INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

| TITLE: | PROMOTION OF SUSTAINABLE DOMESTIC CONSUMPTION OF WOOD PRODUCTS IN THAILAND |
|--------------------|--|
| SERIAL NUMBER: | PD 926/22 <u>Rev.1</u> (I) |
| COMMITTEE: | FOREST INDUSTRY |
| SUBMITTED BY: | GOVERNMENT OF THAILAND |
| ORIGINAL LANGUAGE: | ENGLISH |

SUMMARY:

The global COVID-19 pandemic will remain a significant problem in the tropical timber trade market, international prices and demand are expected to decline. There have been disruptions in supply chains, leading to limited sales of tropical timber in the global market. The ITTO Market Information Service (MIS) and Thailand's Forest Statistics reported that exports of primary wood products to international markets (e.g., Japan and EU27) in 2021 declined more than 20% compared to 2019 before the pandemic. In contrast, the consumption of wood and wood products in the domestic market is predicted steadily increased due to residential properties development in big cities and the government's property stimulus package for buying new homes.

To this end, the Government of Thailand needs to develop its wood and wood products in domestic markets to reduce the country's economic dependency on export markets. In addition, this practice will support the government policy on green growth and sustainable development by increasing bio-based economy value in new market segments.

Therefore, the development objective of the project aims at enhancing sustainable domestic wood consumption in Thailand. The specific objective is to promote sustainable domestic consumption of wood and wood products in Thailand through policy improvement on wood certification, stakeholder capacity building, and timber supply chains in pilot provinces.

| EXECUTING AGENCY: | KASETSART UNIVERSITY (KU) IN COLLABORATION WITH THE ROYAL FOREST DEPARTMENT (RFD) | |
|--|--|---------------------|
| DURATION: | 24 MONTHS | |
| PROPOSED BUDGET AND OTHER FUNDING SOURCES | SOURCE | CONTRIBUTION IN USD |
| | ΙΤΤΟ | 320,000 |
| | KU | 25,000 |
| | TOTAL | 345,000 |

Contents

| Project E | Brief | 4 |
|-----------|---|----|
| List of A | bbreviations and Acronyms | 5 |
| Map of p | roject area | 6 |
| Figure 1: | Project map | 6 |
| PART I: I | PROJECT CONTEXT | 7 |
| 1.1 | Origin | 7 |
| 1.2 | Relevance | 8 |
| 1.2.′ | Conformity with ITTO objectives (ITTC, 2006) and priorities (current SAP) | 8 |
| 1.2.2 | 2 Relevance to the submitting country's policies | 9 |
| 1.3 | Target area | 10 |
| 1.3.′ | Geographic location | 10 |
| 1.3.2 | 2. Social, cultural, economic and environmental aspects | 10 |
| 1.3.3 | 3 Target areas | 11 |
| 1.4 | Expected outcomes at project completion | 13 |
| PART II: | PROJECT RATIONALE AND OBJECTIVES | 14 |
| 2.1 | Rationale | 14 |
| 2.1.1 | Institutional set-up and organizational issues | 14 |
| 2.1.2 | 2 Stakeholder analysis | 15 |
| 2.1.3 | 8 Problem analysis | 18 |
| 2.1.4 | I. Logical framework matrix | 23 |
| 2.2 | Objectives | 24 |
| 2.2.1 | Development objective and impact indicators | 24 |
| 2.2.2 | 2. Specific objective and outcome indicators | 25 |
| PART III: | DESCRIPTION OF PROJECT INTERVENTIONS | 26 |
| 3.1 | Outputs and Activity | 26 |
| 3.1.1 | Outputs | 26 |
| 3.1.2 | 2 Activities and inputs | 26 |
| 3.2. | Implementation approaches and methods | 27 |
| 3.3. | Outputs and Work plan | 28 |
| 3.4. | Budget | 30 |
| 3.4.1 | I. Master Budget | 30 |
| 3.4.2 | 2 Consolidated budget | 34 |
| 3.4.3 | 3 ITTO yearly budget | 35 |
| 3.4.4 | KU yearly budget | 36 |
| 3.5 | Assumptions, risks, sustainability | 36 |
| 3.5.7 | Assumptions and risks | 36 |
| 3.5.2 | 2 Sustainability | 37 |

| PART IV: IN | IPLEMENTATION ARRANGEMENTS | 38 |
|-------------|---|----|
| 4.1. Ex | xecuting agency and organizational structure | 38 |
| 4.1.1 | Executing agency and partners | 38 |
| 4.1.2 | Project Management Team | 39 |
| 4.1.3 | Project Steering Committee (PSC) | 40 |
| 4.1.4 | Stakeholder involvement mechanisms | 40 |
| 4.2. R | eporting, Review, Monitoring and Evaluation | 41 |
| 4.3 Di | issemination and mainstreaming of project learning | 42 |
| 4.3.1. | Dissemination of preject results | 42 |
| 4.3.2. | Mainstreaming of the project learning | 42 |
| ANNEX | | 43 |
| ANNEX 1: | Information on implementing agency | 43 |
| ANNEX 2: | ToRs of personnel, consultants and sub-contracts funded by ITTO | 46 |
| ANNEX 3: | Overall assessment and specific recommendations of the 57 th Expert Panel and respective modifications | 50 |

Project Brief

This project concept note is submitted for consideration of donors who are willing to support ITTO producing member countries to stimulate smallholder forest plantations and sustain their forest industry by promoting sustainable domestic wood use during the uncertainty of the global COVID-19 pandemic. Experts from timber production and consumer countries discussed and agreed during the ITTC-57 that the COVID-19 will remain a significant problem in the tropical timber trade market, international prices and demand are expected to decline. In addition, the political and structural limitations that affect the region will persist, and logistics will continue to be a major problem. There have been disruptions in supply chains, leading to limited sales of tropical timber in the global market. It is of hope that the forestry industry can recover and move towards a promising future. Promoting the domestic market of wood and wood product will drive the sustainability of the wood industry in producing countries. Therefore, the proposed project aims to enhance sustainable domestic wood consumption in Thailand.

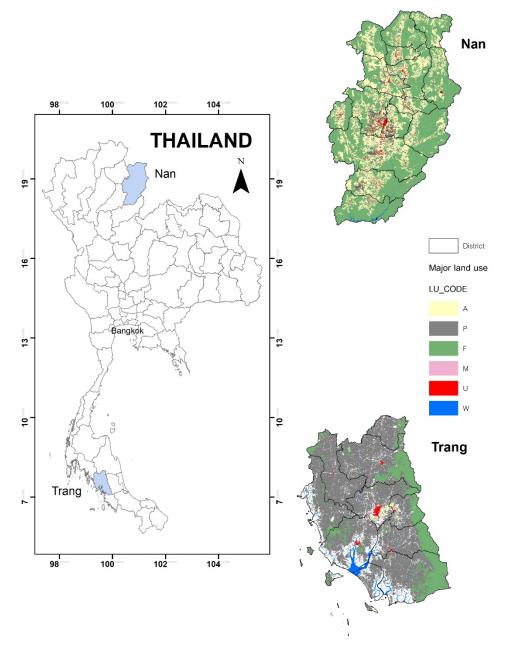
The recent ITTO Market Information Service (MIS) reported that the measures taken to prevent the spread of the COVID-19 are having substantial impacts on the tropical timber sector, with thousands of workers laid off and demand plummeting. The survey also points out that exports of primary wood products are highly vulnerable to economic shocks, and domestic consumption has proven to be a stabilizer for tropical timber production in previous economic crises. The value of Japan's wooden bedroom furniture imported from Thailand continues to decline from 161 million Yen in 2018, to 45 million Yen in 2020 and 38 million Yen in 2021. EU27 Imports from Thailand were USD25 million in the first ten months of 2021, 3% less than the same period in 2020 and down 27% compared to 2019 before the pandemic. In contrast, the RFD reported that domestic wood production increased from 324,042 cubic meters in 2016 to 424,098 cubic meters in 2020 due to substantially decrease in imported wood products.

Tropical timber-producing countries need to transform their wood supply system from dependence on exports to the promotion of domestic wood use, as they face disruptions in supply chains on the timber trade. To this end, those countries need to promote green growth and sustainable development by increasing bio-based economy value in new market segments and promoting sustainable wood consumption and production. In response to this situation, the Government of Thailand will initiate the developing its wood and wood products in domestic markets to reduce the country's economic dependency on export markets.

List of Abbreviations and Acronyms

| СА | Collaborating Agency |
|-------|--|
| CI | Criteria and Indicators |
| CoC | Chains of Custody |
| EA | Executing Agency |
| EU | European Union |
| FAO | Food and Agriculture of United Nations |
| FIO | Forest Industry Organization |
| FLEGT | Forest Law Enforcement, Governance and Trade |
| GDP | Gross Domestic Products |
| GPP | Gross provincial Products |
| ITTA | International Tropical Timber Agreement |
| ITTC | International Tropical Timber Council |
| ITTO | International Tropical Timber Organization |
| JICA | Japan Internal Cooperation Agency |
| KU | Kasetsart University |
| LSSC | Legal and Sustainable Supply Chains |
| MARD | Ministry of Agriculture and Rural Development of Vietnam |
| MONRE | Ministry of Natural Resources and Environment |
| NEDP | National Economic Development Plan |
| NGO | Non-governmental organizations |
| PSC | Project Steering Committee |
| PMT | Project Management Team |
| RFD | Royal Forest Department |
| SAP | ITTO Strategic Action Plan |
| SFM | Sustainable Forest Management |
| UN | United Nations |
| USD | US Dollar |
| VPA | Voluntary Partnership Agreement |
| YPA | Year plan action |

Map of project area





| Number | Name of project areas |
|--------|---|
| 1 | Nan Province: |
| | Area: 12,130 Km2; Population: 479,000; Pop density 40/km2: Forest area is 73,720 ha (61%); GDP per capita: 3,031 USD (country average 6,778 USD); <u>Agriculture</u> <u>contribution to GPP 32%</u> |
| 9 | Trang Province: |
| | Area: 4,918 Km2; Population: 643,116; Population density: 131.km2; Forest area: 109,300 ha (23.1%); GDP per capita: 3,880 USD (country average 6,778 USD); agriculture contribution to GPP 31%; Number of Wood Facility: 92; Number of labors: 7,662 persons. |

PART I: PROJECT CONTEXT

1.1 Origin

Forest cover in Thailand had significantly declined from 53% of the country in 1961 to 25% in 1989 due to encroachment for agriculture, illegal logging and unsustainable forest management. In addition, the rise of grassroots social movements on environmental awareness resulted in the Thai government imposing a nationwide logging ban in 1989 to responsible environmental and social concerns. Forest cover declined in Thailand has generally been stabilized in the last few decades, and forests are even increasing in extent in some areas. The remaining forest cover forest is 32%, which is less than the national target of 40% of the country area which 25% for conservation forests and 15% for production forests. The extent of conservation forests or protected areas is now about 23% and most likely achieve the 25% target soon. The remaining forest cover approximately 7.2%. Thus, approximately 3.5 million ha is targeted to achieve the 15% target.

Thailand now has large areas of both rubberwood and eucalyptus plantations. Rubberwood (mostly domestically sourced) supplies 87% of wood furniture production, while eucalyptus supplies a large part of Thailand's domestic pulp and paper demand. Imported hardwoods are used mostly for the construction sector, although they also make up the balance of supply to the furniture industry. Almost all of the 4 million cubic meters roundwood of sawn wood used in the construction industry in Thailand in 2016 were imported. The Forestry Development Strategy (2017 – 2036) predicts an annual wood demand of 47 million tons. This huge demand can be met by either the additional forest plantations of 1.4 million ha by 2036 or a significantly increase in imported logs and sawn wood for reprocessing for export.

The characteristics of wood industry and the wood products in Thailand are as follows:

- Thailand is increasingly ambitious in seeking to become a regional manufacturing hub for wood-based products and it is a major supplier of furniture and other wood-based products to European, USA and Asian markets. However, access to international markets will require efforts to verify that all timber in its products (both imported and domestically produced) is legal. Recently, Japan and the Republic of Korea have also established requirements to promote the trade in legal timber products,
- Thailand started exploring an EU Forest Law Enforcement Governance and Trade (FLEGT) Voluntary Partnership Agreements (VPAs). Under the VPA process, Thailand is developing a timber legality assurance system to verify that wood products conform to national laws, whether they are domestically harvested or imported.
- Thailand's voluntary certification scheme is a means to give Thai industry a method to show to the buyers the legal origin of wood they are purchasing. However, with the complexity of the industry, high cost (particular smallholders), only a few big companies and FIO can afford the certification scheme. enforcement modalities well established
- Article 7 of the amended Forest Act 2019 permits landowners in private land and public land to cut tree species, which were used to be listed as restricted species. However, the operators who wish to transport cut logs is required to register their private seal with RFD. In addition, the operators of wood processing plants (small- medium and large plants) must obtain a license from the government. Legality risks relate to the confusion, differing interpretations of regulations and uneven enforcement inevitably lead to barriers to native tree species utilization. ITTO and RFD had developed criteria and indications for certification of wood from community forests and smallholder plantations, but it has not been officially adopted by the RFD.
- The design and styles of wooden furniture produced by woodworking villagers are not matched with the market needs. Therefore, the imported wood furniture has increased steadily from 79 million USD in 2012 to USD 140 million in 2020, while the exported wood furniture remains stable at USD 539 million during this period.

• The wrong perception that wood is scarce and utilization of wood products either from legal or illegal sources lead to deforestation and climate change impact. This wrong perception and understanding are stimulated by mass media, social movements on environmental activists. This leads to extremist attitude toward wood use and fabricated pressure on the wood manufacturing and exporting industry. A certain portion of the urban population (52% of the total population and 60% in 2030), especially the young generation living in big cities rush to use substituted materials, including wood composite, grass, concrete, etc.

1.2 Relevance

This proposed project is relevant to the forestry and wood industry development policies of Thailand. Following are the key policies that are in favor of project implementation as follows:

1.2.1 Conformity with ITTO objectives (ITTC, 2006) and priorities (current SAP)

Under ITTA 2006, ITTO has two closely related and overarching objectives:

- To promote the expansion and diversification of international trade in tropical timber from sustainability managed and legally harvested forests.
- To promote sustainable management of tropical timber-producing forests.

The ITTO objectives are highly relevant and support Thailand's national forest policy (item 1.2.2). which aim to 1) promote afforestation in private land and the public land permitted for utilization; 2) promote and assist value chain process from wood industries and biodiversity-based economy development; 3) develop licensing and national and international certification of timber.

Likewise implementing various activities defined in project output 1 (Improved policies for promoting domestic uses of wood and wood products), including strengthening the national council/association, information and analysis on annual domestic wood production, legalizing and endorsing domestic wood from planted forests through national& international certification and learning lessons on smallholder plantations in selected countries investigated and introduced will contribute and consist with ITTA 2006 objective 1. Meanwhile, the proposed activities listed under project output 2 (stakeholder capacity built to produce innovative wood and wood products needed by domestic markets), include providing advanced skills to design and develop wood products to meet domestic market demands, building capacity and understanding of stakeholders to comply with legality requirements, awareness-raising of urban consumers on SFM and domestic wood consumption, and strengthening partnerships and communication between wood producers and wood consumers will contribute to sustainable management of tropical timber-producing forests (ITTO objective 2).

