

Report of APFNet's Workshop on Forest Resources Management

in Asia and the Pacific



Sponsored by: Asia- Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet)

Organized by: National Plateau Wetlands Research Center (NPWRC) Southwest Forestry University (SWFU)

> November 2010 Kunming, China

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Acknowledgements

The Asia-Pacific Network for Forest Rehabilitation and Sustainable Management (APFNet), the National Plateau Wetlands Research Center (NPWRC) and Southwest Forestry University (SWFU) wish to express their heartfelt gratitude to all the people who contributed their time and efforts to make the workshop a success. Special thanks go to Professor Shen Lixin and his team for their dedication and valuable assistance throughout the classroom portion of the workshop and the field trip. We are also grateful to the officials of the prefecture, the county forestry bureaus, and the communities for their support and willingness to share ideas and experiences during the visits onsite.

Last but not least, we would like to convey our sincere appreciation to the participants whose support and insights were invaluable in our collective efforts to understand the importance of achieving sustainable forest management for a better future, building on the support of APFNet. We are looking forward to meeting you again as we pursue our common goals!

APFNet NPWRC SWFU

Preface

The workshop on Forest Resources Management in Asia and the Pacific, as an integral component of APFNet's capacity building program, was held in Kunming City, P. R. China, from November 8 to 19, 2010. Participants consisted of fifteen senior officers from forestry departments, research institutes, and universities in the region. The National Plateau Wetlands Research Center (NPWRC) and Southwest Forestry University (SWFU) organized and implemented the session, with guidance and full funding from APFNet.

By means of presentations, case studies, field tours and interactive discussion among participants and invited speakers, the workshop provided a regional overview of sustainable forest management; highlighted key external factors which have a direct impact on the sector; and described some of the tools available to help achieve SFM. The venue also served as an effective forum for decision-makers and other experts to share experiences, practices, knowledge and lessons. Thanks to the concerted efforts of all participants, organizers and collaborators, objectives were met.

This workshop marks the fourth of the APFNet's forest resources management series as part of its medium-and long-term capacity-building program. This report summarizes the goals, themes, key activities, and outputs of the meeting. Recommendations on the design and planning of future training programs are also presented.

For more information of the workshop, please visit APFNet website at www.APFNet.cn

APFNet November, 2010

1. Introduction

Forests provide multiple functions and their capacity to sustain livelihoods, support social and community development, address climate change, maintain biodiversity and provide other benefits depends significantly on how they are managed.



Sustainable forest management (SFM) aims to ensure that derived goods and services meet present as well as future needs over the long term. The concept also encompasses aspects of conservation and use. Moreover, it requires a comprehensive legal system, strong governance and sound policies - aspects which are often weak in the Asia and Pacific region. Such weaknesses slow the progress towards SFM and contribute to the complex and varied causes which lead to severe forest degradation, deforestation, illegal activities and associated trade.

To address these issues and to promote sound management of forest resources, countries and organizations are making concerted efforts to improve forest law compliance and governance in the region.

This workshop marks the 4th in the series on forest resources management under APFNet's capacity building program. Outcomes will pave the way for conducting future research and case studies. Suggestions from participants and invited speakers on course design, training methods, and outputs, for example, are appreciated. APFNet will use this information to improve its future training and capacity building programs.

1.1 Objectives

The workshop seeks to identify ways to overcome the obstacles which hinder the achievement of sustainable forest management such as weak legislation, governance, policies and institutions. Based on the exchange of views, experiences, and lessons learned among countries in the region, recommendations will be made to address key issues of common concern.

1.2 Participants

Fifteen representatives (1 female and 14 male) from 13 developing APFNet member economies in Southeast Asia participated in the session: Bangladesh, Brunei, Cambodia, Indonesia, Malaysia, Mongolia, Myanmar, Nepal, Peru, Philippines, Sri Lanka, Thailand, and Viet Nam. Participants were selected based on APFNet application procedures after Focal Points issued announcements of the event.



Most participants were high ranking officials from forestry departments, while others came from either a research institute or a university (see Annex 2 for a detailed list).

2. Training themes and key activities

2.1 Training themes

The 12-day workshop was conducted in English and consisted of three components: presentations on specific themes, a five-day field excursion (including 2 days travel), and interactive sessions among participants, guest speakers and APFNet staff.

Course modules combined classroom lectures, case studies, country presentations and a field trip. Consistent with the objectives of the workshop, lectures covered the following topics: legal frameworks for SFM; forest management in select countries; law enforcement, illegal forest activities and trade; science and technology for SFM; protected areas, forest restoration and environmental friendly practices; the role of forests in climate change; and tools to improve SFM and livelihoods. A field excursion to several sites provided the opportunity for participants to interact with local forest

managers and community leaders.

• Thematic presentations



Presentations, followed by discussion, were given on forest governance and legislation in China; forest policies, legislation and institutions in Asia and the Pacific - trends and emerging needs; key elements of the amendments to the US Lacey Act and their impact on SFM in the region; implementation of the EU Forest Law Enforcement Governance and Trade (FLEGT) Action Plan; bamboo utilization and management in China; efforts to combat

illegal logging in Cambodia; forest management and law enforcement in post conflict Sri Lanka; remote sensing and GIS techniques and tools; logging with elephants in Myanmar; protected areas in Yunnan Province, China; mangrove rehabilitation in Bangladesh; forest restoration in the Philippines; forest conflicts in Asia; conflict resolution as an essential process of verifying high conservation value forests and forest certification; community forestry in Thailand and Nepal; forest sof Mongolia; sustainable forest management in Australia, Brunei, Canada, Malaysia and Peru; forest tenure reform in Yunnan Province; a regional approach to enhance the legality of timber; and the role of forests in the mitigation of climate change.

• Field excursion

A 5-day field excursion to Baoshan City and other points of interest in the western part of Yunnan Province was organized to showcase sustainable forest management in China. Highlights included a visit to Gaoligongshan State Nature Reserve, Laifengshan National Forest Park, a community forest farm, a forestry cooperative, a gingko plantation in Juangdong Gingko Village, community eco-protection forests, afforestation and reforestation sites, the National Volcano Hot Spring Park, and the ancient town of Heshun.



• Interactive discussion among participants



Each participant reported on forest management in his/her country, highlighting areas/issues of particular interest. Sharing such experiences and practices provided an additional opportunity for participants to increase their knowledge. They also identified the main challenges which the sector is facing, along with the strategies that are in place in the region to overcome them. As a final exercise, participants completed an evaluation of the different aspects of the workshop and made recommendations on ways to improve future sessions.

