



Asia-Pacific Network for Sustainable
Forest Management and Rehabilitation
亚太森林恢复与可持续管理组织

Agenda item 4

APFNet/Council/2022/03

Prepared by: APFNet Secretariat
Purpose: Information

Sixth Meeting of the APFNet Council

25 May 2022 | Online Meeting

Implementation of APFNet's Work Plan 2021

Implementation of APFNet's Work Plan 2021

The APFNet Secretariat prepared this document to summarize the implementation of the Annual Work Plan (AWP) 2021, which was reviewed by the Council and approved by the Board of Directors.

In response to the impact of the ongoing COVID-19 pandemic, many activities were completed via online or alternative ways to achieve the expected outcomes, while some activities have been postponed due to current ongoing lockdowns or international travel restrictions.

Highlights of activities by pillars/ implementation tools

Capacity building

One objective of APFNet is to help build the capacity of forestry officers and professionals in the Asia-Pacific region according to *The APFNet Strategic Plan (2021-2025)*. APFNet focused on maintaining the quality of capacity building programs and promoting its accessibility by addressing challenges presented by COVID-19 through the APFNet Scholarship Program (ASP), the Asia-Pacific Forestry Education Coordination Mechanism (APFECM), and a thematic training series in 2021.

a. APFNet Scholarship Program (ASP)

- i. The APFNet Scholarship Program (ASP) sponsored 37 awardees in 2021, of which 11 students graduated and earned a master's degree in forestry-related majors in July, while 26 students continued their online studies in the fall semester. APFNet's four partner universities, including Beijing Forestry University, Nanjing Forestry University, Northwest Agriculture & Forestry University and Chulalongkorn University, adopted the online teaching model gradually, having to overcome difficulties like weak internet connectivity and varying time zones.
- ii. To promote information sharing among the ASP alumni, the APFNet Alumni Network managed social media channels to broaden the network's online presence in 2021. It also published and disseminated three quarterly newsletters, and operated the APFNet Alumni Network online portal, which was up and running with 190 registered alumni.

b. APFNet-Supported Forestry Trainings

Regular international forestry trainings were suspended in 2021. Instead, APFNet rescheduled and organized 2 workshops on the topic of forest carbon.

-
- i. To help the grassroots-level forestry officials grasp the concept and implementation of carbon neutrality, APFNet cooperated with the Chifeng Forestry and Grassland Administration to co-organize a training workshop on the themes of forest carbon sinks, carbon neutrality, and forest carbon accounting methodology in Inner Mongolia, China, in September 2021. About 100 local forestry officials and technicians participated in the training. The workshop was also in response to China's goal to have carbon dioxide emissions peak before 2030 and achieve carbon neutrality before 2060.
 - ii. To provide a platform for APFNet's project partners to share carbon-related project knowledge, and for experts and practitioners from relevant fields to exchange experiences on forest carbon measurement, another workshop titled " *Holding Forests Accountable - APFNet Forest Carbon Accounting Zoom Webinar* " was conducted online in December 2021. More than 50 people in the region attended the webinar.

Projects

a. Projects Proposal formulation and new project appraisal

In 2021, 5 Project Concept Notes from Fiji, Mexico, Nepal, Tajikistan and Viet Nam were received. Considering that the projects approved in 2020 have not yet been launched and project feasibility studies cannot be carried out in 2021 due to travel restrictions, the usually annual Project Concept Note Appraisal was not conducted as planned. The received Concept Notes and new submissions shall be considered in the next Concept Note Appraisal.

Via remote communication, progress was made in revising the proposals for 4 projects.

Recommended Proposal	Year of Recommendation	Status
Promoting the sustainable production of sandalwood in Fiji	2018	Project Proposal approved
Rehabilitation of arid ecosystems and wastelands through agroforestry systems in the southern coast of Peru	2020	Project Proposal approved
Development of a business model for enrichment planting including carbon values in Viet Nam	2020	Under revision
Promoting community-based restoration, sustainable management and livelihood development using bamboo resources in the Bago Yoma region of Myanmar	2020	Under revision

b. Project Implementation

In 2021, 23 projects were successfully implemented, including 3 new projects launched, 5 projects completed and 15 projects ongoing. A total of USD 2,094,781 was granted for project

implementation. Despite the impact of COVID-19, most projects were effectively implemented according to their respective goals, objectives and expected outputs, a few projects experienced delays or had to be modified. The 23 projects are listed in Annex 1, and detailed project implementation performances are presented as follows:

- ***New Projects***

3 new projects proposed by Canada and China were initiated in 2021. These projects cover the areas of forest restoration, carbon accounting and forest resource monitoring, climate change adaptation and capacity building. The three projects are:

--Adaptation of Asia-Pacific Forestry to Climate Change Phase III [ID: 2020P4-UBC]

The two-year project is the third phase of the project with the same title and is implemented by the University of British Columbia. The project aims to update and promote the climate change adaptation tools for forests (ClimateAP and Climate niche models) developed in the previous phases. As a result, they can be used more frequently and effectively by foresters and policymakers to develop climate change adaptation strategies in the Asia Pacific region to improve the health and productivity of forest ecosystems and increase their resilience to climate change. The total budget for this project is USD 164,100, of which USD 135,000 is funded by APFNet.