SAP 2022-2026 aims to:

- Highlight the ITTO's contribution to, among others, the SDGs; Recognize that COVID recovery may preoccupy the tropical forest sector for the SAP's duration;
- Serve as a transitional guideline document between 2022 and the launch of a process to renegotiate ITTO 2006; and
- Coincide with the extension of ITTA, 2006 to 2026.

SAP 2022 – 2026 adopted at the ITTC-57 provides a new mission statement^{"1} To facilitate discussion, consultation, international cooperation and policy development on the expansion and diversification of international trade in tropical timber from sustainably and legally harvested forests and on the sustainable management of tropical forests." In addition, SAP 2022-202 identifies strategic priorities and cross-cutting issues follows:

¹ FIFTY-SEVENTH SESSION 29 November – 3 December 2021 Virtual Session

Strategic priories:

- Strategic Priority 1. Promote good governance and policy frameworks to enhance financing and investment in sustainable tropical forest management, legal and sustainable forest product supply chains and related trade.
- Strategic Priority 2. Increase the contribution of the tropical forest sector to national and local economies and resilient livelihoods, including through further processing and trade in tropical timber and other forest products and services.;
- ✓ Strategic Priority 3. Reduce tropical deforestation and forest degradation, enhance forest landscape restoration and the resilience of forest ecosystems to climate change, and conserve forest biodiversity and ecosystem services.; and
- Strategic Priority 4. Improve the quality, availability and timeliness of information on tropical forest product markets, supply chains and international trade, including challenges and opportunities related to market access, expansion and diversification.

ITTO cross-cutting strategies:

- ✓ Help build capacity in Member countries to advance the SAP 2022-2026;
- ✓ Enhance ITTO operational effectiveness;
- Promote integration of the tropical forest sector in COVID-19 recovery plans, measures and investments; and
- ✓ Promote gender equality and the empowerment of women

1.2.2 Relevance to the submitting country's policies

- Amended the Forest Act 2019 Measure 7 stated that the previously restricted tree species either planted in the public land permitted for utilization or the private own land are no longer defined as restricted species. This policy amendment stimulates smallholders and local people to engage in economic forest plantations.
- The National Strategy (2018-2037) is the country's first national long-term strategy. The Strategy for Eco-Friendly Development and Growth is one out of six key strategies aim to achieve sustainable development in terms of manifesting a healthy society, economy, and environment; implementing good governance, and integrated partnerships at both national and international levels. Key development guidelines related to the project proposal are to promote green growth and sustainable development by (1) increasing bio-based economy value; (2) conserving and rehabilitating biological diversity; (3) maintaining and expanding eco-friendly green areas (55% of the country land area); and (5) promoting sustainable consumption and production.
- The National Forest Policy adopted by the cabinet in 2019 aims to maintain 40% forest cover in which 25% for conservation forests and 15% for the production forests. The policies related to production forests and wood industries include: 1) promote afforestation in private land and the public land permitted for utilization; 2) promote and assist value chain process from wood industries and biodiversity-based economy development; 3) develop licensing and national and international certification of timber, including for small- and medium-sized enterprises.
- The Forestry Development Strategy 2017 2036 (B.E. 2560-2579) aims to increase forest cover outside protected areas by 3.52 million ha in order to achieve the 15% for production forest target. Of this number, 1.4 million ha is targeted by 2036.

1.3 Target area

1.3.1 Geographic location

Thailand is located in the middle of mainland Southeast Asia between latitudes 5°27' and 20°27' N and longitude 97°27' and 105°37'E. It is bordered by Myanmar and the Andaman Sea to the west, Lao PDR to the northeast, Cambodia to the southeast, and the Gulf of Thailand and Malaysia to the south. The total land area of Thailand is 517,624 km², of which some 84% is situated within the mainland section and the remaining 16% within the Peninsular South.

1.3.2. Social, cultural, economic and environmental aspects

(a). Social and cultural aspects

The total population of Thailand is 67,653,000, equivalent to 0.91% of the total world population and it is ranked as the 21st most populous country. It's estimated that there are 2.2 million migrants in Thailand largely from Myanmar, Lao PDR and Cambodia. The Thai population is classified into three main ethnic groups, including Thai ethnic (75% of the total population), Thai Chinese (14%), and Malay ethnic (3%). The remainder of the population falls into small minority groups including hill tribes, Khmers and Mons.

Population in the Central region (including Bangkok) accounts for 32.7% of the total population, followed by the Northeast (27.5%) and the Northern region (17.6%). The population density at the national level was 131 people/ km². The highest density of 300 people/ km² was observed in the Central region and the lowest of 72 people/km² was found in the mountainous northern region. There are more than 19 provinces that have populations of more than 1 million. The Bangkok Metropolitan area has approximately 16 million or 23.5% of the total population, with a density of 2,052 people/km². The urban population rapidly increased from 20% of the total population in 1960 to 31% in 2000 and about 52% at present (2017). It is expected that the percentage will be over 60% by 2030.

(b). Economic aspects

Thailand has long been recognized as an agriculture-rich country and it has been ranked as one of the World's largest rice exporters. Thailand's economy has evolved in several stages and shifted from a subsistence farming the 1st National Economic Development Plan or NEDP (1961-1966) to a commercial or market-oriented started from to the 4th NEDP (1977-1981). This national policy resulted in changing the cropping system from the subsistence to a commercial system using higher value and new varieties, such as cassava and maize, targeting foreign income. Cultivated land increased two folds from 77,680 km² in 1961 to 157,024 km² in 1980, but it caused significant impacts on natural resources. Forest cover declined from 53.3% of the country to 32.2% during the same period.

Since 1980, Thailand's national policies have shifted from an agriculture-based economy to an industrial/technology-based. The contribution of the agricultural sector dropped from 33% of the GDP in 1961 to 18% in 1990 and dropped to 10% or less after 1990. Meanwhile, the labor force structure had been changed from the agricultural sector to the manufacturing and service sectors. During the 1960s, more than 70% of the total population worked in the agricultural sector and this figure decreased to 38% in 2016. In contrast, the percentage of employment in the industry, manufacturing and service sectors substantially increased as the result of the new economy structure. Nevertheless, agriculture also played a crucial role as a shock absorber for unemployed laborers in the non-agricultural sectors during the Asian financial crisis known as "Tom Yum Kung" in 1997" and the current global COVID-19 pandemic. Households in the agricultural sector are among Thailand's poorest and their livelihood and poverty have a strong relationship with agriculture. This linkage implies that efficient and precise agriculture or so-called "Smart Agriculture" and sustainable forest management would help address the problem of poverty in Thailand and hence agricultural-forestry sector plays an important role in Thailand's economy.

(c). Environmental aspects

According to long-term forest monitoring, forest cover in Thailand had declined from 53% of the country land's area in 1961 to approximately 25% in 1998 (Royal Forest Department or RFD, 1998). High deforestation rate was observed during 1961 to1982. As a result of unsustainable forest management, the Thai Government imposed the national logging ban in 1989 and promotes escalates the establishment of protected areas. Using high-resolution satellite image interpretation at a 1:50,000 scale, revealed that forest cover during 2000 to 2016 was relatively stable (31-32%) (RFD, 2016). In addition, conservation forests (national parks, wildlife sanctuaries, forest parks, non-hunting areas, conservation mangroves, botanical gardens, arboreta, and class 1 and class 2 watersheds) currently cover about 24.4% of the country, which is almost achieving the national conservation target of 25%. In contrast, the production forest target of 15% is far behind the national target.

1.3.3 Target areas

The target areas of this project are located in two provinces of Thailand: Nan and Trang. Nan province is situated in the north of Thailand, covering approximately 12,0130 km². To the north and the east, the province adjoins Lao PDR. Trang province is located in peninsular Thailand and in the west coast. The province covers an area of 4,918 Km2. To the west is the Andaman Sea, while the west part meets Khao Banthad Range and adjoins Pattalung Province. It has been the important seaport of the south from past to present.

| Location | |
|--|--|
| <u>Nan Province, northern</u> <u>Thailand</u> | Smallholder teak plantations and community enterprise |
| Trang Province, southern Thailand | Large area of rubber plantations and rubber wood industry, as well Centres/clusters for wooden furniture manufacturing |

<u>(a). Nan</u>

Nan province is 1 of 17 provinces situated in the north of Thailand, covering approximately 12,000 km². To the north and the east, the province adjoins Lao PDR. The province encompasses the western slope of the Phi Pannam fold mountain range and the eastern slope of the Luang Phrabang range separates by the elongated valley of the Nan River in the central part of the province (Figure 1). The Nan River flows from north to south and joins other 3 rivers, namely Ping, Wang and Yom, to form the Chao Phraya River in Nakhon Sawan province. The highest altitude of 1,980 m above mean sea level is located in Doi Phu Kha National Park. The lowlands (<400 m) occupy about 18% of the province's area, where elevations greater than 800 m cover approximately 40%. The average mean annual rainfall during 1961-2013 was 1,268.8 mm. The rainy season begins in May and ends in September. Mean annual temperature is 25.9 °C; maximum temperature is 33.1 °C and minimum temperature is 20 °C.

Administratively, the province is subdivided in 15 districts (Amphoes) and 8 municipalities. The population of Nan Province was about 478 thousand (National Statistical Office, 2017) and the total number of households was 164,440. Mean population density of Nan province is rather low (39 persons/km²) compared to the national population density of the country (130 persons/km²), this is due to the limitation of suitable land for settlement by topography factor. Most of the lowlands are dominated by Thai people, whereas the highlands and mountainous territories are populated by diverse ethnic groups. The largest ethnic groups include the Lua, Khmong, Mien and Khmu. Approximately 55% of the total households engage in agriculture. The Gross Provincial Product (GPP) of Nan province steadily increased from 357 million USD in 2000 to 1,09 billion USD in 2019, while GDP per capita increased from 2,200 USD to 3,031 USD during the same period. In addition, the contribution of the agricultural sector to the GPP had increased from 15.7% to 32.25% in the same period or 12% annually. A recent survey indicated that there were 28.8% of the total population (~138,000 individuals) live below the poverty line, but this decreased to 24% (~114,000 individuals) in 2016.

According to long-term forest cover monitoring by the RFD, forest cover in Nan province was 74% of the province area in 2004 and declined to 71% and 61% in 2008 and 2016, respectively (RFD, 2016). The main types of forests in Nan province include evergreen forest (45%), mixed deciduous forests (46%), dry dipterocarp forests (8%), and pine forest (1%). Natural forests decreased by nearly 25% during 1995-2012, but the agricultural lands increased by more than 50%. The highest deforestation rates were recorded during 2009– 2012. In addition, local people mainly hill tribe people have changed their land use practices from the traditional system of slash and burn agriculture to permanent cultivation for commercial trading. Main crops are maize and cassava, which are driven by price incentive and the engagement of big agricultural companies. This rapid change results in an increase in overland runoff, and in an enhanced hazard of heavy floods during the monsoon season.

Large proportions of forest areas (evergreen forest and deciduous forest) were from 2009-2016 converted to maize and cash crops. In addition, approximately 21,200 ha and 8,900 ha of new perennial trees (fruits and rubber plantations respectively) were in 2016 found in previous maize cultivation and deciduous forest area. Forest plantations and rubber plantations rapidly increased from 8,740 ha in 2007 to 35,000 ha in 2015.

Protected areas (national parks and wildlife sanctuaries) cover about 35% of the province's area, while watershed class 1 contributes approximately 45%. These two broad categories are recognized as conservation forest by laws (National Park Act of 1961 and Wild Animal Preservation and Protection Act of 1992) and Cabinet Resolution on Watershed Classification between 1982 and 199, respectively. Actually, agricultural development and settlement are prohibited there, but the maize boom in the last decade have resulted in huge deforestation in conservation forests and have become a controversial issue. In addition, non-timber products (honey, resin, wasp eggs and rattans) extracts are also not allowed inside national parks and wildlife sanctuaries.

<u>(b). Trang</u>

Trang is divided into 10 districts. These are further divided into 87 subdistricts (tambons) and 697 villages. The total population of Trang Province is 643,116 with a density of 131.km2. About 84% of the Trang population are Thai ethnic, and the remaining (6%) are Malay ethnic. Trang was the first area of Thailand where rubber trees were planted, brought there by governor Phraya Ratsadanupradit Mahison Phakdi from British Malaya in 1899. The current rubber plantation area covers about 1.34 million rai or 215.000 ha or 43% of the province area. Trang is ranked the second for rubber plantations after Songkla Province (350,400 ha) and contributes 5.5% of the total plantations in Thailand. About 100,000 households are involved in rubber plantations.

The Gross Provincial Product (GPP) of Trang province steadily decreased from 2,355 million USD in 2012 to 2.08 billion USD in 2019, while GDP per capita decreased from in 3,872 USD to 3,767 in 2019 USD during the same period largely due to the lower price of rubber latex. Agriculture contribution contributes about 31% of the provincial GPP. The GDP per capita of Trang is ranked as 8 in southern Thailand provinces and 34the in Thailand. Currently, there are 105 rubberwood industry factories (e.g., furniture, veneer, sawn wood, play toys, etc) with an investment of over 17 billion USD or 5 billion baht in Trang province.

Trang province covers various landscapes ranging from the coastline, flat area, underrating terrains and mountain. Forest cover in Trang Province varies from 21-23% in the last 10 years. Most of the remaining forests are located in protected areas (national parks and wildlife sanctuaries). Forest encroachment for rubber and oil palm plantation is the main environmental threat to the province. Flash floods and landslides in wet season are frequently observed in the west part of the province nearby Khao Banthad Range.

1.4 Expected outcomes at project completion

Implementing the proposed activities at national and provincial levels (2 pilot provinces) will produce outputs relating to policy improvement and capacity building of stakeholders involved in wood and wood products. In addition, the policy framework and institutional set-up needed to succeed with the promotion of domestic consumption of wood and wood products will be developed and strengthened as follows:

- At the end of the project (2 years after the project execution), The Government policy or other type of legal/bending document) to promote domestic consumption of wood and wood products The policies for promoting domestic uses of wood and wood products should be approved by the National Forest Policy Committee and/or RFD before the project termination. The approved policies will ease and fasten the processes to strengthen the domestic market and supply chains of wood and wood products.
- <u>Wood industries and tree growers (large and smallholders) collaboration</u> strengthened to fill domestic market demands for sustainable legalized wood products and their supply and value chains.
- The capacity of relevant stakeholder groups will be improved by means of wood legality assurance awareness raising, planted-wood product design training, plantation farmer cooperative/household-based wood business lead companies linking to produce innovative wood and wood products needed by domestic markets. At least, 15 companies attended B2B matching meetings with internal companies (e.g., Japan); at least, 50 urban consumers and 50 rural consumers attended uexhibitions/communication campaigns on using planted-wood for housing construction and interior decoration. Furthermore, 10 young designers and winners of contests on the best designs identified and recommended for further engagement
- Raised awareness of urban consumers on the role of wood used for sustainable forest management resulted in enlarged and diversified domestic wood consumption. A series of TV interviews, publication and communication of project outputs, display of piloted demonstrations etc. are planned to take place. Wooded products will be displayed at the national exhibitions.
- Demonstrated legal and sustainable wood supply chains that improve domestic market access to wood products (2 pilot provinces in Nan and Trang Provinces).