2.2 Workshop materials

Upon arrival, participants were given copies of the country reports and powerpoint presentations which were submitted to APFNet prior to the workshop. They also received an overview of the programme, including the schedule of presentations and field visits, a profile of the resource persons, the list of participants, and background on the workshop and Kunming City. Details of



the excursion and sites to be visited were also provided, in addition to a description of the support and coordination to be given by local forestry officials and communities.

2.3 Speakers and facilitators

Based on the topics to be covered during the workshop, the organizers selected well-qualified speakers to present and facilitate the sessions. Experts came from FAO, INBAR, the European Forest Institute (FLEGT Asia Regional Support Programme), Yale School of Forestry and Environmental Studies, The Forest Trust, the Department of Primary Industries in New South Wales (Australia), TRAFFIC, The Nature Conservancy, RECOFTC, the State Forestry Administration of China, and the National Plateau Wetlands Research Center.



3. Summary of topics and main activities

3.1 Opening ceremony



Professor Yang Yuming, Vice-President of Southwest Forestry University (SWFU), chaired the opening ceremony and warmly welcomed participants to Kunming City. On behalf of APFNet, Mr. Lu De thanked SWFU and the National Plateau Wetlands Research Center for their valuable assistance in organizing and hosting this workshop. He noted that it was the second such meeting on sustainable forest management, the purpose of which was to exchange experiences and apply best practices according

to each country's particular circumstances. He expressed his appreciation to participants for their continued support to the activities of APFNET and hoped they would learn a great deal from each other over the coming weeks.

Professor Chen Baokun, Chair of the University Affairs Committee, added his welcome to the forestry experts and resource persons. He indicated that Kunming City was a tourist destination, known for its unique climate and rich biodiversity. Yunnan Province leads the country's in terms of forest cover and, due to significant reforestation and afforestation, forest area is increasing. The Province is also the source of the Mekong River and, therefore, has an intimate relationship and frequent



communication with countries in southeast Asia. As the only forestry university in southern China, SWFU has many ties with regional and international organizations - ties which allow it to make important contributions to forest management and biodiversity protection, not only in Yunnan Province, but also throughout southwest China.



He noted that, by drawing on extensive experiences to date, China has established comprehensive systems to survey forest resources, monitor progress toward SFM, provide technical support, and ensure stakeholder participation. However, Professor Chen also pointed out that China can learn much from neighboring countries. He emphasized that this APFNet workshop will help to improve forest management in the region and to strengthen collaboration on a range of issues. He closed

by wishing participants a safe and enjoyable stay in Kunming City and successful outcomes of their upcoming discussions.

3.2 Overview of topics

In addition to country presentations, the workshop covered the following topics: forest governance and legislation in China; forest policies, legislation and institutions in Asia and the Pacific - trends and emerging needs; key amendments to the US Lacey Act and their impact on SFM in the region; implementation of the EU Forest Law Enforcement Governance and Trade (FLEGT) Action Plan;

bamboo utilization and management in China; remote sensing and GIS techniques and tools; protected areas in Yunnan Province, China; forest conflicts in Asia; conflict resolution as an essential process of verifying high conservation value forests and certifying forests; forest tenure reform in Yunnan Province; a regional approach to enhance the legality of timber; and the role of forests in mitigating climate change.

• Forest governance and legislation in China

Professor Zhang Songdan from the State Forestry Administration gave an overview of the status and characteristics of forests and forest management in China. He noted that natural forests covered 119.69 million ha and that plantations extended over 61.69 million ha. According to FAO's State of the World's Forests (2009), China's forest area accounts for 4.95% of the world's total, fifth behind Russia, Brazil, Canada, and the United States. It ranks sixth in terms of stock volume. He further specified that the quantity and quality of resources are insufficient to satisfy domestic demand. With economic development on the rise, serious efforts are being undertaken to address this issue and to enhance the ecological, economic and social value of forests through their sustainable management.



Forests are divided into public forests for ecological benefits and commercial forests, both of which have different management and operation systems. Only the state and collectives can own forests but, since tenure reform, management and use rights can take many forms, including contracting to households and private enterprises. Under the reform, it is also possible to transfer contracted rights to others for a fee. Harvesting is controlled through a quota system, the transportation of logs is strictly monitored through licensing, and timber processing is also regulated.

China has almost 50 years of experience in conducting forest inventories, the purpose of which is to verify the quantity, quality and changes to these resources over time - information which forms the basis for planning and achieving SFM. Future efforts will focus on implementing guidelines which the State Council recently approved to protect, restore and ensure the sustainable use of forests by 2020. Targets include increasing forest cover to 223 million ha or 23% of the country's land area. Other priorities are to tend young and middle-aged forests, restore degraded forests, deepen reforms, improve policy, and enhance the quality of service delivery - all with a view to increasing resources, raising farmer incomes, and maintaining the ecological integrity of forest ecosystems.

• Forest policies, legislation and institutions in Asia and the Pacific

Mr. Jeremy Broadhead, FAO Bangkok, gave an overview of forest resources in the region, noting that China has 207 million ha compared with 213 million ha in southeast Asia. Forests are declining in most countries and, although protected areas and protection forests are designated, enforcement and management are weak because short term economic gains are often prioritized over social and environmental goals.

In most of SE Asia, deforestation and degradation are continuing, wood production is falling, the area of plantations is expanding, and climate change is threatening forest health. However, positive trends are emerging in some countries such as China, the Philippines, Thailand and Viet Nam. With regard to forest policy, greater attention is being paid to conservation, environmental services, participation, tenure reform, forest rehabilitation and restoration, enforcement, governance and



trade. In terms of forest legislation, conflicts with laws in other sectors are common and many provisions are outdated. The state is gradually relinquishing ownership and management of resources, especially when they become degraded, but it remains responsible for forest protection and conservation. Forestry institutions are increasingly separating regulatory functions from management and production aspects from conservation. They are also discharging their mandate in a more inclusive manner, inviting inputs from civil society, the private sector and user groups. However, illegal logging

is still a major concern. World Bank indicators related to six aspects of governance show that, between 1998 and 2008, performance fell in almost all countries.

