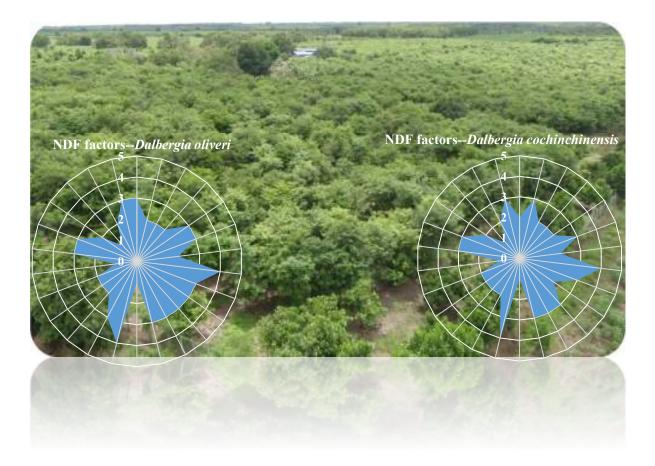


## Report on the Virtual Training Workshop on the CITES Non-detriment Findings Report on *D. cochinchinensis* and *D. oliveri* and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis*



April 2022



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| Financial Support:   | Forestry Administration, Cambodia; the European Union and the CITES<br>Tree Species Programme, CITES Project No. S-568: Integrating the<br>Development of Guidelines and Incentives for Piloting the Establishment<br>of Small-scale Private <i>Dalbergia</i> Plantations with the Determination of a<br>Non-detriment Findings Report in Preah Vihear Province, Cambodia. |
|----------------------|--|
| Implementing Agency: | Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries (MAFF).   |

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## I. Introduction

## 1.1 Background

Rosewood, which in international markets includes *Dalbergia cochinchinensis* and *Dalbergia oliveri* (considered to be synonymous with *Dalbergia bariensis*), as well as several other species of *Dalbergia* and a number of other genera, 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 that are referred to as rosewood 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. In reacting to the recognized declines of both *D. cochinchinensis* and *D. oliveri* and to determine the current status of those and other endangered tree species listed in the CITES Appendix II, the implementation of the project for "Integrating the Development of Guidelines and Incentives for Piloting the Establishment of Small-scale Private *Dalbergia* Plantations with the Determination of a Non-detriment Findings Report in Preah Vihear Province in Cambodia" was envisaged to hasten the establishment of small-scale private plantations of *D. cochinchinensis*.

Cambodia has been a member of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1997. The Ministry of Agriculture, Forestry and Fisheries has been assigned the role as the Cambodia's CITES Management Authority and the Forestry Administration has been designated as the Cambodia's CITES Technical Scientific Authority. The species that are covered under CITES are listed in one of its three Appendices according to the degree of protection required.

The member countries of CITES are obliged to comply with the CITES regulations, especially controlling the distribution of species that are included in the CITES Appendices with regard to both exports and imports from and to the member country. Appendix I contains a list of species that are most endangered and threatened with extinction, while Appendix II includes species not necessarily threatened with extinction, but for which trade must be controlled in order to avoid utilization that is incompatible with their survival.

One of the purposes of this training workshop was to increase the understanding of the resources and processes required to prepare NDF reports that adhere to the compulsory nine-step process supporting the CITES Scientific Authorities in their efforts to establish science-based determinations. The other objective was to build the participants' capacity with simple guiding steps related to economically and theoretical analysis of the advantage of plantations of *D. cochinchinensis* as compared to other fast-growing tree species.

This pilot study on the CITES Non-Detriment Findings Report for *Dalbergia cochinchinensis* and *Dalbergia oliveri* reflected the conservation status and management of the species in the Choam Ksant District, Preah Vihear Province. The assessment systematically followed the IUCN Checklist of NDFs. Nevertheless, some factors and parameters' ordinal conditions were modified to some extent to conform to the conditions in Cambodia. Most of the short descriptions of each parameter related to species characteristics that were used in the scoring system in the assessment followed the factors of sustainability in the guidelines on Non-detriment findings for timber, medicinal plants and agarwood (CoP15 Doc. 16.3) and the Indonesian Guidelines for Non-Detriment Findings Assessment of Ramin *Gonystylus* spp. The factors affecting the management of the harvesting regime consisted of biological characteristics; the current status of the species; harvest management; harvest regime;

harvest monitoring; logging impact to the environment and ecological condition; and conservation and protection.

One of the project outcomes was to conduct a workshop to disseminate the NDF of *D. cochinchinensis* and *D. oliveri* in the Choam Ksant management district in Preah Vihear province, as well as business-related training to prepare private sector entities and small-scale farmers to participate in the establishment of small-scale private plantations of *D. cochinchinensis* and *D. oliveri*. Therefore, a training workshop on CITES Non-Detriment Findings Report on *D. cochinchinensis and D. oliveri* in the Choam Ksant management district in Preah Vihear province and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis* was organized virtually on 24 November 2021. A total of 65 participants from provincial cantonments and departments of the Forestry Administration, non-governmental organizations (NGOs), academic institutions, and the private sector attended the workshop. The Workshop Program and the List of Participants are as attached in **Annex 1** and **Annex 2** respectively.

## 1.2 Objectives

The virtual Training Workshop on the CITES Non-detriment Findings Report on *D. cochinchinensis* and *D. oliveri* and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis* was organized with the following objectives:

- Raising awareness of CITES Non-Detriment Findings Report, CITES' Listed Tree Species, guidelines for preparing a CITES NDF report and practical procedures for NDF assessment.
- Sharing knowledge/case study related to the NDF of *D. cochinchinensis* and *D. oliveri* in the Choam Ksant management district in Preah Vihear province and business-related opportunities to prepare private sector entities and small-scale farmers to participate in the establishment of small-scale private plantations of *D. cochinchinensis* and *D. oliveri*.
- Providing participants with the economic analysis of investment and comparative advantage of *D. cochinchinensis* plantations.

## **1.3 Participants**

The Forestry Administration organized a virtual training workshop on the CITES Non-detriment Findings Report on *D. cochinchinensis* and *D. oliveri* and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis* with 65 participants in attendance, who were representatives from:

- 3 Deputy Director-Generals of the Forestry Administration.
- 29 officials from Provincial Cantonments of the Forestry Administration.
- 5 officials from Divisions of the Forestry Administration.
- 25 officials from Line Departments of the Forestry Administration.
- 2 lecturers from Prekleap National Agricultural Institution.
- 1 person from the private sector and NGO.

## II. Summary of the Training Workshop

## 2.1 Welcome Remark at the Opening Sessions

**Dr. Chheang Dany**, Deputy Director-General of the Forestry Administration on behalf of **H. E. Dr. Keo Omaliss**, Delegate of the Royal Government of Cambodia (RGC)in charge as Head of the Forestry Administration, welcomed all participants attending this workshop organized by the Forestry Administration with support from the CITES Tree Species Programme (Figure 1).

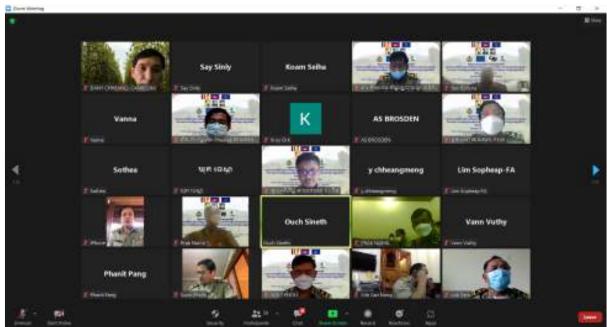


Figure 1. Participants attending the training workshop

He stressed that the extension of a case study associated with the preparation of the NDF report of *D. cochinchinensis and D. oliveri* in Choam Ksant District, Preah Vihear province is very important for all participants from different stakeholders, especially from the Cantonments and Divisions of the Forestry Administration of Cambodia. The preparation of the NDF report of *D. cochinchinensis* and *D. oliveri* in Choam Ksant District was made in accordance with the guideline on Non-detriment findings for timber, medicinal plants and agarwood produced by CITES and it is the first time that a NDF report has been produced for CITES-listed tree species in Cambodia.

If a member of CITES wants to trade and export CITES-listed tree species, a NDF report should be prepared to assess whether the trade and export of CITES-listed tree species will affect its population in the natural habitats. Similarly, whether trade of propagation of CITES-listed tree species requires NDF to be prepared and whether policies in Cambodia allow propagation of CITES-listed tree species to be exported.

In addition to the dissemination of the NDF findings report of *D. cochinchinensis* and *D. oliveri*, Mr. Dany highlighted the importance to build the capacity of the participants on economic analysis of investment in *D. cochinchinensis*, challenges and opportunities, advantages and favorable conditions and incentives for investment in *D. cochinchinensis*.

# 2.2 Presentation 1: CITES Non-Detriment Findings Report on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province

**Mr. Say Sinly**, who is a vice chief of the Private Forest and Partnership office of the Department of Private Forest and Forest Plantation Development as well as a project staff, presented a summary of the project and elucidating the CITES non-detriment findings making guidelines and a case study in preparing the CITES Non-detriment Findings Report on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province. His presentation is as attached in **Annex 3**.

## 2.2.1 Summary of the project

• **Project title:** "Integrating the Development of Guidelines and Incentives for Piloting the Establishment of Small-scale Private *Dalbergia* Plantations with the Determination of a Non-

detriment Findings Report in Preah Vihear Province, Cambodia", which is funded by the EU through the CITES Secretariat's CITES Tree Species Programme.

- **Objective**: The objective of the project is to develop an initial non-detriment findings report on *D. cochinchinensis* and *D. oliveri*, and institutionalize an enabling environment to support the establishment of small-scale private plantations of the species.
- Duration: 18 months (Late 2019 March 2021), but it has been extended until June 2022.
- Achievements: Prepared the Guidelines on Private Forest Registration, including private forest registration practical procedures; organized a National Extension and Consultation Workshop on Rules and Guidelines for Private Forest Plantation Registration in Cambodia from 26-27 November 2020 with 125 participants; completed the inventory of rosewood (*D. cochinchinensis* and *D. oliveri*) in the Choam Ksant district, Preah Vihear province; distributed 48,940 *D. cochinchinensis* seedlings and 1,500 fruit trees to local communities, pagodas and institutions in Choam Ksant district.
- **Reports Produced**: The project has produced 6 reports that can be downloaded through the link: <u>https://cites-tsp.org/regions/cambodia/</u>.

## 2.2.2 Understanding about CITES

- 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. Website: <u>https://cites.org/eng/disc/what.php</u>.
- The member countries of CITES are obliged to comply with the CITES regulations, such as controlling the distribution of species that are included in the CITES Appendices with regard to both exports and imports from and to the member country. This provides a two-way system for controlling the traffic of the wild plant and animal export and import trade in both the exporting and importing countries.
- The CITES system of control is executed by using the CITES' standard licensing system that is published by the CITES Management Authority, which is *responsible for inspecting goods* moving in and out of the country on the basis of the documents and specimens registered in the CITES Appendices I, II and III. Specific plant and animal species that are covered in CITES are registered in the list included in the Appendices of CITES.
- Cambodia has been a member of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1997; the Ministry of Agriculture, Forestry and Fisheries has been assigned the role as the Cambodia's CITES Management Authority and the Forestry Administration has been designated as the Cambodia's CITES Technical Scientific Authority. The species that are covered under CITES are listed in one of its three Appendices according to the degree of protection required.
- The CITES Scientific Authority is obligated to provide advice related to the export that will not be detrimental to the survival of that species, as stipulated in **CITES Article IV** "The export of any specimen of a species included in Appendix II shall require the prior grant and presentation of an export permit. A Scientific Authority of the State of export has **advised** that such export will not be detrimental to the survival of that species. A Scientific Authority in each Party shall monitor both the **export permits granted** by that State for specimens of species included in Appendix II and the actual exports of such specimens."

