

# GUIDELINES FOR FORMULATING NATIONAL FOREST FINANCING STRATEGIES

P. Kant & S. Appanah  
*with contributions from*  
Joost Siteur & Andrew Steel



# **Guidelines for formulating national forest financing strategies**

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ISBN 978-92-5-107476-3

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Cover Design : Kanyapat Seneewong Na Ayudhaya

Photo captions and credits : Virginie St-Onge, Beomtae Kim, Youngsook Choi and Arvydas Lebedys

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Printed and published in Bangkok, Thailand

# Foreword

With forests currently covering about one-third of the earth's land area, it should be no surprise to anyone that they are featuring very strongly in discussions across the globe. But there are additional compelling reasons for such heightened attention to them. Forests are intricately intertwined with life on earth: they maintain life support systems, provide the ecological balance, are the rich reservoirs for terrestrial biodiversity, and millions of people are closely dependent for their livelihoods on this ecosystem. Yet more is coming to the fore on the critical value of forests – in recent times their importance in mitigating climate change has taken on a central role in global negotiations. These are but just a few features that bring home the importance of forests. Despite such affirmations, forests are facing a crisis – deforestation and forest degradation are continuing at an unabated pace globally, particularly so in the tropics, with the situation in the Asia-Pacific region appearing to be quite alarming. Not that we have not been unconcerned about such loss. For decades, we have been seeking ways to manage forests on a sustainable basis. With the years of experience gathered, it is obvious that the technical issues can be surmounted. The limitation is seemingly with opportunity costs – as things stand, forestry is losing out to conversion to other uses such as agriculture. This being the case, in most instances, management of forests is usually limited to extraction of timber, with no provisions for conservation and protection of all the other values attributed to forests. Hence, the single major refrain constantly being voiced is the cost of managing forests – it is very high. Yet forests are expected to continue providing all the ecological, protective and environmental functions for free.

But the situation is beginning to change. More recognition is being given to what the forests provide, such as fresh water, carbon sequestration, soil protection, and other resources that forest-dependent communities have relied upon for millennia. There is still much uncertainty to how to quantify these additional goods and services. This issue on the provisioning of adequate resources for investment in sustainable forest management of forest resources in developing countries has been receiving increasing attention. In its seventh session held in 2007 the United Nations Forum on Forests decided to mobilize funds to support the implementation of sustainable forest management and achievement of global objectives through an innovative forest financing framework. Even if we can agree to how much they are worth, how do we pay for such goods and services?

The barrier happens to be in the way state owned forestry institutions are created – they do not have mechanisms to receive funds from outside the national treasuries

for provisioning forest goods and services. Considering most of the forests in the Asia-Pacific region are state owned, this institutional constraint is a region-wide problem indeed. This has in itself become a barrier – even if a user is willing pay, these state owned institutions do not have a means to receive funds which can be used for managing forests sustainably. But developing a mechanism to receive funding by state-owned institutions cannot be done without considering several issues. For one, the conflicts with current users of forests such as the local communities should be taken into consideration. Next, policy and legal issues would have to be revisited as the existing ones are unlikely to accommodate the proposed changes. Likewise, if the private sector is to play a larger role in forestry, their investments would have to be protected as well. These have to be captured through revisions in policies and regulations.

The above were the considerations behind this joint initiative by FAO-SIDA on financing sustainable forestry management in Asia-Pacific titled “Putting principles into practice: Developing an inclusive framework for enhancing investments into Asia-Pacific forestry.” Under this initiative, four specific studies were carried out to delineate: (i) the role and concerns of governments and other public institutions; (ii) the interests of communities owning or controlling forests; (iii) the critical role that payment of ecological services could play in making investment in forestry an attractive proposition; and (iv) the interest of private investors. These studies provided a set of recommendations which were collated and edited to form the overall guidelines for financing sustainable forestry. This book contains the overall guidelines along with the original studies given in the annexes. It is hoped that this publication will be a major tool for developing financing systems for further strengthening forest management. I would like to see countries adapt these generic guidelines to their specific needs. With this expectation, I would like to congratulate the authors for bringing out this critical piece of work.

A handwritten signature in black ink, consisting of a long horizontal line that curves upwards and loops back to the right.

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# Acknowledgments

The authors are indebted to many forestry and finance experts in the production of the guidelines. The initial idea for this work was formulated at a previous workshop on the subject: Sverre Tvinnereim and Rao Matta can be singled out for their contributions. The idea was raised with Ola Moller of SIDA, who considered its value and agreed to provide the requested funds. The guidelines presented here are synthesized from studies produced by the following: Concerns of governments and of rural communities in financing sustainable forest management – Promode Kant; Concerns of private investors – Andrew Steel and his team in Treedom; and Role of payment of ecological services – Joost Siteur. These reports were presented before a team of experts whose comments during the discussions and subsequently have been instrumental in improving the guidelines. We gratefully acknowledge the contributions of Thang Hooi Chiew, James Peters, Tint Lwin Thaug, Sanjiv Ray, Andrew Steel, Joost Siteur, Padam Prakash Bhojvaid, Bernhard Mohns, Roger Steinhardt, and Ben Vickers. Thanks are also due to Patrick Durst who supported this work throughout its gestation.

Besides the above, the editors also benefitted from interactions in the course of investigating the issues relating to role of governments and rural communities. They include:

A K Bhattacharya, Aimi Lee, Anna Springfors, Annalisa Hartmann, Annapurna Nand Das, Annisa Satyanti, B Kharmawphlang, B V Umadevi, Babulal Dangol, Badri Silwal, Bala Ram Kandel, Barry Flaming, Ben Vickers, Bernhard von der Heyde, Bharat Lal, Bhishma Subedi, Bob Newman, Brajkishor Yadav, Brij Mohan Rathore, C Ramesh, Clare Shakya, D P Bankhwal, Dayaram Maharjan, Debendra Prasad Dharal, Deepak Maharjan, Dhan Khadgi, Dil Bahadur Pun, Dinesh Maharjan, Duraisamy Jeevanandhan, Emily Fripp, Enrico Rubertus, Farid Uddin Ahmed, G C Basumatary, G N Sinha, G P Kafley, Ghulam Samad, Ghuran Thakur, Giridhar Kinhal, Golam Rasul, Govind Prasad Kafley, H S Pabla, Hari Lal Shrestha, Hari Prasad Bhandari, Hem Kumar Besnet, Hugh Speechly, Hwan Ok Ma, Imtienla Ao, Indra Bahadur Maharjan, IV Ramanuja Rao, James Basumatary, Jeremy Gustafson, Jerry Vanclay, John Warburton, Kaji Lal Shrestha, Kalpana Thapa Magar, Kampa Bargoyari, Kanhya Kunwar, Keshav Das, Krishna Bahadur Thapa Magar, Krishna Kandel, Krishna Lal Dangol, Krishna Prasad Bhusal, Kristy Graham, Kun Zhang, Kundan Burnwal, Lawrence Ang, Laxmi Bhatta, M C Malakar, M K Sahu, Man Bahadur Khadka, Mark Witcomb, Mayaju Maharjan, Michael Dutschke, Michael Kleine, Mikael Kullman, Mohammad Djauhari, Mohammed Kamal Hossain, N K Vasu, Naba Raj, Om Sagar Bhandari, P K Hazoari, P K Shukla, P P Bhojvaid, Patricia Mukhim, Pema Wangda, Penny Davies, Percheron Philippe, Peter Neil, Pomonti Vannina, Prakash Chandra Tara, Prakash Mathema, Puspa Lal Ghimire, Pynshngain Syiem, R K Goel, R N Saxena, Rajeshwar man Shrestha, Rakesh Agarwal, Ratna Kumari Shrestha, Regan Suzuki, Ritu Bharadwaj, Roshani Rai, S P Sharma, Sabita Thapa, Samir Dhungel, Sandeep Tripathi, Sangeeta Maharjan, Sanjeeb Bhattarai, Sanukaji Maharjan, Sardar Muhammad Tariq, Satoshi Akahori, Satoshi Kojima, Shantanu Mitra, Shidhi Lal Shrestha, Shyam Agarwal, Sisir Kumar Rath, Soumitri Das, Souraj Adhikari, Subhash Yadav, Sujindra Maharjan, Surendra Prasad Adhikari, Suryan Man Dangol, Sushila Shrestha, T Saiborne, Uma Kant, V K Bahuguna, V K Nautiyal, Vincent van den Berk, Warwick Manfrinato, Will McFarland, and Wu Shuirong.

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# Abbreviations

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
CAMPA	Compensatory Afforestation Fund Management and Planning Authority
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanism
CITES	Convention on International Trade in Endangered Species
CSR	Corporate Social Responsibility
DFID	Department for International Development of UK
EU	European Union
FAO	Food and Agriculture Organization
FECOFUN	Federation of community Forestry Users, Nepal
FLEGT	Forest Law Enforcement, Governance and Trade
FSC	Forest Stewardship Council
FUG	Forest User Groups
GATT	General Agreement on Trade and Tariff
GHG	Green House Gas
ILO	International Labour Organization
IUCN	International Union for Conservation of Nature
INBAR	International Network of Bamboo and Rattan
IUFRO	International Union of Forest Research Organizations
NFFS	National Forest Financing Strategies
NGO	Non Government Organization
NTFP	Non-timber Forest Product
NWFP	Non-wood Forest Product
ODA	Overseas Development Assistance
RECOFTC	The Center for People and Forests
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SFM	Sustainable Forest Management
SME	Small and Medium Enterprises
UN	United Nations
UNCCD	United Nations Convention on Combating Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNIDP	United Nations Industrial Development Program
USAID	United States Assistance for International Development
USF	Unclassed State Forests
WB	World Bank

# Organizations consulted

During the consultancy process the heads or senior staff members of the following government, non-government, other national, provincial, district, international organizations, and universities and other academic centres were consulted in personal meetings, by telephone and through emails:

Arannayk Foundation (Dhaka, Bangladesh), Asia Network for Sustainable Agriculture and Bio-resources (Kathmandu, Nepal), Assam Forest Department (Guwahati, India), Assam Information Commission (Guwahati, India), Bodo Autonomous Territorial Council (Kokrajhar, India), Botanical Garden (Bogor, Indonesia), Center for People and Forests RECOFTC, (Bangkok), Chinese Academy of Forests (Beijing), Department of Geography and Environment, Jahangirnagar University (Dhaka, Bangladesh), Department of International Development of UK (New Delhi), Department of North East Region (Government of India, New Delhi), Deputy Director General (Research) in the Department of Forests (Government of Nepal), Director General of Forests (Government of Nepal), Director General, Department of Medicinal Plants (Government of Nepal), Director, Advanced Research Centre for Bamboo and Rattans (Aizawl, India), Director, Department of Forestry (Government of Afghanistan, Kabul), District Forest Officer (Kathmandu, Nepal), Economy and Environment Group, Institute for Global Environmental Strategies (Kanagawa, Japan), Editor, Shillong Times (Shillong), EFI's EU FLEGT Asia Regional Office (Kuala Lumpur, Malaysia), EU European Forestry Institute FLEGT Asia Regional Office (Kuala Lumpur, Malaysia), FAO Technical Assistance Team to Leasehold Forestry and Livestock Development Program (Kathmandu, Nepal), Forest Research Institute of Malaysia (Kuala Lumpur), Forest Research Institute (Dehradun, India), Forestry Economics and Development Research Center (State Forestry Administration, Beijing), GIZ India Office (New Delhi), Haryana Forest Department (Panchkula, India), Haryana Forest Development Corporation (Gurgaon, India), Herbal Association of Nepal (Kathmandu, Nepal), Indian Council of Forestry Research Organization (Dehradun, India), Indian Institute of Forest Management (Bhopal, India) Indira Gandhi National Forest Academy (Dehradun, India), Indrayani Community Forestry User Group at Bhutkhel Chaur, Saraswati, Tokha (Kathmandu, Nepal), Inspector General of Forests (Islamabad, Pakistan), Institute of Forestry and Environmental Sciences, University of Chittagong (Bangladesh), International Center for Integrated Mountain Development (Kathmandu, Nepal), International Tropical Timber Organization (Yokohama, Japan), International Union of Forestry Research Organization (Vienna), Jalabinayak Community Forestry User Group, Jalabinayaksthan, Chobhar, Kirtipur (Kathmandu, Nepal), Khasi Hills Autonomous District Council (Shillong, India), Madhya Pradesh Ecotourism Development Board (Bhopal, India), Meghalaya Forest Department (Shillong, India), Ministry of Development of North Eastern Region (Government of India, New Delhi), Ministry of Environment & Forests (Government of India, New Delhi), Ministry of Forest (Government of Japan, Tokyo) Netherlands Development Organisation (Kathmandu, Nepal), Office of Additional Principal Chief Conservator of Forests, (Government of Delhi, New Delhi), Pakistan Institute of Development Economics (Islamabad, Pakistan), Program Coordinator, Leasehold Forestry and Livestock Program (Government of Nepal), Rain Forests Research Institute (Jorhat, India), Regional Chair, Global Water Partnership — South Asia (Islamabad, Pakistan), Resident Commissioner, Government of Chhatisgarh, (New Delhi), Resident Commissioner, Government of Gujarat (New Delhi), Resident Commissioner, Government of Odisha (New Delhi), School of Environmental Science and Management, Southern Cross University (Australia), Seoul National University (Seoul, Korea), Strategy and Development, French Agency for Development (Beijing), Swedish International Development Agency in Swedish Embassy (New Delhi), The Energy Resources Institute (New Delhi, India), UK Department for International Development (Beijing), UK Department for International Development (Kathmandu), UK Department for International Development (London), UK Department for International Development (New Delhi, Beijing, London and Kathmandu), United States Agency for International Development (New Delhi), and USAID Regional Development Mission for Asia, Regional Environment Office (Bangkok).



# Contents

<b>Foreword</b>	iii
<b>Acknowledgments</b>	v
<b>Abbreviations</b>	vi
<b>Organizations consulted</b>	vii
<b>Chapter 1</b> Introduction	1
<b>Chapter 2</b> Outcome of the four principal studies	5
<b>Chapter 3</b> Guidelines for formulating national forest financing strategies	15
<b>Annexure 1:</b> Role and core concerns of governments and other public institutions in Asia-Pacific forestry sector — P. Kant	35
<b>Annexure 2:</b> Safeguarding the interests of rural communities in Asia-Pacific forestry sector — P. Kant	73
<b>Annexure 3:</b> Payment for environmental services in Asia-Pacific forestry sector — J. Siteur	117
<b>Annexure 4:</b> Incorporating the interests of investors in Asia-Pacific forestry sector — A. Steel	137
<b>References</b>	157

# CHAPTER 1 :

## Introduction

### Background

Forests are one of the most important natural resource spread across the globe and more than a billion people, often the poorest and mostly living in the tropics, depend upon it for food, fuel and housing. The Asia-Pacific region with more than 60 percent of the world's population, 65 percent of its poor, and barely 0.2 ha of forest land per person, is an example of what constitutes forestry resource deprivation, with the situation even worse in South Asia which has the largest concentration of the world's poor and one of the lowest (0.05 ha) per capita availability of forests in the world.

With the sharply increasing population, and increased per capita demand for forest products, forests need high levels of financial and technological investments, and deft managerial skills, to continue to generate the needed goods and services on a sustained basis. But the present levels of investments are dismal. The total value of wood and non-wood forest produce removed from forests of Asia and Oceania in 2005 is estimated at US\$38.5 billion but the total revenue in that year was a mere US\$3 billion with an average of US\$7/ha for public forests in Asia and US\$23/ha for public forests in Oceania. Public expenditure on forests in the same period, at US\$6.8 billion with an average of US\$30.09/ha in Asia and US\$16.21/ha in Oceania, while more than double the revenues was less than one-fifth of the value of actual removals (FAO 2010).

Why does a resource so critical to the well-being of the people struggle for its survival? The reply to this persistent query is captured in the findings of an important policy work in this field carried out under the aegis of FAO that "where forests do not fetch adequate financial value or an opportunity cost that satisfies the forest landowners or important stakeholders they tend to disappear. (van Dijk and Savenije, 2009). The central issue that faces forestry in general and sustainable forestry in particular is that earnings from existing forests are not



competitive with other services produced by forests”.

The reason for the undervaluation of forests is the failure of the global society in placing appropriate values on the many goods and services forests produce. The markets mostly recognize timber and a few non-timber forest products. In recent years the global community has been able to add the sequestration of atmospheric carbon dioxide to the marketable services from the forests but it is as yet a fledgling market burdened with many impracticable conditions that would need much simplification before it becomes accessible to investors in forestry. The inclusion of other ecosystem services has remained confined to just a few examples, many driven by governments and multilateral institutions as demonstration projects.

Given this situation it is not surprising that a very large part of the forests in the developing economies are not being sustainably managed and the situation is worse in heavily populated tropics with just about 11 percent of tropical forests under responsible management. Even in countries where sustainable management of forests is the declared official goal, sustainability is often interpreted in ways that leaves the results no different from business-as-usual.

#### **Increasing international focus**

The provisioning of adequate resources for investment in sustainable forest management of forest resources in the developing countries has been receiving increasing attention internationally. In the year 2007 the United Nations Forum on Forests (UNFF) decided to mobilize funds to support the implementation of sustainable forest management (SFM) and achievement of the global objectives on forests through an innovative forest financing framework. In 2009 the United Nations Forum on Forests launched the Open-ended Intergovernmental Ad Hoc Expert Group on Forest Financing for implementing sustainable forest management in all types of forests. Financing provisions are in the process of evolving for Reducing Emissions from Deforestation and Forest Degradation, Sustainable Management of Forests, Conservation of Forest Carbon Stocks, Enhancement of Forest Carbon Stocks (REDD+), adaptation under the aegis of the United Nations Framework Convention on Climate Change (UNFCCC), desertification control under the United Nations Convention on Combating Desertification (UNCCD), and biodiversity conservation and habitat protection under the Convention on Biological Diversity (CBD).

The central issue in attracting finances for forestry is the same as for any other area of economic activity, the test of viability, and whether the returns justify investments or not. A country would be willing to spend money on forests to the extent it enhances the overall satisfaction of its people. A rural community in a developing economy

would similarly be more likely to invest its meagre resources on forests if it is reasonably assured of enhanced incomes to its members without waiting for too long while providing employment to some of its burgeoning number of jobseekers who would otherwise be migrating elsewhere to find work. A farmer would be eager to plant trees on his land if he gets more income than what agriculture fetches him, while a businessperson would seek returns commensurate with similar investments in other ventures of parallel risk. All of the above would require supportive policies and laws. To sum up, to make sustainable forestry attractive for investors of various hues it would be necessary to develop broad approaches that would make investments in forestry attractive for the political economies of the countries, leading to the creation of a supportive policy and legal environment for reduction in investment costs, risks and gestation period while enhancing returns.

A national strategy for forest financing is centred on an overall vision of the forest and tree resources of the country in the ensuing decades, the finances needed to protect, create and manage these resources and use them sustainably according to the country's policies and development objectives, and the various ways in which the finances could be sourced. It recognizes that long-term sustainability of efforts can only be ensured when all socio-economic stakeholders become partners in this venture, when the local communities are in the forefront with their skills and creative energies, and the private sector is encouraged to make profitable investments in forestry at sufficient scales with appropriate technologies and entrepreneurship zeal. It seeks to strengthen market and market-based regulatory mechanisms that can transform increasing demand for forest sector based goods and services into sufficient incentives for changing behaviours needed to achieve related environmental management targets. This strategy must jell well with the chosen development path of the country and align itself with other related sector plans that overlap geographically or functionally. The NFFS is expected to provide guidance to policy-makers and forest stakeholders on how to finance sustainable multipurpose forest management while fulfilling a country's national forest management objectives and international commitments.





# CHAPTER 2 :

## Outcome of the four Principal Studies

### Nature and the scope of study

Having identified financing forestry activities as a serious bottleneck in sustainable forest management in most countries of the Asia-Pacific region, particularly the developing countries, the FAO has sought to develop guidelines that can be used by the country governments to finance activities planned under the National Forest Plans. Four broad areas of enquiry were considered necessary to gain insight into the core issues that concern forest financing and four sub-studies were accordingly organized. These studies were carried out separately and the findings were deliberated on through an expert consultation process. The core features of the findings of these studies are as follows:

#### I. Role and concerns of governments and other public institutions

Primary objective of financing of forestry activities is to optimize the production of forestry goods and services, capture their full value and ensure equitable distribution across stakeholders while ensuring that the capital value of the forests does not diminish both in their monetary value and in ecological terms. The role of national governments is to create a policy, legal and fiscal environment that rewards sustainable management of forests, channelizes adequate funds through international and national channels, and encourages private investments (Annexure 1). The governments are also expected to promote research and innovation and promotion of technology that help in meeting the overall objectives.

The topmost priority for governments should be to create a well-coordinated, effective policy regime backed by suitable laws and rules and a network of competent and effective forestry and related institutions for speedy implementation. Governments need to publicly declare that in planting trees and conserving forests, a household or a community is investing its scarce resources for its own future good and that public interest in ecosystem services co-generated would not be allowed to undermine their interests.



Overemphasis on conservation in many countries needs reassessment because large areas of forests can be retained under forest cover only if they are also economically useful and generate revenue and employment. These reassessments should also include opportunity costs of foregoing other types of land-uses needed to meet food, water, and energy security and related poverty reduction targets to understand how the forest sector can best generate the most efficient use of and highest rate of return on natural capital. National governments should help their forestry and related institutions and forest communities assess whether the actual and promised funds under Reducing Emissions from Deforestation and Forest Degradation, and also for adaptation to climate change, meet their related institutional, community and Sustainable Forest Management objectives and support them to gain access to these and related funding sources.

The forestry sector can easily access the much larger funding from the energy sector if it contributes significantly to the production of biomass-based modern forms of energy and can demonstrate economically viable carbon offset models based on scientifically validated results. Greater institutionalized transparency and increased cost-effective, external monitoring of expenditure will increase the trust of funding agencies in the integrity and financial viability of responsive forest governance systems in developing countries. Coordination of improved governance and science-based validation of results and financial values with innovative financial institutions and companies who have made public commitments to reduce their Green House Gas emission levels would lead to larger flow of private sector funds into the forest sector. In countries where land is not a scarce commodity it would be advantageous to attract private forest enterprise on public lands unsuited for agriculture after an effective stakeholder consultation process. Efforts to coordinate such forest finance strategies with the agriculture, tourism, energy, transportation, planning and environment sectors would further strengthen confidence in governance mechanisms and the potential to achieve sustainable, long-term results.

Long gestation of forestry investments increase risks of theft and arson protection against which is a shared responsibility between the forest owner and the relevant public safety organization. Governments should invest adequately in forest protection duties and also make insurance financially accessible. Forest certification will help attract investment only if it is accepted widely in a country. Governments should ensure that the reasons that limit its appeal are addressed quickly. Accessing better paying markets for high value forest products requires brand building by industry associations. Forest and related land tenure reforms currently underway in many countries of the region may need mid-course evaluation to see if the ecological and equity objectives of the reforms are being met satisfactorily.

## II. Safeguarding the interests of rural communities

A detailed analysis of the issues undertaken in the study (Annexure 2) suggests that the core concerns of rural communities can be broadly categorized as those of rural households who own forests or tree plantations and those of rural communities as a whole in relation to the common forestry assets.

The rural households expect that their private forest and tree assets should earn them a regular and decent income at short intervals as a supplement to their other regular incomes. They also expect larger incomes after relatively longer intervals to help them meet special expenditures. They expect that at no time in the future should public interest in their forests undermine their private interests; their property and rights should be free from fear of being taken over by the State in the name of the public interest in preserving ecological services without a fair and acceptable compensation. They want the right to sell or bequeath their forests similar to those applicable to other immovable properties, the freedom to change land use in their own interest and raise loans against their forest property both for development of forests as also for other household investments.

In the case of community owned forests the community interests are somewhat different on account of the communal nature of holding, conflicting demands from community members, and the increasing inequity among the community members, resulting in power imbalance and consequential feeling of being sidelined among less powerful community members. The communities expect that the forests under their full or partial control should lead to significant and regular incomes besides meeting most of their energy, Non-timber Forest Produce and small timber needs. They seek government help in raising finances for development of their forests but they also have fears that bigger public investments in their forests could lead to dilution of their rights as the government might insist on delivery of ecological services at the cost of foregoing income generating opportunities from the production of forestry goods. A legally enforceable guarantee that the community forests would never be taken over, or their rights diluted in any manner, is a major expectation of the communities.

The communities seek greater monetization of both the goods and services aspects of the output of their forests through inclusion in the proposed REDD+ program and other income generating opportunities open to villagers with shorter and, at least initially, more profitable rates of return per unit of labour and land. Less powerful sections of communities also expect governments to ensure that there is greater equity within the communities and the new and enlarged benefits reach them in proportion to the activities performed by them rather than merely hereditary community membership.





Both rural households and communities expect good forest governance from the forestry departments in protecting the trees from theft and also from fires and disease reaching their property from outside, and in creating an environment conducive to reduction in transaction costs. They want no restrictions on harvesting and transport of forest products. They seek help and guidance from forestry departments in sustainably managing their forests, access to high quality planting stock, and appropriate assistance in transport, value addition and marketing of forest products, particularly non-timber forest products. Finally, they desire freedom from intimidation from corrupt government officials.

The specific interests of the communities will, however, differ with their geopolitical locations, and the nature and range of their interface with forests, which can be delineated through participatory cost-benefit analyses. This would also enhance the confidence of rural communities in committing themselves to long-term investment so critical in the forestry sector.

### **III. Incorporating Payment for Ecological Services in forest financing strategies**

The detailed study on incorporating Payment for Environmental Services for forest financing is found in Annexure 3. With the exception of carbon sequestration, the ecological benefits of well-managed forests — biodiversity conservation, water regulation and quality, soil conservation, and ecotourism — usually have no explicit monetary value and have not widely generated sufficient revenues for forest owners despite demonstrated strong demand for them. Economic incentives to manage forests in a way that would provide the full range of ecological services will remain weak without taking systematic steps to create market mechanisms to transform this demand into tangible benefits that can be received by those that provide the services.

Forest ecological services are public goods, but as no one actually owns them there is little incentive to preserve them, much less to enhance them. There are no direct market mechanisms to signal the scarcity or degradation of a service until it fails, by which time it is too late to take any ameliorative steps. The Payment for Ecological Services schemes aim at filling this gap by creating new marketplaces for services such as carbon sequestration, biodiversity conservation, watershed protection, and landscape values. It refers to market-based mechanisms to internalize ecological externalities, involving a financial transaction between buyers and sellers for these services that are usually not monetized and paid for. The core idea of PES is that external Ecological Services beneficiaries make direct, contractual and conditional payments to local landholders and users in return for adopting practices that secure ecosystem conservation and restoration. PES is most efficient and effective when

the producers, buyers and necessary management activities are clearly identified, payments are based on science and measurable improvements, and where the costs of implementing improved forest and land management are low.

From the perspective of market types, PES schemes can be categorized as follows:

- a. **Public payment schemes:** These are country-specific, where governments pay land owners/managers to maintain or enhance ecosystem services.
- b. **Regulated markets:** This involves open trading between buyers and sellers under a regulatory system, such as Clean Development Mechanism. Regulatory markets are established through legislation that creates demand for a service by setting a cap on environmental impacts and allowing trade among users that are able to comply with the regulations at different costs ('cap and trade').
- c. **Self-organized private deals:** These are voluntary markets where service users contract directly with services providers, or through an intermediary. Many of these operate without any formal regulatory markets and little government involvement.

Active schemes in Asia are either public payment schemes that are government-driven and large scale, or local self-organized private deals that operate without any formal regulatory markets and little government involvement. Local schemes can be highly effective with strong commitment by all stakeholders, but due to their small scale they have high transaction costs and limited environmental impacts. Public schemes have the potential to bring high environmental benefits, but tend to be hampered by high levels of bureaucracy and a heavy top-down approach, which limits the commitment of stakeholders and their long-term effectiveness.

In order to stimulate further PES implementation, there is a need to combine the strengths of local deals with those of government programs so that PES can be highly effective and have high environmental impacts. To achieve this, the study makes the following recommendations:

1. *Capacity building:* Training and raising awareness about the potential of PES among government agencies, NGOs, communities and companies would stimulate the development of additional schemes, as well as create potential intermediaries and reduce transaction costs.
2. *Funding for start-up costs:* Given the high upfront costs of local schemes, there is a need for a mechanism to fund these costs, which would help to increase the number of PES schemes implemented. Funding is needed to conduct feasibility analyses and valuation studies, identify potential buyers and develop contractual agreements.



3. *Regulations to reduce transaction costs:* While local schemes can function perfectly well in the absence of regulations, these can be helpful in paving the way for additional schemes and reducing transactions costs. The formulation of PES regulations should ensure that these are in line with existing legal and institutional frameworks.

4. *Engage private sector:* As of yet, most PES buyers in Asia are state-owned companies. There may be a large potential for PES funding from private companies, particularly companies that rely heavily on water resources such as private small-scale hydro plants, agro-industries and producers of drinks. Many companies may already have budgets for Corporate Social Responsibility (CSR), for which PES can provide a good avenue to meet the dual target of creating goodwill and protecting the natural resources they depend on.

During development of a PES scheme, major activities typically include the identification and valuation of environmental services, identification of potential buyers and sellers, the assessment of existing legal frameworks, and the selection of the most appropriate type of payment and contractual arrangement. Major activities during implementation include verification, monitoring and evaluation, as well as the enforcement of contractual arrangements.

