

BOARD OF DIRECTORS & COUNCIL **7TH MEETING**

IN MANILA, THE PHILIPPINES
26-28 APRIL 2023



The Seventh Meeting of the APFNet Council will be held on 26 April 2023 in Manila, the Philippines, in junction with the Seventh Meeting of the APFNet Board of Directors on 28 April 2023. A joint full-day excursion of the APFNet Council and Board members is scheduled on 27 April. The Department of Environment and Natural Resources (DENR) and Forest Management Bureau (FMB) of the Republic of the Philippines will co-host the meeting. The Council meeting is open to Council Representatives, Contact Persons and Observers, and about 20 participants will get together in Manila. Meantime those who can't participate in person would be able to join the meeting online. The current 10 Board members will attend the Board meeting.

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Annual Report 2022

APFNet launched a call for projects in March, with applications due by the end of May. As outlined in the third Strategic Plan, the priority for this year's call is multifunctional forest management and restoration. The announcement of the Call for Projects has been circulated to all members and updated on the APFNet website, where more details would be found.



SANFRI Visiting scholar program 2023



To strengthen the effectiveness and efficiency of forestry research in ASEAN economies and China through information exchange, capacity development and collaboration, APFNet established the Sino-ASEAN Network of Forestry Research Institutes (SANFRI) in 2018. Yunnan Academy of Forestry and Grassland (YAFG) is a member of the SANFRI mechanism and is a scientific research institution focusing on forestry research and the promotion of forest-related technologies.

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APFNET UPDATES RULES TO BETTER GUIDE FUTURE PROJECT MANAGEMENT

APFNet adopts project life-cycle management based on the Manual for Project Identification, Implementation and Management (PIIM), which provides comprehensive guidance for the key actions and procedures of the management of APFNet projects from project identification to inception, implementation, monitoring and evaluation, and finally completion and administrative closure. The first version of the APFNet PIIM was released in 2013 and had efficiently led more than 50 APFNet projects toward achieving project objectives during the past ten years. However, with 10 years of management experience and suggestions from project partners, certain improvements to the 2013 PIIM were needed to better support APFNet future projects. In this context, APFNet updated the PIIM, and we are happy to introduce the new version, which will comprehensively guide the management and evaluation of APFNet demonstration and research projects.

Key changes to the new PIIM include a closer alignment with the APFNet Strategic Plan and the organization's overall priorities. Furthermore, the criteria and indicators for project appraisal have been updated. Additionally, the project accounting and budget system has been fully updated and partially automated, and a range of new and updated templates for the Project Document, the Project Annual Work Plan, the Project Progress Report, the Audit Report, and others have been produced.

Alongside the updated PIIM, a new APFNet Project Visual Identity and Communications Guide, outlining how to design a project's communication strategy, describing different available tools, detailing requirements for APFNet visibility for APFNet-funded products and instructing on proper project documentation, has been launched as well.

CONTINUE >>>

Finally, aiming at informing better learning and further decision-making on an objective basis for APFNet and the project partners, the newly updated Guidelines for Project Monitoring and Evaluation (2022) further regulate project M&E criteria, procedures, classification and responsible parties, as well as relevant templates.



APFNet Manual for Project Identification, Implementation
and Management (PIIM)

Second Edition


2022

**THE NEW
GUIDELINES COME
INTO EFFECT
IMMEDIATELY AND
ALL CURRENT AND
PROSPECTIVE
FUTURE PROJECT
PARTNERS AND
EVALUATORS ARE
HIGHLY
ENCOURAGED TO
CONSULT THEM.**

The main changes include;

- 1) Integrating monitoring and evaluation regulations into a single guideline;
- 2) Regulating the evaluation criteria and indicators;
- 3) Setting evaluation frequency based on different project budget categories;
- 4) Further specifying and upgrading the preparation and execution process of project evaluations to ensure consistent evaluation quality;
- 5) Expanding the evaluation lifecycle by adding the step of giving feedback to the evaluation results, ensuring that the results will be widely shared and effectively used, and
- 6) Improvement of existing templates to increase the overall value of project evaluation, this specifically includes the ToR template, the project evaluation plan and the project evaluation report template.

DEVELOPING AND PROMOTING THE COMPILATION OF MODELLING TOOLS FOR FORESTRY UNDER A CHANGING CLIMATE



Development and applications of forest adaptation tools are critical for foresters and policymakers to promote sustainable forest management to enhance ecological functions and ecosystem security of forests under climate change. Since 2011, APFNet has funded the project “Adaptation of Asia-Pacific Forests to Climate Change” and developed several important forest adaptation tools during the project Phase I and II.

