



**Communication Campaign Plan  
Raising Public Awareness and Incite Social and Behavior  
Change on Forest-related Crimes and Issues in Cambodia**



**Forestry Administration, Cambodia**

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## **Acronym**

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CF	Community Forestry
EN	Endangered
FA	Forestry Administration
FAO	Food and Agriculture Organization of the United Nations
IUCN	The International Union for the Conservation of Nature
KAP	Knowledge, Attitude, Practice
NGO	Non-Governmental Organisation
NTFP	Non-timber forest products
UNEP	United Nations Environment Programme
UN-REDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
UNEP-WCMC	The UN Environment World Conservation Monitoring Centre
VU	Vulnerable

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## I. Introduction

### 1.1 Background

Rosewood including a numerous *Dalbergia* species that have been at high demand in international markets has become the world's most trafficked wild product. In response to that trafficking, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has listed the 300 species under trade restrictions. In the past several decades, the illegal trafficking and trading of high-commercial timber species in Cambodia has increased the vulnerability and reduced the populations of some indigenous timber species, including rosewood. There is nevertheless still remarkably limited documentation about the current status of *Dalbergia* species in the country.

Likewise, Agarwood (also known as eaglewood and gaharu) is produced in several Asian countries for use in incense, perfume and small carvings. It is formed in the heartwood of (mainly) *Aquilaria* and *Gyrinops* species trees when they become infected with a type of mould. Prices of up to USD 100 000 per kg have been recorded for top-quality agarwood, leading to unsustainable levels of extraction and the listing of all species of *Aquilaria* and *Gyrinops* in Appendix II of CITES since 2004 (Thompson, I. et al. 2022). Owing to the high value of agarwood and declining wild populations, there has been an increase in the cost of the wood over time as well as increasing efforts to produce agarwood from planted *Aquilaria* trees. In the commercially cultivated trees, the production of resin is induced by physical penetration of the trunk (wounding) and insertion of a microbial fungal. *Aquilaria* species require up to a decade to reach maturity and most current harvesting techniques, for both wild and cultivated trees, involve destroying the entire tree.

While the demand of wood and its products is still in high and the timber supply from natural forest have been declining, the wood supply from tree plantations have been considered as the important source, particularly teak. The size of the teak plantation had increased from the 1990s to just 2.25 million ha, since reduction in export of teak from the natural forest, especially the ban on teak business in Myanmar, India, Laos PDR and Thailand. Since 1980s, teak plantations have been expanded in countries in Africa (0.47 million ha), tropical America (0.27 million ha), and Latin America could become a major source of planted teak (Pandey and Brown 2000; FAO 2009; Kollert and Cherubini 2012).

Cambodia has been a member of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 4 July 1997. From 2001 to 2021, Cambodia has lost its 2.60 million hectares of tree cover, equivalent to a 30% decrease in tree cover and 1.55 Gt of CO<sub>2</sub> equivalent emissions, while the drivers of forest loss have been noticed with (i) large-scale industrial agriculture plantations and smallholder farming, and (ii) urban expansion and charcoal production (UNEP 2022). Cambodia's natural forests have been declining during past decades, and many tree species in Cambodia are at risk of becoming extinct, especially the listing of endangered tree species in the CITES Appendix II that are not necessarily threatened with extinction, but for which trade must be controlled in order to avoid utilization incompatible with their survival.

The Cambodian government has committed to enacting legal framework and regulations to curb the loss of Rosewood and other endangered species. These include the Law on Forestry 2002 (this Forestry Law is now under revision), the National Forest Programme 2010-2029, the National REDD+ Strategy 2017-2025 and the Production Forest Strategic Plan (draft). In support of these regulations and to ensure a sustained change and transformation towards more sustainable wood trade and halt illegal activities, there still needs to be greater awareness and a shift in the current behaviour of the affected groups and communities, in particular, the enforcement officers, forest communities, business traders and loggers with regards to wood trading and logging practices.

The United Nations Environment Programme (UNEP), under the project/programme entitled "Addressing Forest Crime through Improved Governance in the Lower Mekong Region" in Cambodia via the Small Scale Funding Agreement (SSFA 2021/), has collaborated with Forestry

Administration of Cambodia to develop a national communications campaigns to raise public awareness and incite social behavior change on forest crime.

The the UN-REDD project ‘Addressing Forest Crime through Improved Governance in the Lower Region-LMR’ is supported by the government of Norway and is implemented in five Lower Mekong countries, namely Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. The project aims to increase national commitments to legal and sustainable trade and investment in wood products and supports countries to reduce the likelihood of forest crime and illegal logging by strengthening forest and land use governance, and ultimately reducing deforestation and forest degradation. This SSFA is supported through phase 1 of the LMR project with the intention that additional resources will be accessed by UNEP for a phase 2 focused on implementing the communications campaign.

The Forestry Administration of Ministry of Agriculture, Forestry and Fisheries (FA) has been selected as the implementation partner for this SSFA. This will ensure a strong sense of ownership and uptake of the communications campaign in the country, while also ensuring that the campaign is tailored to the national context. The communications campaign will seek to identify key areas related to behaviour, attitude and knowledge, as well as barriers, to be promoted, to change, and harmful behaviour of the target groups that condone the occurrence of illegal Rosewood trade and associated crimes as well as their capabilities, opportunities and motivations for change. Based on such data, the campaign will make use of behavioural insights and nudges to change existing/harmful or adopt a new behaviour to shift to more sustainable trading practices.

## 1.2 Objectives

The Forestry Administration develops a national communications campaign plan and pilot its implementation in Cambodia. The overarching objective of the national communications campaign plan is aimed at raising awareness on the availability legal options for certifying forest plantations and trade, and on promoting behavior amongst businesses and forest communities to grow, harvest and access the legal supply chain of Rosewood and Agarwood trade. The specific objectives are as follow:

- Conduct desk research and reviews on situation analysis, principally the KAP survey on illegal logging and illegal forest trade in the lower Mekong and in China (UNEP 2022), specifically behavior, attitude and knowledge to be promoted for changing behavior, and identifying target audience, most effective channels, and key messages to raise public awareness regarding forest-related issues;
- Produce a 10-15 minutes video and design material and interventions strategies for campaigns including major thematic areas focusing on protected tree species, alternatives to illegal logging and how to register plantations; and
- Provide a detailed national communications campaign plan, including target audience and budget, to be conducted via most effective channels (media) and extension workshop.

## II. Situation Analysis

A situational analysis and initial data gathering have been conducted as a basis for developing simple communications messages, materials and interventions that will help the target groups understand what is the issue and why it matters, why it is important to legalize Rosewood plantation and trade and what are the steps for legalizing Rosewood and Agarwood trade and plantations. To promote a change in behavior amongst businesses and forest communities to grow, harvest and access the legal supply chain of Rosewood and Agarwood trade, specifically from

forest plantations, as well as furniture and wood products to be substituted by the other tree species such as teak and rubber.

As suggested in SSFA, the analyzed results of KAP survey on illegal logging and illegal forest trade in the lower Mekong and in China (UNEP 2022) is integrated into this plan in terms of audience analysis, effective channels, and key messages. The survey has been conducted with the number of respondents for each country in lower Mekong including Cambodia (400), Laos (407), Myanmar (400), Thailand (400), and Vietnam (400), and in China (450). However, only Cambodia-related KAP survey results were extracted and integrated into this situational analyses and the strategic interventions design for a communications campaign plan. This means that all analyses are reflected the situation in Cambodia, and thus, most of the situational analysis and data used here is extracted from the KAP survey of UNEP (2022) and some are from other references.

## 2.1 Current Status of Rosewood, Agarwood and Teak in Cambodia

In Cambodia, rosewood family consisted mainly of *Dalbergia cochinchinensis*, *Dalbergia cultrate*, and *Dalbergia oliveri* (considered to be synonymous with *Dalbergia bariensis*), as well as several other species of *Dalbergia* and a number of other genera, but *Dalbergia cultrate* is not considered as the main target and at high risk as same as *Dalbergia cochinchinensis* (IUCN - VU; CITES - Appendix II) and *Dalbergia oliveri* (IUCN - EN; CITES - Appendix II).

*D. cochinchinensis* is widely distributed in provinces throughout the country, but its population size is thought to have dramatically declined with mature individuals considered to be ‘very rare’ outside of strictly protected areas. *D. oliveri* is sparsely distributed in provinces throughout the country, as well, and while the size of its population is also unknown and there are no systematic population estimates that exist for either species, both of these populations are considered to be ‘severely depleted.’ Indeed, mature trees of both of these species are reported to be ‘very rare’ even in protected areas and each of the species is considered to be “critically endangered.”

Agarwood including *Aquilaria malaccensis* and *Aquilaria crassna* are among the common traded names in Cambodia for species that produce agarwood. It is an aromatic resinous/fragrant non-wood forest product (NWFP) and highly prized incense that is extremely rare, precious, sometimes referred to as "wood of god", "black gold" and "golden tree" of *Aquilaria*. Four species, *A. malaccensis*, *A. crassna*, *A. sinensis*, and *A. filaria*, are commercially exploited for agarwood production (Barden et al. 2000).

On the current trend, *Tectona grandis* (Teak) that is not listed in CITES Appendix nor IUCN Red List has been long recognized in the emerging market of wood supply not just in the global region but also in Cambodia.

### 2.1.1 Rosewood

There is still remarkably limited documentation about the current status of *Dalbergia* species in Cambodia. *D. cochinchinensis* is assessed as vulnerable (VU), and *D. oliveri* is assessed as endangered (EN) in IUCN Red List.

While the sizes of the populations of *D. cochinchinensis* and in Cambodia are unknown and there are no systematic population estimates that exist, both of these populations are considered to be ‘severely depleted.’ Mature trees of both species are reported to be ‘very rare’ even in protected areas and the two species were regarded to be “critically endangered” in a 2012 report by Cambodia’s Forestry Administration. The largest remaining population of *D. cochinchinensis* was reported to be a seed source in Siem Reap province. The second largest population was reported to be in Leap Kuy Community Forest in Kampong Speu Province. Other known populations of *D. cochinchinensis* exist in Damrey Chak Thlork Community Forest in Kampong Speu province



covering 15,000 ha, O Soam Community Forest in Kampong Thom province consisting of 50-100 trees of 10-15 cm dbh, and Tbeng Lech Community Forest in Siem Reap province consisting of about 10 trees, although the largest tree was illegally cut in 2017 (UNEP-WCMC 2018).