Proper monitoring of compliance with agreements and delivery of environmental services is a critical component of the development and implementation of PES schemes that help to assure the buyer about the quality and quantity of the services. Verification methods should be technically feasible and matching available skills, financially viable and fitting into available budgets and consistent throughout the PES scheme.

The public sector will remain the main source of funding for creating ecological services in the foreseeable future but it is mostly increasingly larger financing from private investments that would help make PES a vibrant mechanism. Public budgets are typically negotiated annually resulting in uncertainty regarding the amount and period for which the funding will be available. This problem could be addressed by instituting long-term policies.

Apart from regular budgets there are several ways to creatively tap into public funds:

- a. Earmarking of dedicated taxes to generate funding for forestry conservation activities at national or subnational levels.
- b. Resource fees or royalties charged from users of natural resources such as hydro power plants and water utilities that can be used by forestry departments for conservation activities.

- c. State-owned companies with the mandate to provide ecological services to the people with dedicated budgets for social and community activities.

This development of an effective PES market mechanism has to be done using improved scientific baselines, models, monitoring and validation systems that can send price signals, certify the delivery of expected levels of services, and reward the service providers sufficiently and equitably for their efforts. Policies for enabling conditions must be created to remove perverse incentives leading to forest conversion and to create fiscal incentives, policy directions, and the legal basis for implementing PES or related market-based regulatory mechanisms designed to encourage related public and private sector investments in the forest sector. Finally, pilot experiences should be implemented to generate scientifically validated experience needed to establish proof of concept and draw enough positive lessons learned to encourage the additional private sector investment levels needed to achieve landscape level National Forest Financing Strategies outcomes.

#### **IV. Private investment as an important component of national forest financing**

Annexure 4 provides details on how the private sector can be an important player in national forest financing. In the developed economies the private sector is a major source of investments in forestry, with the governments playing the role of collaborator in research and development and that of a regulator in keeping their activities within the bounds of the law. But in the densely populated developing economies of Asia-Pacific, land is scarce and has a high opportunity cost, and its large-scale use for forestry operations by the private sector is often considered exploitative and not always welcomed by rural communities.

Among the reasons for private investment in forestry, the main ones are environmental and social concerns, geographical and asset class diversification, carbon offsetting and relatively stable economic returns. Among the risks and deterrents are risks, including land title concerns, corruption and bureaucracy concerns, due-diligence procedure challenges, lack of project liquidity, lack of opportunities, lack of expertise, perceived lack of industry infrastructure, and generally illiquid nature of forestry assets.

During the course of this study investors voiced a desire for the following generic policy environment:

- a. Improved execution of legislation tackling illegal logging, which is perceived as significantly reducing the market price for legally harvested forestry products.



- b. A more robust and stable pricing system for carbon credits.
- c. A cross border regulatory framework for forestry investment funds and the banning of non-regulated forestry investment schemes.
- d. A global standard for the pricing of illiquid forestry assets and auditing of forestry projects.
- e. Government subsidised return enhancement for Reduced Emissions from Deforestation and Degradation (REDD) projects and Environmental Service Schemes.
- f. Improved land title protection for investors via better legislation in emerging markets.
- g. Removing legislation that limits foreign ownership of land and companies in emerging markets.
- h. Legislation providing assurances of water availability to privately owned forestry projects.
- i. Government subsidies supporting the building and maintenance of infrastructure and communication links from poorer rural areas to ports and other key transport links.
- j. Reduced permit approval timelines and increased international co-ordination to reduce corruption in emerging markets.
- k. Improved availability of forestry industry training on account of the lack of suitably qualified local forestry professionals in most emerging markets.
- l. More favourable felling and export rules for commercial forestry enterprises that meet internationally recognised sustainable forestry practices.
- m. Simpler company formation procedures in emerging markets.
- n. Better financial market legislation facilitating easier access to debt and equity capital for sustainable forestry projects.

On a longer time horizon the following actions are recommended:

- a. Improved execution of legislation for tackling illegal logging which is perceived to significantly reduce the market price for legally harvested forestry products.
- b. A cross border regulatory framework for forestry investment funds with the

adoption of established accreditation schemes or standards like the Forest Stewardship Council certification.

- c. Phasing out and eventual banning of unregulated collective investment schemes that are potentially damaging the credibility of genuine and credible investments into the sector.
- d. Improved land title protection for investors.
- e. Reduced permit approval timelines and increased international co-ordination to reduce corruption in emerging markets.

Detailed reports on these four studies have been annexed to this report (Annexures 1–4).





## CHAPTER 3 :

# Guidelines for Formulating National Forest Financing Strategies

The guidelines for forest financing presented in this chapter are based on a synthesis of the four principal studies described briefly in the previous chapter. Detailed reports on these studies are annexed and can be referred to for a comprehensive analysis of the underlying reasons. These guidelines are designed to suggest the most suitable course of action to national and local governments, multilateral and bilateral international institutions, private industry, and foundations and civil society for creating an environment that helps attract optimum investments into the forestry sector.

In this task the highest priority should be on establishing effective forest policies in the countries aimed at managing their forests and tree assets sustainably over a medium to longer time frame. In the shorter time frame the political economy of the poorer developing societies would demand ecological compromises that may not always be wise to resist. The policies adopted should be adequately flexible to permit short-term moderation of ecological objectives with economic and political constraints while aiming at broadening and deepening the ecological base of forestry as economic development progresses and provides greater political and economic space for long-term sustainability.

In the guidelines below the word "governments" includes political governments at federal, provincial and local levels, and their technical departments like the forest department. Multilateral agencies include the World Bank, the Asian Development Bank, Food and Agriculture Organization, United Nations Environment Programme among others whereas bilateral agencies imply international development agencies of developed countries like the United States Assistance for International Development (USAID). International civil societies include large Foundations set up by wealthy individuals and corporations with self-generated funds that function beyond their national boundaries as well as organizations with specific technical objectives like the IUCN.





## Making forestry investments attractive for a nation's political economy

1. The importance of forestry in a country, and the flow of funds to it, would be significantly enhanced if it creates a large number of direct and downstream employment opportunities in forest management, and in various ecological, economic, scientific, and aesthetic aspects of forestry.

### *Action by governments*

May initiate action to bring forests under intensive management for assisted natural regeneration, soil and moisture conservation measures, protection against fire, weeds, pests and disease, forest infrastructure, ecotourism, research and monitoring, as these activities have good potential for generating jobs while being ecologically desirable and leading towards Sustainable Forest Management.

May give high priority to climate change mitigation and adaptation action in the forestry sector as it has a good potential for attracting finance, technology and management skills in this sector in the developing economies.

Train forest staff and forest stakeholder communities in these activities.

### *Action by multilateral and bilateral agencies*

Should help bring forest management in developing countries gradually to the same level of intensity as in developed countries by helping them set standards and invest in capacity building.

### *Action by international and local civil societies*

Raise awareness on the need to manage the forests sustainably and in harmony with the local economy.

### *Action by private industry and their associations*

Promote use of appropriate technologies for better quality and higher efficiency in forest related economic activities and invest in training young people in it.

2. Large parts of countries can be brought and retained under forest cover only if they are economically useful besides being ecologically important, and the overemphasis on conservation that appears to have entered forestry in some countries needs

reassessment and correction where necessary.

*Action by governments*

Make a good assessment of the conservation status of fauna and flora through capable organizations, put it through a public stakeholder process and then decide on the extent of public forest lands that are required to be placed under strict conservation.

*Action by multilateral and bilateral agencies*

Encourage governments to undertake assessment of the conservation status of fauna and flora.

Help developing countries develop appropriate strategies and parameters for trade-offs between conservation and development.

Help forest and wildlife institutes in developing countries develop their capacities in these fields and network with related organizations across the world.

*Action by international and local civil societies*

Raise awareness on the need to manage the forests sustainably and in harmony with the local economy.

3. There is a lack of suitably qualified local forestry professionals in most emerging markets. Improved availability of forest sector training for local communities in emerging markets is necessary for keeping investment costs lower as well as making the forestry projects more useful to the local economy.

*Action by governments*

Assess the need for forestry professionals and encourage universities and specialized forest and forest-related institutions to initiate new educational and vocational courses in the locally relevant fields.

*Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.



### *Action by bilateral agencies*

Consider grant of Overseas Development Assistance (ODA) to Least Developed Countries (LDC) to help upgrade the human and physical capacities of the existing universities and other institutions and encourage them to establish linkages among themselves and with international organizations.

### **Making forest investments compatible with REDD+ and other international mechanisms**

4. Even though negotiations on REDD+ have not been finalized as yet, there are high expectations that in the post-Kyoto climate regime REDD+ will occupy an important place with good possibilities of international funding under it. Other mechanisms for adaptation to climate change, biodiversity conservation and desertification control are also of similar importance. It is necessary that investments in forestry in the developing countries of Asia-Pacific are made in a manner compatible with these evolving international mechanisms.

### *Action by governments*

Should encourage their forestry and related institutions and forest communities to access the actual and promised funds under REDD+ for adaptation to climate change, enhancing renewable energy production and access to it, protecting biodiversity, combating desertification and in meeting their SFM objectives.

Should explore the possibility of insuring forests against fires and disease outbreaks under provisions of financial and technical assistance in international agreements for REDD+, adaptation to climate change, desertification control and biodiversity conservation, etc.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps by conducting training workshops at regional levels.

Align their own financial and other support processes for the forestry sector in developing countries to these evolving mechanisms.

### *Action by bilateral agencies*

Consider grant of Overseas Development Assistance (ODA) to Least Developed Countries (LDC) for helping upgrade the human and physical capacities of their forest departments to enable them to undertake these tasks.

5. Illegal logging not only leads to forest degradation and increased emission of CO<sub>2</sub> but also lowers market prices of legally harvested forestry products and works against the interest of genuine long-term investors in forestry. Effective steps involving local communities need to be taken to control illegal logging.

### *Action by governments*

Should set up a nationally appropriate timber certification system that actively discourages illegal harvesting.

Make the local communities key stakeholders in this process to ensure their cooperation.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps by conducting training workshops at regional levels.

Ensure that their forest sector support processes accord high priority to introduction of timber certification.

### *Action by bilateral agencies*

Consider grant of ODA to LDCs for this purpose with adequate components for civil society so that they may prepare the communities to become active stakeholders in this process.

### *Action by civil society*

Encourage communities to curb illegal logging in forests in their neighbourhood through cooperative action with government.



## **Making non-wood forest products economically attractive for investors in forestry**

6. Open access collection of non-wood forest products (NWFP) in government and community owned forests combined with lax control, corruption, and secretive trade practices have led to the development of clandestine markets in most NWFP, causing rapid destruction of this important resource while bringing very low economic returns to the forest stakeholders.

### *Action by governments*

Regulate access to public forests for harvesting NWFP by making neighbouring communities stakeholders after resolving the issue of open access to NWFP through a political process in which equity, rather than law, should hold centre stage.

Develop locally effective and viable mechanisms for collection and dissemination of information regarding prices, import, export and domestic trade of NWFP since steep information asymmetry in high value NWFP markets favours traders at the consumption end at the cost of producers, collectors, and even traders, at the production end.

### *Action by associations of private industry*

Take proactive steps to curb secretive and corrupt trade practices within the industry and bring openness in the NWFP trade.

Ensure payment of fair value to the NWFP collectors.

### *Action by civil society*

Help governments address the open access to NWFP in a manner which is locally appropriate for enhancing returns to the primary collector, and the value adder in the early stages of the trade.

## **Integrating PES in the economics of forestry**

7. Payment of Ecological Services has the potential to significantly enhance economic returns from investments in forests. But there are as yet no direct market mechanisms, with even the more advanced carbon market only in its infancy, to signal the scarcity or degradation of these services and the market values until they fail, by which time it is too late to take ameliorative steps.

### *Action by governments*

Initiate a long stakeholder consultation process with the help of civil society around the concept of payment for ecosystem goods and services across various ecosystems and communities with differing socio-economic profiles to enhance understanding of the issues involved.

Develop a community linked supply and demand balance in the forest ecological services over landscapes across the country through identification and valuation of environmental services, identification of potential buyers and sellers, assessment of existing legal frameworks, and developing the most appropriate types of payment and contractual arrangements needed for establishing an effective PES system.

Develop valuation tools for ecological services through extensive research, and wide stakeholder consultation process, to enhance their quality and market acceptability. The methods adopted should be technically feasible matching available skills, financially viable and fitting into available budgets, and consistent throughout the PES scheme.

Involve trusted and neutral intermediaries to bring sellers and buyers together in agreeing on environmental services targeted, the level of payments, and contract terms for the successful development of PES schemes.

### *Action by multilateral agencies*

Guide governments in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

### *Action by international civil society organizations*

Develop skills as intermediaries between suppliers and producers of PES in arriving at payment and contract terms and make these skills available to developing countries that need to establish PES systems in their countries.

## **Sourcing energy funds**

8. The forestry sector can access the much larger national, multilateral and bilateral funding for the energy sector if it contributes significantly to the production of biomass-based modern forms of energy.



### *Action by governments*

Develop a renewable biomass-based energy policy and identify wood resources for this purpose spread across the rural areas without harming the important task of biodiversity conservation.

Seek assistance from the International Energy Agency (IEA) for this purpose if own resources are insufficient.

Work with civil society to channel appropriate parts of energy sector funds to the rural biomass energy producers through district level governments.

### *Action by multilateral agencies*

Guide governments of countries of the region in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

## **Streamlining laws and policies**

9. Unreasonable controls on harvesting and transport of forest produce from private holdings discourage private investment in tree growing.

### *Action by governments*

Identify formal laws, rules, and bureaucratic practices that discourage investments in tree planting through a committee of cross-sectoral experts.

Change such laws, rules and practices, as recommended by the expert committee.

Also consider taking quick steps like in Thailand where plantations of quick growing species like *Eucalyptus* are treated as agriculture crops and thus forestry rules do not apply in raising these plantations and in harvesting, transporting and marketing the product.

### *Action by multilateral agencies*

Guide governments of countries of the region in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

10. Re-examining legislation that limits foreign ownership of land and companies in emerging markets would be helpful.

### *Action by governments*

Undertake examination of such laws and cause changes if necessary while keeping local sensitivities in consideration or otherwise land-based agitations could mar long-term forestry projects at a later date and harm genuine investors.

### *Action by civil society*

Appraise communities of the pros and cons of foreign ownership of lands and work with the government in bringing desirable changes in relevant statutes.

11. Many emerging economies of the region have very complex and time consuming company formation and closure procedures which deter investors. Also, in many countries of the Asia-Pacific it takes a very long time to obtain the requisite permits for making commercial investments in general and forestry investments in particular. Reduced permit approval timelines and increased international co-ordination to reduce corruption in emerging markets would address this concern.

### *Action by governments*

Adopt good examples of such procedures from other countries to address this bottleneck.

### *Action by multilateral and bilateral organizations*

Expose concerned policy makers to best practices in other countries to enhance their understanding of the changes required.





## Addressing the consequences of long gestation of forestry investments

12. Policy instability during the long wait between investment and returns in long gestation forestry investments is a major deterrence for investments in forestry.

### *Action by governments*

Develop a long-term vision for forestry through a bipartisan political approach at the national and provincial levels and link forest-related policies to this long-term vision.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

13. Long gestation of forestry investments increases risks of theft and arson protection against which is a shared responsibility between the forest owning organization and the relevant public safety organization.

### *Action by governments*

Assess the staff and infrastructure needs for protection of forest resources against theft and arson and develop a plan of action to fulfil these needs over the next decade.

Seek assistance under ODA for execution of this plan of action if own resources are insufficient.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grant of Overseas Development Assistance to Least Developed Countries for the above purposes.

14. Short rotation crops like *Casuarina* for bio-energy and eucalypts and poplars for plywood are a major attraction for small-scale private investors in tree planting.

### *Action by governments*

Consider treating plantations of fast growing species like *Casuarina*, *Eucalyptus* and poplars as agriculture crops so that forestry rules do not apply in raising these plantations and in harvesting, transporting and marketing the product.

Invest in research in production, value addition and marketing of short rotation crops in public-private partnership mode with plantation corporations of repute.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

Make commercial loans available to corporations for research and development in production, value addition and marketing, including marketing of ecological services of carbon sequestration, biodiversity and water conservation, of short rotation crops.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

## **Reducing the burden of transaction costs on investors in forestry**

15. The transaction costs of new business activities that do not have a traditional market and supportive infrastructure can be quite large. Also, the close involvement of the large number of stakeholders necessary for forestry ventures in developing countries could add substantially to the transaction costs. But limiting the stakeholder consultation process to minimize the costs could enhance the risk of opposition during later stages and reduce the widespread and long-term commitment of important stakeholders and thus reduce the cost-effective delivery of the environmental services targeted.

### *Action by governments*

May bear a part of the transaction costs by making the forest departments undertake some of the activities on behalf of communities for this purpose and thus reduce the costs for the communities.

May share a part of the transaction costs through tax relief and other such fiscal measures for activities that promote sustainable forest management, like payment of ecological services.



### *Action by multilateral agencies*

Guide governments of the countries of the region in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for enabling their forestry departments to take up some of the transactional activities on behalf of the forest communities.

## **Assuring private forest and tree owners of their rights**

16. Government policies must assure households, communities and private business investors in forest and tree assets that their ownership rights would not be curtailed on account of public interest in ecosystem services co-generated without adequate compensation.

### *Action by governments*

Review national, provincial and local policies and laws that discourage harvesting and utilization of forest and tree assets raised with private investments and efforts (as distinct from natural forests that may be owned by private individuals).

Hold regular formal dialogues with associations of small-scale forest owners, forest owning communities and forest-related industries to identify problems of this nature.

Report the action taken in annual forest ministry reports.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

## **Access to debt and equity capital for forestry projects**

17. Better financial market legislation facilitating easier access to debt and equity capital for sustainable forestry projects is needed in most emerging markets.

### *Action by governments*

Establish a national team of experts for this purpose.

Examine the current difficulties faced by various types of forestry based economic activities in accessing capital in debt and equity markets and draw a plan of action for removing impediments and streamlining policies and legislation.

Examine the need for microfinance for rural forestry based ventures and draw a plan of action for easing access to it particularly for women entrepreneurs.

Execute these plans of actions.

### *Action by multilateral agencies*

Hold frequent dialogues with forest authorities to ascertain investment opportunities in the forest sector.

Guide Governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grant of Overseas Development Assistance to Least Developed Countries for the above purposes.

### *Action by civil society*

Help organize the rural communities and women for increasing their access to microfinance through evaluation of need, capacity to repay and provide linkages to the related institutions.

18. There are as yet no acceptable standards for the pricing of illiquid forestry assets and auditing of forestry projects. Creation of such standards would help corporate investors in the creation and management of forestry assets.

### *Action by governments*

Seek assistance from a multilateral agency like the Asian Development Bank for this task.

### *Action by association of private industries*

May work with the Asian Development Bank to develop these standards.



19. More favourable harvesting, transportation and export rules for commercial forestry enterprises are needed to increase the profitability of these enterprises.

*Action by governments*

Recognize that commercial forest plantation management is distinct from natural forest management.

Adopt good practices from other countries in similar situations with the help of multilateral institutions like the Asian Development Bank.

*Action by association of private industries*

May work with the Asian Development Bank to develop these standards.

**Transport of forest goods from remote production facilities**

20. Public investment and support in the building and maintenance of infrastructure and communication links from poorer rural areas to ports and other key transport links would make forestry investments in poorer interior areas more profitable to private ventures. The revival of traditional modes of transport of forest products by rivers, ropeways and elephants in mountainous areas may also be considered.

*Action by governments*

Assess the need for creation of new transport and market infrastructure and revival of old traditional infrastructure for forestry goods, and undertake a good quality environmental impact assessment of these infrastructure.

Decide on a plan of action, raise resources and execute the plan of action.

*Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

*Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

*Action by civil society*

Help the communities bring their difficulties in marketing their products to the appropriate agencies in government and assist the government in devising a workable plan of action.

## Access to public lands for raising plantations by the private sector

21. Private investment in raising forest plantations over public lands may not be welcome in countries with low per capita availability of lands. But in countries where land is not a scarce commodity, it might be advantageous to attract private forest enterprise on public lands unsuited for agriculture. However, this should be done following a thorough stakeholder consultation process following the principles and procedures of the United Nations Declaration of the Rights of Indigenous People (UNDRIP) and under close supervision of neutral intermediaries.

### *Action by governments*

Assess the desirability of assigning public lands for raising private plantations after holding discussions with the local communities and indigenous people and taking their views and concerns into account under the principles of UNDRIP.

Before any such assignation the rights of the local and indigenous people on the concerned lands must be formally decided and made public. This must be done in consultation with the civil society active in that area and, as far as possible, also taking a prominent international civil society organization active in that area on board.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

### *Action by civil society*

Help the governments understand the concerns of the local communities including indigenous people in assignation of local public lands for raising forest plantations by the private sector.



## **Increased investment in forest research and extension for higher productivity**

22. Low demand for forest research from forest managers has resulted in low investments in research and consequent neglect of the possibilities that the advancing technologies could open up. National governments, with support from international organizations, should act to make forest management primarily research based and thus lead to forest productivity enhancement, new uses of forest biodiversity and increased forest based energy production, etc.

### *Action by governments*

Organize forestry and related research and establish close linkages with agriculture and horticulture research for productivity enhancement.

Upgrade the human and physical capacities of the existing institutions in the field of floral and faunal conservation, agroforestry, NWFPs, forest laws, silviculture, biodiversity, etc., and encourage them to establish linkages among them and with regional and international organizations.

Invest in forestry extension services on the lines of agriculture extension already in existence in most countries of the region.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

## **Strengthening forest-related institutions**

23. The governments should create, and improve where they already exist, a network of competent and effective forestry and related institutions and encourage them to link with each other as also with relevant international organizations. Helping countries create and improve such networks of institutions in the Asia-Pacific region should be one of the primary tasks of international organizations.

### *Action by governments*

Assess the need for specialized forest and related institutions in the field of floral and faunal conservation, agroforestry, NWFP, forest laws, silviculture,

biodiversity, etc., upgrade the human and physical capacities of the existing institutions in these fields and encourage them to establish linkages among them and with international organizations.

*Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

*Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

**Forest tenure reforms**

24. Rural communities in the vicinity of forests across the Asia-Pacific are in favour of ownership control over forests. However, proximity to forests as the central criteria for forest land tenure claims is not usually acceptable to communities that are not proximate to this resource. Reforms of this nature have the potential of creating serious conflicts in society on account of competing claims and could even lead to violence. Tenure reform needs to be carried out wherever it enhances equity and justice, and serves the purpose of managing the rural forestry resources in a sustainable manner while hastening poverty reduction. Since these reforms often consist of transfer of public lands into private hands they are politically popular and sometimes acquire a political momentum of their own which brings with it the danger of going overboard.

*Action by governments*

May constitute a small team headed by an eminent jurist and consisting of similarly eminent forestry, social science and rural development experts for an assessment of the need for forest tenure reforms. Their recommendations may be publicly debated before being placed before the legislature for final decision.

Plan and execute the reform by a government task force in which the forest department should play a major, but not the lead, role.

Provide supervision to this task at a very high executive level in the country, otherwise it could easily lead to injustice and intercommunity violence.

Undertake mid-course evaluation of ongoing forest land tenure reforms to ensure that the ecological and equity objectives of the reforms are met satisfactorily.





### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

Avoid taking a philosophical position on forest land ownership as many international organizations have tended to do in recent years, forcing bias in favour of privatization of forest lands even where it neither enhances overall equity nor furthers ecologically sustainable management of forests.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

## **Ensuring the financial success of existing tree plantations**

25. Since the success of existing tree plantations and forests in generating good economic returns would be the most effective invitation for future investments in forestry, the governments should help create conditions that can help rural communities and households earn good returns from their existing investments in trees and forests.

### *Action by governments*

Identify threats (fires, insect attacks, diseases, weeds) to these tree plantations and provide protection against these if they originate in public lands.

Provide forest extension services to small scale and community owners.

Enhance the quality of forest law enforcement to reduce the chances of theft of timber.

Enhance access to markets through investment in improved physical infrastructure (roads, waterways) and regulatory infrastructure (certification).

Invest in public facilities for first level of value addition (like drying, debarking, sizing, bundling) close to the plantation sites for local job creation and also for reducing transport costs.

### *Action by multilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.

### *Action by bilateral agencies*

Consider grants of Overseas Development Assistance to Least Developed Countries for the above purposes.

26. Lack of access to water in some forestry projects lowers productivity to levels that make them economically unviable.

### *Action by governments*

Address access to water through appropriate policy measures but care should be taken that provision of water for tree planting is never at the expense of drinking water, food production, and water for urban hygiene.

### *Action by civil society*

Keep a watch to ensure that plantation owners do not adopt foul means to divert waters meant for habitations and food crop irrigation.

## **Mandate of forest departments**

27. There is an urgent need for reform in the mandate of forest departments, which is generally law enforcement centric, retraining of forest department officials and deeper interactions with private sector as well as academics that may help break the seclusion common to many forest departments across the region.

### *Action by governments*

Examine the mandate of the forestry department in the light of the new requirements and the demands of the international conventions on climate change, desertification control, biodiversity conservation, rights of indigenous people, etc., with the help of an international organization like the FAO and then undertake capacity building of the organization.

### *Action by multilateral and bilateral agencies*

Guide governments of smaller countries in taking the above mentioned steps.





# ANNEXURE 1

## **Role and core concerns of governments and other public institutions in Asia-Pacific forestry sector**

by

Promode Kant



## Executive summary

Primary objective of financing of forestry activities is to optimize the production of forestry goods and services, capture their full value and ensure equitable distribution across stakeholders while ensuring that the capital value of the forests does not diminish both in their monetary and ecological values. The role of national governments is to create a policy, legal and fiscal environment that rewards sustainable management of forests, channelize adequate funds through international and national channels and encourage private investments. The governments are also expected to promote research and innovation and promotion of technology that helps in meeting the overall objectives.

The topmost priority for governments should be to create an effective policy regime backed by suitable laws and rules and a network of competent and effective forestry and related institutions for speedy implementation. Governments need to publicly declare that in planting trees and conserving forests a household or a community is investing its scarce resources for its own future good and that public interest in ecosystem services co-generated would not be allowed to undermine their interests.

Overemphasis on conservation in many countries needs reassessment because large extents of forests can be retained under forest cover only if they are also economically useful and generate revenue and employment. National governments should encourage their forestry and related institutions and forest communities to access the actual and promised funds under REDD+ and also for adaptation to climate change for meeting their SFM objectives.

Forestry sector can easily access the much larger funding for energy sector if it contributes significantly to production of biomass based modern form of energy. Greater institutionalized transparency and increased external monitoring of expenditure will increase the trust of funding agencies in the integrity of forest governance in developing countries and thus lead to larger flow of funds. In countries where land is not a scarce commodity it would be advantageous to attract private forest enterprise on public lands unsuited for agriculture after an effective stakeholder consultation process.

Long gestation of forestry investments increase risks of theft and arson protection which are a shared responsibility between the forest owner and the relevant public safety organization. Governments should invest adequately in forest protection duties and also make insurance financially accessible. Forest certification will help attract

investment only if it is accepted widely in a country and in the global market place. Governments should ensure that the reasons that limit its appeal are addressed quickly. Accessing better paying markets for high value forest products requires brand building by industry associations. Forest land tenure reforms currently underway in many countries of the region may need mid-course evaluation to see if the ecological and equity objectives of the reforms are being met satisfactorily.



# Introduction

The provisioning of adequate resources for investment in sustainable forest management of forest resources in the developing countries has been receiving increasing attention internationally. In its seventh session held in the year 2007 the United Nations Forum on Forests (UNFF), recognizing that lack of financial resources is a major cause of lack of progress in this direction, decided to mobilize adequate funds to support the implementation of sustainable forest management (SFM) and achievement of the global objectives on forests through an innovative forest financing framework.

In 2009, the United Nations Forum on Forests launched the Open-ended Intergovernmental Ad Hoc Expert Group on Forest Financing for implementing sustainable forest management in all types of forests. A number of studies have also been initiated by the World Bank and other regional development banks on various aspects of financing sustainable forest management in poorer countries. Some of the financing mechanisms that are being designed specifically for Reducing Emissions from Deforestation and Forest Degradation, Sustainable Management of Forests, Conservation of Forest Carbon Stocks, and Enhancement of Forest Carbon Stocks (REDD+) and adaptation under the aegis of the United Nations Framework Convention on Climate Change (UNFCCC), arrest of desertification under the United Nations Convention on Combating Desertification (UNCCD) as also various overlapping activities under the Convention on Biological Diversity (CBD) also have immediate relevance to this complex task.

Forests form one of the largest public assets all over the world. Almost three quarters of the four billion hectares of forests worldwide is either owned or controlled by governments – national, provincial or local. Even where ownership does not lie in public hands a large part of the benefits from forests flow to the public. Governments are required to play a crucial role in forest management across the world to ensure the continuity of flow of goods and services to the people from this important natural resource.

A large part of these publicly owned forests are heavily utilized for timber and other forest produce and are often not managed sustainably, particularly in developing economies, resulting in increasingly depleted growing stock and flow of goods and services year on year. The picture, however, differs sharply from country to country. Some countries have been able to invest adequately in forestry over prolonged periods. Prominent among them is China which has invested heavily in forestry with

visible results all round even though their sustainability may still be in doubt.

A slew of policy interventions since 1998 like the natural forests protection programs and forest tenure reform, and improving policy and investment environment with tenacity have seen total investment of forestry in China increase from 13.53 billion Yuan in 1998 to 137.79 billion Yuan in 2008, an astounding tenfold increase with an annual growth of 23.8 percent (Wenfa, 2010). A few other developing countries like India, Malaysia and Indonesia have also ensured increased flow of investments in forestry in the past decade but most of the developing countries in Asia-Pacific still find it beyond their financial and technical capabilities to bring sustainability in the management of their forests.