By achieving the specific objective of enhancing domestic consumption and promoting local markets of wood and wood products, the expected outcomes of the project will go beyond its overall goal of sustainable domestic wood consumption. It will support national bio-based economy policy, contribute to biodiversity conservation, maintain and expand eco-friendly green areas, and create job and income opportunities for small- and medium-sized enterprises

PART II: PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

The Executing Agency of the project is Kasetsart University Faculty of Forestry (KUFF). The KUFF is the only academic institution in Thailand offering undergraduate and post-graduate degrees in forestry and natural resources. There are over 1,500 students and over eighty well-educated faculties affiliated with 6 academic departments. KUFF has been collaborating with national and international governmental and non-governmental organizations to provide training, arrange workshops, seminars and conferences to transfer knowledge and exchange innovative ideas on various topics of sustainable forestry management, biodiversity conservation and wood industries. KUFF is currently managing an ITTO project PP-A/54-331 entitled "Enhancing Conservation and Sustainable Management of Teak Forests and Legal and Sustainable Wood Supply Chains in the Greater Mekong Sub-region".

To execute the proposed project smoothly, KUFF will closely collaborate with the Royal Forest Department (RFD) and Forest Industry Organization (FIO) as policy-making body. The Royal Forest Department (RFD) under the Ministry of Natural Resources and Environment (MONRE) has the responsibility, capacity, manpower and infrastructure to manage production/economic forests. Thus, the RFD places a high strategic emphasis on achieving sustainable forest management, implementing reforestation programs with financially viable tree species to combat deforestation and forest degradation, and supporting the legality of timber harvesting and trade. In addition, the Forest Industry Organization (FIO) established in 1933 is a state-owned forestry enterprise under MONRE and is recognized as the main agency to implement commercial plantations. FIO's activities include economic forest plantation, import and export of timber, and wood, wood processing wood business. At present, FIO owns 249 plantation stations, covering 175,106 ha. Dominant planted species include teak, *Eucalyptus* spp. and rubber.

Furthermore, the KUFF as the Executing Agency of the project will maintain close collaboration with various wood producers and consumers, and international and national academic and training institutions as follows:

- Forest owners/timber growers (wood producers/industry, over 13,000 enterprises: Bangkok 1,800 and provinces approximately 15,000 companies and associations), comprising medium and large companies and associations such as suppliers – large companies and smallholders);
- Timber processing, trading enterprises and wood industry practitioners and associations such as large companies and associations (e.g., Thai Hevea Wood Association, Thai Furniture Industries Association, ASEAN Forest Product Industry Country) and smallholders (e.g., Forest Plantation Network and individuals);
- Wood consumers, especially urban consumers in big cities. This is due to new residential properties and new condominiums in Bangkok significantly increasing in recent years.
- Other universities (forestry- Mae Jo, Sukhothai, architecture and construction engineering universities), technical schools and vocational training centers (training institutions).

Other potential international collaborating partners are FAO and RECOFTC. FAO Regional Office for Asia and the Pacific has a mission to help member countries halve the number of undernourished people in the region by raising agricultural productivity and alleviating poverty while protecting the region's natural resources base. KUFF and the RFD have worked closely with FAO Regional Office for several decades for sustainable forest management. RECOFTC is a non-governmental organization that has been involved in forest resource management in the Mekong countries for many years. It has good knowledge of the local situation in the respective countries, and possess skills to support local communities in forest conservation and management.

2.1.2 Stakeholder analysis

While the main beneficiaries of the Project are small- and medium-sized enterprises, various stakeholders could also benefit from the project, including <u>relevant government</u> <u>departments/ministries</u>, urban and local-rural consumers, the associations of wood processing and trading enterprises at the national and local levels, formal and non-formal research and training institutions with young students who may be interested to enter the industry upon graduation as well as government agencies to amend and newly formulate policies and policy tools to promote sustainable domestic uses of wood and wood products in Thailand.

| Related stakeholder groups | Characteristics | Problems/Needs/Con cerns | Potential contribution | Participation in project implementation |
|--|--|--|---|--|
| PRIMARY STAK | EHOLDERS | | | |
| Wood processing and trading enterprises specialized on local markets and/or export | Having wood manufacture, wood working equipment, labor force; Need to comply with FSC and PEFC for international export. Need sustainable supply of legal and higher quality wood Wish to increase local consumption and local markets for wood and wood products | wood legality assurance, Lack of designing and marketing know-how leading to low efficiency of wood business Lack of product advertisement of domestic market and trade promotion Cannot effort high cost of wood certification | challenges to be analyzed and addressed. | Attending trainings and workshops, trade fairs etc. Providing comments/ feedbacks on policies. Sharing experience with and encouraging micro/non- formalized businesses to engage in Project implementation. |
| Community and household-base wood businesses operating and small-scale plantation farmer at various communities and villages | Micro/non- formalized business entities. Still relying on planted species (e.g., rubber, teak) to produce wooden furniture and construction materials for local consumption. Cutting teak at early stage to get cash and after latex production declines (rubber) | Lack of capacity to comply with international certification standard. Lack of long-term investment. Lack of product advertisement and design of domestic market and trade promotion. Lack of ability to engage effectively in supply chains | - Share problems and challenges to be analyzed and addressed | Attending trainings and workshops; joining cross visits; trade fairs etc. Engaging in legal wood and supply chains. |
| Urban consumers. | Sharing about 50% of the total population, and is expected to increase. Young generation of urban consumers getting better-off and changing interior space decoration | Many of young generation consumers abusing environ non- friendly and too much energy consuming interior (glasses, aluminum, plastic, and imported wood etc. instead of traditional and domestic wooden | Provide feedbacks on draft policies though interviews/need surveys. Contribution to better utilization of eco- friendly construction materials planted in the country. | - Communication on the need of shifting to the use of planted wood to replace wood-substitute composite and imported wood. |

| Related stakeholder | Characteristics | Problems/Needs/Con cerns | Potential contribution | Participation in project |
|--|--|--|--|--|
| groups | | | contribution | implementation |
| Local rural | more frequently. Consuming more and more modern-designed and build-in wooden furniture. Sharing about 50% | Many of low-income urban consumers wood-substitute composite instead of wood-based biomass fuel due to price attractive Prefer to purchase | - Targeted customers of | - Providing responses |
| <u>consumers</u> | of the total population, and is expected to decline as urbanization. - Absorb economic disruption and the COVID-19 pandemic. | domestic wood planted nearby communities with seasonal price - Rapid change from wooden construction to modernized and concrete/glass housing | piloted planted-wood structure and out-door furniture. Potential customers for promoting wood consumption in the local markets. | on interviews/surveys, major audience of sustainable forest management and responsible wood consumption communications. |
| Private plantation firms (medium-and large-scale) | Involved in rubber, eucalyptus and native species (teak) plantations Manufacturing wood, woodchip. etc Organize smallholder plantation, contact farming arrangements | Lack of information on wood demand and marketing Frustrated to comply with complicated forest law and regulations on wood trade under forest laws | advisory services and update on policies, technologies available for timber industry development. Experiences of mastering events on trade promotion and advertising wooden furniture. Bridge links between wood enterprise and wood/plantation households. Develop collaborative links with relevant authorities and related associations. | implement national voluntary certification (cost-effective scheme) |
| Private sector associations (TFA, Private Forest Plantation Association, Tree Bank Association, etc) | Having large spectrum of members Maintaining good cooperation with local authorities Wishing to have enabling environ for member companies to do business. | provide services and advices to members. | advisory services and update on policies, technologies available for timber industry development. Experiences of mastering events on trade promotion and advertising wooden furniture. | companies with the project. |

| Related stakeholder groups | Characteristics | Problems/Needs/Con cerns | Potential contribution | Participation in project implementation | | |
|---|--|--|--|---|--|--|
| SECONDARY STAKEHOLDERS | | | | | | |
| RFD | Responsible for forest areas outside protected areas Promote forest plantation, community forest, private sector plantations and wood industry Prepare national guideline to implement national wood certification and CoC | support domestic market development. Lack of updated information for market trend analysis. Limited access to overseas experience on local consumption facilitation. | - Jointly conduct exhibition and pprovide "National Awards of Sustainable Wood Use" to best practices of wood use - Legalize and endorse domestic logs and sawn-wood from planted forests in private own land or permitted public lands | Closely collaborate and jointly implement project activities with KUFF, Document domestic markets and wood products showing annual domestic production of selected wood species and the location of sources of supply | | |
| FIO | Running business on industrial wood processing and marketing commercial forest plantation, export timber and wood products, Selling of confiscated wood. | specialized on value chains analysis and modernized/designed wood product | To provide raw and processed wood materials for housing and furniture applications and other wood products. Bridge links between wood enterprise and related associations to organize events on trade promotion and advertising wooden furniture. Share experiences with small-and medium wood processing enterprises. | Connecting member companies with the project. Partner in international forest certification implementation. Organize B2B meetings between selected Japanese and Thailand companies Jointly holding training and other events | | |
| Office of the Rubber Replanting Aid Fund (under Ministry of Agriculture and Cooperatives) | - Involved in promotion, financing and control of rubber plantation | Over plantation across the country Over production of latex and result in low latex price | To provide information on planted location and trends | - Provide information and attend B2B meeting | | |
| Agricultural Land Reform Office or ALRO (under Ministry of Agriculture and Cooperatives) | - <u>conduct land</u> <u>allocation for</u> <u>farmers under</u> <u>the Agricultural</u> <u>Land Reform</u> <u>Act. The land are</u> <u>from public and</u> private land | - most allocated lands are used for agriculture even though they are not suitable. | - <u>Allocate portion of</u> <u>land for forest</u> <u>plantation</u> | Provide information where the project should promote forestation | | |
| NationalHousingAuthority(under MinistryofSocialDevelopmentandHumanSecurity) | - <u>to provide</u> <u>housing for low</u> and middle income earners | - <u>Current wooden</u> design and furniture are not attractive. | Require wood for construction and furniture for new housing for low- and middle-income earners | Provide information on demand and types of wood products | | |

| Related stakeholder groups Provincial Natural Resources and Environment Office | Characteristics Represent MONRE to enforce various forest laws related to conservation and utilization. Work closely with local level agencies, wood processing factories, small- and medium forest enterprises Promote local participation in NRE conservation and restoration | Problems/Needs/Con cerns - Lack of staff/experts specialized on wood product R/D - Lack of updated knowledge on local and national markets of wooden furniture and other wood products | Potential contribution - Sharing experience and networks to improve supply chains. - Gathering member enterprises to implement project activities. - Providing coordination/harmoniz ation amongst projects of the same concern. | Participation in project implementation - Providing information; - Follow up project progress and disseminate project out puts |
|--|--|--|--|--|
| TERTIARY STA | KEHOLDERS | | | |
| ITTO KUFF, other universities, (forestry, architecture and construction engineering), technical schools and vocational training centers (training institutions). | - Lacking incentives to attract students to study wood product designing and marketing. | Lack of faculty staff/experts specialized on wood product R/D Lack of updated knowledge on local markets of wooden furniture and other wood products | Engaging faculty staff and students to participate in project implementation. Enlarge enrolment. | Leading training, seminars, technology transfer. Conduct value chains analysis of woods from plantations in demonstrating provinces Nominating promising students to join training, contests on the best designs, and attend on-job training |

2.1.3 Problem analysis

Thai forest manufacturing industry responded to the national logging ban in 1989 by shifting to imported wood materials and utilizing less valuable plantation species grown by smallholder and contracted farmers, particularly rubberwood. The total plantation for rubberwood is 3.6 million ha. Additionally, teak and eucalyptus are dominant planted species. FIO owns 175,106 ha of teak plantation and it is the only institution that can export sawn teak timber to international markets. Rubberwood supplies 87% of wood furniture production, while eucalyptus supplies a large part of Thailand's domestic pulp and paper demand. Thai's smallholders cannot effort to grow long-term hardwood plantations to produce higher-quality wood due to land tenure issues and long-term investment. Therefore, the economic benefits the farmers expect to get as well as the ecosystem service provided by short-term plantation forestry remains limited.

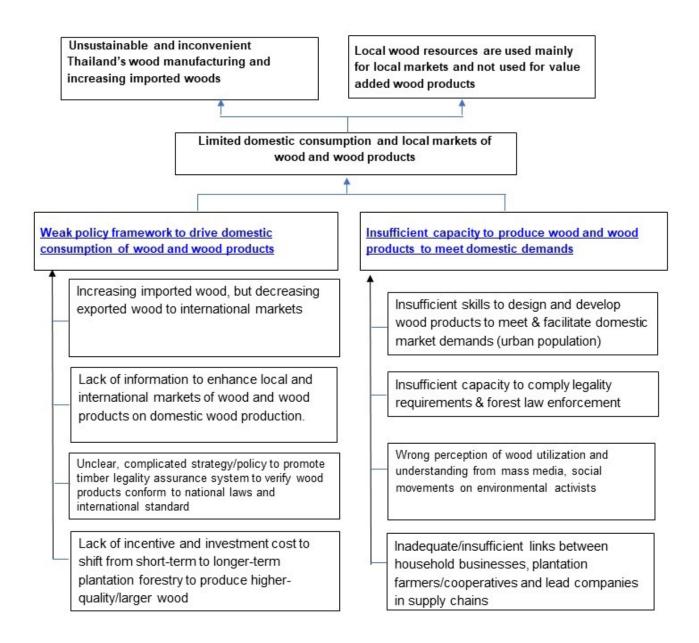
Since 2016, Thailand has imported 4 million cubic meters of roundwood of sawn wood used in the construction industry and reprocessing for export. The imported wood cost more than USD1 billion in forest products annually (e.g. USD 1.4 billion (2016), USD 1 billion (2019). In addition, Thailand has exported more than USD3 billion in forest products annually even during the COVID-19 pandemic. The major destinations for Thailand's wood-based exports are diversified and include China, the EU, Japan, the USA, Vietnam and Malaysia.

The consumption of wood and wood products in the domestic market is predicted steadily increased due to residential properties development in big cities and the government's property stimulus package for buying new homes. The Forestry Development Strategy (2017 - 2036) predicts an annual wood demand of 47 million tons. This huge demand can be met by either the additional forest plantations of 1.4 million ha by 2036 or a significantly increase in imported logs and sawn wood.

The Government of Thailand has put efforts on the production forest and wood industries to shift from reprocessing imported wood for export to self-sustainability by promoting afforestation in private land and the public land permitted for utilization; species exemptions from regulation (Article 7 of the amended Forest Act 2019), promoting and assisting value chain process from wood industries and developing licensing and national and international certification of logs and wood products. (ITTO C&I project)

Thailand's voluntary certification scheme is a means to give the Thai industry a method to show to purchasers the origin of wood used. However, the high cost and complexity of the industry, legality and regulation imposed by the RFD become to comply. Only limited private companies and FIO can comply with an international timber legality assurance system. There is a need for a truly comprehensive system for Supply Chain Monitoring, Control and Legality Verification. In addition, the global economic downturn due to the COVID-19 pandemic has negatively impacted due to the international market uncertainties. Hence, it is timely for Thailand to put efforts in place to strengthen the domestic market.