Drivers of change in forestry include economic growth, demographic changes, infrastructure development, agricultural expansion, governance and technology. A number of approaches are used to formulate policies but capacity for implementation is often overlooked, as are links to other sectors. Priorities should reflect realities on the ground and be developed in a consultative manner to ensure strong connections to the local level and across sectors.

• The impact of key amendments to the US Lacey Act on SFM in Asia-Pacific

Mr. Chen Hin Keong of TRAFFIC explained that the Lacey Act is the oldest wildlife protection statute in the United States. It was enacted in 1900 to combat hunting for commercial purposes, interstate shipment of unlawfully killed game, the introduction of harmful exotic species, and the killing of birds for the feather trade. Amendments in 1981, 1988 and 2008 broadened its scope to cover trafficking in wildlife and fish caught illegally, as well as illegally harvested plants. The latest amendment makes it unlawful to trade in any plant that is taken, possessed, transported, or sold in violation of the laws of the United States, a State, an Indian Tribe, or any foreign law that protects plants. It also makes it unlawful to falsify or submit falsified documents, accounts or records of any plant covered by the Act and to import certain plants and plant products without an import declaration. Penalties for violations include seizure of products, fines and prison terms.



Mr. Chen also clarified the principle of due care which requires that a person take reasonable steps to ensure they are not violating the law. He noted that the principle is applied differently, depending on the person's degree of knowledge and responsibility. Other provisions stipulate that a violation under the Lacey Act need not have been committed by the person charged – a third party might have taken the product illegally. Additional aspects are that U.S. Courts can interpret the

underlying foreign law and that enforcement is based on facts, not on documents. Information is obtained from a range of sources such as foreign governments, customs agents, industry, NGOs, private citizens, anonymous tips and data analysis.

Because the issue is no longer about legal versus illegal wood but about proper documentation, who decides and what proof is needed have become important considerations to those engaged in export trade. Timber and wood products from the region which directly or indirectly make their way into U.S. markets are vulnerable if countries shipping these goods abroad cannot substantiate their legitimacy. Thus, they must take steps to ensure required documentation is in place.

Some countries participating in the workshop export to the U.S. so it is important to include the legal requirements of the Lacey Act when developing or amending procedures. Given that Australia - a developed country which provides foreign aid - recently incurred a \$2 billion trade deficit in timber and timber products, countries in the Asia-Pacific region may be able to access funds for capacity-building to conform with provisions. His key message is that countries which import illegal timber through cross-border trade and also export to U.S. markets fall under the Lacey Act and must prove legality. The problem arises in countries which have no procedures in place because of free trade agreements. This is one area where APFNet may wish to provide assistance.

• The EU Forest Law Enforcement Governance and Trade Action Plan

Ms. Aimi Lee Abdullah from the European Forest Institute Asia Regional Support Programme explained that the initiative was put in place in response to pressure from civil society, industry, and governments to close the EU market to illegally harvested timber. Funded by the European Union, with support from Finland, Germany and the United Kingdom, its aims are to achieve sustainable forest management, improve governance, increase transparency, and eradicate poverty. The programme is due to end in 2012 when countries in the region must comply with the new EU



legislation.

Key elements consist of voluntary partnership agreements; the regulation on due diligence; public procurement policies in EU member states; and EU assistance to producer countries. Efforts focus on timber exporting countries, principally China and other states in the Mekong Delta. Consumer markets in Asia-Pacific are also targeted.

The purpose of FLEGT voluntary partnership agreements is to establish controls and licensing systems which allow governments in producer countries to guarantee the legality of the timber being exported, according to domestic laws. Assurances cover chain of custody, verification, licensing and independent monitoring. The definition of legality reflects the 3 pillars of sustainable forest management and includes aspects such as the legal rights to harvest; compliance with regulations; taxes, fees and levies; respect of the tenure and use rights of other parties; and trade/export procedures.

Indonesia and Malaysia have entered into formal negotiations, Cambodia, Papua New Guinea, Thailand and Viet Nam are in the preparation phase of building country consensus, and the concept is being introduced in Lao PDR. FLEGT licenses - the final stage - are yet to be issued.

The regulation on due diligence is binding on all EU member states and covers most timber and timber products, imported or domestically produced. Legality is defined in the same way as in voluntary partnership agreements, i.e., on the basis of legislation in the country of harvest. EU producers must ensure due diligence by, for example, tracking timber flows; conducting risk assessment; identifying the country of harvest; and accessing reliable information on legal compliance. EU importers need to know the country of harvest; be informed about compliance, in line with FLEGT requirements; and give preference to products which have been verified by a third party, certified by recognized schemes, and licensed by FLEGT.

• Bamboo utilization and management in China

Professor Zhu Zhaohua from the International Network for Bamboo and Rattan noted that, although China has attached great importance to the development of bamboo plantations since the 1950s, the resource was sold mainly as raw material until the country began processing in 1985. The area of plantations grew from 3 million ha in 1976 to 5.1 million ha in 2009 and now forms the basis of an important rural industry, increasing from US\$.06 billion in 1990 to an estimated



US\$11.21 billion in 2009. China has about 500 species of bamboo but only 50 are used for industrial purposes. Products such as flooring, decoration board, furniture, charcoal, fiber, handicrafts, and shoots are exported mainly to Japan, North America and Europe, the value of which rose from US\$0.17 billion in 1990 to US\$1.875 billion in 2009.

Professor Zhu then described how different parts of the bamboo plant were used - roots (art and handicrafts), leaves (juice, chicken feed and medicine), shoots (food), sawdust (energy), chips (pulp/paper), and small poles (fiber for textiles). He indicated that, in 2003, farmers could earn an average of 10,900 RMB/year and, in 2005, a factory processed as much as 25 tons/day.

Challenges facing the industry include a shortage of raw material and a utilization rate of less than 20% in most producer countries. If the culm is used only for bamboo flooring, for example, the absolute utilization rate is less than 12%. A rapid increase in prices is also problematic, rising from 160 RMB/ton in 1985 to 830 RMB/ton in 2008 in Anji County, for example. In addition, stiff competition has significantly reduced profit margins and the capacity to develop new products. In 1992-93, it cost 86 RMB to produce a square meter of bamboo floor board which then sold for 250 RMB. In 2006-07, the production cost jumped to 103 RMB compared to a selling price of 110 RMB.