--Study on forest carbon storage and carbon sink potential of Wangyedian Forest Farm [ID: 2021P2-INM]

The one-year project is implemented by Wangyedian Forest Farm with technical support from the Chinese Academy of Forestry. The project aims to accurately and efficiently quantify forest carbon stocks and estimate the forest carbon carrying capacity at forest management unit level. An inventory-based carbon estimation methodology has been applied in this project with 7,996 field sample plots set up and monitored at Wangyedian Forest Farm (25,000 ha) in 2021. The total budget for this project is USD 169,558.82, all funded by APFNet.

--Construction of Multi-Functional Forest Management Demonstration Sites - Phase III [ID: 2020P2-INM]

The third phase of this project is implemented by Wangyedian Forest Farm and supervised by the Chifeng Forestry and Grassland Bureau. It aims to continue the demonstration of multifunctional forest management in Wangyedian Forest Farm via optimized forest management in both commercial and ecological forests. Moreover, additional facilities for the *APFNet Multifunctional Forest Management Training Base* will also be constructed, including an environmental education camping ground and other necessary facilities. The Training Base has been operating well since its launch in 2019. Several themed trainings, such as on environmental education and forest carbon accounting, have been held at the Base in 2021. The total project grant is USD 2,503,676, of which USD 2,132,529 is funded by APFNet.

- ***Completed/closed Projects***

While several projects were delayed in their completion due to COVID-19, 5 projects from Canada, China and Mongolia were completed and/or closed in 2021. The main achievements of completed/closed projects are:

-- Improving the land productivity and profitability through innovative forest restoration in the mountainous areas of Southern China

Many forests in the mountainous areas of southern China are severely degraded and vulnerable to soil erosion. To address this issue, the project “*Demonstration on Sustainable Forest Management and Restoration in Hilly and Low Mountain Areas of Southern China [ID: 2016P2-CAF]*” was initiated in 2016 to showcase innovative forest restoration models, which focused on both forest ecological restoration and local livelihood improvement in the area. Five different restoration models were demonstrated in 150 ha degraded forests, specifically: 1) enrichment planting of valuable species in stony mountain areas (for example *Pteroceltis tatarinowii* can be used for producing Chinese art paper and help control soil erosion); 2) close-to-nature forest management of Chinese fir, which transformed the Chinese fir plantation into mixed forests with high productivity; 3) intensive farming of bamboo forests to increase the production of bamboo poles or bamboo shoots; 4) multi-purpose restoration of *Torreya grandis*; 5) agroforestry to enrich hickory forests with Chinese medical herbs. It can be expected that the experiences gathered in these areas will be relevant for Southern mountainous areas all over China and perhaps even beyond in similar ecosystems.

--Developing an online, digital, and technology-based forestry education platform

Since 2016, APFNet has been funding two phases of the project “*Innovative Sustainable Forest Management Education in the Asia-Pacific Region*” in order to develop a comprehensive online learning program for Sustainable Forest Management (SFM) under the Asia-Pacific Forestry Education Coordination Mechanism (AP-FECM). The project was conducted in cooperation with universities, which play leading roles in forestry education, such as the University of British Columbia, Beijing Forestry University, the University of Melbourne, the University of Putra Malaysia, and others. In total, 15 high-quality courses were developed, and the second phase of the project put a special emphasis on tropical forests, covering topics from forest measurement, forest planning, and climate adaptation to community forestry and providing local livelihoods. These courses provide a systematic knowledge base and skill set for learners to understand SFM in a global context. The project achievements won the “*Global Competition on Best Practices in Forest Education – Top 2*” award, issued by IUFRO. Throughout the COVID-19 pandemic, this project provided immense support to students in the Asia-Pacific region by providing free online forestry education that, if they participated in the AP-FECM Certification Course, could even lead to a certification for the students, an important credential for their future careers.

--Building a botanic park in the National Garden Park of Mongolia

Starting in 2016, APFNet and the Ministry of Environment and Tourism of Mongolia launched the project “*Construction of a mini-botanic park within the National Garden Park of Mongolia [Project ID: 2016P4-MN]*” to construct an 8.4 ha botanical garden within the National Garden Park of Mongolia to provide a site for people to experience forests in an urban area. This project has been credited as an integral part of the “Mongolian Green Wall” – a long-term national program to combat desertification and reduce deforestation. The project was actually completed in December 2020. However, the project could not be closed as a number of financial reports were still missing. These were handed in in late 2021. In order to maintain the plants established

in the park, APFNet will provide the Mongolia partners with USD 10,000 annually for 3 years starting from 2021.

• ***Ongoing Projects***

By the end of 2021, there were 15 on-going projects (not including the 3 new projects) implemented in 11 APFNet member economies, including six GMS economies, Canada, Indonesia, Malaysia, PNG, and the USA. These projects cover diverse fields, such as forest restoration, forest ecosystem management, watershed management, multifunctional forestry, desertification control, forest resources monitoring, and climate change. While several projects experienced delays or had to be modified due to the COVID-19, good progress was made in most. Major progress achieved is categorized by the following thematic fields:

- i. **Forest Restoration:** APFNet continues to align its work to existing international, regional and national processes to advance forest restoration, so that forests can regain their health and are able to provide ecosystem services, while also benefitting local livelihoods. For instance, the *Sustainable Forest Management in Northern Provinces of Lao PDR* project demonstrated forest restoration practices in subtropical areas, where NTFPs were also planted underneath existing forests to support local livelihoods. The *Development of Participatory Management for a Micro Catchment at the Bengawan Solo Upper Watershed Phase II* demonstrated how to address soil erosion by using agroforestry for forest restoration in Indonesia.
- ii. **Multifunctional Forest Management:** Multifunctional Forest Management is becoming an increasing focus of APFNet's work in forestry, and is now also incorporated into the new Strategic Plan 2021-2025. In this regard, many APFNet projects, such as in Pu'er, Wangyedian or Cambodia continue to maintain established demonstration sites using multifunctional forest management principles.
- iii. **Carbon Accounting:** In response to the exacerbating climate crisis, as well as new commitments by several economies to reach carbon neutrality, and many economies' ambitions to improve their carbon reporting, APFNet supported a number of projects in China, including projects in Inner Mongolia, Anhui, Zhejiang, and Yunnan, but also internationally in Indonesia to test and demonstrate various carbon accounting approaches. In some cases, this was pioneering work, such as the *Improving capacities towards reducing greenhouse gas emissions from peat swamp forest fires in Indonesia* project, which developed a new methodology for the measurement of peat land fire emissions, which now enables the economy to improve its formal reporting to the IPCC.
- iv. **Construction:** The establishment of a variety of facilities was a key focus of APFNet's work in 2021, ranging from greenhouses and an arboretum in Myanmar, to a high-value tree species breeding center in Cambodia, and to the establishment of the *APFNet Pu'er SFM Demonstration and Training Base* in Yunnan, China. These facilities will serve the core needs of members and provide them with new opportunities previously unknown. For example, the Cambodia Breeding Center, which got all designs approved and started purchasing materials in 2021, will be the first breeding center in the economy, providing

opportunities for tissue-culture breeding. The completion and formal opening of the [APFNet Pu'er SFM Demonstration and Training Base](#) in July 2021 marks a special achievement in APFNet's history, which now has training bases covering the temperate and boreal, as well as sub-tropical and tropical forests.

- v. **Monitoring:** Monitoring is a key tool for providing data of APFNet demonstrations on SFM and forest restoration. It also has crystallized as one of the key areas for improvement based on the 10-year review. As such, in 2021, PMD put an increased focus on improving monitoring. New comprehensive monitoring plans have been developed and additional monitoring sites have been established in a wide range of projects, including in Wangyedian, Pu'er, and Aohanqi in China, Vietnam, Cambodia and others. Furthermore, new monitoring reports were closely reviewed. For projects that have ended, additional funds were readied for long-term monitoring. This was often added as an explicit budget item in later phases. A wide range of experts were consulted in the process. APFNet is now confident to be able to support its ideas with data derived from these sites.

c. Project evaluation

Despite the COVID-19 pandemic, we still strived to ensure the continued delivery of evaluative knowledge while preserving the safety of staff, evaluators, and partners. In 2021, three projects received a mid-term evaluation and two projects a terminal evaluation. All projects received overall positive feedback from the independent consultants hired by APFNet. The details are as follows:

- ***Mid-term evaluation (MTE)***

Three projects were evaluated at their mid-term in 2021, which aims to check the project performance, provide guidance and recommendations to the remaining project activities.

-- **The Regional Forest Observations for Sustainable Forest Management [2018P2-CAF]** project addresses the problem of how to effectively monitor forest resources on a large scale, and support the development of strategies for SFM and climate change adaptation in the GMS and Malaysia. A mid-term project evaluation was conducted in January, 2021. Via a desk review of project documents, stakeholder interviews, and an online project progress review meeting and discussion, the MTE found that the project was technically sound, and will significantly contribute to improving forest monitoring in the GMS and Malaysia by developing methods and guidelines for forest cover and carbon stock mapping. For further improvement, it was recommended to consider harmonizing land use classification systems within the GMS and Malaysia, and encourage all the implementing agencies to complete map product accuracy assessments.

-- **The Demonstration of Sustainable Forest Management and Establishment of APFNet Pu'er Training Base [2020P1-PE]** project aims to provide a platform for SFM capacity building, information sharing and scientific research for the GMS region by building a training base covering subtropical and tropical forest ecosystem types. A mid-term project evaluation

was conducted in July 2021. Via a desk review of project documents, stakeholder interviews, and a field visit to the project site in Wanzhangshan Forest Farm, Pu'er City, Yunnan Province, the MTE found that the base construction was completed, and 580 ha of forest sites have been established to demonstrate selective cutting in degraded plantation forests and secondary forests. Additionally, different thinning models, assisted natural regeneration and enrichment planting were applied in Simao pine plantation forests. For further improvement, it was suggested to develop long-term management and monitoring plans for the demonstration sites, and further develop related supporting infrastructures and improve the base operation management capacities.

-- The Demonstration Project of Vegetation Restoration and Management and Utilization of Forest Resources in Greater Central Asia Phase II (Chifeng sites) [2019P4-INM] project aims to improve the quality of sandy forest ecosystems through demonstrating SFM, restoration and rehabilitation models. A mid-term project evaluation was conducted in September 2021. Through a review of project documents, stakeholder interviews, and a field visit to the project site in Sanyijing Forest Farm of Aohan Banner, Chifeng City, Inner Mongolia, China, the MTE found that 1) a preliminary effectiveness of the vegetation (forest) restoration was observed, such as new tree species combinations and mixed methods on sandy land, improved health of degraded poplar forest at the demonstration sites of the project in terms of survival rates (86%-90%), tree growth and biomass; 2) the involvement of farmers into the project activities and the benefit sharing between the project and farmer's cooperatives will ensure the sustainability of the project. For further improvement, it was mainly suggested to focus more on 'water' (including gathering data on water use) when conducting (forest) restoration and rehabilitation in sandy areas, and further strengthen the project summary and dissemination of the existing project outputs.