## 2.2.3 What is Non-detriment Findings Report (NDF)?

Non-detriment Findings Report (NDF) is a kind of practical procedure and/or assessment report on current status, especially in natural habitat, of a species included in the CITES Appendix II. The purpose of such CITES' NDF making tool is to ensure that a CITES Scientific Authority can advise wisely its CITES Management Authority for such export that will not be detrimental to the survival of that species.

## 2.2.4 CITES Non-detriment Findings making Guidelines

There were four principal NDFs-making guidelines that were used in the case study. They are:

- 1. The nine-step process to support CITES Scientific Authority making science-based nondetrimental findings (NDFs) for timber/tree species listed in CITES Appendix II (Daniel Wolf, 2018) incorporated into the CITES guidelines for preparing a scientifically-based NDF for timber species; (Steps & worksheet, Figure 2 (Left)).
- 2. The Non-detriment findings for timber, medicinal plants and agarwood (CITES, 2010) (CoP15 Doc. 16.3); (NDF for different groups of plant & wildlife).
- 3. The Guidance for CITES Scientific Authorities: Checklist to assist in making non-detrimental findings for Appendix II exports (Rosser and Haywood, 2002); (Factors & Indicators for assessment; plants & animals, Figure 2 (Right)).
- 4. The Indonesian Guidelines for non-detrimental finding assessment for *Ramin gonystylus* spp., (2010).

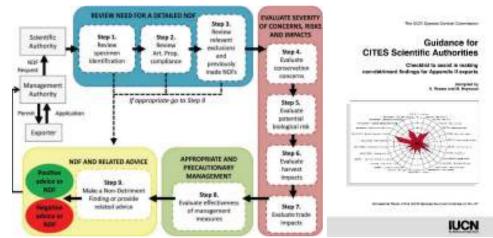


Figure 2. The nine-step process to support CITES Scientific Authority making science-based nondetrimental findings (NDFs) for timber/tree species listed in CITES Appendix II (Left), and The Guidance for CITES Scientific Authorities: Checklist to assist in making non-detrimental findings for Appendix II exports (Right)

- The nine-step process incorporated into the CITES guidelines for preparing a science-based NDF for timber species is fundermental for CITES Scientific Authorities to use its worksheets through subsequent steps for reviewing and providing advices to Management Authorities in relation with export permits for wood speciemen, and the Guidance for CITES Scientific Authorities: Checklist to assist in making non-detrimental findings for Appendix II exports is of importance for cross-refferencing to use factors and indicators for making NDF assessment of plants or animals currenct stautus.
- There were 7 factors composed of 26 parameters that were assessed to produce a visual scoring radar plot to facilitate the determination of the NDF and used in the case study in the Choam Ksant District, Preah Vihear Province of Cambodia. Then, each parameter was explained in the presentation that it should be evaluated based on a scoring system.

# 2.2.5 Non-detriment Findings on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province

• The CITES Non-detriment Findings Report on *Dalbergia cochinchinensis* and *Dalbergia oliveri* in the Choam Ksant District, Preah Vihear Province was prepared with 3 other reports as follows:

- Systematic Survey of *Dalbergia cochinchinensis* and *Dalbergia oliveri* for Piloting Assessment on Sustainable Genetic Conservation in Choam Ksant district, Preah Vihear Province;
- Review of the taxonomy, biology, ecology, and the status, trend, and population structure, of *D. cochinchinensis* and *D. oliveri* in Choam Ksant district, Preah Vihear province, Cambodia; and
- Assessment Report on the Conservation Status, Management Practices, and Harvest Monitoring of *Dalbergia cochinchinensis* and *Dalbergia oliveri* in the Choam Ksant District, Preah Vihear Province.
- Then, the advices to ensure that a CITES Scientific Authority will recommend to its CITES Management Authority are based on the assessment and legal acquisition (the existing regulations).
- The assessments of the case study were explicated with such key factors as biological data; distribution and ecological habitats; current status and trends; population structure and dynamics; biological risks and major threats (habitat specificity, biological risks and vulnerability, management measures); management history (forest management system, authorized harvesting areas, trends in harvesting and trade, master plan or management plan, illegal harvesting and trade); harvest monitoring (harvest regime, methods of monitoring harvests, confidence in harvest monitoring, mortality rate and maturity, legal framework); new forestland management system (reformed forestland zoning and management, law enforcement, species restoration, promotion of establishment of forest plantations, private forest plantation certification, effectiveness of management measures).

## 2.2.6 Virtual Assessment (NDF not required for specimen export)

- In practice, an NDF is not required to export *Dalbergia* specimens sourced through artificial propagation in plantations. Article VII of the CITES Convention includes provisions for the exceptions of exports of specimens produced as the result of artificial propagation. In such a case, legal acquisition would still prevail, however, so that if the current measure (Regulation No. 601) is not replaced, any specimen of either of the *Dalbergia* species sourced through artificial propagation would not be allowed to be exported.
- In adhering to the nine-step process to support CITES Scientific Authorities to make sciencebased NDF determinations, it is elaborated below:
  - Step 1 (Review specimen identification): The response is that "The Scientific Authority is confident that the scientific names are: (1) Dalbergia cochinchinensis, which has the synonymous name of Dalbergia cambodiana that is listed in CITES Appendix II and classified as Vulnerable (VU) in the IUCN Red List; and (2) Dalbergia bariensis, which has the synonymous name of Dalbergia oliveri that is listed in CITES Appendix II and classified as Endangered (EN) in the IUCN Red List." This provides the response to key question 1.1 and refers to Guidance for Step 1 (Figure 3).

| Key<br>questions for<br>step 1  | Responses and outcome (  | Refer | to G | uidance for  | Step 1)                             | Information sources used  |  |  |
|---|--|-------|------|--|-------------------------------------|---|--|--|
| 1.1 Is the<br>Scientific<br>Authority<br>confident,<br>that the<br>timber or<br>timber<br>product<br>concerned<br>has been<br>correctly | The Scientific Authority is<br>confident about the species<br>identification or has<br>corrected a simple error or<br>outdated name and<br>taxonomic concerns have<br>been resolved  |       | x    | Describe<br>concerns or<br>error(s)<br>resolved<br>below   | Go to<br>step 2                     | - CITES<br>Appendix List;<br>- IUCN Red<br>List;<br>- Van Sam et      |  |  |
|   | The species is not correctly<br>identified and/or concerns<br>cannot be resolved by the<br>Scientific Authority or<br>referral to the MA or an<br>expert   | no    | X    | Describe<br>concerns or<br>unresolved<br>error(s)<br>below | Go to<br>Step 9:<br>Decision<br>9.1 | al. (2004);<br>- Hartving<br>(2015);<br>- Niyomdham<br>et al. (1997). |  |  |
| identified,<br>and that the   | Concerns about clear identification:   |       |      |  |                                     |   |  |  |
| right<br>scientific<br>name has<br>been used for<br>the timber?   | <ul> <li>Yes, the Scientific Authority is confident that the scientific names are:</li> <li>1. Dalbergia cochinchinensis, which has the synonymous name of Dalbergia cambodiana that is listed in CITES Appendix II and classified as Vulnerable (VU) in the IUCN Red List.</li> <li>2. Dalbergia bariensis, which has the synonymous name of Dalbergia oliveri that is listed in CITES Appendix II and classified as Endangered (EN) in the IUCN Red List.</li> </ul> |       |      |  |                                     |   |  |  |

Figure 3. Step 1: Review specimen identification

- Step 2 (Review compliance with requirements of artificial propagation): The response is supposed to be "yes" to key question 2.1 "Is the permit application for artificially propagated specimens?", so go to the subsequent key question "Is the export of artificially propagated specimens of this species permitted by national or relevant sub-national legislation?" The response is "No, it is not allowed" based on the existing regulation and/or measure (Regulation No. 601). "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." This provides the response to key question 2.2, and allowed us to go to step 9 (Figure 4).

| Key questions for step 2  | Responses and outcome (Refer to Guidance for Step 2)  |     |   |  |                               |   |  |  |
|---|---|-----|---|--|-------------------------------|---|--|--|
| 2.1 Is the permit application for   | Supposed to be "yes"  | yes | X |  | Go to Key<br>Question 2.2     | NA  |  |  |
| artificially  |   | no  | X |  | Go to Step 3                  |   |  |  |
| propagated specimens?   |   |     |   |  |                               |   |  |  |
| 2.2 Is the export of  |   | yes | X | Describe<br>relevant<br>legislation<br>below | Go to Key<br>Question 2.3     | A regulation<br>No. 601, dated<br>24 April 2014,<br>issued by the   |  |  |
| artificially<br>propagated<br>specimens of this<br>species permitted by<br>national or relevant | No, it is not<br>allowed  | no  | x | Describe<br>relevant<br>legislation<br>below | Go to Step 9:<br>Decision 9.2 | Council of<br>Minister of the<br>Royal<br>Government of<br>Cambodia |  |  |
| sub-national legislation?   | Describe relevant legislation:  |     |   |  |                               |   |  |  |
|   | The Royal Government of Cambodia has suspended its exporting of all<br>forest products and forest by-products derived from luxury grade timber<br>species until it is informed via a new regulation. This aims to improve<br>sustainable forest resource management and usages. |     |   |  |                               |   |  |  |

Figure 4. Step 2: Review compliance with requirements of arterial propagation

- Step 9 (Non-Detriment Finding and Related Advice): The response to key question 9.2 from the outcome of Step 2 is "*The export of artificially propagated specimens of this species is not permitted by national or relevant sub-national legislation*". This negative decision denies export permits, which are supported by this Guidance (Figure 5).

| Outcome of NDF<br>Process  | NDF Results and Related Advice   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  | <ul> <li>Negative decision (deny export permit) (supported by this Guidance)</li> </ul>  |  |  |  |  |  |  |
|  | Justification for advice of Scientific Authority:  |  |  |  |  |  |  |
| 9.2. The outcome of<br>Step 2, Key Question<br>2.2 is: Export of<br>artificially<br>propagated<br>specimens of this<br>species is not<br>permitted by national<br>or relevant sub-<br>national legislation | [Summary, or refer to Worksheet 2, Key Question 2.2]<br>In such a case, a strong recommendation to the CITES Management<br>Authority is that the permit for the exporting of any products derived from<br>these species should not be issued as referred to in the regulation provided<br>in the above worksheet in which the RGC has been suspending all exports<br>of any products extracted from luxury grade timber species, including the<br>specimen from either artificially propagated or natural forests.<br>However, a new thorough decision shall be made accordingly if such a<br>restricted measure is lifted and a regulation is renewed allowing exporting<br>specimens of these Dalbergia species that are artificially propagated and<br>fully meet the criteria of CITES' "propagation" definition, an advice<br>regarding a permit of products related to this that is requested to be<br>exported may appear with positive NDFs. |  |  |  |  |  |  |

Figure 5. Step 9: Non-detriment finding and related advice

• In such a case, a strong recommendation to the CITES Management Authority is that the permit for the exporting of any products derived from these species should not be issued as

referred to in the regulation provided in the above worksheet in which the RGC has been suspending all exports of any products extracted from luxury grade timber species (includes both of the *Dalbergia* species), including the specimen from either artificially propagated or natural forests;

• However, a new and thorough decision shall be made accordingly if such a restricted measure is lifted and a regulation is renewed allowing exporting specimens of these *Dalbergia* species that are artificially propagated and fully meet the criteria of CITES' "propagation" definition. The advice regarding a permit of products related to this matter that is requested to be exported may appear with positive NDFs.