Figure 1. Planted *Dalbergia cochinchinensis* regrown from cut stumps (Preah Vihear province)

Photo: CITES-CTSP - FA 2021

In a related survey conducted in 2007 in the lowland forests of Stung Treng Province, it was revealed that illegal logging had led to the local extinction of the species. Similarly, there have been five botanical surveys, each of 14 days duration, that have been conducted in Samkos in the Central and Eastern Cardamom Mountains since 2015 and during that period there has been only a single *D. cochinchinensis* individual, a root sucker that had survived felling and the removal of the root of the mother tree has been reported. Rangers commented that all of the *D. cochinchinensis* trees “had been felled for the rosewood trade” in the Southern Cardamom Mountains, as well. Scientists contacted by the Environmental Investigation Agency involved in field and genetic studies of the species in 2016 had also noted that the number of *D. cochinchinensis* trees in the country was “dramatically decreasing” and that “field guides in Cambodia reported in 2015 that many of the populations sampled from 2010-2012 no longer exist due to deforestation and logging.” (UNEP-WCMC 2018)

Sinly S. et al. (2021) reported that aside from threats and ecological constraints that could affect the reproduction, resilience capacities, and natural growth of *D. cochinchinensis*, which could result in either mortality or increased vulnerability, such human-induced activities as illegal selective logging, forest burning, and clearing forestland for agriculture, caused severe threats to the *Dalbergia* species in Choam Ksant district of Preah Vihear province.

Similarly, *Dalbergia oliveri* is reported to be found in the northeastern provinces of Kratie, Ratanakiri, and Stung Treng; in the Northern provinces of Preah Vihear and Siem Reap; in the western province of Pursat; and in the central province of Kampong Thom. Its populations in the country are considered to consist of very few mature or large individual trees and are characterized as “seriously threatened” on the basis of the species’ potential uses and the IUCN’s conservation criteria and at risk of extinction if no effective conservation measures are more completely implemented and enforced. It has, as a result, been selected as a priority tree species for gene conservation in Cambodia, as well as under the Asia Pacific Forest Genetic Resources Program,

which aims to encourage the conservation and management of forest genetic resources throughout the region.



Figure 2. *Dalbergia oliveri* in the yard of the Neak Bous Temple in Preah Vihear province

Photo: CITES-FA 2021

Seeds of *D. oliveri* can be obtained from a number of identified seed sources in natural forests, such as in Pal Hal commune in Tbeng Meanchey district in Preah Vihear province or in Prognel commune in Phnom Kravanh district in Pursat province. The remnant forest surrounding Boeung Yak Loam in Rattanakiri province is also the habitat of a number of mature trees of *D. oliveri* where seed collection is possible (UNEP-WCMC, 2014).

### 2.1.2 Agarwood

Thompson (2022) reviewed agarwood producing species and suggested that there were five tree species in Cambodia, but only has *Aquilaria crassna* been known commonly to Cambodian people. Before 1980s, there was no any plantation of *Aquilaria crassna* in Cambodia, but only were those found in natural stand. Due to substantial demand in global markets, to collect “agarwood,” *A. crassna* trees were overexploited and almost wiped out in the forest. Thereafter, Cambodia’s plantation industry began operating in the 1990s and has expanded significantly in recent years, primarily *A. crassna* that have been planted as small household plantations by local famers and communities, and planted as large-scale plantations by companies, up to more than hundred thousand trees.

*A. crassna* trees can be found planting as either mono species or mixed species plantation, or agroforestry form mixed with fruit trees. The planting can be done on backyard or around houses, small to big scale plantation. As its natural growth is so slow that it has to take decades to get

heartwood contained scented resin, inoculation technique with chemical substance injected in all agarwood trees in plantations has been used to shorten period for exploitation in order to increase effective and efficient production of agarwood. Currently, more 1 million stand trees of planted *A. crasna* in Cambodia. Currently, large plantations of *Aggarwood* in Cambodia are reported in Koh Kong, Preah Sihanuk, Kampot, Kep, Pursat, Pailin, Siem Reap, Kampong Spue, and Kampong Cham province. Aside from a native species of *Crassna* (family “Thymelaceae”), there were about 50,000 *A. crassna* trees have been imported for planting during 2000s, and those were among 1 million agarwood trees that have been registered as private forest plantation (Dany C. et al. 2022).



Figure 3. Agarwood plantation and inoculation to stimulate the oil contained within heartwood

Photo: Dany C. 2022

### 2.1.3 Teakwood

Teak was introduced to Cambodia in 1936 in Han Chey commune, Kampong Cham province, as an agroforestry system. Before 1963, Cambodia had been under French colony during which political control and territory administration were fully supervised by French. In 1930s, French commenced to carry out agroforestry system trials in Indo-china for the enrichment of natural forests by intercropping method, which was applied throughout Southeast Asia--birth of agroforestry practices in Indo-china (Pierre Allouard, 1947).

As of 2002, teak plantations exist between 6,200 and 7,000 ha equivalent to 7.2-10 million scattered trees in some provinces. The number of major teak plantations reported is 6,100 ha recorded in 6 provinces including Tbong Khmum, Kampong Cham, Kratie, Ratanakiri, Kampong Speu, and Kampot. The price of teak sawnwood in the local market (Cambodia), as assessed by the owners of local private teak plantations and teak wood processing factories varies between 800-1,500 USD per cubic meter, depending on the quality, length, and diameter of the wood. This price seems to be higher than in international market, and that may be a reason teak is uncommon in most of the local wood processing factories or handicrafts (Sinly S. et al 2022).

The density and spacing of teak planting affect significantly the growth of teak, and these practices have been taken into consideration to coincide with both economic effectiveness and trials. The Grandis Timber Co., Ltd has planted teak since 2014, and Teak Farm Co., Ltd has established teak plantation since 2018. Both companies set up demonstration plots to conduct experiment of teak growth at different treatments such as various intervals tested, silvicultural techniques applied, and intensive maintenance undertaken. For demonstration plots in Grandis Timber Co., Ltd, the measurement conducted in 2020 revealed that the average DBH of teak planted at Grandis Timber Co., Ltd was 6.35 cm. (3.2x2.5 m. of spacing) and 8.41 cm. (4.0x2.5 m. of interval) with the age of 2 and 3 years- old, respectively. At teak plantations in Kampong Speu province (Teak Farm), the 8-10 years of teak cultivars are expected to be harvested since they have applied intensive fertigation including the uses of soluble fertilizer, dripping, and silvicultural practices, as well as genetic improvement and cloning, as what has been done in Indonesia (Sinly S. et al 2022).



Figure 4. View of private teak plantation in Kampong Cham Province and of teak plantation in Kampong Speu Province

Photo: FA-ITTO 2022

## 2.2 Trends in Customer Demand for Timber

### 2.2.1 Demand for Wood and Heartwood Furniture

At regional scale, the evaluations of the combined production and exports of many timber species available in ITTO's database were conducted for wood of many timber species within 57 Asia-Pacific countries showed that the estimated wood production from 2010 to 2021 was 3,880 million cubic meters or, on average, 323.34 million m<sup>3</sup>. That production consisted of 2,647 million m<sup>3</sup> of industrial roundwood, 690.89 million m<sup>3</sup> of sawnwood, 468.26 million m<sup>3</sup> of plywood, and 74.16 million m<sup>3</sup> of veneer. The largest wood producing countries were China, India, Indonesia, Malaysia, Vietnam, Thailand, and Myanmar.

The estimated wood exports from the Asia-Pacific countries during the same period were 399.9 million cubic meters with 33.33 million m<sup>3</sup> exported annually. That exported wood volume consisted of 144.98 million m<sup>3</sup> of industrial roundwood, 113.68 million m<sup>3</sup> of sawnwood, 101.95 million m<sup>3</sup> of plywood, and 39.3 million m<sup>3</sup> of veneer products. The largest wood exporting countries were China, India, Indonesia, Malaysia, Vietnam, Thailand, Myanmar, Lao PDR, Philippines, Papua New Guinea, Solomon Islands, and Cambodia.

The estimated wood imports for the Asia-Pacific countries for the same period were 454.23 million m<sup>3</sup> with 37.85 million m<sup>3</sup> imported annually. That imported wood volume consisted of 216.6 million m<sup>3</sup> of industrial roundwood, 122.9 million m<sup>3</sup> of sawnwood, 74.48 million m<sup>3</sup> of plywood, and 40.23 million m<sup>3</sup> of veneer products. The largest importer countries were China, Japan, India, South Korea, Taiwan, Indonesia, Malaysia, Vietnam, Thailand, and Australia (Sinly S. et al. 2022).

For the wood of the two species that were preliminary selected are listed in CITES' Appendix II including *Dalbergia cochinchinensis* and *Dalbergia oliveri* is allowed to be traded but under strict controls to ensure the sustainability of natural habitats. Wood volume exported by Asia-Pacific exporter countries over the period from 2010-2021 of these two species was 738,411.19 m<sup>3</sup>. The exported wood of *Dalbergia cochinchinensis* accounted for 38% (282,522.77 m<sup>3</sup>) of that total, while that of *Dalbergia oliveri* was responsible for 62% (455,888.42 m<sup>3</sup>) of those exports. The assessments excluded export data whose units could not be summed together, encompassing the number of specimens (live trees/seedlings), wood logs, and products.

Consumers in China are the major purchasers of hardwood furniture among the six countries studied. In China, 76 percent of respondents reported purchasing hardwood furniture, whereas only seven percent was reported in Cambodia in the past two years. While the demand trends of heartwood furniture has been increasing in Thailand, Vietnam, and China, that was found low in Cambodia (UNEP 2022).

On the other hand, a case study on NDF in Choam Ksant district, Preah Vihear province of Cambodia, appeared that the target timber species including rosewood were of high-value and have been used in the processing of various forest products and by-products. This was indicative of the multiple uses of those species that are traded and that are in high demand in the markets (Sinly S. et al. 2021). The same study suggested that the volume of the trade of processed forest products and by-products originating in the harvested areas seemed to substantially decrease in combination with declines in the target timber species as well as other timber species, reflecting the increasingly limited availability of wood resources.

