade in the Agarwood products. Furthermore, because collection of the wild Agarwood has been practiced in individual walking-carriers, normally there are few collectors in a team, proper protection from rangers and forest officers has been less effective, especially in the forest areas of PAs. As claimed by Joel Jurgens, project manager at Flora and Fauna International, posted on the Phnom Penh Post News (Phnom Penh Post, 2014):

“If we’re talking about natural forests, there are very few,” he said, adding that one of the best ways to help the species’ survival is to encourage traders to source their Agarwood from plantations, which he estimated number in the hundreds in Cambodia, instead of felling the few remaining wild trees.

Having seen threat of extinction of the wild Agarwood, *Aquilaria crassna* and *Aquilaria malaccensis*, and with the legal supports of ministerial and Prime Minister regulations, specifically on forest restoration with the CF management and development, there is time to establish piloting restorations of the species, one site in each province of the four provinces of the proposed areas of the Southwestern Cambodia. In addition, based on the recent face-to-face interview surveys on the abundance of the native Agarwood with former traditional collectors, such as Mr. Tep Mala and Mr. Ta Thy (pers. com.), and site visits to the former habitats of the species within CF areas in the Koh Kong province, interventions to restore the native Agarwood species are the must in order to protect the species from extinction.

2. Conformity with AFoCO’s Objectives and Strategic Priorities

It is noted that practically extraction of Agarwood oil could be made after 8-year of its plantations. The

Project will promote CF members, Family-scale, and private plantation owners to continue to plant Agarwood seedling in the target areas using customized reforestation and rehabilitation in order to counterclockwise of the existing declined local livelihood communities. Livelihoods of the local people, especially traditional Agarwood collectors of the project target areas have been negatively impacted by drastic decrease of wild Agarwood in their forest areas, specifically within the CF sites. Because the project is expected to maintain income generations, in short and medium terms, from sustainable collections of Non-Timber Forest Product (NTFP) (Agarwood collection), the Project conforms to the AFoCO's Strategic Priority Areas (2019 - 2023) by contributing to "Improving livelihoods and incomes through forestry-related activities." In medium term, livelihoods of the project targeted areas, e.g. CF members and Family-scale plantation owners, will be improved through selling high quantity and quality of native Agarwood products. In the long-term, the Project will fulfill the AFoCO's Strategic Priority on "Local livelihood improvement & community-based small enterprise development" through initiations of technology transfers from the helps of the AFoCO's networks and of the exchanges of in-the-country knowledge and skills for improvement of oil extraction of the existing local factories. It is, also, expected that with the CF member activities of working in the CF such as enrichment planting and amelioration, the forest management of the CF will be improved.

Adding to the existing Family-scale plantations of native Agarwood, the Project will achieve 8 ha of native Agarwood plantations and plant 50,000 seedlings throughout the Southwestern Cambodia. This figure will support the AFoCO's Strategic Priority Areas on "Achieving the global goal of increasing forest cover by 3% worldwide." The Project will be implemented as demonstration model for native Agarwood plantations involving stakeholders from conservation, communities, private sector, and government institutions. This activity also adheres to the AFoCO's Strategic Priority Areas of "Initiating customized restoration and reforestation models" and supporting the implementation of the Paris Agreement on climate change - Implementing the Paris Agreement on climate change particularly in pursuit of policy approaches for adaptation in the forestry sector.

Lessons learned and experience from the Project demonstration will be shared throughout the country and region using AFoCO project network and by FA through its own regional networks, promoting the strategy to other member countries. This will support the achievement of strengthening institutional capabilities, diversifying resources, and promoting regional actions. As the results, the core values of the AFoCO will build partnership between FA and local community, local authorities and NGO to working together to achieving the common goal fulfilling the "local livelihood improvement through sustainable forest management."

3. Regionality

The Southwestern Cambodia area is bordering with Thailand. Cardamom Mountain occupies most

part of the Southwestern Cambodia area. Even though majority of provincial people are Khmer (Cambodians), long-lasting ethnic people of the areas are Por, Samre, and Kular (see point 4.2, section A) have been living as forest-dweller communities for years. Most of the bordering villagers in the western areas, especially those living in Koh Kong province, speak Thai language. According to recent field interviews, any collected wild Agarwood would be traded immediately to Thailand or to Phnom Penh, then to Vietnam. They all have been in the networks of supply chains of custody and demand of wild Agarwood products. They faced with scarcity of the wild Agarwood products for sometimes now. They all know that restoration of the native species is a must in order to bring back sustainable harvest and high quality of the products.

The local communities and Thai people have been trading and knowledge exchanging on Agarwood plantation and oil extraction for many years now. For instance, the biggest named Thoub Chankrassna Khmer Co., Ltd. partnering with Thai based-First Capital Group has been investing on Agarwood plantation in the areas since 2018 (Phnom Penh Post, 2018). Almost all the Agarwood plantations of the areas imported seeds from Thailand. They are all facing problems of little and low fragrant oil that can be extracted from their planted Agarwood chips.

The Project, therefore, will provide good opportunity for demonstration model of native Agarwood restorations in its former habitats of the CF areas and improved native Agarwood plantations, such as Family-scale plantations, for Cambodia and Thailand. As expected, the Project will bring lessons learned, such as growth stimulation and processing technology to get better oud (processed resin or oil), from the ASEAN member countries like Indonesia, Malaysia and Thailand, those people of the bordering areas could benefit from the project such as plantation techniques, inoculation technology, and oil extraction. Technical skills and experiences from pool of experts from AFoCO will be shared among the project stakeholders in the target areas – using as transboundary model and lessons learned. The Project will share its lessons learned and success stories to the ASEAN member countries through AFoCO network, regional events such as ASOF (ASEAN Senior Officers on Forestry) annual meeting, publications, and project steering committee meetings. In addition, communities of the other two more provinces of the Cardamom Mountain, where are former habitats of the native Agarwood, will be shared with the lessons learnt from the Project.

4. Information on Project Site

4.1 Geographic Information

The Southwestern Cambodia is located in the Southwest of Phnom Penh, Capital of the Kingdom of Cambodia. It is about 200 km from the Capital Phnom Penh. Quite often, the Southwestern Cambodia is referred to as Cardamom Mountain because there are plenty of cardamom species growing under multiple storey of evergreen forests, including Agarwood trees. The areas, with the highest point of 1,848 meter (Oral Mountain) and many more of mountains of as high as 1,500 meter above sea level, consist of mostly mountainous evergreen forests, including pine species. The annual rainfall of the areas is up to 4,000 mm with average temperature of 28°C.

As shown on the map below (Map 1), the Project areas consist of mostly Protected Areas, CF and the wildlife Corridor Zones. The Corridor Zones are under development in order to try to connect forest areas between the existing PA sites for conservation purposes. The development is the joint program of the Royal Government of Cambodia with the Asia Development Bank financial supports since sometime in 2012. However, the Project will focus mainly on the existing 19 CF areas and forest-dweller villages.

4.2 Environment and Socio-economic Information

The Cardamom Mountain can be reached from Phnom Penh by two (2) main national roads: road number 4 and number 5. Majority of people living within and around the Cardamom Mountain areas are Khmer even though there are few ethnic people like Por, Samre, and Kular (Tebtebba Foundation, 2020) have settled in these areas for hundreds, if not thousand, years. Most of the villagers in western areas of the Cardamom Mountain, especially those living in Koh Kong province, speak Thai language. To date, the Southwestern Cambodia provinces have been considered as remote rural forested areas with less likely well educated standard compared to people of the lowland areas near Capital Phnom Penh. Furthermore, majority of local works are conventional like collection of non-timber forest products, upland agriculture, and forest-dependent handicraft. Therefore, there have been less likely of gender balance happened in the villages because men would go to forest areas, whereas women tend to work at home with the exception of those people who have attended the CF management programs because they had been trained on gender balance and participation in forest management by CF supported projects. The Project is envisioned to take some steps forward to help improve gender balance and concerns, especially among those Family-scale plantations.

Map 1: Cardamom Mountain range, Southwestern Cambodia.

Because of the increase of demand of Agarwood product and its decrease in the wild for the last 15

years of so, the local villagers have initiated Agarwood plantations in the forms of either Family-scale or company. The recent interview surveys, also, found that the private and Family-scale plantation owners show their interest in welcoming the proposed restoration actions. Currently there are two large-scale private companies that have their 8-year plantations (up to 300 ha each) in Koh Kong province. The private plantations are purely non-native Agarwood species while the Family-scale plantations could be mixed of native and non-native species. At the same time there are few oil extraction companies utilizing oils from non-native Agarwood plantations coming from Family-scale and private plantations. The oil extraction companies, e.g. Lya Agarya, claimed that they do not have enough Agarwood chips for their daily extraction capacity; and sometimes they lacked of the raw materials for extraction. Moreover, they claimed that, from their past experiences, quality and quantity of oil extracted from native Agarwood have better fragrance and higher yields than that of the plantations. In this regard, detailed data will be established during the Project implementation.