## 2.2.7 Scoring Results of Non-detriment Findings

• The scores of *D. cochinchinensis* and *D. oliveri* generally ranged from 1 to 3, highlighting the relatively severity of the impacts on both the species associated with biological characteristics, current status of the species, harvest management, the harvest regime, harvest monitoring, logging impact on the environment and ecological conditions, and conservation and protection in the Choam Ksant District. The principal difference in the scoring between the two species was that *D. cochinchinensis* exhibited states of greater severity because of its attenuated dispersal distribution, smaller population density, and greater instances of illegal selective logging gleaned from the numbers of cases of forest offenses than did *D. oliveri*, even though the regenerative capacity of *D. oliveri* exhibited considerable vulnerability, as well. On the basis of the assessment, it was recommended that the Scientific Authority should issue a negative Non-detriment Findings Report to the CITES Management Authority in Cambodia to ensure that any requests for exporting specimens of these species should be rejected because of their declining populations in natural habitats (Table 1).

| No. | Factors        | Parameters                                  | Response<br>(A) | Response<br>(B) |
|-----|----------------|---|-----------------|-----------------|
| 1.1 | Biology        | Adaptability                                | 2               | 3               |
| 1.2 |                | Regeneration capacity                       | 3               | 2               |
| 1.3 |                | Dispersal efficiency                        | 2               | 2               |
| 1.4 |                | Habitat                                     | 2               | 2               |
| 2.1 | Status         | Distribution                                | 2               | 3               |
| 2.2 |                | District abundance                          | 3               | 3               |
| 2.3 |                | District population trend                   | 2               | 2               |
| 2.4 |                | Quality of information                      | 4               | 4               |
| 2.5 |                | Major threats                               | 3               | 3               |
| 3.1 | Management     | Illegal harvest or trade                    | 2               | 3               |
| 3.2 |                | Management history                          | 3               | 3               |
| 3.3 |                | Management plan                             | 3               | 3               |
| 3.4 |                | Aim of harvest in management plan           | 3               | 3               |
| 3.5 |                | Quotas or area to be harvested annually     | 1               | 1               |
| 4.1 | Control        | Harvest in authorized concessions           | 4               | 4               |
| 4.2 |                | Harvest in conservation and Protected Areas | 2               | 3               |
| 4.3 |                | Harvest in Production Forests               | 2               | 2               |
| 4.4 |                | Confidence in harvest management            | 2               | 2               |
| 5.1 | Monitoring     | Methods to monitor the harvest              | 2               | 2               |
| 5.2 |                | Confidence in harvest monitoring            | 1               | 1               |
| 6.1 | Logging Impact | Benefit to environment                      | 3               | 3               |
| 6.2 |                | Logging impact to environment damages       | 3               | 3               |
| 6.3 |                | Environment recovery                        | 2               | 2               |
| 7.1 | Protection     | Protection Percentage                       | 1               | 1               |
| 7.2 |                | Protection effectiveness                    | 2               | 2               |

Table 1. Scoring Results of Non-detriment Findings

| No. | Factors | Parameters      | Response<br>(A) | Response<br>(B) |
|-----|---------|-----------------|-----------------|-----------------|
| 7.3 |         | Harvest control | 3               | 3               |

• The scoring conducted in the assessment of the NDF associated with *D. oliveri* paralleled that of *D. cochinchinensis* with respect to the severity of the state of most of the parameters impacting the species in natural habitats. The principal difference in the scoring was that *D. cochinchinensis* exhibited states of greater severity because of its attenuated dispersal distribution, smaller population density, and greater instances of illegal selective logging gleaned from numbers of forest offenses cases than did *D. oliveri*, even though the regenerative capacity of *D. oliveri* exhibited considerable vulnerability, as well. The resulting recommendation would, therefore, be for a comparable negative NDF finding for *D. oliveri*.

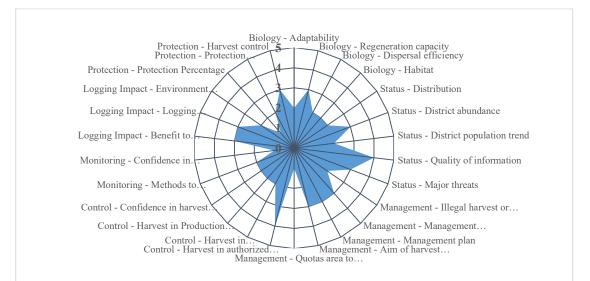


Figure 6. NDF factors used in assessing Dalbergia cochinchinensis

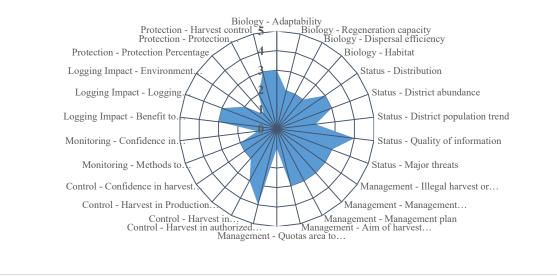


Figure 7. NDF factors used in assessing Dalbergia oliveri

# 2.3 Presentation 2: Economic analysis and comparative advantage of plantations of *D. cochinchinensis*-challenges, and opportunity

**Mr. Hort Sothea**, deputy director of the Department of Wildlife and Biodiversity and a project officer, delivered the presentation on the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis* as in **Annex 4**. The presentation is summarized as follows:

## 2.3.1 Deforestation trend

31% of the earth's surface is covered by forests. Over 420 million hectares of forest have been lost since 1990. Between 1990-2010, an average of 15.5 million hectares of forest were destroyed every year. Between 2010-2015, 12 million hectares of forest were destroyed every year giving a 22.58% decline for the period from 2010-2015 as compared to the period from 1990-2010. Between 2015-2020, 10 million hectares of forest were destroyed every year giving a 35.48% decline for the period from 2015-2020 as compared to the period from 1990-2010 and 16.67% decline as compared to the period from 2010-2015.

Cambodia was covered by forest with the size of 8,502,858 hectares in 2018. Approximately 2.6 million hectares of forest were lost between 2002-2018 with an average of 152,941 hectares of forest destroyed every year. Figure 8 indicates the trend of forest cover assessment since 1965.

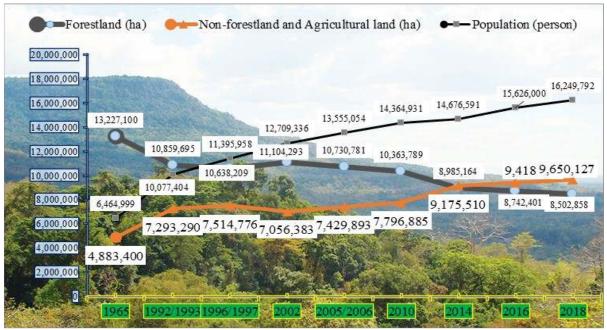


Figure 8. The negative relationship between population growth and forestland

## 2.3.2 Relation of population growth and wood demand

Population in Cambodia continues to grow steadily as reflected in Figure 8 which indicates the trend of population growth since 1965. Population is predicted to grow further in the next ten years. Wood demand is predicted to increase. Global wood demand will increase more than 50% in 2050 while the demand for wood utilization will grow as well in Cambodia in the future because the majority of the Cambodian people are using wood materials for construction, firewood, furniture and charcoal production. According to an assessment of wood demand in Cambodia, the use of fuelwood is approximately 32% from Forest Plantations and 3% from Agroforestry areas. Wood-based products used for Construction is approximately 34% from Forest Plantations and 1% from Agroforestry areas. Furniture and decoration are approximately 10% from Forest Plantations and 0.5% from Agroforestry

areas, and wood processing for export related to furniture and decoration is approximately 24% from Forest Plantations and 1% from Agroforestry areas.

# 2.3.3 Understand how to establish tree plantation and do economic analysis and comparative advantages

Mr. Hort Sothea also elaborated how to assess the sites before establishing tree plantations by pointing out to the factors to be considered. The selection of land for a tree planting project is an important point that individuals or legal entities should study carefully before deciding to purchase or undertaking joint venture to establish private plantations and forests, which should consider environmental and socio-economic factors. If private forests are established for commercial plantations, then they can be established where the soil and climatic conditions (quantity and distribution of rainfall) are suitable for the growth of the species. Other locations, such as plantations that are not intended for commercial purposes, could be set up as private forests in response to environmental and social benefits. Site assessment should begin at an early stage prior to land preparation, including reviewing the following:

- Soil conditions, flora and fauna using rapid assessment tools.
- Status of land use in accordance with the land tenure system, not related to the state's permanent forest reserve or forest area of the protected area.
- Economic analysis of labor force.

Possible impacts such as water pollution, water scarcity and/or lack of water sources should be considered. After the site study process, if the private forest owner decides to plant trees, then the next task is to plan the planting. Planning for the establishment of a private commercial plantation should include information on economic efficiency analysis to show that the plantation project will be profitable as a basis for investment decisions. The main points to be analyzed are:

- Based on actual estimates of the area to be planted, excluding environmental costs, and making actual estimates of financial revenues and establishment costs, maintenance and protection costs, etc.
- Consider the impact of topography and accessibility of harvesting and transportation costs.
- Use data from local plantation growth with similar conditions for estimating productivity and yield.
- Assess the potential risks of diseases, fires, pests and other natural disasters.

To assist the participants to easily understand the steps for analyzing economic return from establishing *D. cochinchinensis* and *D. oliveri* plantations as compared to other investment projects, he explained the use of the Built-in Economic Analysis Formulas in MS Excel. The inputs needed were (i) estimated cash-flow (flow-in and flow-out); (ii) duration of investment; (iii) discount rate; (iv) assumptions that determine the market price of products to be sold; and (v) risks to be controlled. The key Economic Analysis Formulas that should be used were (i) Internal Rate of Return (IRR); (ii) Profitability Index (PI); and (iii) Net Present Value (NPV). Detailed explanations were provided to the participants with illustrations in Figure 9. The comparative advantages were conducted against the economic analyses, so that all participants were aware of which species of tree plantations or crops would be more profitable.

