



AFoCo

Individual Cooperation Projects

2011-2012

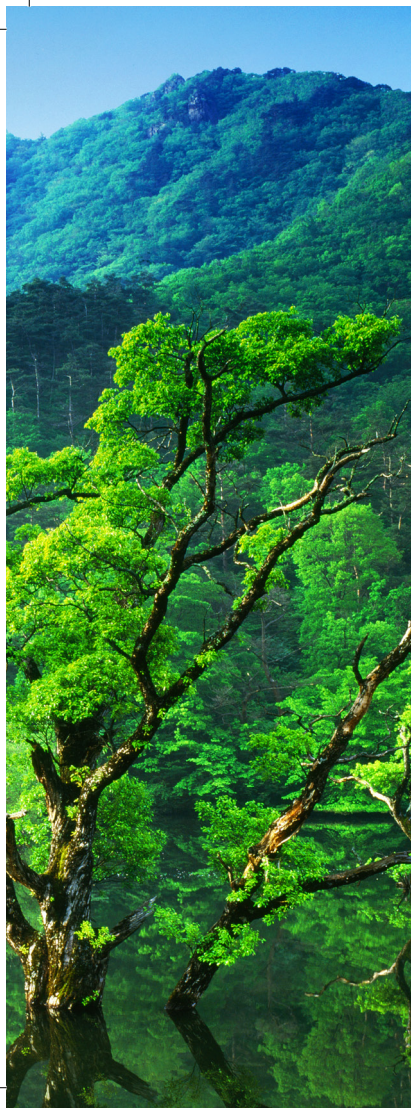
ASEAN-ROK Forest Cooperation (AFoCo)

is an inter-governmental regional cooperation mechanism in the forest sector which was formalized in August 2012. AFoCo aims to facilitate forest cooperation between ASEAN Member States and ROK focusing on action-oriented field activities while ensuring synergies and complementation of existing cooperation, regional and international organizations, and broaden the scope to other Asian countries by providing a platform towards Asian Forest Cooperation Organization (AFoCO).



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Project Overview

AFoCo Individual Cooperation Projects were designed to support the implementation of **national forestry priorities** and strengthen the **forestry cooperation between ASEAN and ROK** in anticipation of the establishment of AFoCO. In early 2010 during the process of negotiation for AFoCo Agreement, ROK proposed to support the individual cooperation projects to be implemented in each ASEAN Member State.





In order to develop the project proposals, an International Workshop on Forest Cooperation was organized on 8-10 December 2010 in Korea and identified the **four potential cooperation activities** for individual cooperation projects as follows:

- i. **Mitigation of climate change effects through rehabilitation/ restoration of degraded forest and ecosystem, environmental service, community forestry and REDD+ activities;**
- ii. **Conservation of biodiversity and eco-tourism;**
- iii. **Non-timber forest products development and renewable biomass energy; and**
- iv. **Human capacity development (scholarship and training programmes).**

A total fund of USD 100,000 was allocated for each project, the projects were implemented over the period of one year during 2011 and 2012.

Brunei Plant Biodiversity:

Endemics and Database

The cooperation project was to increase the level of knowledge of Brunei Darussalam's flora, consolidate the existing data into a form useful to all, and enhance Brunei Darussalam's biodiversity management capability.

The project consisted of two main activities that are **documentation of Brunei endemic plants and development of a Brunei plant database**.

Thorough survey of the relevant scientific literature from 1990 to 2012, queries of online databases, correspondence with botanists expert in given plant families and with curators of herbaria in the region, **sixty five endemic flowering plants have been found** in Brunei. The endemics are **documented** in detail in individual reports. The endemics and their associated conservation issues have been summarized in the book: **The Flowering Plants Endemic to Brunei Darussalam 2012** (ISBN: 978-99917-31-08-7).

The information on the 30,000 plant vouchers of the Brunei National Herbarium have been **entered** with the **digital photograph into the database record** using the software BRAHMS (Botanical Research and Herbarium Management System). One week training in the BRAHMS database system has taken place at the Brunei Herbarium, with trainers from the National Herbarium of the Netherlands.

Brunei Darussalam

Implemented by Forestry Department Ministry of Industry and Primary Resources





Field survey for endemic plant species in Belalong, Temburong of Brunei Darussalam



Publication titled "The flowering Plants Endemic to Brunei Darussalam 2012" was launched on 11 April 2013 with presence of H.E. Minister Pehin Haji Yahya, Minister of Industry & Primary Resources. This book presents the first enumeration of the endemic flowering plants in Brunei Darussalam and highlights the 65 species among them including pictures of plants, herbarium specimens, line drawings, and distribution maps.