In general observation, the places where people purchase hardwood furniture in Cambodia were traditional furniture stores or small-scale household outlets that sell processed forest products and by-products.

### **2.2.2 Most Popular Species for Hardwood Furniture**

The KAP survey (2022) found that there are clear preferences among consumers for Rosewood and Teak as well as Mahogany and Oak in China and the Lower Mekong countries. Several in-depth interview respondents from China mentioned that Rosewood furniture has certain desirable characteristics which account for its popularity such as collectible value and an artistic feel.

The illegal logging and trafficking of *D. cochinchinensis* and *D. oliveri* associated with Cambodia has transboundary connections that often culminate in markets in China. These connections have been especially reflected in the volume of Vietnam's imports of logs and sawnwood from Cambodia that have been destined for the Chinese markets (Phuc et al., 2016).

There was some variation in hardwood preferences within China and the Lower Mekong countries, and one of the specific species "next up" to become new widely-exploited tree species for domestic and export markets in the Lower Mekong region would be Agarwood (Eaglewood).

Agarwood is a fragrant resin, which is produced by certain trees of the genus *Aquilaria*. Agarwood has multiple uses and has been utilised for over 2000 years for medicinal, aromatic and religious purposes (Lee and Mohamed 2016).

In Cambodia, agarwood has been traded as various products and derivatives, including oil, wood, wood chips, and live seedlings. Cambodia exported a total of 315 087 kg of wild agarwood (chips) between 1993 and 1998, and those were reported exporting to Taiwan (Barden, Awang, Mulliken, & Song, 2000). There was nothing for a decade until small amounts were recorded again starting in 2008. A considerable amount of agarwood chips was once recorded in 2009 and 2016, when 10 000 kg and 200 000 kg were exported, respectively. Some export figures were recorded in the Forestry Statistics of the Forestry Administration, but not reported in CITES trade data. In total, from 1993-2019 Cambodia has exported primary agarwood products and specimens with 525 200 kg of chips, 0.5 m<sup>3</sup> of wood, 200 seedlings of live specimens, 257 kg of extract, 14 liters of extract, and 132 liters of oil, primarily *A. crassna* (Dany C. et al. 2022).

From 2003-2020, Cambodia has imported agarwood and its derivatives with 20,652 kg of chips, 192 kg of logs, 3,080 kg of sawn wood, 76.5 kg of derivatives, 571 kg of root, and 434 liters of oil. The vast majority of those were imported from Malaysia and Thailand. It is noted that all the imported agarwood chips to Cambodia was from a few species including at least 6,142.5 kg of imported agarwood chips (29.74% ) was *A. crassna*, while 0.97% was from *A. malaccensis* , 0.24% was from *A. filarial*, and 69.05% was from *Aquilaria spp* (Dany C. et al. 2022).

### **2.2.3 Influencers and Certification for Avoiding Illegal Tree Species**

In China and across the Lower Mekong countries, style and design and quality were reported as the main influencers on consumer's decisions around purchasing hardwood furniture. Forest crime

related influencers such as avoiding illegal tree species and certification were secondary influencers, alongside price, especially in Vietnam and Thailand, which were shifting to be more environmentally sensitive. In contrary, any of these “recommendations” was not considered an important influencer of hardwood purchasing behaviour in Cambodia (UNEP 2022).

## 2.2.4 Hardwood Alternatives and Composite Wood Products

According to the FAO, the demand and trade of tropical industrial timber worldwide is about 15 million cubic meters per year in 10 years (2005-2014), and the teak roundwood contributes more than 1 million cubic meters per year, equivalent to 7%, while teak sawnwood averaged 0.12 million cubic meters per year during the same period. The countries that export and supply teakwood include Myanmar (43% of teak roundwood and 50% of teak sawnwood) and countries in Latin America (Ecuador, Costa Rica, Panama and Colombia) and Africa (Ghana, Côte d'Ivoire, Benin, Togo and Nigeria). Major importers include India, Thailand, China, Taiwan, South Korea, USA, Europe and other Asian countries. The price of teak wood in the international market is between 350-1,000 USD per cubic meter (FAO, 2015; ITTO, 2020).

Rubber wood furniture seems to be more popular than rosewood in China, and this is likely due to a combination of multiple factors including cheaper price, eye-catching design, as well as China’s new ban on imports of illegal wood. On the other hand, composite wood products (particle board and plywood) are popular alternatives to solid timber in Cambodia. As these hardwood alternatives are already popular with consumers, they are likely to be open to choosing alternatives to hardwoods more often in the future with the right incentives (UNEP 2022).

In Cambodia, the instance that rosewood furniture can be substituted is teak. Teak wood is medium density, hard, yellowish brown, fragrant and oily that repel insects. It is one amongst other local timber species that are considered good luxury wood for construction, furniture, home decoration, musical instruments, railroad, etc. (Dy Phon, 2000; Orwa et al., 2009).



Figure 5. Teak products--wooden furniture made of teak in Lamphat district, Ratanakiri province

Photo: ChhunVirak-ITTO Mekong Teak-FA 2022

Since there is not much supply of teak wood originated domestically from various sources in Cambodia, the made-of-teakwood products and furniture could hardly be found both in local markets and at wood processing factories. In 2021, a wide range of made-of-teak wood products are seen extensively promoted for marketing sales on social media. Teak Wood Furniture Cambodia is a local wood processing factory that has just started its own wood processing business for 6 months, and all teak wood products are processed from teakwood harvested from their own teak plantation established since 2000. There are numerous types of teak wood products getting

purchasing orders, including round and rectangle wooden tables, foldable wooden tables, wooden arm chairs, complete set of wooden sofa, many kinds of wooden furniture, wooden decoration material for construction, long wooden dinner tables, wooden beds, teak plywood, and other types of teak sawnwood. Such business is flourishing well with piles of pre-orders in a satisfactory manner (Sinly S. et al 2022).

### **2.2.5 Responsible Purchasing**

KAP survey (2022) revealed that young people (18-29) and adults (30-39) were greater awareness of the concept of responsible purchasing. Regardless of their age, in urban area where there is higher demand for hardwood, the residents were reported with greater awareness of the concept than that of the rural residents, which is good for target. However, male respondents were more likely to be aware of the concept of responsible purchasing.

The survey also found that people perceive the concept of responsible purchasing with ‘certified or legal products,’ ‘not from protected trees’ and ‘zero deforestation’ at relatively high levels, which appears a concrete understanding as it is linked to forests and wood products.

More interestingly, the government is one of the main stakeholders who are the levers for making drastic changes in purchasing behaviour, and for ensuring that responsible purchasing happens, followed by manufacturers, retailers and lastly consumers. This means that they believe that government and manufacturers are key to ensuring responsible purchasing.

The same study also suggested that respondents do not necessarily make a connection between their purchasing behaviour and the market actors supplying illegally harvested wood. If they do not place themselves in the picture when thinking about the overall supply chain for illegally harvested wood, they likely do not see the role that they can play in preventing forest crime. This reflected that people just highlighted the governments’ responsibility in both the enforcement of laws prohibiting forest crimes as well as in breaking the linkages between authorities and the actors perpetrating illegal logging, but it indicated that there is a lack of willingness to take personal responsibility on the issue of forest crime, and that they are unable to have impact on forest crimes as individuals. Actually, Cambodian people seem not to be familiar with environmentally friendly certification “certified products”, which indicates that the very few consumers in Cambodia that purchase certified products may have more to do with availability of such option than their willingness or understanding of the matter.

## **2.3 Forestry-related Legislations, Regulations and Policies**

### **2.3.1 Management Practices and Law Enforcement**

There are some general management measures for forest management and protection in Cambodia as follow:

- Laws and regulations: Forestry Law and other relevant regulations.
- Law enforcement, and
- Incentives for tree planting

#### **A. Forestry Law (2002)**

- Article 30 of the Forestry Law implies that it is prohibited to process forest products and by-products or establish and operate a forest industry, including a sawmill or a forest products and by-products' processing facility, as well as all types of kilns in the domains of Permanent Forest Reserves.

- Article 76 of the Forestry Law stipulates that forest offenses are criminal offenses, which are specially defined in that law. The Forestry Administration officials who are qualified as judicial police officials have jurisdiction to investigate forest offenses and file such cases and documents in the court. Every level of the Forestry Administration shall have the duty to investigate, control and suppress forest offenses within their assigned territory. The operation of Forestry Administration officials qualified as judicial police officials shall be implemented consistent with the Law on Criminal Procedures.
- Articles 96, 97, 98, and 99 of the Forestry Law are related to punishing and penalizing of forest offenders who violate the provision of the Forestry Law according to the degree of forest offense.

## **B. Other Relevant Legislations**

- Sub-Decree 53, dated 29 May 2006, issued by the Royal Government of Cambodia, is concerned with the Trading of Endangered Flora and Fauna species listed in CITES Appendices. Every species listed in CITES Appendix I is highly restricted with regard to cross-border trading, with the exception of some instances that are prescribed in the CITES Convention, while those listed in Appendix II are also under similar restrictions.
- The Ministry of Agriculture, Forestry and Fisheries issued Prakas 89 in 2005 on Prohibited Forest Products and Non-timber Forest Products for harvesting from Reserved Permanent Forests in Cambodia. The declaration also regulates minimum felling limits based on the diameter at breast height (DBH) of *Aquilaria crassna* which is categorized as third category with the minimum DBH for the allowable cut established as 0.35 m, whereas DBH *D. cochinchinensis* and *D. oliveri*, which are categorized as luxury species, is defined with the minimum DBH for the allowable cut established as 0.45 m.
- A regulation No. 601, dated 24 April 2014, issued by the Council of Minister of the Royal Government of Cambodia. The Royal Government of Cambodia has suspended its exporting of all forest products and forest by-products derived from luxury grade timber species until it is informed via a new regulation. This aims to improve sustainable forest resource management and usages.

## **C. Law Enforcement**

In recognition of the loss of some of its biodiversity and land conflicts in the country, the Royal Government of Cambodia, in mid-2020, commenced implementation of a campaign to increase private and state land registration on long-term, temporarily-occupied forestland used by local villagers. That measure, which is still in the initial stage of data collection, is ultimately expected to reduce land conflicts, forestland encroachment, and forest offenses throughout the country.