In general economic analysis, the formulas are expressed as follow:

• the Net Present Value (NPV) =  $\frac{R_t}{(1+i)^t}$  where,

 $R_t$  = net cash flow at time t; i = discount rate; t = time of the cash flow

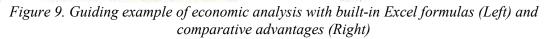
• the Internal Rate of Return (IRR) =  $\sum_{t=1}^{t} \frac{c_t}{(1+r)^t} - C_0$  where,

 $C_t$  = net cash inflow during the period t; r = discount rate; t = number of time periods;  $C_0$  = total initial investment cost

• the Profitability Index (PI) =  $\frac{PV \text{ of Future Cash Flows}}{Initial Investment}$ 

He further provided many examples of economic analysis and comparative advantages related to D. cochinchinensis and D. oliveri plantations with facts and detailed economic analyses. D. cochinchinensis and D. oliveri plantations are a long-term life investment, at least 30 years, compared to other local high-valued timber species such as teak, at about 20-25 years, and agricultural crops such as paddy rice and cassava which are annual cash crops. Despite such a long-yielding tree planation, they can provide high economic returns at approximately USD 38,500.00/ha for D. cochinchinensis plantation, but just USD 26,500.00/ha for Teak or 68.8% of USD 38,500.00/ha for D. cochinchinensis plantation, USD 650.00/ha for cassava or 1.7% of that D. cochinchinensis plantation, and USD 750.00/ha for rice field or 1.9% compared to that for D. cochinchinensis plantation. The Profitability Index (PI) in investing in D. cochinchinensis is projected to be relatively high if they can be harvested at USD 9.78, USD 9.35, USD 9.04, USD 7.85, and USD 7.22, for 30, 25, 20, 15, and 10 years, respectively. This means that if one were to invest USD 1.00 today, then it will return an economic profit of USD 7.22 for 10 years, USD 7.85 for 15 years, USD 9.04 for 20 years, USD 9.35 for 25 years, and even USD 9.78 for 30 years. Therefore, the longer the trees are kept for harvesting the higher the profit they will collect. The Internal Rate of Return (IRR) seems to provide various results in terms of economic viability at 28.26%, 28.30%, 28.94%, 30.46%, and 37.29%, for investment duration of 30, 25, 20, 15, and 10 years, respectively (Figure 9). That may be a reason that the current value of both rosewood live trees is over-estimated, while the wood at the time of harvest is under-estimated. The assumption used in the projection is based on the current value of wood of both the Dalbergia species which is approximately USD 3,000.00 per cube meter, and the seedlings to be planted is about 2,000 seedlings per hectare. Some other tree species can provide moderately high economic-profit in the short- and medium-term are Acacia species, *Eucalyptus* species, paulownia, teak, sandalwood, etc.

|  |                  | Standard I                  | 202              |                   |             | Crop   | Crop Type   | Gross Value Generated                       |  |  |
|--|------------------|-----------------------------|------------------|-------------------|-------------|--|---|---|--|--|
| Incompany of the local division of the local | -                | da in Tax 200 until<br>201  | State and        | 307               |             | Rice   | Agriculture (Current)   | \$750+                                      |  |  |
| Full Repaired  | DRAFERD          | (10.00.20)                  | HELDELTE         | (REATERS)         | (20.701.00) | Cassava  | Apriculture (Current)   | 8650+                                       |  |  |
| fold income  | 80.105.29        | 01,711,20                   | 14,391.31        | 101.08.05         | KLOTTED     | Sandalwood   | Forestry (Fland)  | \$25.500+                                   |  |  |
| fel sald free  | 218,778.69       | BEDRON                      | 100.023.03       | 18/9/26           | m108-00     | Rosewood"  | Forestry (Fixed)  | \$38.500 +                                  |  |  |
| ITV A HIR.   | 87               | 207                         | 27               | 117               |             | The income and takes out   | mation from the related cross.  | The Squares relate to One Hoctore Pare      |  |  |
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| Nan Ma   | 26.58            | 28.08                       | Hill             | 10.00             | 41.00       | 5. Merilium Term   |   |   |  |  |
| F15 - F50  | 18.41            | 61.09                       | 16.0             | 10.00             | 10.00       | 1. Recording of the  | Rum Term ann  |   |  |  |
| PER 121  | 10.88            | 12.00                       | 10.00            | 8.88              | 0.04        | 1. Spubranti   | (5-8 years, \$250 face value, Capex \$  | 180. Open \$150 term copplice step to regre |  |  |
| 12 - 129   | 878              | 1.05                        | 6.64             | 1.00              | 7.00        | the set to a   |   |   |  |  |
|  | 1.2              |                             |                  |                   |             |  | 8 gates, 5408 fain value. Capes \$108.  |   |  |  |
| Datbergia opohinchinansia Pierra   |                  |                             |                  |                   |             | E Long Terro   | ad (15 years, \$900 face value, Caper-S   | 200, Open S400, where at hervoet \$5,980+   |  |  |
|  |                  |                             |                  |                   |             | i. Reservice of Lan  | There are   |   |  |  |
| <b>Commercial Grade</b>  | and Value        |                             |                  |                   |             |  |   | D. Capes 3019, Open S2150, Value of Name    |  |  |
| Value  | : 1500-3000 \$ r | m <sup>1</sup> , depended - | on quality, dian | aster & longth    |             | 53,090-1   | ter a traction and set a  | a for a for any second second second        |  |  |



However, he stressed that if small-scale farmers who do not have much start-up capital for investment but wanted to invest in either *D. cochinchinensis* or *D. oliveri* plantations, then they could grow them as agroforestry. In doing so, they could benefit from short-, medium-, and long-term economic returns. In addition, tree plantation contracting with local companies or exporters would not only just sustain their income generation, but would also contribute to their power of bargaining.

### 2.3.4 Green investment, policies and incentives related to tree plantations

In its efforts to further promote investors to invest in forest establishment and development, the Council of Ministers of Cambodia issued a set of regulations on the reduction of export fees for products and processed products derived from forest plantation in November 2019. This includes a

reduction of 50% of the total obligatory export fees for export of products from forest plantation, and a 100% exemption of export fees for furniture and final processed products produced from forest plantation.

In 2008, a Sub-decree on Rules for Granting Right to Use public forest land for tree planting was issued by the government that aims to increase forest productivity and services, and ensure sufficient wood supply to the general public. The Sub-decree authorizes MAFF to grant part of the public forest land for tree planting.

The individual or company that has been granted the right to use public forest land for tree planting is able to develop, utilize, sell and distribute their products in accordance with the agreement with the FA and MAFF. However, the benefits derived from tree planting on public forest land will be shared between the government and the individual or company as agreed in the agreement during the duration of the agreement which could be for a period not exceeding 50 years.

## 2.3.5 Challenges

There is currently not enough infrastructural development by the Government of Cambodia. The majority of the land areas granted is located in remote areas with limited developed infrastructures. As such, concessionaires/companies/ individuals have to prepare and develop their own basic infrastructures to facilitate their operations, including transportation of their products to the market and final destination. This will incur additional high cost for the concessionaires in addition to their operational costs. Moreover, commercial production of plantation timber requires high initial establishment cost and it takes many years before it could achieve a positive return. This has, to a certain extent, deterred concessionaires to extensively invest in forest plantation establishment and development.

Market information is not comprehensive, timely and readily available for investors in forest plantation establishment and development in Cambodia. Consumption and the use of forest plantation wood for house construction by the local community are limited, especially those derived from fast-growing species like the eucalyptus. This coupled with fluctuation of prices in the international market has created uncertainty and thus affecting efforts to promote the private sector to substantially invest in forest plantation development.

The investment in *D. cochinchinensis* plantations is required to be long term of up to 30-40 years. This requires large investment because the CITES-listed tree species grows slowly even though the demand for the species of *D. cochinchinensis* in the international market is currently high and has every good price in the regional and international markets. In this regard, to promote the planting of *D. cochinchinensis*, incentives should be provided to the private sector or individuals in the form of monetary or non- monetary incentives.

## 2.3.6 Opportunities

There is considerable wood demand for domestic uses in Cambodia and export as well. In addition, there is an upward trend towards green investment and tree plantations in Cambodia, especially CITES-listed tree species. There is demand for luxury or CITES-listed tree species in the form of planting trees as gardens in public institutions, public spaces and large residential and housing areas where hundreds of trees are needed. In this connection, investors, private sector, or individuals can invest in tree plantations of luxury tree species and they do not have to wait up to 30 or 40 years to harvest their plantations. They may spend up to ten years and can sell their plantations in the form of live trees.

A number of individuals in Cambodia who own large land areas are interested in investment in medium-term plantations. The purpose of planting is not for harvesting in the medium term. The reason for the planting of *Dalbergia cochinchinensis* is for recreation as the Cambodian people who want to enjoy their weekend with large plantations of luxury wood with their families and relatives.

There are medium-mixed plantations of different species usually comprising two or three species as seen in the coastal areas in the southwest of Cambodia where there are agarwood and D. *cochinchinensis* species in a large area. In addition, there are other options that the private sector or an individual can invest in fast-growing tree species, medium-term tree plantations, and long-term tree plantations.

## 2.3.7 Preparation of private sector to participate in establishment of tree plantations

After the consultative workshop in November 2020 and while the guidelines itself was in the process of being edited and requesting for the final endorsement, two private companies have applied to register their private forest plantations. In total, there are four locations of private forest plantations with at least 359 hectares where mixed tree species have been planted including *Aquilaria crassna*; *Dalbergia cochinchinensis*; *Dalbergia odorifera*; *Afzelia xylocarpa*; *Pterocarpus macracarpus*; and *Khaya senegalensis*. This could be an immediate consequence from promotion of private forest registration to prepare small-scale famers and the private sector, especially investors who have a clear long-term insight into their business to invest in tree plantations such as *Dalbergia cochinchinensis*, among others.

If interested in tree plantation investment, individuals should be aware of the forest policy, incentives, opportunities, challenges, and especially the economic profit through analysis of comparative advantages of each tree species that were targeted. For example, small-scale farmers may want to plant trees to supply a company that want to export wood products made from CITES-listed tree species to international markets, so the registration of private forest can be an integral part of the process of compliance assessment for artificial propagation of CITES-listed tree species. This could assist them in the issuance of export permits of CITES-listed tree species that are required by the Cambodian CITES Management Authority.

## **III. Participants' Inputs**

There were some suggestions raised by the participants after the presentations, which could fruitfully be supplementary to the workshop outputs, as follows:

- Additional members from the academia including professors and senior researchers should be considered to be ascribed to the committee of the Cambodian CITES Scientific Authority.
- If there is a study on NDF at the national level for any specific CITES-listed tree species for the international trade purpose, especially all species listed in the CITES Appendix II, the National Forest Inventory Manual should be incorporated in the sampling plot design and the coefficient of variance (CV) must be taken into account.
- The regional climatic conditions inclusive of temperature and rainfall should be employed for the Non-parameter Correlation Test together with those factors that can affect the occurrences of the species.
- Some local research papers from the academia may help to make the NDF study more prolific.
- A certificate of the registered private forests can possibly be used to certify artificial propagated tree species.
- There should be a study on wood density and its characteristics of main timber species (CITES-listed tree species) conducted to technically distinguish between the wood

specimens harvested from natural forest and plantations, which can make NDF reports more viable.