Brunei Plant Database was developed for about 38,000 specimen collection in Brunei National Herbarium (BRUN) with BRAHMS (Botanical Research and Herbarium Management software).



Improving **Capacity on Forest Restoration** in Cambodia

This project aimed to provide knowledge and skills on forest restoration to local communities that manage the forest and equip the Forestry Administration with a tissue culture laboratory for mass production of seedlings of high-value timber species, especially *Dalbergia cochinchinensis*.

A total area of 18.73 ha of Leap Kuy community forest has been diversified by **enrichment planting/seeding with high-value timber species**, particularly those that had been extinct locally, such as *Dipterocarpus alatus* and *Hopea odorata*. Along the boundaries of Leap Kuy community, 1,800 seedlings of *Acacia mangium* were planted for demarcating the boundaries of the forest and providing fuelwood to local communities. 200 seedlings of *D. cochinchinensis* were distributed to two communities for planting in their community forest.

Research trial has been conducted to examine the effects of chemical fertilizer on growth and survival of *D. cochinchinensis*. Results from the trial were printed in booklets for distribution to the beneficiaries and other interested stakeholders.

In addition, **plant tissue culture technology** was introduced for mass production of seedlings. The plant tissue culture lab and its equipment were prepared and installed at the Institute of Forest and Wildlife Research and Development.

Cambodia

Implemented by Institute of Forest and Wildlife Research Development



Mother tree of *Dalbergia cochinchinensis*. This tree species, which is native to Indochina and adjacent countries, has been promoted in tree planting programmes in Cambodia.



Insufficient silvicultural knowledge for *D. cochinchinensis* was found to be the limiting factor of its rehabilitation. This project attempted to enhance knowledge and capacity of plantation establishment and management through research trials in the field. In the picture, local expert is explaining the pre-treatment of seed to promote germination in the field.



Tissue culture laboratory in the Institute of Forest and Wildlife Research and Development.



Survival and growth of seedlings of *D. cochinchinensis* has been monitored to examine the effect of chemical fertilizers under plantation conditions in Siem Reap.



Database Management and Development for Forestry Research and Development Results and Capacity Building on **Biomass Energy** in FORDA-INDONESIA

This project was to develop database for forestry research and development in accordance with the plan of Forestry Research and Development Agency of Indonesia (FORDA).

In order to coordinate the scattered information and research data and to facilitate its planning, implementation, and dissemination of the results, FORDA put its effort in collection of land/forest cover data and spatial information and capacity building of researchers and officials on database management. GIS equipment and software were installed in GIS data management center and four regional sub-centers and four consecutive trainings and workshops were held.

FORDA enhanced the human capacity of bio-energy, recognizing its potential as an alternative to fossil fuel energy. Two researchers from Center for Forest Products Research and Development (PUSTEKOLAH) were invited to Korea Forest Research Institute in Seoul for training and hands-on practice on wood pellet and bio-oil production.

Indonesia

Implemented by Forestry Research and Development Agency (FORDA)





Advanced training workshop for GIS analysts held in Labanan research forest, East Kalimantan, Indonesia on 25-29 July 2012.



Junior level training workshop for GIS operators held in GIS data management center in Bogor on 18-22 June 2012. This workshop provided introductory lessons for GIS and ArcGIS programs for various types of analysis such as land suitability, vegetation types and aboveground carbon analysis.



Bio-energy technology training held in Korea Forest Research Institute on 21-28 April 2012. This training program provided lecture and experimental practice of producing various types of bio-energy including bioethanol, bio-oil and wood pellet.

Capacity building to support **Village and Village Cluster Forestry**

The project aimed to fill the capacity gap in the forest sector and begin the process of forming a core group of expert trainers that will accelerate the rate at which village forestry activities can be rolled out simultaneously across Lao PDR.

Based on review of “Community Based Forestry” programmes and projects applied by different international organizations, the project came up with the base model for Village and Village Cluster Forestry. Ban Vang Village in Mueun District of Vientiane Province, was selected as a pilot site to test the model and a platform to further rollout of the project.

The project **established a highly trained core group** of Lao master trainers to support the dissemination of the precepts, practice, and theory of village forestry. The training has run in conjunction with guideline testing and in parallel with the formulation and development of **village forest allocation and management plans**.