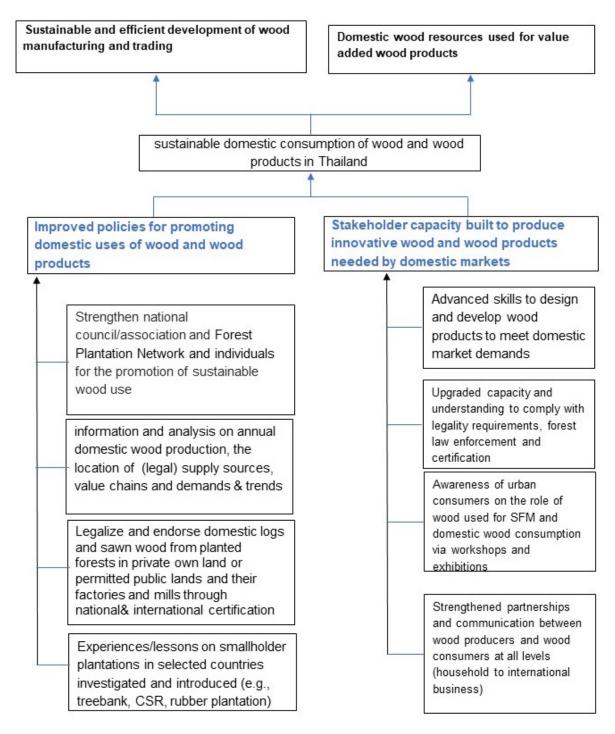
PROBLEM TREE



As above indicated, the problems of limited domestic consumption and local markets of wood and wood products resulted from 1) weak policy framework to drive domestic consumption of wood and wood products and 2) insufficient capacity to produce wood and wood products to meet domestic demands in Thailand. The influencing factors that drive in the 2 key pending issues are shown in the **Problem Tree**.

In contrast, the **Objective Tree** shows strategies/measures to improve the policy framework to drive domestic consumption of wood and wood products and strengthen the capacity of stakeholders to produce wood and wood products to meet local market demands & promote local consumption. In addition, awareness-raising of urban consumers on the role of wood use for SFM and domestic wood consumption via workshops and exhibitions and strengthening partnerships and commination between wood producers and wood consumers at all levels are expected. Given the limited funding and lifespan allocated, project interventions are designed to provide direct contribution to mitigate or eradicate the identified problems and reach the targeted objectives.

OBJECTIVE TREE



2.1.4. Logical framework matrix

| Strategy of intervention | Measurable indicators | Means of verification | Key assumptions | |
|---|---|---|---|--|
| Development objective To contribute to sustainable and efficient use of domestic wood resources | By end 2025 (2 years after project completion): Annual growth rate of domestic wood consumption increases at least 2%; Share of locally produced larger-size wood for value-added processing; Number of signed contracts between plantation farmer co-ops and processors for supplying larger-size wood. | Annual statistics report by the RFD Surveys/interviews of the relevant wood industry and stakeholder groups; | The policy support of the Government seeing the wood industry as a key bio-economic and its determination to promote Thailand as a hub for wood manufacturing The international commitments of Thailand FLEGT maintained | |
| Specific Objective To promote sustainable domestic consumption of wood and wood products in Thailand | By the end of the project - The Government policy or other type of legal/bending document) related to domestic consumption of wood and wood products - Capacity to produce wood and wood products to meet local market demands & promote local consumption strengthened. | -Government decree or RFD Notification; - - Number of trainees and participants attending project events and newly designed products | RFD and FIO support the establishment of the Committee/Task Force Group Taskforce group established and motivated to work | |
| Output 1 Improved policies for promoting domestic uses of wood and wood products | The Government (RFD) adopts domestic wood certification (C&I) or other types of legal/bending document) related to domestic consumption of wood and wood products Experience and good practice in promoting wood use from selected countries compiled and transferred to RFD and relevant agencies for reference and possible application; Government policy to facilitate local consumption of wood products (e.g., tax) | - RFD notification | - The Thai Government and RFD retain the policy on green economics and its determination to promote Thailand as hub for wood manufacturing | |

| Output 2 Stakeholder capacity built to produce innovative wood and wood products needed by domestic markets | At least, 15 companies attended B2B matching meetings with internal companies (e.g., Japan); At least, 50 urban consumers and 50 rural consumers attended ulexhibitions/communicati on campaigns on using planted-wood for housing construction and interior decoration; 10 young designers and winners of contests on the best designs identified and recommended for further engagement; At least, 5 partnerships between plantation farmer co-ops and lead companies established with contracts for the supply of larger-size wood; | Questionnaires/ interviews Reactions/ acceptance of entrepreneurs Data on the production and marketing of value-added and diversified domestic wood products. | No major change of VPA/FLEGT; Universities and research institutions willing to support Government committed to going further with the policy to shift to renewable/green economy Young generation in urban preference of Japanese hinoki/sugi; |
|--|---|--|--|
|--|---|--|--|

2.2 Objectives

2.2.1 Development objective and impact indicators

Thailand's National Strategy (2018-2037) aims to achieve sustainable development in terms of manifesting a healthy society, economy, and environment; implementing good governance, and integrated partnerships at both national and international levels.

In addition, Thailand positions itself as an export-focused manufacturer, maintaining access to markets will increasingly require efforts to verify that all timber in its products (both imported and domestically produced) is legal. Thailand is developing a timber legality assurance system to verify that wood products conform to national laws, whether they are domestically harvested or imported.

The Forestry Development Strategy (2017 – 2036) predicts an annual wood demand of 47 million tons. This huge demand can be met by either the additional forest plantations of 1.4 million ha by 2036 or a significantly increase of imported logs and sawn wood.

The development objective of the proposed project is to contribute to sustainable and efficient use of domestic wood industry in Thailand with specific targets defined by the strategy.

Impact indicators

By the end of 2025, 2 years after project completion:

- The annual growth rate of domestic wood consumption increases at least 2%;
- Share of locally produced larger-size wood for value-added processing;
- The number of signed contracts between plantation farmer co-ops and processors for supplying larger-size wood.

2.2.2. Specific objective and outcome indicators

The specific objective of the project is to promote sustainable domestic consumption of wood and wood products in Thailand

Outcome indicators:

- The Government policy or other type of legal/bending document) related to domestic consumption of wood and wood products
- Capacity to produce wood and wood products to meet local market demands & promote local consumption strengthened.

PART III: DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and Activity

3.1.1 Outputs

Output 1: Improved policies for promoting domestic uses of wood and wood products

Indicators:

- The Government (RFD) adopts domestic wood certification (C&I) or other types of legal/bending document) related to domestic consumption of wood and wood products
- Experience and good practice in promoting wood use from selected countries compiled and transferred to RFD and relevant agencies for reference and possible application;
- Government policy to facilitate local consumption of wood products (e.g., tax)
- **Output 2:** Stakeholder capacity built to produce innovative wood and wood products needed by domestic markets

Indicators:

- At least, 15 companies attended B2B matching meetings with internal companies (e.g., Japan);
- At least, 50 urban consumers and 50 rural consumers attended exhibitions/communication campaigns on using planted wood for housing construction and interior decoration;
- 10 young designers and household manufacturing owners, and winners of contests on the best designs identified and recommended for further engagement;
- At least, 5 partnerships between plantation farmer co-ops and lead companies were established with contracts for the supply of larger-size wood.

3.1.2 Activities and inputs

Output 1: Improved policies for promoting domestic uses of wood and wood products

- Activity 1.1: Strengthen the national council/association and Forest Plantation Network and individuals for the promotion of sustainable wood use).
- Activity 1.2: information and analysis on annual domestic wood production, the location of (legal) supply sources, value chains and demands & trends.
- Activity 1.3: Legalize and endorse domestic logs and sawn wood from planted forests in private own land or permitted public lands and their factories and mills through national& international certification.
- Activity 1.4: Experiences/lessons on smallholder plantations in selected countries investigated and introduced (e.g., treebank, CSR, rubber plantation).

Output 2: Stakeholder capacity built to produce innovative wood and wood products needed by domestic markets

- Activity 2.1: Advanced skills to design and develop wood products to meet domestic market demands
- Activity 2.2: Upgraded capacity and understanding to comply with legality requirements, forest law enforcement and certification
- Activity 2.3 Awareness of urban consumers on the role of wood used for SFM and domestic wood consumption via workshops and exhibitions
- Activity 2.4: Strengthened partnerships and communication between wood producers and wood consumers at all levels (household to international business.

3.2. Implementation approaches and methods

To promote sustainable domestic consumption of wood and wood products, the project will deal with the following stakeholder groups:

- Policymakers/administrative bodies at national and provincial levels;
- Training and research institutions;
- Producers/suppliers (international and local markets);
- Consumers, with special attention to urban consumers.

While dealing with these groups, gender inclusion will be practiced by giving priority to smallholders and all genders as the most targeted beneficiaries.

To facilitate stakeholder groups to work toward achieving the project objective, the following approaches/strategies will be applied:

- Participatory approach with intensive consultations to engage relevant parties: In particular, consultations and in-depth interviews, either offline or online, will be held to review the current situation of domestic consumption and the policies currently applied so that the policy/institution, as well as capacity gaps could be properly investigated and discovered. In this way, the results of reviewing the Thailand national policies and long-term strategies, and experiences available from selected countries in particular Vietnam and Japan will be widely circulated for reference and feedback. Participatory approach is also very important for formulation of decree/decision on promoting domestic consumption. Whenever appropriate, the project will facilitate dialogues/debates between policymakers and private plantation firms/associations and interested plantation farmers to provide feedback and comments on project findings/recommendations and translate them into policies/policy tools. Short-term regional/international experts will be recruited to work with responsible government institutions, private sectors and smallholders to improve policies for promoting domestic uses of wood and wood products.
- Integration of ongoing initiatives/processes toward sustainable development of Thailand's wood industry: As Thailand positions itself as an export-focused manufacturer, maintaining access to markets will increasingly require efforts to verify that all timber in its products (both imported and domestically produced) is legal In addition various policies are formulated to support this mission, The project will engage and proactive to incorporate all outcomes produced by local and international supported projects/programs. In this regard, the project will utilize every national event/forum/means to inform project objectives and activities, and update project progress.
- With the capacity building component, the project will play the role of a facilitator using existing platforms and networks of RFD and FIO: In particular, the project will facilitate cross visits of plantation farmer association to lead companies and vice versa, B2B matching meetings, producer/supplier and consumer dialogues, partnerships/contracts between rubber and native species (teak) growing farmers and manufacturers for extended cutting cycle etc. Efforts will also be made by the project to link universities/research institutions and member companies in training young designers and architects. Potential involvement of relating associations and NGOs, including the Private wood industry firms and private plantation associations (TFA, Private Forest Plantation Association, Tree Bank Association, etc). will be considered.
- Maximum use of mass media means and online platforms (webinar, Facebook, Youtube) to raise awareness on sustainable domestic consumption of wood and wood products: Exhibition. Demonstration and contest will be conducted to engage domestic wood and wood production-consumption.
- Gender, especially women will be given priority to joining project activities: All the intended trainings, workshops, and B2B matchings will include women (40-50% of invitees/participants).
- Engagement of urban consumers in project implementation: As of current (2020), urban population contributes about 52% of the total population and will increase to 60% in 2030, especially young generation living in big cities. They are interested in using substituted materials, including wood composite, grass, concrete etc. Many of them get better off with the

increasing demand of housing and interior decoration. To address this targeted group of consumers, the project will prepare modernized communication tools to engage wood use promotion. Short-term local experts will be recruited to work with a selected segment of the urban consumers to improve their understanding of potential wood-use alternatives. In addition, questionnaire surveys/interviews on urban consumers' understanding of the idea of "sustainable domestic wood use" will be seen as a useful indicator of policy outcomes. Selected urban customers may be invited to join training/workshop and cross visits.

| Outpute/Activ | | Responsible | Yea | ar 1 | | | Year 2 | | | |
|---------------|--|---|-----|------|----|----|--------|----|----|----|
| Outputs/Activ | vities | agencies | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Output 1: | Improved policies for promoting domestic uses of wood and wood products | | | | | | | | | |
| Activity 1.1: | Strengthen the national council/association and Forest Plantation Network and individuals for the promotion of sustainable wood use | Kasetsart, RFD and FIO in collaboration with local associations | x | x | | | | | | |
| Activity 1.2: | Information and analysis on annual domestic wood production, the location of (legal) supply sources, value chains and demands & trends. | Kasetsart, RFD, FIO and int. consultant in collaboration with local and national associations | x | x | x | | | | | |
| Activity 1.3: | Legalize and endorse domestic logs and sawn wood from planted forests on private own land or permitted public lands and their factories and mills through national& international certification | Kasetsart, RFD, FIO and int. consultant | | | | x | x | x | x | x |
| Activity 1.4: | Experiences/lessons on smallholder plantations in selected countries investigated and introduced (e.g., treebank, CSR, rubber plantation) | Kasetsart, RFD, FIO and int. consultant, local and national associations | | | | x | x | x | x | x |
| Output 2: | Stakeholder capacity built to produce innovative wood and wood products needed by domestic markets | | | | | | | | | |
| Activity 2.1: | Advanced skills to design and develop wood products to meet domestic market demands | | | | x | x | x | x | x | |
| Activity 2.2: | Upgraded capacity and understanding to comply with legality requirements, forest law enforcement and certification | Kasetsart, other universities, RFD | | x | x | x | x | x | x | |

3.3. Outputs and Work plan

| Outpute / A a | | Responsible | Yea | ar 1 | | | Year 2 | | | | |
|---------------|--|---------------------------------------|-----|------|----|----|--------|----|----|----|--|
| Outputs/Ac | vities | agencies | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | |
| Activity 2.3: | Awareness of urban consumers on the role of wood used for SFM and domestic wood consumption via workshops and exhibitions | Kasetsart and local consultants | | x | x | x | x | x | x | x | |
| Activity 2. | : Strengthened partnerships and communication between wood producers and wood consumers at all levels (household to international business | RFD and FIO | | | x | x | | x | x | | |