• ***Terminal evaluation (TE)***

Two projects were evaluated at their completion in 2021, which aims to review the project performance and determine outcomes and potential impacts stemming from a project.

--The Demonstration on Sustainable Forest Management and Restoration in Hilly and Low Mountain Areas of Southern China [ID: 2016P2-CAF] project aimed to showcase different forest restoration models in the typical hilly areas of Southern China, determining the best methods to increase forest carbon storage by calculating and comparing the carbon storage of the different planting methods, and improving livelihoods of local forest communities. The TE was conducted in March, 2021, and mainly found that 1) the demonstration model of sustainable management of degraded Chinese fir is worth promoting in the Asia-Pacific region, it not only improves the stand productivity through thinning, but also transformed the monoculture to mixed forests by promoting natural regeneration; 2) the demonstration of degraded forest restoration on rocky mountainous land confirmed that the stand structure improvement and the advanced silvicultural techniques are a suitable way to raise productivity and carbon storage, as well as increase biodiversity of degraded forests in the mountainous area in Southern China. It was mainly recommended that if there is a next phase, it should have some landscape restoration planning.

--The Innovative sustainable forest management education in the Asia-Pacific region (Phase II) [ID: 2018P3-UBC] project aimed to improve access to SFM education, enhance teaching equality, and improve curriculum and research capabilities in the Asia Pacific Region. The TE was conducted through document review and online interviews from August to December 2021. It was found that the successful implementation of this project laid a foundation to build a certificate program focusing on SFM for universities in the Asia-Pacific region in the near future. It was furthermore recommended to 1) increase the educational impact and extend collaboration to the entire Asia-Pacific region through further promotion; 2) help more universities to develop the online certificate programs; and 3) conduct a professional review or evaluation on the existing courses developed. Moreover, some of the most important lessons learned from the project were that 1) student-centered pedagogical models and learning activities are key for developing and implementing innovative online courses, and 2) both self-directed and instructor-led online course learning can provide more flexibility regarding study time and thus increase engagement of the course taker.

d. Project communication, publicity and dissemination

In the light of the global pandemic, APFNet organized a number of workshops online. For example, the workshop “*COVID-19 Pandemic Impacts in Forestry in the Asia-Pacific Region*” was held in November 2021, and attended by nearly 50 APFNet project partners from over 15 economies in the Asia Pacific region. During the workshop participants shared their experiences on implementing forestry projects during the ongoing pandemic. Another online webinar, titled “*Holding Forests Accountable - APFNet Forest Carbon Accounting Webinar*”, was held in December 2021, and provided a platform not only for APFNet’s project partners to share carbon-related project knowledge, but also for experts and practitioners from relevant fields to exchange experiences on forest carbon measurement. More than 60 people attended the webinar.

A seminar titled “*Forest Management in China: Balancing Conservation and Utilization*” was held to help Chinese project partners exchange experiences regarding forest management in different administrative forest types, such as economic forests, ecological forests or multifunctional forests. The participants provided recommendations to the Chinese government on how to improve current regulations through real on-the-ground examples in APFNet projects, which often demonstrate new, alternative management styles.

In addition, two project brochures were finalized and published, namely the *Boosting Local Livelihoods through Participatory Watershed Management in Indonesia*, and the *Developing an Integrated Watershed Management Plan for Cambodia's Prek Thnot Watershed*.

Regional policy dialogues

To enhance forest policy exchange and strengthen synergies in forest policies and forest innovation among member economies that help to contribute to achieving forest-related regional and global goals, APFNet has been using its advantage in networking to promote policy dialogue, and made the following progress in 2021:

-
- a. By contributing to combating desertification in Greater Central Asia, APFNet has devoted itself to work with the Shanghai Cooperation Organization. The consultations between the two parties in 2021 reached a preliminary consensus regarding joint efforts for addressing desertification as a core part of regional ecological security;
 - b. In order to upgrade training outputs of vegetation restoration in arid areas of Greater Central Asia, APFNet completed a new edition of the textbook "*International Training Courses on Vegetation Restoration of Arid Lands in Greater Central Asia*" in 2021.
 - c. In order to explore more possible tangible collaborations in the Greater Central Asia region, APFNet organized the *2021 Info-Exchange Meeting on Strategic Forestry Cooperation in Greater Central Asia*. Through consultation, the member economies and partners reached a consensus on the development of sub-regional action plans on forestry cooperation;
 - d. During a consultation at the *Fifth Meeting of Asia-Pacific Forestry Planning Network (FPN)*, the members reached a consensus regarding the development of an analytical report on "*Forest Restoration Planning in the Asia-Pacific Region: Stocktaking study on policies, legal frameworks and programmes*". Through joint efforts, this publication was completed at the end of 2021 to facilitate regional forestry policy dialogue among APFNet members by providing an in-depth understanding of forest restoration policies, legal frameworks, management structures and existing practices.