Section B. Rationale and Objectives

1. Rationale

1.1. Stakeholder analysis

The following stakeholders will be engaged actively in collaboration with the Implementing Agency (IA). These stakeholders are:

- **Public Institutions at Sub-national level:** The Subnational Committee, Forestry Administration Cantonment (FAC) and Provincial Department of Environment (PDOE) of the Ministry of Environment: At the subnational level, the FAC and PDOE cooperatively work together to deliver the project expected results. With the CF committee, they will develop working plans and actions, daily site management, seedling productions, Agarwood enrichment planting, stakeholder coordination, and facilitation of meetings. At post project life, the Sub-national FA of the project sites will continue to be responsible for site activities, enrichment planting, and awareness-raising for long-term management of the Agarwood species.
- **Private sector:** Family-scale and company-scale individuals will be involved in the Project. From the private sector viewpoints, they will be the key people to provide strategic development of sustainable Agarwood. From the proposed project implementation, the private sector will gain technical skills, production improvement, and official registration for long-term management of their plantations. Exchanges among successful stories and owners will be facilitated to disseminate wider lessons learnt.
- **Local authority:** The local authorities, from localized villages and communes, will be the core players of the project development and continuous implementation of the project outcomes. They will be encouraged to implement strategic development programs as part of the Project outcomes for continuous improved production of the species.
- **Collectors of Agarwood:** Traditional family collectors will be involved in the initial part of the Project implementation. Their traditional knowledge of wild Agarwood management will be incorporated into the project implementation. With the private sector engagement in the Project, they will, also, be trained in entrepreneurship and business management and marketing. Best practices of these traditional family collectors will be written for future uses and replication in other parts of the country and strategic development of the species.
- **Non-governmental organization:** The on-the-site non-governmental organization, such as Fauna and Flora International, Conservation International, and Wildlife Alliance, will be collaborated in the project implementation from the first time. Their knowledge, strategic management of biodiversity, and community development of the areas will be consolidated into the project implementation and lessons learnt. On top of it, their experiences in and data of native

Agarwood ecosystem management and conservation will be definitely add values to the Project.

- **Public institutions at National level:** The Southwestern Cambodia forestlands are classified into Protected Areas and Production Forests including CF areas. The FA/MAFF is responsible for management of Production Forests while the Ministry of Environment (and its line departments of each province) is responsible for Protected Area management. The Ministry of Environment will be engaged in sustainable development of the native Agarwood species while their rangers will be trained in restoration and sustainable management, including private sector coordination. The representatives from the Ministry of Environment and FA/MAFF will also be enjoined to conduct awareness sessions on conservation and protection of native species of the Agarwood to the project stakeholders.

As stated on the Sub-Decree No. 53 (2006), and as part of their core roles and responsibilities, MAFF performs CITES roles of issuing certificates for export, import and re-export of the CITES Listed species while FA performs domestic transportation of CITES species in trade. The Endangered species of flora, including the two Agarwood species, are protected by Ministerial Prakas No. 089 (MAFF, 2005) and Sub-Decree No. 53 (RGC5, 2006). The Prakas states that all kinds of Endangered species of flora are strictly prohibited (point 2 of Article 1). On the other hand, the Sub-Decree notifies that the MAFF should classify and accordingly re-classify the List of species as needed in accordance with CITES Appendices.

The Project stakeholders are classified with descriptions of their characteristics; problems, needs, interests; potential benefits; and involvement in the project in the table 1 below.

Table 1: Stakeholder Analysis

Stakeholder group	Characteristics	Problems, needs, interests	Potential benefits	Involvement in the project
Primary stakeholders				
MAFF (Ministry of Agriculture, Forestry and Fisheries)	<p>Asides from its core roles in management of Agriculture, Forestry and Fisheries, MAFF plays CITES Management Authority roles and responsibilities in issuing permits for export, import and re-export of CITES Listed species.</p> <p>One of its mandates, MAFF is supervising Forestry Administration of national and subnational levels.</p>	<p>Problem: Lack of data for sustainable management of wild Agarwood species. Coordination between MAFF and the Ministry of Environment (MoE) for legal collection of Agarwood from the wilds, particularly from the areas of Protected Areas, has been weak, leading to illegally overexploitation of the species.</p> <p>Needs, Interests: National database for sustainable management of the Agarwood species. The proposed project activities of data collection and restorations piloting sites would be improving the coordination among relevant ministries, specifically the MAFF and MoE.</p>	National database on Agarwood will be developed for national policy consideration and strict protection of the species attracted among policy makers.	<p>The high level of MAFF and MoE representatives will be invited to coordinate studies of Agarwood species, restoration dialogues, and private sector involvement in plantations of native and non-native Agarwood species</p> <p>Using MAFF roles in implementation of Prakas on Private Forest Plantations (MAFF, 2017), private plantations and Family-scale plantations would be officially recognized and secured by MAFF for sustainable Agarwood plantation and productions.</p>
CF Members	Local community people, who are living close to and managing the Community Forestry areas, rely upon and use the forest for various forest products. They experienced the decrease of	Problem: Lack of income opportunity from the community forests due to the loss of Agarwood and forest degradation. Lack of technology, skills and resources to apply native	Their capacity in Agarwood collection, selection, seedling handling skills and restoration of the species will be trained and improved. The CF areas are well protected ensuring long-term benefits for local	<p>The CF Members will be involved in:</p> <ol style="list-style-type: none"> 1. Identifying areas of former habitats of the two (02) Agarwood species and selection of which one species to be

	<p>forest products including Agarwood.</p> <p>The project will work with the Sub-national Committees (Section D below) to select the CF Members to collaborate with. By then, their livelihood baselines will be established prior to the project implementation.</p>	<p>Agarwood species and forest rehabilitation.</p> <p>Needs, Interests: They are keen to improve the productivity of forest lands for economic benefits and at the same time protection of the forests including Agarwood species.</p>	<p>communities. Increased household income through access to knowledge of Agarwood seedling productions for future selling to private plantations.</p>	<p>planted in which habitats;</p> <p>2. Capacity building on sites establishment, production of seedlings and implementation of Agarwood rehabilitation; In short, they will be involved in planning, implementation and monitoring of the changes following the project interventions.</p>
Family-scale plantation villagers	<p>Villagers of the local communities who have their own Family-scale Agarwood plantations in their agricultural lands. Parts of their incomes generated from their Family-scale plantations.</p>	<p>Problem: capacity in:</p> <ul style="list-style-type: none"> • Good Agarwood seed selection, • Proper technical plantation of the species, • Artificial Stimulation of resin development. <p>Needs, Interests:</p> <ul style="list-style-type: none"> • They are interested in Agarwood development, • Welcome new ideas and intention to collaborate in restoration and increasing native Agarwood plantations. 	<p>Plantation and restoration methods in suitable areas of native Agarwood species will be built among the Family-scale plantation villagers. They will, also, gain knowledge and skills on using modernized technology of increasing resin from their plantations. Their Family-scale plantations will be also recognized by capable authorities such as FAC/FA/MAFF and local administration.</p>	<p>They will be engaged in training on seed selection, site development, and planting methods. These people will be consulted for former habitats of the native Agarwood in their areas.</p>
Private plantation owners	<p>Companies that owns Agarwood plantations. It is worth noticing that majority of the private plantation owners had involved in whole sellers of native Agarwood in the past. While the production of wild Agarwood had been</p>	<p>Problem: The private owners have been facing problems such as:</p> <ul style="list-style-type: none"> • Growing native Agarwood species for productive benefit, • Lack of experienced 	<p>The private plantation owners will benefit on improved technical plantation of the species, both nonnative and native. They will be networking within the country and in the region such as Thailand, Vietnam, Malaysia,</p>	<ul style="list-style-type: none"> • They will obtain training in improvement of seed selection, plantation techniques, and site development of native Agarwood species. • They will allocate some

	<p>decreased, these people started to plant nonnative Agarwood species hoping to replace the wild production. They had not been properly trained in technologies or practices before embarking on the business venture.</p>	<p>plantation techniques,</p> <ul style="list-style-type: none"> • Legally recognition by capable authorities such as FA/MAFF. <p>Needs, Interests:</p> <ul style="list-style-type: none"> • Improved technical supports on plantations of Agarwood, • Capacity building and networking with regional experiences. 	<p>and Indonesia.</p>	<p>areas of their plantations to add up the 2 ha of the project target demonstration plantations.</p>
<p>FAC (FA at subnational level)</p>	<p>The Forest Administration Cantonment is a provincial level of FA. The FAC manage two subordinate line agencies: FA Divisions (at district level) and FA Triage (at communal level).</p>	<p>Problem: The FAC officials face problems of:</p> <ul style="list-style-type: none"> • Lack of technical knowledge and skills in native Agarwood restoration because they never had done before, • Their existing nurseries produce mainly timber tree seedling rather than native Agarwood, • Lack of upfront financial support for restoration of Agarwood in the CF areas. <p>Needs, Interests: Aside from their official mandates on forest management, the FAC officials are keen in:</p> <ul style="list-style-type: none"> • Collaboration with FA/IA on bringing new ideas and developments such as native Agarwood 	<p>The officials of the FACs will benefit knowledge, skill, and more interaction with CF members in the native Agarwood restorations in the local CF sites. The CF restoration demonstration sites will be experiencing for other CF sites in the country. As the results, the proposed planted native Agarwood species will become seed sourcing for other CF native Agarwood restorations.</p>	<p>The FAC will be playing roles of Subnational Committee, with the local PDOE, for project implementation (see Section D below). They will daily monitor the project progress, helping coordinate among the project stakeholders, report and coordinate with FA/IA of national level.</p>