The major tools include

- 1) the scale-free climate model ClimateAP;
- 2) climate niche models for 15 tree species and 4 forest ecosystems;
- 3) the Forecast models;
- 4) a web platform to facilitate easy access to climate data and spatial visualization of climate data and species distributions.



To further explore and realize the potential values of the tools that developed through Phase I and Phase II of the project, APFNet, in cooperation with the Faculty of Forestry, University of British Columbia (UBC), conducted Phase III of the project “Adaptation of Asia-Pacific Forestry to Climate Change–Synopsis, updating and extension of forest adaptation tools”.

To summarize and synthesize climate niche models and their projections for 15 key species and 4 forest ecosystems, the project conducted projections to include impacts of climate change on habitat distributions of the tree species and forest ecosystems in terms of the changes in the area, geographic locations, as well as the restraints of soil conditions.

Soil variables have been derived from the basic soil indicators of the Harmonized World Soil Database, containing a soil raster data layer with 30 arc seconds spatial resolution. The soil variables have been prepared for each of the four economies (China, Chinese Taipei, Malaysia and Myanmar) involved.

In 2023, a soil niche model has been developed for each of the 15 forest tree species on time. Spatial distributions of the suitable soil habitat for each species have also been predicted.



No.	The Latin name of 15 tree species	SNM accuracy
1	<i>Chamaecyparis formosensis</i>	90.2%
2	<i>Cyclobalanopsis longinux</i>	73.5%
3	<i>Larix gmelinii</i>	95.5%
4	<i>Larix olgensis</i>	72.5%
5	<i>Phyllostachys pubescens</i>	78.0%
6	<i>Pinus sylvestris</i>	78.5%
7	<i>Pinus yunnanensis</i>	76.2%
8	<i>Quercus variabilis</i>	84.7%
9	<i>Robinia pseudoacacia</i>	82.6%
10	<i>Salix matsudana</i>	88.0%
11	<i>Pinus tabuliformis</i>	88.8%
12	<i>Pinus massoniana</i>	77.9%
13	<i>Tsuga dumosa</i>	96.1%
14	<i>Cunninghamia lanceolata</i>	79.4%
15	<i>Pinus kesiya</i>	93.3%



The project published a manuscript titled “Assessment of the impact of climate change on endangered conifer tree species by considering climate and soil dual suitability and interspecific competition” in March this year on Science of the Total Environment, which described the climate, soil and inter-species competition in the prediction of climate change impact on rare coniferous species in details.



Contents lists available at ScienceDirect

Science of the Total Environment

journal homepage: www.elsevier.com/locate/scitotenv

Assessment of the impact of climate change on endangered conifer tree species by considering climate and soil dual suitability and interspecific competition

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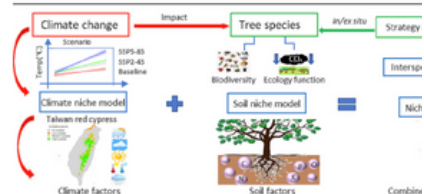
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HIGHLIGHTS

- Developed a new approach that integrates soil and climate factors.
- Future dual suitable habitat for red cypress was predicted to decrease.
- Red cypress forests would face competition from late-succession oak tree species.
- Provided a framework for evaluating the impact of climate change on endangered tree species.