### **Objective and scope of the study:**

This study is a component of the new FAO initiative on financing sustainable forestry management (SFM) in Asia, titled "Putting principles into practice: Developing an inclusive framework for enhancing investments into Asia-Pacific forestry", and seeks to map the interests of public organizations and institutions, including governments, in the context of financing sustainable forest management. In particular, it examines the effect of private and community ownership of forest assets on their sustainable management in view of the increasing demands for privatizing forest ownership, and in improving rural livelihood.

### **The study has the specific objectives of producing:**

- a report outlining the interests and role of public institutions pertaining to facilitating the financing of sustainable forest management; and
- a written guideline that describes generic priorities for national governments in relation with the formulation process of National Forestry Financing Strategies in Asian countries.

### **Area of study**

A study of this nature should cover all countries in the region because the governance structures, nature of public institutions, state of economy and of social capital, historical development, and the extent and quality of forest cover, are vastly different across the Asia-Pacific. But neither the time nor financial resources available would permit such an approach. It was, therefore, decided to make India as the core area of the study as this large economy in tumultuous transition with its three tiered participatory governance, significant forest cover, large dependency of people on forests, long established forest governance with as many good examples as bad, rule





of law often marred with serious lapses, innovative experiments with community governance running parallel to hidebound bureaucratic approach, serve as useful reference point for Asian countries ranging from the least developed to those that are nearly developed. It is hoped that combined with intense study of literature from other countries, and author's own personal knowledge of the systems and conditions obtaining across the region, should provide enough information for doing justice to this work.

## **Methodology**

The task began with the development of an action plan for undertaking the described task with the help of concerned officials in the Asia-Pacific regional office of the FAO in Bangkok. A review of literature on the role of public institutions from local to global levels in financing sustainable forest management was done though much published material on the subject could not be found. Similar works undertaken in other regions, specifically in Latin America were also explored (van Dijk and Savenije, 2009).

This was followed by a review of legal and administrative framework and recent initiatives pertaining to financing sustainable forest management in India. Subsequently discussions were held with a number of officials of relevant public institutions to understand their perspectives on what their essential interests would be in the formulation of a National Forestry Financing Strategy. At the third tier of governance in North East India, namely, the Autonomous Tribal District Councils, discussions were held with both the political executives and the permanent bureaucracy. In addition, the matter was also discussed with an eminent editor of a newspaper published from Shillong who is well versed in the matter of governance in tribal areas of India.

Before the work began it was planned to gather the requisite information through structured interviews and questionnaires but it soon became apparent that top officials at various levels of governance and in all the other related institutions were extremely circumspect in articulating their concerns and would limit themselves to handing over their policy documents. It was then decided to keep the discussions free flowing with no recording of any kind during the event even while holding the discussions in a formal setting in their offices and during office hours. The information so gathered was analysed and discussed among a number of experts before preparing this report.

## Literature review

The basic premise of an important policy work in this field by van Dijk and Savenije (2010) is that “where forests do not fetch adequate financial value or an opportunity cost that satisfies the forest landowners or important stakeholders they tend to disappear”. The central issue that faces forestry in general and sustainable forestry in particular is that earnings from existing forests are not competitive with other possible uses of the forest lands “mainly because of a failure to capitalize on all the goods and services produced by forests”. The paper proposes the national forest programme (NFP) as a comprehensive framework leading to sustainable forest management (SFM) over most of the forests in a country and a national forest financing strategy (NFFS) that enables NFP to access all available resources within and without. This financing strategy should aim at creating: (i) investment financing mechanisms with the requisite resources, instruments and operators to incentivize and finance, and reduce investment and operating risks with regard to SFM, (ii) payment mechanisms with requisite resources, instruments and operators to ensure adequate payment for forest goods and services produced by SFM, and (iii) an enabling environment for the effective functioning of these mechanisms.

APFC (2010) in its detailed study report on the Asia-Pacific forestry sector outlook in the coming decade has sought to delineate priorities of the various groups of nations in this region. The priorities of developed economies in the region are provision of ecosystem services with a focus on carbon sequestration and recreation, improved cost and energy efficient processing technologies, and maintaining competitiveness of forest industries in the face of high labour costs and reduced natural advantages and of forestry as an attractive employment option. The emerging economies, on the other hand, would prefer to focus on large-scale afforestation and reforestation to meet growing demands for forest goods and services, increase investments in forest industries to enhance production and improve cost, energy and raw material use efficiency, improved governance and strengthening investor confidence, attracting carbon financing, and promoting small and medium forestry enterprises.

The priorities of low income forest rich countries in Asia-Pacific like Papua New Guinea, Cambodia and Lao PDR are better management of its existing forest resources, low impact logging, promoting value addition to forest products, strengthening forest law enforcement and governance, attracting carbon financing to the forestry sector, avoiding deforestation resulting from unplanned land use practices, and policy and institutional reform to ensure that resources are sustainably managed.



Low income forest poor economies would like to concentrate on: (i) large scale forestation to enhance natural asset bases by integrating tree growing and forest conservation into larger land-use planning, (ii) policy, institutional and governance reforms for promoting forestry as an important component of rural development through the involvement of local communities and farmers in improved land management and in rural employment generation, and (iii) attracting carbon financing.

The priority of small island nations, on the other hand, is improved forest management for the provision of ecosystem services that support of tourism and fisheries, protection of coastal areas against natural disasters, integration of forests and trees with other land uses to enhance landscape values, development of niche markets for tree and forest products.

Boscolo et al. (2010) summarised the lessons learned from two projects that examined various modes of financing forestry in Latin America. Increased public support for managing their forests sustainably has created greater political space for the governments in bringing appropriate legislations and policies but the progress is hindered by fund crunch as also lack of clarity in what is needed to be done. SFM, in spite of its increased acceptance, still does not attract financing to achieve it. Interest rates are often higher than growth in the value of forests since timber is almost always the only marketed output. The answer obviously lies in the society recognizing the ecological services rendered by a sustainably managed forest but there is as yet no mechanism which can do that at a large enough scale. The extreme complexity of SFM is another reason it is so out of reach of most forest owners.

Implementation of measures to achieve SFM is also hampered by weak institutions and lack of coordination between various institutions which sometime seem to work at cross purposes. Unresolved tenure and confused ownership of forests leaves crucial stakeholders with little interest in sustaining their interests over a long period. Lending policies of banks favour short-term loans with low risks but the very long term nature of investments in forestry brings with it an inflated perception of risk in forestry and lack of information only serves to enhance it further. Forests are often not acceptable collateral for a loan since land cannot be used as collateral without clear land tenure. This inherent distance between the interests of lending institutions and requirements of forests is not conducive to permit flow of money seeking good returns into investments in forestry.

ODA is an important source of finance for forest conservation and natural forest management but very little for production forestry where the largest investments come from private sector. Most of public sector financing is through grants, tax relief, subsidies and subsidized loans that are meant to incentivize, and also create an

institutional environment supportive of, private-sector investment. For the payment of ecological services (PES) to become a reality over a larger landscape, public funding has to play a lead role in the years to come to create an appropriate institutional framework. Often purchase of PES is done initially only from public funds and private purchases follow later.

The dynamic biological community of forests has its members ceaselessly reproduce, grow, decay and die while coping with storms, droughts and fires, and creating a much prized ecological diversity in the process in large sized forested lands. These large forest holdings are usually under public ownership and have access to higher quality management with public funding. But in smaller isolated forest lands it requires a farmer's skills to ensure their survival when faced with adverse circumstances rather than depending upon the nature to do the job (Vanclay et al., 2006) and it devolves on public authorities to create an environment in which they can achieve it at least cost and efforts.

The benefits of forest ecological services are well recognized in larger society and within governments. There is public expectation of these benefits from all types of forests but it is accompanied by a deep reluctance to pay for them even when originating from privately held forests (Mitchel-Banks, 2001) and there is a clear preference for regulatory processes for deriving such benefits. This makes privately owned forests subject to more restrictions at least in some territories in the Asia-Pacific like in India and it would serve the end of sustainability if governments made efforts to address this anomaly that increases costs of small private forest owners. Also there is growing demand for certification of legal and sustainable origin of timber without which it is difficult to get fair price for timber in the important markets of developed economies. This has the potential for creating new barriers for forest owners due to high expenditure and procedural delays involved in certification. If the burden of these increased transaction costs could be reduced through public expenditure and management then the increased returns to the forest owners from higher prices obtained for certified forest product would help create an environment conducive to sustainable management of forests.

Many core forestry activities like fire control and disease management as also provision of road access are capital intensive and beyond the capacity of most private forest owners. Lillandt (2001) recommends organizing them in an association or a collective for more effective management and reducing transaction costs.

State policies are critical for sustainable forest management of small scale forests (Hermelin, 2001) where generous state provided incentives and subsidies could encourage effective initial steps towards sustainability by private forest owners.



But the difficulty with this approach is that once given the subsidies are difficult to withdraw and can become an unsustainable burden on the state drawing away resources from other areas of governance where there might be more urgent need for money.

In his analysis of ownership rights over forest lands in Arunachal Pradesh in India, Sinha (2007) presents a sensitive analysis of the extremely complex issue of forest land allocation among tribal communities and other land users. On one hand land ownership and clearly delineated property rights help alleviate poverty and yet private land ownership is also the main instrument of concentration of wealth. It often contributes to perpetuation of social injustice and becomes a major obstacle in the implementation of poverty alleviation schemes. A large part of the forest lands in North East India falls under the category of Unclassed State Forest (USF) whose status is practically indeterminate since local communities reside in, and cultivate, parts of these lands and use some of the rest for meeting their other forest based demands. Most of it is still a land which is not in occupation of any individual or community and thus belongs to the Government as per the Anglo-Saxon Jurisprudence which India follows. But the tribal communities dispute it and claim the entire land as theirs. Within the communities also there are rival claims, and powerful and well connected individuals among the tribal communities have often enriched themselves by misusing the tribal customary laws to occupy huge extents of USF lands. This situation does not bode well for increased investments in these forests. There is, therefore, an urgent need to address the conflict between the statute law and the customary rights of the local communities. Since the customary laws do not empower women in matter of property rights the state government may need to remedy this situation, too.

Government stewardship of forestry often lacks transparency and genuine participation of the community in the management of forest resources. This can lead to the use of resource to benefit only a chosen few and the community loses interest in resource management (Vicker and Mackenzie, 2007). On the other hand, Tempel and Beukeboom (2007) describe the allocation of publicly owned forests among communities in Bhutan and the formation of Community Forestry Management Groups by a very proactive government.

Strict conservation requirement in forests affects right holders through reducing their enjoyment of the forest resource and sometimes even outright exclusion. In the past international assistance in establishing conservation areas has led to removal of people from lands considered important for wildlife conservation violating civil and land ownership rights (Campese et al., 2009).

Choice of species and the right mix is critical for success in rural forestry by farmers. Short rotation crops of multiple use and high demand would predictably be useful. Government of Maharashtra in India along with INBAR have successfully implemented a poverty alleviation project among a Dalit community in western India through the creation of an institutional ecosystem with bamboo resource enhancement on one side and capacity development and market development for the finished products on the other side, using government funding for social forestry and rural development, resulting in an effective supply chain ensuring raw material for community enterprises (Rao et al., 2007).

Chaudhary et al. (2010) write of entrepreneurship development in value chains of Indian bay leaf (*Cinnamomum tamala*) where the primary collectors receive very low prices due to severe information asymmetry, non-use of technology and limited management skills, poor bargaining power and lack of institutional support. When the ICIMOD officials were able to mobilize the support of the connected government line agencies there were immediate benefits to the stakeholders in terms of increased profits through better prices.

A review report edited by Sheyvens (2011) presents four studies evaluating recent legal initiatives for restoration of customary rights of forest-dependent communities in Asia. These rights, reportedly lost during colonial period, have been receiving much attention in the recent years. In India the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006, popularly termed the Forest Rights Act has led to the settlement of 1.79 million hectares of forest lands in favour of 1.25 million household till April 30, 2012. In Thailand the Community Forestry Bill of 2007 has not yet received the Royal approval. The Indigenous People's Rights Act in Philippines is a comprehensive law recognizing the rights of indigenous people. In Malaysia a number of Court decisions in recent past have served to enhance the security of indigenous people's rights which, though protected in law, have become restricted in practice.

Elson (2011) states that community and individual rights and privileges in forests should be recognized legally to assure investors about the long-term safety of their investments but cautions that mere ownership of forest resources is unlikely to bring prosperity to communities and that skills, markets, capital and institutions are no less important when it comes to the maximizing returns from the resource. Governments would need to take effective steps to remove the deficiencies in these aspects.

IGES (2007) offers an important study encompassing seven countries in Asia-Pacific related to transitions in forest governance, contemporary forest management



and the prospects for communities to contribute to and benefit from sustainable forest management. The study considers decentralisation as important for quality governance as it draws on local knowledge and preferences, gives local people a sense of ownership over planning and implementation promoting self-reliance, enhances the accountability of related institutions and public officials and thereby ensuring increased responsiveness in governance, enable monitoring and evaluation of public expenditure and thus lead to sustainable development. There are four founding concepts of decentralisation. Subsidiarity requires that decision making be decentralized to the lowest possible level at which adequate competencies exist, or can be developed quickly, thus minimizing costs and building skills in the community. Empowerment refers to the need of ensuring that benefits of decentralization reach marginalized groups on a priority basis. Pluralism celebrates diversity and seeks innovative ways to broad base development at the grassroots that works as an insurance against disasters and is very important for integrating adaptation to the impacts of changing climate on people's welfare. Social capital is the formal and informal network and institutions in communities that form the bedrock of a successful decentralized governance system.

One of the most serious issues that face governments everywhere is the frequent need to place restrictions on the enjoyment of private forested properties and, often enough, even trees standing on private lands. van Kooten and Folmer (2004) state that public intervention in the private use of lands is justified when private use imposes costs or confers benefits on others. Such restrictions could come in the shape of zoning, regulation of permissible land uses and taxation and are usually enforced through subsidies and compensation etc. The 'taking' clause in the US Constitution requires that compensation be paid whenever the government uses its domain power to restrict land use. Elsewhere, local land laws may make such compensations mandatory. But there are still many territories where restrictions on the enjoyment of private forests and trees could come without compensation.

# Legal and administrative structure of forest governance

A key requirement of cost efficient and effective financing of forestry activities in a country is a technically sound and politically acceptable forest administration in an environment of overall good governance. For reasons explained in chapter 1, this study has limited the examination of the structure of forest governance to India only. The Indian system of governance is a three tiered federal democratic system with functionally separated governments at the national, provincial and district levels. The Constitution of India has delineated subject matters between the states and the centre and land falls within the states' jurisdiction. The 42<sup>nd</sup> amendment to the Indian constitution in 1976 made protection and improvement of the natural environment, including forests, lakes, rivers and wild life, a fundamental duty of every citizen of India and brought forests and wildlife under the concurrent list of subjects in the Constitution thereby giving the central Parliament the overriding power to legislate in matters of forests and wildlife even though administration and management of forests continued with the states.

Governance at the national and provincial levels involves both making laws and implementing them while the third tier at the district level only implements the laws except in the tribal districts of North East India where the Autonomous Tribal District Councils combine legislative powers with executive duties in matters connected to tribal life, land, forests, traditional livelihood and culture. Forest governance at all levels is expected to be in accordance with the National Forest Policy which has taken the vast diversity of the country into account. The states also have their own forest policies taking into account their special circumstances but their policies have to fall within the bounds of the national forest policy.

## India's National Forest Policy

India must rank as one of the few countries in the world that have a formal national forest policy continuously in place since the end of nineteenth century. Its first national forest policy was adopted in 1894 which emphasized the need for forest land settlement through a legal process that recognized people's claims over forests and delineation of reserve forests where the overwhelming objective of management was ecological combined with silvicultural management for meeting public needs from forests. The agencies identified for such public management were the state forest departments.





The policy was revised in 1952 after independence from colonial rule and again in 1988. The principal aim of the present National Forest Policy 1988 is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which are vital for sustenance of all life-forms, human, animal and plant and direct economic benefit from the forests are expected to be subordinated to this principal aim. The inclusion of “atmospheric equilibrium” is the principal aim of this policy, enunciated in 1988 when concerns about the increasing concentration of carbon dioxide in the atmosphere were only beginning to be articulated, must perhaps rank as the first attempt anywhere in the world to place forestry at the service of climate change mitigation. The detailed objectives of the Policy are:

- i. Maintenance of environmental stability through preservation and restoration of the ecological balance,
- ii. Conserving India’s natural heritage of its natural forests and the biological diversity and genetic resources contained therein,
- iii. Checking soil erosion in the catchment areas of water bodies, mitigating floods and droughts and reducing siltation of reservoirs,
- iv. Checking desertification,
- v. Increasing forest and tree cover through afforestation on all denuded, degraded and unproductive lands,
- vi. Meeting the requirements of fuel-wood, fodder, NTFP and small timber of the rural and tribal populations,
- vii. Increasing forest productivity,
- viii. Encouraging efficient utilisation of forest produce and maximising wood substitution,
- ix. Creating a people’s movement with the involvement of women for achieving these objectives.

### Legal instruments of Policy

The above policy is implemented through a set of national, provincial and district council forest laws and rules. **The Indian Forest Act** was first notified in 1878 and has since been revised and amended a number of times to reflect the changing needs and policies. The Act provides the legal mechanism to declare lands as Reserved Forests, Protected Forests and Village Forests, defines activities that are prohibited in these

forests, provides penalties for infringements and regulates transit of forest produce.

Another important national law is the **Forest (Conservation) Act of 1980** which makes permission from central government mandatory for any diversion of forest lands for non-forestry purposes. This law has been instrumental in reducing deforestation sharply by curtailing the powers of the provincial governments to divert forest lands for other purposes. But this law has also become quite controversial for encroaching upon the powers of the states and disturbing the balance between the Centre and the states, besides affecting the developmental activities.

Yet another very crucial national law is the **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006**, popularly called the **Forest Rights Act**. This Act recognizes that in the matter of reservation of government forests the rights of many traditional owners of forests, mainly tribal people, were ignored in the past and lays down a procedure to transfer such forest lands back to the rightful owners. Vast public machinery has been activated across the country to quicken the process and by the end of April 2012 a total of 1.26 million land ownership titles involving 1.79 million ha of forest lands have already been distributed after examining 3.18 million claims.

Another law that was not primarily intended for forests, but has often been used by the central government to intervene in matters of high ecological importance, is the **Environment (Protection) Act 1986** enacted with the objective of providing for the protection and improvement of the environment. It empowers the Central Government to establish authorities charged with the mandate of preventing environmental degradation in all its forms, including ecological degradation, and to tackle specific environmental and ecological problems that afflict different parts of the country.

A national conservation law of high importance is the **Wild Life (Protection) Act**, enacted in 1972 and amended several times since, which seeks to protect the wild fauna and flora of the country along with their habitats from illicit hunting, trade, violation of their habitats and other nuisances. The Act provides for detailed procedures for declaring forest and other lands as National Parks, Wildlife Sanctuaries and Tiger Reserves that serves to avoid injustice to people in the process of protection of the habitat of wild fauna and flora.

International agreement on biodiversity conservation has led to the enactment of the **Biological Diversity Act of 2002** which seeks to ensure conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources and knowledge. The Act has



created a National Biodiversity Authority at the Centre, State Biodiversity Boards in each state and Biodiversity Management Committees at the local level across the country for regulation of access to biological diversity, transfer of biological resources and knowledge and determination of equitable benefits. Biodiversity heritage sites have also been identified. A **Local Biodiversity Fund** has also been created for conservation and promotion of biodiversity within the jurisdiction of the concerned local body. The Fund can also be used for the benefit of the community if such use is consistent with the primary objective of the conservation of biodiversity.

### **Provincial Forest and Tree Protection Laws**

The Indian Forest Act has been adopted in most provinces by their legislatures with suitable modifications to suit their local socio-economic and topographical situations and land holding patterns. Even when some states like Tamilnadu have their separate laws, and the **Tamilnadu Forest Act** actually predates the Indian Forest Act, the laws are not much different in their objectives, procedures and the nature of prohibitions. These laws prescribe the manner of formation of various types of forests, namely the Reserve Forests, Reserve Lands, Protected Forests and the Village Forests, etc. and the activities that are prohibited in these forests. Transport of timber and other forest products is regulated under the provisions of these Acts. The quantum of punishment on violation of various provisions of the law is also provided and the manner of prosecution takes cognizance of the fact that offences in forests are unlikely to be witnessed by others.

The **Arunachal Pradesh Anchal and Village Forest Reserve (Constitution and Maintenance) Act 1984** was enacted for collaborative management of forest reserves belonging to a cluster of villages and sharing the revenue from forest operation with the communities after recovering the expenditure incurred by the state. The **Arunachal Pradesh Soil and Water Conservation Act 1991** envisages preparation and execution of soil and water conservation plan, and prevention of activities prejudicial to soil and water conservation in the hills. Community forests under shifting cultivation are regulated by specific laws like the **Nagaland Jhum Land Act of 1950** and the **Balipara/Tirap/Sadiya Frontier Tract Jhum Land Regulation of 1947**. Removal of timber to places outside the states is controlled by laws such as **Meghalaya Forest (Removal of timber) Act of 1981** and the **Arunachal Pradesh Forest (Removal of Timber) Regulation Act of 1983**. Trading in timber by outsiders in tribal dominated areas is regulated by laws such as **United Khasi-Jaitia Hills District (Trading by Non-Tribals) Regulation, 1954**, and **Mizoram Trading by Non-Tribals (Regulation) Act of 1974** in order to prevent cheating of tribal people by clever traders from elsewhere.

Private forests have also been brought under regulation in many states to prevent the indiscriminate destruction of private forests and interference with customary and prescriptive rights in these forests by owners. Examples of such laws are the **Orissa Preservation of Private Forest Act of 1947**, **Bihar Private Forest Act of 1947** and the **Tamil Nadu Preservation of Private Forest Act of 1949**. The private forests are also subject to the restrictions placed under the Forest (Conservation) Act of 1980. There is no provision of any compensation for the restrictions placed on the private forests.

A legal framework to regulate felling of trees also exists in ecologically sensitive parts of many states. Good examples of such laws are the **Tamil Nadu Hill Areas (Preservation of Trees) Act of 1955** and the **Meghalaya Tree (Preservation) Act of 1976** that have been enacted to prevent deforestation and soil erosion on hills and to preserve the landscape, vegetal cover and climate of specified hill areas in these states. Here also there is no provision for payment of compensation for the restrictions placed on the owners of the trees in the interest of ecology and of the larger society.

### **Forest and related laws at the third tier of governance**

At the third tier of governance at the district level and below the power to enact laws and raise tax and non-tax revenues is restricted to Autonomous Tribal District Councils in some tribal dominated areas of North Eastern India. Elsewhere the third tier is Panchayati Raj which is essentially an elected developmental planning and implementation body with no powers to legislate. Under the Directive Principles of the State Policy of the Constitution of India the states were advised to take steps to organize local self-governance at village level and equip them with adequate authority and finances to enable them to function effectively. By a constitutional amendment in 1992 this constitutional advisory was turned into a constitutional requirement and since then local self-governance with three levels at the district, block (a cluster of villages), and village has taken roots in most parts of the country. Social forestry, farm forestry and Non-Timber Forest Produce fall under the jurisdiction of the local government at the district level but law enforcement in the forests remains outside their jurisdiction and is the responsibility of the state government. Urban forestry falls under the control of the urban governance system of municipalities.

The Autonomous Tribal District Councils in some districts of North East India have been an integral part of the Constitution of India from its inception as recognition of the distinct ethnicity, different ways of life and ethos and the socio-economic conditions of the tribal people. These are elected bodies having perpetual succession with members elected for 5 years and with powers to make laws for management,



allotment, occupation and use of land other than reserved forests, regulation of shifting cultivation, and ownership of land and trading in timber and other forest produce by non-tribals etc., collect tax and non-tax revenues, allocate funds for various activities falling under its jurisdiction from out of the District Fund and implement them. A well known forest law enacted by the District Council is the **United Khasi-Jaintia Hills Autonomous District (Management and Control of Forests) Act of 1958** defines various types of ownership patterns of forests and the authorities responsible for their management and control, and authorizes the Executive Committee of the Autonomous District Council to notify reserved trees, fix rates of royalty, exercise control over transit of timber, regulate felling of trees and make rules for the improvement of forests. Similar laws are applicable in other Autonomous District Councils.

### **Subordinate legislation**

Subordinate legislation, also known as delegated legislation or secondary legislation or subsidiary legislation is law made by an executive authority under the powers given to it by the legislature for the express purpose of implementing the letter and spirit of the primary legislation. In India the subordinate legislation is usually called Rules and the authority for framing the Rules is prescribed in the primary legislation itself. Some examples of these Rules are

- Environment Protection Rules, 1986, under the Environment Protection Act 1986
- Wildlife (Transaction and taxidermy) Rules, 1973, under the Wildlife Protection Act 1972
- The Recognition of Zoo Rules, 1992, under the Wildlife Protection Act 1972
- Assam Sale of Forest Produce Coupes and Mahals Auction Rules of 1977 framed under the Assam Forest Act for managing the sale of forest produce and forest timber leases in the state
- Nagaland Rules to Regulate Removal of Orchids from Forests, 1969, framed by the Nagaland government under the Nagaland Forest Act 1968
- Nagaland Rules to Regulate Export of Forest Produce, 1969, framed by the Nagaland government under the Nagaland Forest Act 1968
- Nagaland Rules for Establishment and Control of Forest Villages, 1969, framed by the Nagaland government under the Nagaland Forest Act 1968

- Meghalaya Forests (Ejection of Unauthorized Persons from Reserve forests) Rules 1979 under the Meghalaya Forest Regulation (Application and Amendment) Act 1973

The parent law often becomes implementable only after the framing of the rules which provide the details and also help tie the loose ends. These Rules have the force of the primary legislation since violation of the provisions of these Rules is deemed the violation of the parent law. Causing changes in these Rules is relatively quicker since these are framed by the Executive and the legislature is only informed about them.

### **Judicial System**

Cases under these laws are prosecuted in the normal courts having jurisdiction over the place where the violation of law occurred. There is also provision for setting up special courts for dealing with forest cases alone under extraordinary situation, like courts for trying sandalwood offences in a few places in the state of Tamilnadu. The appeal lies, as usual, with higher courts including the High Courts of the concerned province and the Supreme Court of India.

### **National Green Tribunal**

The National Green Tribunal is a recent addition to the forest governance institutions in India and is expected to provide an appeal platform for communities, businesses and individuals aggrieved by the actions of forest authorities against which no administrative appeal is possible. This specialized legal institution with both legal and subject expert members was established in 2010 under the **National Green Tribunal Act** for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. Enforcement of legal rights relating to environment and awarding relief and compensation for damages to persons and property also falls within the jurisdiction of this Tribunal which is not bound by the usual court procedures in India and is guided solely by principles of natural justice. The Tribunal has its headquarters in the national capital with four regional branches across India.

### **Financing forestry activities**

All public expenditure in the field of forestry has to be consistent with the National Forest Policy and all public institutions working in the field of forestry, including research organizations, are expected to take cognizance of it and plan and execute their activities in a manner that furthers this policy. The state forest departments



prepare state plans of forestry activities in accordance with their forestry objectives within the overall national forest policy. This is debated in the state planning commission during finalization of the overall state plan, and in the state finance department for the purpose of pruning it to the expected size of available finances and the competing demands of other sectors before submission to the Ministry of Environment and Forests in the Central Government.

The Ministry examines proposals from the states from a national perspective and the international commitments under the UNFCCC, UNCCD, CITES and the CBD before submission to the Planning Commission of India which is headed by the Prime Minister. Once the plan is approved by the Planning Commission of India for the five year plan period the state governments approve their annual budgets and seek legislatures' approval of the same.

A major source of funding outside the annual budget appropriated by the legislature in India is termed **Compensatory Afforestation Fund Management and Planning Authority (CAMPA)** fund which is the accumulated monies received under the compensatory afforestation scheme against forest lands released for non-forestry activities under the Forest (Conservation) Act. Bureaucratic delays have so far hindered the utilization of this fund but once that is addressed the amount available for forestry activities from under CAMPA would rival the annual planned forest budget outlay.

**Overseas Development Assistance and multilateral assistance** from World Bank have been an important source of financing forestry activities in India for the past half century. Lately its importance has receded, and as it now forms a small part of the total monies spent on forestry. But from 1960s to 1990s it played a major role in introducing some path breaking concepts in forest management in India including social forestry by Swedish International Development Agency in 1970s and eco-development around protected areas by the World Bank in late 1980s and 1990s. Skilfully carried out, bilateral and multilateral assistance has the potential of achieving far more than what national financing can achieve with the same amount of funds.

Direct channelling of funds from the central government to the executing agencies at the district level through the **Forest Development Agencies** set up at the district level with forest officials and representatives of Joint Forest Management Committees bypassing the state governments to cut delays, and avoid use of funds meant for forestry for other purposes more emergent to the state governments, has been practiced for the past decade with mixed results. A major flaw in this approach is the lack of adequate monitoring by state government machinery which can serve to

lower the quality of work by the executing agencies at the district level and increase corrupt practices.

In the 1980s, and to a lesser extent in the 1990s, there were many advocates among the bilateral and multilateral agencies of **channeling funds through Non-Government Organizations** for raising forest plantations. But, with some exceptions on a small scale, it has not always been a good experience on account of both lack of forestry skills among the NGOs and also poor monitoring which often lead to misuse of money and poor output.