## IV. Pre- and Post-Training Evaluation

Pre- and post-training workshop evaluations were conducted to assess the level of understanding as part of the process in capacity building. Prior to the day of commencement of the training workshop, a 10-question survey questionnaire was sent to all the participants through Telegram for them to complete and to be returned before the workshop. After the training workshop was completed, the same questionnaire was sent to the attended participants and requested them to return the completed questionnaire. A scoring was conducted to assess whether the participants' capacity was strengthened and enhanced (Table 2).

|      | Table 2. Pre- and post-training evaluation of p   |      |      |         |     |     |          |      |               |      | snop | <u>, , , , , , , , , , , , , , , , , , , </u> |     |       |      |
|------|---|------|------|---------|-----|-----|----------|------|---------------|------|------|---|-----|-------|------|
| No.  | Questions for understanding   |      | Pre  | -traini | ng  |     | Total    | Rank | Post-training |      |      |   |     | Total | Rank |
| 110. | evaluation  | 1    | 2    | 3       | 4   | 5   | Total Ka | Rank | 1             | 2    | 3    | 4   | 5   | Total | Rank |
| 1    | 1. Understanding about CITES  | 28   | 21   | 13      | 3   | 0   | 65       | 1    | 5             | 24   | 27   | 7   | 2   | 65    | 3    |
| 2    | 2. What is Non-detriment Findings Report (NDF)?   | 52   | 9    | 2       | 2   | 0   | 65       | 1    | 11            | 25   | 21   | 8   | 0   | 65    | 2    |
| 3    | 3. CITES Non-detriment Find-<br>ings making Guidelines  | 59   | 3    | 1       | 2   | 0   | 65       | 1    | 17            | 31   | 15   | 2   | 0   | 65    | 2    |
| 4    | 4. Parameters and scoring re-<br>sults of Non-detriment Find-<br>ings   | 55   | 5    | 4       | 1   | 0   | 65       | 1    | 21            | 18   | 22   | 4   | 0   | 65    | 3    |
| 5    | 5. Providing advice regarding<br>the issuing export permit for<br>specimens based Non-detri-<br>ment Findings                       | 60   | 2    | 1       | 2   | 0   | 65       | 1    | 23            | 34   | 5    | 3   | 0   | 65    | 3    |
| 6    | 6. Site assessment and selec-<br>tion for tree plantation   | 12   | 17   | 29      | 6   | 1   | 65       | 3    | 11            | 18   | 28   | 8   | 0   | 65    | 3    |
| 7    | 7. How to do economic analy-<br>sis and comparative ad-<br>vantages for investing in tree<br>plantations                            | 61   | 1    | 2       | 1   | 0   | 65       | 1    | 15            | 18   | 26   | 6   | 0   | 65    | 3    |
| 8    | 8. Green investment, policies<br>and incentives related to tree<br>plantations  | 9    | 28   | 17      | 9   | 2   | 65       | 2    | 3             | 14   | 17   | 26  | 5   | 65    | 4    |
| 9    | 9. Challenges and opportuni-<br>ties for tree plantation invest-<br>ment  | 11   | 14   | 26      | 10  | 4   | 65       | 3    | 4             | 10   | 22   | 23  | 6   | 65    | 4    |
| 10   | 10. Usefulness of private for-<br>est registration for private sec-<br>tor to participate in establish-<br>ment of tree plantations | 2    | 27   | 33      | 2   | 1   | 65       | 3    | 0             | 2    | 22   | 31  | 10  | 65    | 4    |
|      | Average   | 34.9 | 12.7 | 12.8    | 3.8 | 0.8 | 65       | 1.7  | 11            | 19.4 | 20.5 | 11.8  | 2.3 | 65    | 3.1  |

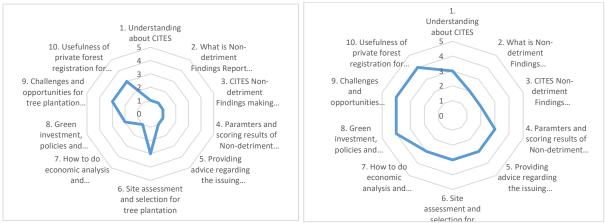
*Table 2. Pre- and post-training evaluation of participants attending the workshop* 

Note: The level of understanding at pre- and post-training are categorized as follow:

- 1 = Never known before/did not understand at all.
- 2 = Used to know little / understood slightly.
- 3 = Has already known somewhat/ fairly understood.
- 4 = Has already known more/ Understood very much.
- 5 = Has already known intensively/ More comprehensive understanding.

One of the training workshop's outcomes was building the capacity of the participants with which the ranks at pre-training workshop were mostly centered at level 1 & 2, indicating the fact that they have never known or used to know little before, and the average ranks at post-training workshop were centered at 3 & 4, indicating they fairly understood or understood very much. The answers to

the question 9 & 10 appear that the participants seemed to have already understood the current issues related to forest plantation investments and the usefulness of private forest registration in Cambodia that provide benefits to private forest registrants, especially for wood product exporters. This is because they had participated in the earlier National Extension and Consultation Workshop on Rules and Guidelines for Private Forest Plantation Registration in Cambodia that was held from 26-27 November 2020. The rest of the questions asked were related to the technical aspects of investing in tree plantations establishment which were hard for them to answer. These topics were "Challenges and opportunities for tree plantation investment", and "Usefulness of private forest registration for private sector to participate in establishment of tree plantations" (Figure 10). In general, the average ranking score of post-training evaluation of building the participants' capacity increased from 1.7 to 3.1 which appeared to outperform their understanding perceived through the presentations during the training workshop (Figure 10).



*Figure 10. Pre- (Left) and post-training (Right) evaluation of participants attended the training workshop* 

## V. Conclusion

The training workshop consisted of presentations on CITES guidelines for the preparation of nondetriment findings reports with a case study on the assessment of the population of *D. cochinchinensis* and *D. oliveri* in the natural habitats for harvesting in the Choam Ksant District, Preah Vihear Province, and an economic analysis and comparative advantage in investing in on fast-growing tree plantations and CITES-listed trees species. The specific objective of the training workshop was to build the capacity of FA officials, NGOs, academic institutions and other stakeholders through enhancing knowledge on the assessment and preparation of non-detriment findings reports and the economic analysis and comparative advantage of investment in *D. cochinchinensis* species before any decision is made to invest in CITES-listed tree species plantations.

Participants were engaged to learn, willing to put in the effort despite the intensity of the training that was needed to ensure the completion of the workshop program. However, the Non-detriment Findings Report on *D. cochinchinensis* and *D. oliveri* was new to the participants, especially the specific technical assessments. As such, the virtual training workshop of one day might not be sufficient for the participants to understand fully the technical assessments required to make a science-based NDF.

There was limited understanding of CITES in regulating plants and timber in the CITES Appendices and timber trade requirement by CITES among the participants, especially the participants from the local FA offices, the private sector, and NGOs. Thus, it required more time and efforts to build the capacity of stakeholders and those in the private sector and to disseminate CITES-related tree species, plants and wildlife information as broadly as possible. However, some of the participants who profoundly understood the presentations had suggested their wise voices be incorporated into future national NDF assessments for CITES-listed tree species (Appendix I & II), including members of the CITES Scientific Authority.

Pre- and post-training workshop evaluations were conducted to assess the level of understanding as part of the capacity building process. In general, the average ranking score of post-training evaluation of building the participants' capacity increased from 1.7 to 3.1 which appeared to outperform their understanding perceived through the presentations during the training workshop. The conclusion from the economic analyses and comparative advantages suggested that to ensure sustainable agroforestry in a circular economy, tree plantations mixed with cash crops can provide small-scale farmers the economic return in the short, medium, and long term, as the incomes sourced from crops can help to meet the famers' monthly expenses and that they do not have to wait until the trees are harvested. In addition, tree plantation contracting could further economically incentivize small-scale farmers to participate in the establishment of tree plantations.

## VI. Recommendations

- Physical training on CITES Non-detriment Findings for Timber/tree species listed in CITES Appendix II with field practice and demonstration combined with CITES information should be organized at provincial and district levels where there are presence of large population of CITES-listed tree species and good habitats.
- Incentives should be provided in the form of seedlings of *D. cochinchinensis* to individuals, public institutions and those in the private sector to promote the planting of the CITES-listed species through agroforestry, in plantations and public spaces, to restore and conserve the species which would contribute to meeting the obligations in international conventions and promote green growth.
- Technical and financial support should be provided to conduct National NDF assessment for CITES-listed tree species (Appendix I & II).

## Workshop Program



## Virtual Training Workshop "CITES Non-Detrimental Findings Report on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis*" Online Zoom Meeting, 8:00 AM – 17:00 PM 24<sup>th</sup> November 2021

## Program

| Time        | Sessions   | Mediators/speakers  |  |  |  |
|-------------|--|---|--|--|--|
| 8:45-9:00   | Zoom Launching   | Mr. Say Sinly   |  |  |  |
| 9:00-9:10   | Opening remarks  | Mr. Chheang Dany,<br>Deputy Director<br>General, Forestry<br>Administration |  |  |  |
| 9:10-10:00  | Presentation 1:<br>"CITES Non-detriment Findings Report on <i>Dalbergia</i><br><i>cochinchinensis and Dalbergia oliveri</i> in the Choam<br>Ksant District, Preah Vihear Province"             | Mr. Say Sinly   |  |  |  |
| 10:00-10:10 | Break  | Mr. Say Sinly   |  |  |  |
| 10:10-11:30 | Presentation 1: (Continued)<br>"CITES Non-detriment Findings Report on <i>Dalbergia</i><br><i>cochinchinensis and Dalbergia oliveri</i> in the Choam<br>Ksant District, Preah Vihear Province" | Mr. Say Sinly   |  |  |  |
| 11:30-12:00 | Q & A  | Mr. Say Sinly & Mr.<br>Chheang Dany   |  |  |  |
| 12:00-13:45 | Lunch  |   |  |  |  |
| 13:45-14:45 | Presentation 1: (Continued)<br>"CITES Non-detriment Findings Report on <i>Dalbergia</i><br><i>cochinchinensis and Dalbergia oliveri</i> in the Choam<br>Ksant District, Preah Vihear Province" | Mr. Say Sinly & Mr.<br>Chheang Dany   |  |  |  |
| 14:45-15:00 | Q & A  |   |  |  |  |
| 15:00-16:00 | Presentation 2:<br>Economic analysis and comparative advantage of<br>plantations of <i>D. cochinchinensis</i> -challenges, and<br>opportunity.   | Mr. Hort Sothea   |  |  |  |
| 16:00-16:30 | Q&A  | Mr. Hort Sothea &<br>Mr. Chheang Dany                                       |  |  |  |
| 16:30-17:00 | Sum-up and closing remarks   | Mr. Chheang Dany  |  |  |  |

## **List of Participants**

## Virtual Training Workshop "CITES Non-Detrimental Findings Report on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province and the Economic Analysis and Comparative Advantage of Plantations of *D. cochinchinensis*" Online Zoom Meeting, 8:00 AM – 17:00 PM 24<sup>th</sup> November 2021

| No. | Name and Surname          | Position                | Organization  |
|-----|---------------------------|-------------------------|---|
| 1   | Dr. Chheang Dany          | Deputy Director General | Forestry Administration                                   |
| 2   | Ms. Vong Sopanha          | Deputy Director General | Forestry Administration                                   |
| 3   | Mr. Chann<br>Sovathapheap | Deputy Director General | Forestry Administration                                   |
| 4   | Mr. Hem Saravuth          | Director                | Department of Forest Management and<br>Community Forestry |
| 5   | Mr. Suon Phalla           | Deputy Director         | Forestry Administration                                   |
| 6   | Mr. Teang David           | Deputy Director         | Department of Legislation and Law<br>Enforcement          |
| 7   | Mr. Bun Rada              | Deputy Director         | Department of Industrial and International<br>Cooperation |
| 8   | Dr. So Thea               | Deputy Director         | Forest and Wildlife Research and<br>Development Institute |
| 9   | Dr. Samreth Vanna         | Deputy Director         | Department of Forest Management and<br>Community Forestry |
| 10  | Mr. Cheav Sophorn         | Deputy Director         | Department Wildlife and Biodiversity                      |
| 11  | Mr. Chor Phengphao        | Deputy Director         | Forest and Wildlife Research and<br>Development Institute |
| 12  | Mr. Kang Kimly            | Deputy Director         | Department of Private Forest and Forest<br>Plantation     |
| 13  | Ms. Lim Sopheap           | Deputy Director         | Department of Private Forest and Forest<br>Plantation     |
| 14  | Mr. Cheav Sopheaktra      | Deputy Director         | Department Wildlife and Biodiversity                      |
| 15  | Mr. Hort Sothea           | Deputy Director         | Department Wildlife and Biodiversity                      |
| 16  | Mr. Pang Phanith          | Office Chief            | Department Wildlife and Biodiversity                      |
| 17  | Mr. Ouk Sara              | Office Chief            | Department of Legislation and Law<br>Enforcement          |
| 18  | Mr. Say Sinly             | Deputy Chief            | Department of Private Forest and Forest<br>Plantation     |
| 19  | Mr. Chhin Navin           | Deputy Chief            | Department Wildlife and Biodiversity                      |
| 20  | Mrs. Ouch Sineth          | Deputy Chief            | Department of Private Forest and Forest<br>Plantation     |
| 21  | Mr. Vann Vean             | Deputy Chief            | Department Wildlife and Biodiversity                      |
| 22  | Mr. Our Kruy              | Deputy Chief            | Phnom Tamao Wildlife Rescue Center                        |
| 23  | Mr. Phoung Sophea         | Officer                 | Department of Private Forest and Forest<br>Plantation     |