GRAPHICAL ABSTRACT



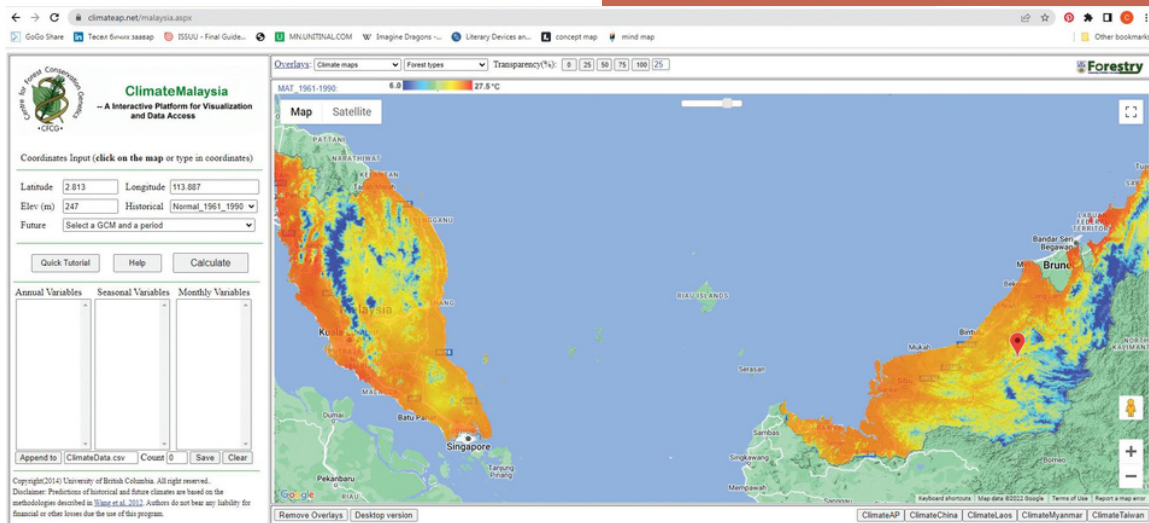
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ABSTRACT

Climate change results in the habitat loss of many conifer tree species and jeopardizes its ecological functions. Delineating suitable habitats for tree species via climate niche model dict the impact of climate change and develop conservation and management strategies. CNM is broadly debated as it usually does not consider soil and competition factors. This approach combines soil variables with CNM and evaluates interspecific competition potential areas. We used an endangered conifer species - *Chamaecyparis formosensis* (red cypress) - to assess the impact of climate change. We developed a novel approach to integrate the climate niche



Web platform for data access and visualization of one of the target economies—Malaysia.
Data can be accessed at [here](https://climateap.net/malaysia.aspx)



ClimateAP provides scale-free climate data with much higher accuracy than gridded climate data from other currently available climate models. The superiority of the scale-free ClimateAP data has become more and more popular and recognized in the Asia-Pacific region with an increasing number of subscribers and citations. ClimateAP requires to be updated annually to incorporate the climate data from the latest year for the historical climate data, and future climate projections also need to be updated periodically, which is the case for this project period as Phase 6 of the Coupled Model Intercomparison Project (CMIP6) released in October 2021.

By using computer programs R, Python, ArcGIS, and Visual Studio, now the ClimateAP model made projections based on the new GCM in three future normal periods: 2011-2040, 2041-2070 and 2071-2100.

YEAR 2

PROGRESS OF THE ESTABLISHMENT OF A HIGH-VALUE TREE SPECIES BREEDING CENTER IN CAMBODIA

Forest germplasm resources hold significant importance as strategic assets for socioeconomic development, particularly in the face of growing demands brought on by the evolving social economy. However, Cambodia's rapid economic growth seriously threatens these resources. To address this issue and develop a forest gene conservation strategy, APFNet has initiated the project "Establishment of a High-Value Tree Species Breeding Center in Cambodia." Now in its second year, the project is progressing smoothly and steadily.

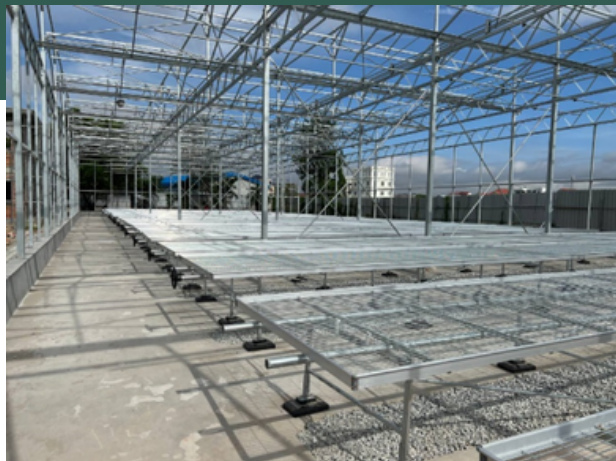
The project consists of four primary components:

1. Constructing a high-value tree breeding centre on the Institute of Forest and Wildlife Research and Development (IRD) campus in Phnom Penh. This centre will include a tissue culture and diagnostic lab, a greenhouse, and related equipment.
2. Establishing a 100-hectare Forest Genetic Resource Conservation Garden of valuable trees at the IRD research station in Siem Reap (Chan Sor restoration site).
3. Developing a 20-hectare eco-forest farm at the IRD research station in Siem Reap.
4. Conduct capacity-building activities, including research and plantation training.