Communication and information sharing

APFNet continued to support regional efforts to collect, update and share information and data on experiences, lessons learned and best practices of sustainable forest management and rehabilitation. Beside communication and information sharing in APFNet projects, policy dialogues and capacity building activities, in 2021 APFNet also promoted communication and information sharing with colleagues in the forestry sector in the following ways:

- a. Responding to the aspirational goal to increase forest cover in the Asia-Pacific Economic Cooperation (APEC) region by at least 20 million hectares of all types of forests by 2020, agreed by leaders of APEC economies, APFNet launched the completion assessment for the above mentioned forest goal in collaboration with the Food and Agriculture Organization of the United Nations (FAO). With the support of APEC member economies and the APEC Secretariat, a synthesis of economy reports - *Achieving the APEC 2020 Forest Cover Goal* was developed and published on the APEC and APFNet websites in 2021. The report indicates that the total forest area across the APEC economies increased by 27.9 million hectares between 2007 and 2020, which was welcomed in the *APEC Ministers Joint Statement* issued on 9 November 2021. The report also puts forward recommendations for economies in the region to further increase their forest cover and reduce forest degradation based on the actions and lessons learnt. The key findings of this report also were shared in some international meetings.

-
- b.** Economies in the region has been working to deliver on their restoration pledges at the economy scale through various approaches. China has already significantly increased its forest area by 138 million ha and its forest cover from 8.6% to more than 23% since 1949. Its success in reversing forest degradation and forest loss shows that large-scale restoration is possible given good political leadership, multi-stakeholder involvement and an adaptive management approach. Conducted by APFNet, an e-poster session titled “*Achieving forest landscape restoration at scale – lessons from China for ramping up the global response*” was held virtually at the IUCN World Conservation Congress in September 2021 as a vehicle for sharing experiences in forest restoration and to understand how such an achievement in forest restoration can be realized in different economies;
- c.** In order to ease public access and increase knowledge about APFNet and the development of forestry in the APEC member economies, more information products, such as news, publications, scientific papers funded by APFNet, as well as information about new forest-related laws and strategic forestry plans issued by Asia-Pacific member economies, were produced and updated on the APFNet website. Some of them also were posted on APFNet social media to promote to wider audiences. The APFNet annual report, outlining the key activities and outputs in 2020, was produced and released in English and Chinese. Three editions of the APFNet newsletter were sent to stakeholders via email. Short articles and project information were produced and posted during internationally celebrated days;
- d.** In collaboration with FAO/RAP, APFNet took the lead on a thematic paper for the *Pacific Forestry Sector Outlook Study – Increasing the Resilience of People and Landscapes in the Pacific Island Economies: the role of forests and trees in the context of climate change*. The paper analyzed climate change and its impact on forests and forestry in the pacific island economies and made recommendations for priorities to improve adaptation and resilience in the forestry sector.

Governance and operations

Governance and institutional work

a. Communication with Board and Council

To facilitate the Board and Council to better fulfill their respective responsibilities, in 2021, the APFNet Secretariat regularly communicated with the Board of Directors, member economies of the Council and partners. Quarterly updates were submitted to the Board of Directors in a timely manner to update on the progress of APFNet’s activities. Furthermore, APFNet has kept in contact with Council Representatives and Contact Persons to invite them to attend some virtual webinars and workshops;

b. APFNet’s presence enhanced in the Americas

Despite the continuing challenges by COVID-19 in 2021, the APFNet-UBC Americas Office

(AO) was successful in maintaining international collaboration with the Latin American region, fostering regional sustainable forest management, and broadening its network. In 2021, AO cooperated with UBC's Faculty of Forestry to conduct a global forest leadership forum. The *Dialogue with Educational Leaders (DEL)* series is a new initiative of the Asia-Pacific Forestry Education Coordination Mechanism (AP-FECM). In response to the COVID-19 pandemic, this series seeks to identify common key challenges to online teaching in higher forestry education, as well as potential areas for future collaboration. Additionally, AO conducted a literature review to promote protected area management in Latin America.

Partnerships

APFNet explored more cooperation by renewing MoUs or establishing working groups with partners to support member economies.

a. Renewed MOU and partner' collaboration exploration

In December 2021, the renewed MoU between APFNet and IUFRO was signed to continue collaboration on climate change and reversing forest degradation through capacity building and policy development. Additionally, APFNet actively conducted several virtual meetings with partners such as RECOFTC and UBC to explore wide cooperation for supporting member economies;

b. Opportunities identified to represent APFNet activities regionally and internationally

Promoting APFNet's profile in the Asia-Pacific region is key to broadening and strengthening its networks. APFNet identified opportunities to communicate with members and partners by virtually attending several international meetings and events in 2021, including: the Seventh Regional Meeting of Pacific Heads of Agriculture and Forestry Services, the 60th IUFRO Enlarged Board Meeting, the UNFF Expert Group Meeting and 57th ITTO Council Meeting. By attending these events, APFNet disseminated its efforts and successes in achieving APFNet's strategic vision, thereby broadening its networks as well as identifying other strategic opportunities for collaboration.

The APFNet Strategic plan (2021-2025)

The third *APFNet Strategic Plan* was developed and has entered its implementation stage. Incorporating the comments and suggestions from experts of the Ten Year Review, the formulation of the Strategic Plan was prepared based on extensive consultation with the Board and Council members and partners. The new plan emphasizes that APFNet will focus more on forest restoration and continue to contribute to restoring forests in the Asia-Pacific region through demonstration projects, capacity building, policy dialogue, and information sharing. Guided by the new Strategic Plan, APFNet will put more effort into coordinating activities under the four pillars to create synergies and increase impacts.