• Remote sensing and Geographic Information System (GIS)

Dr. Moe Myint and Ms. Xumei Han from the Yale School of Forestry and Environmental Studies presented these topics. Dr. Myint explained that remote sensing is about acquiring data through satellite sensors and then interpreting outcomes. Data are in the form of pixels, similar to digital

cameras, and are either in optical or microwave form. Remote sensing data are surrogate data, depending on how you perceive and interpret it. Aspects include spatial characteristics expressed in terms of different resolutions; temporal characteristics where the satellite revisits the site and the data; radiometric characteristics which are measured in bits; detection of surface roughness by radar and microwave; and detection of moisture content by radar and microwave.



GIS captures the where and what of spatial objects and their relationship to each other.

The system comprises data analysis, storage and retrieval and is designed to support decision-making which ultimately must be based on human assessment. It provides new knowledge based on existing knowledge through spatial relationships of spatial objects (analysis of points, lines and polygons according to their location, attributes and patterns). Dr. Myint suggested that the

Global Positioning System is under-utilized compared to its potential and could well be used to track the movement of logs, for example - providing critical information to combat illegal logging.

With regard to statistics, questions must be asked to ascertain the validity and reliability of the sample size. For example, decision makers need to know the margin of error, the variance, the standard deviation, and the confidence level (noting that a level of 95% was not necessarily better than one of 80% or 85%).

Ms. Xumei Han then demonstrated the landscape management system (LMS) using the toggle program. She explained that LMS is a computer tool to access the response of forest ecosystems to different management scenarios. Inputs consist of management scenarios, landscape information, and stand inventory. Outputs are characteristics of productivity, biodiversity, forest health, carbon sequestration, and socio-economic benefits. It is a powerful tool for forest management, easy to use, can readily be combined with remote sensing technology and GIS, and it is free. She reminded participants that LMS should be used as a tool to support decision-making based on pre-determined objectives and then described the methodology she used to design a forest management plan for the conservation of the Amur tiger on China's border with Russia.

• Protected areas

Ms. Wang Yue provided an overview of The Nature Conservancy's involvement in two projects in the region: national parks in Yunnan Province and conservation easements in collective forests in Sichuan Province. She began her presentation by restating the first goal and associated targets of the Convention on Biological Diversity, the aims of which are to protect at least 10% of each of the world's ecological regions and areas of particularly important biodiversity. She then described global



trends related to protected areas, followed by national trends in select Asia-Pacific countries. By 2008, for example, China had designated 2538 nature reserves - 15.1% of its total land area.

The process by which national parks are designated in Yunnan Province is grounded in policy and regulations, thus provides a high degree of security. Implementation takes place in 4 phases: introduction of the concept (3 years), government recognition on paper (4 years), experimentation on the ground (4 to 8+ years), and replication (5 years). The parks focus on conservation, their financing is sustainable, they serve as venues to educate the public on environmental issues, and provisions are in place to share benefits with communities. So far, the provincial government has approved 5 demonstrations sites, drafted standards and guidelines for establishing future sites, and completed a 10-year development plan.

With regard to conservation easements in collective forests in Sichuan, Ms. Wang noted that 70% of panda habitat will be affected by changes brought about by tenure reform. However, she also pointed out that new conservation opportunities were emerging. For example, capital from responsible entrepreneurs will be used to establish a fund to rent collective forestland important to the panda habitat. Activities of non-profit entities will be limited and must be consistent with the conservation

agreement (e.g., eco-tourism). In addition, revenues will be reinvested to support neighboring reserves and officials in these adjacent areas can inspect the activities carried out on the rented collective forests.

• Forest conflicts in Asia

Dr. Yurdi Yasmin from RECOFTC noted that the term "conflict" has no single meaning, that the definition depends on perceptions which often vary according to culture. Elements of conflict include interdependence (at least 2 parties), limited resources (human vs human and human vs animal), and opposing views (your actions prevent someone else from achieving their goals). He specified that conflict does not extend to situations where differences can be discussed or tolerated. In terms of its seriousness, conflict affects 75% of forests in Asia.



Based on 8 case studies, Dr. Yasmin concluded that communities have the most to lose but the least power to win. The negative impacts are fear, anxiety, disharmony, distrust and high socio-economic costs. On the positive side, conflict unites communities by helping them to speak with one voice. Conflict also increases awareness of the issues among parties, including realization by government that it must take local interests into account when developing policies. In addition, it creates pressure to clarify who owns and who can use the land. The

underlying causes or triggers of conflict are contested tenure and overlapping claims; lack of coordination among government agencies; and global/national interests versus local priorities. Direct causes include eviction of communities; pollution by industry (noise, air, water); destruction of assets; unemployment (jobs given to outsiders); and loss of income and of livelihood opportunities. To manage conflict, the case studies adopted a number of approaches, often in combination: avoidance (initial stage), negotiation, 3rd party mediation, and coercion.

In the short term, it is important to consult with communities early, before making decisions; improve coordination among government agencies; enter into co-management agreements; and ensure government remains neutral in negotiations between communities and companies. Over the long term, tenure and land use must be clarified; mediation skills need to be strengthened; local management of resources must be respected; and livelihood strategies and conservation policies should be integrated.

• Conflict resolution in identifying high conservation value forests (HCVF)



Mr. Agung Wiyono from The Forest Trust (TFT) described how his organization assists communities and companies to prepare for SFM certification by improving performance and resource management systems. He stressed that TFT, in itself, is not a certifying body. Rather, it helps communities and industry to produce responsible forest goods from extraction, processing, delivery to markets and, finally, purchase by consumers. Prior to engagement, TFT conducts a feasibility study to determine both the level of the party's commitment to certification and the potential markets. It then assesses the gaps between the company/community's current status and requirements to meet certification standards. Following this exercise, the client develops a plan to address

shortfalls and TFT provides technical guidance and support during implementation.

The process begins with stakeholder consultation and requires good communication and bridging skills. Moreover, findings from the pre-assessment phase should be incorporated into forest management planning.

Mr. Wiyono mentioned that HCVF is one of the conditions of certification under the Forest Stewardship Council and it has 4 aspects, all of which are linked: legal and administrative; production; environmental; and social. He also described the 6 categories of HCVF: important levels of biodiversity; natural landscape and dynamics; rare or endangered ecosystems; environmental services; natural critical areas to meet basic needs; and natural critical areas for maintaining the cultural identity of communities.