Lao PDR

Implemented by Ministry of Agriculture and Forestry





Conducting a Participatory Rural Appraisal with community at Ban Vang Village in Muen District, Vietiane Province



Director General of Forest Department conferring a certificate to a trainer at the Training of Trainers on Village Forestry



Undertaking field survey at the project site near Ban Vang Village



1. **Plant Biodiversity Enrichment**
Program of a Greened Man-made Ecosystem in Peninsular Malaysia
2. **Human Capacity Development**
in key important areas to further enhance the implementation of
sustainable management in FDPM

The project had two main objectives - one was to establish a **plant biodiversity enrichment model** in a greened ex-tin mine in FRIM Field Station, Bidor, Perak and the other was to strengthen **human resource development** in the Forestry Department of Peninsular Malaysia (FDPM).

Through the Plant Biodiversity Enrichment Program, a total area of 3 ha enriched with tropical rainforest species was successfully **established** at Tin Tailings Afforestation Centre (TTAC), Bidor. The enrichment site was planted with 20 indigenous species from primary and secondary forests which bear edible and essential fruits for birds, bats, rodents, and mammals. The enrichment site will be further maintained into model plot for research.

As a part of human resource development program, the FDPM officers visited Korea and **learned** new knowledge on various fields of forest management such as national park management, forest recreation, R&D on seed improvement technology, forest fire mitigation, public awareness and capacity building and non-government organization participation in sustainable forest management.

Malaysia



Implemented by Natural Resources and Environment

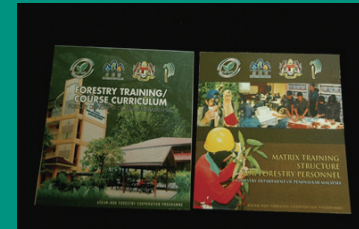
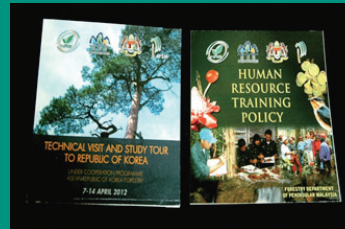




Planting *Cananga odorata* seedling at greened slime tailings. 1,440 seedlings of 20 tropical rainforest species were planted in May 2011 at Tin Tailings Afforestation Centre (TTAC), Bidor.



Top soil for greened sand tailings was trenched and filled with mineral soils for planting trees.



Four documents were published through the project – 1) Technical visit and study tour to ROK; 2) Human Resource Training Policy; 3) Forestry Training Course Curriculum; and 4) Matrix Training Structure for Forestry Personnel.



Mitigation of Climate Change

Impacts through Restoration of Degraded Forests and REDD-Plus Activities in Bago Yoma Region

The project implemented the pilot activities for the restoration of degraded forests and conservation of ecosystem for mitigating climate change effects and supporting sustainable forest management in a degraded forest area in central region of Myanmar.

20-ha degraded forest area was selected for demonstration of REDD+ carbon enhancement through the establishment of forest arboretum, community woodlot and forest conservation. In addition, the area with high tree density and frequent re-growth was selected for conservation and enrichment planting with *Tectona gradis* and *Xylia xylocarpa*.

The project also worked on baseline carbon stock and analyzed the main deforestation factors of the site to support REDD+ readiness.

Two training sessions were organized for the staff of MOECF, focused on carbon measuring/monitoring, reporting and verification (MRV), forest inventory, and REDD+. A series of workshops and trainings for local people in surrounding eight villages enhanced their awareness on climate change, forest and REDD+ promoting their active role and participation to sustainable forest management.

Myanmar



Implemented by Ministry of Environmental Conservation and Forestry (MOECF)





Forest inventory was conducted in Sabyin and Lonyon Reserved Forests in Yedashe Township, Taungoo District to understand the current forest resources and carbon stock in coping with REDD+ readiness.



Raising public awareness on climate change, forests and REDD+



Addressing Climate Change through **Community-Based Fuelwood Plantation** Development and Management

The project aimed to develop and sustainably manage a community-based alternative source of energy and provide an environment-friendly livelihood for forest-dependent communities in Barangay Santo Tomas, Tagkawayan, Quezon Provinces.

The project established **20 ha of fuelwood plantation with a nursery** which could produce a total of 160,000 seedlings of various fuelwood species.