3.4. Budget

3.4.1. Master Budget

| Outputs/ Activities | Description | Budget Compon ent | Qua | intity | Units | Unit cost in USD | Total cost in USD | IT | го | KU | FF |
|------------------------|--|-------------------------|------------|------------|----------------------|---------------------|----------------------|--------|--------|--------|--------|
| Activities | | ° Gol Bu | Year 1 | Year 2 | | 050 | 050 | Year 1 | Year 2 | Year 1 | Year 2 |
| | Common Expenses of Project | | | | | | | | | | |
| | Project Coordinator | 11.1 | 12 | 12 | Month | 2,000 | 48,000 | 24,000 | 24,000 | | |
| | Secretary/accountant | 11.2 | 12 | 12 | Month | 750 | 18,000 | 9,000 | 9,000 | | |
| | ITTO Project Monitoring & Review | 81 | 1 | 1 | Times | 7,500 | 15,000 | 7,500 | 7,500 | | |
| | Annual/Final Audit | 65 | 1 | 1 | Times | 4,000 | 8,000 | 4,000 | 4,000 | | |
| | ITTO Programme Support | 83 | 1 | 1 | Times | 34,286 | 34,286 | 34,286 | | | |
| | ITTO Ex-post evaluation | 82 | | 1 | Times | 10,000 | 10,000 | | 10,000 | | |
| | Computer equipment | 41 | 1 | 1 | Computer | 1,000 | 2,000 | 1,000 | 1,000 | | |
| | Office supplies | 53 | 12 | 12 | times | 500 | 12,000 | 6,000 | 6,000 | | |
| | Office space | 54 | 12 | 12 | months | 800 | 19,200 | | | 9,600 | 9,600 |
| | PSC meeting | 62 | 1 | 1 | Report | 2,000 | 4,000 | 2,000 | 2,000 | | |
| | Maintenance and repairing and printing, etc | 42 | 1 | 1 | Time | 1000 | 2,000 | | | 1,000 | 1,000 |
| Output 1 | Improved policies for promoting domest | ic uses of | wood an | d wood p | roducts | | | | | | |
| A1.1 | Strengthen national council/association and | Forest Pla | antation N | etwork and | d individuals for tl | ne promotion of s | sustainable wood | use | | | |
| | Consultations with local staff and associations | 21 | 10 | 0 | Participation day | 100 | 1,000 | 1,000 | 0 | | |
| | Consultation workshop | 61 | 1 | | Workshop | 3500 | 3,500 | 3,500 | 0 | | |
| | Information, media, publications and other contingencies | 64 | 1 | | Unit | 1,000 | 2,000 | 1,000 | 1,000 | | |

| A1.2 | Information and analysis on annual domesti | c wood pro | duction, t | he locatio | n of (legal) supply | sources, value o | chains and dema | nds & trends | | | | | | |
|------|---|--|------------|------------|---------------------|------------------|-----------------|--------------|-------|--|--|--|--|--|
| | Consultations with local staff and associations | 21 | 5 | | Participation day | 100 | 500 | 500 | 0 | | | | | |
| | DSA National experts/ consultants | 31.1 | 5 | | Day | 75 | 375 | 375 | 0 | | | | | |
| | Local transport costs | 32 | 2 | | Time | 750 | 1,500 | 1,500 | 0 | | | | | |
| A1.3 | Legalize and endorse domestic logs and sawn-wood from planted forests in private own land or permitted public lands and their factories and mills through national& international certification | | | | | | | | | | | | | |
| | International consultant in studies on wood use promotion policy in Japan, SE Asia, US, EU | 14.1 | 0.5 | 0.5 | Man-months | 6000 | 6,000 | 3,000 | 3,000 | | | | | |
| | Consultations with local staff and associations | 21 | 5 | 5 | Participation day | 100 | 1,000 | 500 | 500 | | | | | |
| | DSA National experts/ consultants | 31.1 | 5 | 5 | Day | 75 | 750 | 375 | 375 | | | | | |
| | Local transport costs | 32 | 2 | 2 | Time | 750 | 3,000 | 1,500 | 1,500 | | | | | |
| | Consultation workshop | 61 | 1 | | Workshop | 3500 | 3,500 | 3,500 | 0 | | | | | |
| A1.4 | | Experiences/lessons on smallholder plantations in selected countries investigated and introduced (e.g., tree bank, CSR, rubber plantation) | | | | | | | | | | | | |
| | Domestic consultant in studies on wood use promotion policy in Japan, SE Asia, US, EU | 14.2 | 0.5 | 0.5 | Man-month | 5000 | 5,000 | 2,500 | 2,500 | | | | | |
| | International consultant in studies on innovative wood and wood products Japan, SE Asia, US, EU | 14.1 | 0.5 | 0.5 | Man-month | 6000 | 6,000 | 3,000 | 3,000 | | | | | |
| | Consultations with universities and institutions | 22 | 5 | 10 | Participation day | 170 | 2,550 | 850 | 1,700 | | | | | |
| | Local transport costs | 32 | 2 | 1 | Time | 750 | 2,250 | 1,500 | 750 | | | | | |
| | International travel costs | 33 | 1 | 1 | Time | 2000 | 4,000 | 2,000 | 2,000 | | | | | |
| | Information, media, publications and other contingencies | 64 | 1 | 1 | Unit | 800 | 1,600 | 800 | 800 | | | | | |

| Output 2 | Stakeholder capacity built to produce in | novative w | vood and | wood pro | ducts needed b | y domestic mar | kets | | | | | | |
|----------|--|------------|----------|----------|-------------------|----------------|--------|-------|--------|-------|-------|--|--|
| A2.1 | Advanced skills to design and develop wood products to meet domestic market demands | | | | | | | | | | | | |
| | Domestic consultant in studies on innovative wood and wood products Japan, SE Asia, US, EU | 14.2 | 0.5 | 0.5 | Man-month | 5000 | 5,000 | 2,500 | 2,500 | | | | |
| | Consultations with universities and institutions | 22 | 10 | 10 | Participation day | 170 | 3,400 | 1,700 | 1,700 | | | | |
| | DSA National experts/ consultants | 31.1 | 10 | 10 | Day | 75 | 1,500 | 750 | 750 | | | | |
| | Local transport costs | 32 | 2 | 2 | Time | 750 | 3,000 | 1,500 | 1,500 | | | | |
| | Materials | 51 | 1 | 1 | <u>Guidance</u> | 2000 | 4,000 | 2,000 | 2,000 | | | | |
| | Training | 61 | 1 | 1 | Workshop | 6,000 | 12,000 | 4,500 | 4,500 | 1,500 | 1,500 | | |
| | Information, media, publications and other contingencies | 64 | 3 | 3 | | 800 | 4,800 | 2,400 | 2,400 | | | | |
| A2.2 | Upgraded capacity and understanding to comply legality requirements, forest law enforcement and certification | | | | | | | | | | | | |
| | Consultations with local staff and associations | 21 | 5 | 5 | Participation day | 100 | 1,000 | 500 | 500 | | | | |
| | Consultations with universities and institutions | 22 | 5 | 5 | Participation day | 170 | 1,700 | 850 | 850 | | | | |
| | DSA National experts/ consultants | 31.1 | 10 | 10 | Day | 75 | 1,500 | 750 | 750 | | | | |
| | Materials | 51 | 1 | 2 | <u>Guidance</u> | 2000 | 6,000 | 2,000 | 4,000 | | | | |
| | Training | 61 | 1 | 1 | Workshop | 4300 | 8,600 | 3,900 | 3,900 | 400 | 400 | | |
| A 2.3 | Awareness of urban consumers on the role of wood use for SFM and domestic wood consumption via workshops and exhibitions | | | | | | | | | | | | |
| | Consultations with universities and institutions | 22 | 5 | 5 | Participation day | 170 | 1,700 | 850 | 850 | | | | |
| | Materials | 51 | 1 | 1 | <u>Guidance</u> | 2,000 | 4,000 | 2,000 | 2,000 | | | | |
| | Demonstration of out-door/in-door wooden structure/instruments/tools | 52 | | 1 | Unit | 25,000 | 25,000 | 0 | 25,000 | | | | |
| | Training/exhibition | 61 | | 1 | Workshop | 3,500 | 3,500 | 0 | 3,500 | | | | |
| | Information, media, publications and other contingencies | 64 | 1 | 2 | Unit | 800 | 2,400 | 800 | 1,600 | | | | |

| A 2.4 | Strengthened partnerships and communication between wood producers and wood consumers at all levels (household to international business (1 national, 2 international) | | | | | | | | | | |
|-------|--|-----------|----------|----------|-------------------|---------------|---------------|----------|---------------|--|--|
| | Consultations with local staff and associations | 21 | 6 | 6 | Participation day | 100 | 1,200 | 600 | 600 | | |
| | International travel costs | <u>33</u> | | <u>1</u> | Time | <u>15,089</u> | <u>15,089</u> | <u>0</u> | <u>15,089</u> | | |
| | <u>Materials</u> | <u>51</u> | <u>0</u> | <u>1</u> | <u>Guidance</u> | <u>1,000</u> | <u>1,000</u> | <u>0</u> | <u>1,000</u> | | |
| | Communication outreach (done by ITTO in collaboration with international organization) | 61 | 1 | 1 | Unit | 10,000 | 20,000 | 10,000 | 10,000 | | |
| | Information, media, publications and other contingencies | 64 | 1 | 1 | Unit | 800 | 1,600 | 800 | 800 | | |

3.4.2 Consolidated budget

| Cate | gory | Desc | ription | Total | Year 1 | Year 2 |
|------|------------|-----------|--|---------------|---------|---------|
| 10. | Proj | ect Pe | rsonal | | | |
| | 11. | 11.1 | Project Coordinator | 48,000 | 24,000 | 24,000 |
| | | 11.2 | Secretary | 18,000 | 9,000 | 9,000 |
| | 14. | 14.1 | International consultant in studies on wood use promotion policy in Japan, SE Asia, US, EU | 12,000 | 6,000 | 6,000 |
| | | 14.2 | Domestic consultant in studies on innovative wood and wood products Japan, SE Asia, US, EU | 10,000 | 5,000 | 5,000 |
| | 19. | Sub t | otal | 88,000 | 44,000 | 44,000 |
| 20. | Sub | contra | acts | | | |
| | 21. | | Consultations with local staff and associations | 4,700 | 3,100 | 1,600 |
| | 22. | | Consultations with universities and institutions | 9,350 | 4,250 | 5,100 |
| | 29. | Sub t | | 14,050 | 7,350 | 6,700 |
| 30. | | / trave | | | | |
| | 31. | | Daily subsistence allowance | | | |
| | | 31.1 | DSA National experts/ consultants | 4,125 | 2,250 | 1,875 |
| | 32. | | Local transport costs | 9,750 | 6,000 | 3,750 |
| | 33. | | International travel costs | 19,089 | 2,000 | 17,089 |
| | 39. | Sub t | otal | 32,964 | 10,250 | 22,714 |
| 40. | Cap | ital iter | ms | | | |
| | 41. | | Computer equipment | 2,000 | 1,000 | 1,000 |
| | 42. | | Maintenance and repairing and printing, etc | 2,000 | 1,000 | 1,000 |
| | 49. | Sub t | otal | 4,000 | 2,000 | 2,000 |
| 50. | Con | sumab | ble items | | | i |
| | 51. | | Materials | 15,000 | 6,000 | 9,000 |
| | 52. | | Demonstration of out-door/in-door wooden structure/instruments/tools | 25,000 | 0 | 25,000 |
| | 53. | | Office supplies | 12,000 | 6,000 | 6,000 |
| | 54 | | Office space | 19,200 | 9,600 | 9,600 |
| | 59. | Sub t | otal | 71,200 | 21,600 | 49,600 |
| 60. | Misc | cellane | ous | | | |
| | 61. | | Training | 51,100 | 27,300 | 23,800 |
| | 62. | | PSC meeting | 4,000 | 2,000 | 2,000 |
| | 64. | | Information, media, publications and other contingencies | 12,400 | 5,800 | 6,600 |
| | 65. | | Auditing expense | 8,000 | 4,000 | 4,000 |
| | 69. | Sub t | 0 - | 75,500 | 39,100 | 36,400 |
| 70. | | | Project | 285,714 | 124,300 | 161,414 |
| 80. | Proi | | onitoring and administration | | | , |
| | 81. | | ITTO monitoring & review | 15,000 | 7,500 | 7,500 |
| | 82. | | ITTO ex-post evaluation | 10,000 | 0 | 10,000 |
| | 83. | | ITTO program support costs | 34,286 | 34,286 | . 5,550 |
| | 89. | Subte | | 59,286 | 41,786 | 17,500 |
| | 69. | Juni | | | | |

3.4.3 ITTO yearly budget

| Cate | gory | Description | Total | Year 1 | Year 2 |
|------|------|---|---------|---------|---------|
| 10. | Proj | ect Personal | | | |
| | 11. | 11.1 Project Coordinator | 48,000 | 24,000 | 24,000 |
| | | 11.2 Secretary | 18,000 | 9,000 | 9,000 |
| | | International consultant in studies on wood | | | · · · |
| | 14. | 14.1 use promotion policy in Japan, SE Asia, US, EU | 12,000 | 6,000 | 6,000 |
| | | Domestic consultant in studies on innovative 14.2 wood and wood products Japan, SE Asia, US, EU | 10,000 | 5,000 | 5,000 |
| | 19. | Sub total | 88,000 | 44,000 | 44,000 |
| 20. | Sub | contracts | | | |
| | 21. | Consultations with local staff and associations | 4,700 | 3,100 | 1,600 |
| | 22. | Consultations with universities and institutions | 9,350 | 4,250 | 5,100 |
| | 29. | Sub total | 14,050 | 7,350 | 6,700 |
| 30. | Duty | / travel | | | |
| | 31. | Daily subsistence allowance | | | |
| | | 31.1 DSA National experts/ consultants | 4,125 | 2,250 | 1,875 |
| | 32. | Local transport costs | 9,750 | 6,000 | 3,750 |
| | 33. | International travel costs | 19,089 | 2,000 | 17,089 |
| | 39. | Sub total | 32,964 | 10,250 | 22,714 |
| 40. | Сар | ital items | | | |
| | 41. | Computer equipment | 2,000 | 1,000 | 1,000 |
| | 42. | Maintenance and repairing and printing, etc | | | |
| | 49. | Sub total | 2,000 | 1,000 | 1,000 |
| 50. | Con | sumable items | | | |
| | 51. | Materials | 15,000 | 6,000 | 9,000 |
| | 52. | Demonstration of out-door/in-door wooden structure/instruments/tools | 25,000 | 0 | 25,000 |
| | 53. | Office supplies | 12,000 | 6,000 | 6,000 |
| | 54 | Office space | | | |
| | 59. | Sub total | 52,000 | 12,000 | 40,000 |
| 60. | Misc | cellaneous | | | |
| | 61. | Training | 47,300 | 25,400 | 21,900 |
| | 62. | PSC meeting | 4,000 | 2,000 | 2,000 |
| | 64. | Information, media, publications and other contingencies | 12,400 | 5,800 | 6,600 |
| | 65. | Auditing expense | 8,000 | 4,000 | 4,000 |
| | 69. | Sub total | 71,700 | 37,200 | 34,500 |
| 70. | | Total Project | ,. •• | | • 1,000 |
| 80. | Proj | ect monitoring and administration | | | |
| | 81. | ITTO monitoring & review | 15,000 | 7,500 | 7,500 |
| | 82. | ITTO ex-post evaluation | 10,000 | 0 | 10,000 |
| | 83. | ITTO program support costs | 34,286 | 34,286 | -, |
| | 89. | Subtotal | 59,286 | 41,786 | 17,500 |
| 100. | | ND TOTAL | 320,000 | 153,586 | 166,414 |

3.4.4 KU yearly budget

| Categ | ory | Description | Total | Year 1 | Year 2 |
|-------|------|---|--------|--------|--------|
| 40. | Сар | ital items | | | |
| | 42 | Maintenance and repairing and printing, etc | 2,000 | 1,000 | 1,000 |
| | 49. | Sub total | 2,000 | 1,000 | 1,000 |
| 50. | Con | sumable items | | | |
| | 54 | Office space | 19,200 | 9,600 | 9,600 |
| | 59. | Sub total | 19,200 | 9,600 | 9,600 |
| 60. | Misc | cellaneous | | | |
| | 61. | Training | 3,800 | 1,900 | 1,900 |
| | 69. | Sub total | 3,800 | 1,900 | 1,900 |
| 100. | GRA | ND TOTAL | 25,000 | 12,500 | 12,500 |

3.5 Assumptions, risks, sustainability

3.5.1 Assumptions and risks

The global COVID-19 pandemic has started in February 2019 in the region. The Government of Thailand and other countries impose travel restrictions, and prohibit gathering for workshops and meetings. At current, the pandemic is under control. It is assumed that this situation will continue so that all planned activities could be started and implemented in time. In case if the pandemic suddenly triggers again, most of the project activities of the first two quarters are related to office review of existing policies on the promotion of wood use and local market of wood and wood products, setting up policy task force/national committee. as well as meetings and consultations will be done virtually using online tools jointly managed by ITTO and Kasetsart University. On-site activities such as demonstrations/pilots, exhibitions, physical consultations and hand-on workshops will be conducted later when the situation is manageable.