		plantation and restorations, <ul style="list-style-type: none"> • Welcoming the financial supports to establishment of restoration demonstration in the CF areas. • Technology transfer from FA/AFoCO networks regarding Agarwood plantations, resin collection and oil extraction. 		
PDOE	The Provincial Department of Environment (PDOE) is a subnational level of the Ministry of Environment. The PDOE is responsible for Protected Area management at the provincial level; and normally one province consists of a PDOE.	<p>Problem: Key problems of the PDOE are:</p> <ul style="list-style-type: none"> • Lack of capacity and experiences in restoration of Agarwood, • Lack of financial support for protection of the natural resources of the PA, • They do not have appropriate human resources for the PA management because their responsible PA scope is too large to cover. <p>Needs, Interests: The officials of the PDOE needs and interests are:</p> <ul style="list-style-type: none"> • Capacity building in seed collection, selection, and 	The PDOE will benefit participations of relevant stakeholders in protection and conservation of the wild Agarwood in their local responsible areas. The officials of the PDOE will benefit knowledge and skills of site development, enrichment planting of forest trees and restoration method. They would use enrichment planting methods to restore endemic plant species in their responsible areas in the future. In addition, they may obtain restoration experiences from the project for future forest restorations in the PAs.	They will work closely with FAC for the project management at subnational level. The PDOE officials could be helpful to identify seed sourcing sites of native Agarwood, within the PAs, to be collected. They will also participate in trainings and on the ground activities of Agarwood restoration.

		<p>site development,</p> <ul style="list-style-type: none"> • Awareness raising on native Agarwood conservation from extinction, • Sustainable harvest of wild Agarwood through increase numbers of plantations of native Agarwood. 		
Implementing Agency (DWB/FA)	The Department of Wildlife and Biodiversity (DWB), FA, is responsible for assessment and restoration of species and management of project related subject.	<p>Problem: Acknowledges the loss of species compositions and forest degradation as a major problem with negative impacts on ecological services. Lack of financial resources.</p> <p>Needs, Interests: Financial resources; Capacity building of the technical staff to address species restoration.</p>	<ul style="list-style-type: none"> • Staff capacity building, • Experiencing new knowledge and skills on CITES Listed species restoration. 	DWB in coordination with AFoCO to secure funding to implement the project. Planning, implementation and monitoring of the changes following the interventions.
NGOs in place	Non-governmental Organizations that have been working in the project target areas. These NGOs are non-profit organization; most of them are environment NGOs working for protection and conservation of natural resources of the Southwestern Cambodia. The in NGOs in place are CI, FFI, Wildlife and Alliance.	<p>Problem: The NGOs have faced challenges of illegal and unsustainable harvests of endangered species of wild fauna and flora of the areas.</p> <p>Needs, Interests: They need collaboration from local communities and responsible line ministries such as FAC and PDOE.</p>	Partnering with the project and project stakeholders for community participation in restoration and protection of endangered species. They will gain safe habitats for wildlife and sustainable collection of rare species.	Because these NGOs have been working in the areas for so long, more than 10 years now, they should have experiences in native Agarwood ecosystems, schemes of local people participation in the project implementation, what work and what do not work, These NGOs will participate in technical consultation for

				specific site selections, and strategic development of the Agarwood restoration.
Secondary stakeholders				
Former and current Agarwood collectors	Local people who are and used to collect wild Agarwood from the Southwestern Cambodia. Majority of them are old age, as old as 50 years.	Problem: Most of them lost the wild Agarwood collection jobs. Aside from their agricultural tasks, they work in no specific jobs in their local communities such as selling labors for plantations and construction. Needs, Interests: They need training on seedlings works, proper plantation management, and collection of resin from the Agarwood plantations.	Knowledge on seedling productions, proper planation, and sustainable harvest of Agarwood.	They will participate in training and establishment of plantations, enrichment planting, and restoration plantations. They will be consulted for areas of former habitats of Agarwood species within the target CF sites and the existing Agarwood seed sources in the forest areas.
Communal Authorities	Commune is the lowest elected authority in the government. They are responsible for security and development of their communes.	Problem: Scarcity of jobs in their communes leading to out-migration of their people for jobs. Loss of wild Agarwood is one of the main factors for out-migration of their people. Needs, Interests: Job creation projects and development activities such as Agarwood plantations and oil extraction.	More jobs will be available in the communes created by more Family-scale and private Agarwood plantations.	The commune staff will be informed of the presence of the project and project implementation activities for cooperation in terms of security. Commune Hall will be used for meeting among project stakeholders, especially with communities.
Tertiary and other stakeholders				
Oil Extraction Companies	The private companies who are running extraction factories in the local areas. They are normally settled in	Problem: <ul style="list-style-type: none"> Do not have enough wild production for oil extraction (for oud), 	Gain new technology in oil extraction and networking.	Participation in training on new technology of oil extraction. Provide lessons learned from their past oil

	district or provincial towns, where Agarwood plantations nearby could be collected.	<ul style="list-style-type: none"> • The nonnative Agarwood chips produce little resin compared to the native ones, • Lack of modernized technology in oil extraction. <p>Needs, Interests: Knowledge and skill development on better oil extraction technology.</p>		extraction experiences.
Middlemen and Business companies	The companies and local people who involve in buying and selling raw and processed Agarwood products. They could be from local and from outside the province.	<p>Problem: Their business faced scarcity of Agarwood products.</p> <p>Needs, Interests: They need qualified Agarwood products such as from the wild Agarwood.</p>	They envisage gaining back higher quality of native Agarwood products and resin from sustainable sources like native Agarwood plantations and CF areas.	Technical consultation for better seed quality and chains of custody in marketing of Agarwood products. Their involvement would help encourage CF members, Family-scale, and private plantation owners to proper manage their plantation to orientated market demands.

1.2. Problem Analysis

There are no available data on trade in Agarwood in the Cambodia CITES Authority, even though anecdotal observation claimed that Illegal trade is happening across the neighboring country borders of Thailand and Vietnam (Mr. Tep Mala and Mr. Ta Thy (pers. com.)). Official records of the Forest Statistic Aid Memory (FA, 2018) shows that around 200 ton of raw wood of Agarwood and 300 kg of plywood were officially exported to China, Vietnam, Thailand, Japan, Korea, Singapore, and Ukraine in 2016, but there is no mentioning of their sources of the woods either from the wilds or plantations. It is worth to note that Forestry Administration issues permits for log transportation, export and import, whereas CITES Authority, MAFF, issues CITES permits for trade in the species. However, the data on trade in Agarwood available on the CITES website (CITES, 2022) stating no *Aquilaria* sp. originated from the wild exported from or imported to Cambodia during 2014 – 2018 (CITES, 2022).

The core problem is “loss of viable naturally reproductive populations of Agarwood in Community Forestry areas”. Relatedly, there are three main causes for this loss, such as: 1) ineffective management of Agarwood in the CF areas; 2) overexploitation due to past illegally export trade; and 3) lack of coordination and technical skills among stakeholders in Agarwood plantation management.

As shown in Figure 1, the effect of declining restoration of the species is basically the extinction of the wild Agarwood species – loss of native Agarwood species - in the near future while in the same way the income generated from the wild Agarwood production of traditional collectors has already decreased – loss of local community income generations. The Project is seen to reverse the current challenges to bring back and secure sustainable growth and harvest of the Agarwood species in its former habitats of the proposed CF sites. Relevant stakeholders (see Organizational Structure, Section D) will initiate inclusive efforts in the development, sustainable use and management, and conservation of the remaining hotspots of the species while implementing the project.

The ineffective management of Agarwood in the CF areas has been caused by two main factors: lack of government funding in protection and conservation efforts and lack of data on the wild Agarwood status. There is an interaction among the three sub-causes: because of lack of government funding in protection and conservation efforts, the responsible officers have been reluctant, and sometimes involved in illegal harvest of the wild species of Agarwood, until overexploitation happened. Furthermore, the lack of an updated data on Agarwood in the forests led to no proper action on protection and sustainable management of the species. Because of these facts, the Project will establish piloting sites, in the proposed CF sites of the four provinces, where are secured by CF members, in order to bring back the native Agarwood natural growth.

Overexploitation due to previous illegal export/trade of Agarwood has been caused by three factors: 1) non-registered Agarwood traditional collectors, 2) lack of awareness-raising on sustainable harvest of wild Agarwood, and 3) lack of proper technology (or lack of technology transfer) for sustainable harvest of wild Agarwood. While demands have been increasing for the last decade or so, and sustainable harvest of the species products had not been strong due to lack of awareness-raising, trade in wild Agarwood productions had been out of controls. As a result, populations of the wild Agarwood species had been overexploited.