The FMB with University of the Philippines at Los Banos carried out several activities to provide technical assistance for the communities.

They held **a series of training courses** to inform the communities about the project in relation to the National Greening Program (NGP) as well as to sustainably manage the project's outcomes.

The project team conducted the **assessment of baseline biomass and carbon stock** within the plantation site, and a research on heating value of other potential species to serve as basis in its current and future similar projects and programs.

For the benefits of local community of the project site, **fuelwood market survey** were carried out, demonstrating the advantages and benefits of utilizing fuelwood in lieu of using fossil fuels or crude oil.

Philippines

Implemented by Forest Management Bureau (FMB)





The fuelwood plantation site sub-divided into 4 compartments with 5 ha each compartment. Hole digging was conducted with staking at a spacing of 1m X 1.5m. Within each compartment, mix of *Leucaena leucocephala*, *Gliricidia sepium*, and *Alstonia macrophylla* were planted.



A three-day training course entitled "Capacity Building on Community-Based Fuelwood Plantation to Mitigate Climate Change" was co-organized by FMB and UPLB to build the technical capacities of local community through Sto. Tomas Tagkawayan Upland Farmers Association Incorporated (STUFAI). The training focused on forests development and management, climate change mitigation and adaption and project monitoring and assessment.

The project team conducted the assessment of baseline biomass and carbon stock within the plantation site. They found that the soil contains 1,270 tC and the plantation has the potential to store more than 5,000 tC.



Strengthening Collaboration of Forestry Research and Sustainable Forest Management with Local People Participation

More than 60 percent of the rural population is depending on forest for their livelihoods and daily needs in Thailand. This project was aimed to build capacity of local community to plan community forest management in coordination of related stakeholders by applying Rural Appraisal Techniques in Ban Srinaparn, Ruang Subdistrict, Muang District, Nan Province.

The implementing agency organized four **workshops on community-based forest management** in which village leaders, villagers, government officers, private sectors, and local administration officers participated on programme. They identified four groups of stakeholders and their needs and demand to scheme **participatory community forest management plan**. The project established the Bansrinaparn Testing Model, which is expected to be applied to the other community forest areas.

The project also promoted the public awareness on forest ecosystem and conservation by holding **youth camp for local school students**. Kasetsart University held several workshops to facilitate participatory research and extension in forest restoration.

Thailand



Implemented by Royal Forest Department of Ministry of Natural Resources and Environment





The 2nd workshop on community based forest management held on 26-28 January 2012.



Application of focus group brings local people to share ideas, basic needs and expectation about natural resources management in their community.



Youth training camp at the Prachuabkhirikhan Silviculture Research Station in Prachuabkhirikhan Province.



Developing **Non-Timber Forest Products** in the Northwest of Vietnam as the Mechanism for Sustainable Forest Management and Livelihood Improvement for Local Communities

The project aimed to assess the status and uses of Non-timber Forest Products (NTFPs) and to develop appropriate techniques and methodologies for their development, processing and trade in four selected provinces in the Northwest of Vietnam, namely Hoa Binh, Son La, Dien Bien, and Lai Chau Provinces.

At each province, general information of natural and social conditions and characteristics was collected. Particularly, the data and information regarding forest and NTFPs were collected.

Based on these data and information, **technical guidelines to plant, tend, harvest, process and preserve four main NTFPs**, namely *Dendrocalamus membranaceus*, *Amomum longiligulare*, *Docynia doumeri*, and *Amomum aromaticum*, were developed. Furthermore, **strategies** to conserve and develop NTFPs in each province were created, contributing to the sustainable use and management of forest.

As part of dissemination of the project outcomes, **four training courses** to transfer technical guidelines on NTFPs species were held in each province.

Viet Nam

Implemented by Vietnam Administration of Forestry (VNFOREST) and Relevant Agencies





Chopstick production using *Dendrocalamus barbatus* in Mai Chau, Hoa Binh, Viet Nam



Conducting survey to understand the NTFP production and trading status through questionnaires to community people.



Training course on technical guideline to seedling production, planting, tending, harvesting and preservation of *Dendrocalamus barbatus* in August 2012 in Lai Chau Province

This brochure presents the highlights of “AFoCo Project Reports Volume 1: AFoCo Individual Forest Cooperation Projects 2011-2012”, which was published by ASEAN-ROK Forest Cooperation Secretariat. The complete version of the report can be downloaded at www.afocosec.org or requested from:

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