The success of the Activity depends on the continued shared commitment and political will of responsible agencies, especially RFD and FIO to support national cooperation and promote the legality of the timber trade. That commitment and political will be reflected in several regional and national mechanisms, including the VAP FLEGHT, FSC, national certification and the national forest policy frameworks of the country².

Other assumptions to assure the project success are the commitments and motivations of relevant stakeholder groups to participate in the project implementation. As one of the most recognized associations of the private sector, Kasetsart University will work closely with the RFD and FIO to engage stakeholders at levels, research and training institutions, wood villages and plantation cooperatives as well as member companies to proceed smoothly with all intended activities.

² Lawson, S. 2014. Illegal Wood Import and Re-export: The Scale of the Problem and the Response in Thailand, South Korea and India. Energy, Environment and Resources EER PP 2014/01

Table 1 Risk/uncertainty and planned mitigating measures

| No. | Risk | Mitigating measure |
|-----|---|--|
| 1. | COVID-19 is rising | Online facilities will be used to proceed with activities related to policy improvement and capacity building while on-site and physical activities will be conducted in small groups or after the situation is under control. ITTO with the collaboration of Kasetsart University will take the lead on online communication and networking. |
| 2. | Lack of strong commitments and political will from responsible agencies | KUFF will work closely with administrative bodies and wood industry associates to participate in project implementation. A senior official will be invited to act as project steering committee and task force. |
| 3 | Smallholder plantation owners lack of incentive and motivation to participate in project implementation. | The Project will catalyze/facilitate meetings between wood industry firm and smallholder plantation owners to discuss and initiate cooperation. The source of funding will be explored. |

3.5.2 Sustainability

The sustainability of this project is much dependent on the acceptance of relevant Government agencies (e.g., RFD) to improve and transform the existing national forest policy and long-term RFD strategy to action for promoting sustainable local consumption of wood and wood products.

Thailand is determined to be an export-focused wood manufacturer, and transform the national economy to a bio-economy. This mission is supported by the National Forest Policy adopted by the cabinet in 2019 and the Forestry Development Strategy 2017 – 2036. In addition, the RFD aims to increase forest cover outside protected areas from 7-8% of the country at current to 15%. The proposed project will not only facilitate the RFD to achieve this long-term goal but also provide opportunities for smallholder plantation groups to earn income from domestic wood consumption.

Building on the project outputs, the proposed task force group/policy advisory committee to be set up at the beginning of the project implementation will make use of project outcomes to provide advice and recommendations to the Government for further actions. The human resource used by the executing agency to implement the project are mostly permanent staff of KUFF, appoint RFD officials and consultants.

All lessons learnt and knowledge gained by the project will be widely communicated, disseminated and shared locally and internationally to promote sustainable consumption of wood and wood products. In particular, with this project, KUFF as the academic institution which has diverse discipline on R&D related to wood supply chains will imbed lessons learnt and knowledge into the curriculum for undergraduate, post-graduate studies at Kasetsart University.

With the engagement of ITTO as a collaboration partner, ITTO will disseminate all outputs to member countries and interested individuals worldwide through ITTO Tropical Forest Update Bulletin and online tools. Furthermore, the project will facilitate FIO, wood industry associations to strengthen trade ties between Thailand and Japanese companies and contribute to the bilateral cooperation between the two countries.

PART IV: IMPLEMENTATION ARRANGEMENTS

4.1. Executing agency and organizational structure

4.1.1 Executing agency and partners

The Executing Agency (EA) of the project is Kasetsart University Faculty of Forestry (KUFF). The KUFF is the only academic institution in Thailand offering undergraduate and graduate degrees in forestry and natural resources. There are over 1,500 students and over eighty well-educated faculties affiliated with 6 academic departments (Annex 1)³. KUFF has been collaborating with national and international governmental and non-governmental organizations to provide training, arrange workshops, seminars and conferences to transfer knowledge and exchange innovative ideas on various topics of sustainable forestry management, biodiversity conservation and wood industries. KUFF is currently managing an ITTO project PP-A/54-331 entitled "Enhancing Conservation and Sustainable Management of Teak Forests and Legal and Sustainable Wood Supply Chains in the Greater Mekong Sub-region".

Upon recruitment of the Project Manager, the Project Steering Committee (PSC) will be established, the primary role of which is to oversee the implementation of the workplan, approve expenditures within the budget, review the activities that have been carried out, and review and propose changes in budgets and activities. The PSC monitors the overall strategic management of the planned activities and ensures that it proceeds in a timely, efficient and effective manner in accordance with its work plan and other aspects of the Activity document.

<u>The PSC will comprise of representatives from the Executing Agency and key national partner</u> <u>agencies (e.g. RFD, FIO), ITTO and the donor country (Forest Agency of Japan, Japan).</u> <u>The Project Manager will act as Secretary of the PSC that will meet at the inception, during the</u> <u>mid-term, and at the end of the project.</u>

The RFD is the main responsible for the production forest in Thailand. The RFD aims to promote forest plantation, community forests, private sector plantations and wood industry, and facilitate national policies and guidelines to implement national wood certification and CoC. The Director-General of the RFD will be assigned to chair the Project Steering Committee Besides ordinary roles in providing supervising, monitoring and supporting for the project implementation, ITTO in collaboration with other international organizations will lead communication outreach with the key stakeholders in the target countries.

The partners are FIO, national wood manufacturing and associations, and Japan Forestry Agency. Their roles are to share experiences with small-and medium wood processing enterprises and to bridge links between wood enterprises and related associations to organize events on trade promotion and advertising wooden furniture at national and international levels.

³ http://www.forest.ku.ac.th/forestry/en/index_en.php

| Table 2: Roles of KUF | F, RFD, ITTO, Japan Forestry | Agency and associations |
|-----------------------|------------------------------|-------------------------|
|-----------------------|------------------------------|-------------------------|

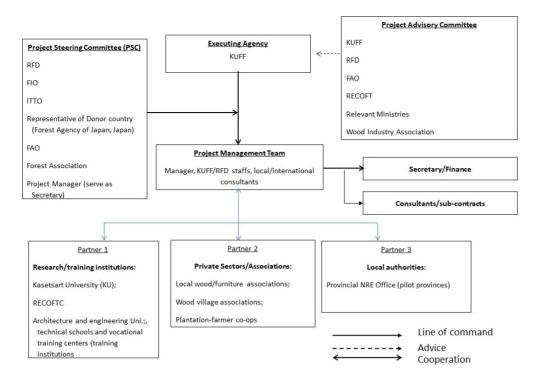
| Organization | Roles | | |
|--------------|--|--|--|
| Kasetsart | Act as the executing agency of the project | | |
| University | Form the project management team | | |
| - | Implement the project activities and deliver the outputs | | |
| RFD | Responsible for forest areas outside protected areas | | |
| | Promote forest plantation, community forests, private sector plantations and wood industry | | |
| | Prepare national guidelines to implement national wood certification and CoC | | |
| | Act as Chairperson of PS committee | | |
| ITTO | Provide inputs to the implementation of the project | | |
| | Supervise, monitor and support the project implementation | | |
| | Facilitate the communication with the key stakeholders in the target countries | | |
| FIO | Act as the key collaborator of the project | | |
| | Provide experience, experts to join project activities, especially with the policy framework improvement | | |
| | Participate in field studies and conduct trainings | | |
| Japan | Supervise and guide project implementation | | |
| Forestry | Contact JICA Bangkok to join the Project Steering Committee and attend | | |
| Agency | gency important events of the project | | |
| | Provide support to compile and analyze the experience of selected countries in promoting wood and wood product consumption | | |

4.1.2 Project Management Team

The project management team will be appointed, which consists of a Project Manager (PM), project secretary & finance (PS) and local/international consultants. Project planned activities will be executed with the assistance of partners as indicated in the previous section.

The qualification of the project team members and their terms of reference are outlined in Annex 2. The project organizational structure is as depicted below.

Figure 2: Organizational Structure



4.1.3 Project Steering Committee (PSC)

PSC will be established to oversee project implementation, approve budget planning, monitor and evaluate the project progress against project logical matrix and give immediate instructions on necessary revisions and adjustments. Membership of PSC is:

- > Chairperson: Senior leader (DG or assigned DDG) of RFD;
- > Vice President of KU or Dean of KUFF as a Deputy Chairperson
- Representative of ITTO;
- Representative of donor country;
- Representatives of FIO;
- Representative of FAO
- Representative of RECOFTC (R&D)
- Forest Alumni Association (NGOs)
- Project Coordinator as the secretary of the PAC;
- Representatives of wood product producers/consumers may be invited to join the PAC.

4.1.4 Stakeholder involvement mechanisms

A stakeholder forum with regular online/offline consultations and dialogues will be established under the project to facilitate participants from local communities, R&D institutions, NGOs, private companies, plantation co-ops, wood villagers, supplier/consumer sides and other groups interested in promoting sustainable consumption of wood and wood products to exchange views and ideas, develop propositions and make recommendations to the executing agency in view of improving the efficiency of project implementation. While the forum has no formal responsibility for the project execution, its advice and recommendations are invaluable inputs to the project and will be as much as possible incorporated in recommendations to policymakers.

4.2. Reporting, Review, Monitoring and Evaluation

Reporting

In accordance with ITTO Manual on standard operating procedures for the ITTO project cycle, the following reports will be prepared and submitted to ITTO:

Inception Report

To be submitted after signing of Agreement between ITTO, Executing Agency and Government of Thailand. The Inception report contains the confirmation of the availability of office space and facilities, registered banking account, key project personnel and any changes if any and first Yearly Plan of Operation.

• Yearly Plan of Operation

To be submitted a year before the commencement of project activities in the subsequent year for endorsement by PAC, as appropriate and by ITTO. The first YPO will be attached to the Inception Report. The subsequent YPOs will be submitted at least ten weeks before the beginning of the planned year. ITTO approves the YPO based on endorsement of PSC.

Project Progress Reports

To be submitted bi-annually or as requested by ITTO. This report contains information on the execution and the progress of activities during the period covered for the report, achieved output and inputs applied.

• Project Technical Reports

To be submitted in accordance with the schedule and at the end of project period. The Technical Report contains technical and scientific data and information, analyses and other project results. A technical report may be produced from one or a set of activities in one Output. The report may also contain present procedure and methodologies adopted, the data generated and the results achieved.

• Financial Report

An audited financial report will be submitted to ITTO within three months after the end of the current fiscal year. A final audited report will be submitted within four months after the date of project completion. The project will appoint a public accountant to be submitted to ITTO for approval period to carry out project financial auditing.

Project Completion Report

A Project Completion Report will be submitted to ITTO within three months after project completion. The report contains summary of the activities executed, unexecuted (if any), inputs and expenditures, outputs achieved and objectives during the project implementation period. The report also highlights the most critical differences between planned and realized project elements using original project documents as primary reference, lessons learned from the implementation of the project.

Monitoring

Internal monitoring system will be led by the PC within the Project Management Team to ensure timely and appropriate project implementation and reporting, as well as adaptive management. Internal monitoring is applied monthly basis or where appropriate, including the following aspects:

- Follow-up commitments resulting from the Agreement between ITTO and the EA;
- Progress and proper execution of work, using as indicators planned input items from input tables and budget tables and the Activities in the Work plan and the Yearly Plan of Operation;
- On-time delivery and quality of the Outputs, using indicators as presented in the Logical Framework Matrix in the Project document;
- Report on extent to which the Specific Objective has been achieved, using indicators as presented in the Logical Framework Matrix in the Project document:

External monitoring will be undertaken by ITTO, in cooperation with the Forestry Agency of Japan, where desirable, to supervise the project implementation. The timing for external monitoring will determined between ITTO and the Executing Agency. The scope of the external monitoring includes:

- To assess whether these Projects are proceeding according to the agreed work schedules, so that the necessary ITTO actions (eg. payments to the Executing Agency) may be taken;
- To propose and participate in any necessary reviews of the Projects as a result of these assessments; and
- To report to the Committees and the Council on the situation and completion prospects for the Project.

4.3 Dissemination and mainstreaming of project learning

4.3.1. Dissemination of preject results

Project learning and results will be disseminated through various means and channels during the implementation stage and after project completion, as outlined below:

- **Technical documents/ brochures** Will be circulated widely by various means, such as VIFOREST GoViet Magazine, Websites, at seminars, publications, brochures, and so on.
- National Workshop
 The national workshop will be organized to disseminate information on project's goal and
 objective in order to gain support by stakeholders.
- **Completion Report** Will be distributed to interested nation-wide and ITTO member countries and other relevant institutions.
- Magazine and website and TV
 Project effects will be posted by means of articles in magazines/newspapers and websites and
 integrated into TV talk shows and interviews and short video and use of Instagram,
 Facebook, Webinars and Youtube channel.

4.3.2. Mainstreaming of the project learning

Thailand is determined to be an export-focused wood manufacturer, and transform the national economy to a bio-economy. The proposed project will not only facilitate the RFD to achieve this long-term goal but also provide opportunities for smallholder plantation groups to earn income from domestic wood consumption. With the involvement of ITTO (in collaboration with other international organizations) in communication outreach, there are a lot of opportunities for that Project to share lessons learnt at national and international levels. In particular, the project will analyse the current situation of domestic consumption of wood and wood products, provide recommendations on how to overcome constraints and step up toward sustainable consumption as mentioned in the National Forest Policy adopted by the cabinet in 2019 and the Forestry Development Strategy 2017 – 2036.

The experience and lessons learnt with the promotion of sustainable wood consumption gained from the project will be automatically embedded in the teaching and training curriculums of KUFF to educate students in Thailand and neighbouring countries. KUFF and ITTO will use all innovative communication tools to cope with current and post-COVID-19 pandemic situations. Webinars will be arranged for knowledge sharing. Short video/s will be produced to reflect/communicate project activities. Social media channels, including Instagram and Youtube, will be used as much as possible to accelerate project outreach and enable project outputs to reach plantation farmers, wood villagers, urban and rural consumers, etc. Furthermore, off-line and online meetings will be held regularly to review and monitor project activities, update project progress as well as share lessons learnt.

ANNEX ANNEX 1: Information on implementing agency

Kasetsart University Faculty of Forestry (KUFF)



Address: 50 Ngamwongwan Road, Chatuchak, Bangkok 10900, Thailand Tel: 66-2579-0176; Fax: 662-2561-4246 Email: infor,kuff@ku.ac.th (corresponding: fforyyt@ku.ac.th) Website of KUFF: www.forest.ku.ac.th

Year of establishment:

Kasetsart University (KU) was established in 1943. However, the Faculty of Forestry as one of four founders was established 6 years (1937) before the official establishment of Kasetsat University. It is now 85 years-old.