The lack of coordination and technical skills among stakeholders in Agarwood plantation management is another main cause led to the core problem of the proposed Agarwood advancing restoration action. There are some initiatives to bring back Agarwood production, for some years now, through plantations, either by companies or Family-scales. Both companies and families planted native species of the Agarwood, but they did not gain benefit from their plantations due to the claiming-lacks of technical skills and knowledge of how to inoculate for more resin from the tress. Therefore, almost all of them imported Agarwood seeds from abroad such as from Thailand and Vietnam for their plantations. With these imported seeds their business showed good results, and some of them already extracted production from the trees (at about 8 years old of plantations) with acceptable fragrant oil. However, additional supported coordination among these players should improve the situations in order to engage wild Agarwood species in plantations. First of all, the creation of mechanism for proper wild Agarwood restoration through registrations of the Family-scale and private plantations by increasing Agarwood products from plantations; while at the same time increase native Agarwood species in their plantation areas and in CF sites. It is worth noticing that most of the areas of CF of the Cardamom Mountain ranges are former habitats of the wild Agarwood species.

Finally, the intended results of the project will counter the current situations and initiate demonstration of native Agarwood restoration to the key stakeholders for them to continue sustainable use and management.

A. Gender Analysis and Mainstreaming

Based on the gender information described on point 4.2 of section A, the Project will help the gender concerns through the following.

While majority of local works are conventional, like collection of non-timber forest products, upland agriculture, and forest-dependent handicraft, gender balance might be difficult to achieve. There have been less likely of gender balance happened in the villages because men would go to forest areas, whereas women tend to work at home with the exception of those people who have attended the CF management programs because they had been trained on gender balance and participation

in forest management by CF supported projects. The Project will take some forwarding steps to help improve gender balance and concerns, especially among those Family-scale plantations.

The project will involve men and women to have equal rights, opportunities and benefits, and will be consulted at every stage of the planning and implementation process of Agarwood restoration and protection. The Implementing Agency will make sure to discuss with the four Subnational Committees and the CF leaders and committees in setting gender quotas in all activities. One way to empower women is to increase their participation in a range of activities such as in the site selection and enrichment planting of native Agarwood. These, also, include in the consultation for species collection, management planning, and plantation methods even though forestry experts will be closely consulted. Capacity building activities will be tailored to the specific needs of women and men. Conventional preferences of women and men will be considered. For instance, women prefer to work at home while men like working in the fields. In this regard, women may be inclined to do raising and management of native Agarwood seedlings while men would work in field preparations.

The national internal Gender Mainstreaming Team of FA will be engaged to conduct training on Gender Balance and active participation in forestry sector using the existing Gender Action Plan. Gender Awareness-raising team of the Ministry of Woman Affairs will be consulted as necessary for this specific purpose. All stakeholders, especially those are in the remote areas of the project target areas, will be firmly focused on the gender mainstreaming in daily Project activities.

B. Problem Tree

The main effect (top box) of the core problem (the second top box) is the “loss of local community income generation and native Agarwood species; and the main causes and sub-causes are identified using the Problem Tree below.

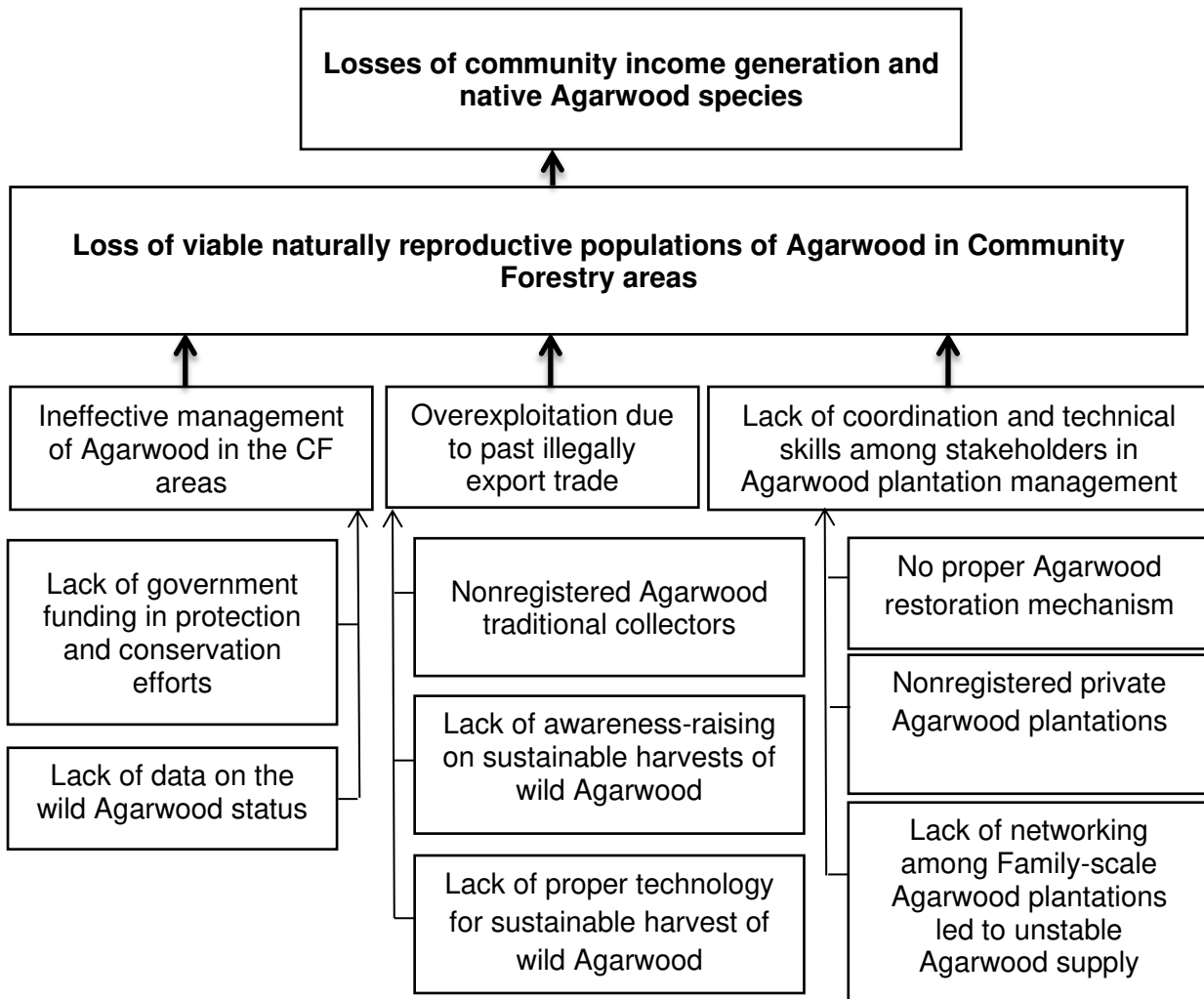


Figure 1: Problem Tree

1.1. Logical Framework Matrix

Table 2: Logical framework matrix

Output/ Activities	Narrative	Objectively Verifiable Indicators (OVIs)	Means of Verification	Important Assumptions
<p>Goal: The goal of the project is to restore native Agarwood species in their former habitats of the target Community Forestry sites of the Southwestern Cambodia contributing to the country National Forest Program (2010 – 2029).</p>				
<p>Outcomes:</p> <ul style="list-style-type: none"> • 50,000 seedlings will be planted as piloting restoration of native Agarwood species. • Official data on status of native Agarwood of the project sites will be established for national policy development. • National demonstration sites, with Manual of Agarwood Plantation Management, of native Agarwood restorations will be established for further replications and seed-sourcing of the country. • Private sector and Family-scale plantations of both native and nonnative Agarwood species will be officially registered as country database for national policy development and trade. 				
<p>Objective 1: Rehabilitation of former Agarwood ecosystems as the country piloting areas.</p>				
<p>Output 1: 12,500 seedlings planted for each of the four provincial sites (seedlings of 8 to 12-month old with approx. 0.5 m high)</p>				
Activity A1:	Select former habitats of native Agarwood for restoration plots (the plots will be applied enrichment planting methods).	Former habitat sites are selected by Q2 of 2024 (Y2) Baseline: 0 Target: 4 sites	One site in each of the four provincial sties	CF members and FA subnational levels are willing to collaborate.
Activity A2:	With the Tree Seed program knowledge, such as ecological zones and seed quality, available in the FA, train core staff teams (they are from CF members) on seedling handling, recording, and planting.	The participants are trained by Q2 of Y2 Baseline: 0 Target: 20 (5 CF members per provincial site for 4 sites)	Lists of the trained participants and Certificate of Recognitions are available.	<ul style="list-style-type: none"> • Technical collaboration of technical staff of Department of Forest Plantation and Private Forest Development (DPP), FA. • Collaboration of FA subnational levels.
Activity A3:	There will be two types of plantations: enrichment and monoculture. The reason to plant two types of plantations is to demonstrate growth quality of the species. Plant Agarwood seedlings in their former habitats using enrichment planting	The participants are trained by Q2 of Y2 Baseline: 0 Target: 20 (5 CF members per provincial site for 4 sites)	Lists of the trained participants and Certificate of Recognitions are available.	<ul style="list-style-type: none"> • Technical collaboration of technical staff of DPP, FA. • Collaboration of FA subnational levels.