Upon completion, the project will support the conservation of valuable tree species in the demonstration area and serve as ex-situ seedbanks for other endangered plant resources in Cambodia. Due to the COVID-19 pandemic, the project was restricted to primarily focusing on collecting valuable tree germplasm resources, producing seedlings through asexual and seed methods, planting high-value tree species and fruit trees in the Forest Genetic Resource Conservation Garden and the Eco-Forest Farm, and maintaining the economic timber trees and fruit trees that have already been planted.



THE TREE BREEDING CENTRE



The construction of the tree breeding centre has reached the public bidding stage for selecting a construction company. Samnang Borey Kamkor Co., LTD began constructing the modern greenhouse in March 2022 with technical support from Yunnan Jianyue Engineering Project Management Co., Ltd. As of the first quarter of 2023, the tree breeding centre's construction is approximately 50% complete, including the foundation, structural framework, wall and roof of the building.



In terms of progress on the tree breeding itself, the project also involves producing seedlings by sexual methods for four valuable tree species and by seed method for others. In-depth research into and development of tissue culture technology is being conducted by YAFG for species. To date, a total of 26,324 seedlings of 22 valuable tree species have been produced by seed and are ready for planting in June or July 2023. The results of the current research will be fully applied to wider Cambodia after the construction of the tree breeding centre has been completed.

THE FOREST GENETIC RESOURCE CONSERVATION GARDEN



A total of 100 species of valuable tree genetic resources are planned to be collected during the project period to establish a forest genetic resource conservation garden. These include precious tropical tree species, endangered species, traditional species, and those with special purposes such as medicinal, spice, and forest vegetable tree species, of which 50 species are planned to be collected in the second year. Due to the COVID-19 pandemic, the project team has so far only collected 16 species of valuable tree genetic resources from four different provinces in Cambodia.

In August 2022, the establishment of the forest genetic resource conservation garden , composed of valuable timber trees and economic fruit tree gardens , began, covering a total area of 12 hectares. A total of 7710 seedlings of 9 valuable tree species were planted on 9 ha in the garden. Additionally, 6 economic fruit trees were planted in a total area of 3ha. The project continues to maintain these economic fruit trees. Associated facilities of the gardens were constructed, specifically the base entrance (40% completion), the main and branch roads (80% completion), drainage channels (70% completion), the water pond (100% completion), the visitor centres and public toilets (30% completion) and, finally, the flooding water pump station (100% completion). However, some construction activities have been postponed due to the pandemic and budget constraints.

THE ECO FOREST FARM

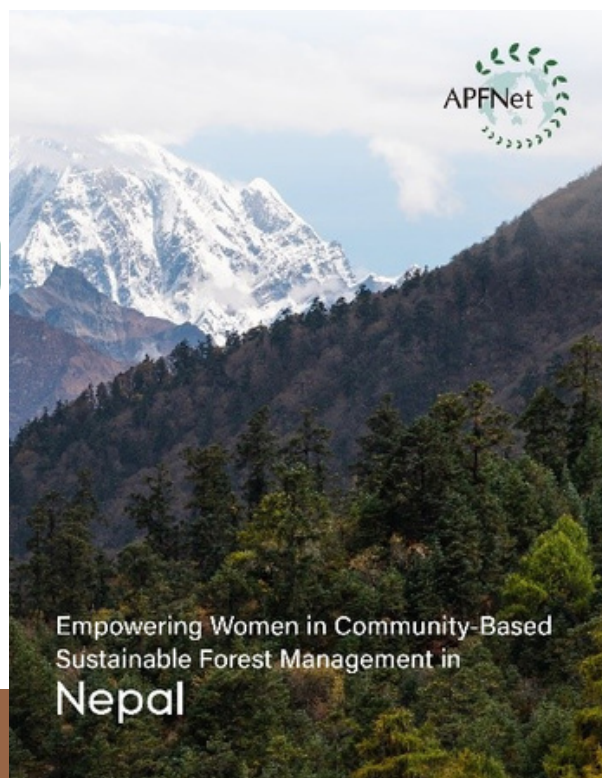


Eco-forest farm activities primarily concentrate on the maintenance of economically valuable trees and the replanting of 386 economic fruit trees that perished during the first year. Progress has been made on constructing several accessory facilities, including the main road, boundary road, and branch road, which are approximately 60% complete. The drainage channel is about 50% finished, while the visitor centre has reached 30% completion, and the floodwater pump station is now fully operational.