**Private financing of forestry activities** has been strictly limited to tree planting on private lands. Attempts by private companies to lease forest lands for raising plantations have failed for fears of harming the interests of poor people living in the vicinity of forests. The conduct of private companies in the past who had long-term leases on government forest lands for harvesting bamboo, eucalypts, wattle and other forest products has not been a shining example of what private capital should achieve in a poor country like India. It is unlikely to receive much support in future either.





# The role and concerns of governments and other public institutions

Since the first UN Conference on Sustainable Development the concept of sustainable forest management has gained in acceptance across the world and now it has a universal appeal. But the translation of this appeal into practice has faced many challenges the foremost of which is access to money to make it happen. There is a clear recognition of the fact that sustainable forest management enforces costs on the forest owners and other stakeholders, and that while the advantages are many and substantial they often flow to people and organizations who neither own the forests nor have close stakes in them.

In 1992 at the Rio conference a major agreement was on the implementation of a non-legally binding instrument concerning sustainable management of all types of forests. For many years now the UN Forum on Forests (UNFF) has been attempting to broaden the base of financing the sustainable forest management and has intensively engaged country governments with the help of the FAO, World Bank and other regional development banks in this task. The increasing emphasis on forests as one of the most important climate change mitigation agent and the urgent need for adaptation to the changing climate in forests has given further fillip to it. This has led to deeper involvement of forest governance and development related institutions at all levels across the world in finding ways to contribute to sustainable forest management within the limits of their mandate, competence and availability of resources.

## Role and concerns of institutions

The role and concerns of institutions at all levels essentially relate to environmental, economic and equity issues in making the long and arduous journey to sustainable forest management. International public institutions work to ensure deeper political support to the concept of sustainable forest management so that the country policies and laws could become supportive of it. But they are concerned that upgrading environmental values from forests should not be at the cost of human rights of the people who reside in or by the side of the forests and those who have traditionally owned these forests.

The role of national and sub-national governments is to create a policy and legal environment that rewards sustainable management of forests, arrange for adequate funds through international and national channels and encourage private investments

with commercial objectives as also for reasons of Corporate Social Responsibility (CSR). The governments are also expected to promote research and innovation and promotion of technology that helps in meeting the overall objectives.

Bilateral assistance organizations' role lies in increasing access to financial assistance to the countries that actually need it along with technical guidance where necessary. Their central concern is about corrupt practices that make it difficult for them to justify funding to their own tax payers. They want transparency in execution and an effective monitoring system supported by an active media.

These role and concerns regarding forests and forestry are described below.

**i) An effective policy regime backed by laws**

One of the most important requirements of a state that is considered a good bet for investment is a clear set of policies that are transparent and durable and that are made effective with the backing of relevant laws implemented fairly and firmly. Clarity in policies and laws ensures predictability of response by the state to outside stimuli creates a good business environment in which the investor is not caught by surprise. International organizations are concerned that this area has not received much attention except in the developed countries of the region and, to a lesser degree, in countries like Malaysia, China, Thailand, India, etc. National and provincial governments should work to ensure that the lacunae in this aspect are addressed quickly.

**ii) A network of competent and effective institutions**

Good forest governance requires the presence of a large network of competent and effective organizations like forest departments, law enforcement agencies, markets for forest goods and services, forest industries, forest research institutions, forest resource mapping centres, extensions centres, training centres and university departments spread across the country and linked to relevant international organizations. Organizations like the FAO have contributed to the development of many such organizations in the countries one very good example of which is the Forest Survey of India which was established with the help and guidance of FAO as Pre-investment Survey of Forest resources in the 1960s and which has turned out to be one of the most outstanding forestry organization in India today. Helping countries create such a network of institutions in the Asia-Pacific region should be one of the primary tasks of international organizations.



### iii) Overemphasis on conservation needs correction

The governments at the third tier feel that there is overemphasis on forest conservation and the importance of this resource in the economy of the districts is discounted heavily. The trees are allowed to grow old and economic forestry is seen as a practice of lesser virtue. The utility of such an approach needs a thorough examination by international bodies and national research organizations.

### iv) Revenue generation

National governments, at least of large countries, and many provincial governments do not see forestry as an important source of revenues for exchequer. However, for the governments at district level the revenues from forests are a very important determinant of their approach to forest management. In order to nudge them in the direction of SFM it would often be necessary for the national governments to find ways to compensate them for the lost revenues.

### v) Employment generation

Employment generation is a high priority for governments at all levels in the Asia-Pacific region and the most preferred public activities are those that create more employment opportunities of better paid jobs. It has been estimated that an annual investment of US\$ 1 million in forest activities in a developing economy creates from 500 to 1000 permanent skilled jobs (Nair and Rutt, 2010). Investment in forests helped US recover from Great Depression in 1930s and Japan after the disastrous Second World War creating jobs and building natural capital stock.

But forestry as practiced in many Asia-Pacific countries, including India, tend to be confined to raising nurseries and planting seedlings, which generates mostly unskilled and semi-skilled seasonal jobs alone. Most other aspects of forestry – soil and moisture conservation practices, fire management, desertification control, productivity improvement of existing plantations, plant disease, weed and insect control; agro-forestry, urban and peri-urban forestry, awareness building, and training and teaching are either ignored or paid peripheral attention. Forest conservation mostly means mere non-interference in forests, and conservation activities like demarcation of boundaries, maintenance of inspection paths and roads, and creating and managing nature education and information centres attract little investment. As a result, forests remain low in quality and visibility and provide little satisfaction to the people.

For forestry to give full economic and ecological values to the people it is necessary that it is practiced in all its aspects and is not reduced to mere tree planting. It would require a major change in the approach and such a change can only come if

international organizations like the FAO and the World Bank take a lead in it.

#### **vi) Biomass energy**

The district level governments are very keen to exploit the potential of biomass energy but the national governments are less enthusiastic about it fearing that good forests and biodiversity would be sacrificed for energy if this happens. While there is substance in these fears it is important to understand that wood can, and should, be an important source of energy and this is an area where genetic research for fast paced production of energy wood should not be hampered due to endless debate about the desirability of it. The rural needs for energy are expanding fast all over the developing countries of Asia-Pacific but better consumer organization in urban area means that the urban needs get prioritized resulting in severe shortfall of energy supply in rural areas. This inequity can be addressed only if the rural consumers also become the producers of the energy as can happen with ease in decentralized biomass based energy production. This will also enable them to access public funds in the energy development sector which are usually several times more than those for the forestry sector. The national governments and international organizations may work together to address this situation at the earliest and channel appropriate part of energy sector funds for this purpose to the rural biomass energy producers through the district level governments.

#### **vii) Transparency**

Suspected high level of corrupt practices in forestry departments in many countries of the region has been a matter of concern for the international organizations. Greater transparency in planning and execution of forestry works backed by laws and setting up institutions such as the Right to Information Act and the Information Commission in India should help to a degree. Effective external monitoring of expenditure of funds provided by multilateral and bilateral organizations will also improve the situation. Involving media in the exposure of wrong doings is useful in an environment in which media itself is properly self-regulated. But deeper changes in the situation would come only when the society refuses to condone corruption among its members and creates an environment in which integrity is rewarded and dishonesty is shunned.

#### **viii) Low investment in research**

In Asia-Pacific research in forestry has not attracted enough high talent in comparison to agriculture and the published works in reputed journals have been relatively far less compared to Europe and North America. While the reason partly lies in very long periods that forestry research requires it is also due to the fact that forest management



in the region, except in developed countries, does not rely on scientific inputs and is either tradition based or on the European forestry practices of the nineteenth century. Low demand for forest research from the forest managers results in low investments in research and consequent neglect of the possibilities that the advancing technologies could open up for forest productivity enhancement, new uses of forest biodiversity and forest based energy production etc. International organizations along with national governments need to focus on forest research. Developing strong collaboration among research institutions in the region would be a very good initial step. This does not require high investments, only a determined facilitative role by a leading international organization.

#### **ix) Private investment in forestry**

In India there is a strong opposition to the role of private investment in degraded government forests. There has been persistent demand from industry for permission to raise pulpwood and other plantations on these lands but the national and provincial governments are strongly opposed to it for fears that people who are dependent upon these lands for grazing their cattle, edible roots and mushrooms and firewood would be adversely affected once these lands get transferred under the control of private investors. In countries with high population and low availability of lands, like in India, such investments may never be welcome but in countries where land is not a scarce commodity it would be advantageous to attract private forest enterprise in unproductive government forest lands. However, this should be done with genuine stakeholder consultation and under close supervision.

#### **x) Forestry and climate change mitigation**

Forestry activities have remained marginal under the Clean Development Mechanism (CDM) on account of long gestation, temporary nature of credits, high risks and the unwillingness of the EU to purchase forest based carbon credits. The situation in the voluntary carbon market is somewhat better but the size of voluntary market is only a small fraction of the mandatory market. Now, however, REDD+ holds much promise for the forestry sector in Asia-Pacific, particularly because large amount of funds have been committed for REDD+ by developed countries at the Durban Climate Summit. The district level governments are very hopeful of increasing their income under REDD+ programme and they need support and guidance from the national governments and international organisations.

#### **xi) Forestry and adaptation**

With the prospect of global warming, forests across the Asia-Pacific are set to

face adverse conditions with the change projections being particularly disturbing in the tropical parts of the region. Fires, infestation of insects and plant diseases are projected to become much more severe in the coming years and the current habitats of many species will become less hospitable resulting in migration. Intensive research programs in the field of tree productivity, tree pathology and tree genetics are required for an understanding of what is needed to enable forests to adapt to these changes. But as of now very little adaptation work has been initiated in the forests of the region. The adaptation plans that have been developed so far in many Indian states are usually very general in nature and inadequate for initiating concrete steps. Effective guidance, and funding, from International organisations would be required for taking much needed action. National governments should take steps to link forestry research to funding under adaptation.

#### xii) Forest land tenure

International organizations want the customary rights and privileges that rural and indigenous community and households residing in and close to forests have traditionally enjoyed, should be recognized formally so that this section of population does not suffer injustice. They appear largely sympathetic to the idea of disaggregating the public ownership of at least a part of forests that have been enjoyed to varying degrees by people living in the vicinity into either smaller holdings of households or relatively larger holdings of communities with full ownership control under a formal legal framework of duties and responsibilities. They see a permanent tenure over forest lands as good collateral for accessing loan from banks that would incentivize investments in forestry activities by smallholders and thus lead to SFM.

National governments, more concerned about the political economy of their decisions with regard to land, also see forest land tenure settlement of government forest lands in favour of communities and rural households in a positive light. The Asia-Pacific region has seen historically the greatest ever allocation of publicly held forest lands into privately held property in recent years. In China about 173 million ha of collective forest land, which accounts for 95 percent of total collective forest land, has been contracted to 84 million households, averaging 2.67 to 3.33 ha per household across various provinces by the end of 2011 while India has already allocated 1.8 million ha and the process is still going on. In India this is one area where there is a rare political consensus across the entire political spectrum, even among those who cannot seem to agree on anything else. There are also similar exercises going on in the Philippines, Thailand, Indonesia, Cambodia, Laos and many other countries of the region.

For the same reason of political economy the enthusiasm of the provincial governments and of the third tier of governments in the Autonomous Hills Tribal District Councils



and Panchayats for allocation of forest lands among the rural households is clearly visible without exception. This intense political support, with strong backing by international institutions, leaves little doubt that the current movement of forest land tenure settlement would gather pace in the times to come.

This enthusiasm for privatizing publicly controlled forest lands is, however, not shared by the professional foresters working in Forest Ministries and the state forest departments. They point out that while there are many examples of permanent household or community tenure over forest lands few could be termed as sustainably managed. An example of this is the community owned forests in north eastern India where there has been almost unabated decline of forest resources even when the tribal ownership has remained unhindered and is constitutionally protected. Forest department officials in north eastern India also point to increasing tendency among powerful and well connected tribal people of exploiting their customary laws that allow clan members to possess the lands under active cultivation by their families by planting long-term crops like rubber and tea (instead of the traditional rice crops) over large extents of such lands and thereby cornering common property resource to themselves.

Forest department officials also point out that from past experience in North Eastern India there is also little to suggest that forest lands owned by communities would be able to attract investments for forestry activities since tribal communities manage their natural resources in accordance with their immutable tribal customary laws which could inhibit modern business management practices and thus discourage investments.

### **xiii) Equity**

In developing economies the distribution of costs and benefits along the production chain of natural resources, including forest products, often suffers from inequity. It is skewed against labour and small land owners and favours capital and traders, particularly in the case of high value NTFPs. This has been attracting the attention of international organizations as also of governments at all level, particularly those at the district level. No long-term investment in forestry can be safe and profitable unless it is seen as a just and equitable use of forest and land resources. Diversion of common lands long in use by local communities for raising commercial plantations of timber and biofuels has only served to cause anger among the dispossessed which can ill-serve the interest of forestry. The country governments may need to avoid taking such steps and bilateral and multilateral international organizations need to be vigilant against it.

A major concern of international organizations is that the benefits reaching the poor are receding relative to those of more powerful members of their communities. Community forest resources are often cornered by the more influential community members many of whom may actually be residing far away in capital and other important cities. In view of the likely enhanced returns from community forests under the REDD+ program there are expectations that the country governments and international organizations should work to ensure that future investments in forestry should serve to enhance intra-community equity also.

#### **xiv) Forests for poverty alleviation**

International institutions, in pursuance of the Millennium Development Goals, see poverty alleviation as the primary goal and most discussions among them on the role of forests in the economic lives of indigenous and other local people is centred on survival and subsistence. This contrasts with the attitude of national governments in Asia-Pacific and certainly governments at the second and third tiers. With most countries of the Asia-Pacific region developing at 5 percent and above the expectations of even the poorest are not merely survival but ongoing growth and increasing share in economic profits. This is most reflected in the attitude of the third tier of governance that is closest to the people who, while not opposed to forestry schemes focussed on poverty alleviation, do not betray high enthusiasm for these schemes.

#### **xv) Long gestation period**

Long gestation of forestry activities is not considered a deterrence to financing by international organizations and national governments, and even by sub-national governments in large countries. But for third tier governments there is clear preference for shorter gestation and quick commercial returns, or meeting demand for a forest good like fuelwood or a marketable non-timber forest produce in a short time frame. Long-term investments in enhancing ecological value of forests is only a limited concern of these governments unless such enhancements lead to higher returns from ecotourism or other such non-consumptive activity.

Long gestation also entails higher risks. Forests are vulnerable to theft and arson besides damage by natural causes like disease, fires due to lightening, insect attack, drought and floods, cyclones and storms. Prevention of theft and arson is a shared responsibility between the forest owning organization and the relevant public safety organization. The owner is required to take reasonable precautions for the safety of property and insure it against the possible causes of damage, and the government is expected to provide a generally safe environment in which the property can remain unharmed. Organized methods of risk mitigation are a necessity to make investments





in forestry possible. Governments at the district level expect national and state governments to invest in forest protection duties and also make insurance financially accessible. Forest departments seek greater investment in protection machinery as also adequate manpower.

#### **xvi) Forest certification**

International organizations have been promoting forest certification as an important means of promoting sustainable forest management not only within the country but also in other countries from where the imported timber originates. The national government in India has now initiated the process, though somewhat reluctantly, and state governments are expected to fall in line. But the district level governments are concerned about the ramifications of this certification process on account of costs and also the possible harassment to the private tree owners and traders. It has been argued that certification is expected to lead to higher stumpage value but that may not necessarily result in increased profits because the cost of certification is usually quite high and the amount of wood produced also goes down considerably because of the need to ensure that the forest is sustainably managed or at the very least be well-managed.

In addition, market faith in the quality of certification, which determines the prices that the certified product can fetch, is also dependent upon the overall environment in which certification is achieved. If overwhelmingly large extents of forests in an area are without certification the chain-of-custody (C-O-C) of timber harvested from the few certified forests there would be more difficult to establish and the market would likely discount the certification in accordance with the perceived risks. So in order that the market does not discount the prices of certified timber it is important that International organizations act to persuade governments to create an environment of good forest governance under which a larger number of forest owners could agree to certification. They should also ensure that most, if not all, national governments agree to certification process because that would make this new, and somewhat painful, process politically more acceptable.

#### **xvii) Accessing better paying markets**

Most forestry products are consumed in the immediate locality which is good for a sustenance economy but does not satisfy most producers because of very low earnings. Enlargement of market is important to arouse the interest of investors in forest based enterprise. One way to do so is through geographic labelling for a few forest products like Burma teak, Mysore sandalwood and Assam agar which enhances market value of products. Labelling is possible under GATT but it will be of advantage

only with widespread knowledge of the good marketable qualities of specific labels. This requires sustained advertising and other media focus and would need lead by international organizations to persuade governments and industry associations to initiate action. Brand building of high value forest products like honey and mushroom from specific community forests will also help them get premium prices and encourage them to sustain the quality of their products

#### **xviii) Non Wood Forest Produce**

Governments and Institutions at all level feel that NWFPs bring only a small fraction of possible benefits to the forest owners, private or public, and the largest part is stolen or wasted away. Marketing of most NWFPs that have medicinal uses is heavily tilted in favour of the long chain of traders and deliberately limits flow of information. The producers and collectors get extremely low prices while the final consumers pay exorbitant prices. Also there are rampant adulteration and other clandestine and fraudulent practices and the consumer is rarely assured of the product quality which further restricts the growth of market.

While the international organizations and governments at all level are generally in favour of continuing with the current practice of open access collection of NWFPs in government owned forests the forest department officials feel that it is this open access combined with the willingness of consumers to pay very high prices, and extremely secretive trade practices evolved over a long period of time which is responsible for this situation. The whole chain of activities, including command and control that mimic crime more than commerce, has served to limit the number of traders to very few. Lax control and corruption in regulating agencies have contributed to the scale of the problem. The issue of open access to these resources from public forests is politically sensitive that can be resolved only by involving the neighbouring stakeholders through a political process in which equity, rather than law, should hold centre stage.

An important recent development in this direction is the signing of Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity providing a transparent legal framework for this purpose. The Protocol creates greater legal certainty and transparency for both providers and users of genetic resources by establishing more predictable conditions for access to genetic resources and ensuring benefit-sharing when genetic resources are transferred from the source to the user.



### **xix) Extension services**

There is a widely felt need for knowledge of silviculture and pest control of at least the more important tree species. Unlike in agriculture the extension services in forestry in the region are underdeveloped. In countries where resource crunch does not permit separate extension services for forestry it might be better to combine them with agriculture extension. Besides silvicultural services, there is also a need for education for empowering wiser and wider choices from economic angle. Niche species earn good returns and there is a need to educate landowners about market prices of various timbers so that they may earn increased incomes.

### **xx) Laws that hinder forestry**

International agencies have often drawn attention to archaic rules that place unreasonable restrictions on harvesting and transportation of timber creating an unfavourable environment for investment in tree growing. One such rule widely practiced is the Timber Transit Rule in most Indian states introduced to enable a small forest law enforcement agency to control the transport of illegally felled timber from government forests spread over vast areas. Under these rules timber, even when harvested from privately owned trees, is allowed to be transported only after inspection and authorization through a permit by the state forest officials. This not only leads to harassment and long delays in timber transport and consequent losses but is also a major cause of rent seeking behaviour in the forest departments. The governments at the district level feel that central and state governments in India should address this problem with urgency. They feel that there is no justification to impose extra costs on genuine owners of trees for the sake of protection of public property from rogue elements.

Similar concerns are also expressed by district level governments for restrictions on tree felling in hills and a ban on harvesting of forests at elevations exceeding 1000 meters. This does not help in making forestry an economic activity in hills which are the main areas remaining for practising forestry. These governments feel that if restrictions are imposed for ecological reasons than the beneficiaries, which in these cases is the larger society beyond the smaller communities that are asked to make sacrifices, should be willing to pay the costs incurred in the delivery of ecological services.

## **xxi) Fiscal incentives**

All over the Asia-Pacific region forestry has been organized through a set of regulations that both prescribe and limit forestry activities on private and public lands. In several hill townships of India trees are not allowed to be felled without permission which often handicaps honest landowners from following silvicultural practices they think best for their tree crops while lacking the teeth needed to control unscrupulous landowners who may surreptitiously girdle or remove trees. Incentives are likely to work better in reaching desired public objectives from private efforts rather than regulations. Governments can also encourage investment in forestry by providing fiscal incentives like tax relief, low interest loans and even grants meeting part of the costs. In India the income from tree plantations is treated as an agricultural income and no income tax is payable on it.

Sometimes it is possible to levy an additional tax, called Green Cess or Forest Cess, payable on financial transactions over and above the normal taxes and the proceeds used to create Forest or Environmental Fund to finance forestry activities including those undertaken on private and community holdings. In order to ensure that this additional levy does not affect poor people it can be restricted only to financial transactions over a minimum limit. No governments would, however, be willing to levy new taxes because of its unpopularity and it would need much persuasion by International organizations to push governments in that direction.

## **xxii) Reforms in forest governance**

There is an urgent need for reform in the mandate of forest departments which is currently law enforcement centric, and retraining of forest department officials. This is particularly required because forestry in the heavily populated land-deficient Asia-Pacific region will remain largely small-scale. Small forestry operations suffer disproportionately from inefficiency and corruption in forestry establishments and face even more disincentives and roadblocks than large scale operations.

Retraining would be helpful and deeper interactions with academic world may help break the seclusion from others that is common to many forest departments across the region. Forest training institutes in collaboration with universities could develop new curriculum for forestry schools that covers social, legal, economic and political aspects in addition to the growth and silviculture of tree crops. Linking with international research organizations and promotion of networking and sharing information and expertise for this purpose would prove very useful for ensuring quality.



### **xxiii) Payment of ecosystem services**

Forests are mostly not profitable by themselves because timber and non-timber goods produced fetch economic returns that rarely offset the opportunity cost of placing the land under forests. Most services provided by forests fall outside the market and it was only recently that climate change mitigation services have become a saleable commodity in carbon market. The CBD also provides hopes of payment for biodiversity services some time in the near future. There is also some forward movement in the valuation and payment of forest hydrological and aesthetic services though entirely localized to a few sites and no international mechanism for these is in sight.

It is only when all non-market services produced by the forests fetch reasonably good market values, rather than mere appreciation as now, that forests would be able to break the investment barrier. International organizations have been placing some emphasis on it in the past few years and the national and provincial governments should work closely with international institutions to find ways to compensate forest owners for the ecological services rendered by their forests.

### **xxiv) Forest ecosystem services should be a boon, not burden**

In many countries of the Asia-Pacific region landowners who plant trees, particularly in ecologically sensitive areas, fear loss of control over the enjoyment of their own lands though the degree to which it happens varies among countries and localities. This is because many governments of the region tend to place high value on the public good aspects of ecological services generated by private forests and tend to deny the owners the advantage of harvesting forest products from their own lands. This is done either without paying compensation, or paying only an insignificant amount at best failing to appreciate that in planting trees on his land a landowner invests his scarce resources for his future good and any public goods and services that follow are merely unintended by-products. Forestry would attract more investment if people know that their investments are safe and any takeover of their property by the state would be only through payment of adequate compensation. Governments at the national and provincial levels are mostly responsible for such acts and they need to act wisely in this regard in future.

# Guidelines for formulating national forestry financing strategies: Priorities for national governments

Primary objective of financing of forestry activities is to optimize the production of forestry goods and services, capture their full value and ensure equitable distribution across stakeholders while ensuring that the capital value of the forests does not diminish both in their monetary value and in ecological terms. The overall objectives could be summarized as economic efficiency in maximizing returns on investment, incentivizing sustainable use of forest resources, enhancing gender equity and inter- and intra-community justice, promotion of good governance, accountability and transparency, and increasing biodiversity conservation without burdening stakeholders unduly with increased costs on this account.

The role of national governments is to create a policy, legal and fiscal environment that rewards sustainable management of forests, channelize adequate funds through international and national channels, and encourage private investments with both commercial objectives as also for reasons of Corporate Social Responsibility. The governments are also expected to promote research and innovation and promotion of technology that helps in meeting the overall objectives. The priority for action for the national governments can be summed up as follows:

- 1) The topmost priority for governments should be to create an effective policy regime based on a medium and long-term vision that moderates ecological goals with economic and political constraints.
- 2) This policy regime should be backed by suitable laws and administrative rules for speedy implementation. The laws and rules that serve to hinder or delay implementation need to be amended or deleted from statute.
- 3) The governments should create (or improve where they already exist) a network of competent and effective forestry and related institutions and encourage them to link with each other as also with relevant international organizations. Helping countries create and improve such networks of institutions in the Asia-Pacific region should be one of the primary tasks of international organizations.
- 4) There is an urgent need for reform in the mandate of forest departments, which is generally law enforcement centric, retraining of forest department officials



and deeper interactions with academic world that may help break their seclusion that is common to many forest departments across the region.

5) The overemphasis on conservation that seems to have entered forestry in many countries needs reassessment, and correction where necessary, because large areas of countries can be brought and retained under forest cover only if they are economically useful besides being ecologically important.

6) Revenue generation from forests is important at lower levels of governance and national governments should find ways to compensate them for loss of revenues if larger national and international obligations require them to limit forest harvesting.

7) The importance of forestry in a country, and flow of funds to it, is assured if it creates a significant number of well paid and respected jobs. Forestry will contribute its full economic and ecological potential to the country if it is practiced in all its aspects and not reduced to mere tree planting.

8) Forestry sector can easily access the much larger national, multilateral and bilateral funding for energy sector if it contributes significantly to production of biomass based modern form of energy. It will also help the rural energy consumers also become its producers as can happen with ease in decentralized biomass based energy production.

9) Greater institutionalized transparency and increased external monitoring of expenditure will increase the trust of funding agencies in the integrity of forest governance in developing countries and thus lead to larger flow of funds.

10) Low demand for forest research from forest managers has resulted in low investments in research and consequent neglect of the possibilities that the advancing technologies could open up. National governments, with support from international organizations, should act to make forest management primarily research based and thus lead to forest productivity enhancement, new uses of forest biodiversity, increased forest based energy production, etc.

11) Private investment in raising forest plantations over public lands may not be welcome in countries with low per capita availability of lands but in countries where land is not a scarce commodity it would be advantageous to attract private forest enterprise on public lands unsuited for agriculture. However, this should be done following a thorough stakeholder consultation process and under close supervision.

12) Since community forest resources are often cornered by the more influential community members the governments and international organizations should work to

ensure that investments in forestry serve to enhance both inter and intra-community equity.

13) Long gestation of forestry investments increase risks of theft and arson protection against which is a shared responsibility between the forest owning organization and the relevant public safety organization. Governments should invest adequately in forest protection duties and also make insurance financially accessible.

14) Forest certification will help attract investment only if it is accepted widely in a country. Governments should ensure that the reasons that limit its appeal are addressed quickly.

15) Accessing better paying markets for high value forest products require brand building which may require help from government and industry associations.

16) Governments need to take cognizance of the fact that barely a small fraction of the value of Non Wood Forest Produce removed from public forest lands reaches the exchequer because of open access of the resource, lax control and corrupt practices and act in a concerted manner to improve the situation.

17) There is a need to set up an efficient system of extension services, on the pattern of agriculture extension services, to make rural forestry sustainable. Continuous capacity building of the forestry department staff and the rural communities should be an important responsibility of this service.

18) Governments need to publicly declare that in planting trees and conserving forests a household or a community is investing its scarce resources for its own future good and that public interest in ecosystem services co-generated would not be allowed to undermine their interests.

19) Governments should evolve mechanisms to recognize the multifunctional nature of forests to enhance the economic viability of forestry through payment of ecological services using available international agreements.

20) Governments need to recognize that forests which merely help survival and subsistence of the poorest would never be able to attract private investment for growth and they must work at creating value through forestry.

21) Governments need to work at increasing forest productivity by encouraging use of technology and investing in rural forest management improvement.

22) Governments should act to evolve suitable mechanisms for spreading high risks, which discourage lending for long-term forestry projects, among a set of lending





banks, land owning community and outside investors under the guidance of Asian Development Bank.

23) National governments should encourage their forestry and related institutions and forest communities to access the actual and promised funds under REDD+ and also for adaptation to climate change for meeting their SFM objectives.

24) Forest land tenure reforms currently underway in many countries of the region may need mid course evaluation to see if the ecological and equity objectives of the reforms are being met satisfactorily.

## ANNEXURE 2

# **Safeguarding the interests of rural communities in Asia-Pacific forestry sector**

by

Promode Kant



## Executive summary

This study is a component of the new FAO initiative on financing sustainable forestry management in Asia relating to mapping the interests of rural communities in sustainable forest management. A detailed analysis of the issues undertaken in the study suggests that the core concerns of rural communities can be broadly categorized as those of rural households who own forests or tree plantations and those of rural communities as a whole in relation to the common forestry assets.

The rural households expect that their private forest and tree assets should earn them a regular and decent income at short intervals as a supplement to their other regular incomes. They also expect larger incomes after relatively longer intervals to help them meet special expenditures. They expect that at no time in future public interest in their forests should undermine their private interests, and their property and rights should be free from fear of being taken over by the State in the name of public interest in preserving ecological services without a fair and acceptable compensation. They want the right to sell or bequeath their forests similar to those applicable to other immovable properties, the freedom to change land use in their own interest and raise loans against their forest property both for development of forests as also for other household investments.