• Forest tenure reform in Yunnan Province, China

Professor Shen Lixin from the National Plateau Wetlands Research Center first gave an overview of forestland tenure reform in China then described progress in Yunnan Province. Historically in China, it took place in four phases:

Early 1950s to 1958: Land and forests were allocated to households but rights related to ownership, use and benefits were unclear - a situation which provided little incentive to sustainably manage resources.



1958 to early 1980s: Forestland management was highly centralized.

1982 to 2008: The contracted responsibility system was introduced and collective forest management improved but the concept of forest tenure was still intangible for local people and protection of benefits had no basis in law.

2008 and ongoing: Rural collective forest tenure was launched nation wide, with a planned completion date of 2014.

The objectives of the current reform are to increase the confidence, initiative, enthusiasm and ability of communities to manage forest sustainably. It also aims to clarify and transfer forestland tenure and ownership of forests to individual households by issuing certificates, valid for 70 years. All collective commercial forests and waste hills/fallow suitable for forestation are targeted but nature reserves and protected forests are excluded. Clear, transparent and participatory processes are used, where all villagers discuss details of the reform and at least two-thirds agree to implementation.

As far as progress in Yunnan Province is concerned, certificates covering 255.87 million mu of community forestland (80.7% of the total) were issued to 6.2987 million households. Professor Shen Lixin then gave examples of issues to be addressed:

- ☆ The equitable allocation of forestland to individual households is difficult due to the different quality of land and the different value of the trees. Thus, some farmers received better parcels of land than others.
- Villages where collective forests are designated as nature reserves and protected forests do not benefit as much as others, despite government compensation for the ecological functions these resources provide. (RMB75/per ha/year is low.)
- ♦ Holy hills and sacred forests are irreplaceable in terms of cultural and spiritual values for indigenous ethnic communities. Traditionally, they are owned by the community and considered a shared resource but current emphasis on individual management and use rights may undermine these arrangements.
- ☆ Minority ethnic groups traditionally used the slope fallow or swidden fields for shifting cultivation so that the distinction between forestland and farm land was not made. However, the current reform recognizes many slope swidden fields as forestland and, as a result, they cannot be reclaimed for farming. Only reforestation is allowed.

• Regional approach to enhance timber legality from the ASEAN perspective

The 10-member countries of ASEAN developed Vision 2020 in 1997 which describes the region's commitment to promote the sector as a model of forest management, conservation and sustainable development. Its roadmap covers the period 2009-2015 and includes the formulation of legality standards for timber (completed); a phased approach to forest certification by 2015; and support to FLEG to achieve SFM.

In November 2007, the ASEAN ministers of agriculture and forestry endorsed criteria and indicators for the sustainable management of tropical forests and a format for monitoring, assessing and reporting on SFM. They also approved the establishment of a working group to develop criteria and

indicators for the legality of timber (done) as well as a framework to phase in forest certification. Chain of custody guidelines have been finalized and are now being translated.

With regard to the FLEG process, a regional network was established in October 2008 to promote implementation. Among other tasks, it provides technical advice and support to address FLEG issues and collaborates with institutions, agencies, instruments and processes working on FLEG at both the regional and global levels. The network has produced several policy briefs and papers which are available, along with other material, through the ASEAN Forest Clearing House Mechanism.



• The ASEAN criteria and indicators for the legality of timber provide a framework to develop national standards that match the requirements for legal timber in markets that demand such products. Work undertaken by the FLEG network will strengthen the region's capacity to enforce laws and to enhance transparency, accountability and public disclosure in matters related to SFM.

• Climate change and the UN-REDD Programme

Dr. Tint Lwin Thaung explained that climate change is caused by infrared radiation which is trapped in the earth's atmosphere and it heats up. As a result, temperature have increased dramatically over the past 1000 years, especially the last 100. He described 4 climate change models, noting that the most likely scenario appears to be late and slow action, given failure to reach agreement on post 2012 action at the 15th Conference of Parties to the UN Framework Convention on Climate Change



in Copenhagen in December 2009. If business remains as usual, temperatures are predicted to rise 5.5 to 7.1 degrees by 2100.

There has been a 64% growth in carbon dioxide emissions between 1996 and 2006 but some countries in the region have adopted ambitious targets and are committed to work hard to achieve them. Climate extremes are a clear sign of the consequences of climate change: flash floods, famine, volcanic eruptions, waterborne diseases, drought and desertification, among others. The need to take action at every level, from individuals to international organizations is clear and urgent.

The UN-REDD Programme is a partnership among FAO, UNDP and UNEP which was launched in 2008. Its initial budget was slightly more than US\$42 million to fund 8 pilot sites. It is viewed as a promising tool for adopting a sustainable management and conservation approach to reduce carbon dioxide emissions and has the potential to yield significant benefits to both government and communities. However, leakage is an issue, as is elite dominance, and consensus has not been reached on the desirable scale of the programme (project vs national).

• Sustainable forest management in Australia and Canada

Both Dr. Bi Huiquan, Principal Research Scientist from Primary Industries Department of Australia, and Ms, Rosalie McConnell, Senior Consultant of APFNet, has given a wounderful introduction about Sustainable forest management in Australia and Canada respectively during indoor session of workshop.





3.3 Field excursion



Following the classroom segment of the workshop, a five-day field trip took place from 14-18 November, 2010. Participants journeyed to Baoshan Prefecture where they visited sites of interest in Baoshan City and Tengchong County.

In the Gaoligongshan State Nature Reserve and nearby communities, they observed forest management practices in core, buffer and experimental zones, in natural parks, and in state and community forests. They saw how Tengchong

County Government managed Laifengshan National Forest Park for multiple purposes such as water supply, eco-landscape protection, and recreation. The park also houses more than 200 native varieties of camellia which are endemic to Yunnan Province. In addition, participants viewed the management of a collective forest farm and learned about the benefits each shareholder received. They were impressed with the Jiangdong Gingko Village and its thousand-year history of establishing and managing Gingko plantations which provide an annual net income in excess of 1 million RMB or more than 10,000 RMB per person, on average.



Another highlight of the field excursion was a visit to a community forest of 6670 hectares which, with technical and financial support from the county forest bureau, is managed for ecological conservation and the protection of water sources. The extent to which land on the sites of previously erupted volcanoes was fully utilized was also of great interest, especially how their development enhanced livelihoods.

All information conveyed during the trip provided participants the opportunity to see first hand the environmental, economic, social and cultural benefits of sustainable forest management in the region.