APFNet Monitoring and Evaluation (M&E)

The function of M&E in 2021, both internal and external, has been further enhanced and reflected in the operation of APFNet. A thematic external evaluation of the APFNet Scholarship Program (ASP) was completed in March 2021. Data collected during the evaluation statistics created based on that information indicate that ASP provides great opportunities for further education for forestry practitioners in the Asia-Pacific region, and positively contributes to the forestry talent development in APFNet member economies.

The systematic and regularized Mid-term and Terminal evaluations of APFNet funded projects and result/feedback sharing largely ensured the effectiveness and efficiency of APFNet operations, contributing to the better improvement of future activities planning and implementation.

Administration, finance, human resource management

Guided by the Executive Director, and adopting flexible arrangements, the operation of the Secretariat has been stable and effective.

- a.** Rules, regulations, and procedures were reviewed and trainings were organized. A staff manual was produced, including a code of conduct, covering attendance, welfare, confidentiality, etc. to ensure more standardized staff management.
- b.** In-house capacity building was provided to help staff enhance presentation skills, language skills, and develop an enhanced understanding of international forestry. One staff was sent to UBC for a Master's degree. Meanwhile, staff were encouraged to conduct small researches, join field studies, and summarize APFNet's practices on SFM to share at international conferences;
- c.** Constrained by COVID-19-related international travel and visa restrictions, new international staff were not able to join APFNet. Instead, the APFNet Secretariat actively attracted and provided offers to new Chinese staff who have international experience after living abroad for many years and specialized in forestry to contribute to APFNet project management;
- d.** APFNet operated with reduced funds in 2021, as some of its activities were postponed due to the ongoing COVID-19 pandemic. However, via careful adjustment of budget allocations and an improvement of financial efficiency, the provision of financial resources for key activities was ensured. Partner contributions provided important support to activity implementation. (See Annex 2 for partner contributions in 2021)

Annex 1**Implementation of APFNet's Work Plan 2021**

No.	Activity/Task	Status	Results/Outcomes
I. Capacity building			
1	Provide young forestry officials with scholarships for professional development so they can better contribute to the forestry sector	completed	26 forestry officials and practitioners from APFNet member economies were supported by the APFNet Scholarship Program at Beijing Forestry University, Nanjing Forestry University, and Chulalongkorn University.
2	Enhance impacts of APFNet Alumni Network	completed	Three quarterly newsletters were published and disseminated, and the Network online portal was running to act as a platform for alumni to share and exchange information.
3	Reschedule and organize a training workshop on the topics of forest carbon	completed	A training workshop was organized on forestry carbon sinks and carbon accounting with around 100 forestry officials and technicians attending.
II. Projects			
No.	Activity/task	Status	Results/outcomes
4	Launch 3 new projects	Completed	Three new projects from Canada and China successfully launched: 1) Adaptation of Asia-Pacific Forestry to Climate Change Phase III [ID: 2020P4-UBC] 2) Study on forest carbon storage and carbon sink potential of Wangyedian Forest Farm [ID: 2021P2-INM] 3) Construction of Multi-Functional Forest Management Demonstration Sites - Phase III [ID: 2020P2-INM]

5	Complete/close 5 projects	Completed	<p>Five projects from Canada, China and Mongolia were completed and/or closed:</p> <ol style="list-style-type: none"> 1) Demonstration on Sustainable Forest Management and Restoration in Hilly and Low Mountain Areas of Southern China [ID: 2016P2-CAF], 2) Construction of a Mini Botanic Park of 8.4ha within the National Garden Park of Mongolia's Mini Botanic Garden [ID: 2013P5-MYN], 3) Innovative Sustainable Forest Management Education in the Asia-Pacific Region (Phase II) [ID: 2018P3-UBC], 4) Fire Prevention Project of Sanyijing Forest Farm in Aohanqi Banner [ID:2020P3-INM] 5) Fire Prevention Project of the APFNet Sustainable Forest Management Demonstration and Training Base [ID:2020P5-PE]
6	Successfully implement 15 ongoing projects	Completed	<ol style="list-style-type: none"> 1) Development Participatory Management of Micro Catchment at the Bengawan Solo Upper Watershed Phase II [ID: 2020P1-INA] 2) Community tree planting project in Papua New Guinea [ID: 2017P3-PNG] 3) Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Cambodia) [ID: 2017P2-CAM] 4) Demonstration of vegetation restoration and management and utilization of forest resources in the Greater Central Asia (Chifeng site) Phase II and Added Activities [ID: 2019P4-INM] 5) Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Pu'er Project Site)[ID: 2016P1-GMS-PE] 6) Sustainable Forest Management in Northern Provinces of Lao PDR[ID: 2014P1-ASEM] 7) Integrated planning and practices for mangrove management associated with agriculture and aquaculture in Myanmar [ID: 2018P1-MYR] 8) Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Myanmar) [ID: 2018P4-

			<p>MYR]</p> <p>9) Reconstruction and sustainable management of degraded forest based on the combination of interplanting nitrogen fixing rare tree species and thinning [ID: 2018P4-CAF]</p> <p>10) Regional Forest Observations for Sustainable Forest Management [ID:2018P2-CAF]</p> <p>11) Improving capacities towards reducing greenhouse gas emissions from peat swamp forest fires in Indonesia [ID:2018P5-IND]</p> <p>12) Empirical synthesis and capacity building on forestry [ID:2019P1-APFNet/MSU]</p> <p>13) Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Vietnam) [ID: 2019P2-VNM]</p> <p>14) Establishment of a High Value Tree Species Breeding Center in Cambodia [ID: 2019P3-CAM]</p> <p>15) APFNet Sustainable Forest Management Training Center Project [ID: 2020P1-PE]</p>
--	--	--	--