Legal status:

Kastsart University is an autonomous academic institution under the Ministry of Higher Education, Science, Research and Innovation.

Functions and duties:

According to Kasetsart University Decree approved by the Thai Cabinet, KUFF has three main functions as follows:

- Teaching: KU (including KUFF) is a non-profit organization. It is only one academic institution in Thailand that offers education degrees from bachelor's, master and PhD degrees in various fields of forestry. Currently, there are approximately 400 new enrolments annually. The total students are about 1,400 individual.
- Research: There are over 85 faculty members specializing in forest management, conservation, afforestation, logging, and wood and forest product processing and trading. These well-educated faculty staff are affiliated with 6 academic departments, namely Department of Forest Management, Department of Forest Biology, Department of Conservation, Department of Silviculture, Department of Forest Engineering and Department of Wood Products and Technology. Based on continuing academic excellence, KU has been ranked as the top 5 in Asia and the top 50 in the world by the QS World University Ranking in the fields of Agriculture and Forestry for over 10 consecutive years.

✓ Academic Services and Social Engagement:

✓ KU has over 30 research stations, while KUFF has 6 research stations scattered across the country to provide ample opportunities for faculty members and students to learn, explore and conduct research in various geographical and environmental settings. The mechanisms for Inter-faculty and research unit coordination have been effectively designed to facilitate fast and efficient administration and cooperation in database and information exchange. Research projects granted to faculty members are administered by the KU Research and Development Institute (KURDI). The Office of Academic Services works on intellectual property, patents,

technology transfer, and university and private sector research investment. The Extension and Training Office is dedicated to extending university research knowledge, outputs, technologies, innovation that have been developed by faculty members and researchers to the public, farmers, and interested people.

✓ The Faculty of Forestry currently KU recently serves as the Regional Project Manager to coordinate and implement the project entitled "Enhancing Conservation and Sustainable Management of Teak Forests and Legal and Sustainable Wood Supply Chains in the Greater Mekong Sub-region" which was financed by the Government of the Federal Republic of Germany, represented by the Federal Ministry of Food and Agriculture (BMEL). Collaborating agencies_include_the International Tropical Timber Organization (Japan), Cambodia's Forestry Administration, Laos' National Agriculture and Forestry Research Institute, Myanmar's Forestry Department, Thailand's Royal Forestry Department, and Vietnamese Academy of Forest Sciences.

Access to relevant stakeholders

At local and national levels, KU has been reputed and has strong programs in agriculture and forestry. Research outputs, models and practices can be effectively disseminated to multi-stakeholders at all levels through various campuses and field practices and research stations at the local level.

At the national level, The KU has worked with government institutions responsible for natural resources and climate changes issues. These institutions include the Dept. of Agriculture, Dept. of Agricultural Extension, Dept. of Forestry (RFD), Dept. of National Parks, Wildlife and Plant Conservation (DNP), Forest Industry Organization (FIO). Dept. of Land Development, Bank for Agriculture and Agricultural Cooperatives (BAAC), Office of Natural Resources and Environmental Policy and Planning (ONEP), and most of their staff are KU alumni.

In addition, KU has hosted a number of international non-profit organizations including RECOFTC, FAO, KITTO, JICA, GIZ. Etc. This means that KU and RECOFT (primary partner) have comprehensive networks in place to further develop and achieve the ultimate or specific goals. As a member of the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC SEARCA), ASEAN Forestry Colleges, APBON, the outputs of the project could be extended to other members.

1.2 Organization structure:



1.3 Budget:

The Faculty of Forestry obtained an annual income (government budget and revenue) of USD 4.0, 4.1 and 4.3 million in 2018, 2019 and 2020, respectively. In addition, the annual expenditures due the same period were USD 3.4, 4.1 and 4.3 million, respectively. These amounts exclude staff salary, which KUFF obtained from the government.

ANNEX 2: ToRs of personnel, consultants and sub-contracts funded by ITTO

1. Project Manager

Qualification:

As a Project Manager, the Manager should be an expert with in-depth knowledge and experience in related fields. The Manager should have postgraduate qualification in forestry policy or natural resource management, and a minimum of 10 years of working experience in natural resources management and proven experience in experience in implementation of donor funded projects is of preference.

Location: Bangkok with field trips to pilot provinces of Thailand

| Minimum requirements | Functions, responsibilities |
|---|--|
| Good knowledge of timber processing and trading, and timber legality assurance Proven team worker with coordination skills at international, national and local levels Familiar with ITTO project management Fluency in spoken and written English | Take overall responsibility of activity planning and implementation at regional level and day-to-day activity management and administration; Coordinate project activities; Monitor and evaluate the project execution, programme and budget implementation Represent the project at any event/forum that invites project to participate in meets Guide and supervise project staffs and recruited experts to conduct their assignments Prepare all reports described in Reporting Section and submit them to PSC and ITTO. facilitate transformational change through integration into broader regional or national development programs Supervise the preparation of the technical report and/or activity documents and ensure distribution to relevant stakeholders, coordinate feedback and amendment of drafts, and circulate final versions Ensure optimal flow of funds to activities and prepare financial reports, or special reports, to the executing agency and the donor Participate in training events in your field of expertise |

2. Project Secretary

Qualification:

The Secretary should be a Thai citizen with knowledge and experience in logistics and meeting arrangements. The Secretary should have a university degree in all fields, and a minimum of 2 years' experience of donor funded projects (previous working with ITTO project an advantage).

Location: Bangkok with field trips to pilot provinces of Thailand

| Minimum requirements | Functions, responsibilities |
|---|--|
| Good knowledge of timber processing and trading, and timber legality assurance Good understanding of institutions. Experience working with the RFD and wood processing companies is advantage. Proven ability to work with teams of local people and other specialists. An experience using financial software Advanced MS Excel skills, analytical and numerical skills Sharp time management skills | Overall responsibility for project logistics. Assist the Project Manager in day-to-day project administration. Collaborate with Project Staff, consultants and contractors to ensure effective project implementation. Assist the Project Manager in arranging meetings and workshops. Gather information on the progress of project activities and report to the Project Manager. Prepare budget balance sheets, invoices Record accounts payable and accounts receivable Prepare monthly, quarterly and annual financial reports Reconcile bank statements Participate in financial audits. |

3. Consultant 1: Wood use promotion policy (international)

The Consultant#1 Wood use promotion policy (international) should be an expert with in-depth knowledge and experience in the related fields. The consultant should have postgraduate gualification or as equivalent in in forestry policy, wood industry, import/export and legality in Asia (Thailand is an advantage). Experience is required at least 10-year experiences in related field as policy maker or expert.

Location: International cities with field trips to pilot provinces of Thailand

Duration: 2 man-months, expanding within 2 years of the project period

| Position, qualification | Functions, responsibilities |
|---|---|
| Experience in coordinating and leading the same kind of project Good knowledge of domestic and international wood and wood product trade | • Undertake a literature review, and compile relevant reports and information on policy and legality related to wood production and consumption |
| Experience in capacity building and the implementation of training events Fluency in spoken and written English Familiar with ITTO project management is an advantage | Study of policies/initiatives for the promotion of sustainable wood use |
| | Formulate enabling policies and legal frameworks to support sustainable domestic wood and wood products used |
| | Support the establishment of a chain-of- custody of controlled legal sources according to e.g. the FSC Controlled Wood Standard or the PEFC Controlled Sources Standard, if applicable. |
| | Assist in the capacity building program for researchers, scientists and local communities, as and when required |

4. Consultant 2: Innovative wood and wood products (International or Domestic)

The Consultant#2 Innovative wood and wood products should be an expert with in-depth knowledge and experience in the related fields. The consultant should have postgraduate gualification or as equivalent in in architecture, wooden products design or wood technology. A minimum of 5 years of working experience in wood products and design.

Location: International cities with field trips to pilot provinces of Thailand

Duration: 2 man-months, expanding within 2 years of the project period

| Position, qualification | Functions, responsibilities |
|---|--|
| Good understanding of wood manufacturing, knowledge of domestic wood use promoting policy is an advantage. Good knowledge of domestic and international wood and wood product trade Experience in capacity building and the implementation of training events Fluency in spoken and written English Familiar with ITTO project management is an advantage | Designing and marketing planted-wood products for the young generation Work with the Project Manager to organize trade promotion, exhibition and linking business Organize and host Japanese wood business firms for B2B workshop Assist in the capacity building program for researchers, scientists and local communities, as and when required Assist in other activities assigned by the Project Manager |

ANNEX 3: Overall assessment and specific recommendations of the 57th Expert Panel and respective modifications

PD 926/22 (I) Promotion of Sustainable Domestic Consumption of Wood Products in Thailand

Assessment by the Fifty-seventh Panel

A) Overall Assessment

The Panel recognized that the aim of this project is to promote sustainable domestic consumption of wood and wood products in Thailand. The project proposal aligns well with the goal of increasing private sector involvement in sustainable landscapes management, and the overall objective of increasing Thailand's selfsufficiency in the wood products sector, and the consideration of the full value chain, from producers to consumers, are important points of this proposal and to ITTO's mandate and programmatic lines.

It's recognized that the project proposal is consistent with ITTO's mandate and objectives as set out in ITTA, 2006. This proposal is well drafted with concise and clear sentences, and the activities listed are appropriate and realistic. It is noted that the gender component of the proposal will be given priority to joining project activities and all the intended trainings, workshops, and B2B matchings will include women.

However, there are a number of weaknesses in some sections of the project proposal, such as project brief, origin and relevance, expected outcomes, stakeholder analysis, outputs and activities, budget and annex, and implementation arrangements.

Further, one potential hurdle is the lack of enabling legal framework. A suggestion is to consider adding a component that would look at broader enabling factors, outside the forestry sector, and include other Ministries as stakeholders. It is also noted that the project should not be giving preference or singling out one specific certification scheme over another, if multiple certification schemes are valid in country.

The project is a Category C on the ESM checklist. It is suggested the specific recommendations mentioned below for that purpose.

B) <u>Specific Recommendations</u>

- 1. Include an improved and detailed map of project area showing the description of the area's major physical features and ecological characteristics;
- 2. Explain how the project is related to ITTO's objectives and priorities. List the objectives with their number as in ITTA 2006;
- 3. Discuss qualitative and quantitative expected outcomes more clearly, and improve the comprehension of the outcomes by giving approximatively the number the stakeholders to be impacted by the project. The policies for promoting domestic uses of wood and wood products should be approved during the project implementation by the National Forest Policy Committee and RFD, not after;
- 4. In Stakeholder Analysis. include consultations with other ministries which may impact this work.
- 5. Reformulate the 3rd indicator of the Output 1 which is not SMART as required in ITTO's manual of project formulation;
- 6. Delete all the sub-activities in Activities section. They can be noted in the budget tables if needed (with budget cost);
- 7. In the Master Budget Schedule, detail the material to be bought on the budget component 51 mentioned in the activities of the output 2;
- 8. In Organizational Structure, the project management team is not clear. Redesign the Organizational Structure and make project management team and titles clear;
- 9. In Annexes, include the ToRs of personnel, consultants and sub-contracts funded by ITTO;
- 10. Include an Annex that shows the overall assessment and specific recommendations of the Fifty-seventh Expert Panel and respective modifications in tabular form. Modifications should also be highlighted (**bold and underline**) in the text.

C) <u>Conclusion</u>

<u>Category 1</u>: The Panel concluded that the proposal could be commended to the Committee with incorporation of amendments.

| Comments | Response to comments | |
|---|--|--|
| 1. Include an improved and detailed map of project area showing the description of the area's major physical features and ecological characteristics | New maps of project area were prepared and included. This section was restructured and more texts were added (section 1.3.2). 1.3.2 Target areas The target areas of this project are located in two provinces of Thailand: Nan and Trang. Nan province is situated in the north of Thailand, covering approximately 12,0130 km². To the north and the east, the province adjoins Lao PDR. Trang province is located in peninsular Thailand and in the west coast. The province covers an area of 4,918 Km2. To the west is the Andaman Sea, while the west part meets Khao Banthad Range and adjoins Pattalung Province. It has been the important seaport of the south from past to present. Location Nan Province, northern Nan Province, northern Smallholder teak plantations and | |
| | ThailandSmallfolderteakplantationsandTrang Province, southern ThailandLarge area of rubber plantations and rubber wood industry, as well Centres/clusters for wooden furniture manufacturing | |
| | (a). Nan Nan province is 1 of 17 provinces situated in the north of Thailand, covering approximately 12,000 km ² . To the north and the east, the province adjoins Lao PDR. The province encompasses the western slope of the Phi Pannam fold mountain range and the eastern slope of the Luang Phrabang range separates by the elongated valley of the Nan River in the central part of the province (Figure 1). The Nan River flows from north to south and joins other 3 rivers, namely Ping, Wang and Yom, to form the Chao Phraya River in Nakhon Sawan province. The highest altitude of 1,980 m above mean sea level is located in Doi Phu Kha National Park. The lowlands (<400 m) occupy about 18% of the province's area, where elevations greater than 800 m cover approximately 40%. The average mean annual rainfall during 1961-2013 was 1,268.8 mm. The rainy season begins in May and ends in September. Mean annual temperature is 25.9 °C; maximum temperature is 33.1 °C and minimum temperature is 20 °C. Administratively, the province is subdivided in 15 districts (Amphoes) and 8 municipalities. The population of Nan Province was about 478 thousand (National Statistical Office, 2017) and the total number of households was 164,440. Mean population density of the country (130 persons/km ²), this is due to the limitation of suitable land for settlement by topography factor. Most of the lowlands are dominated by Thai people, whereas the highlands and mountainous territories are populated by diverse ethnic groups. The largest ethnic groups include the Lua, Khmong, Mien and Khmu. | |

Approximately 55% of the total households engage in agriculture. The Gross Provincial Product (GPP) of Nan province steadily increased from 357 million USD in 2000 to 1,09 billion USD in 2019, while GDP per capita increased from 2,200 USD to 3,031 USD during the same period. In addition, the contribution of the agricultural sector to the GPP had increased from 15.7% to 32.25% in the same period or 12% annually. A recent survey indicated that there were 28.8% of the total population (~138,000 individuals) live below the poverty line, but this decreased to 24% (~114,000 individuals) in 2016.

According to long-term forest cover monitoring by the RFD, forest cover in Nan province was 74% of the province area in 2004 and declined to 71% and 61% in 2008 and 2016, respectively (RFD, 2016). The main types of forests in Nan province include evergreen forest (45%), mixed deciduous forests (46%), dry dipterocarp forests (8%), and pine forest (1%). Natural forests decreased by nearly 25% during 1995-2012, but the agricultural lands increased by more than 50%. The highest deforestation rates were recorded during 2009–2012. In addition, local people mainly hill tribe people have changed their land use practices from the traditional system of slash and burn agriculture to permanent cultivation for commercial trading. Main crops are maize and cassava, which are driven by price incentive and the engagement of big agricultural companies. This rapid change results in an increase in overland runoff, and in an enhanced hazard of heavy floods during the monsoon season.

Large proportions of forest areas (evergreen forest and deciduous forest) were from 2009-2016 converted to maize and cash crops. In addition, approximately 21,200 ha and 8,900 ha of new perennial trees (fruits and rubber plantations respectively) were in 2016 found in previous maize cultivation and deciduous forest area. Forest plantations and rubber plantations rapidly increased from 8,740 ha in 2007 to 35,000 ha in 2015.