| No. | Name and Surname         | Position                                   | Organization  |
|-----|--------------------------|--|---|
| 24  | Mr. Buor Vuthy           | Officer                                    | Department Wildlife and Biodiversity                      |
| 25  | Mr. As Brosden           | Officer                                    | Department of Forest Management and<br>Community Forestry |
| 26  | Mr. Sroy Vanna           | Officer                                    | Department of Private Forest and Forest<br>Plantation     |
| 27  | Mr. Khot Chesda          | Officer                                    | Phnom Tamao Wildlife Rescue Center                        |
| 28  | Mr. Bou<br>Monkulrengsey | Officer                                    | Department Wildlife and Biodiversity                      |
| 29  | Mr. Koam Seiha           | Chief, Phnom Penh<br>Cantonment            | Forestry Administration                                   |
| 30  | Mr. Vannarith            | Deputy Chief, Phnom Penh<br>Cantonment     | Forestry Administration                                   |
| 31  | Mr. Seng Ly              | Deputy Chief, Phnom Penh<br>Cantonment     | Forestry Administration                                   |
| 32  | Mr. Nget Phou            | Chief, Kandal Cantonment                   | Forestry Administration                                   |
| 33  | Mr. Choun Sara           | Chief,Kamport<br>Cantonment                | Forestry Administration                                   |
| 34  | Mr. Kim Chanmaly         | Deputy Chief, Kampot<br>Cantonment         | Forestry Administration                                   |
| 35  | Mr. Dy Sokhom            | Chief, Kampong Sam,<br>SHV Cantonment      | Forestry Administration                                   |
| 36  | Mr. Phal Mony            | Chief, Kampong Speu<br>Cantonment          | Forestry Administration                                   |
| 37  | Mr. Y Cheangmeng         | Deputy Chief, Kampong<br>Speu Cantonment   | Forestry Administration                                   |
| 38  | Mr. Sim Lapin            | Chief, Takeo Cantonment                    | Forestry Administration                                   |
| 39  | Mr. Phy Ravin            | Deputy Chief, Takeo<br>Cantonment          | Forestry Administration                                   |
| 40  | Mr. Pea Kimheng          | Chief, Kampong Chnang<br>Cantonment        | Forestry Administration                                   |
| 41  | Mr. Seang Rous           | Deputy Chief, Kampong<br>Chnang Cantonment | Forestry Administration                                   |
| 42  | Mr. Pit Phearak          | Chief, Batambang<br>Cantonment             | Forestry Administration                                   |
| 43  | Mr. Uch Phirun           | Deputy Chief, Batambang<br>Cantonment      | Forestry Administration                                   |
| 44  | Mr. Om Virak             | Chief, Pailin Cantonment                   | Forestry Administration                                   |
| 45  | Mr. Lay Piseth           | Deputy Chief, Pailin<br>Cantonment         | Forestry Administration                                   |
| 46  | Mr. Nuon Sokhom          | Chief, Preah Vihear<br>Cantonment          | Forestry Administration                                   |
| 47  | Mr. Mok Phanha           | Deputy Chief, Preah<br>Vihear Cantonment   | Forestry Administration                                   |
| 48  | Mr. Bun Sothy            | Deputy Chief, Kampong<br>Thom Cantonment   | Forestry Administration                                   |
| 49  | Mr. Noun Peovratana      | Chief, Kratie Cantonment                   | Forestry Administration                                   |
| 50  | Mr. Chea Sovannarith     | Kratie Cantonment                          | Forestry Administration                                   |
| 51  | Mr. Sarou Ratana         | Deputy Chief, Mondulkiri<br>Cantonment     | Forestry Administration                                   |

| No. | Name and Surname     | Position  | Organization                  |
|-----|----------------------|---|-------------------------------|
| 52  | Mr. Ou Sopheakdy     | Deputy Chief, Mondulkiri<br>Cantonment                      | Forestry Administration       |
| 53  | Mr. Prak Noma        | Chief, Kampong Cham<br>Cantonment                           | Forestry Administration       |
| 54  | Mr. Keo Muny         | Deputy Chief Division,<br>Tambe Cantonment                  | Forestry Administration       |
| 55  | Mr. Ben Bollyna      | Chief, Thbong khmum<br>Cantonment                           | Forestry Administration       |
| 56  | Mr. Heng Namyi       | Deputy Chief Division,<br>Memot, Thbong khmum<br>Cantonment | Forestry Administration       |
| 57  | Mr. Chhuon Chanvuthy | Chief, Svay Reang<br>Cantonment                             | Forestry Administration       |
| 58  | Mr. Khim Aun         | Chief, Prey Veng<br>Cantonment                              | Forestry Administration       |
| 59  | Ms. Kea Ratha        | Chief Department  | Preak Leap National Institute |
| 60  | Mr. Pol Mony         | Vice Chief Department                                       | Preak Leap National Institute |
| 61  | Mr. Chea Sotharith   | Division Chief Kampong<br>Cham                              | Forestry Administration       |
| 62  | Mr. Sith Samnang     | Deputy Chief, Kampong<br>Cham Cantonment                    | Forestry Administration       |
| 63  | Mr. Kao Vutha        | Deputy Chief, Kampong<br>Thom Cantonment                    | Forestry Administration       |
| 64  | Mr. Van Vuthy        | Chief Triange,Svay Reang<br>Cantonment                      | Forestry Administration       |
| 65  | Mr. Kiri Vuth        | Officer   | RECOFTC                       |

## Presentation 1: CITES Non-Detrimental Findings Report on *D. cochinchinensis* and *D. oliveri* in the Choam Ksant District, Preah Vihear Province





## ខាងអំគា (Content)

- សង្ខេបអំពីគម្រោង (Project summary)
- ស្វែងយល់អំពីអនុសញ្ញាសាយដេស (Understanding about CITES)
- · Understanding about NDF
- ការណ៍សិក្សា NDF សម្រាប់ប្រភេទឈើទ្រញុង និងនាងខ្លួនក្នុង ស្រុកជាំក្សាន្ត ISឮព្រះវិហារ (Non-detriment Findings on D. cochinchinensis and D. oliveri in the Choam Ksant District, Preah Vihear Province)

### សទ្វេមអំគីគរប្រាខ (Project Summary)

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#### អំពីអនុសញ្ញាសាយអេស (Understanding about CITES)

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### ធំពីអនុសញ្ញរសាយអេស (Understanding about CITUS)

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- អាជ្ញាធតិឲ្យសាស្ត្រជាតិកំពូល(ជាន់ខ្ពស់)

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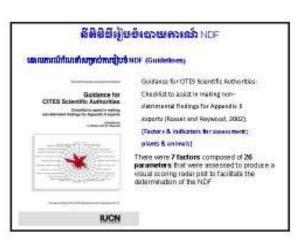
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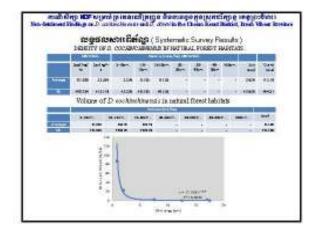
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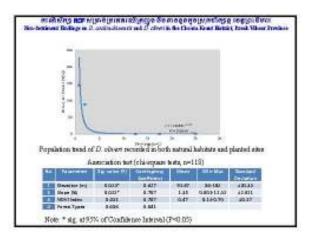








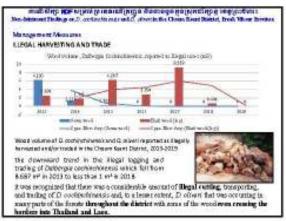
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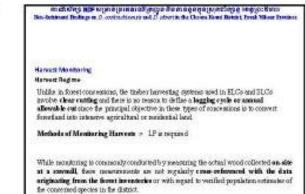




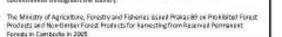


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nicibility of any installed state in the second state of the secon

#### Coordssion

- The monogenesis measures associated with the distribution of two escalings that constitutes to the recovery of both the populations of the Datespile species beam lines works. It is recommended that the genetic conservation of these species should near be for the recoversing through instruction, plassing, and the instructions of social
- While accounterative interage interaction includes providers for the exceptions of spacinitism. While Article VII of the CRES Concention includes providers for the exceptions of exceptions produced as the most of setting propagation, it is concluded on the basis of the most of this report that the current policy of the CRES Management. Althouty in which the RSC has a special of the spectra of all products softwated from the leavery goald timber special, including Gallery's, imagencies of all products softwated from the leavery goald timber special, including Gallery's, imagencies of whether the spectrum. Now base, artificially propagated or derived from national forests, should continue using add.

#### REALING Recommendations'sdutions

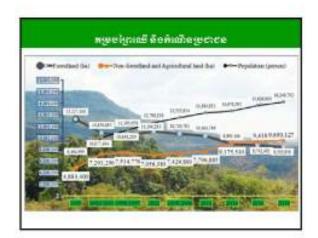
- Genetic conversation is primarily required,
- Finiting both species about the interferiored an energy former as highly preserved such as plantations or agreementy whenever possible on housibeld plantations and path in lattice of the area.