III. Supporting regional policy dialogues

No.	Activity	Status	Results/outcomes
7	Support high-level forestry dialogues and exchanges in GCA to share experiences and develop common strategic priorities	Completed	1) Conducted a 2021 Info-Exchange Meeting on Strategic Forestry Cooperation in Greater Central Asia. Introduced the Action Plan for Greater Central Asia Forestry Cooperation Mechanism (2021-2030) and prepared its adoption during the Third Meeting of Ministers Responsible for Forestry in GCA.
8		Postponed	2) Due to COVID-19, the Third Meeting of Ministers Responsible for Forestry in Greater Central Asia has been postponed to the second half of the year 2022.
9		Completed	3) Developed a new edition of the textbook in Russian and Chinese versions for the International Training Courses on Vegetation Restoration of Arid Lands in Greater Central Asia.

10		Ongoing	4) APFNet and Shanghai Cooperation Organization have strengthened cooperation on forest restoration. An MoU is in the negotiation stage.
11	Support the Forestry Planning Network (FPN) to strengthen strategic capabilities, improve planning processes and increase the effectiveness of strategic forestry plans	Completed	A Report of “Forest Restoration Planning in the Asia-Pacific Region: Stocking Study on Policies, Legal Frameworks and Programmes” was finalized.
12	Support the APFNet Transboundary Wildlife Conservation Initiative (@Wild) to increase cooperation in wildlife conservation among GMS economies	Postponed	1) A study tour to the Bangliang Nature Reserve in Guangxi Province of China was postponed to 2022; 2) A side-event on wildlife habitat protection during the 15 th Conference of the Parties (COP15) to the Convention on Biological Diversity was postponed due to the COP15 itself being postponed.
13	Advance forestry research by strengthening cooperation and facilitating collaborative actions among forestry research institutions through the Sino-ASEAN Network of Forestry Research Institutes (SANFRI)	Ongoing	The mid-term project evaluations of four research projects under the APFNet Small Research Grant and the second installment of those projects were completed, and the projects have been moved to the next phase.
14	Support the Pu’er Forum to increase synergies and contributions to forestry-related goals and international commitments	Completed	1) Organized the second consultation meeting for group discussions on preparing the Pu’er Forum among the concerned partners; 2) Established a working group for preparing the Pu’er Forum after the meeting.
IV. Communication and information sharing			
No.	Activity/task	Status	Results/outcomes
15	Assess the extent of achievement of the APEC 2020 Forest Cover Goal, provide recommendations to further increase forest cover, and reduce forest degradation	Completed	A synthesis of the report has been posted on the APEC and APFNet websites and has been disseminated on some meetings

16	Share experiences and insights on large-scale forest restoration in China	Completed	An e-poster session titled “Achieving forest landscape restoration at scale – lessons from China for ramping up the global response” was held virtually at the IUCN World Conservation Congress. The video of the presentation has been posted on the website for attracting wider attention.
17	Share progress of APFNet activities in a timely manner	Completed	Developed and released the <i>APFNet 2020 Annual Report</i> , 3 newsletters, 4 periodical reports for board and council members, and some news and brochures. Most of them have been posted on the APFNet website and social media.
18	Develop a thematic paper for the Pacific forestry Sector Outlook Study	Ongoing	The <i>Pacific Forestry Sector Outlook Study – Increasing the Resilience of People and Landscapes In the Pacific Island Economies: the role of forests and trees in the context of climate change</i> will be published by FAO

V. Partnerships, networking, and outreach events

No.	Activity/task	Status	Results/outcomes
19	Collaboration with FAO	Ongoing	Continue to implement they APFNet-FAO MoU
20	MoU Renewal with partners	Ongoing	1) Renewed MoU with IUFRO (2021-2025); 2) Discussed with RECOFTC collaboration areas in the to-be-renewed MoU.
21	Raise public awareness of the importance of forests and nature education	Completed	Promotional activities organized in Chaoyang, China, and Chifeng, Inner Mongolia Autonomous Region of China.

VI. Governance, institutional work

No.	Activity/Task	Status	Results/outcomes
22	Maintained contact with Board and Council	Completed	1) Regularly communicated with Board and Council members; 2) Four quarterly updates circulated.
23	APFNet’s presence in the Americas	Completed	The APFNet-UBC Americas Office conducted a brief literature review that aims to cover the origins and current state of national parks in

			Latin America, identify some of the challenges and identify knowledge gaps in the literature available.
24	Development of the <i>Third APFNet Strategic Plan</i>	Completed	<ol style="list-style-type: none"> 1) The <i>Third APFNet Strategic Plan</i> was developed and approved by the Board and released via the website; 2) A sharing session on the new Strategic Plan was conducted at the Secretariat; 3) Hard copies of the Strategic Plan were printed and disseminated.