3.4 Communication among participants



During the workshop, participants described various aspects of forest management in their respective countries and answered questions. This rich exchange of information highlighted similarities among countries but also underscored vast differences - differences which confirm the need for sustainable forest management to be based on specific contexts and unique circumstances.

In small working groups, participants also identified some of the main issues related to sustainable forest management in the

region, the obstacles which hinder its achievement, and the current strategies to address problems. Among other concerns, they listed encroachment, illegal logging, poverty, insecure land tenure, and lack of coordination within and across sectors. In addition, they indicated that insufficient resources, weak law enforcement, inadequate monitoring systems, corruption, and centralized decision-making made progress difficult. Efforts to improve the situation should include capacity-building, more research and extension services, stronger governance, greater



transparency, participatory management, development and implementation of criteria and indicators, as well as better support from politicians and other leaders.

4. Monitoring and evaluation

A questionnaire was distributed at the end of the workshop to assess the level of communication and understanding among the participants and to obtain their feedback and suggestions on the organization and design of activities (topics, field tour and communication), preparation of materials, arrangements for the field trip, accommodation, and secretariat services, for example.

Findings showed that participants were satisfied with the field tour, course design, and preparation of materials. All indicated they learned a lot from the rich exchange of information and experience and all spoke highly of the



organization and of the secretariat. They also expressed an interest in receiving updates from APFNet on a regular basis. Upon request, they made the following suggestions to improve future workshops:

- showcase more of China's achievements in SFM
- include more sessions on the technical aspects of SFM
- provide training on remote sensing and GIS
- allow more time for presentations and discussions
- spend less time on travel to and from the field visit
- establish a web board on APFNet's site to continue networking
- organize a follow-up workshop to report on country progress
- provide written summaries of presentations made by local officials during the excursion

In conclusion, this workshop was successful because of the concerted efforts of the attendees, organizers and sponsor. Participants expressed their thanks to APFNet for such an excellent training opportunity and stated that they benefited a great deal. Many committed to put the knowledge they acquired into practice upon their return home.



ANNEX 1: List of participants



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2) Mr. Yudho Shekti Mustuko Senior staff of planning division, Directorate general of land rehabilitation and social forestry, Ministry of forestry Indonesia Email: yudhosm@gmail.com



3) Mr. Preecha Ongprasert Forest Officer, Community Forestry Management Bureau, Royal Forest Department Thailand Email: preecha_ong@yahoo.com



4) Mr. Mohd Firdaus Bin Ab Latif Assistant Secretary, Ministry of Natural Resources and Environment, Malaysia Email: <u>mohdfirdauslatif@nre.gov.my</u>



5) Mr. Michid Khaltar Specialist, Forest Agency, Forest Organization Service Mongolia Email: michid mgi21@yahoo.com



6) Mr. Luis Esequiel Campos Baca President of the Board of Directors, Peruvian Amazon Research Institute,Peru Email: lucamposba@yahoo.com; legna.razalas@gmail.com



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8)



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11) Mr. Nguyen Tuan Hung Government officer, Department of forest utilization -Development directorate of forestry Vietnam Email: Nguyentuanhung07@Gmail.com; httg76@yahoo.com



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ANNEX 2: Workshop Schedule

Part 1: Indoor session (8-13 November 2010) Golden Spring Hotel, Kunming City

Time	Ses. #	Title	Aims	Resources/Comments
8:00		Breakfast	Hotel Dining Hall	
8:30	1	Opening Ceremony	Welcome participants	 Chaired by Prof. Yang Yuming APFNet Deputy Director General Southwest Forestry University
9:00	2	SFM in China: Forest governance and legislation	- Legal framework	 Prof. Zhang Songdan Deputy Director General Forest Resources Management Department SFA
9:45	Grou	ıp photo and tea break		
10:15	3	Forest policies, legislation and institutions in Asia and the Pacific		- Jeremy Broadhead, FAO
10:35	4	US Lacey Act and its impact on SFM in Asia and the Pacific	 Key elements Current status Potential to influence future direction 	- Chen Hin Keong, TRAFFIC
11:00	5	FLEGT and EU Due Diligence: its impact on SFM in Asia and the Pacific	 Key elements Role of EFI Current status Potential to influence future direction 	- Aimi Lee Abdullah, European Forest Institute
11:20	6	Q&A and panel discussion, sessions 2, 3, 4, 5	-	- Facilitated by Tint
11:40		LUNCH	Dining Hall	
1:30 to 5:00		Dianchi Lake and West Mountain National Park		NPWRC/SWFU
6:00	Welcome Dinner			NPWRC/SWFU

8:00		Breakfas	Hotel Dining Hall	
8:30	7	Morning Welcome - Setting the scene	 Getting to know each other Training context 	Facilitated by Tint
8:50	8	 Participant expectations Training norms and ground rules 	-	Facilitated by Tint
9:10	9	Bamboo Utilization and Management in China	-	- Prof. Zhu Zhaohua, INBAI
9:45		Q&A - session 9		Facilitated by Tint
10:00		Break		Hotel Dining Hall
10:30	10	Sustainable forest management in Australia	-	 Bi Huiquan, Principal Research Scientist, Primary Industries Department
11:00	11	11 Combating illegal logging in Cambodia - Challenges		- Kim Sobon, Forestry Administration
11:30		Lunch	Hotel Dining Hall	
1:30	12	Forest management and law enforcement in post conflict Sri Lanka	-	 Hewa Gajanayakage Wasantha, Assistant Conservator of Forests
2:00	13	Sustainable forest management in Malaysia	 Experiences and lessons 	 Mohd Firdaus Bin AB Lati Assistant Secretary, Ministry of Natural Resources and Environment
2:30	14	Q&A - sessions 10, 11, 12, 13		Facilitated by Tint
3:00		Break		
3:30	15	Short film		
4:00	16	Panel discussion of country papers		Facilitated by Tint
4:30	17	Summary		Ms. Rosalie McConnell
5:00		CLOSE OF DAY		
6:00		Dinner	-	NPWRC/SWFU