Law enforcement and patrols by hundreds of rangers and forestry administration officials, as well as community forestry committees in protected areas, permanent forest reserves and community forests, continue to be regularly conducted throughout the forest area to crack down, and prevent illegal logging, harvesting of timber products and non-timber forest products, poaching and clearing of forestland.

### **2.3.2 Incentives Policies and Regulations for Tree Planting**

#### **A. National Forestry Policy**

The Royal Government of Cambodia's Declaration on National Forestry Policy 2002 urges Cambodians and the private sector to be involved in forest conservation in order to ensure food security, alleviate poverty and contribute to socio-economic development. Additionally, the Royal Government of Cambodia has been encouraging investment in all forms of tree planting, such as



individual plantations, private plantations, economic land concessions, and public-private partnerships to create a source of local timber supply and export from tree plantations to replace the source of supply of timber from natural forests. The Royal Government of Cambodia's policy to encouraging tree planting work is as follows:

- Promote the dissemination of education and campaigns on education, public awareness of the forest to all walks of life in Cambodian society.
- Encourage the supply of timber from forest sources instead of natural forest sources by encouraging private investment and public sector participation.
- Increase efficiency in the use, processing and marketing of forest products, especially forest products, to support the supply of domestic demand and for export.

## **B. Legislations and Regulations**

### **Forestry Law (2002):**

#### Article 46-

- Any individuals that plant trees on private land or on state forest land where they have granted user rights, have the right to maintain, develop, use, sell, and distribute their products.
- Ministry of Agriculture, Forestry and Fisheries shall issue a Prakas to determine the rules on tree plantations in order to encourage individuals to plant and maintain tree plantations.

#### Article 59-

- People, armed forces, and authorities of all levels shall have the obligation to participate in tree planting and reforestation.
- The participation of the people in tree planting and reforestation shall be encouraged by the Royal Government of Cambodia through mobilizing communities and other social organizations.
- The Forestry Administration shall develop appropriate measures for forestry development through extension, education and motivation of individuals, communities and people to plant and protect forests, and by providing necessary technical assistance.

#### Article 61-

- The planting of trees within the State Forestland may be done directly by the Forestry Administration, Community Forestry, or by participation of people through a granted right to use state forest.
- Tree planting on private land may be done by private entities in accordance with rules on private forest as stated in Article 46 of this law.
- Rules on granting rights to use state forestland to plant trees shall be determined by Anu-Kret. These rules and regulations shall take into account the potential social and environmental impact of the selected species to be planted.

### **Regulations**

- Sub-Decree No. 26R.N.Kr.B.K dated March 25, 2008, on the rules for granting the right to use state forest land for tree planting: Granting the right to use degraded forest land or state vacant land for tree planting.
- Letter No. 120 S.J.Nr.S dated February 08, 2017 (the Council of Ministers): Authorization of the principle of planting trees on degraded forest land in cooperation between the state and the Public Private Partnership (PPP). In principle, the Royal Government has permitted planting trees on previously exploited forest land, on degraded land, and vacant state land.

- Letter No. 1211 S.J.Nr.S.K dated November 28, 2017 (the Council of Ministers): Promoting the improvement of the living standards of local communities in order to minimize their dependence on timber in order to create a source of supply of timber and energy from tree plantations (a strategic direction set out in the long-term forest management vision in the).
- Letter No. 1704S.J.Nr.S.T dated November 18, 2019 (the Council of Ministers): Decreasing export tax rates on plantations and plantation products to encourage tree planting investors such as:
  - ✓ Preferential reduction of 50% of total export tax obligation on the export of domestic plants.
  - ✓ Imposing an export tax on the state regarding the export of domestic furniture and finished products
  - ✓ The competent authority must confirm the export license with the scientific names and the trade name of the timber. It shall be specified as a species of locally grown timber or a product derived from locally grown timber.
- Proclamation No. 327 BrK.K.S.K dated May 26, 2017, of the Ministry of Agriculture, Forestry and Fisheries on "**Private Forest**"
  - ✓ the owner of a private forest who registered the private tree plantation land as "**Private forest**" have the right to maintain, develop, use, sell and distribute their plantation products. If private forest owners need technical assistance;
  - ✓ the Forestry Administration can provide technical training services for afforestation and plantation management;
  - ✓ The permit for the transportation of wood products originating from private forests to supply to customers or the local market is not required (LP);
  - ✓ Before harvesting timber in a private forest plantation, the owner of the private forest must notify the competent local forest administration, be responsible for inspecting the amount of timber collected, and have the harvesting activities of the private forest owner written.

### C. Strategic Plan

Rectangular Strategy Phase 4, 2019-2023: Focus on managing and conserving forest resources to ensure the sustainability of national economic growth and improve the livelihoods of people in rural areas by increasing planting trees and restoring the forests.

The National Strategic Development Plan 2019-2023 emphasizes the need for Cambodia to increase the sustainable management of forest and wildlife resources by reinforcing the implementation of forest laws to promote reforestation. The National Strategic Development Plan sets out a national target indicator that the number of trees planted will be collected annually at 200,000 cubic meters in 2019 and will increase annually to 300,000 cubic meters by 2023.

National Forest Program (2010-2029): Prioritizes multi-purpose afforestation to boost local supply, cut down poverty and improve rural livelihoods, significantly reducing the pressure of using timber from natural forests and aiming to increase forest cover. Key activities include:

- Sustainable forest management and poverty reduction through reforestation
- Private forest development with a focus on multi-purpose tree planting, which has the potential to serve local timber needs and increase the income of local people

- Developing cooperation on the establishment of plantations between the private sector community and the forestry administration through developing a "model agreement" on the management and distribution of benefits.

Cambodia Sustainable Development Goal Framework 2016-2030 has been reviewed and set out goals by ensuring the conservation, restoration, and sustainable use of ecosystems and services, especially mountainous forests, in accordance with their obligations under international agreements and setting national target indicators by achieving 50% forest cover by 2030, which must be increased from 48,8% in 2016.

## **2.4 Perceptions and Awareness of Forest Crime**

### **2.4.1 Local People and Forest-dependent Livelihood**

The majority of Cambodian people in rural areas depend on the forests for their livelihoods. Forests provide people with firewood for cooking (80%) and timber for constructing their houses. Non-timber forest products provide local people with food, medicine, and small-scale income generation opportunities. People from countryside areas reported good knowledge of a wide range of common tree species. For example, which species of tree produced high-valuable wood, the top species names given were Rosewood, Teak and Agarwood (Eaglewood). Meanwhile, they observed that illegal timber trade has been in decline over the past three years (UNEP 2022).

Some cases along the Cambodia-Thai border at the Emerald Triangle in the last decade, it was recognized that there used to be a few local people who committed illegal cutting, transporting, and trading of *D. cochinchinensis* and, to a lesser extent, *D. oliveri* that was occurring in many parts of the forests throughout the district with some of the wood even crossing the borders into Thailand and Laos (Sinly S. et al. 2021).

### **2.4.2 Declining of Illegal Timber Trade**

In Cambodia, the main reasons attributed to the decline in illegal timber trade were (i) fewer trees now, (ii) a tighter regulations and difficulty in getting permission to cut trees, and (iii) community support (UNEP 2022).

The case study in Choam Ksant district indicated that it was reported that after 2016 the volume of the trade of processed forest products and by-products originating in the legally harvested areas seemed to substantially decrease in combination with declines in the target timber species as well as other timber species, reflecting the increasingly limited availability of wood resources. Since wood production in the district has been reserved for domestic uses, there are no data that are related to legal wood exported to other countries. The district could, nevertheless, be considered to be one of the principal crossings through which timber has been illegally transported to other areas throughout the country or even exported to Vietnam. During the period between 2013 and 2019, the total wood volume associated with the illegal logging of *D. cochinchinensis* and *D. oliveri* was 31 m<sup>3</sup> and 27 m<sup>3</sup>, respectively, as reported by the Choam Ksant Forestry Administration Division (Sinly S. et al. 2021).

### **2.4.3 Forest Crimes and Its Associated Factors**

The top reasons given by rural respondents why they would not fell a protected tree were related to illegality and enforcement. The vast majority of respondents reported "afraid of competent authority and rangers" as a major reason. This reported awareness of illegality and potential consequences for breaking laws prohibiting felling protected trees indicates that many local people are aware of and

have respect for the law. The illegality of illegal logging was one of the most prevalent reasons given for not doing it. The awareness and concern that illegal logging is damaging to the natural environment was prevalent, “bad for the environment” was such an instance of the least important reasons for not felling a protected tree. Logging of protected tree species is more closely associated with forest crime, followed by encroachment. It should be noted that forest encroachments is a sensitive and complex issue as this also touches on access to land and land tenure especially for local and indigenous communities. In Cambodia, women reported a greater awareness of illegal logging than men did, and regardless of gender, Cambodian people over 40 reported greater awareness (UNEP 2022).

The surge of new settlements has increased the threat of the rate of forestland conversion in the district, as well. Forest fragmentation in the Choam Ksant district occurs after a large area of contiguous forest has been subdivided into smaller forest patches by roads, agricultural practices, urbanization, and other developments. That was apparent with the harvesting of the target species since the harvesters of these species did not only clear forestland for agriculture or residential purposes, but also entered the forests near their homes searching for high-value commercial timber species (Sinly S. et al. 2021).

**2.4.4 Awareness Raising Roles of News and Media**

Regarding the sources of awareness on illegal logging, gaining awareness through word of mouth from friends and family was more common, but news and media were also reported as being important sources of awareness, although local government and the police were reported as important sources of information about illegal logging (UNEP 2022).

**III. Behavioral Change Campaign Plan**

**3.1 KAP Index and Behavioural Compliance**

The KAP Index is a one-number indicator in which the answers to the knowledge, attitudinal and behavioural questions have been aggregated. A high KAP Index is synonymous with high behavioural compliance, meaning people are more likely to take actions that would mitigate the impact of forest crime, such as not buying hardwood from endangered species or engaging in illegal logging activities. Unfortunately, Cambodia had a relatively low KAP index (20), indicating gaps in knowledge, attitude and practices on forest crime prevention and response. Based on over 230 studies using the KAP Score model, it has been identified that a KAP Index below 60, is a strong indicator that some form of intervention is needed. However, the KAP index is higher in urban Areas of Cambodia, at 22, compared to that in rural area with only 17. This indicates that people in urban areas have a better understanding of illegal logging and its impact, so higher educational attainment, access to information and socio-economic status are likely playing a positive influence on the KAP scores of people in urban areas. In Cambodia, around nine out of ten respondents were found in the first two stages of change (knowledge formation and belief). The results confirm that more education around forest crime and its impact is needed through awareness-raising and knowledge-building initiatives (UNEP 2022).