In the case of community owned forests the community interests are somewhat different on account of the communal nature of holding, conflicting demands from community members, and the increasing inequity among the community members, resulting power imbalance and consequential feeling of being sidelined among less powerful community members. The communities expect that the forests under their full or partial control should lead to significant and regular incomes besides meeting most of their energy, NWFP and small timber needs. They seek government help in raising finances for development of their forests but they also have fears that bigger public investments in their forests could lead to dilution of their rights as the government might insist on delivery of ecological services at the cost of forestry goods. A legally enforceable guarantee that the community forests would never be taken over, or their rights diluted in any manner, is a major expectation of the communities.

The communities seek greater monetization of both the goods and services aspects of the output of their forests through inclusion in the proposed REDD+ program. Less powerful sections of communities also expect the governments to ensure that there is greater equity within the communities and the new and enlarged benefits reach them

in proportion to the REDD activities performed by them rather than merely hereditary community membership.

Both rural households and communities expect good forest governance from the forestry departments in protecting the trees from theft and also from fires and disease reaching their property from outside, and in creating an environment conducive to reduction in transaction costs. They want no restrictions on harvesting and transport of forest products. They seek help and guidance from forestry departments in sustainably managing their forests, access to high quality planting stock, and appropriate assistance in transport, value addition and marketing of forest products particularly non-timber forest products. They desire an improvement in their working relationship with government officials.



# Introduction

Of the four billion hectares of forests worldwide about one fourth, a billion hectares, are owned *dejure* or *defacto* by local communities or their members and they provide forest ecosystem goods and services to an estimated one billion people (Elson, 2011). One seventh of humanity, often the poorest, thus depends upon this natural resource almost entirely for energy and access to clean water and, to a lesser degree, for housing, nutrition and health. Forest ecosystems are their natural capital and the goods and services they generate constitute their income. This section of population is also the one which has seen the greatest growth in numbers in the past fifty years placing an enormous burden on the forests. The burden is compounded several folds due to the fact that these forests are often also the source of timber supply to urban areas and industries leading to large scale deforestation and forest degradation.

Exposed to such intense usage these forests need the highest levels of investments and managerial attention in order to ensure that they continue to generate goods and services on a continuous basis. But for a few notable exceptions, in general this has not been realized. Societies often tend to ignore or undervalue the multiple functions of forests and in many tropical countries the value of growing stock is not recognized and forests are seen as resources to be exploited and the steep decline of residual value does not trouble most. Only an estimated 11 percent of tropical forests are under responsible management (ITTO, 2011). Investments are minimal when they are not altogether absent and reliance is usually placed completely on nature. Even where some investments are made the forest management is not rooted in the concept of sustainability; neither technology nor silvicultural approaches suited to the site or the objectives are used. Not surprisingly, it results in inefficient use of the forest resources and lowered productivity.

In his report to the UNFF at its ninth session in February 2011 the UN Secretary General stated that while the community-based forest management has gradually increased over large parts of the world its success so far has been less than the possibilities it offers. He pointed out that "additional emerging opportunities, including bridging the gap with the timber industry, payments for ecosystem services, reducing emissions from deforestation and forest degradation plus conservation, forest landscape restoration and a growing interest in forest financing, could breathe new life into the concept."

The provisioning of adequate resources for investment in sustainable forest management of forest resources including those in community and private holdings

has been receiving attention at the highest level internationally with the United Nations Forum on Forests (UNFF) according priority to the development of National Forest Financing Strategies (NFFS) since 2007 when in its seventh session the Forum decided to mobilize increased and additional financial resources to support the implementation of sustainable forest management (SFM) and achievement of the global objectives on forests through an innovative forest financing framework for all types of forests. As a follow up World Bank and other regional development banks have initiated studies in various aspects of this complex task. Financing mechanisms that are being designed specifically for REDD+ and adaptation under the UNFCCC, conservation of biodiversity under the CBD and arresting of desertification under the UNCCD all have high significance for the NFFS.

In 2009, the United Nations Forum on Forests launched the Open-ended Intergovernmental Ad Hoc Expert Group on Forest Financing for implementing sustainable forest management in all types of forests including in community forests. There has been limited progress in this complex work as of now.

### **Objective and scope of the study:**

This study is a small component of the new FAO initiative on financing sustainable forestry management (SFM) in Asia, titled “Putting principles into practice: Developing an inclusive framework for enhancing investments into Asia-Pacific forestry”, and relates to mapping the interests of rural communities in sustainable forest management including the right to ownership and the use and role of forests in improving livelihoods.

The study has the specific objectives of:

1. Preparation of a report describing the generic interests of rural communities in Asia-Pacific region regarding processes to attract investment into SFM.
2. Elaboration of how the interests of rural communities and vulnerable groups may be safeguarded in the process of designing National Forestry Financing Strategies aimed at attracting investments into the forestry sector in Asian countries.
3. Making recommendations on improving the processes of allocating rights to forest resources to local communities with limited political influence and negotiation power to prevent their being “squeezed” by powerful interest groups in the management of resources.



#### 4. Recommendations for the design of National Forest Financing Strategies.

### **Methodology**

A review of the literature to uncover relevant work that has been conducted in Asia on safeguarding the interests of rural communities was undertaken. Similar works undertaken in other regions, specifically in Latin America were also explored (van Dijk and Savenije, 2009).

In the process of reviewing relevant literature on the issue, cases of best practice with regards to inclusive stakeholder processes in formulating financing SFM policies were identified and brief case studies developed that contain basic information about the community, such as location, means of income, composition of economic activity, and the strength of local communities vis-à-vis political institutions and private companies. This is followed with an extensive analysis of the reasons for why this particular community was able to obtain a voice in the policy-making process and a short discussion of lessons learned and recommendations to be derived from these cases to a more general approach of formulating NFFS.

In addition, detailed discussions were held with two rural communities in Nepal and with others who had worked with rural communities across the region to understand their perspectives on what are crucial interests to be maintained in the process of formulating NFFS. Similar discussions were also held with a number of experts working with international organizations that have been working in this field to get their views on how NFFS should be designed in order to maintain the interests of tree-growers and rural communities.

The information so gathered was analysed and discussed among a number of experts before preparing this report.

## Literature review

Agrawal and Ostrom (2001) have identified five variables in community enjoyment of forest resources, namely, access to enter forests and enjoy non-subtractive benefits like passage, withdrawal of extractable resources from forests, management of forest for enhancing its value and regulating its harvest, right of exclusion of others from enjoying the forest resource, and the right of alienation for transferring management and exclusion rights. All these variables need not exist together in favour of a community in the context of a forest for it to be termed community forest. For example, a community may enjoy the right of access, withdrawal and management without the right of alienation and exclusion which may rest with the national or provincial government. Or the right could be restricted to access and temporary alienation of access only as is often the case in some forests that are managed for ecotourism purposes.

These rights also entail a set of duties which at its most fundamental level is the duty to ensure that harm is not caused to the resource in the process of enjoyment of the right. This follows from the fact that the right is communally owned and if individual rights holders do not ensure the good health of the resource other rights holders cannot enjoy their rights. The sustainability principle is, therefore, ingrained in the community rights by the very communal nature of the right. Hardin's theory of the 'tragedy of commons', however, points towards the fact that unless sustainability principle is enforced effectively the overuse and degradation of the forest resource cannot be avoided. Stated otherwise, this means that unless sustainability can be ensured investments in community forestry would only amount to wastage of financial resources.

Community forestry has had a positive impact on the social, economic, and environmental aspects of rural life and in the development of new institutions as community members work together for planting valuable tree species, protecting them and harvesting them when the time comes. Roughly one fourth of world's forests are controlled locally by rural communities contributing US\$75–US\$100 billion in goods and services to the economy annually involving one sixth of the global population (Elson, 2011) in addition to environmental, social, cultural and spiritual benefits.

Forests are a dynamic biological community of flora and fauna each member of which reproduces, grows, decays and dies, and copes with storms, droughts and fires thus creating an ecological diversity that enhances the richness of the landscape in large





sized forested lands. But in smaller isolated forest lands it requires a farmer's skills to ensure their survival rather than depending upon the nature to do the job (Vanclay et al., 2006). Small scale forestry incorporates all the challenges of large scale forestry like long gestation, huge market uncertainties and public expectations of ecological benefits but reluctance to pay for them (Mitchel-Banks, 2001). In addition, it has the limitations posed by small scale higher transaction costs leaving very narrow margin for manoeuvrability. Lillandt (2001) recommends organizing smallholder forest owners for reducing transaction costs as many core forestry activities like fire control and disease management as also road access are best done collectively because taken individually these activities would not only be too costly but also often ineffective.

To optimize the benefits of community forestry for rural livelihood increased awareness of relevant technologies and access to finances among the communities would be required and the governments need to take proactive steps to enable this to happen. Tempfel and Beukeboom (2007) have described the careful stewardship of the Government of Bhutan in allocating parts of the government forests as community forests giving households with traditional claim to forest produce from the proposed community forestry area the opportunity to join Community Forestry Management Group. The policies of the state are the most crucial instruments for encouraging sustainable forest management of small scale forests (Hermelin, 2001). Incentives and subsidies are important as a first step to quick start but can create dependencies and force weak governance structures to enhance the subsidies to unsustainable levels. A long-term approach with greater emphasis on creating the right environment and provision of extension services combined with regular evaluation of strategies adopted would work best.

For the community to be able to participate in business it would need to come together in a legally recognized entity that can enter into agreement, sue and be sued, and take executive decisions. An entrepreneurial culture also needs to be created in this entity. Rights claimed by communities must not only be recognized locally but also legally otherwise investors may not consider them sufficiently robust for making large long-term investments (Elson, 2011).

Lack of transparency and of genuine participation of the community in the management can lead to the resource management benefiting a few and the community losing interest (Vickers and Mackenzie, 2007; Phanbuh, 2008). Without continued economic benefits beyond the initial harvest the community will have no interest in managing its forests. Barik and Darlong (2008) have examined the paradox of a people inhabiting lands endowed with rich natural resources living poverty stricken lives and conclude that it is because the state's natural resource management policies lack livelihood focus

and may be excessively oriented towards conservation and suggest that the tradeoffs between conservation and livelihoods should be balanced in favour of livelihood. The need for conserving forest resources does bring a degree of conflict with the rights holders as conservation has often meant exclusion of people and for long international assistance in establishing conservation areas has led to removal of people from lands considered important for wildlife conservation violating civil and land ownership rights (Campese et al., 2009). The rights-based approaches to conservation may vary widely but good governance is the bedrock on which conservation has to be based.

Smallholder teak plantations play an important role in rural household economy of Indonesia with an average of 10 percent of the farmer's lands allocated for teak woodlots. The economic contribution of teak wood sales to household total incomes is about 11.6 percent (ACIAR, 2005) but the real value lies in the fact that teak trees keep growing till money is critically needed for important family events. But smallholders earn low profits due to high transaction costs, ignorance of timber markets, poor plantation management and premature harvesting. These are often compounded due to corrupt practices as cutting and transportation permits and registration procedures designed for large-scale timber companies in mind are applied equally severely to smallholders too.

Yadav et al. (2010) present a case study of a teak plantation in Nepal where active silvicultural management not only led to generation of substantial revenues but also to abundant natural regeneration, better growth and is expected to lead to increased revenues from bigger sized teak timber in future. Women groups were also able to collect seeds for selling and raise teak stump for planting for sale creating good flow of income. Lund et al. (2010) have explored the poverty reduction potential of self-generated community forestry common funds using forest revenue and expenditure data of community forest user groups in Nepal. The difference in their incomes is driven primarily by the availability of timber and access roads and a substantial part of expenditure on forest management was incurred on payment to watchers suggesting an overinvestment in monitoring and possible distribution of patronage by community leaders through engagement as watcher.

It is often much harder to obtain loans for small scale forestry since proving economic viability, the very basis of lending, presents serious difficulties even where the lender is a known sympathetic entity. Pokharel et al. (2010) have examined loans granted by the Community Forestry User Groups in Nepal and found that the mean value of loan sanctioned to men was higher than the mean value of loans sanctioned for women.

Short rotation crops of multiple use and high demand can give a boost to rural forestry. Rao et al. (2010a) describe a successful attempt at alleviating poverty among



a Dalit community in western India. The project has helped create an institutional ecosystem undertaking bamboo resource enhancement and capacity development using government funding for social forestry and rural development, resulting in an effective bamboo supply chain ensuring raw material for community enterprises. The program also provides access to high value markets and has led to improved institutional linkages within the communities and with concerned government departments.

Value addition and scaling up of an established community economic activity based on a forest resource available in plenty can lead to sharply increased incomes as Rao et al. (2010b) describe in the case of production of incense sticks using bamboo in the province of Tripura in the north eastern India. Acharya and Acharya (2007) present two case studies illustrating the role forest based small scale enterprises can play in improving rural livelihoods. The Community's ability to modify their management of forests to suit the requirement of business was a key to success. The selection of right entrepreneurs and enterprise options, along with continuous follow up and counselling, were critical requirements. Chaudhary et al. (2010) present the experience gained from a pilot project on entrepreneurship development in value chains of Indian bay leaf (*Cinnamomum tamala*) that is both disorganized and highly secretive with the primary collectors receiving very low prices due to severe information asymmetry, non-use of technology and limited management skills, poor bargaining power, and lack of institutional support. Once these issues were addressed even partially by mobilizing the support of different government line agencies there were immediate benefits to the producers in terms of increased income.

Globalizing trade has improved the economic lot of most but has affected at least some of the forest smallholders in Japan where private forests account for 58.2 percent of total forested lands and three fourths of the total timber produced. Since 1970 the increasing strength of Yen has resulted in timber imports becoming cheaper making the economic situation of private forestry untenable. In order to revitalize small scale private forestry in Japan, strong trade policies are needed that insist on certification of the imported timber so that domestic producers may have a level playing field (Ota, 2001).

A review report edited by Sheyvens (2011) presents four studies evaluating recent legal initiatives for part restoration of customary rights of forest-dependent communities in Asia. The Forest Rights Act of India recognises the forest-related rights of tribes and other forest dependent communities and has led to the settlement of 1.61 million hectares of forest lands in favour of 1.22 million households till September 30, 2011. In Thailand the Community Forestry Bill of 2007, not yet operational, does not fully satisfy the communities. The Indigenous People's Rights Act in Philippines

is a comprehensive law recognizing the rights of indigenous people. In Malaysia even though the customary rights of forest dependent people are protected in law, many recent reforms for safeguarding the rights might actually end up restricting their rights in practice. But a number of Court decisions in recent past have served to enhance the security of indigenous people's rights. Elson (2011), however, cautions that giving too high an importance to mere ownership or proximity to natural resources entails the risk of ignoring the value of the business plan that should be central to an investment decision since excessive emphasis on resources and rights diminishes the importance of labour, skills, markets, capital and institutions.

There is growing demand for timber certification (Mitchel-Banks, 2001) which has the potential for creating new barriers for small scale operators due to its high expenditure and procedural delays. Increasingly the certification of legal origin of timber is becoming important for getting a fair price but it involves high transaction costs. However, this can be turned to an advantage if the transaction costs could be reduced with government support and incomes to the smallholders can be considerably enhanced by developing linkages with certified furniture exporters. Simplification of timber trade regulations will also help to minimize transaction costs and increase the profitability of smallholder teak plantations.

International conventions like the Convention on Biological Diversity place what may appear as excessive expectations from these small scale operators (Mitchel-Banks, 2001). Alhojarvi (2001) has examined the possibilities of accessing funds from International finance institutions and finds many opportunities within the forestry sector where small scale community forestry is a focus area being an important instrument of poverty alleviation and also in energy, environment and agriculture sectors. Institutional development of community forestry can also be financed through Global Environmental Facility and certain aspects like the forest owners association could be supported through FAO, UNDP and ILO while UNIDP has provisions that can support value addition. Small and Medium Enterprises (SME) are often supported by UN organizations and community forestry with significant value addition qualifies as SME.

A toolkit jointly developed by the Price Waterhouse Coopers and World Business Council for Sustainable Development (WBCSD & PWC, 2010) aims at helping financial institutions invest in sustainable forest management and marketing of carbon and other environmental services that forests produce. Small scale and community forest enterprises face a host of problems that include insecure land rights, difficult policy environment, lack of bargaining power and access to legal knowledge, insufficient knowledge of business and management, lack of access to technology and difficulty in



accessing investment from private sectors. Integrating secure land ownership and use rights, developing management capabilities and gaining access to legal support can improve the likelihood of a successful financing partnership.

Sometimes recourse to law would need to be taken when differences cannot be resolved otherwise. In some jurisdictions the courts may lack the ability or the independence to decide fairly. In such cases it might be a good idea to agree for an alternate jurisdiction with the provision that the costs are borne by the investor or the bank. Risks can be further lowered by introducing third parties in various ways like escrow accounts for revenue, crop verification and asset protection, performance certification by a respected professional body, financial auditing by professional accountants and insurance to cover political, economic or physical risks (Elson, 2011).

# The concerns and the interests of rural communities

Across this vast and varied political, cultural, economic and agro-climatic landscape of the Asia-Pacific region the primary interest of individual household forest owners do not differ much across countries. In the case of community owned forests, however, the community interests are somewhat different on account of the communal nature of holding, larger sizes and greater challenges and threats, declining productivity, conflicting demands from community members, and the increasing inequity among the community members, resulting power imbalance and consequential feeling of being sidelined among less powerful community members. These concerns regarding forests and forestry are summed up below.

## i) Tenure concerns

Across the Asia-Pacific region the single biggest concern of the rural communities is the nature of their relationship with the forests, whether they are the owners of the forest lands and all that grows on it in perpetuity or on leasehold for a fixed period of time or merely in temporary enjoyment of a part of the forest resource like timber or non-timber forest produce. Political economies of most countries in the region recognize it as the core demand of the people and currently the biggest forest land reform known to mankind is underway in China (Box 1). In many countries forest land belonging to indigenous communities is perceived as unjustly appropriated in the past and the restoration of lands to them is considered a legal duty (See Box 2) even when ecologically it is not the most advisable course of action. The communities and households would want unhindered ownership and a large section of civil society appears in favour of disaggregating the public ownership of most forests into smaller holdings of rural households or relatively larger holdings of rural communities with full ownership control under a formal legal framework of duties and responsibilities.

Besides the feeling of a secure future that a permanent tenure accords to the owner the forest lands also act as sound collateral in accessing loan from banks and other financial institutions the lack of which is often the biggest hurdle in making investments in forestry activities by smallholders. It guarantees ownership of the forest produce and share from the proceeds of payment for ecological services wherever such arrangements can be set up, both of which are important motivation for investment in forestry for communities and households.



### **Box 1. History's biggest forest tenure reform unfolds in China**

The introduction of communist system of governance in China in 1949 brought fundamental changes in land management with almost all agriculture lands and more than half of China's forests (58 percent) placed under collective ownership owned by village communities. The famines that followed and sharp reduction in the extent of forest cover suggested that the collectives were plagued by low productivity, low investments and poor managerial attention. The reforms that began in 1978 in China gradually addressed these concerns in the agriculture sector culminating in the Rural Land Contracting Law passed in 2002 which allowed transfer, inheritance, and mortgaging of land contracted by farmers.

The forest reforms followed the agricultural reforms in the mid-1980s when it became permissible to allocate small parcels of collective forest to households on a contractual basis for short terms who were also allowed to harvest trees under certain conditions. But huge market demand for timber plus timber market liberalization reform, lax supervision and lack of confidence in policy stability led to a situation of widespread deforestation which forced the government to enforce strict controls on forest harvesting, requiring prior permission before felling timber. This policy change, however, made forest management excessively bureaucratic and difficult of implementation leading to widespread dissatisfaction particularly on account of rent seeking behaviour of some officials charged with the responsibility of granting permission for felling.

In 2003, the southeastern province of Fujian, which was the only province that did not allocate collective forests on contractual basis in the 1980s, began a collective forest tenure reform by granting long-term management rights over an allocated part of the village collective forest land to individual households with the objective of enhancing the quality of management through individualized

attention. By 2008 it was deemed a success with increased investments and higher production of wood and non-wood products. It was extended over the entire country through a new national policy enunciated by the State Council of China on July 14, 2008 entitled “Guidelines on Fully Promoting Collective Forest Tenure System Reform” encouraging the village collectives to reallocate long-term forest management rights to individual households, and collections of households in partnerships or private contractors with freedom to use the allocated lands as loan collaterals. The collectives also have the option to retain management at the full community level as hitherto or to devolve it at the level of hamlets.

The reform is in keeping with the overall economic trend in the Chinese system of governance. The government has also financed the delimitation, surveying, titling, and registration of the new plots, investing approximately \$370 million in 2008 alone for these tasks and till 2011, 173 million ha of collective forest land has already been contracted to 84 million households, averaging 2.67 to 3.33 ha per household across various provinces.

Sources: 1. Dr Wu Shuirong, Chinese Academy of Forests, and Dr Kun Zhang, Forestry Economics and Development Research Center, State Forestry Administration, Beijing (personal communications)

2. Jintao Xu, A. White and U. Lele, 2010, China’s Forest Tenure Reforms: Impacts and implications for choice, conservation, and climate change, Rights and Resources Initiative, USA

### *Permanent tenure by itself will not attract investment*

But experiences in the past have shown that mere permanent household or community tenure over forest lands does not by itself ensure sustainable management and rarely attracts investment either by owners or by others with surplus funds. An example of this is the community owned forests in north eastern India where there has been almost unabated decline of forest resources even when the tribal ownership has remained unhindered and is constitutionally protected. Tribal communities manage their natural resources in accordance with immutable tribal customary laws which could inhibit modern business management practices and discourage investment





## **BOX 2. Philippines' Indigenous Peoples Rights Act of 1997**

This is considered one of the most important national laws to recognize, protect and promote the rights of indigenous cultural communities (ICC) and indigenous peoples (IP) and has a special significance in the context of forests. It calls on the State to recognize and promote these rights while making it clear that these rights are subject of national unity and development and thus cannot be a ground for claim of sovereignty and should not be allowed to block development in national interest. The Act defines ancestral domains of indigenous cultural communities and indigenous peoples as lands, inland waters, coastal areas and natural resources claimed by them since time immemorial continuously to the present, and which are necessary to ensure their economic, social and cultural welfare. Ancestral lands are those that are occupied, possessed and utilized by individuals, families and clans who are members of the ICCs/IPs since time immemorial. An important feature of this Act is that it does not recognize alienation of ancestral domain and lands by force, deceit, stealth, or as a consequence of developmental projects which has been a major complaint of the indigenous peoples worldwide.

The Act acknowledges the fundamental difference between the indigenous concept of ownership with the meaning of ownership in modern economies. Section 5 of the Act notes that the indigenous concept of ownership generally holds that ancestral domains are the ICC's/IP's private but community property which belongs to all generations and therefore cannot be sold, disposed or destroyed.

### *Tenure claims can sometimes lead to deforestation*

During the 1990s it was a common practice in Assam province of India for some tribes to competitively deforest large extents of lands to demonstrate their control over the land and claim occupancy. Similar trends of deforesting to make tenure claims have also been noted in parts of Amazon and Australia. Elsewhere, people may plant exotic trees along boundaries to secure tenure claims. Conversely, in lands under shifting cultivation in the north eastern India, where a tribal clan member owns a land as long as he cultivates it, there is an increasing tendency to permanently claim lands by planting teak trees or plantation crops like rubber and tea, all of which last for decades and thus serve to lengthen the period of occupancy of clever clan members at the expense of others (See Box3).

### **BOX 3. A rational critique of tenurial claims**

A rational criticism of the tradition of communal land ownership among indigenous people, without despising tradition, is needed in several places. There are instances of small communities, surrounded by large number of poor from other communities, who could obtain full or partial control over very large extents of forest lands in previous centuries because of fortuitous circumstances of that time, a great leader, a generous opponent, or surviving a devastating natural disaster or disease that drove all others away. But today if the entire land once under their partial or total control is handed over to this one community alone ignoring the presence of large number of landless poor from other communities it would only create conflict where none exists. Tenurial settlement should not become merely a reward of history but a dynamic justice concerning land ownership, set in a historical context but not ignoring the current realities, that seeks to advance livelihood as well as equity.

#### **ii) Equity concerns**

There is often a great inequity in the distribution of costs and benefits along the production chain of forest goods and services which is accentuated by the fact that a vast majority of stakeholders in forests are some of the poorest people, lacking education, organizing abilities, and are too thinly spread to be able to attract attention among the political decision makers. The tolerance for this inequity has, however, been reducing sharply in recent years among its victims and no investment in forestry can expect to succeed in making profits in medium and long-term unless it is actively seen to be leading towards a just and equitable use of forest and land resources. Diversion of common lands long in use by local communities for raising commercial plantations by investors from within the country or from outside, as has happened in some countries of Africa and Asia for raising biofuel plantations, has only served to cause extreme anger among the affected which can ill-serve the interest of forestry. The country governments may need to avoid taking such steps and bilateral and multilateral international organizations need to be vigilant against it.

#### *Equity within communities*

A concern less articulated, but no less important for that reason, is of poorer members of communities that community resources are sometimes cornered by the more influential members of their communities many of whom may actually be residing



far away and that the benefits reaching the poor are receding relative to those of more powerful members. There is expectation that the country governments and international organizations should work to ensure that investments in future should enhance equity within these forest owning communities also. This concern gains high importance now in view of the likely enhanced returns from community forests under the REDD+ program.

### iii) Intellectual Property Right concerns

The preamble of the Convention on Biodiversity (CBD) recognizes the “desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices” and an important objective of the Convention is the “fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources”. But a common concern of the forest communities across the region is that even after two decades of the Convention being in force there are still no known instances of sharing of benefits with the communities arising out of either the use of indigenous knowledge or access to the genetic resources. A few cases cited from Latin America arise essentially out of corporate social responsibility rather than a measure of settlement of rights of the indigenous people.

One of the core problems in setting a sharing mechanism for benefits arising out of indigenous knowledge is the difficulty in drawing geographical boundaries on the existence of indigenous knowledge because almost all knowledge of utility has spread far and wide having already been shared by the indigenous communities with their neighbouring communities over the past millennia and more. Without any historical record and written evidence it is impossible to trace the origin of knowledge particularly with folklore of many tribes claiming paternity.

### iv) Fear of public interest in forests undermining community interests

There is a widespread perception, cutting across borders, that if lands are planted with trees the land owners could lose the freedom to use their land resources in their best self-interest in future as increasing public interest in ecological services generated by their forests may force the government to preserve them in perpetuity and deny the owners the advantage of harvesting forest products. It needs to be recognized that in planting trees a household or a community is investing its scarce resources for its own future good and any public goods and services that follow are merely unintended by-products. If the larger society develops an interest in retaining or enhancing these by-products then the only legitimate way would be by paying a fair compensation to the forest owner. It would help the cause of greater investment

in forestry by the people if the country governments could incorporate this concept under their national laws.

**v) Concerns of economically viability**

The central challenge is to make forests more economically attractive which by itself will invite investment. Sustainable forest management (SFM) is a demanding discipline with its guiding principles covering institutional, social, economic, financial, technical and environmental aspects because of the multifunctional nature of forests. In highly productive lands close to well developed markets, a single wood or non-wood product alone may bring substantial profits to the smallholder but these are exceptions; In most forests the earnings from direct forest products rarely catch up with the opportunity costs and the sole manner in which the economic viability could be enhanced across the board is by bringing a much larger basket of forest goods and services into the forest based economy. So far payment for forest ecological services is still in a voluntary payment mode rather than an obligation and remains at a pilot scale. Only the carbon sequestration services can claim to have a mandatory model under the clean development mechanism (CDM) of the Kyoto Protocol though the future of CDM beyond 2017 is as yet uncertain.

**vi) Concerns that international community promotes subsistence and not prosperity**

Most discussion on the role of forests in the economic lives of indigenous and other local people is centred on survival and subsistence. In circumstances of extreme poverty bare survival would be a laudable immediate objective but it would not be able to provide protection to forests for long as alternate uses of the forested lands would soon begin to appear economically more attractive to the peoples that have just begun their long journey to development. With most countries of the Asia-Pacific region developing at 5 percent and above the expectations of even the poorest are not merely survival but ongoing growth and increasing share in economic profits. This needs to be factored in all strategies that are being developed around forests and trees.

**vii) Lack of fair public expenditure policies on private and community lands**

Financing for the forest sector could come from sources like own savings, sale proceeds of forest products and services, loan from banks, investments from private sector, government budgets, overseas development assistance and philanthropic organizations, etc. Communities expect Governments to play an important role in forest financing because the positive externalities benefit the larger society



whereas the neighbouring people primarily benefit from forest goods only. Research and development in small scale private and community forestry is considered the domain of governments and where the country governments are unable for reasons of financial or technical capabilities the international community is expected to fill the gaps. Expenditure on rehabilitation of privately owned forests and afforestation on private lands is mostly through private funding though sometimes public sector also undertakes plantation activities on these lands in a public-private partnership mode as in catchment afforestation programs of hydroelectric dam. Elsewhere also, where the objective is social and environmental benefits, public funds are often utilized on private and community land holdings. But in poorly governed countries allegations of favouritism and corrupt practices are not rare in such investments of public funds in private and community forestry. Generous and fair policies for public funding in support of small scale forestry by households and communities and their good implementation would address this problem.

#### **viii) Concerns about high risks involved**

Since forests are long-term investments over large areas open from all sides and vulnerable to theft and arson besides damage by natural causes like disease, fires due to lightning, insect attack, drought and floods, cyclones and storms, organized methods of risk mitigation are a necessity to make investments in forestry possible.

Wherever the community forests are in close vicinity of public forests there is likelihood of spread of fires and pests and diseases from public forests into community forests and, therefore, the government is expected to ensure that such damages do not take place beside which risk mitigation through insurance as a second line of defence should also be arranged by the government.