8:00	Breakfast	Hotel Dining Hall

	Morning Welcome		Participants to facilitate	
18	Remote sensing and GIS to monitor illegal forest activities	 Available/affordable remote sensing tools and techniques Demonstration of applied technology 	-Dr Moe Myint,Research Scientist, Yale Forestry School	
19	Q & A - session 18	Group + Dr Moe Myint		
	Break			
20	Practical exercise to understand remote sensing technologies (group work)		Facilitated by Dr. Moe Myint	
	Lunch		Hotel Dining Hall	
21	Landscape-level mapping of forest stand structure and type by combining multispectral reflectance and radar backscatter		- Xumei Han, Yale Forestry School	
22	Indonesia case studies	 Available software, computerized timber tracking system 	Facilitated by Dr Moe Myint	
23	Q & A - sessions 20, 21, 22	-		
	BREAK			
24	Sustainable forest management in Brunei	-	 Mansor bin Haji Ahmat, Assistant Forestry Officer 	
25	Forests of Mongolia		 Michid Khaltar, Forest Inventory Specialist 	
26	Q&A - sessions 24, 25			
27	Summary	-	Ms. Rosalie McConnell	
	CLOSE OF DAY	-		
	Dinner	-	NPWRC/SWFU	
	18 19 20 21 22 23 24 25 26 27	18 Remote sensing and GIS to monitor illegal forest activities 19 Q & A - session 18 19 Q & A - session 18 Break 20 Practical exercise to understand remote sensing technologies (group work) 20 Practical exercise to understand remote sensing technologies (group work) 21 Lunch 22 Landscape-level mapping of forest stand structure and type by combining multispectral reflectance and radar backscatter 22 Indonesia case studies 23 Q & A - sessions 20, 21, 22 BREAK 24 Sustainable forest management in Brunei 25 Forests of Mongolia 26 Q&A - sessions 24, 25 27 Summary CLOSE OF DAY	18 Remote sensing and GIS to monitor illegal forest activities - Available/affordable remote sensing tools and techniques - Demonstration of applied technology 19 Q & A - session 18 - Break 20 Practical exercise to understand remote sensing technologies (group work) - 21 Landscape-level mapping of forest stand structure and type by combining multispectral reflectance and radar backscatter - 22 Indonesia case studies - Available 23 Q & A - sessions 20, 21, 22 - BREAK 24 Sustainable forest management in Brunei - 25 Forests of Mongolia - 26 Q&A - sessions 24, 25 - 27 Summary -	

DAY 4 (Thursday, 11 November): Protected areas, forest restoration and environmental friendly practices in SFM

8:00	Breakfast		Hotel Dining Hall
8:30	Morning Welcome		Facilitated by Tint
8:50	Protected areas: case study from TNC-Yunnan		 Wang Yue, Director, TNC- China Yunnan Program
9:20	Logging with Elephants in Myanmar: the best RIL?	-	 Khaing Khaing Soe, Assistant Lecturer

10:00	Break		Hotel Dining Hall	
10:30	30	Q&A - sessions 28, 29		Facilitated by Tint
10:50	31 Mangrove rehabilitation in Bangladesh		 Nirmal Kumar Paul, Deputy Conservator of Forests 	
11:10	147	32 Forest restoration in the Philippines		 Ildefonso Lapitan Quilloy, Forest Specialist
11:40	33	Q&A - sessions 31, 32		Facilitated by Tint
12:00				
1:30 to 5:00		Free time		
6:00		Dinner	-	NPWRC/SWFU

DAY 5 (Friday, 12 November): Practical tools to improve forest management and livelihoods

8:00	Breakfast			Hotel Dining Hall	
8:30		Morning Welcome		Facilitated by Tint	
8:40	34	Forest conflicts in Asia		- Dr. Yurdi Yasmin, RECOFTC	
9:10	35	Short film			
9:40	36	Q&A - session 34			
10:10		Break			
10:30	37	Conflict resolution as an essential process of HCVF identification and forest certification		- Agung Wiyono, The Forest Trust	
11:00	38	Q&A - session 37		Facilitated by Tint	
11:30		Lunch			
1:30	39	Community forestry in Thailand	-	Preecha Ongprasert, Forest Officer	
2:00	40	Community forestry in Nepal		Dipak Jnawali, Planning Officer	
2:30	41	Q & A - sessions 39, 40	-	Facilitated by Tint	
3:00	BREAK				
3:30	Δ·)	Forest tenure reform in Yunnan, China	-	- Prof. Shen Lixin, NPWRC	
4:00	43	Group work on SFM issues	-	Facilitated by Tint	
4:30	44	Summary		Ms. Rosalie McConnell	

5:00		CLOSE OF DAY		
6:00		Dinner		NPWRC/SWFU
Fore	st n	Saturday/13 November): nanagement in other regions ate change, the role of forests		on and REDD+ (PM)
8:00	Bre	akfast		Hotel Dining Hall
8:30		Morning Welcome		Facilitated by Tint
8:45		Regional approach to enhance timber legality – ASEAN perspective	 the ASEAN legality standard the challenges potential for collaborative action 	of Mr Thang Hooi Chiew, Chairman of ASEAN Regional Knowledge Management Network
9:20	46	Sustainable forest management in Peru		Lusi Esequiel Campos Baca, President, Board of Directors, Peruvian Amazon Research Institute
10:00		Break		
10:30	47	Sustainable forest management in Canada	-	- Rosalie McConnell, Consultant, APFNet
11:00	48	Q & A - sessions 45, 46, 47	Facilitated by Tint	
11:30	Lur	ich		
1:00	49	Climate change	 The evidence Forest conservation and management as the most cost effective way to address climate change 	Facilitated by Tint
1:30	50	UN-REDD Programme	 Current status REDD as a tool 	Facilitated by Tint
2:00		Break		
2:30	51	REDD in Indonesia		 Yudho Shekti Mustiko, Senior Officer, Planning Division
3:00	52	REDD in Viet Nam	-	Nguyen Tuan Hung
3:30	53	Q&A - sessions 49, 50, 51, 52	-	Facilitated by Tint
4:00	54	Summary	-	Ms. Rosalie McConnell
4:30		Introduction of field trip	-	Prof. Shen Lixin
5:00		CLOSE OF THE DAY	-	
6:00		Dinner	-	NPWRC/SWFU

Part 2: Field Trip Tengchong County and Baoshan City (14-18 November 2010)