	methods; and plant monoculture of Agarwood seedlings in CF 1-ha plots of each of the four provincial sites.			
Objective 2: Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia.				
Output 2: Data on status of native Agarwood species established in each provincial site.				
Activity B1:	Conduct technically subnational consultation workshops for subnational data consolidation of all four provincial sites.	Number of reports of the Agarwood status data of each provincial site by Q3 of Y1 Baseline: 0 Target: 4 (each provincial site will produce one report)	Survey report on Agarwood status data	Local community and FA subnational levels are willing to participate in data collection.
Activity B2:	Conduct surveys on the abundance of the native Agarwood species in each of the four target provincial sites.	The results of the reliable surveys by Q2 of Y2 Baseline: 0 Target: 4 survey reports of the surveys	Survey reporting data	Local FA subnational levels are willing to collaborate and facilitate for the surveys.
Output 3: National technical workshops on status of native Agarwood species will be conducted for stakeholder discussions and data dissemination.				
Activity C1:	Hold technical pre-assessment workshop on the status of native Agarwood in the Southwestern Cambodia.	Concept note and agenda of the workshop by Q3 of Y1. Baseline: 0 Target: 1	List of participants and the minutes of the workshops.	Ministry of Agriculture, Forestry and Fisheries will be actively supported to issue invitation letters to target project stakeholders.
Activity C2:	Hold technical post-assessment workshop on the findings of native Agarwood data and policy recommendations for restoration of the species.	Concept note and agenda of the workshop by Q1 of Y3. Baseline: 0 Target: 1	List of participants and the minutes of the workshops.	Ministry of Agriculture, Forestry and Fisheries will be actively supported to issue invitation letters to target project stakeholders.
Activity C3:	Endorse and disseminate the National Agarwood status data.	The National Agarwood status data report is available for dissemination by	Signature and Stamp of the MAFF on the data report	MAFF is willing to endorse on the National Agarwood status data report.

		Q1 of Y3. Baseline: 0 Target: 200 copies		
Objective 3: Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.				
Output 4: Two (02) hectare of native Agarwood plantations established by Family-scale and private sectors in each of the four target provincial sites.				
Activity D1:	Select the suitable site for 2 ha piloting plantation sites.	Agreed areas of existing Family-scale and private plantations will be allocated for demonstration sites by Q3 of Y1. Baseline: 0 Target: 2 ha (in each of the four provincial sites)	Maps of selected plots targeted for restoration demonstration areas are in place.	<ul style="list-style-type: none"> Family-scale and private plantation owners will actively cooperate with the project; The project Subnational Committee will be actively facilitating.
Activity D2:	Train the owners of Family-scale and private plantations on native Agarwood plantations and establish the plots.	Numbers of participants trained by Q2 of Y2. Baseline: 0 Target: 24 [4 people from Family-scale and 2 people from private plantation owners of each of the four provincial sites: (4 X 4) + (2 X 4) = 24].	Lists of the trained participants and Certificate of Recognitions are available.	<ul style="list-style-type: none"> Family-scale and private plantation owners will actively participate in the training sessions; The project Subnational Committee will be actively facilitating.
Activity D3:	Plant native Agarwood seedlings to the 2 ha piloting sites.	The target plantations of the Family-scale and private areas planted with the native Agarwood species by Q1 of Y3. Baseline: 0 Target: 8 ha (2 ha per each of the four provincial target sites).	Reports with maps of restoration plots planted with the targeted numbers of Agarwood seedlings are available.	<ul style="list-style-type: none"> Family-scale and private plantation owners will actively participate in the training sessions; The project Subnational Committee will be actively facilitate.
Output 5: Official lists of private and Family-scale plantations established in all four provincial sites.				
Activity E1:	Survey and list all available Agarwood plantations of Family-scale and privates.	Number of reports of the Agarwood plantations of	Reports with maps of plantations are available.	FA subnational level will be actively coordinating the surveys.

		each provincial site by Q4 of Y3. Baseline: 0 Target: 4 (each provincial site will produce one report)		
Activity E2:	Hold official meetings with the owners of Family-scale and private plantations to inform them on project objectives.	Number of meetings recorded of each provincial site by Q2 Y3. Baseline: 0 Target: 4 (each provincial site will produce one meeting minutes)	Numbers of The minutes of the meetings and List of participants are available.	<ul style="list-style-type: none"> Family-scale and private plantation owners will actively participate in the training sessions; The project Subnational Committee will be actively facilitate.
Output 6: Capacity building on forest ecosystems and typical native Agarwood habitats provided to owners of Family-scale and private plantations.				
Activity F1:	Train owners of Family-scale and private Agarwood plantations on forest ecosystem and Agarwood typical habitats. The training aims to provide the trainees robust knowledge of restoration of native Agarwood species and its native component species.	The participants are trained by Q1 of Y4. Baseline: 0 Target: 24 (see point E2).	Lists of the trained participants and Certificate of Recognitions are available.	<ul style="list-style-type: none"> Technical collaboration of technical staff of Department of Forests and Community Forestry (DFC), FA. Collaboration of FA subnational levels.
Activity F2:	Conduct training on seed quality, habitat site and plantation management.	The participants are trained by Q1 of Y4. Baseline: 0 Target: 24 (see point D2).	Lists of the trained participants and Certificate of Recognitions are available.	<ul style="list-style-type: none"> Technical collaboration of technical staff of DPP and DFC, FA. Collaboration of FA subnational levels.

- 1.The narrative is the description of the project activities and are expressed by using an action verb.
- 2.The OVIs show the important characteristics of the objectives and the performance standard expected to be reached in terms of quantity, quality, time frame and location
- 3.The means of verification tell us where we should obtain the data necessary to prove the objectives defined by the indicator has been reached
- 4.Important assumptions are events or circumstances that are expected to occur during the project life-cycle. This may include identification of policy and institutional support that leads to project

sustainability including potential roles associated with certain project activities.

1.2. Justification

Two (2) main strategies of interventions will be performed: restorations of wild Agarwood species in their former habitats of CF areas and increase plantations, as demonstration sites of native Agarwood species while supporting the existing nonnative Agarwood species plantations of Family-scale and private plantations. Priority restoration works will be given to the former habitats of Agarwood within the areas of CF sites of the target four provinces.

Subject to training on the concerned partners is restoration knowledge of native Agarwood species. Key points below will be applied:

- **Assessing the site:** A thorough appraisal of the current conditions at the restoration site is essential for determining what kind of actions will be necessary. In this step, the causes of ecosystem disturbance and methods for stopping or reversing them are identified. During the site assessment, consultation on historical sources that detail the pre-disturbance community with communities and NGOs in place will be held.
- **Removing sources of disturbance:** forces of disturbance will be removed. Examples fast growing species of vegetation will be clear out for enrichment plantings.
- **Apply enrichment planting methods** to the target planting sites.
- **Rehabilitating substrates:** This can include any activity aimed at repairing altered soil texture or chemistry, or restoring hydrological regimes or water quality.
- **Restoring native Agarwood species:** restoration activities involve direct re-vegetation of the site. The native Agarwood and its native composition species suited to local environmental conditions will be chosen for planting. The vegetation can be planted as seeds, or seedlings.
- **Monitoring and maintenance:** The sites will be monitoring over the Project duration and after by the Sub-national Committees and CF members. Observations made at the site may indicate that further action, such as periodic weed removal, is necessary in ensuring the long-term success of the project.

Even though much more detail on training contents of the native Agarwood restoration will be produced by technical experts from the Department of Private Forest Plantation (DPP), the key platforms are introduced here. Based on 2,720 seedlings per hectare of Agarwood plantations (monoculture), and the target 50,000 seedling purchased, the project will mobilize 12 ha (4 ha within four CF target sites; and 8 ha within Family-scale and private plantations) of monoculture plantations and 16 ha of enrichment planting. The enrichment planting method is suggested to have 40% of

numbers of seedlings of the single species plantation, which are 1,088 seedlings per hectare. Therefore, the total of 28 ha (50,000 seedlings) will be planted with the native Agarwood species.

a. Impacts at the Outcome level

In the short-term of the outcome impacts, the members of the CF, Family-scale and private Agarwood plantations will be gaining knowledge on the native Agarwood plantation, such as seedling handling, enrichment planting and ecological systems of the species. Plantations of the native Agarwood species in the CF sites will provide productions of Agarwood to its members for livelihood improvement in the medium-term, e.g. in 8 years of time. And in return, the members will be more proactive to the protections of the CF sites participating in sustainable forest management. And, it is, also, expected that the members will gain knowledge, skills, and networking among the proposed four target provinces in native Agarwood plantations, and thereby increase their Family-scale plantations of native Agarwood species for long-term. As stated above, with the involvement of partners the CF members will gain restoration knowledge as they are the key stakeholders to pursue future successes of the restoration of native Agarwood in their specific CF sites.