Table 1. Recommended intervention/campaign for the desired behavioural change outcomes

COUNTRY	KAP SCORE	BEHAVIOURAL CHANGE OUTCOME	CAMPAIGN/ INTERVENTION	TARGET GROUP
CAMBODIA	Low	Shift to more sustainable livelihoods; Register plantations	Awareness campaign on protected tree species, alternatives to illegal logging and how to register plantations	Forest dependent communities

COUNTRY	KAP SCORE	BEHAVIOURAL CHANGE OUTCOME	CAMPAIGN/ INTERVENTION	TARGET GROUP
CHINA	Medium	Consumers shifting to more sustainable wood options	Advocacy campaign for reducing consumer demand and of more sustainable alternatives	Young, urban consume
LAO PDR	Low	Report illegal forest activities	Awareness campaign on ‘what is illegal wood and how to report illegal activities’	Forest dependent communities
MYANMAR	Low	Protect illegally traded wood species like Rosewood	Awareness campaign on ‘what is illegal wood and how to report illegal activities’	Environmental networks
THAILAND	Medium	Report illegal forest activities; Shift to sustainable wood enterprise	Advocacy campaign on how to report illegal activities, manage forest lands and shift to sustainable wood enterprise	Forest dependent communities
VIETNAM	High	Young consumers shifting to more sustainable wood options	Advocacy for reducing consumer demand and awareness of more	Young, urban consumers

Source: UNEP 2022

### 3.2 Social Norms as Influencers

When looking at behaviour change, it is essential to consider the potential impact of social norms. Strong social norms can influence people to behave against their conscience or what they believe is right. In such cases, affecting people to change their behaviour may be less effective unless social norms are also tackled.

In urban areas, social norms were measured by presenting respondents with a scenario in which their parents offered to buy them some new furniture made from Rosewood. When finding out the furniture came from a protected tree species, they had to decide whether to accept them or not. Relatively stronger social norms were found in Cambodia compared to the other, more developed countries. Social norms are more pronounced in rural areas when looking at Cambodia. The KAP survey results show that social norms influence people to some extent concerning forest crime and buying hardwood, and those must certainly be considered in Cambodia (UNEP 2022).

### 3.3 Lacking of Knowledge on the Link between Consumer Demand and Illegal Logging

All countries have relatively limited knowledge regarding consumer demand being the main driver for illegal logging. This shows that people in general do not comprehend that there is a link between consumer demand for hardwood and illegal logging. More specifically, Cambodian people have greater knowledge about (i) illegal logging happened in Cambodia and (ii) its adverse impacts on the environment, economy and society, but fairly limited to the extent that deforestation is a key driver of climate change. On the other hand, Cambodia people have a very limited knowledge about (i) high consumer demand is the main driver for illegal logging and (ii) many tree species in the Mekong region are at risk of becoming extinct (UNEP 2022).

### 3.4 Attitudes Towards Illegal Logging (Unauthorized logging)

People express apathy towards illegal logging and think the problem is exaggerated. Moreover, they do not feel illegal logging is a problem that can be solved and there is a perception that buying furniture from protected tree species is more important than the impacts of illegal logging. In general, the majority of Cambodian people stress their attention on the issues of (i) buying and selling endangered tree species is OK, even if it was illegal, (ii) illegal logging is an exaggerated

problem, there are plenty of trees, (iii) illegal logging is not a problem that can be solved by our generation, (iv) a profitable timber trade is more important than saving trees, but only few people hold their attitude to the issues “most people do not care about illegal logging.” Cambodian people hold the most positive attitudes, and because many of them do not have the economic means to buy hardwood furniture, they do not put importance to it. On the other hand, they are affected negatively by illegal logging, so they see it as a problem, but know that other people do not care about it enough. The study also suggests that a positive attitude is a good indicator for a campaign if it seeks to engage with people (UNEP 2022).

### 3.5 Behavioural Compliance

In general, behavioural compliance is low in Cambodia. Many Cambodian respondents said they would persuade a friend not to buy furniture made from protected tree species, and some of them said they would (i) persuade a relative not to take a job that support illegal logging and (ii) have spoken to friends about the negative effects of illegal logging. On the other hand, fewer people who agreed and supported the behavioural compliance that they (i) report if someone is involved with illegal logging or trading protected tree species, (ii) prefer to buy wood products if they were certified legal or sustainable, (iii) have supported forest protection activities (e.g. community patrols, attend training etc.), and (iv) have donated money to an environmental cause (UNEP 2022).

### 3.6 Most Effective Media Channels

KAP study (2022) by UNEP found that most Cambodian respondents own smartphones, TVs, laptops, and cellphones with 93%, 60%, 17%, and 15%, respectively, among the total 400 respondents. The media usage is dominated by internet (social media) and TV. The top popular and widely used channels are Facebook and TikTok. Younger people and urban dwellers use social media significantly more relative to older people and rural dwellers. Messenger is by far the most popular online chat service, followed by Telegram. Most Cambodian respondents reported that the channels they have trusted the most were Facebook (90%), YouTube (65%), and TV News (45%). Respondents in Cambodia reported relatively high levels of influence from a wide range of stakeholders, although family and environmental protection NGOs were at the top of the list.

Family, friends, government officials and environmental protection NGOs are the top influencers for potential campaigns against illegal logging. However, respondents across all countries listed friends and family among their top preferred channels for sharing information. Social media was also a preferred place to share information. Notably, community meetings were universally less preferred than social media as a place to share information.

### 3.7 Recommended Pilot Interventions/Campaign

Since the KAP (related to illegal logging and illegal forest trade in the lower Mekong and in China) score of Cambodia is moderately “**low**”, it is advised that the behavioural change outcome be “a shift to more sustainable livelihoods and plantations registration.” For the campaign, the recommended interventions are “awareness campaign on protected tree species, alternatives to illegal logging and how to register plantations.” The target group to be focused on is forest dependent communities (UNEP 2022). KAP score Index analyses the situation, defines the gaps, and recommends the influencers and campaign focus as follow:

#### Situation:

- Lack of sustainable or diverse sources of income in forest communities;
- Lack of understanding that consumers of wood products is a main driver of illegal logging;

- Lack of understanding that many trees in the region are at the danger of being extinct.

#### **Gaps/Barriers:**

- Many respondents are familiar with responsible purchasing (related to forest and non-forest products) but practice remains limited;
- Awareness about illegal logging is limited, but many consumers have a positive attitude, with regards to fighting illegal logging and trade, for example, they believe this issue can be solved by this present time and by Government.
- As a result, functional behaviour is limited and there is evidence to suggest some people in rural areas are involved in the forest and non-forest produce trade.

#### **Media/Influencers:**

- Many people access and more likely to be influenced by narrative direction social media and the information presented on TV, Internet, particularly Facebook and TikTok; however, people don't know credibility and reliable sources of those information
- Rural communities consider local governments as trusted sources of information.

#### **Campaign Focus:**

- Need for education about legal harvesting, illegal logging and its impact;
- Need to promote tree planting (especially high value and endangered tree species) and enhance protection for endangered tree species;
- Engagement with local communities needs to consider providing alternative livelihoods through agro-forestry practice and tree planting that are sustainable.

### **3.8 Communications Campaign Plan (two-year period)**

The Forestry Administration plans to produce a 10-15 minute video spot and design material including five posters covering the issues and communication interventions focusing on protected tree species, alternatives to illegal logging and how to register plantations for behavioural change campaigns (See table 4).

**Communication Interventions:** A production of 10-15 minutes video and five posters will be produced to carry key messages quoted from findings, analyses, and KAP study (UNEP 2022) that include the key interventions:

- Awareness campaign on current status in the wild and sustainable uses of tree species: “promoting of tree planting and ex-situ genetic conservation, especially especially CITES-listed tree species such as rosewood and agarwood species;”
- Alternatives to illegal logging: “promoting of establishment and registration of forest plantation particularly hardwood, teak and fast-growing tree plantation for domestic uses and substitute harvesting from natural forest;”
- Diversification of income sources for forest communities “promotion of agroforestry practices and tree planting to provide short and long-term benefits from tree plantation (rosewood and agarwood species).”

**Video Production:** A 10-15 minute video include the following aspects:

- key overviews on CITES conventions and its restricted practices;
- current status of key endangered tree species (rosewood and agarwood) in Cambodia;
- consumers of wood products area main driver of illegal logging;

- forest-related legislations and regulations, as well as main articles for law enforcement implementation, in Cambodia;
- individual's contribution to preventing illegal logging and reporting;
- the practices with responsible purchasing;
- the development and establishment of rosewood and agarwood plantation in Cambodia (Ex-situ conservation), alternatives to illegal logging;
- key message concepts (information and motivation for behavioral changes);
- a shift to more sustainable livelihoods via promoting agroforestry practices with planting rosewood mixed with fruit trees;
- substitute hardwood products with teak; and
- practical procedure on guidelines and incentives for private forest registration.

**Design Extension Material:** five posters will be designed and extracted from 10-15 minutes video. The printed posters will be shared to all forestry communities and provincial FA cantonments during the workshop, and also, these material will be posted on online platforms such as Facebook and YouTube. The five posters include:

1. Poster on current status of rosewood including *D. cochinchinensis* and *D. oliveri*;
2. Poster on current status of *Aquilaria crassna*;
3. Poster on promotion of hardwood tree planting and teak wood products;
4. Poster on community participation in tree planting and promoting agroforestry practices; and
5. Poster on practical procedure on tree planting and private forest registration in Cambodia.

The above two previous posters shall be integrated with the key topics to covers will be illustrated to raise public awareness and understanding with respect of:

- (i) current status many tree species in the region are at the danger of being extinct (rosewood and agarwood);
- (ii) consumers of wood products are a main driver of illegal logging and individual contribution in preventing illegal logging and the practices with responsible purchasing; and
- (iii) forest-related legislations and regulations, as well as main articles for law enforcement implementation, in Cambodia.