Prevention of theft and arson is a shared responsibility between the owner and the relevant public safety organization, mostly police and forest departments, on behalf of the government. The owner is required to take reasonable precautions for the safety of his own property and insure it against the possible causes of damage, and the government is expected to provide a generally safe environment in which private property can remain unharmed. Good governance is thus important for attracting investment in forestry.

#### **ix) Concerns about low productivity**

The forest productivity of most developing countries in the region is below the global annual average of  $2.1 \text{ m}^3\text{ha}^{-1}$  and in some countries like India the annual productivity is abysmally low at  $1.37 \text{ m}^3\text{ha}^{-1}$  (IUFRO, 2008) even with tropical humid warm agro-

climate over a large part of its geographical area. The primary reason is unsustainable levels of use of forest resources through legal and illegal harvesting, browsing and grazing, and repeated incidences of forest fires combined with very low levels of investment in creating, recreating and managing forestry assets. Even where funds are available the results are often not commensurate with investments as there is often reluctance to use modern technology in forestry.

In many developing countries the use of genetic technology even with proper safeguards, important for enhancing productivity and already widely acceptable in agriculture, is shunned in tree farming. There is need both for research in developing adequate safeguards and for educating well meaning activist organizations about the impossibility of meeting the increasing demand of wood products at reasonable prices for the poorer sections of the people without recourse to technology.

#### **x) Difficulties in borrowing money for forestry**

Long gestation of forest investments is one of the main reasons for disinterest among investors for forestry activities. The uncertainty that it introduces in the assessment of economic viability of forestry projects also inhibits banks from providing loans. It is a rare bank which is willing to lend significant amount of funds for forestry and the little that is available is usually short term working loans for harvesting operations or for nurseries and for capital investment in setting up wood based industries. It is for this reason that in most parts of the region private investment in small scale forestry is limited to seedling supply and post harvest industries like sawmilling and plywood manufacture. The risks facing private capital are considered too high in other parts of this sector. Unless a solution to this problem is found there are few prospects of large scale capital investments in raising forests. Attempts made in the past have tended to place the onus on banks but the banks can only take a limited amount of risk in lending their monies and the rest of the risk needs to be shared among the land owning community, outside investors, and the country government. Suitable mechanisms for this risk sharing need to be evolved under the guidance of Asian Development Bank and the World Bank. Online microfinance platforms (Box 4) operational in India in non-forestry enterprises could provide useful examples.



#### **BOX 4. Online Microfinance Platform**

Milaap, which means 'joining' in Hindi, is an online microfinance platform incubated in 2010 at the Indian Institution of Management, Bangalore, that identifies enterprising poor with credible business plans who need small loans at affordable interest. Its current areas of focus are education, sanitation, water, energy, farming and healthcare and it wants the loans it arranges to be life changing and not merely good commercially. Its main tasks are to ensure that loan seekers are genuine small entrepreneurs who intend to repay the loan because this is the greatest risk in this business, and that they have a good business plan and have the technical capabilities needed or can access them within their means. For this purpose they collaborate with grassroots partners, usually NGOs, and have a very elaborate process for approval of partners to ensure their selection of borrowers is not flawed. The details of selected small entrepreneurs, the proposed activity and the required credits are then placed on the online platform from where the lenders can pick up the beneficiary and the amount they are willing to lend. The rate of interest varies from 12 to 17 percent (as against the minimum market rate of 26 percent) of which 8 percent goes to Milaap as service fee and the rest to the lender. The lenders are mostly medium and large corporations who utilize their corporate social responsibility (CSR) funds and mandate for this purpose. In the first year of their operation Milaap was able to arrange for disbursal of INR 10 million as loan and they hope to break even with their second year target of INR 100 million.

(Source: Indian Express, "Small Money, Net gain", January 15, 2012, New Delhi)

#### **xi) Unreasonable restrictions on harvesting and transport of timber**

Forestry laws in many developing countries discourage investment in tree growing through archaic rules that place unreasonable restrictions on harvesting and transportation of timber creating an unfavourable environment for investment in tree growing. In most former British colonies timber transit rules were introduced to control the transport of illegally felled timber from forests to the few sawmills that existed then through a limited number of strategically placed forest check posts. This allowed a small forest law enforcement agency to keep watch over a very large forest area against illegal commercial exploitation of timber. This is no longer effective but the law remains on the statute allowing corrupt elements in forest departments to use them for rent seeking and harassing farmers who grow timber.

Increasing awareness about the damaging effects of forest denudation on soil and moisture conservation particularly in mountainous region and the aesthetic value of forests has led to restrictions on not only forest harvesting but even of individual trees in many parts of the region as in India where restrictions exist on tree harvesting at elevations exceeding 1 000 meters. This does not help in making forestry an economic activity in hills which should be the most suitable land for practising forestry.

**xii) Difficult entry and exit conditions for investors drive them away**

Investments in tree planting would increase significantly if it is seen as investment like in any other economic activity. Investments in timber plantations may not always be difficult to enter into but these are rarely economically viable as they are usually raised on marginal soils. Investors would prefer projects in which ecological services like carbon also make significant contribution to revenue streams like the CDM projects. But entry into CDM projects is perceived as extremely difficult because of complex procedures and even though voluntary carbon markets have attempted at simplification the success has been limited and is at the cost of lowering of carbon prices. Entry and exit for investment in tree growing in rural areas should not be more cumbersome than in other sectors of economy. With the exception of identified ecologically important areas the land owner should be in a position to decide the length of rotation and the species to be planted.

**xiii) Concerns that rural forestry is not women friendly**

Male migration from rural areas is a reality in almost all developing countries of Asia-Pacific leaving a higher percentage of women among the resident rural population for whom tree husbandry giving more free time could prove a more suitable option if it is economically viable. Since landownership is mostly in the names of male members in most countries of Asia-Pacific it is difficult for women to raise loans from formal banking institutions. Women Self Help Groups, adequately supported by governments in the beginning and closely supervised, can be of considerable help in raising small loans for NWFP related commercial activities. In this online microfinance platforms could prove very helpful. Technical and entrepreneurial capacity building of identified rural women and guidance in entering new markets is a necessity.

**xiv) Very high transportation costs of forest products from interior areas**

In Nepal and in most hilly areas elsewhere in the region a major factor that keeps community forestry economically unattractive is the cost of transport of timber and other forest products to the nearest depot or market. Communities often seek transport subsidies to make their products viable in the market place but subsidies of





this nature are liable to breed corrupt practices in environments of poor governance and are generally inefficient. A more effective and efficient way would perhaps be to use public funds from country governments and under overseas development assistance to create, and strengthen where already available, timber transport infrastructure of waterways, chute and animal dragging, similar to that which existed in the Himalayas during the first half of the twentieth century.

**xv) Restrictive laws make private forestry unattractive for investment**

Governments across the region have been changing their forest policies to encourage forestry on private lands but the existing laws are often not amended adequately to facilitate implementation of the new policies. One prime example is the major role for the private sector in planting on non-forest lands envisaged in the Indian National Forest Policy of 1988 but almost all provincial laws dealing with private forests remain very restrictive. In some provinces private lands with tree cover over a minimum land size can be notified as private forests for reasons of ecological protection through an executive order which then makes them subject to restrictions on transfer by sale or lease, felling of trees and even silvicultural measures like thinning. In extreme cases the state may even assume management for a limited period if the owners are found not to be acting in accordance with the provisions of the law. These extant laws thus severely undermine the tenurial security of private lands under forest and tree cover and discourage land owners from making investments to increase tree productivity on their lands.

**xvi) Unfavourable trade policies**

In a few countries of the region the State has historical monopoly over trade in a limited number of locally important species, sometimes called “royal” trees like teak and sandalwood, as also some important non-wood forest produce (NWFP). Some provinces in India prescribe that virtually all important NWFPs can only be sold through state owned corporations that pay a predetermined price. When introduced the primary motive behind these steps was to ensure that the mostly illiterate tribal producers were not cheated by clever traders but in places where the emerging local leadership is educated and business savvy these regulations can prevent them from obtaining competitive prices for the produce and also exposes them to bureaucratic corruption. Sometimes, controls are established in the interest of the consumers rather than the producers, for example, some Indian provinces control movement of timber and firewood across the provincial borders.

### xvii) Concerns about the clandestine markets ruling NWFPs

Timber markets in most countries of the region are usually well developed with relatively easy flow of information between producers and consumers, responding to changes in supply and demand and incorporating likely future trends. Markets of many NWFPs that are produced in very large quantities in tropical and subtropical forests and have a large consumer base, like the fruits of *Emblica officinalis* and *Terminalia bellerica*, also have a reasonably mature market structure.

But marketing of most other NWFPs that have medicinal uses is still in a nascent stage in its technical sense with very restricted exchange of information and heavily tilted in favour of the long chain of traders. The producers (and collectors) get extremely low prices while the final consumers pay exorbitant prices. Also there are rampant adulteration and other clandestine and fraudulent practices and the consumer is rarely assured of the product quality which further restricts the growth of market.

It is the open access collection of NWFP in government owned forests almost everywhere in the developing part of the region combined with the willingness of consumers to pay very high prices, and the extremely secretive trade practices evolved over a long period of time, which are responsible for this situation. The whole chain of activities, including command and control that mimic crime more than commerce, has served to limit the number of traders to very few. Lax control and corruption in regulating agencies have contributed to the scale of the problem. The issue of open access to these resources from public forests is politically sensitive that can be resolved only by making the neighbouring stakeholders through a political process in which equity, rather than law, should hold centre stage.

### xviii) Linkages between forestry and development need strengthening

Historically, forestry departments of many countries of the region have developed in near autonomy with the self-view of vast landowning organizations governed under a special set of laws and with the primary mandate of conserving the forests. While conservation is likely to remain the central focus of public forests small scale forestry among communities and households would attract financial investment and management attention only by making economic advancement of participating stakeholders as the core objective. This can happen with ease if the country governments cause necessary shift in the mandate of their forestry departments creating a separate wing for non-government forests if necessary, retrain staff and establishes organic links between them and other sectors dealing with development so that every opportunity to make these forests and tree husbandry economically viable can be exploited.



**xix) Land ceiling for tree planting too low**

Across the countries of the region there are non-forestry sector policies that play important roles in the decision to invest in plantations but are beyond the jurisdiction of political ministries in charge of forestry departments. Of these one of the most crucial is the ceiling on land holdings that are primarily intended for agriculture but apply to tree plantations also. Often the statutory permissible limits are too small inhibiting the raising of captive industrial plantations for meeting raw material requirements of wood-based industries.

In addressing this situation, however, a cautious approach may need to be taken. In more populous countries enhancing the land ceiling is not an easy task politically and more innovative options that can make large enough extents of lands available for tree planting may have to be explored. Even in countries where land availability is higher the possibilities of local governments favouring industries at the cost of poorer and politically unorganized sections of people cannot be ignored. A bold attempt in this direction is being made in Afghanistan (Box 5).

**xx) Low stumpage value of timber**

The success of sustainable forest management lies in the high stumpage value of wood at the logging stage. In most parts of the developing world the land owners receive just about 8 to 10 percent of the final retail value of the timber. At these low values, forest management of any kind is unsustainable over a long time because cattle ranching or other agriculture activities would invariably result in much better returns. Primary reasons are the high costs of transportation to the market, of obtaining the necessary permits for harvesting and transportation from the forest department and of storage before consumption beside market distortion caused by information asymmetry.

**xxi) Concerns about increasing requirement of timber certification**

Timber certification is expected to lead to higher stumpage value but not necessarily significantly increased profits because the cost of certification is usually quite high and the amount of wood produced also goes down considerably. In addition, market faith in the quality of certification, which determines the prices that the certified product can fetch, is also dependent upon the overall environment in which certification is achieved. If overwhelmingly large extents of forests in an area are without certification the chain of command of timber harvested from the few certified forests there would be more difficult to establish and the market would likely discount the certification in accordance with the perceived risks. So in order that the forest owners increase their incomes significantly from certification and the market does not discount the

## BOX 5. Community forestry in Afghanistan

Never well endowed with forests Afghanistan today has barely 1.3 percent of its geographical area under forest cover, down from about 5 percent in the middle of the previous century due mainly to the disintegration of indigenous system of forest resource management combined with the complete collapse of formal regulatory regime of the government over the past three decades and extreme overharvesting of forests for energy and timber. It is estimated that firewood harvesting for Kabul alone results in the destruction of 10 000 ha of oak forest and 15 000 ha of conifer forest in Paktiya and Khost provinces each year. Smuggling of timber to Pakistan is a major source of revenue to some warlords in southern Afghanistan.

The new National Forestry Law drafted in 2009 (final Presidential decree still pending) and the Forestry and Rangeland Policy and Strategy (2006) both strongly advocate community forestry and provide the legal tools to give communities user rights over their lands. Government schemes for reforestation seek involvement of members of Forestry Social Associations for efficient and effective management and training them in nursery establishment, composting, irrigation, plant protection, disease control, and watershed management, etc.

In its current hostile and unpredictable environment, and the associated political, social and economic uncertainties, investment into forestry projects is an unattractive proposition as the risks are too great. For quite some time to come all investments in forestry, public or private, would have to be essentially from public sources only. One possible incentives for investment into Community Forestry is through a more commercial approach to harvesting Non-Timber Forest Products from forests; for example the commercialisation of enterprises for the collection and processing of *Chilgoza* pine nuts, morel mushrooms (genus *Morchella*) or medicinal plants (e.g. liquorice in the Northern provinces) and commercially-driven regeneration of pistachio forest in the north-west of the country through agro-forestry.

Source: Mark Witcomb, Planning Advisor to the Director, Department of Forestry, Government of Afghanistan, Kabul (personal communication)

prices of certified timber it is important that the country government is able to create an environment of good forest governance and persuade a larger number of forest owners to agree to certification.

#### xxii) Concerns about the safety of private forest stocks

While a nation would be willing to save forests for the future because its people expect the whole range of forest goods and services to continue in future too, a community or household would do so only if the expected direct financial returns from the forests justify it. In some countries, timber is a safer asset than money in the bank but sometimes this tradition is lost as nations develop and banks become more reliable. In many parts of Indonesia a teak tree is often planted at the time of birth of a child which is expected to pay for dowry or education of the child after about two decades (See Box 6). But this can happen only under conditions where trees can remain reasonably safe from theft and arson.

#### **BOX 6. Tebang Butuh**

Teak (*Tectona grandis*) is grown across Indonesia by millions of farmers who are estimated to own nearly 80 million trees. Smallholder teak plantations play an important role in rural household economy with an average of 10 percent of the farmer's lands allocated for teak woodlots. The economic contribution of teak wood sales to household total incomes is about 11.6 percent but the real value lies in the fact that teak trees keep growing till they are really needed when they can be easily cashed out and provide the much needed money for important family events. This practice of harvesting teak to fulfil emergent needs of household is widely practiced and has even acquired a local name "tebang butuh".

But the returns from these plantations are not as much as the high demand for teak would suggest due to high transaction costs, ignorance of timber markets, poor plantation management and premature harvesting. Adoption of poor silvicultural techniques including reliance on natural regeneration, seedlings collected from forests, and coppice often leads to low quality timber and consequential low returns. Smallholders do not have easy access to higher quality teak seedlings which is available only at a few localities. These are often compounded due to corrupt practices as cutting and transportation permits and registration procedures designed with wealthy large-scale timber companies in mind are applied equally severely to smallholders too.

Smallholder access to loans from banks is limited as banks are reluctant to provide credit for teak plantations on account of high risks, long gestation and insufficient collateral. Most smallholders tend to sell their teak trees in standing condition instead of adding value by felling and conversion and grading of logs. Quite often it is done to avoid the transaction costs involved in procuring felling and transport permits from the forest department. But this also reduces the economic returns to the smallholders significantly.

Incomes to the smallholders can be considerably enhanced by introducing advanced silviculture technology, creating financial schemes to incentivize investments in teak production techniques and improving smallholders' access to markets. A micro-finance organization, Lembaga Keuangan Mikro Gunung Seribu, has been established for this purpose. The teak producers could also be encouraged to develop linkages with certified furniture exporters for supplying semi finished furniture components to

the companies by imparting them the necessary skills. This will not only increase their incomes through premium prices for certified timber but also make the wood waste available locally to be used as fuel. Simplification of timber trade regulations will also help to minimize transaction costs in timber marketing and increase the profitability of smallholder teak plantations.

Reference: ACIAR, 2005, Improving Economic Outcomes for Smallholders Growing Teak in Agroforestry System in Indonesia, Report of the Australian Centre for International Agricultural Research funded project FST/2005/177.

### xxiii) Accessing CSR funds from private sector companies

In developed countries like Japan, and even many developing countries, large corporations are keen to invest in forests under their Corporate Social Responsibility (CSR) provisions to contribute to social good, to have good public images and also sometimes to provide occasions to their employees to contribute to social good. If the country governments could make investment in CSR mandatory for corporations of a certain size and also require that a minimum percentage be spent on forests then the funds available for forestry from this source would become much larger than now. Alternatively, fiscal measures by way of tax concessions for investments in forestry under CSR could also prove effective.



**xxiv) Migration from rural areas causing lack of expertise**

In some developed countries like Japan private forests in rural areas are often managed by older people and when they migrate to urban areas for better living facilities the collective forest management is affected adversely and the quantity and the quality of forest goods and services suffer on this count. This reduces the likelihood of further investments in these poorly managed forests unless the local authorities and concerned forest cooperatives proactively intervene and ensure quality management and care of such forest properties by coordinating among forest owners of the neighbourhood.

**xxv) Success of existing investments in forests**

The best advertisement for inviting more investment in community and small household forestry is to ensure that the investment already made brings good returns. A good example of this is poplar plantations under agroforestry around Yamunanagar city in northern India where the concentration of plywood factories, support infrastructure, huge demand for the final product, and consequential good prices for the timber has ensured that no promotional efforts are needed for smallholder and community forestry. Communities and households expect the country governments and civil society to help create conditions that can help them earn good returns from their existing investments in trees and forests.

**xxvi) Incentives are needed along with regulations**

All over the Asia-Pacific region forestry has been organized through a set of regulations that both prescribe and limit forestry activities on private and public lands. In several hill townships of India trees are not allowed to be felled without permission which often handicaps honest landowners from following silvicultural practices they think best for their tree crops while lacking the teeth needed to control unscrupulous landowners who may surreptitiously girdle or remove trees.

Incentives are likely to work better in reaching desired public objectives from private efforts rather than regulations. In a preliminary research survey with limited sample conducted in the Southern Cross University in New South Wales, Australia, to assess the perceptions about the efficacy of incentives in contrast to regulations in private native forests it was found that respondents belonging to environmental groups concerned with biodiversity conservation tended to favour regulatory approaches while landholders advocated more landholder freedom believing that private native forests were in a better condition than comparable government forests. City people with academic and other professional backgrounds were in favour of financial incentives (Vanclay et al., 2006).

### **xxvii) Fiscal incentives to attract investment**

Governments can also encourage private sector investment by providing fiscal incentives like tax relief, low interest loans and even grants meeting part of the costs. In India the income from tree plantation is treated as an agricultural income and no income tax is payable on it. Sometimes it is possible to levy an additional tax, called Green Cess or Forest Cess, payable on financial transactions over and above the normal taxes and the proceeds used to create Forest or Environmental Fund to finance forestry activities including those undertaken on private and community holdings. In order to ensure that this additional levy does not affect poor people it can be restricted only to financial transactions over a minimum limit.

### **xxviii) Middlemen are not always villains**

In a competitive market with a large number of middlemen, who are not allowed to form monopolies of any kind, they can serve to bring updated market information to the producers and enrich the market. It is only when they are able to gang together to form a monopoly that they can cause severe harm to the interest of tree growers and, ultimately, to forestry. In the state of Haryana in India, where farm forestry has created wealth among farmers, the government owned Haryana Forest Development Corporation ensures that middlemen do not form a clique to artificially depress prices by making an open offer to purchase timber from farmers at a reasonable price fixed from time to time thus forcing the middlemen to offer a price that is above the Corporation's offer. Encouraging open discussions among the producers and middlemen can lead to similar results.

### **xxix) Making robust data available**

Development of a large forest product market that would spur investment in forestry requires robust data on forest inventories in specified boundaries indicating the species, age, area, thinning and final harvesting, productivity, nurseries, fertilizers, pesticide and other treatments. Almost all developing countries of the region, with partial exception of China, India, Malaysia and a few others, lack credible technical and scientific information base. This would need major investment in research and development in tree growing.

### **xxx) Community forestry needs REDD to scale up the benefits to poor**

While there is some empirical evidence that community forestry has provided sustenance benefits to poor people in a number of places across the world it has not been possible to scale it up either in geographic terms or in terms of extent of benefits. The poor performance of community forestry on profitability grounds would ensure that until





these circumstances change it may continue to be a less attractive investment option. Even when the forest ownership and management is completely in the hands of the communities as in Papua New Guinea (Box 7) sustainable management of forests is not an assured outcome and governments may have to lay down appropriate policies and implement them with vigour for desired results. There is, however, hope in the evolving REDD+ mechanism and the rapidly growing role of the carbon markets. Many REDD+ project designs presently under consideration have kept community forestry, payment for ecological services and raising of private plantations as key components of their strategies and the promised international financial support to REDD gives reasons to believe that REDD driven approaches would be able to make community forestry more profitable to both the communities and the investors.

### **BOX 7. Community ownership alone may not ensure sustainable management**

More than three fourths of the geographical area of 46.2 million hectares of Papua New Guinea is forested and nearly 97 percent of the land in the country is owned by indigenous people. Management is also entirely in the hands of the communities. Harvesting is done by big timber companies and is rarely with any kind of forest ecological planning. Any planning in existence is almost always logistical planning of harvesting. There is little value addition and most of the harvested timber is exported in round log form to China, Japan and Korea. Harvesting is not carried out carefully, roads are built wherever suited for logging and there is no emphasis on replanting. Indigenous landowners get barely 10 percent of the export (FOB) price of round timber.

The PNG government is now trying to organize the landowners to develop an alternate forest industry that is locally controlled, sustainable and undertakes low-impact harvesting of forest resources using small scale portable saw mills. Since these are owned by indigenous people they offer employment, local value addition and help keep a good part of the money generated within the country thus helping local community development. However, only a few forest areas are yet covered by management plans and even there regulations are not enforced properly on account of both lack of professionals and political will at the local level. Many villagers have purchased portable mills but they operate in isolation and even where they possess the technical skills to operate the machines they lack the requisite management skills to run the business.

Development of this community forestry industry through small village-based operations using portable saw mills is important because it ensures that the effective control of forests remains with the indigenous people and it provides employment and income generation opportunities to local people, the saw milling is ecologically less damaging with lesser road construction for logging and lower levels of carbon emissions associated with timber harvesting and transport. Also, while the financial returns to landowners from logging concessions currently average \$3.00–\$7.5 per cubic meter the sawn timber produced by forest owners could fetch up to \$150 per cubic meter at domestic market and up to \$450 per cubic meter in Japan and other overseas markets.

Ref: Bun, Y.A., and B. Baput Community Forestry benefits customary landowners: Case study on Madang Province, Papua New Guinea, by Yati A. Bun and Bazakie Baput, Foundation for People and Community Development, Madang, Papua New Guinea, produced by ITTO, Forest Trends, RRI, Edited April 2006)

#### **xxxi) Change in the mindset of forest bureaucracy**

Changes in the policy environment should be accompanied by reform in the mandate and, wherever necessary, retraining of forest department staff. This is particularly required because small-scale investments in forest enterprise suffer disproportionately from inefficiency and corruption in forestry establishments than large scale operations. Community managed forests face more disincentives and roadblocks and require the strong backing of government institutions in reducing risks.

It would be helpful to develop academic collaboration in the field of community forestry across the region and develop a specialized curriculum for community forestry in all forestry schools that should cover social, legal, economic and political aspects in addition to the growth and silviculture of tree crops. Linking with international research organizations and promotion of networking and sharing information and expertise for this purpose would prove very useful for ensuring quality.

#### **xxxii) Value addition through labeling and brand building**

Geographic labelling for a few forest products like Burma teak, Mysore sandalwood and Assam agar enhances market value of products. Labelling is already possible under GATT but it will be of advantage only with widespread knowledge of the good marketable qualities of specific labels. This requires sustained advertising and other media focus which is a task beyond the capacity of communities and both country governments and industry associations must take a proactive role. Brand building of



high value forest products like honey and mushroom from specific community forests will also help them get premium prices and encourage them to sustain the quality of their products.

#### **xxxiii) Access to export for community forestry products**

Most community forestry products are consumed in the immediate locality which is good for a sustenance economy but does not satisfy most producers because of very low earnings. Enlargement of market is important to arouse the interest of investors in entrepreneurship activities centred on community forestry. Since the products and national circumstances are widely different across the region it would need substantial amount of research by academic institutes for commercialization of community forestry products and to decipher the steps required making it possible.

#### **xxxiv) Small scale forestry should qualify as an SME**

Small and Medium Enterprises (SMEs) are often supported by country governments, donor agencies and UN organizations. If small scale forestry and community forestry is declared as a small and medium enterprise the stakeholders would benefit from the advantages that accrue to the SMEs making forestry at this scale an economically viable business activity.

#### **xxxv) Incorporate incentives within FLEGT agreements**

The European Union's FLEGT program is designed to control trade in illegally and unsustainably harvested timber from forests through agreements between timber exporting countries in the developing countries and the EU. The forests under the control of communities are key components of these arrangements but the agreements with the country governments usually have no clear budget provisions for the subsidies and incentives for community forestry and it is left to the countries concerned to decide. As important stakeholders it would be wise to keep the communities engaged in discussions for deciding on the incentives and subsidies and incorporate clear provisions for these in the program budget which should then become available for bilateral monitoring.

#### **xxxvi) Extension services**

There is a widely felt need for knowledge of silviculture and pest control of at least the more important tree species. Unlike in agriculture the extension services in forestry in the region are underdeveloped. In countries where resource crunch does not permit separate extension services for forestry it might be better to combine them with agriculture extension.

Beside silvicultural services there is also a need for education for empowering wiser and wider choices from economic angle. Astute landholders may plant niche species earning good returns while the rest continue with the more traditional commodity species that may already have large supplies and hence lower value. The need is educate the landowners about the contrasts between commodity and niche species so that more may become astute and earn increased incomes (Vanclay et al., 2006).

#### **xxxvii) Social aspirations affect attitudes to small-scale forestry**

In a trend shared across the Nordic countries those who can afford tend to buy a second or third house near a lake with a small patch of forest or sometimes just a forest land without expecting income from this resource. In China, India, Malaysia, Indonesia and many other countries of the Asia-Pacific many wealthy people living in urban areas purchase summer houses in remote hills and villages and raise trees around for aesthetic considerations. In some countries like India, an added attraction is that the income that accrues from tree plantation is also free of income tax though a larger part of these planted trees are unlikely to be felled.

#### **xxxviii) Small Scale and Community Forest Management Associations**

The Federation of Community Forestry Users, Nepal (FECOFUN) is a formal network of Forest User Groups set up with the objective of strengthening their role in policy making processes, provides silvicultural guidance and encourages cooperation among them. It undertakes advocacy and influences government policies on behalf of forest owners and also provides training and other professional assistance in achieving the economic sustainability of forest crops by reducing transaction costs and ensuring that trade policies do not become inimical to the interests of small forest owners. Similar networking organizations are needed in the countries of the region to further the cause of rural forestry.



# Protecting the interests of vulnerable rural communities

Primary objective of forest financing is to optimize the production of forestry goods and services, capture their full value and ensure distribution across stakeholders in such a way that it promotes both sustainable forest management and equity. The overall objectives of financing rural household and community forestry are:

- Economic efficiency in maximizing returns on investment
- Provide incentive to communities to use forest resources wisely and sustainably
- Promote good community governance including accountability and transparency
- Contribute to gender equity and inter and intra-community justice
- Enhance biodiversity conservation without burdening smallholders with its costs

At its core there are two purposes that community-based forestry can serve and these are increased earnings and employment for members of the community, and conservation and enrichment of the forests. As can be expected a community would aim at the former and would likely seek an arrangement in which the second objective would also contribute towards enhancing their income and employment opportunities whereas the larger society would be willing to extend its support for the first objective if the second is also served. From the community's perspective it can invest its limited land, human and financial resources in forestry only if either forestry is able to generate enough income to support itself and create surpluses or, if expectations are of meeting larger ecological and social objectives, the society subsidizes it adequately for its efforts.

Smallholder forestry shares many characteristics of community forestry except that it is usually owned by rural households or extended families. Some of its special features are:

- Small forest landholdings are usually less than 5 ha in size, often less than 1 ha.
- Small forest stakeholders are not always the owners as they may not often have a clear individual title to the forest land.
- Small forest landholders usually have little savings and can only invest self-labour, technical knowledge and management skills in forestry.

- Mostly no loans are available for forestry activities but even where available smallholders cannot access credit for want of securities.
- Long gestation forestry practices carry little meaning for smallholders whose economic interests lie in early returns.
- Their forests provide important positive externalities including carbon benefits but capturing their monetary benefits would require appropriate international legal framework, enabling national policies and a proactive institutional environment.
- Smallholders expect regular significant incomes from forest assets but only rarely achieve their objective causing them to lose interest in the management of this resource resulting in loss and depletion of forests.