In the longer run, the lessons learnt from the Project implementation, including restoration results, challenges faced, and encouragement of Family-scale and private plantations of native Agarwood and government official recognition, will be shared among the AFoCO countries as necessary either directly through bilateral countries or through AFoCO Secretariat. For instance, Thailand and Vietnam are among the most immediate AFoCO countries to be share the lessons learnt. The experiences of the

Project could be raised through senior government official regional meetings among the ASEAN countries such as the meetings of ASOF.

b. Impacts at the Output level

Nurseries of the native Agarwood seedlings will be selected and contracted to produce the target numbers of seedlings. Standards of the native Agarwood seedlings, such as quality, ecological zones and genetic aspects of the seeds, will be detailed prior to the seedlings production. The nurseries will be located at closest possible to the four provincial target sites in order to reduce transportation time and cost. A total of 50,000 seedlings of native Agarwood species will be purchased for restoration purposes and for dissemination. It is worth noticing that some Family-scale owners are, also, members of CF in their communities. 28 hectares of new native Agarwood species plantations will be established for piloting of restorations of important endangered endemic tree species in the country. The results and experiences from the proposed restoration could be best practices and replicated in other areas of the country; and to some extent, in the Southeast Asia (ASEAN) regions.

Previous experiences and lessons learned from the past AFoCO supporting projects such as Output 1 of the project entitled “*The registration of Small-Scale Private Forest Plantations in Cambodia*” will be considered in the implementation of the Project , specifically in the registration of Family-scale and private plantation using Agarwood.

c. Impacts at the Activity level

Former and current Agarwood collectors will be recruited to work for the project: they will be engaged to work with the CF members and the Project teams in identification of former habitats of the native Agarwood for piloting sites. At the same time rangers of the PDOE will be engaged in the restoration of former habitats of the native species of Agarwood. The rangers will be trained on how to handle seedlings, enrichment and monoculture planting and how to work on Assisted Natural Regeneration of the species. Knowledge and skills acquired from the training will definitely be utilized for their daily activities within the PAs.

At the very same time, members of CFs of the target provincial sites will benefit from the Project activities including planting site establishment, knowledge and skill development on restoration, and enrichment planting of endemically endangered species like native Agarwood. They will also benefit from coordination activities with owners of the Family-scale and private plantations for future collaboration in such tasks.

The owners of the Family-scale and private plantations will gain new knowledge and skills in plantations of native Agarwood, which they have faced and been challenging for years in making the plantation survived. They will, also, have better networking among the plantation owners, middlemen, and oil extraction companies in this regards.

For the three years of the project life and onward, the demonstration sites of endangered Agarwood species restoration are expected to bring policy development and enhancement for consideration of decision makers at national levels, MAFF and Ministry of Environment, and local authorities including commune, district, and provincial governors.

2. Objectives

2.1. Main objective (development objective)

In order to counter the problem described above, the goal of the project is to restore native Agarwood species in their former habitats of the target Community Forestry sites of the Southwestern Cambodia contributing to the country National Forest Program (2010 – 2029).

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

To fulfill restoration success, the specific objectives of the project are:

1. Rehabilitation of former Agarwood ecosystems as the country piloting areas.
2. Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia.
3. Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.

It is worth noticing that previous experiences and lessons learned from the past AFoCO supporting projects such as Output 1 of the “*The registration of Small-Scale Private Forest Plantations in Cambodia*” (2020 - 2021), will be replicated or adjusted for the proposed project.

Section C. Description of Project Interventions

The activities, with three objectives and six outputs, of the project will be implemented for three (03) years. There are Indirect Activity Schedules, mostly at the last few Quarters of the final year, shown at the last few rows of the matrix table. The Project will involve research teams from Forestry Faculty of the Royal University of Agriculture (RUA), Cambodia, for their expertise in assessment of wild Agarwood in the proposed areas.

1. Work Plan and Schedule

Outputs	Performance Indicator	Responsible Person/ Body	Annual Timeline												Remarks
			Year 1			Year 2				Year 3				Y4	
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	The project started at Q2 of the first year
Objective 1: Rehabilitation of former Agarwood ecosystems as the country piloting areas.															
Output 1: 12,500 seedlings planted for each of the four provincial sites (seedlings of 8 to 12-month old with approx. 0.5 m high)															
A1: Select former habitats of native Agarwood for restoration plots (the plots will be applied enrichment planting)	4 CF sites	IA, FAC, and CF Committee													

methods).																		
A2: Train core staff teams (they are from CF members) on seedling handling, recording, and planting.	4 training reports	IA/FA (DPP)																
A3: Plant Agarwood seedlings in their former habitats using enrichment planting methods; and plant monoculture species of Agarwood seedlings in CF of the four provincial sites.	Report, with maps, of plantations of 4 hectare of monoculture and 16 hectare of enrichment planting.	IA/FA (DPP)																
Objective 2: Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia.																		

Output 2: Data on status of native Agarwood species established in each provincial site.															
B1: Conduct technically subnational consultation workshops for subnational data consolidation of all four provincial sites.	1 report of data subnational consultation workshop	IA Subnational Committees													
B2: Conduct surveys on the abundance of the native Agarwood species in each of the four target provincial sites.	4 survey reports of each of the four provincial sites	IA RUA (Forestry Faculty) Subnational Committees													
Output 3: National technical workshops on status of native Agarwood species will be conducted for stakeholder discussions and data dissemination.															
C1: Hold technical pre-assessment national workshop on the	1 report of national technical consultation workshop	IA RUA (Forestry Faculty) Subnational Committees													

status of native Agarwood in the Southwestern Cambodia.																	
C2: Hold technical post-assessment national workshop on the findings of native Agarwood data and policy recommendations for restoration of the species.	1 report of national technical consultation workshop	IA RUA (Forestry Faculty)															
C3: Endorse and disseminate the National Agarwood status data.	200 copies of National Agarwood status data	IA/FA MAFF															
Objective 3: Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.																	
Output 4: Two (02) hectare of native Agarwood plantations established by Family-scale and private sectors in each of the four target provincial sites.																	

D1: Select the suitable site for 2 ha piloting plantation sites.	4 report with maps	Subnational Committee, owners of private and Family-scale plantations																
D2: Train the owners of Family-scale and private plantations on native Agarwood plantations and establish the plots.	4 training reports	IA, FA (DPP), Subnational Committee, and owners of private and Family-scale plantations																
D3: Plant native Agarwood seedlings to the 2 ha piloting sites.	4 plantation report with maps	Subnational Committee, owners of private and Family-scale plantations																
Output 5: Official lists of private and Family-scale plantations established in all four provincial sites.																		
E1: Survey and list all available Agarwood plantations of Family-scale and privates.	4 reports with maps	IA and Subnational Committee																

<p>E2: Hold official meetings with the owners of Family-scale and private plantations to inform them on project objectives.</p>	<p>4 meeting reports</p>	<p>IA and Subnational Committee</p>													
<p>Output 6: Capacity building on forest ecosystems and typical native Agarwood habitats provided to owners of Family-scale and private plantations.</p>															
<p>F1: Train owners of Family-scale and private Agarwood plantations on forest ecosystem and Agarwood typical habitats. The training aims to provide the trainees robust knowledge of restoration of native Agarwood</p>	<p>4 training reports</p>	<p>IA, FA (DFC), and FAC</p>													

representative, DWB Director, DFC Director, and DPP Director).															
G3: "Annual Performance and Management Review" to be organized at the AFoCO Regional Education and Training Center.	Three training reports	IA													
G4: Financial auditing.	Three financial audit reports	Auditing company													
G5: Project communication and reporting	Three electronic devices	IA AFoCO													
G6: Project Assistant	One person	IA													
G7: Project Administration	One person	IA													

2. Budget (USD), in accordance with the approval from the 7th AFoCO Assembly, KRW amount is calculated based on the exchange rate of KRW 1,130 per USD.

Activities	Allocation by units						Allocation by year										Total cost		
	Unit cost	Unit1	Quantity1	Unit2	Quantity2	Total unit cost	2023 (Year 1)			2024 (Year 2)				2025 (Year 3)				2026 (Year 4)	
							Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		Q4	Q1
Objective 1: Rehabilitation of former Agarwood ecosystems as the country piloting areas.																			
Output 1: 12,500 seedlings planted for each of the four provincial sites (seedlings of 6 to 8-month old with approx. 1.5 m high).																			
A1: Select former habitats of native Agarwood for restoration plots (the plots will be applied enrichment planting methods).																			
DSA for Coordinator for travelling to 4 provinces	35	person	1	Day	40	1400			400	1000							1400		
Transportation of the Coordinator	50	person	1	trip	8	400			100	300							400		
Cost for guides for 10 days each province (2 former or current Agarwood collectors per province)	15	person	8	Day	10	1200			200	1000							1200		
Local transportation for 4 provinces		Lumpsum				3200			200	3000							3200		