VII. Monitoring and evaluation

No.	Activity/Task	Status	Results/outcomes
25	Project evaluation	Partly Completed	<ol style="list-style-type: none"> 1) Mid-term evaluation of two projects conducted to assess project performance and progress. Results shared with project partners in a timely manner to guide remaining project implementation; 2) Completion evaluations of three projects were conducted to assess achievements and impacts; 3) According to the actual implementation progress of the identified projects, two project terminal evaluations were postponed to 2022.
26	External evaluation of the APFNet Scholarship Program (ASP)	Completed	Report of the evaluation of ASP released, and derived lessons learned and recommendations to improve the program during the next stage. Specifically, the achievements and impacts of the program were positively remarked upon by the evaluator.
27	Monitoring and evaluation system	Ongoing	<ol style="list-style-type: none"> 1) Current guidelines on project evaluation reviewed to identify gaps and problems; 2) Project monitoring and evaluation procedures, indicators and other operational details clarified; 3) Criteria for the performance evaluation of consultants explored.

VIII. Secretariat Operations: Administration, HR, Finance

No.	Activity/Task	Status	Results/outcomes
-----	---------------	--------	------------------

28	Policy review and amendment	Completed	<ol style="list-style-type: none"> 1) Policies, rules, by-laws, and procedures reviewed, updated and implemented; 2) Training workshops organized in the Secretariat to facilitate its implementation; 3) Staff manual conducted.
29	Finance	Completed	<ol style="list-style-type: none"> 1) APFNet financial operations regularly monitored and efficiency enhanced; 2) An independent auditing completed.
30	Development and management of human resources	Ongoing	<ol style="list-style-type: none"> 1) One staff started a Master's degree program; 2) Regular weekly training, lectures, field visits organized; 3) Staff participated in forest-related events and meetings; 4) Staff were encouraged to speak at international events.

Annex 2

APFNet Partners' Contribution in 2021

No.	Activity	Partner	Contributions in kind or cash(USD)
1	Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Pu'er Project Site, P.R.China)	Forestry Bureau of Pu'er Wanzhangshan Forest Farm	49,800.00
2	APFNet Sustainable Forest Management Training Center Project	Forestry Bureau of Pu'er Wanzhangshan Forest Farm	1,129,242.42
3	Fire Prevention Project of APFNet Sustainable Forest Management Demonstration and Training Base (Pu'er)	Forestry Bureau of Pu'er Wanzhangshan Forest Farm	69,868.69
4	Development Participatory Management of Micro Catchment at the Bengawan Solo Upper Watershed (Phase II)	Watershed Management Technology Center	74,281.00
5	Wangyedian Multifunction Forest Mangement Demonstration Sites- Phase III	Wangyedian Forest Farm	233,590.91
6	Regional Forest Observations for Sustainable Forest Management	Institute of Forest Resource Information Techniques, Chinese Academy of Forestry	33,600.00

7	One small research project under SANFRI: Study on Variation Pattern of Growth Characteristics of Two Families of Precious Rosewood Tree Species in Seedling Stage and Their Genetic Diversity	Yunnan Academy of Forestry and Grassland	11,645.37
8	APFNet Scholarship Program	Beijing Forestry University	19,333.33
9	APFNet Scholarship Program	Nanjing Forestry University	31,515.15
10	Development of Criteria for Rehabilitating Degraded Tropical Forests in the Lancang-Mekong Region	APFNet-UBC Americas Office (AUAO)	24,750.00
11	Demonstration project of forest experience and nature education (Wanzhangshan, Pu'er)	Forestry Bureau of Pu'er Wanzhangshan Forest Farm	43,863.64
12	Improving capacities towards reducing greenhouse gas emissions from peat swamp forest fires in Indonesia	Center for Standardization of Sustainable Forest Management Instruments The University of Melbourne	52,440.00
13	Demonstration on Integrated Planning and Management of Forest Ecosystem in Greater Mekong Sub-region - Myanmar site	Forest Research Institute, Myanmar	121,163.00
14	Reconstruction and sustainable management of degraded forest based on the combination of inter-planting nitrogen fixation rare tree species and thinning	The Institute of Forest and Wildlife Research and Development, Cambodia	36,200.00
15	Establishment of a High Value Tree Species Breeding Center in Cambodia	The Institute of Forest and Wildlife Research and Development, Cambodia; Yunnan Academy of Forestry and Grassland, China (YAFG)	163,973.00
16	Demonstration of vegetation restoration and management and utilization of forest resources in the Greater Central Asia (Chifeng site) Phase II	Chifeng Municipal Forestry Bureau; Sanyijing State-owned Forest Farm, Aohan Banner	89,713.64
17	Added activities- Demonstration of vegetation restoration and management and utilization of forest resources in the Greater Central Asia (Chifeng site) Phase II	Chifeng Municipal Forestry Bureau; Sanyijing State-owned Forest Farm, Aohan Banner	149,090.91
18	Integrated Forest Ecosystem Management Planning and Demonstration Project in Greater Mekong Sub-region (Cambodia)	The Institute of Forest and Wildlife Research and Development, Cambodia	66,073.50
19	Adaptation of Asia-Pacific Forestry to Climate Change Phase III	University of British Columbia	14,650.00

20	Demonstration on Integrated Planning and Management of Forest Ecosystem in Greater Mekong Sub-region - Vietnam site	Forest Inventory and Planning Institute	42,145.16
21	Innovative Sustainable Forest Management Education in the Asia-Pacific Region (Phase II)	University of British Columbia	94,100.00
22	Sustainable Forest Management in Northern Provinces of Lao PDR	Department of Forestry, Ministry of Agriculture and Forestry	25,609.91
	Total		2,576,649.63