Sustainable forest management (SFM), in which the capital forest stock and forest productivity does not diminish over generations and biodiversity does not suffer a significant loss, is not difficult to achieve where the forests under the command of the community are vast in extent and rich in resources and the community membership is limited in number. In most developing societies, however, with increasing populations and decreasing per capita forests, sustaining the forest stock and productivity even over shorter periods is becoming a difficult task. The central problems with SFM is that the earnings from most forests do not provide sufficient incentive to retain the lands under forest cover since other possible alternative land uses offer clear advantages. As a result the communities, or the households in case of smallholdings, acting prudently in their economic interest try to switch to more viable alternative land uses, and if such switches are legally not permitted as is often the case, they try to increase their earnings by harvesting more than what forests can sustainably deliver.

The fact is that if private and community owned forests do not give economic returns to the owners that are commensurate with the opportunity cost of the lands on which they stand they are unlikely to survive for long. The ecological services that these forests may render to the larger society are of little relevance as long as these services are not monetized and directly benefit the owners. The governments, of course, usually take recourse to law to compel the forest owners to manage their forests without harming the capital stock but such attempts rarely succeed even in countries with good governance.

### **A stepwise approach to financing SFM in rural communities**

The following stepwise approach would be useful in creating a regulatory and financial environment in which sustainable forest management would become possible in



rural settings in developing countries.

### 1. Preparing the forestry department

It is important to provide a clear mandate to the forestry department which does not leave them in any doubt as to what is expected to be achieved and then provide the requisite training to impart the new skills needed at various hierarchical levels. The changed nature of their responsibilities in rural community forestry, particularly in regard to the financial matters, would demand a complete rethink by a high level panel of experienced foresters, auditors and rural development experts and their forest working codes, prepared in colonial times in many countries of the region, would need an overhaul.

### 2. Seeking partnership with development agencies

While it cannot be termed a mandatory requirement it would be useful for the implementing department to have an experienced, and socio-politically neutral, partner with skills and finances that would be required to cause the changes ahead. Networking with individuals and agencies worldwide that have managed such changes elsewhere would become feasible through such a partnership.

### 3. Preparing communities and strengthening their institutions

Preparing the community involves educating its members about the costs and benefits of managing the resource sustainably, the discipline needed to enforce sustainability and the fact that equity within the community is as important as that in relation to the outside world. In most communities this would tend to disturb the existing power equations and might create a hostile environment for those seeking and facilitating change. It would not always be possible to avoid conflict in such cases but good meaningful changes in the existing situations often arise out of properly managed conflicts since the stress created can help break the widespread community inertia which is usually behind the continuance of a local power structure that favours a section of the community over others.

Sustainability also requires a functioning community institution that can set the standards and guide the processes for ensuring it. Indigenous peoples sometimes have institutions that have past experience and settled procedures for doing so which can become examples for other communities in the neighbourhood. When the institutions are ineffective or weak then strengthening could be achieved by examining the causes and addressing them.

#### 4. Assessing need and nature of tenure reform

It is to be understood that forest land tenure reforms are not required everywhere and they need to be carried out only if it serves the purpose of managing the rural forestry resources in a sustainable manner while hastening poverty reduction. Since these reforms can lead to transfer of public lands into private hands they are politically popular and sometimes acquire a political momentum of their own which brings with it the danger of taking things overboard. Reforms of this nature have the potential of creating serious conflicts in society on account of competing claims and could even lead to violence. It would be advisable to constitute a small team headed by an eminent jurist and consisting of similarly eminent forestry, social science and rural development experts for this assessment and their recommendations may be publicly debated before being placed before the legislature for final decision.

#### 5. Planning and executing the tenure reform

Once the need and nature of forest tenure reform is decided planning and executing such a reform would be the next step. This would be a government multi-agency task in which forest department should play a major, but not the lead, role. This task would need supervision at the highest executive level in the country otherwise it could easily lead to injustice and even intercommunity violence.

#### 6. Examining the regulatory framework

There would be many old laws and regulations which could hamper the task unless suitably amended. Once the policies are laid out the regulatory framework must be changed to make their implementation quick, efficient and cost-effective.

#### 7. Integrating the rural community forests into the evolving REDD+

It is seldom possible to make forestry economically self-sustainable without internalizing all its ecosystem benefits. The evolving REDD+ mechanism holds the promise of payment for the carbon sequestration component of the ecosystem services. This might be the key to making forestry sustainable in future.

#### 8. Setting up extension services

A highly efficient system of extension services, on the pattern of agriculture extension services, would be required to make rural forestry sustainable. Continuous capacity building of the forestry department staff and the rural communities should be an important responsibility of this service.





# Recommendations for the design of national forest financing strategies

On the basis of the discussions in the preceding sections the following recommendations for designing national forest financing strategies are made:

1. The rural communities and households want unhindered ownership with secure tenure of forest lands that can also act as sound collateral in accessing loan from banks and guarantee ownership of forest produce and ecological services generated. However, care should also be taken that competing tenure claims do not cause intercommunity violence.
2. Existing inequities in the distribution of costs and benefits along the production chain of forest goods and services need to be borne in mind while allocating forest resources to the people. Governments and international organizations should work to ensure that investments in future should enhance equity within forest owning communities. A protocol for addressing equity issues should also be evolved for diversion of common lands for raising forest plantations.
3. A suitable mechanism should be evolved to ensure a fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources which is one of the objectives of the Convention on Biodiversity.
4. Governments need to recognize and publicly declare that in planting trees a household or a community is investing its scarce resources for its own future good and that public interest in ecosystem services co-generated would not undermine their interests except through paying a fair compensation to the forest owners.
5. Governments should evolve mechanisms to recognize the multifunctional nature of forests to enhance the economic viability of forestry through payment of ecological services using available international agreements.
6. Country governments and overseas development agencies need to recognize that confining the role of forests to merely survival and subsistence would never be able to attract private investment for growth and they must work at creating value through forestry.

7. Generous and fair policies for public funding in support of small scale forestry by households and communities in recognition of the public services generated would help the rural communities manage their forests sustainably.
8. Since forests are long-term investments over large areas open from all sides and vulnerable to various damages governments are expected to provide a generally safe environment in which private property can remain unharmed.
9. Governments need to work at increasing forest productivity by encouraging use of technology and investing in rural forest management improvement.
10. High risks discourage lending for forestry projects. Suitable mechanisms for sharing this risk among lending banks, land owning community, outside investors, and the country government need to be evolved under the guidance of Asian Development Bank.
11. Gender discrimination in the sanction of loans for forestry activities to women should be avoided.
12. Governments need to amend laws and regulations that place unreasonable controls on harvesting and transport of forest produce from private holdings that discourage investment in tree growing.
13. Governments and overseas development agencies may help to create, and strengthen where already available, forest produce transport infrastructure of waterways, chute and animal dragging, similar to that which existed in the Himalayas during the first half of the twentieth century.
14. States' monopolistic control over trade in a number of locally important species often serves to limit the monetary benefits to the rural communities from the forest produce. This need to be examined case by case and removed wherever necessary.
15. Open access collection of NWFP in government owned forests combined with lax control, corruption, and secretive trade practices have led to the development of clandestine markets with most NWFPs. Since open access to public forests is a sensitive issue it may be resolved by making neighbouring communities stakeholders through a political process in which equity, rather than law, should hold centre stage. Mechanisms also need to be developed for collection and dissemination of information regarding prices, import, export and domestic trade of these products.
16. The forestry departments may be mandated and trained to see rural forestry as a development activity rather than a regulatory function.



17. Land ceilings on tree planting may be examined and amended suitably but it must be ensured that it does not result in local governments favouring industries at the cost of poorer and politically unorganized sections of rural communities.

18. Governments and overseas development agencies must work together to create a locally suitable timber certification practice that meets international standards and enhances profits to the rural communities from their forests.

19. Governments should work to ensure that there are no inordinate threats to private forest assets from theft and arson.

20. Governments may consider making investment in corporate social responsibility (CSR) mandatory for corporations of a certain size and also require that a minimum percentage be spent on forests to increase the funds availability for forestry from this source. Alternatively, fiscal measures by way of tax concessions for investments in forestry under CSR could also prove effective.

21. Governments and civil society should help create conditions that can help rural communities and households earn good returns from their existing investments in trees and forests.

22. Governments may work at shifting emphasis from the currently largely regulation bound forestry to incentive promoted forestry since incentives are likely to work better in reaching desired public objectives from private efforts rather than regulations.

23. Governments should ensure that middlemen serve to enhance competition and are not allowed to form monopoly of any kind.

24. Generation and publication of robust data on forest inventories in specified geographic boundaries would spur investment in forestry and should be undertaken by country governments.

25. Governments should help create conditions in which rural communities investing in forestry can take advantage of REDD+ program that has the promise to make forestry economically viable.

26. Changes in the policy environment should be accompanied by reform in the mandate and, wherever necessary, retraining of forest department staff so that they may be able to provide better support to rural communities in sustainably managing their forests.

27. Geographic labelling and brand building of high value forest products like honey and mushroom from specific community forests will help them get premium prices and encourage them to sustain the quality of their products.
28. Enlargement of market beyond the immediate neighbourhood and, for some products, beyond the national borders is important to arouse the interest of investors in entrepreneurship activities centred on community forestry and the national governments are best placed to initiate this process.
29. Governments may notify small scale and community forestry as a small and medium enterprise to make them eligible for incentives meant for SMEs which could help make forestry at this scale an economically viable business activity.
30. The European Union's FLEGT program designed to control trade in illegally and unsustainably harvested timber from forests through agreements between timber exporting countries in the developing countries and the EU may incorporate clear provisions for incentives and subsidies for rural communities in the program budget.
31. Governments may establish forestry extension services to build capacity among rural communities to manage their forests better.
32. Governments may promote the formation of community forest management associations with the objective of providing silvicultural guidance to private forest owners, encourage cooperation among them and influence government policies on their behalf.





## **ANNEXURE 3**

# **Payment for environmental services in Asia-Pacific forestry sector**

by

**Joost Siteur**



# Introduction

Over the last two decades Sustainable Forest Management (SFM) has been promoted as a strategy to reduce forest degradation and deforestation and protect the environmental services that forests provide. However, the adoption and financing of sustainable forest management has faced several constraints.

One of the most important constraints is that many of the benefits of well-managed forests have no explicit monetary value and do not generate revenue for forest owners, managers and inhabitants. So far, income from forests comes mainly from the sale of forest products (timber and other products), while other functions, such as biodiversity conservation, water control, soil protection, carbon fixation and ecotourism, in comparison produce very little income. This means that forest management focuses mostly on immediate financial returns and there is hardly any incentive to manage forests in a way that would provide the full range of environmental services (including ecosystem services; Table 1).

Therefore, strengthening SFM requires the recognition of the multiple values that forests provide and the broadening of forestry financing to develop new financing mechanisms and generate additional revenue streams.

Table 1. Types of Ecosystems Services from Forests

Environmental Goods	<ul style="list-style-type: none"><li>• Food</li><li>• Fresh water</li><li>• Fuel</li><li>• Fiber</li></ul>
Regulating Services	<ul style="list-style-type: none"><li>• Climate regulation</li><li>• Flood regulation</li><li>• Disease regulation</li><li>• Water purification</li></ul>
Supporting Services	<ul style="list-style-type: none"><li>• Nutrient cycling</li><li>• Soil formation</li></ul>
Cultural Services	<ul style="list-style-type: none"><li>• Aesthetic</li><li>• Spiritual</li><li>• Educational</li><li>• Recreational</li></ul>

Source: Adopted from UNEP (2008)

Over the last two decades, several mechanisms have been developed and implemented to value the additional environmental services, and to create a market, including buyers and sellers. Probably the most well-known of these are the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and forest Degradation (REDD), which are large-scale, highly-regulated and international market-based mechanisms for climate regulation.

In contrast, there are also many initiatives at local level, often without any formal regulations. Most of these target the multiple services provided by watersheds, and involve a variety of stakeholders such as farmers, communities, local government agencies, NGOs and private companies. Such schemes are typically referred to as Payments for Environmental Services (PES).

PES is an innovative financing mechanism with a strong potential to provide additional revenue for forest management. PES is increasingly being developed and implemented in Asia, with the objective to value additional forest services and have outside beneficiaries pay for these services. Despite growing experiences with PES over the last decade, it is still a relatively new concept in the region. In most countries, procedures and regulations related to PES have yet to be established and institutionalized, and so far most schemes have been implemented on an experimental and small scale, often relying on international funding.

Therefore, there is a need to incorporate these experiences into broader strategies for the SFM financing, and to identify synergies with other forestry financing options. This can be achieved by the formulation of a National Forest Financing Strategy (NFFS), a tool in support of national forest programs.

A National Forest Financing Strategy (NFFS) is the set of measures and arrangements to create the institutional, political, legal, socio-economic and financial framework agreed with the actors most closely concerned both within and outside the forest sector. It establishes criteria and guidelines for obtaining and channelling financial resources, and identifies, develops and puts into operation financing mechanisms that promote investment and payment for forest goods and services. It covers the public and private sectors, and the local, regional, national and international levels, pursuing the objectives of national forest programs and in general of the forest management of the various target groups, in a sustainable manner (van Dijk et al., 2009).

This document aims to provide a number of approaches and tools that can be used to incorporate Payments for Environmental Services (PES) into the formulation of National Forest Financing Strategies (NFFS). Since every PES mechanism is unique these may not apply to every case and should be adjusted as appropriate.





The work is one of the outcomes of a joint effort by FAO and SIDA in exploring PES in Asia. It accompanies another regional study on PES in the Asia forestry sector and a study on the economic cost and benefits of selected best practices on PES (not included). This guideline is partly based on the outcomes of those studies.

## Characteristics of PES

Environmental services are public goods, but as no one actually owns them, there is generally very little incentive to preserve them. As a result, there are no direct market mechanisms to signal the scarcity or degradation of a service until it fails. PES schemes aim to fill this gap by creating new marketplaces for services, such as carbon sequestration, biodiversity conservation, watershed protection and landscape values (FAO, 2011).

PES refers to market-based mechanisms to internalize ecological externalities, involving a financial transaction between buyers and sellers for the provision of environmental services, which are usually not monetized and paid for. PES originated out of the thinking that it could be more effective than traditional command-and-control measures typically employed by forestry management agencies, as well as the failure of many integrated conservation and development projects (Adhikari, 2009).

The core idea of PES is that external ES beneficiaries make direct, contractual and conditional payments to local landholders and users in return for adopting practices that secure ecosystem conservation and restoration (Wunder, 2005). Four types of environmental services are usually considered: watershed protection, carbon sequestration, biodiversity conservation, and preservation of landscape beauty. PES schemes may target poverty alleviation besides the environmental benefits, but this is not always the case.

Experiences from various schemes has shown that PES is most efficient and effective when the producers, buyers and necessary management activities are clearly identified, payments are based on science and measurable improvements and where the costs of implementing improved forest and land management are low (Boscolo, 2009).

The most commonly adopted definition proposed by Wunder (2005) defines PES as:

1. a voluntary transaction where

2. a well-defined Environmental Service (ES) (or a land-use likely to secure that service)
3. is being 'bought' by a (minimum one) ES buyer
4. from a (minimum one) ES provider
5. if and only if the ES provider secures ES provision (conditionality).

In practice, few PES schemes meet all these criteria, with conditionality the hardest criterion to meet, as many initiatives neglect to closely monitor the deliverance of the environmental services contract and the expected benefits.

Payments are typically made in cash, but could be complemented with in-kind payments such as legal rights to land and resources, improvement of local infrastructure, and the provision of education and health services.

From the perspective of market types, PES schemes can be categorized as follows (UNEP, 2008):

1. *Public payment schemes*: These are country-specific, where governments pay land owners/managers to maintain or enhance ecosystem services (e.g. China and Viet Nam).
2. *Regulated markets*: This involves open trading between buyers and sellers under a regulatory system, such as CDM. Regulatory markets are established through legislation that creates demand for a service by setting a cap on environmental impacts and allowing trade among users that are able to comply with the regulations at different costs ('cap and trade').
3. *Self-organized private deals*: These are voluntary markets where service users contract directly with services providers, or through an intermediary. Many of these operate without any formal regulatory markets and little government involvement.

During development of a PES scheme, major activities typically include the identification and valuation of environmental services, identification of potential buyers and sellers, the assessment of existing legal frameworks, and the selection of the most appropriate type of payment and contractual arrangement. Major activities during implementation include verification, monitoring and evaluation, as well as the enforcement of contractual arrangements.



# Involving stakeholders

The development of PES schemes involves a wide range of stakeholders and requires the balancing of the interests of each. Depending on the scale and type of a scheme, stakeholders include individual landowners, communities, private companies, local and national government entities, NGOs and donor agencies. This section discusses the importance of closely involving stakeholders and approaches to do so.

## *Why Involve Stakeholders?*

Each PES scheme will be unique, depending upon the environment and stakeholders. Therefore, close stakeholder involvement in the development and implementation of a PES scheme is crucial to ensure a successful and long-term PES scheme. Different stakeholders should be aware of and have a saying in the environmental services targeted, levels of payments and contractual obligations. It is important to begin stakeholder involvement early in the development process and continue involvement throughout subsequent phases. Early and extensive communication with key stakeholders can help overcome challenges, avoid misunderstandings and increase participation.

It should be emphasized that effective stakeholder involvement is more than just holding a public hearing or seeking public comment on a proposed PES scheme. When stakeholders are closely involved in the formulation of the scheme and its implementation, they will have a sense of ownership and stay committed in the long-term. Likewise, it is important to incorporate useful and constructive contributions from stakeholders in the PES development process. If these are largely ignored, stakeholders quickly will lose interest and may even obstruct further implementation.

## *Transaction costs*

Transaction costs refer to the time and money spent by different parties to develop and implement a PES deal. A close involvement of stakeholders could add substantially to the transaction costs, especially in areas with limited institutional capacity. Since high transaction costs are often an obstacle to the development and implementation of PES, it may be tempting to limit the stakeholder consultation process in order to minimize the costs. However, close stakeholder involvement will reduce the risk of opposition during later stages and enhance their widespread and long-term commitment, as well as the cost-effective delivery of the environmental services targeted.

Therefore, it is important to seek a balance between stakeholder representations, the duration of the planning process and the overall costs. If possible, it is recommended to work with stakeholder representative groups who are able to represent specific interest, rather than many individual stakeholders, but it should be ensured that these truly represent their interests. UNEP (2008) provides a number of approaches to reduce transaction costs.

### *Identifying stakeholders*

Each PES scheme is different, so the key stakeholders will vary from case to case as well. Nevertheless, the stakeholders involved will typically include the following:

- *Communities and Farmers:* Land use practices by farmers and communities have an impact on the quality of environmental services that forests provide. Therefore, these are often the sellers or service providers in PES schemes.
- *Private Sector:* The private sector is an important user of environmental services, particularly in the form of water and hydropower. Private companies are important PES stakeholders, not only as potential buyers but also as a source of funding, as well as for their practical and technical experience.
- *Forestry Departments and other government agencies:* These play several important roles in PES development by (1) formulating the policy and institutional framework, including land tenure rights, (2) providing technical expertise, (3) setting regulations that catalyze private sector involvement, and (4) funding transaction costs. In addition, they may be important buyers of environmental services, as in China and Viet Nam.
- *NGOs:* Both local and international NGOs are instrumental in the development of many PES schemes. Among others, they provide technical support and funding, and may act as an independent intermediary.
- *International Agencies and Donors:* These are an important source of funding for the development of PES schemes. In addition, they can facilitate the exchange of international experiences, provide advice to national governments, and support the building of institutional capacity.

### *Elements of stakeholder involvement*

If stakeholders are not involved in the design and implementation processes of a PES scheme, the likelihood that participants will adhere to the requirements of a contract is reduced (FAO, 2011). Reversely, when stakeholders are closely involved from the beginning and strongly support the scheme, there should be no serious impediment to



the scheme's implementation, even without any official PES legislation or regulation in place.

To ensure effective stakeholder involvement, a number of elements are important, of which the main ones are:

1. *Trusted Intermediary*: Experience has shown that the involvement of a trusted intermediary is crucial for successful PES scheme development. The intermediary's main task is to bring sellers and buyers together in agreeing on environmental services targeted, the level of payments, and contract terms. The intermediary should be neutral and needs to be trusted by both sellers and buyers to allow for negotiations and preparing agreements. In the absence of a suitable institution that could serve as the intermediary, the creation of a PES communication forum with representation from different stakeholders can provide a stable platform for stakeholder participation (see Box 8 for an example).
2. *Sufficient Time*: Development of a PES scheme can take considerable time and resources. While it is important to control the transactions costs, it is also important to allow for sufficient time to develop an effective mechanism. Probably one of the greatest difficulties in PES development is building trust among stakeholders, and it takes time to overcome existing misunderstandings and previous conflicts. In addition, since PES is still relatively new, stakeholders should be allowed sufficient time to fully understand the concept, any supporting information (e.g. valuation studies) and the commitment they are about to make.
3. *Information Campaign*: To enhance stakeholder involvement, it is important to provide clear and concise information throughout the development process. Since stakeholders have different backgrounds the information should be presented in a form they can understand and relate to, covering their main needs and concerns. Particularly on the seller's side, the information should enhance their understanding of the commitment and any long-term implications for local livelihoods and resource rights. The information campaign should not just inform stakeholders of decisions made, but it should allow for active participation in decision-making.
4. *Participation in Decision-Making*: Apart from consulting stakeholders to learn from their needs and concerns, they should be allowed to actively participate in the decision making process. This will create an atmosphere of shared authority and responsibility for decisions or actions, creating a sense of ownership and increased commitment. It will also lead to more cost-effective solutions that are more likely to be adopted and implemented in the long-term.

5. *Transparency*: Transparency and access to information are essential, both during planning and implementation. The management and administration need to be open to scrutiny by those who will be potentially affected, including decisions made, budgets, and procedures. The greater the transparency in establishing objectives, deciding on measures and reporting on achievements, the more stakeholders will be committed to the scheme and stick to their side of the deal.

### **Box 1. Communication Forum of Cidanau Watershed**

The Cidanau watershed is an important source of water for households and industries in West Java, Indonesia. Due to population pressure, over the last two decades the watershed has experienced rapid change in land cover with forests being converted to agricultural land. This has led to increased levels of erosion and problems for downstream water users, with water shortages during the dry season, as well as pollution and high sedimentation.

The limited success of past efforts, such as transmigration, reforestation and land rehabilitation programs, stimulated a group of concerned people in 1998 to establish the Forum Komunikasi DAS Cidanau (FKDC or Communication Forum of Cidanau Watershed). The forum is facilitated by two local NGOs, and consists of representatives from farmers, government, private sector, and NGOs who meet monthly to discuss several issues related to the watershed.

The forum has been instrumental in the development of a PES scheme in which a water supply company pays private landholders to plant and maintain trees. The scheme has been operational since 2005, with annual payments of more than \$30 000 to around 225 landowners, covering 150 ha.



# Tools and approaches

As of yet, many PES schemes are developed locally and often ad-hoc, with little standardization and regulation. Often, schemes are developed through a process of learning by doing. As such, there are limited standards for PES tools and approaches. Nevertheless, the section discusses tools that are important for the development of a PES scheme.

## 4.1 Valuation of environmental services

Experience has shown that the long-term success of a PES scheme often depends on the proper assessment of the value of environmental services, both from the buyers' and sellers' perspective. However, the absence of markets for most environmental services makes it difficult to estimate a payment structure acceptable to both parties. For instance, an ecosystem may provide several kinds of environmental services, with only a few being valuable to service users. Similarly, opportunity costs for service providers will depend on the specific land use practices they are asked to adopt. Therefore, an ad hoc payment structure will rarely work in the long run. Instead, PES programs must conduct careful analysis to estimate values of the environmental services targeted (USAID, 2007).

Where there are no markets, useful methods to estimate the value of environmental services include:

- *Imputing or Attributing Values:* This can be done in a variety of ways, but is typically based on the estimation of forgone revenue or savings in operation for a potential buyer. For example, the costs of removing sediment from a reservoir can be used as proxy for the value of reducing sedimentation in the river through erosion control measures. Similarly, the value of water regulation by forests to hydropower and water supply facilities can be interpreted as the forgone revenue for these facilities because of the loss of forest areas. Box 9 provides an example of such an approach.

- *Surveys:* Instead of carrying out an implicit valuation of an environmental service surveys can be used to estimate buyers' willingness to pay (WTP) for a service and sellers' willingness to accept (WTA) compensation in return for providing a service. Ideally, payments should be set above providers' WTA and below buyers' WTP. A major limitation of surveys is that they are based on stated preferences of the respondents, which may or may not be their true preferences. Thus, WTP and WTA estimates may not necessarily translate into actual payments when the scheme is implemented.

## Box 2. Valuation of Da Nhim Watershed, Viet Nam

In 2008, the government of Viet Nam adopted a 2-year PES pilot policy, which included the development and implementation of two pilot schemes. The pilot in Lam Dong province was supported by Winrock's Asia Regional Biodiversity Conservation Program (ARBCP), which conducted a valuation study of the different watershed services.

The study considered two scenarios: (1) preserving existing forest cover and (2) converting 45,000 hectares of pine forest to agriculture. A model predicted the water runoff and suspended sediment entering the reservoir of the Da Nhim Hydropower Plant for each of the scenarios. The value of the environmental services from the forest was established by estimating the total power generation forgone due to the shift between the two scenarios.

Results valued the forest at \$69/ha/year to the Da Nhim hydropower plant, of which \$14.6 was attributed to the benefits accrued from water regulation and \$54.4 for reduction of sediment into the reservoir. These initial estimates formed the basis for the payment levels stipulated in the pilot PES policy: 0.1 US\$ cents per kWh for power generation and 0.2 \$ cents per cubic meter for water provision (Winrock, 2011).

- Auctions: Potential sellers and buyers may have asymmetric information, meaning that they do not have the same information and thus one may take advantage of the other in negotiating a payment system. Auctions among potential sellers may be an effective way to deal with asymmetry. Auctions are based on the premise that, when service providers compete for a contract, they are bound to reveal their true preferences. Under auctions, buyers invite bids from potential suppliers of an environmental service, and then select the lowest bids. This method is supposed to be cost-effective, providing the biggest conservation bang for the buck. However, a major constraint with auctions is that their political and social feasibility in the context of developing countries is hardly tested, and paying two neighbours differently for the same environmental service may lead to resentment (USAID, 2007).

The type of valuation technique chosen will depend on the type of environmental service to be valued, as well as the quantity and quality of data available. Some valuation methods may be more suited to capturing the values of particular environmental services than others (DEFRA, 2007).





## 4.2 Monitoring and evaluation plan

Proper monitoring of compliance with agreements and delivery of environmental services is a critical component of the development and implementation PES schemes. Monitoring can help to assure the buyer that the service is being obtained, and impress the conditionality of the payments on the sellers. Therefore, an effective monitoring, reporting and validating system should be in place.

The development of a monitoring and evaluation plan is a useful tool to achieve this. An M&E plan is a flexible guide that can be used to document project activities, answer evaluation questions, and show progress towards project goals and objectives. It explains project methodologies (such as instruments for gathering data), implementation plans, and expected results (Jjumba, 2011).

It is essential to be clear on who undertakes M&E verification activities throughout the duration of a PES agreement. The importance of this element means that the M&E program needs to be well-planned prior to implementation of the PES scheme. It should be developed with the input of all key stakeholders to ensure all parties are satisfied with the parameters that are being monitored. In addition, the plan should be evaluated and modified over time as the project progresses, ideally with the input of all stakeholders throughout (UNEP, 2008).

Prior to verification, the buyer, seller, and verifier should discuss and agree upon monitoring standards and implementation methodology. It is important to agree whether the monitoring focuses on a specific land use practice (e.g. planting trees) or the actual delivery of a service (e.g. reduced sedimentation).

Verification methods should be:

- Technically feasible matching available skills
- Financially feasible, fitting into available budgets
- Consistent throughout the PES scheme.

Analysis of the verification report will identify the shortcomings of the monitoring and evaluation plan and yield insight into the effectiveness of the PES scheme. Verification results should be made available to buyers, intermediary institutions, and the public to increase transparency and legitimacy, as well as to facilitate adaptive management processes (UNEP, 2008).

# Funding for PES

Traditionally, funding for reforestation and forest conservation in Asia comes largely from the government and international assistance. PES goes beyond traditional government or donor funding by introducing innovative market-based approaches that allow public and private beneficiaries to pay for ecosystem services that might otherwise not be valued.

For the development PES schemes, often new types of funding will have to be sourced. With the multiple functions and values of forests being recognized more and more, other entities may increasingly be willing to provide funding. However, the challenge of obtaining funding often lies more in being able to access alternative funding sources than about the availability of money *per se*.

## *Start-up funding*

For PES schemes to work, it requires both initial funding for scheme development and start-up, and a secure long-term source of financing to keep the scheme running over many years. Development and start-up costs includes project design and transaction costs, as well as the funding of initial activities such as establishing a nursery for seedlings or building check dams. The need to secure start-up funding is considered to be a fundamental obstacle to increasing the number of PES initiatives (Herbert, 2010). Sometimes a buyer may be willing to pay for upfront costs, but in most cases this financing gap is filled by NGOs and international funding.

There may be a need for a mechanism where project developers can apply for funding to cover upfront costs, which would help to increase the number of PES schemes, by allowing communities or other groups to perform feasibility analyses and valuation studies, identify potential buyers and develop contractual agreements.

## *Sources of funding*

The following sections list a number of potential sources for PES funding, both to generate payments and fund start-up costs.