DSA for 2 PDOE staff and 2 FAC staff per province	35	person	16	Day	10	5600			600	5000									5600
DSA for CF 2 members per province	35	person	8	Day	10	2800			2000	800									2800
A2: Train core staff teams (they are from CF members) on seedling handling, recording, and planting.																			
DSA for Coordinator for travelling to 4 provinces	35	person	1	Day	40	1400				1400									1400
Transportation of the Coordinator	50	person	1	trip	8	400				400									400
DSA for DPP technical staff to provide trainings for 4 provinces	35	person	2	Day	20	1400				1400									1400
Honorarium for expert	100	person	2	Day	4	800				800									800
Renting provincial training venue, documents, snack, lunch, and printing		Lumpsum				4000				4000									4000
A3: Plant Agarwood seedlings in their former habitats using enrichment planting methods; and plant monoculture species of Agarwood seedlings in CF of the four provincial sites.																			
Seedling production/purchase of	3	seedling	500			1500				1500									1500

seedlings																			
Cost for enrichment planting	5	seedling	1088	ha	16	87040					87040								87040
Transportation to enrichment planting site	2	seedling	1088		16	34816					34816								34816
Site preparation for mono-crop Agarwood plantations	200	ha	4			800					800								800
Transportation to the mono-crop planting site	2	seedling	2720	ha	4	16320					16320								16320
Planting	300	ha	4			1200					1200								1200
Safety boots	100	pair	4			400					400								400
First-aid kit	150	set	4			600					600								600
Design of billboards and signposts		Package				500					500								500
Billboard construction and installation	1000	set	4			4000					4000								4000
Objective 2: Awareness-raising on advancement of native Agarwood restoration in Southwestern Cambodia.																			
Output 2: Data on status of native Agarwood species established in each provincial site.																			
B1: Conduct technically subnational consultation workshops for subnational data consolidation of all four provincial sites.																			
DSA for Project staff	35	person	3	Day	12	1260					1260								1260
DSA for	35	person	1	Day	12	420					420								420

Renting Workshop venue, snack, lunch, and printing	40	person	50	Day	1	1000	1000												1000
Honorarium for three presenters	100	person	3			300	300												300
C2: Hold technical post-assessment national workshop on the findings of native Agarwood data and policy recommendations for restoration of the species.																			
DSA of provincial participants	35	person	16	Day	3	1680													1680
Transportation of the provincial participants	40	person	16	trip	2	1280													1280
Round trip Airfare of Participation of AFoCO expert	400	person	1	trip	1	400													400
DSA for AFoCO expert	35	person	1	Day	5	175													175
Renting Workshop venue, snack, lunch, and printing	40	person	50	Day	1	1000													1000
C3: Endorse and disseminate the National Agarwood status data.																			
DSA of provincial participants	35	person	12	Day	3	1260													1260
Transportation of the	40	person	12	trip	2	960													960

provincial participants																			
Renting Workshop venue, snack, lunch, and printing	40	person	30	Day	1	600								600					600
Objective 3: Establishment of effectively enabling environment to support the development of Family-scale and private sector in native Agarwood species plantations.																			
Output 4: Two (02) hectare of native Agarwood plantations established by Family-scale and private sectors in each of the four target provincial sites.																			
D1: Select the suitable site for 2 ha piloting plantation sites.																			
DSA for Subnational Committee to select the sites	35	Person	8	Day	10	2800	2800												2800
Transportation	40	Person	4	Day	10	1600	1600												1600
D2: Train the owners of Family-scale and private plantations on native Agarwood plantations and establish the plots.																			
DSA for experts from DPP	35	Person	1	Day	12	420					420								420
Transportation for expert from DPP	50	Person	1	Day	8	400					400								400
Meeting snack cost		Lumpsum				400					400								400
Honorarium fee	100	Person	1	Day	4	400					400								400
D3: Plant native Agarwood seedlings to the 2 ha piloting sites.																			

Site preparation for mono-crop Agarwood plantations	200	ha	8			1600					1600							1600
Transportation to the mono-crop planting site	2	seedling	2720	ha	8	32640					32640							32640
Planting	300	ha	8			2400					2400							2400
Safety boots	100	pair	4			400					400							400
First-aid kit	150	set	4			600					600							600
Design of billboards and signposts		Package				500					500							500
Billboard construction and installation	1000	set	8			8000					8000							8000
Output 5: Official lists of private and Family-scale plantations established in all four provincial sites.																		
E1: Survey and list all available Agarwood plantations of Family-scale and privates.																		
DSA for Subnational Committee to study the plantation sites	35	Person	8	Day	5	1400											1400	1400
Trensportation	40	trip	5	province	4	800											800	800
E2: Hold official meetings with the owners of Family-scale and private plantations to inform them on project objectives.																		
Renting venue, snacks, and printing for provincial meeting	150	Meeting	4			600											600	600

DSA for participants from Family-scale and private owners	35	Person	60	Day	3	6300									6300				6300
Transportation of the participants	40	Person	60			2400									2400				2400
Output 6: Capacity building on forest ecosystems and typical native Agarwood habitats provided to owners of Family-scale and private plantations.																			
F1: Train owners of Family-scale and private Agarwood plantations on forest ecosystem and Agarwood typical habitats.																			
DSA for DFC experts	35	Person	2	Day	12	840									840				840
Transportation	50	trip	2	Province	4	400									400				400
Honorarium for experts	100	Person	1	Province	4	400									400				400
Renting venue, snacks, and printing for provincial meeting	150	Meeting	4			600									600				600
DSA for participants from Family-scale and private owners	35	Person	60	Day	3	6300									6300				6300
Transportation of the participants	40	Person	60			2400									2400				2400
F2: Conduct training on seed quality, habitat site and plantation management.																			
DSA for experts from DPP	35	Person	2	Day	12	840									840				840

Transportation for expert from DPP	50	Person	2	Day	8	800								800					800
Meeting snack cost		Lump sum				200								200					200
Honorarium fee	100	Person	1	Day	4	400								400					400
Sub-total (Objective 1 to 3), Direct cost						4813	103	83	35	8366	3434	0	0	205	93	22	0	0	4813
						71	60	80	00	0	36			35	00	00			71
Indirect cost																			
G1. Project inception (recruitment of staff, project members, and training of the project team members)		Lump sum				500	500												500
G2. Project National and Subnational team Committee Meeting						1000	1000												1000
DSA for participants	35	person-day	30	Time	8	8400	2800		2800					2800					8400
Transportation cost	50	person	10	trip	6	3000	1000		1000					1000					3000
Welcome/fare well diners	400	Lump sum	1	Time	3	1200	400		400					400					1200
Honorarium	300	Lump sum	1	Time	3	900	300		300					300					900

Venue and materials	500	Lump sum	1	Time	3	1500	500			500				500				1500
Renting, documentation and printing	500	Lump sum	1	Time	3	1500	500			500				500				1500
Miscellaneous	100	Lump sum	1	Time	3	300	100			100				100				300
G3. Annual Performance and Management Review” to be organized at the AFoCO Regional Education and Training Center																		
DSA for participants	35	person-day	10	Day	3	1050	350			350				350				1050
Local transportation	100	Lump sum	2	Time	3	600	200			200				200				600
Round-trip airfare	400	Person	2	Time	3	2400	800			800				800				2400
G4. Financial auditing	2000	Year	3			6000	2000			2000				2000				6000
G5. Project communication and reporting	3000	Year	2			6000	3000							3000				6000
G6. Project technical assistant	1000	Month	36			3600	9000			12000				12000			3000	36000
G7. Project accountant	1000	Month	36			3600	9000			12000				12000			3000	36000
Total indirect cost						106350	31450	0	0	32950	0	0	0	35950	0	0	6000	106350
Sub-Total (direct and indirect cost)						587721	41810	8380	3500	116610	343436	0	0	56485	9300	2200	6000	587721
Program support (12%) Financial Regulation 3.4						70527												
Grand total						658,248												

In-kind contribution (USD)							
Description	Budget Allocation by year			Total			
	Y1	Y 2	Y3				
					Y1 = 60,133	Y2 = 515,252	Y3 = 82,863
One Coordinator	4800	4800	4800	14400	Project Total Cost = 658,248 + 55,500 = 713,748		
Three Project staff	8280	8280	8280	24840			
Project office	2500	2500	2500	7500			
Utility (Lumpsum)	1420	1420	1420	4260			
Phone, mail, and internet	1500	1500	1500	4500			
Total				55,500			

The In-kind contribution will be covered by the Royal Government of Cambodia through staff and office supports.

Section D. Implementation Arrangement

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.)

The Project will be implemented by the Department of Wildlife and Biodiversity (DWB), as the IA, of the Forestry administration (FA), and key stakeholders shown on the organogram below.

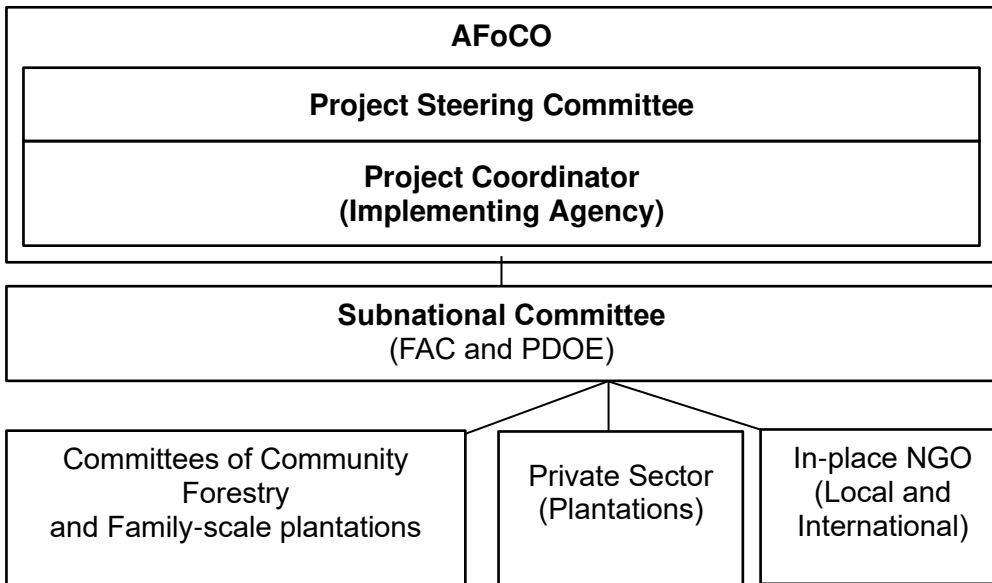


Figure 2: Organogram of the Implementation Arrangement

There are two main levels of implementation arrangement: National and subnational levels.