**National Extension Workshop (as options, it will be co-sponsored by ongoing forestry-related projects in Cambodia):** When a successful production of 10-15 minutes video, a national extension workshop will be conducted for outreach activity and raising public awareness, including the key topics as the following:

- Launch 10-15 minutes video on “A shift to more sustainable livelihoods, and private rosewood and agarwood tree plantations registration in Cambodia”
- The 10-15 minutes video will be upload on YouTube and posted on FA's Facebook, boosting it extensively to reach target groups including urban users of hardwood furniture, Forest dependent communities, primarily selected stakeholders, and key influencers including FA's officers, rangers and law enforcement officials;
- Presentation on practices of CITES convention and control of international trade, current status of key endangered timbers species listed in CITES Appendix II (rosewood and agarwood);
- Presentation on current status of illegal logging and law enforcement in Cambodia, and how illegal logging can be reported as individual for a safer;



- Presentation on Practical Procedures for Private Forest Registration in Cambodia, and enabling conditions and incentives for establishment of private tree plantations, principally CITES-listed tree species;
- Presentation on business-related preparation to promote private sector to participate in the establishment of small-scale private plantations of *D. cochinchinensis* and *D. oliveri*

**Target audience:** the target groups to be focused on and be invited to the extension workshop will include (i) forest-dependent communities (community forestry), (ii) provincial CF network, (iii) private sectors who are interested or invested in private rosewood and agarwood plantations, (iv) representatives from all Forestry Administration cantonment and divisions, as well as officials from central Forestry Administration, (v) non-timber forest products processing and handicraft. In total, there will be more than 100 participants to be invited to the workshop. The women participants will be encouraged to attend. Additionally, the urban users of hardwood furniture and furniture outlets in urban will be focused for boosting communication campaign on social media (FA’s Facebook). The telegram group will be created for participants who attend a national extension on communications campaigns, and the material encompassing 10-15 minutes video and five posters will be shared.

**Budget:** The estimated budget for implementing communications campaign plan will be approximately USD 32,000, which includes the following expenses:

- USD 8,500 for the production of 10-15 minutes video on “A shift to more sustainable livelihoods, and private rosewood and agarwood tree plantations registration in Cambodia”
- USD 5,500 for design and print 150 sets of each poster that will distributed to target audience (Forestry Communities, Community Forestry Networks, provincial Forestry Administration cantonments, and private sectors)
- USD 18,000 for organizing a National Extension Workshop and boosting FA’s Facebook.

**Note:**

A- The secured funding is total of 19,500, which includes 5,000 USD – to be transferred by UNEP as part of SSFA and the other 14,500 USD – for the national workshops to be transferred by FAO to FA. Other outstanding fund for this implementing communication campaign plan will be co-sponsored by ongoing forestry-related projects and development partners in Cambodia, especially for sponsoring the national extension workshop. The production of 10-15 minutes video and national extension workshop is set to be prioritized.

B- In case, if the funding is not able to be mobilized for the above three activities, the activity for designing and printing of posters for distributing to target audience will not be conducted.

**Main Activities and Timeline**

The expected duration of the communication campaign plan is for 2 years.

Table 2. Main Activities and Schedule for implementation of communications campaign plan

No	Activities	Tentative Timeline (2023-2024)
1	Submit draft of communications campaign plan to UNEP for review and comment	9 January 2023

2	UNEP provides feedback and comments, and endorse the revised communications campaign plan	9 February 2023
3	A contract for the production of 10-15 minutes video	20 February 2023
4	The production of 10-15 minutes video	25 Feb - 25 Mar 2023
5	Design and print 150 sets of five posters	15 Feb - 25 Mar 2023
6	Preparation of material and coordination with other projects for co-sponsor the National Extension Workshop	March-April 2023
7	Organize the National Extension Workshop	May 2023
8	Continuous and regular posting of produced video and communication material for campaign on FA's Facebook quarterly	Quarterly (2023-2024)
9	Development of a project proposal for submitting to development partners and donors for implementing KAP countrywide assessment and impact of communication campaign plan.	From Quarter 3 of 2023
10	Conduct KAP countrywide assessment and impact of communication campaign plan.	From Quarter 1 of 2024 (If funded)
11	Conduct a national extension workshop on the result of KAP countrywide assessment and impact of communication campaign plan.	Quarter 4 of 2024 (If funded)
12	Revisions of legislation and related regulations (under the new forestry law) will be based on the outcomes from KAP countrywide assessment and impact of communication campaign plan.	From Quarter 3 of 2024 (If funded)

Table 3. A Communications Intervention to Achieve Behavioural Change

Problem Statement	Behavioural change Outcome	Behavior to promote	Attitude to promote	Knowledge to promote	Barriers to change	Factors encouraging ideal behavior, overcoming barriers	Communications intervention
Lack of understanding that many tree species (rosewood and agarwood) in Cambodia, as well as in the region are at high risk of being extinct	By end-2023, the level of public understanding of endangered timber species (rosewood and agarwood) will be enhanced through education video spot.  In addition, there will be additional private forest plantations (rosewood and agarwood) to be submitted for registration (360 ha, baseline 2022)	Forest-dependent communities and Cambodian people keep aware of current status of many tree species (rosewood and agarwood) in Cambodia that are at high risk of being extinct; Secondly, local communities and private sectors are interested and invest in rosewood and agarwood plantation, and requests for private forest registration, will be submitted to FA	Forest-dependent communities and Cambodian people understand that illegal logging is not an exaggerated problem, many tree species are hardly found in the wild and community forest and even not found in the community, so they can contribute to either solving the issue or reporting illegal logging of protected tree species in their communities.	Forest-dependent communities and Cambodian people know that plating trees or establishment of tree plantation, particularly rosewood and agarwood, can contribute to Ex-situ genetic conservation of those species in the wild.	Many respondents are familiar with responsible purchasing but practice remains limited;	The information about current status of those tree species that are at high risk of becoming extinct in the wild;  Showcase of sustainable uses of tree species through promoting of tree planting and ex situ genetic conservation, especially CITES-listed tree species such as rosewood and agarwood species.	A video spot and posters for posting and sharing on FA’s Facebook and Extension workshop to inform stakeholders about awareness campaign on current status in the wild and sustainable uses of tree species: “promoting of tree planting and ex situ genetic conservation, especially CITES-listed tree species such as rosewood and agarwood species.”
Lack of understanding that consumers of wood products is a main driver of illegal logging	By end-2023, the public awareness that consumers of wood products is a main driver of illegal logging will be mainstreamed by some extent (the majority of target audience) through education video spot	Urban Cambodian users of wood furniture and owners of private tree plantation persuade their friend and relatives not to buy furniture made from protected tree species due to negative effects of illegal	Urban Cambodian users of wood furniture no longer think that buying and selling endangered tree species is OK, even if it was illegal. And they stay aware that everyone should care about illegal	Forest-dependent communities and Cambodian people know that illegal logging is serious forest crime, penalty and punishment are inevitably taken, especially international trade	Awareness about illegal logging is limited.	The brief explanation on the impact of illegal logging and punishment by social norms, laws and regulations.  Showcase of individual contribution to	A video spot and posters for posting and sharing on FA’s Facebook and Extension workshop to inform the public about alternatives to illegal logging: “promoting of establishment and

Problem Statement	Behavioural change Outcome	Behavior to promote	Attitude to promote	Knowledge to promote	Barriers to change	Factors encouraging ideal behavior, overcoming barriers	Communications intervention
	and extension workshop	logging, but instead, use substitute wood from other species such as teak	logging, and report it if found.	of wood under CITE convention. They know that consumers can contribute to preventing illegal logging through buying certified wood products and furniture, and know about the responsible purchasing.		responsible purchasing and preventing illegal logging, and promoting of establishment of forest plantation (hardwood, teak and fast-growing species).	registration of forest plantation particularly hardwood, teak and fast-growing tree plantation for domestic uses and substitute harvesting from natural forest.”
Lack of sustainable or diverse sources of income in forest communities	By end 2023, the public interests in the practices of agroforestry and private tree plantation, especially teak as a fast-growing tree species to deviate from rosewood and agarwood species, will be increased by some extent.	Urban Cambodian users of wood furniture and owners of private tree plantation persuade their friend and relatives to buy wood products if they were certified legal or sustainable so as to stimulate the tree plantation (legal source of timber).	Urban Cambodian users of wood furniture no longer perceive that a profitable timber trade is more important than saving trees, and instead, keep them aware of considerable benefits and incentives obtained from agroforestry plantation.	Forest-dependent communities and owners of private tree plantations know about agroforestry techniques and how to make effective uses of resources originating tree plantation including silvicultural practices.	Some people in rural areas are involved in the forest trade.	The information about diversification of income sources for forest communities; Showcase of agroforestry practices and tree planting to provide short and long-term benefits from tree plantation (rosewood and agarwood species).	A video spot and posters for posting and sharing on FA’s Facebook and Extension workshop on diversification of income sources for forest communities “promotion of agroforestry practices and tree planting to provide short and long-term benefits from tree plantation (rosewood and agarwood species).”