Overall, throughout the second year of implementation, the project has made steady progress in alignment with the working plans, despite the ongoing COVID-19 pandemic and budget limitations. The project team remains committed to completing the main activities as outlined in the project documents. Given the current progress, it is anticipated that the project will achieve its objectives, even though some planned activities have been delayed and will need to be carried out during the remainder of 2023.

“EMPOWERING WOMEN IN COMMUNITY-BASED SUSTAINABLE FOREST MANAGEMENT IN NEPAL

➤➤➤ NEW PUBLICATION

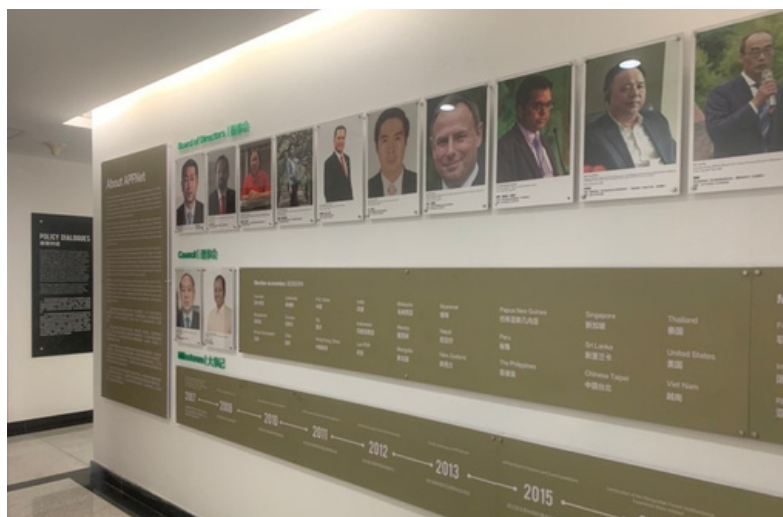


The empowerment of women and the support of sustainable forest management were the main goals of a successful project, APFNet implemented between 2014 and 2018 in Nepal. Now the project management division published a summary report in the form of a comprehensive brochure, available for download and also as a hardcopy at the APFNet secretariat.

Within the scope of this project, more than 110 women received training to start their enterprises for eco-tourism, wood handicraft manufacturing or essential oil production. Furthermore, project measures contributed to the sustainable management of 1,357 ha of community forests. To reduce the workload of women as well as the pressure on forests as a main source of fuel wood, 75 biogas units, 90 solar panels and 300 improved cooking stoves were installed in poor households.

The brochure gives an overview of how this was achieved and can provide valuable information for future projects in Nepal and other economies with a similar focus.

RENOVATED THE INFORMATION WALL DESIGN AT THE SECRETARIAT OFFICE



The corridors at the APFNet Secretariat office are decorated with posters and photos to introduce APFNet and showcase the latest activities to visitors. The design on the walls includes seven parts: a general introduction with information on the Board and Council; an introduction to the strategic plan; capacity building; policy dialogue; projects; communication and outreach; and monitoring and evaluation. As the Board and Council of APFNet had a change of officers and members in 2022, and the number of visitors expected to increase in 2023 as pandemic-related travel restrictions lifted, APFNet took the opportunity to redesign and renovate the walls. The renovation took around three months and was finished by the end of March 2023.



PU'ER FORUM ON ASIA-PACIFIC FORESTS WILL BE HELD IN OCTOBER 2023

At present, the global awareness of the multiple functions of forests is deepening. At the same time, the forestry industry of developing economies in the Asia-Pacific region is undergoing a critical period of transformation, and the nations are attempting to find a development path that combines protection and development and unity of ecology and people's livelihoods. Therefore, APFNet proposed holding the Pu'er Forum on Asia-Pacific Forests to set up an exchange platform for forestry policy, planning, industry, technology and education in the Asia-Pacific region to promote regional forestry information exchange, share best practices in regional forestry development, and serving the realization of the United Nations 2030 Agenda for Sustainable Development and the Glasgow Leaders' Declaration on Forests and Land Use. The Forum is co-organized by the National Administration of Forestry and Grassland of China, The Forestry and Grassland Bureau of Yunnan Province, the Pu'er Municipal Government and APFNet and will be held in October 2023 at APFNet Pu'er Base, Yunnan Province, China.

CHECK OUT THE APFNET ANNUAL REPORT 2022

NEW PUBLICATION