## Presentation 2: Business-related training to prepare private sector entities and small-scale farmers to participate in the establishment of small-scale private plantations of *D*. *cochinchinensis* and *D. oliveri*









| Centration<br>Fundace and Decoration  | Contraction of the local division of the loc | 2740,000<br>175,000 | 45<br>118 | 5.506<br>5.508 | E-23579<br>(2)<br>(2)579 |
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| West converted Chatsout is used<br>for coaling in topological and<br>restaurants              | 0.780,000  |                     |           | -6,88          | 314924                   |
| Tela  | 6.280.000  | 101000              | 18116     | 92,518         |                          |

|       | m | វិនិយោងបែកសៈ គោលនិយោបាយ និងការលើកទឹកចិត្ត<br>ការវិនិរយាងចំការលើឯកជន  |
|-------|---|--|
| A NAL | ľ | ម្នាប់ស្តីពីប្រានពី (១០០២) ម៉ាងមិសិទ្ធិបង្កឲ្យស្នួល ឬ វីកែត្រួលសាកា អើកហារាណា<br>ហេដំលើពីស្តេទីព្រំណាំពង់ហេសិទ្ធិព្រះស្នេចឈាន ទៀប្រស ពីឈ្មោះ យាងឆ្ នៃ<br>តែសមានទាំយទំនែល   |
| -     | ľ | យុទ្ធសាស្ត្រឈ្មោះសារណ៍ការ៉ាទ័ន ឆ្នាំ២០១០ ២០១៨: ប្រោះណ៍ការូលគ្នា និង<br>សិក្សានយកស្រានី និរៀតនាមិសារន៍ដែលសារពិទូក។ ដែលដឹកសូរកំព័រ<br>រស័យ២០សម្រួនគេនាវារិយដែល។ មានប្រភពនារអ្វីទសារតំ និរសួរពិទូនអ៊ីរអ៊ីរអ៊ីរ<br>ម៉ែយ។ |
|       | ÷ | តែលាយក្លសាស្ត្រាវិវឌ្ឍន៍ជាតិ ២០១៩ ២០២០នាត់សារលានានាំដាត់ Comany<br>នៃល្អមន្តិតារូបតែប្រវត្តិភ្លាប់ផ្លាតែល ព្រះវាត ភ្លៀងស្រ័ទាំ២៩ ០០០នាំងតា   |

#### ការវិនិយោងថៃចង្កៈ គោលេខយោបាយ និងការឃើតទឹកចិត្ត ការវិនិយោងចំការហើងគ៨ខ

ស្ត្រីស្តែងតែមិនក្លុងស្នាស់ស្តេចអាស្តារ បានសារសារជានាវែបាយជានាវ័យដែលប្រូវបានដែរស្តែ ព្រំត្រូវស្តេចស្តេចស្តេចសារស្តែសារស្ត្រីស្តែ និងសើមស្តេងដែរស្តេចសារសារ ជាតិសេលាន៍បន្តថា លំការស្តើប្រស់នៅដែរសារប្រូនសិត្តិស្នេងនិ និងសំនៅសត្តិសារសំនា ស្តើម៉េព្វាះសារស្ត្រាសំរាន់ក្នុងកាស

- ការគ្នាប់ក្រដម្លៃឈើក្រកប ដោយវិវឌ្ឍតាត និងការកត់ផ្សេយកតក្តីក្រ តាមរយៈការនាំ យដិហ៊្មាទិញ
- ការទំព័ន្ធដំណាល់ ជាយល់កស់ចាត់លើការបំណើតបញ្ជូនរបស់ខ្លាំ ដែលមានសត្វា ខ្លួនជាច្រុងប្រជាព្រះខ្ញុំផ្លូវបានជាថ្ងៃក្រសួរ។ និងសន្តិនព្រះអំណូនដល់ប្រជាន មូលដូចេ មូលដូចេ
- អត់ខ្មែរអ៊ីតូសហ្វាត់ស្ថិកដើមនេះត្រិនឲ្យអារដដែលសហរមេស៍ វៃល័យជាមាន និង រដ្ឋបានស្ថិតដើមនយៈការអត់ខ្មែរ អ៊ីតូស្រុនត្រៀងមុទ្ធ។ ស្ថិតិកម្មអប់ទេង និងកាន់វេង ដែមជារដ្ឋបាយន័ន៍
- ການເຊື້ອງອະຊັມແຫຼງ,ອາດກ ລວດເຮັບຮູ້ຮູ້ແຈຍ ກາຍເມກາະໄຫຼການກາດແມ້ ແມ້ຢູ່ຮູ້ມູນການກ່າ ຮວກ.cocore ໃນການເຮົາອາການໃນເອາການດ້ຽວການ ເມືອງອາຊະນະກຳເປັດ:

#### ការវិនិយោគថៃតងៈ គោលនយោបាយ និងការលើកទឹកចិត្ត ការវិនិយោគចំពារពេធិឯកជន

- ចំណារយុទ្ធសក្សេរជាត្រូវពីប្រជាវិ ឆ្នាំ២០១ភា-២០៣០៖ ខេត្តក៏កថ្លៃពីនាំនេះលើតាមលេខាន្ទ សែទ សហគារ បុទ្ធលេខត្តលេខត្តលេខ សហគមន៍និងឯកនាន, បង្កើនសមត្ថភាសន្សន្តទំនើប កម្មស្តីវិញកម្ម និងជំរុញតាមឱ្យចំផុលហិ និងភាននាំពិសោធន៍ចូលលើ
- ដែរការដំបូរសម្តេចដើម្បីដែលដឹងខែ១៩៩-៦០១៩ដ បានបញ្ជាក់ដីការចត់បាន់សម្រាប់ ប្រទេស កម្ពុជាក្នុងការអន្តាតរប្បកាលវាងការនើវន្តន៍ និងការកើរទទ្ធ និងកម្រាការ ១) កម្រប ថ្ងៃលេអី និងការអភិវត្តក្រៃលេអី និងសទ្ធប្រៃ ។ ដែរការយុទ្ធសាស្ត្រនើវន្តន៍ជាចំ បានកំណង់ នាការដាំជាតិ ៦០ភាគលៅនកម្របស្ថិតនាយីជាមួយផ្លៃនីប្រច័ន្ទដែល ក្រុងជានុងស៊ីនវិញទំហំ ២៥.០០០ហិកតាមាប់ រឺឆ្នាំ២០១៤ នល់ឆ្នាំ២០១៥។
- ដែលខានជាមួយស្នេតដែលនៃប្រាយាលាលនាក្នុងស្នាំ២០១៤-២០២នាននេះដែលលោក នេះមានទី២ ន័ងចំពូលយ៍ ពណត្ថទំនាលកម្មជាកំពុងសុំព្រោះនៅដើមឈើ ការស្វានឡើងវិញខ្លាំ ខ្សែនយើដែលក្រុងបានជនលៃ និងការវិនិសារកក្នុងការដល់នៅដន់ខ្លួន ។

#### កាល់ទីយោងថែតង្កុះ ដោលខយោបាយ ទីឯការលើកទឹកចិត្ត កាល់ទីយោគចំការលើឯត៨ន

- នៃទទ័លចូលក្នុងសិទ្ធាទីដែលសង្កាត់តាតិ៖ លើការម្ភលំកាសកូរសំពួនយើនៅក្នុងប្រទេសភាទា យការលើកទឹកចិត្តដែលមានមូលដ្ឋានលើការទូចោច់ ក្នុងនោះបានដាក់បត្ថាលក្រសួង និង ស្ថាល័នជាជាដើម្បីជាដើមឈើនៅតាមជនផ្លូវ និងតែកម្ចាករមួយថ្ងៃសេយី ដើម្បីមានឡើមាន សក្តាមានចំនួយខ្មែរបន្ថែរបន្តឲ្យស៊ី និងតាមពាល់លើជាតិ។
- នេះស្មើត្រង់ដែរមានល្អទូរសូស្ត្រស្មាត់ផ្ទាស់ក្រុម្ភបែងលេខ១៩ ដែលលេខ កាលស្មាយៗនេះលើ នៅតាមស្ថានិយព្យខ្វស្លាយ ការពាំក្នុងឈើនៅលែន់ស្នាត់ព្រះឈើទៀនវិញ និងទីនាំងផ្សេង១ តែសេចការរៀបចំពិធី រញ្ញទី៣- ជារៀងគល់ខ្លាំលើឡើបផ្ទុសច លោខណៈជនទាំងអស់ឱ្យចូលរួម ជាសិខាលើ ចែកម្លា និងការពារមនណាវ៉ាព្រលើ។
- ព្រោះសង្កើពីតែទៅត្រងាយ៖ ប្រការសហទ ៣២៤បាញាករណា ត្នារំខ្លាំង២ ខែមិខ្លាំនា ឆ្នាំ ២០១៥ នេះសំព្រះកូងហើយខ្ញុំ អ្នកប្រាស់ខ្លាំ និងដែលថា)

#### ការវិធិយោនបែកឯ: គោលរមយោបាយ និងការលើកទឹកចិត្ត ការវិធិយោនចំពារឈើឯកជន

- ការផ្លាក់លើខ្ញុំប្រើប្រាស់ពីក្រោមដែល ឬ ព័ទ៌នេអាស់អន្តសម្រាប់ការពិណារ៍ (អារុក្រីប្រាសទ ២ចំអាវញបេទា សុងក្លែទី២៥ ខែទីជា ឆ្នាំ២០០៥ ស្តីពីនៃសង់សមាន្តសំសិទ្ធិប្រើប្រាស់ពីព្រៃ របស់គេ្តសម្លាប់ការពីឈើក្រ។
- ការអនុញ្ញាការកាលការណ៍ដាំលើហើរត្រៃសាហិងទើលដោយលោកដល់គ្នាត់សត្វជាមួយ និងវិស័យឯកជន (PPP Powe Press Press ratio) (បើទិការបទ ១២០សាងណាសត្ ថ្ងៃទី០៨ ខែកុម្ភៈ ឆ្នាំ២០១៧ របស់ទីស្លឹកទោណ រដ្ឋមន្ត្រី) បារមាលអាយើកើតជាឆ្នាំគឺបាល បានអនុញ្ញាតធ្វើការដាំដូនដឹមឈើហើរខ្លួនថ្ងៃសេចរើលេខសាករស្លឹកជិតាអ្នកខ្លួងមក ថ្លៃនី ដែលមានការមេទើល និងនៅទំនេយស់ធម្លាំ។
- ជុំប្រកាលធ្វើនកម្រិនដំណេលលស់លហាមដមូលក្ខនា ដើម្បីការបន្ថយការដ៏រង់ត្រ។ អម្លេចិយ គណៈលើ សំដៅអេឆ្នាំកម្លាះកណ្តន់ក្នុងដល់លេវី និងលើថាមាលចេញពីទទួលលើ លី (ទិសារវាយុទ្ធរកសូត្រីដល់បានកំណត់ក្នុងទទន្ទន និស័យប្រប់ត្រង់ស្វែកយើយ ដែង លិខិតលេខ ១២១១សារណ៍ រហា ចុះថ្ងៃទី២៨ ខែថ្ងៃភ្លា ឆ្នាំ២០១៨ លល់ទីស្វិការភាណ ស៊ីមន្ត្រី)

### ការវិនិយោងថៃតងៈ នោរបនយោបាយ និងការយើកទឹកចិត្ត ការវិនិយោងចំការហើងតជន

- ភាពហ្វាយក្រោមការនាំទេញលើមុខទំនិញព្រភទល់ដីតាំ និងវត្ថុធ្វើវិនយើនា () ដើម្បីលើក ទឹកខំជូវនិទេយត់នណ៍លដ៏ដូចជា៖
  - អຊາທາວັນຮູບ 46% ໂຮ້ຫາຮຽກັງການຮ້ານຄຽມຮູບ ເດືອການການຄຽບປະຈັກສູງ ມູນຮອດເມື່ອໃຫຼຮຽນແຫ່ນປະສິນ
  - ដាក់អាកនៅចេញជាបន្តរទន្លន់នោះកានៅចេញមុខទំនិញទៀងសង្ឃើន និង ដលិតដល់សមុទមផ្លេងបាទព្រៃធ្វើពីរលើដាំក្នុងប្រទេស
  - អាជ្ញាយមានលមអ្នកិច្ចខ្លន់បញ្ហាកំណើមពួកហ្លេទាំយឲ្យ នូវឈ្មោះវិទ្យាលម្អភូ និង ឈ្មោះអាយិត្តអម្មរបស់លើ និងត្រូវបញ្ហាកំពាតា «ប្រភេទឈើតិថ្មានព្រះស» ថ្ម «លិកតំហង់លើតិថ្មានត្រូវសារ»
  - លើនិងលេខ ១៧០៤លាលា សារ ខ្មង់ត្រទី១៨ ខែវិច្ឆិកា ឆ្នាំ២០១៩ របស់ទីស្តីការ អណៈរដ្ឋមន្ត្រី;