Table 4. A Communications Campaign Plan

Desired output	Target audience	Message concept	Message appeal	Message delivery/ images	Channels	Timeline
Urban consumers and local communities become aware of current status of protected tree species that are at high risk of extinct in the wild; sustainable uses of tree species through promoting of tree planting and ex situ genetic conservation, especially especially CITES-listed tree species such as rosewood and agarwood species are enhanced.	Forest dependent communities, urban users of wood furniture, and private tree plantation owners	<ul style="list-style-type: none"> <li>• The illegal trafficking and trading of high-commercial timber species such rosewood and agarwood in Cambodia has increased the vulnerability and reduced the populations.</li> <li>• You may be hardly find those tree species in the wild, and even in your community forest.</li> <li>• Any person fell, saw, split, and chop logs and transport Forest Products &amp; By-products without a permit, there will be subject to the penalties and serious punishment.</li> </ul>	people-to-people take-home messages	Mainstreaming and enforcement	A video spot and posters will be posted and shared on FA’s Facebook and Extension workshop.	1 year
Consumers and local communities will contribute to responsible purchasing, and for alternatives to illegal logging, there will be a promoting of establishment and registration of forest plantation particularly hardwood, teak and fast-growing tree plantation for domestic uses and substitute harvesting from natural forest. Thus, private forest plantations or agroforestry practices is widely interested.	Forest dependent communities, urban users of wood furniture, and private tree plantation owners	<ul style="list-style-type: none"> <li>• Every urban buyer must be aware that you are taking part of illegal logging driver if you buy hardwood furniture.</li> <li>• To substitute those products harvesting from natural forest, the alternative uses of hardwood furniture made out of other hardwood and fast-growing tree species originating from plantation will absolutely contribute to sustainable uses for our prospective generation.</li> <li>• Establish and register rosewood, agarwood, and teak plantation will definitely contribute to sustainable uses, ex-situ genetic conservation of those tree species, and responsible purchasing as it has been highly demanded by social norm on current trend.</li> </ul>	people-to-people take-home messages	Mainstreaming and stimulation	A video spot and posters will be posted and shared on FA’s Facebook and Extension workshop.	1-2 year
Forest communities started practices with agroforestry plantation and tree planting to diverse income sources for forest communities “promotion of agroforestry practices and tree planting to provide short and long-term benefits from tree plantation (rosewood and agarwood species).	Forest dependent communities and owners of all scales of private tree plantations	<ul style="list-style-type: none"> <li>• Tree plantation and any form of agroforestry practices like plating trees of those species as living fence can provide long-term benefits from luxurious hardwood harvest and and also contribute to their genetic conservation.</li> <li>• If plant 100 rosewood trees mixed with corn as intercrop on a piece of farmland from now, there will be short-term economic return for maize harvested annually and long-term benefit which may be 1,000\$, 10,000\$, or even 100,000\$ for just 2, 5, and 20 years, respectively.</li> </ul>	people-to-people take-home messages	Mainstreaming and stimulation	A video spot and posters will be posted and shared on FA’s Facebook and Extension workshop.	1-2 year

## IV. Expected Outcomes

A monitoring and evaluation plan can help to measure change and track how it will be changed for the next one or two next years later. Revisions of legislation and related regulations (under the new forestry law) will be based on the outcomes from KAP countrywide assessment and impact of communication campaign plan, especially the sustainable forest resources management and conservation and incentives for tree plantation establishment and registration.



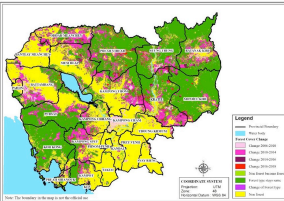
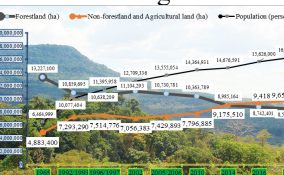
Table 5. A monitoring and evaluation plan

Objective	Knowledge indicator	Attitude indicator	Behavior indicator	Impact
By end-2023, the public understanding of many tree species (rosewood and agarwood) in Cambodia, as well as in the region are at high risk of being extinct by some extent through education video spot.	Increase in knowledge on many tree species in the Mekong region are at risk of becoming extinct	Change in perception that buying furniture from protected tree species is more important than the impacts of illegal logging.	Many people will agree and support the behavioural compliance that they, or higher willingness to, report if someone is involved with illegal logging or trading protected tree species.	The news on many tree species (rosewood and agarwood) in Cambodia, as well as in the region are at high risk of being extinct will be spread out extensively, especially among forest dependent communities, urban users of wood furniture, and private tree plantation owners.
By end-2024, the public awareness that consumers of wood products is a main driver of illegal logging will be raised by some extent, and tree plantation on teak and fast-growing tree species to deviate from rosewood and agarwood species will be more interested.	Increase in knowledge on the area that high consumer demand is the main driver for illegal logging. Increase in knowledge on steps for establishment and registration of private forest plantations (rosewood and agarwood).	Change in attitude to the fact that most people do not care about illegal logging, but instead, they will hold positive attitude towards responsible purchasing on which wood furniture and products should come from teak as a fast-growing tree species aside from rosewood and agarwood. Promoting establishment and registration of tree plantations are publicly supported.	Many people prefer to buy wood products if they were certified legal or sustainable uses (wood originating from tree plantation), or higher willingness to support establishment and registration of private forest plantations (rosewood and agarwood).	The number of people who buy wood products that are certified legal or sustainable uses (wood originating from tree plantation), will be increased, especially urban users of hardwood furniture. In addition, there will be additional private forest plantations (rosewood and agarwood) to be submitted for registration (360 ha, baseline 2022).
By end 2024, the public interests in the practices of agroforestry and private tree plantations will be increased by some extent.	Increase in knowledge on diversification of incomes through agroforestry practices and private tree plantations	Change in attitude to the area that the income source is only from illegal logging, and instead, they support agroforestry practices and private tree plantations.	Many people, especially forest communities, prefer to apply agroforestry practices and private tree plantations to diversify their income sources.	The agroforestry practices and private tree plantations will be increased in a number, particularly among forest dependent communities and owners of all scales of private tree plantations.

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**Annex 1: Draft narrative and key messages (scripts) for a 10-15 minute video production on “Current status of key selected tree species in Cambodia and a shift to more sustainable livelihoods through other hardwood, teak and fast-growing tree plantation, a substitute for rosewood hardwood products”**



Thematic areas	Length (mn)	Key Actors/ Speakers	Suggested Narrative and Key messages (scripts) for subtitle in English of the Video	Images used/ Places of video production
Key theme		Voice Over (VO)	<p><b><u>Overview (Cambodia-A country profile)</u></b></p> <p><i>“Cambodia, located on the Indochinese mainland of Southeast Asia, is a land of plains and rivers that lies amid important overland and river trade routes linking China to India and Southeast Asia. Cambodia is bordered to the west and northwest by Thailand, to the northeast by Laos, to the east and southeast by Vietnam, and to the southwest by the Gulf of Thailand” (Eye on Asia<sup>1</sup>, 2023).</i></p>	 <p>World map &amp; Angkor Wat</p> 
Sub-theme		V/O	<p><b><u>A short introduction to forest resources in Cambodia</u></b></p> <p><i>“Planting trees is like making money fall from the sky Lessons, that we can learn from the earth in growing money/ wealth”</i></p> <p><i>“From 2001 to 2021, Cambodia has lost its 2.60 million hectares of tree cover, equivalent to a 30% decrease in tree cover and 1.55 Gt of CO<sub>2</sub> equivalent emissions, while the drivers of forest loss have been noticed with (i) large-scale industrial agriculture plantations and smallholder farming, and (ii) urban expansion and charcoal production (UNEP 2022). Approximately 2.6 million hectares of forest were lost between 2002-2018 with an average of 152,941 hectares of forest destroyed every year. The population of Cambodia continues to grow steadily as reflected in the trend of population growth since 1965, which is considered to be negatively correlated with the decline in forests and forest resources. Global wood demand is expected to increase more than 50% by 2050 while the demand for wood utilization will grow, as</i></p>	<p>Forest cover Maps: 2006-2018 (Animation)</p>  <p>Graph showing positive correlation between Population &amp; Non-forest land change</p> 

<sup>1</sup> <https://www.eyeonasia.gov.sg/asean-countries/know/overview-of-asean-countries/cambodia-a-country-profile/>





			<i>well, because the majority of the Cambodian people use wood materials in construction, as fuelwood and charcoal, and for furniture.”</i>	
Sub-theme		V/O	<p><b><u>A short introduction to CITES conventions and its restricted practices for international trade of endangered tree species</u></b></p> <p><i>“CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.”</i></p> <p><i>Cambodia has been a member of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 4 July 1997<sup>2</sup>. The species that are covered under CITES are listed in one of the three CITES Appendices according to the extent of protection that they require.</i></p> <p>”</p>	 <p>CITES Brochure</p>
Key theme		V/O	<p><b><u>Current status of key selected tree species in Cambodia</u></b></p> <p><i>“What are the key selected species in Cambodia?</i></p> <p><i>These species include mainly rosewood and agarwood.</i></p> <p><i>The illegal trafficking and trading of high-commercial timber species such rosewood and agarwood in Cambodia has increased the vulnerability and reduced the populations.”</i></p>	 <p>Confiscation of illegally transported wood of <i>D. cochinchinensis</i> in the area of the Choam Ksant District.</p>
Sub-theme		V/O	<p><b><u>Current status of Rosewood</u></b></p> <p><i>“Rosewood including a numerous Dalbergia species that have been at high demand in international markets has become the world’s most trafficked wild product. In reaction to that trafficking, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has listed the 300 species under trade restrictions.</i></p>	


<sup>2</sup> CITES. Cambodia. Retrieved on 19 September 2020 from: <https://cites.org/eng/cms/index.php/component/cp/country/KH>

			<p><i>In Cambodia, rosewood family consisted mainly of Dalbergia cochinchinensis (IUCN-VU; CITES-Appendix II) and Dalbergia oliveri (IUCN-EN; CITES-Appendix II).</i></p> <p><i>In the past several decades, the illegal trafficking and trading of high-commercial timber species in Cambodia has increased the vulnerability and reduced the populations of some indigenous timber species, including rosewood. There is nevertheless still remarkably limited documentation about the current status of Dalbergia species in the country.</i></p> <p><i>Indeed, mature trees of both of these species are reported to be ‘very rare’ even in protected areas and each of the species is considered to be “critically endangered.</i></p> <p><i>Aside from threats and ecological constraints that could affect the reproduction, resilience capacities, and natural growth of D. cochinchinensis and D. oliverii, which could result in either mortality or increased vulnerability, such human-induced activities as illegal selective logging, forest burning, and clearing forestland for agriculture, caused severe threats to the Dalbergia species.”</i></p>	<p>Photos/video clip on D. cochinchinensis in Siep Reap (the above will be replaced)</p>  <p><i>Dalbergia oliveri</i> in the yard of the Neak Bous Temple in Preah Vihear province</p>
Sub-theme		V/O	<p><b><u>Current status of Agarwood</u></b></p> <p><i>“Agarwood (also known as eaglewood) is produced in several Asian countries for use in incense, perfume and small carvings. Owing to the high value of agarwood, there have been a declining of wild populations. Aquilaria species require up to a decade to reach maturity and most current harvesting techniques, for both wild and cultivated trees, involve destroying the entire tree.</i></p> <p><i>There were five tree species in Cambodia, but only has Aquilaria crassna been known commonly to Cambodian people. Before 1980s, there was no any plantation of Aquilaria crassna in Cambodia, but only were those found in natural stand. Due to substantial demand in global markets, to collect “agarwood,” A. crassna trees were overexploited and almost wiped out in the forest.”</i></p>	 <p>Agarwood plantation in Koh Kong province</p>
Sub-theme		Mr. Phab Phanna Deputy Chief of Law Enforcement	<b><u>Law enforcement and forest-related legislations and regulations in Cambodia</u></b>	Proposed location: <i>D. cochinchinensis</i> in Siem Reap (Khun Ream)