- At national level: The Department of Wildlife and Biodiversity (DWB), FA, will be responsible for Implementing Agencies (IA). The Department of Forest and Community Forestry (DFC); and Department of forest Plantation and Private forest development), FA, will be requested for technical supports. There will be two (02) officials from DFC, two (02) officials from DPP, and five (05) staff from DWB. AFoCO will be closely consulted for technical and financial advice and networking with regional experiences regarding Agarwood restoration experiences and private plantations. To some extent, technical and skills on oil extraction from Agarwood plantations would be consulted in order to help improve the existing private Agarwood plantation and extraction processes.
- At Subnational level: A Subnational Committee will be established for daily management of the project implementation. The Subnational Committee will consist of Forestry Administration Cantonment (FAC) and Provincial Department of Environment (PDOE). Five (05) staff from FAC and three (03) from PDOE will be permanently working for project implementation. The Subnational Committee will closely work with three main players: Committees of Community

Forestry (CCF) and Family-scale plantations; Private sector; and in-place NGO (who are currently working on the sites). The CCF acts as management team for forest areas of Community Forestry (CF), where officially registered by the Ministry of Agriculture, Forestry and Fisheries. The CCF, also, is officially recognized MAFF. Normally, the CCF consists of 5 people selected from members of the CF.

- Private and Family-scale plantation owners and In-place NGOs will be required to closely work with IA and Subnational Committees for the project implementation. Their past experiences on Agarwood plantations, conservation, and protection of other endemic species will be used for the successes of the Project expected results.

2. Staff Resource Plan

As shown on the Project implementing body consists of a Project Coordinator, Project Accountant, Technical Assistant and Project Personnel. With the exception of Project Technical Assistant and Project Accountant, all other project personnel will be seconded from the IA as parts of government In-kind contribution.

3. Reporting, Monitoring, and Evaluation Arrangements

(Monitoring arrangements must be formulated in line with logical framework matrix, AFoCO project manual and related guidelines.) (300-500 words)

Five types of reports will be submitted to AFoCO during the project implementation period as follows:

No.	Report	Number	Deadlines for submission
1	Mid-year Report	3	31 July
2	Annual Progress Report (APR)	2	31 January
3	Financial Report, part of the APR	2	31 January
4	Annual or biannual financial auditing report	TBD	Three months into the following year
	Project Completion Report	1	Three months after project completion

Monitoring

The IA/FA is responsible for project monitoring in accordance with Article 11.1, reviewing the progress of activities, and making necessary decisions for Project implementation. The IA/FA meeting will be held at least once a year, preferably either in the second or fourth quarter of each year at least one month after annual monitoring conducted under Article 11.

4. Risk Management and Sustainability

4.1. Assumption and Risks

With reference to the environmental and social risk category for the project, identify the specific potential risks and identify mitigation measures. For low risk project, integrate relevant mitigation in the project logical framework matrix as identified under ‘important assumptions’. For medium and high risk projects, carry out Environmental and Social Impact Assessment and accordingly suggest mitigation measures through and Environmental and Social Management Plan as specified in the AFoCO’s Environmental and Social Management System. Please indicate relevant domestic policies/guidelines relative to Environmental and Social Impact Assessment and Planning (400-500 words)

Key potential risks and mitigation measures are raised in the table below.

Potential Risk	Mitigation Measures
Former Agarwood habitats within the Community Forestry Areas are too degraded to help growth and the recovery of the native Agarwood species.	Enrichment planting of the native Agarwood species in the best possible former habitats while seeking technical advice and assistance from experts such as Korea National Arboretum/National Institute of Forest Science of Korea. The AFoCO will coordinate to communicate with them.
Community Forestry Committees are not active in collaboration with the project activities because of shortage of labors, e.g. Covid-19 pandemic issues.	The IA and Subnational Committees will coordinate from one province to another to solve this matter.
Staff movement within relevant government agencies, e.g. FAC and PDOE.	The offices of the FAC, PDOE, and CF will be equipped with the plantation manual “farmer Agarwood plantation” for their continuous uses. The office staff, especially the office heads, of these partners will be thoroughly and systematically trained on how to use it. The office Heads will be surly informed that the plantation manual has to be kept in the office and all new coming staff should know how to use it.

4.2. Sustainability Mechanism

(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 consistent with those that are identified in

the logical framework matrix under 'Important Assumptions'.) (400-500 words)

As detailed in the logical framework matrix (under "Important Assumptions" column), all relevant stakeholders will be actively collaborated, especially the Committees of Community Forestry of the entire Project target sites. For sustainability ambition, the Project will increase awareness-raising among stakeholders on the bringing back and sustainable uses of the native Agarwood species for local community livelihoods (as it was used to contribute), national economy, and biodiversity conservation as the country-regional pride as it used to be in the past. It is believed that after the Project implementation, the native Agarwood species will be one of the national-biologically iconic species taken into strong protection (in the remaining wild) and development (in the plantations) as part of the local community income generation. For that reasons, management of the existing Community Forestry sites would not be only to protect forest areas, but also to add on values of incomes for members of the Community Forestry sites. In return, they will continue to manage their Community Forestry sites sustainably.

All the proposed plantations, of the private, Family-scale and CF, of the native Agarwood will be officially recognized by the Forestry Administration and the Ministry of Agriculture, Forestry and Fisheries, with certificates of recognitions, before the end of the Project life. The sustainability of the Project will be ensured by the existing government, private sector, and Family-scale project stakeholders. The government stakeholders, in this regard, are FA/DWB, and FACs, who closely work with Committees of Community Forestry of the provinces. According to Sub-Decree (2003) and Prakas of MAFF (2006) on Community Forestry management, the Committees of the Community Forestry and the members have legal rights to manage the forests for renewable cycle of 15 years. The FACs is mandated to closely coordinate with the Committees for sustainable forest management for local livelihoods and forest development. Furthermore, because the forest areas of the existing Community Forestry are under Permanent Forest Estates, the project restorative sites will be permanently managed for sustainable forest productions including Agarwood. On top of that, the Manual of Agarwood Plantation Management of each CF project target site will be in place for longer uses. The Manual will consist of Agarwood plantations and factories Groups listing all relevant contact addresses of plantations and factories, specifically in Koh Kong. The Subnational Committees and CF Committees of each project target province will be responsible for networking of the Groups. The Manual will also be kept a copy in offices of the FAC, PDOE and CF Committees of all the four provinces.

Private and Family-scale plantation owners will be encouraged because their Agarwood productions will be increased through technical and production improvement for better quality and higher prices. The owners of the plantations would be happier to participate in the continuation of the Project outcomes because they would have more chip production from the native Agarwood sourcing from the continuously restorative areas of the Community Forestry for the next 15 years and more.

Technically and biologically, the native Agarwood would produce seed within 15 years or so (Ta Thy, pers. com.). The Committees of Community Forestry will manage the sites for benefitting from selling native Agarwood seeds to plantations either within the provincial sites or outside. Previous experiences and lessons learned from the past AFoCO supportive projects such as Output 1 of the project entitled “*The registration of Small-Scale Private Forest Plantations in Cambodia*” will be replicated for the proposed project for the sustainability purpose.

By the end of Project life, it is expected that native Agarwood seedlings will be planted within the proposed restoration sites, FAC and Committees of the Community Forestry will be able to handle the results of the Project. The “Handover Agreement” ceremonies will be held for each provincial site with the presence of the AFoCO, FA, and MAFF ministerial representatives (optional). Documentation of all project objectives, outcomes, and outputs will be recorded for future monitoring at least for another 15 years by the FACs as stated on the Community Forestry Agreement between FAC and the Committee of the Community Forestry. While the financial generation could be made from selling the native Agarwood seeds, long-term management of the restorative native Agarwood sites will be secured as all financial aspects managed by the Financial Units of the Community Forestry. Furthermore, Family-scale plantations could closely coordinate their works with the Committees of the Community Forestry through entrepreneurship to make sure their native Agarwood production price strong in the markets.

The project will, also, facilitate the existing Cambodian Family-scale factories and private plantation owners to network among all four provincial target sites. Lessons learnt from these private owners will be shared among the AFoCO countries as necessary either directly through bilateral countries or through AFoCO Secretariat. For instance, Thailand and Vietnam are among the most immediate AFoCO countries to be share the lessons learnt because of similarity of geography, culture, and ASEAN political nations. The experiences of the project could be raised through senior government official regional meetings among the ASEAN countries such as the meetings of ASOF.

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