Protected areas (national parks and wildlife sanctuaries) cover about 35% of the province's area, while watershed class 1 contributes approximately 45%. These two broad categories are recognized as conservation forest by laws (National Park Act of 1961 and Wild Animal Preservation and Protection Act of 1992) and Cabinet Resolution on Watershed Classification between 1982 and 199, respectively. Actually, agricultural development and settlement are prohibited there, but the maize boom in the last decade have resulted in huge deforestation in conservation forests and have become a controversial issue. In addition, non-timber products (honey, resin, wasp eggs and rattans) extracts are also not allowed inside national parks and wildlife sanctuaries.

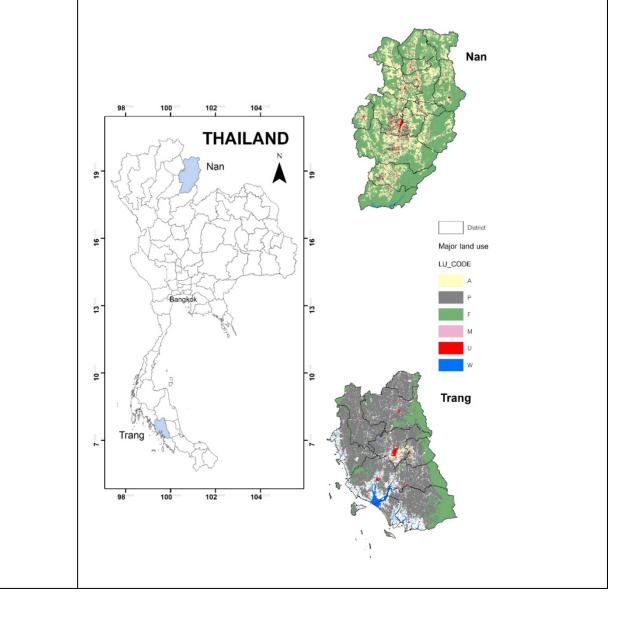
(b). Trang

Trang is divided into 10 districts. These are further divided into 87 subdistricts (tambons) and 697 villages. The total population of Trang Province is 643,116 with a density of 131.km2. About 84% of the Trang population are Thai ethnic, and the remaining (6%) are Malay ethnic. Trang was the first area of Thailand where rubber trees were planted, brought there by governor Phraya Ratsadanupradit Mahison Phakdi from British Malaya in 1899. The current rubber plantation area covers about 1.34 million rai or 215.000 ha or 43% of the province area. Trang is ranked the second for rubber plantations after Songkla Province (350,400 ha) and contributes 5.5% of the total plantations in Thailand. About 100,000 households are involved in rubber plantations.

The Gross Provincial Product (GPP) of Trang province steadily decreased from 2,355 million USD in 2012 to 2.08 billion USD in 2019, while GDP per capita decreased from in 3,872 USD to 3,767 in 2019 USD during the same period largely due to the lower price of rubber latex. Agriculture contribution

contributes about 31% of the provincial GPP. The GDP per capita of Trang is ranked as 8 in southern Thailand provinces and 34the in Thailand. Currently, there are 105 rubberwood industry factories (e.g., furniture, veneer, sawn wood, play toys, etc) with an investment of over 17 billion USD or 5 billion baht in Trang province.

Trang province covers various landscapes ranging from the coastline, flat area, underrating terrains and mountain. Forest cover in Trang Province varies from 21-23% in the last 10 years. Most of the remaining forests are located in protected areas (national parks and wildlife sanctuaries). Forest encroachment for rubber and oil palm plantation is the main environmental threat to the province. Flash floods and landslides in wet season are frequently observed in the west part of the province nearby Khao Banthad Range.



| 2. Explain how the | More texts were added and elaborated as follows: |
|---|--|
| project is related to ITTO's objectives and priorities. List the objectives with their number as in ITTA 2006 | The ITTO objectives are highly relevant and support Thailand's national forest policy (item 1.2.2). which aim to 1) promote afforestation in private land and the public land permitted for utilization; 2) promote and assist value chain process from wood industries and biodiversity-based economy development; 3) develop licensing and national and international certification of timber. |
| | Likewise implementing various activities defined in project output 1 (Improved policies for promoting domestic uses of wood and wood products), including strengthening the national council/association, information and analysis on annual domestic wood production, legalizing and endorsing domestic wood from planted forests through national& international certification and learning lessons on smallholder plantations in selected countries investigated and introduced will contribute and consist with ITTA 2006 objective 1. Meanwhile, the proposed activities listed under project output 2 (stakeholder capacity built to produce innovative wood and wood products needed by domestic markets), include providing advanced skills to design and develop wood products to meet domestic market demands, building capacity and understanding of stakeholders to comply with legality requirements, awareness-raising of urban consumers on SFM and domestic wood producers and wood consumers will contribute to sustainable management of tropical timber-producing forests (ITTO objective 2). |
| 3. Discuss qualitative and quantitative | Section 1.4 Expected outcomes at project completion was further elaborated and rewritten as follows: |
| expected outcomes more clearly, and improve the comprehension of the outcomes by giving approximatively the | Implementing the proposed activities at national and provincial levels (2 pilot provinces) will produce outputs relating to policy improvement and capacity building of stakeholders involved in wood and wood products. In addition, the policy framework and institutional set-up needed to succeed with the promotion of domestic consumption of wood and wood products will be developed and strengthened as follows: |
| number the stakeholders to be impacted by the project. The policies for promoting domestic uses of wood and wood products should be | - <u>At the end of the project (2 years after the project execution).</u> The Government policy or other type of legal/bending document) to promote domestic consumption of wood and wood products The policies for promoting domestic uses of wood and wood products should be approved by the National Forest Policy Committee and/or RFD before the project termination. The approved policies will ease and fasten the processes to strengthen the domestic market and supply chains of wood and wood products. |
| approved during the project implementation by the National Forest Policy Committee and RFD, not after | Wood industries and tree growers (large and smallholders) collaboration strengthened to fill domestic market demands for sustainable legalized wood products and their supply and value chains. The capacity of relevant stakeholder groups will be improved by means of wood legality assurance awareness raising, planted-wood product design training, plantation farmer cooperative/household-based wood business – lead companies linking to produce innovative wood and wood products needed by domestic markets. At least, 15 companies attended B2B matching meetings with internal companies (e.g., Japan); at least, 50 urban |
| | <u>consumers and 50 rural consumers attended lexhibitions/communication</u> <u>campaigns on using planted-wood for housing construction and interior</u> <u>decoration.</u> Furthermore, 10 young designers and winners of contests on <u>the best designs identified and recommended for further engagement</u> <u>Raised awareness of urban consumers on the role of wood used for</u> <u>sustainable forest management resulted in enlarged and diversified</u> <u>domestic wood consumption.</u> A series of TV interviews, publication and |

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|---|---|
| | <u>communication of project outputs, display of piloted demonstrations etc.</u> are planned to take place. Wooded products will be displayed at the national exhibitions. <u>Demonstrated legal and sustainable wood supply chains that improve</u> domestic market access to wood products (2 pilot provinces in Nan and <u>Trang Provinces).</u> |
| | By achieving the specific objective of enhancing domestic consumption and promoting local markets of wood and wood products, the expected outcomes of the project will go beyond its overall goal of sustainable domestic wood consumption. It will support national bio-based economy policy, contribute to biodiversity conservation, maintain and expand eco-friendly green areas, and create job and income opportunities for small- and medium-sized enterprises. |
| 4. In Stakeholder Analysis. include consultations with other ministries which may impact this work | Agricultural Land Reform Office, Ministry of Agriculture and National Housing Authority are added in stakeholder Table. |
| 5. Reformulate the 3rd indicator of the Output 1 which is not SMART as required in ITTO's manual of project formulation | Government policy to facilitate local consumption of wood products (e.g., tax) was rewritten to " <u>A draft policy or guideline to facilitate local consumption of wood</u> products approved by the RFD". |
| 6. Delete all the sub- activities in Activities section. They can be noted in the budget tables if needed (with budget cost); | All sub-activities in the Activity Section (3.1.2) were removed as suggested. |
| In the Master Budget Schedule, detail the material to be bought on the budget component 51 mentioned in the activities of the output 2 | Materials " unit " was changed to " Guidance ". In addition, description items were reordered . |
| 8. In Organizational Structure, the project management team is not clear. Redesign the Organizational Structure and make project management team and titles clear | The organization Structure Chart was redrawn, which includes the PSC, consultants and lines of commands and cooperation. |

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|------------------------|--|---|---|-------|
| | | | Project Advisory Committee | |
| | Project Steering Committee (PSC) | Executing Agency | KUFF | |
| | RFD | KUFF < | RFD | |
| | FIO | | FAO | |
| | ΙΤΤΟ | | RECOFT | |
| | Representative of Donor country | | Relevant Ministries | |
| | (Forest Agency of Japan, Japan) | ļ | Wood Industry Association | |
| | FAO | Project Management Team | | |
| | Forest Association | Manager, KUFF/RFD staffs, local/international | Secretary/Finance | |
| | Project Manager (serve as Secretary) | consultants | | |
| | | | Consultants/sub-contracts | |
| | | | | |
| | Partner 1 | Partner 2 | Partner 3 | |
| | Research/training institutions: | Private Sectors/Associations: | Local authorities: | |
| | Kasetsart University (KU); | Local wood/furniture associations; | Provincial NRE Office (pilot provinces) | |
| | RECOFTC | Wood village associations; | | |
| | Architecture and engineering Uni.;, | Plantation-farmer co-ops | | |
| | technical schools and vocational training centers (training | | Line of command | |
| | institutions | | Advice Cooperation | |
| | | | | |
| | T 1 1 1 1111 | | | |
| 9. In Annexes, include | l asks and responsibiliti | es (ToRs) of Secre | etary were included. Further, ToRs for Pro | oject |
| the ToRs of | Manager and two consu | Itants funded by IT | TO were expanded (Annex 2). | |
| personnel, | | | ······································ | |
| | | | | |
| consultants and | | | | |
| sub-contracts | | | | |
| funded by ITTO | | | | |
| 10.Include an Annex | Comments and respond | ls were tabulated a | and included in the <mark>Annex 3</mark> , Edited texts | are |
| | | | | arc |
| that shows the | highlighted (bold and u | nderline) in the tex | xt. | |
| overall assessment | | | | |
| and specific | | | | |
| recommendations | | | | |
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| of the Fifty-seventh | | | | |
| Expert Panel and | | | | |
| respective | | | | |
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| modifications in | | | | |
| tabular form. | | | | |
| Modifications | | | | |
| should also be | | | | |
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| highlighted (bold | | | | |
| and underline) in | | | | |
| the text | | | | |
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Annex 2 ToRs of personnel, consultants and sub-contracts funded by ITTO

1. Project Manager

Qualification:

As a Project Manager, the Manager should be an expert with in-depth knowledge and experience in related fields. The Manager should have postgraduate qualification in forestry policy or natural resource management, and a minimum of 10 years of working experience in natural resources management and proven experience in experience in implementation of donor funded projects is of preference.

Location: Bangkok with field trips to pilot provinces of Thailand

| Minimum requirements | Functions, responsibilities |
|--|--|
| Good knowledge of timber processing and trading, and timber legality assurance Proven team worker with coordination skills at | Take overall responsibility of activity planning and implementation at regional level and day-to-day activity management and administration; |

| international, national and local levels Familiar with ITTO project management Fluency in spoken and written English | Coordinate project activities; Monitor and evaluate the project execution, programme and budget implementation Represent the project at any event/forum that invites project to participate in meets Guide and supervise project staffs and recruited experts to conduct their assignments Prepare all reports described in Reporting Section and submit them to PSC and ITTO. facilitate transformational change through integration into broader regional or national development programs Supervise the preparation of the technical report and/or activity documents and ensure distribution to relevant stakeholders, coordinate feedback and ensure final |
|---|---|
| | and/or activity documents and ensure distribution |
| | Ensure optimal flow of funds to activities and prepare financial reports, or special reports, to the executing agency and the donor Participate in training events in your field of expertise |

2. Project Secretary

Qualification:

The Secretary should be a Thai citizen with knowledge and experience in logistics and meeting arrangements. The Secretary should have a university degree in all fields, and a minimum of 2 years' experience of donor funded projects (previous working with ITTO project an advantage).

Location: Bangkok with field trips to pilot provinces of Thailand

| Minimum requirements | Functions, responsibilities |
|---|--|
| Good knowledge of timber processing and trading, and timber legality assurance Good understanding of institutions. Experience working with the RFD and wood processing companies is advantage. Proven ability to work with teams of local people and other specialists. An experience using financial software Advanced MS Excel skills, analytical and numerical skills Sharp time management skills | Overall responsibility for project logistics. Assist the Project Manager in day-to-day project administration. Collaborate with Project Staff, consultants and contractors to ensure effective project implementation. Assist the Project Manager in arranging meetings and workshops. Gather information on the progress of project activities and report to the Project Manager. Prepare budget balance sheets, invoices Record accounts payable and accounts receivable Prepare monthly, quarterly and annual financial reports Reconcile bank statements Participate in financial audits. |

3. Consultant 1: Wood use promotion policy (international)

The Consultant#1 Wood use promotion policy (international) should be an expert with in-depth knowledge and experience in the related fields. The consultant should have postgraduate qualification or as equivalent in in forestry policy, wood industry, import/export and legality in Asia (Thailand is an advantage). Experience is required at least 10-year experiences in related field as policy maker or expert.

Location: International cities with field trips to pilot provinces of Thailand

Duration: 2 man-months, expanding within 2 years of the project period

| Position, qualification | Functions, responsibilities |
|--|---|
| Experience in coordinating and leading the same kind of project Good knowledge of domestic and international wood and wood product trade Experience in capacity building and the implementation of training events Fluency in spoken and written English Familiar with ITTO project management is an advantage | Undertake a literature review, and compile relevant reports and information on policy and legality related to wood production and consumption Study of policies/initiatives for the promotion of sustainable wood use Formulate enabling policies and legal frameworks to support sustainable domestic wood and wood products used Support the establishment of a chain-of-custody of controlled legal sources according to e.g. the FSC Controlled Wood Standard or the PEFC Controlled Sources Standard, if applicable. Assist in the capacity building program for researchers, scientists and local communities, as and when required |

4. Consultant 2: Innovative wood and wood products (International or Domestic)

The Consultant#2 Innovative wood and wood products should be an expert with in-depth knowledge and experience in the related fields. The consultant should have postgraduate qualification or as equivalent in in architecture, wooden products design or wood technology. A minimum of 5 years of working experience in wood products and design.

Location: International cities with field trips to pilot provinces of Thailand

Duration: 2 man-months, expanding within 2 years of the project period

| Position, qualification | Functions, responsibilities |
|---|--|
| Good understanding of wood manufacturing, knowledge of domestic wood use promoting policy is an advantage. Good knowledge of domestic and international wood and wood product trade Experience in capacity building and the implementation of training events Fluency in spoken and written English Familiar with ITTO project management is an advantage | Designing and marketing planted-wood products for the young generation Work with the Project Manager to organize trade promotion, exhibition and linking business Organize and host Japanese wood business firms for B2B workshop Assist in the capacity building program for researchers, scientists and local communities, as and when required Assist in other activities assigned by the Project Manager |