		and Governance Office, Department of Legislation and Law Enforcement, Forestry Administration	<p>You may be hardly find those tree species in the wild, and even in community forest.</p> <p>Any person fell, saw, split, and chop logs and transport Forest Products &amp; By-products without a permit, there will be subject to the penalties and serious punishment.</p>	
<b>Key theme</b>			<b><u>Consumers of wood products is a main driver of illegal logging</u></b>	
Sub-theme		<p><b>Not-yet identified</b></p> <p>A buyer of hardwood furniture in Phnom Penh capital</p>	<p><b><u>Have you ever noticed that Consumers of wood products is a main driver of illegal logging?</u></b></p> <p><i>“Many people in urban/cities, especially hardwood furniture consumers and local communities don’t seem to be aware that those protected tree species are at high risk of extinct in the wild, especially CITES-listed tree species such as rosewood and agarwood species. Everyone should be aware that you are taking part of illegal logging driver if you buy hardwood furniture. It requires public awareness for genetic conservation and great care among those stakeholders.”</i></p>	A clip showing substitute products of hardwood furniture in Phnom Penh capital
Sub-theme		V/O	<p><b><u>The practices with responsible purchasing and contribution to preventing illegal logging</u></b></p> <p><i>What is responsible purchasing?</i></p> <p><i>“Responsible purchasing refers commonly to purchasing in a way that comes from ‘certified or legal products,’ ‘not from protected trees’ and ‘zero deforestation’ at relatively high levels.</i></p> <p><i>Who are mainly ensuring the responsible purchasing?</i></p> <p><i>It is mainly the government, one of the main stakeholders, who is the lever for making drastic changes in purchasing behaviour, and for ensuring that responsible purchasing happens, followed by manufacturers, retailers and lastly consumers. This means that the government and manufacturers are key to ensuring responsible purchasing.</i></p>	A clip showing substitute products of hardwood furniture in Phnom Penh capital (cont’)

			<i>For instance, Cambodian people should choose “certified products” which indicates the environmentally friendly certification.”</i>	
Key theme		V/O	<p><b><u>Alternatives to illegal logging (other hardwood, teak and fast-growing tree plantation can be substituted for rosewood hardwood products)</u></b></p> <p><i>“To substitute those products harvesting from natural forest, the alternative uses of hardwood furniture made out of other hardwood and fast-growing tree species originating from plantation will absolutely contribute to sustainable uses for our prospective generation.</i></p> <p><i>Establish and register rosewood, agarwood, and teak plantation will definitely contribute to sustainable uses, ex-situ genetic conservation of those tree species, and responsible purchasing as it has been highly demanded by social norm on current trend.”</i></p>	
Sub-theme		<p><b><u>First speaker</u></b>  <b>H.E Cheam Pe Ah,</b>  National Assembly  Member &amp; Owner  of Rosewood  Plantation (Tbong  Khum Province)</p>	<p><b><u>Promoting of establishment of private forest plantation (rosewood and agarwood) for ex situ conservation</u></b></p> <p><i>“Up to 2021, this plantation is about 5 years old, yet we did not start planting 100,000 trees a year immediately. Initially, we planted 30,000 trees; 40,000 trees in the next So the total number of trees planted on an area of 20 hectares is roughly 100,000 trees. The plantation is located in Sre leu Senchey village where the land tenure is obtained through Social Land Concessions, provided by the Royal Government of Cambodia, which <b>Samdech Techo</b> pays great attention on this geographical area.</i></p> <p><i>We create jobs for locals of Sre Leu Sen Chey village consisting of about 250 families, a total of about 650 people. I hired some of them regularly, so they can earn from their labor force.</i></p> <p><i>At first they seemed to burst out laughing for the start with my planting such kinds of tree species, but now they understood what I have been doing.</i></p> <p><i>First of all, planting trees is mainly for economic benefit, and then it helps to control environmental pollution.</i></p> <p><i>What we want here is to suggest that the private forest plantation registrations be done officially, so we are encouraged to plant more trees as land cover to contribute to</i></p>	Tbong Khmum province (interview video)

		<p><b><u>Second speaker</u></b>  <b>Nang Sothy,</b>  the owner of THY HOLDING GROUP CO., LTD</p> <p>“Not-yet identified”</p>	<p><i>mitigate global warming and generate their family's income, as well as support the development of the national economy.”</i></p>	<p>Koh Kong province (interview video)</p>
<b>Key theme</b>			<b>A shift to more sustainable livelihoods</b>	
Sub-theme		Not-yet identified	<p><b><u>Agroforestry practices (rosewood/agarwood mixed with fruit trees)</u></b></p> <p>“.....” (a new scrip suggested</p>	A location??
Sub-theme		V/O	<p><b><u>The Globule Rise of Teakwood</u></b></p> <p><i>“While the demand of wood and its products is still in high and the timber supply from natural forest have been declining, the wood supply from tree plantations have been considered as the important source, particularly teak.</i></p> <p><i>According to the FAO, the demand and trade of tropical industrial timber worldwide is about 15 million cubic meters per year in 10 years (2005-2014), and the teak roundwood contributes more than 1 million cubic meters per year, equivalent to 7% The price of teak wood in the international market is between 350-1,000 USD per cubic meter (FAO, 2015; ITTO, 2020).”</i></p>	 <p>Private teak plantation in Kampong Cham Province</p>  <p>Teak plantation in Kampong Speu Province</p>

Sub-theme	Mr. Chhun Virak, Owner of private teak plantation in Ratanakiri province	<p><b><u>Promoting of forest plantation establishment: other hardwood, teak and fast-growing tree plantation for domestic uses and substitute harvesting from natural forest</u></b></p> <p><i>“Since there is not much supply of teak wood originated domestically from various sources in Cambodia, the made-of-teakwood products and furniture could hardly be found both in local markets and at wood processing factories. In 2021, a wide range of made-of-teak wood products are seen extensively promoted for marketing sales on social media. Teak Wood Furniture Cambodia is a local wood processing factory that has just started its own wood processing business for 6 months, and all teak wood products are processed from teakwood harvested from their own teak plantation established since 2000. There are numerous types of teak wood products getting purchasing orders, including round and rectangle wooden tables, foldable wooden tables, wooden armchairs, complete set of wooden sofa, many kinds of wooden furniture, wooden decoration material for construction, long wooden dinner tables, wooden beds, teak plywood, and other types of teak sawnwood. Such business is flourishing well with piles of pre-orders in a satisfactory manner.”</i></p>	 <p>Teak products--wooden furniture made of teak in Lamphat district, Ratanakiri province (a video on interview will be added)</p>
<b>Key theme</b>		<b>Practical procedure on guidelines and incentives for private forest registration</b>	
Sub-theme	V/O	<p><i>“Cambodia has the goal of maintaining at least 50% of its land under forest cover to contribute to the country’s Sustainable Development Goals by 2030. In pursuit of this ambitious goal, the Forestry Administration has identified degraded forests and other degraded lands that are available for restoration and introduced initiatives for investing in the establishment of private forest plantations on state land by forging partnerships between various private sector entities. It has recently developed and obtained approval of the <b>Guidelines on Private Forest Registration</b>, as well.</i></p> <p><i>Private forests are defined as plantations or trees that grow naturally on land that is registered and privately owned under state valid procedures and laws. Private forest refers to plantation established by natural persons or private legal entities who own</i></p>	Guidelines on Private Forest Registration in Cambodia

land on their private land with the right to occupy in accordance with the land law and are registered as private forest according to the regulations of the Forestry Law and the Prakas No. 327 PRK dated 26 May 2017 on the Private Forest Rule.

Under the guidelines, private forest plantations are categorized by area, each of which is distinguished by its own application form and place of submission.

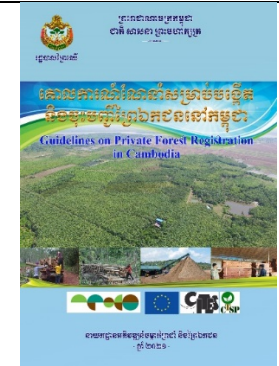
There are four categories of private forest forests, as follows:

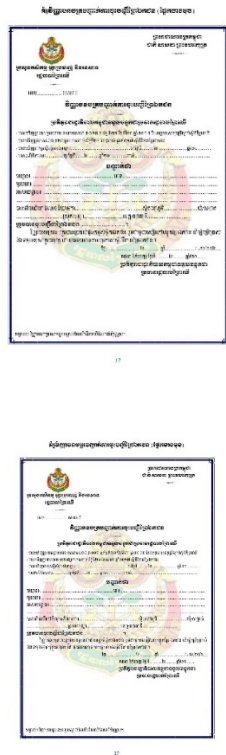
- household private forest plantations that consist of land areas of less than 10 hectares.;
- small-scale private forest plantations that consist of land areas that range from 10 to 100 hectares.;
- medium-scale private forest plantations that consist of land areas that range from 100 to 1,000 hectares.
- large-scale private forest plantations that consist of land areas that are greater than 1,000 hectares..

The documents required to be submitted with the application form are, namely, (i) a national identification card or passport; (ii) a land tenure certificate; and (iii) business patents if an applicant is a large entity or a company.

Natural persons or private legal entities who are interested in registering their private tree plantations may consult with the specialized officers of the Department of Plantation and Private Forest Development of the Forestry Administration or the specialized officers of the Forestry Administration division before applying for private forest registration.

There are three interrelated steps in the registration process. The initial step proceeds through the provision of general guidance to the filing out of the application form and submission of the required documents for reference and certification of legal acquisition. The second step establishes the process by which field verification and evaluation are conducted by appropriate authorities comprising of Forestry Administration officers from either or both the central and local levels. Finally, the third step is the issuance of the private forest registration certificate.



			<p><i>The issuance of a certificate of private forest registration can be issued to the owner of the private land in the size of the area and/or the number of trees of equal value, depending on the actual situation.”</i></p> <p>r</p>	
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