#### ចការឈេត្រញូង ខងខាងខ្លួន ការវិនិយានចែង ការវិតារសេដ្ឋកិច្

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| Crop  | Crop Type   | Gross Value Geografied |
|---|---|------------------------|
| Rice  | Agriculture (Ourrent)   | \$750+                 |
| Cassava   | Agriculture (Current)   | \$550+                 |
| Sandahwood*   | Forestry (Fixed)  | \$26,500+              |
| Forsewood*  | Forestry (Fixed)  | \$38,500 +             |
| <ol> <li>Examples of the<br/>L. Simelin (A)     </li> </ol> | en na versal ly Agnar Franssing.<br>17 Teorem ann.<br>18 gena na 310 Teorem an Ion, Carpon (200–42)<br>14 Júnyas na 51 Million verken, Carpon Still |                        |
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#### ទំភាវដេញីគ្រញូង និងនាងខ្លួន «ស្វារសាគនី ទាលថ្មាចូរ ទេសនៃយកើត

#### ការសានុវត្តភាព: គោលនយោយបាយតំណោយ៨ល

- រូបវន្តបុគ្គលាំដលពីឈើនៅលើដឹងកដនមានសិទ្ធិដែរក្សា អភិវឌ្ឍន៍ ប្រើ ប្រាស់ លក់ និងតែកតាយគលិតថលឈើរបស់ខ្លួនចេញព័ត៌ការឈើងាំ។
- ៣៩០១ ២ឆាត្រានខ្លាំដេញលើដល់តដល់ឈើខេញនឹងការឈើដៅដើម្បី
- លើកទឹកចិត្តដល់អ្នកវិនិយោគដាំណេរី: • កាត់បន្ថយពន្ធអាំខេញ ៥០% ទៅលើដល់គដលឈើខេញព័ទ៌ការឃើ
- ដាំក្នុងស្រាក
- មិនយកពន្ធនាំខេញចំពោះ៥លិត៥លាឈើកខ្វែលទ្រេចដឹងក្រឿង សង្ខារឹម៥លិតខេញពីចំពានឈើនាំក្នុងស្រុក។

#### ចំការឈើត្រញូង និងនាងនួន ៣វីនៃនាមទទេលភ្លាប់ទេ និងតារអនុវត្តការ

| Multiple tree products<br>than divertier tree 5, cargo<br>and animals                            | Midtale true products<br>Face coveral true<br>species  | Woody wate tals<br>lock at a ringtl Sinder,<br>dap is sod, faels sod,<br>small pole etc.   |
|--|--|--|
| Private tand   | -Fable state land<br>-Fitnetic land  | Parate land, IBLC, FFF   |
| Hostehold-cinal scale  | Median colle   | Small ; modiers , and<br>targe scale   |
| Many opening of these<br>bandos, observative<br>opening and accelerated<br>mail impose g., fore. | Oh is plasting with<br>alternate lines or strips<br>of this growing and<br>high accessmic value. | Monitorial States And States And States and States States and States Sta |
| beans, rack crops, .<br>Durd er, line, and block<br>planning                                     | Die is glasting with<br>sharmate inter or strigg<br>line   | Stock planding with<br>Ngh-density   |
| Weeding, promitioned<br>interaction cut  | Thinking, selective rat<br>or older sat  | Firs protection proving<br>and three leg   |
| Agro Brividay, indegrated  | Privata In not   | Herbe complexeds, at<br>Only Relify  |

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| អលាលអៀថ្មី | ឡាសនាល័យពិហាតខ្លួនមេទាំសូទី<br>-ម្នាសនាល័យខ្លួមទំហាញ<br>-សមមុខែលចំណនសម្ពន័រ ទ្រង្ស<br>-សមម័នលើសនេសម្ពន័រ ទ្រង្ស                                    | រលាយកីឡាអាកពី<br>-ទូល់ទូលបានចូវហើមាលានកេសលី<br>សត្រស់ខ្លត់ខ្លត់ទ្រង់ក្រង់កំផ លិកកម្ម<br>-ភ្លៃខេតកំណាម្ចណ៍ជំងឺបញ្ហាតិឆ្លឺ                                       |
|------------|--|--|
| ដូណរបង្ក   | មានចូលចំណេងមានអាច យ៉ានាវាន<br>ការិទូរទេ ស៊ីទូកលើកិច្ចព្រមព្រៀងរ<br>-តែមានលក់ផលិតផលលើលលំខ្លួន<br>ផ្លេកពីនិសារលេះបីមូសន្យា ចោះបីមាន<br>កេត្តមិតិឲ្យអ | កមភិការកាសពីរាមានការម្នាស់ក្មេង ចំតួនី<br>ការពិនលើទៅធ្វើនំណាកសិកាឆ្ន<br>ការសិការកាសមានលក់ផ្ទាល់ឆ្នី<br>ការសិការអាចនិងមានការលួចលក់<br>នលិកដលចម្លាលឃ័តទៅភាគីទីបី |

#### ចំការឈើត្រញូង និងនាងខ្លួន ៣វិនិយាមចែល បញ្ហាបាន វិងកាលអ្នកកា

#### Opportunities: key strategic policies

 Relevant authorities shall certify the export license with the scientific and local names of the timber species, and shall certify it as "locally grown timber" or "a wood product made of domestically-gown-tree".

3. The FA has identified indicators and input data to contribute to achieving a long-term Zero Carbon Emissions Strategy (1) establishing CFs. (2) strengthening sustainable forest management; (3) promoting the distribution of reedlings and planting trees in all forms on degraded forest lands and private lands to reduce pressures on natural forests; and (4) developing and promoting agreforestry practices in both community forests and private lands.

#### ចំការលើព្រញ្ញង និងនាងនុន ការដែលតាន បញ្ហាបាន Tamunajame

#### Opportunities: key strategic policies

3 The FA has established the practical procedures for the registration of private forents using forms such as private forest registration applications, logbook, and certificates that may meet the requirements of the SITES Convention.

Registration of tree plantations or agroforestry plantations at the residential land in the rural area in Cambodia may be an incentive set out in the guidelines for the establishment and registration of private forests in Cambodia, which contribute to rehabilitating key high-commercial tree species





#### ឧន្ទងខេងនិ ៥ប្រព្យឃិរារាល់ «ក្មេរទូលាកង ឈាញ់ចូប seulemiAlum

#### Opportunities: key strategic policies

4. To achieve the target defined in the Agricultural Strategic Development Flan 2019-2023, FA plans to increase tree plantations that can be harvested from 200,000 m3/year in 2019 to 300,000 m3/year by 2023. FA has been customizing the reforestation on state-owned degraded forent land and promoting the participation of pitvate rectors to plant trees on their private land for multi-purpose, especially for commercializing, in the long, medium and short term. These aim to create a variety of supply sources of timber and fuelwood from tree plantations, and help improve living standards of local communities, as well as to reduce their dependence on natural forest sources.

#### ននុងពេងនឹងព្រាញពីពេរកៅ សត្វផ្ទោះទោង ខណ្ឌច្ចាន ដល់នាយទី៥៣

#### Opportunities: Impact of the implementation of Guidelines on Private Forest Registration

Four locations of private forest plantations that have just been registered in the first semanter 2021

- The first location covers an area of 3.92 hectares situated in B or soft detrict, K an pong Spou province, and the pensonly plasted two spectres consist of Agalania crasswa Piorre, Dalbergia contributions: Agalania pioconput (Kara) Craits, Phy compute intercompute Kinz.
- The second location has an area of 200 hertares, located in Bre Ambel district, Keh Kong province, and the mainly planted these spectre consist of Apalaria crasson Piene, Dabbergia cockechments Piene, Dabbergia odersfera, Afedda sphecarpa (Kuzi) Craite, Pherocarpus macracarpus Kuzi, Biogra sessinglerati.

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## ចំការឈើក្រហួង និងនាងខ្លួន ៣វិទិយាទាំទេ៖ ខណ្ឌព្រះទេ និងកាលទាំទ្រក៖

#### Opportunities: Impact of the implementation of Guidelines on Private

#### Forest Registration

Four locations of private forest plantations that have just been registered in the first semester 2021 :

- The third Incestion is 33 he doesn, located in Teak Obiou district, Kampet province, and the primarily planted tree species remain of Aputonic crasses Pierre, Joshergia cochristeness Pierre, Afterlar tylecorps (Kum) Craib
- The fourth location covers 37 hectares attained in Battery Meas district, K uppor Province, and the primarily planted tree species consist of Agailantic reasons Piene, Dalbergie conferences in Piene, Attaine splicespie (Engl) Craib.



#### ចំការលើក្រព្យង និងខាងខ្លួន ការវិលាទទេសចាញ់ព្រះទេ និងការកម្មវត្តភាព

## បញ្ហាប្រឈម:

- លិខិតអនុញាន និងវិញាមនមត្រនើម កម្មសិទ្ធមញា លិខិត អនុញាតសាយតេស និងតម្រវាកររៀបចំ NDFs
- ឬគូលនីមួយៗប្រតិបត្តិការដោយឡែកៗពីគ្នា
- បម្រែបម្រលការប្រើប្រាស់ដី
- ខ្សែសង្វាត់នៃសមត្ថភាពផលិតកម្មនៅមានកម្រិត

#### ចំការឈើរុកញូង និងខាងខ្លួន ៣វើមិយារនៃខេត្តព្រះទេ និងខាងខ្លួន៖

#### ស្ថានភាពអំណោយផលហើតាលិទិយោគ

កម្ពុជា និងអាស៊ីមានសត្ថាតុឧលបីយ៉ាងបើប្រៀបដៀបនឹងបណ្តាប្រទេស លោកខាងលិង:

- លក្ខខណ្ឌអំណោយថលដៃទំបន់ក្រុងអដែលខេខធានដឹងឱកល្អ ប្រសើរ ត្រៅហើយសើមមានអំណាយថលសម្រាប់ការលុកណាល់ ដំណាំត្រប់ប្រទេទ
- ៣តំបន្តយន្តករដ្ឋភាសន៍អន្លវាញ់បំដាមត័យមា
- ៣នំបន្តយនាំម្តសម្រាប់ដី រាលកម្ម និងចារុផ្លេះផ្សងទៀន។
- ខ្មែកលើសប្តាកុតលាម៉ាម ឆា ទេះ កម្ពុជា គិចតាស៊ីអាចដលីកដោយ ចំណាយកខ្មែកចជាងជាក់កណ្តាលជំនាយចំណាយទៅក្នុងប្រទេសលោក មានលើច។

### ចំការហើត្រញូង និងនាងខ្លួន ការីនិយារនៃកង ចុល្លាយទ និងការអង្កការ

### សន្ធិថ្នាន

- អាស៊ីត្រូវការឱ្យមានការទទួលស្គាល់លក្ខខណ្ឌអំណោយផល សម្រាប់ធ្វើពាណិច្ចតម្ម
- ចំការគ្រញុងគឺជាការវិនិយោងថៃតង និងកានាំទ្រការអភិវឌ្ឍ
   ថៃតង នាំទ្រ៨លំការតារ សេដ្ឋកិច្ច និងសត្វព្រៃ
- តាវវិនិយោគចំតារឈើត្រញូងគឺជាតាវវិនិយោងទទួលបានផល ចំណេញនិងអាចធឿជាក់មាន និងមានតម្រូវការទីផ្សារខ្ពស់នៃ ផលិតផលលើសម្រាប់ទីផ្សារក្នុងស្រុក និងទីផ្សារអន្តរជាតិ
- កម្មសិទ្ធបញ្ញា និងតាណិជ្ជកម្មអន្តរជាតិ



## For Further Contact:

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