Date	Time	Contents	Resources/comments
	8:00	Breakfast	Hotel dining hall
	8:40	Hotel check out	NPWRC
	09:00	Departure by car	NPWRC
Day 7:	12:00	Lunch on the way	NPWRC
Nov. 14	4:00	Arrival in Baoshan City - Check in Hotel	NPWRC
(Sunday)	5:00~6:00	Welcome address and introduction of forest management in Bhaoshan City	Forestry Department of
	6:00~7:30	Welcome dinner - hosted by Prefecture	Baoshan City and NPWRC
	Evening	Free time	NPWRC
	8:00~8:30	Breakfast in hotel	NPWRC
	8:30~10:00	Bhaoshan to Nujiang - the eco-landscape in Salween River Basin	
	10:00~12:00	Gaoligongshan State Nature Reserve and Nangkan Natural Park	Forestry Department of Baoshan City and NPWRC
Day 8:	12:30~1:30 Lunch in Nangkang Natural Park		
Nov. 15	1:30~3:30	Leave for Tengchong and check in Rong He Hotel	NPWRC and Tengchong Forestry Bureau
(Monday)	4:00~5:00	Meeting room of county Forestry Bureau - Welcome address by county government - Introduction of forests and forest management in Tengchong County	Tengchong Forestry Bureau
	5:00~6:30	Laifengshan State Forest Park and County Botanical Garden	and NPWRC
	6:30~8:30	Welcome banquet hosted by County Government	
Day 9:	8:00~8:30	Breakfast at Hotel	NPWRC
Nov. 16		Collective forest farm and community forest management, Qinko Village	NPWRC, County FB
(Tuesday)	10:30~12:00	Forestry cooperation and forest management by farmer households, Qinko Village	NPWRC, County FB
		Lunch hosted by Administrative Committee of Houqiao Border Cooperative Zone (ACHBCZ)	ACHBCZ and NPWRC
	1:30~3:00	Traditional forests and eco-landscape protection	NPWRC

	3:00~5:30	Heshun Ancient Town - the top of ten most	
		attractive ancient villages in China	
	6:00-7:30	Dinner hosted by County FB	County FB and NPWRC
Evening		Free time	NPWRC
	8:00-8:30	Breakfast at Hotel	NPWRC
	8:30-10:00	Sustainable forest management in Jiangdong Gingko Village	
	10:30-12:00	Collective eco-protection forests, Mazhan Township	
Day 10	12:00~1:30	Lunch	
Nov. 17	1:30~3:00	Reforestation and conversion programme in Qinshui	County FB and NPWRC
(Wedn)	3:00~5:30	Hot Sea Spring	
	6:00~ 7:30	Dinner (Tengyue Ancient Town)	
Day 11	7:30~8:00	Breakfast	NPWRC
	8:00	Departure for Kunming (lunch on the way)	NPWRC
Nov. 18 (Thurs)	6:00	Check in Golden Spring Hotel	NPWRC
	6:30	Dinner at Golden Spring Hotel	NPWRC
	8:00-8:30	Breakfast	
	8:30-10:00	Workshop evaluation	Ms. Rosalie McConnell and Ms. Wang Qian, APFNet
D 40	10:00-10:30	Break	
Day 12 Nov. 19	10:30- 11:300	 Closing Ceremony Farewell speech by participants, APFNet and NPWRC/SWFU Presentation of certificates 	NPWRC/SWFU, APFNet
(Friday)	11:30	Lunch	Golden Spring Hotel
	13:00-17:30	Free time	
	18:00-19:30	Farewell dinner	NPWRC/SWFU
<i>Day 13</i> Nov. 20 (Sat)	Whole day	Departure	NPWRC/SWFU

ANNEX 3: List of Lectures contributed by resource persons

- 1. SFM IN CHINA: FOREST GOVERNANCE AND LEGISLATION Prof. Zhang Songdan Deputy Director General Forest Resources Management Department SFA
- 2. FOREST POLICIES, LEGISLATION AND INSTITUTIONS IN ASIA AND THE PACIFIC Jeremy Broadhead, FAO.
- 3. US LACEY ACT AND ITS IMPACT ON SFM IN ASIA AND THE PACIFIC Chen Hin Keong, TRAFFIC.
- 4. FLEGT AND EU DUE DILIGENCE: ITS IMPACT ON SFM IN ASIA AND THE PACIFIC Aimi Lee Abdullah, European Forest Institute
- 5. BAMBOO UTILIZATION AND MANAGEMENT IN CHINA Prof. Zhu Zhaohua, INBAR.
- 6. SUSTAINABLE FOREST MANAGEMENT IN AUSTRALIA Bi Huiquan, Principal Research Scientist, Primary Industries Department
- 7. REMOTE SENSING AND GIS TO MONITOR ILLEGAL FOREST ACTIVITIES -Dr Moe Myint, Research Scientist, Yale Forestry School
- 8. LANDSCAPE-LEVEL MAPPING OF FOREST STAND STRUCTURE AND TYPE BY COMBINING MULTISPECTRAL REFLECTANCE AND RADAR BACKSCATTER - Xumei Han, Yale Forestry School
- 9. PROTECTED AREAS: CASE STUDY FROM TNC-YUNNAN Wang Yue, Director, TNC-China Yunnan Program
- 10. FOREST CONFLICTS IN ASIA Dr. Yurdi Yasmin, RECOFTC
- 11. CONFLICT RESOLUTION AS AN ESSENTIAL PROCESS OF HCVF IDENTIFICATION AND FOREST CERTIFICATION Agung Wiyono, The Forest Trust
- 12. FOREST TENURE REFORM IN YUNNAN, CHINA Prof. Shen Lixin, NPWRC
- 13. REGIONAL APPROACH TO ENHANCE TIMBER LEGALITY: ASEAN PERSPECTIVE Tint Lwin Thaung on behalf of Mr Thang Hooi Chiew, Chairman of ASEAN Regional Knowledge Management Network
- 14. SUSTAINABLE FOREST MANAGEMENT IN CANADA Rosalie McConnell, Consultant, APFNet
- 15. CLIMATE CHANGE Tint Lwin Thaung
- 16. UN-REDD PROGRAMME Tint Lwin Thaung

Reading references

- 1. Brief FLEGT DDR
- 2. Forest land tenure changes in China
- 3. Historical overview and the ongoing reform of collective forest tenure system in Yunnan Province
- 4. Forest Law Enforcement, Governance & Trade (FLEGT) and New EU Market Requirements
- 5. Sustainable Forest Management in Australia
- 6. China Forest Resources management

ANNEX 4: List of National reports provided by workshop participants





APFNet's Workshop on Forest Resources Management in Asia and the Pacific

November 2010, Kunming, China



- **Sponsored by:** Asia- Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet)
- **Organized by:** National Plateau Wetlands Research Center (NPWRC) Southwest Forestry University (SWFU)