### *Public funding*

The public sector will remain the main source of funding for forestry conservation. Public budgets are typically negotiated annually, hence there is uncertainty regarding the amount and period for which the funding will be available. Apart from regular budgets there are several ways to creatively tap into public funds:



- *Earmarking of taxes:* This refers to a dedicated tax or levy to generate funding for forestry conservation activities, which can be collected at the national or decentralized level. Several examples of this are available (see Box 10). Often specialized autonomous funds need to be set up to manage the revenues. Instituting these taxes is often difficult to achieve and will require the adoption of specific laws, but once established they will provide long-term funding, even though the annual amount will fluctuate with the tax collected.
- *Resource fees:* Many countries charge resource fees or royalties to companies that make use of natural resources for their operation, such as hydro power plants and water utilities. These are either used by forestry departments for conservation activities or may just end up in the overall government budget. Instead, part of the royalties could be allocated to pay communities under a PES scheme. For example, in Nepal a scheme was developed by tapping into the royalties paid by a hydropower company. While the amount of potential funding from royalties may be large, the drawback is that they are largely managed by the state and both buyers and sellers have little saying over their use.
- *State-owned companies:* Since these play an important role in providing services to the public, they often also have an interest in funding environmental and community activities. In addition, in most Asian countries the main hydro power and water supply facilities are owned by the state. Some of these may already have dedicated budgets for social and community activities, such as in Indonesia, where by law, state-owned companies have to spend a minimum of 1 percent of their after-tax profit on community development programs. However, they may also be subject to a high level of bureaucracy and regulation so in practice their ability to participate may be limited.

### *Private sector*

While private companies are largely driven by profit motives, they are increasingly concerned about environmental issues, both out of concerns for their reputation and the realization that their operation depends on the continued provision of environmental services. When the provision of environmental services is made visible to specific beneficiaries, in several cases private companies have been willing to pay providers to ensure continuous provision.

More and more companies in Asia have budgets for Corporate Social Responsibility (CSR) and PES can provide a good avenue for companies to meet the dual target of creating goodwill and protecting the natural resources they depend on. Once

### Box 3. Earmarking taxes

This approach has been used in several countries to generate significant funding for environmental activities. Two examples:

In Costa Rica, **FONAFIFO**, established by law in 1996, runs a national PES program with the aim of promoting the conservation and recovery of the country's forest cover. The fund purchases various environmental services from local landowners and sells these to different buyers, e.g. watershed services are sold to local hydroelectric companies, while carbon sequestration services are being marketed globally. The program has been funded primarily with revenues from a national tax on fossil fuels and forestry revenues, which averages about \$10 million annually. Additional support has included grants and loans from international agencies (USAID, 2007).

In Thailand, the **ENCON Fund** was established in the early 1990s under the Energy Conservation Promotion Act. The fund obtains revenues from a levy on the domestic sales of fossil fuels. The Fund was setup to provide financial support to government agencies, businesses and NGOs to increase energy efficiency (EE) and to promote renewable energy (RE). The Fund has an average annual income of \$240 million and average spending level of \$150 million. Since 1995 the fund has supported hundreds of EE and RE programs and has been instrumental in stimulating the rapid development of the renewable energy sector of the country.

convinced, private companies can make decisions fairly quickly but in the long-term their commitment could be endangered by changes in management or overall market fluctuations.

Accessing funding from the private sector requires bridging the significant communication gap that may exist between small communities and commercial enterprises. Local community organizations and NGOs could be useful in helping to overcome this gap and find a common language.

Of the private sector, two sub-sectors would have the greatest potential interest in joining a PES scheme:

- *Hydro power plant and water utilities:* Since these are highly dependent on watershed services they are directly concerned about their continuation. However, in many cases they already pay royalties for the use of water resources so they may not always be willing to make additional payments.
- *Eco-Tourism:* Forest areas are often a major source of attraction for tourists,



so tourism has the potential to generate substantial funding for PES, but as of yet this has been largely untapped. Most national parks and protected areas already charge entrance fees but these funds are mostly used for recreational services and infrastructure but not on the indirect services that PES focuses on. The challenge lies in the formulation of mechanisms that incorporate PES aspects such as conditionality. A PES scheme in the Northern Plains Cambodia provides an interesting example (see Box 11).

#### **Box 4. Eco-tourism and PES**

The Northern Plains of Cambodia contain rare species that are high profile targets for international birdwatchers and access is relatively easy from the major tourism centre at Siem Reap. With the support of the Wildlife Conservation Society (WCS) a PES scheme was developed to stimulate eco-tourism in the area. An agreement between the local authorities and villagers stipulates that tourism revenue is subject to the villagers agreeing to stop hunting key species and abiding by the land-use plan. The value to local families of conserving wildlife is further reinforced by the fact that each tourist pays \$30 to the village if they see all key species and only \$15 for just a subset.

In addition, a direct payment program was established to protect nine endangered bird species, which were heavily threatened by collection of eggs and chicks from nesting sites for consumption or trade. Under the program, local people were offered conditional payments if they successfully protected nests until the chicks fledged. Since 2002, more than 1 550 nests have been protected over more than 4 000 km<sup>2</sup> of habitat. Annual payments exceed \$30 000, with average payments of \$80-\$160 per protector, significant in comparison with local cash income.

#### *International agencies and donors*

International public sector funding is a very important source for PES program funding. Many initiatives across the region have in some form been supported by international agencies. For example, the World Agroforestry Centre (ICRAF) has been instrumental in the development of several schemes, through its program 'Rewarding Upland Poor for Environmental Services' (RUPES). In Viet Nam, Winrock and GIZ supported the implementation of two pilots that formed the basis for the national PES policy adopted in 2010.

The Global Environment Facility (GEF) is an important PES investor and has a strong interest in catalyzing global conservation investments. In many GEF-financed PES projects, international funding was used to pay the start-up costs of establishing

mechanisms, with the expectation that payments will also help protect valuable biodiversity over the long-term. In many countries the GEF has a Small-Grants program, managed by UNDP, which supports small, local initiatives that help to protect biodiversity. This could be a good source of funding start-up costs of local schemes.

Donor support could be used to support the update of the legal framework and the strengthening institutional capacity for PES scheme design. In the long run, donor funding might be required to cover biodiversity values in which the private sector is not interested or public funds cannot reach (e.g. in national PES programs where donor agencies like GEF earmark funds contributed to biodiversity priority). The same applies to PES schemes with a strong commitment to support poverty alleviation. In these cases, donor funds could be crucial in supporting poverty-specific characteristics of the scheme (Pagiola et al., 2009).



# Recommendations for the design of national forest financing strategies

Over the last decade numerous initiatives and activities related to Payments for Environmental Services have been developed in Asia, leading to several active schemes across the region in which payments or rewards are being provided to land users and managers. Most of these involve the protection and rehabilitation of watersheds, with hydropower plants and water utilities as buyers. Numerous other schemes are under development, and it can be expected that many more schemes will be implemented in the near future.

The active schemes in Asia can be categorized as either public payments schemes that are government-driven and large scale, or local self-organized private deals that operate without any formal regulatory markets and little government involvement. Each approach has its strengths and shortcomings and it cannot be said that one is better than the other. Local schemes can be highly effective with strong commitment by all stakeholders, but due to their scale they have high transaction costs and limited environmental impacts. Public schemes have the potential to bring high environmental benefits, but tend to be hampered by high levels of bureaucracy and a heavy top-down approach, which limits the commitment of stakeholders and their long-term effectiveness.

In order to stimulate further PES implementation, there is a need to combine the strengths of local deals with those of government programs, so PES can be highly effective and have high environmental impacts. To achieve this, the following recommendations are made:

1. *Capacity building:* Training and raising awareness about the potential of PES among government agencies, NGOs, communities and companies would stimulate the development of additional schemes, as well as create potential intermediaries and reduce transaction costs.
2. *Funding for start-up costs:* Given the high upfront costs of local schemes, there is a need for a mechanism to fund these costs, which would help to increase the number of PES schemes implemented. Funding is needed to conduct feasibility analyses and valuation studies, identify potential buyers and develop contractual agreements.

3. *Regulations to reduce transaction costs:* While local schemes can function perfectly well in the absence of regulations, these can be helpful in paving the way for additional schemes and reducing transactions costs. The formulation of PES regulations should ensure that these are in line with existing legal and institutional frameworks.

4. *Engage private sector:* As of yet, most PES buyers in Asia are state-owned companies. There may be a large potential for PES funding from private companies, particularly companies that heavily rely on water resources such as private small-scale hydro plants, agro-industries and producers of drinks. Many companies may already have budgets for Corporate Social Responsibility (CSR), for which PES can provide a good avenue to meet the dual target of creating goodwill and protecting the natural resources they depend on.







## **ANNEXURE 4**

# **Incorporating the interests of investors in Asia-Pacific forestry sector**

by

Andrew Steel



## Executive summary

The Treedom Group undertook this research role that involved significant engagement with approximately 400 participants involved in the forestry sector promoting the interests of the forestry sector and local communities whose income is partly or wholly reliant on forestry related employment. Prospective investors and investment distribution companies included pension funds, hedge funds, private equity funds and high net worth individuals along with regulated investment advisory companies.

In summary, investors are more aware relative to 5-10 years ago of the environmental need for and the investment potential of commercial Asian forestry projects. However the current level of awareness and trust in the sector and investment options, remain insufficient to either raise meaningful capital or halt the erosion of existing natural forestry resources. Both sectors have broadly similar motivations for considering investment, though the order of priorities and motivations differ with institutions led by strategic considerations whilst individual investors are primarily driven by environmental concerns. Groups who had previously considered investing, did not commit due to concerns relating to land title transparency, the perception of bureaucracy and corruption, the lack of investment liquidity and the lack of regulated investment options. Even with these concerns, both potential and current investors nominated Asia as the region likely to offer the best forestry investment opportunities.

There is a large and diverse supply of literature supporting the case for the protection of existing Asian forestry assets along with a reasonable amount of literature promoting further commercial involvement in the Asian forestry sector, largely written by academics or quasi-governmental bodies (Abt et al., 2010). However this literature is almost wholly circulated amongst environmentalists and other forestry participants and does not generally penetrate into the professional investment community. There is a paucity of literature aimed at investors which makes the case for private sector investment in forestry and the vast majority of literature of quality refers to investing in North American forestry assets (Clutter and Mei, 2010).

All participants nominated Teak as the opportunity most likely to be considered for investment followed by (in order of preference) *Aquilaria*, Bamboo, Oil Palm and Biomass. The narrow range of species nominated is partly a function of the mainstream investment community generally having little or no knowledge of commercially viable forestry species. However, there are a few exceptions to the general rule of poor investor awareness of commercially viable species. *Aquilaria* has a high profile in the Middle East due to the production of Oudh oil the latter of which is widely used in the

region as an ingredient for perfumes. Biomass has the highest profile in the European investment community. Teak has the highest market awareness in Asia and achieved the second highest level of awareness in Europe and the Middle East. Bamboo enjoyed a consistently high profile across all regions.

Quasi-governmental bodies continue to promote the concept of private sector investment into the forestry sector but due to internal policy restrictions and/or the reluctance to take reputational risk by directly associating themselves with private sector companies, do not allocate funding to or proactively promote the existence of commercial Asian forestry projects or investment funds and find it difficult to communicate with the business sector in a language they can comprehend.



# Consultation with international institutions and communities

Significant time and resources were allocated during the research project to secure the input of groups working with rural communities and international institutions. The majority of input from groups working with communities was secured from Asia and in particular communities actively involved in reforestation projects. Institutional input was mainly from the developed world with some respondents coming from the Asia-Pacific region. Investor interests are listed in a following section. This section will address the interests of non-investing international institutions and groups working with rural communities. The following interests and themes were identified in consultations with international non-investing institutions:

1. Campaigns promoting reforestation are growing in number and effectiveness in most regions. The United States and China appear to be most productive in promoting their re-forestation efforts. The Middle East and North Africa (MENA) has the lowest profile in promoting re-forestations efforts. The success of the US and China maybe a reflection of their larger financial budgets, but there is also a wave of enthusiasm for reforestation at a public level in the United States with environmental groups continuing to grow in terms of membership and influence (Harris, 2012). Reforestation efforts in China are growing due to the effective clarification and execution of government policy and the Chinese government's ability to organize the requisite manpower to meet its targets<sup>1</sup>. The relative lack of recent action in the MENA region is according to research not due the distractions of the 'Arab Spring' revolution as efforts were just as negligible before the uprisings. Unsuitedly dry weather in much of the MENA region is partly attributable, though a reliance on income from fossil fuels notably oil and gas appears to dissuade some decision-makers in the region from embracing pro-environment and reforestation policies.

2. There is an underlying fear at national level that allowing foreign entities to invest in the forest sector may undermine their own reforestation efforts and plans. One such respondent was quoted as stating that this was akin to selling of a national asset to a foreign party.

3. Many international bodies proactively promote a unified global policy in relation to reforestation and are increasingly helping developing countries to form and execute appropriate environmental policies (FAO, 2011). However, most institutions,

1 <http://www.china.org.cn/english/2002/May/32599.htm>

even those with a global reach, tend to localize their efforts where they enjoy deeper relationships with legislators and environmentalists; however, the efforts do not always trickle through to a concerted effort of action on the ground.

4. Negative feedback from non-investing institutions offered the following views:

- a. An appreciation that the 'green' or reforestation movement was generally stronger globally, relative to the situation 5–10 years ago, although the pace of change was still inadequate. A follow on from the view that Non Government Organizations' (NGO's) work whilst immensely valuable can be bureaucratic and not performance driven to achieve goals or targets in the timely manner expected of the modern day business world.
- b. The perception that commercial enterprises were failing to correctly 'price' the environmental and social benefits of forestry over and above the cash proceeds from forestry product sales. This issue was particularly relevant to discussions relating to Payment for Environmental Services projects.
- c. Confusion regarding the Carbon Credit legislation and pricing along with markets. Although the carbon market is still a relatively new concept, many understand the metrics of trading a commodity but fail to understand the whole process, which is seemingly very complex for an outsider.
- d. Disillusionment with governments' failure to agree and execute an effective global framework post Kyoto and the perception of frequent policy shifts in relation to forestry which due to its long-term nature thereby centers on a higher perceived risk.
- e. A lack of regulated forestry investment options from reputable financial jurisdictions leaving only unregulated high risk 'Managed Investment Schemes' (MIS) as a viable option which generally cannot pass the due diligence of major investors.
- f. Weak availability of low interest or interest free loans or tax credits for sustainable forestry projects from either Governments or International agencies to stimulate the economic investment at an operation level. At country level (Thailand) a lack of attractive incentives to invest in the sector where the country via its Board of Investment (BOI) Committees is generally trying to guard its agricultural/forestry sectors and push investment into manufacture or other such industries.



- g. Concerns that regulators and governments were ill equipped to supervise forestry companies on valuations (The Sino Forests incident was often referred (Mc Crum, 2011)).
  - h. Land ownership issues and land title concerns mean convoluted organizational structures and shareholdings to ensure control of both the forestry asset and the underlying land asset as both display good potential financial growth models making investment even more attractive when combined.
  - i. Concerns that the global economic crisis since 2008 was letting governments “off the hook” in relation to improving environmental policies and tackling climate change.
  - j. A minority of environmentalists view all commercial forestry projects as deforestation: motivated purely by financial gain, irrelevant of the commercial enterprises’ efforts to communicate their sustainability activities or accreditations, a key solution to meet commercial demand for forestry products and thereby relieving pressure on existing native woodland.
5. Positive feedback from non-investing institutions offered the following views:
- a. Whilst non-investing institutions largely voiced concerns or nominated obstacles to achieving deeper commercial involvement in the Asian forestry sector, some positive themes were identified including the belief that the pro-green movement and reforestation efforts had secured a momentum that made further progress inevitable.
  - b. European Institutions are seeing that there is potentially a sleeping giant that they have been unaware of in the forestry sector and that growth rates in Asia could easily surpass those seen in the developed world forestry sectors.
  - c. The drive for renewable sources of energy and guaranteed feedstock supply is forcing the search farther and wider. However currency risks due to fluctuations are one problematic area for the commodity sector, as is a fear due to lack of understanding of the operational elements on the ground.

Corporations would rather provide take-off agreements and let the project develop source funding rather than investing directly.

- d. A seemingly immature forest carbon market is poised to explode if platforms in other countries allow the introduction of international compliance emission reductions and voluntary emission reductions from the forestry sector, although the general consensus is that this may still be a number of years off and thereby investment in other forms or renewable energy may provide a simpler route.

6. Approximately 400 parties have liaised with The Treedom Group and have provided feedback valuable to the research process. The institutions listed in Appendix 4a are representative, but not an exhaustive list of those communicated with.





# Consultation with current investors or potential investors in Asian forestry

Significant time and resources were allocated to understanding the needs of:

- a. Investors already exposed to Asian forestry assets.
- b. Investors who had previously considered investing in Asian forestry assets but on reflection had decided not to commit.
- c. Investors who confirmed they would consider investing in Asian forestry assets in the foreseeable future.

Feedback from investors on the reasons they need / want to invest in forestry (in order of priority):

## Institutions:

- I. Strategic investment
- II. Environmental & social concerns
- III. Geographical and asset class diversification
- IV. Carbon offsetting
- V. Returns

## Individuals:

- I. Environmental & social concerns
- II. Returns
- III. Geographical and asset class diversification

Reasons limiting investment in Asian forestry assets – Institutional and individual:

- I. Risks, including land title concerns, corruption and bureaucracy concerns, due-diligence procedure challenges, and lack of project liquidity
- II. Lack of opportunities
- III. Lack of expert and proven forestry asset managers
- IV. Perceived lack of industry infrastructure
- V. Wider rejection of illiquid assets due to financial market concerns

**Investor geographical preferences for forestry investment opportunities (in order of preference):**

- I. Asia
- II. South America
- III. Africa
- IV. North America
- V. Europe
- VI. Australasia

*Note: Europe and Australasia are presently unattractive to investors on valuation concerns.*

**Forestry projects most attractive to prospective investors (in order of preference):**

- I. Teak – return potential
- II. Aquilaria – earlier cash flow via oil and agar wood sales
- III. Bamboo – fast growing and multiple end-market options
- IV. Oil Palm – multiple end-market options
- V. Biomass – renewed interest in locally sourced fuel

**Why has the forestry investment market seen more success in the past in US and Europe than Asia and other emerging markets?**

- I. Higher environmental awareness and willingness by local investors to invest in home markets in a socially responsible manner
- II. More mature land title legislation and a more trusted legal framework
- III. Deeper investor understanding of the diversification benefits of forestry assets relative to traditional investments such as equities, fixed interest, real estate, commodities and hedge funds

**What concerns do you have regarding the reputation of the Asian forestry industry?**

- I. Deep layers of bureaucracy
- II. Concerns that corruption exists
- III. Unregulated investment industry
- IV. Reputation is improving but too slowly to encourage immediate investment
- V. Investors remain unsure how they can make money ethically in forestry



## How can the Asian forestry industry increase private sector investment (in order of priority)?

- I. Regulation & supervision of forestry investing activities
- II. Improved land title transparency
- III. Better availability of local / sovereign risk analysis
- IV. Better monetization of carbon offsetting helping to increase sources of income
- V. Improve liquidity
- VI. Improved certainty of returns
- VII. Education for investors

# Investor awareness of policy schemes for financing Asian forestry projects

There is a paucity of knowledge amongst the mainstream investing community regarding the policies and processes available which enhance the attractiveness of private sector investment in Asian forestry assets. London based investing institutions tended to offer relatively superior global policy knowledge and articulated the most sophisticated due-diligence and project valuation techniques though a lack of trust and experience in Asian forestry projects has prevented meaningful investment.

Those with deep knowledge of the policy schemes related to the financing of Asian forestry projects tended to work within government bodies, environmental groups and academic institutions and had limited or no exposure to investing institutions.

Investors voiced a desire for the following generic policy environment:

- I. Improved execution of legislation tackling illegal logging, which is perceived as significantly reducing the market price for legally, harvested forestry products.
- II. A more robust and stable pricing system for carbon credits.
- III. A cross border regulatory framework for forestry investment funds and the banning of non-regulated forestry investment schemes.
- IV. A global standard for the pricing of illiquid forestry assets and auditing of forestry projects.
- V. Government subsidised return enhancement for Reduced Emissions from Deforestation and Degradation (REDD) projects and Environmental Service Schemes.
- VI. Improved land title protection for investors via better legislation in emerging markets.
- VII. Removing legislation that limits foreign ownership of land and companies in emerging markets.
- VIII. Legislation providing assurances of water availability to privately owned forestry projects.
- IX. Government subsidies supporting the building and maintenance of infrastructure and communication links from poorer rural areas to ports and other key transport links.



- X. Reduced permit approval timelines and increased international co-ordination to reduce corruption in emerging markets.
- XI. Improved availability of forestry industry training for local communities in emerging markets (There is a lack of local suitably qualified forestry professionals in most emerging markets.).
- XII. More favourable felling and export rules for commercial forestry enterprises that meet internationally recognised sustainable forestry practices.
- XIII. Simpler company formation procedures in emerging markets.
- XIV. Better financial market legislation facilitating easier access to debt and equity capital for sustainable forestry projects.

# Recommendations for the design of national forest financing strategies

Whilst there are innumerable measures and policy changes that could be introduced, these would take significant time to be implemented, a narrower focus on key areas would better serve the interests of the Asian forestry sector and encourage quicker and more private sector investment by adopting a shorter term approach.

One of the major barriers that exist is the relatively poor image that forestry as an investment vehicle has, due to lack of knowledge of those not involved in the sector in relation to the perceived risks. The investment community that has tackled this sector with seemingly large capital sums invested has remained in safer 'home country' markets via Timber Real Estate Investment trusts (REIT). A factor that could be addressed by improving communication outside of the normal forestry channels to allow external mainstream investors to understand the perceived risks and see the opportunities that exist in the region.

## I. Marketing/Communication

Quasi-governmental and environmental groups should increase their communication efforts towards the mainstream investment community. The perception is quasi-governmental and environmental groups spend most of their time speaking to each other about increasing private sector investment and not engaging enough with the private sector itself in face to face meetings.

Current publications encouraging private sector investment into the Asian forestry sector should be more accurately aimed at the mainstream investment community and composed in conjunction with experienced institutional investors. This will ensure the publications also focus on the return, risk, investment horizon, liquidity and diversification benefits of forestry investment as opposed to the traditional focus of such publications on the social, environmental and climate change problems caused by deforestation and the environmental benefits of reforestation; which is where the current benchmark is set.

Distribution of UN publications needs to be addressed so that the target market actually receives the marketing message. However bankers do not normally attend forestry conferences and therefore do not pick up copies of such publications that can



be technical and cumbersome for a person with no in-depth knowledge.

Some options for consideration are as follows:

- i. The creation of a regional team with a focus on marketing and addressing the issues and challenges for forest finance at national levels. Similarly engaging the investment community in a pro-active manner to alleviate concerns will make great strides in breaching the current gap that exists. The opportunity for UN bodies to provide technical support to projects will also undoubtedly have a strengthening factor in the support of investments into the sector.
- ii. A strategic and sustained marketing campaign should be strongly considered, whereby communication of the multileveled benefits of investments beyond the financial returns, coupled with a greater understanding of the risks will allow a fresh perspective to develop.
- iii. The creation of a quarterly publication similar to the ITTO 'Tropical Forests Update' is potentially a cost effective solution to attracting investment, demonstrating opportunities and giving examples of successful cases and best practise of Sustainable Forest Management (SFM); the content needs to be aimed at the correct market and distribution of the publication needs to reach the intended recipients outside of the forest community.
- iv. Credence should also be given to short articles in current monthly financial/ investment publications or journals.
- v. International quasi-governmental Institutions with budgets available to promote reforestation efforts should more actively endorse and facilitate private sector investment into the Asian forestry sector by, for example, allocating funds to pay for forestry conferences for institutional investors, as opposed to funding conferences aimed at and attended almost exclusively by other quasi-governmental and environmental groups.
- vi. The establishment of a regional status report on countries current financing strategies as well as opportunities for the private sector to be engaged directly or alternatively involved in Public–Private Partnerships where possible. The linking of this directive with a quarterly publication will ensure adequate dissemination of information to relevant parties.

## II. Bridging the gap

Thought should be given to the set up of regional training workshops/programmes that will allow private project developers to ensure that their project opportunities and documentation are up to the stringent due diligence standards that are expected of the mainstream investment community.

Currently many projects are inadequately constructed in paperwork terms without understanding the fundamental requirements of the investment community at large. Financially viable projects are rejected at the first screening stage and do not receive the attention that they duly deserve as they do not contain the basic level of documentation required. Funds/Institutions receive countless applications for financing and experience has shown forestry projects often do not contain the simple list of documents listed below that will allow them to effectively evaluate an investment opportunity. Investors will not chase deal flow, it is up to the project developer to have all key elements in place at the start and quite often many fail to understand this point.

- a. Executive summary
- b. Financial appraisal and projected return
- c. Due Diligence Reports
- d. Independent valuations
- e. Comparable evidence for market
- f. Photographs of the investment, where available
- g. Business plan including proposed exit strategies
- h. Summary biographies of key management or project sponsors.

To date no real platform exists to bring the parties together as a “Connector” with Asia and its project developers. Although we are aware that FAO has made some efforts in this regard in Europe during 2012, this was not widely promulgated to the business community or project developers, which highlights the marketing inadequacy mentioned above.

Investment conferences at a regional and/or national level could be convened which bring parties together and can include project information and structured due diligence material and dissemination of investment ready projects in an enabling environment. The option for investors to meet and discuss projects face to face with developers will





often assist in overcoming the first barrier whereby projects are previously rejected on due diligence due to poor paperwork/administration. Training in this area coupled with direct meetings will significantly improve the communication and generally facilitate a higher rate of deal flow.

### III. Longer term actions

Prioritise and action policy changes listed in the “Investor Awareness of Policy Schemes for Financing Asian Forestry Projects” above. Key issues include:

- a. Improved execution of legislation tackling illegal logging, which is perceived as significantly reducing the market price for legally, harvested forestry products.
- b. A cross border regulatory framework for forestry investment funds with the inclusion/ adoption of established accreditation schemes or standards that form part of the investment criteria i.e. Forestry Stewardship Councils Principles & Criteria<sup>2</sup> or the Equator Principles<sup>3</sup>
- c. The phasing out and eventual banning of unregulated collective investment schemes (UCIS) that are potentially damaging the credibility of genuine and credible investments into the sector<sup>4</sup>.
- d. Improved land title protection for investors via better legislation in emerging markets (See paragraph below).
- e. Reduced permit approval timelines and increased international co-ordination to reduce corruption in emerging markets.

Discussion at National level could open dialogue aimed at guaranteeing investors a fallback position if government policy changes prove unfavourable and run against an investment decision taken. A facility that would assist in reducing the risks currently inhibiting investment would be useful. A similar approach was adopted recently in Indonesia surrounding major infrastructure projects whereby a fund was established as an insurance guarantee to protect investors<sup>5</sup>.

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2 <http://www.fsc.org/1093.html>

3 <http://www.equator-principles.com/index.php/about-ep/about>

4 <http://www.citywire.co.uk/money/sfo-investigates-unregulated-biofuel-investment-firm/a577735?ref=citywire-money-latest-news-list>

5 <http://www.financeindonesia.org/showthread.php?766-Indonesia-Infrastructure-Guarantee-Fund-backed-by-WB>

## Regulatory framework

An extension of the above government-backed concept is the significant potential to establish a regulated fund with the direct objectives in line with NFFS. For example a Luxembourg domiciled investment vehicle SICAV-SIF (Specialised Investment fund). A SICAV-SIF is a collective investment fund in which investors pool their money to co-invest towards an agreed investment strategy that can incorporate such mandates as the Equator Principles or similar.

A fund is supervised by the regulator, in Luxembourg for example the Commission de Surveillance du Secteur Financier (CSSF). This legal framework has successfully launched and supervised thousands of investment funds across all asset classes. There are no taxes at fund level on capital gains, profits or income in Luxembourg with the added advantage of increase private sector and institutional investment in Asian reforestation and agricultural projects in 2012 and beyond via recognised and regulatory frameworks whilst offering reforestation solutions that help the environment, provide employment for local communities and offers a return to investors.

Due to a SIF fund's mandate of diversification across countries and asset classes this would have a significant effect of lowering the risk profile for institutional investors and create an enabling investment environment that the financial markets can understand. It is clear that a significant amount of funding is available. A 2001 report<sup>6</sup> quoted 180 institutions controlling US\$650 billion had earmarked 10 percent for socially responsible investments but without the safety of a strong jurisdiction and regulatory framework a lot of these investments never reached their intended placements. Those institutions often controlling large amounts of capital for pension funds etc. are still seeking ethical investments in line with their clients' criteria; however, availability of options is limited.

The establishment of a team to investigate how this could be achieved to support NFFS with either government or agency backing should be pursued.

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6 <http://www.ellipson.com/files/studies/Socially%20Responsible%20Investm.pdf>



## Annex 4a: Research project methodology

During the period September to December 2011 numerous routes were used to secure relevant input for the research project including social media tools, business networking forums, online questionnaires, email campaigns, telephone and face-to-face meetings. Whilst precise and detailed feedback was best secured from the questionnaire and lengthy face-to-face meetings, shorter email and telephone interactions also proved useful for obtaining a summary of other participants' views for inclusion in the report. We are highly confident that the research conclusions are an accurate summary representing the views of a large and diverse group of institutions and individuals with a meaningful interest in, or exposure to, the Asian forestry sector.

However, it is important to note that the aim of the research project was designed to primarily gain an understanding of how to incorporate the interests of investors in forming financing strategies for the Asian forestry sector. The vast majority of investors and other investment industry professionals are not forestry experts, and forestry experts are equally rarely also qualified and experienced investment professionals. The research findings therefore closely reflect the views of mainstream investors considering forestry as an asset class often for the first time, as well as forestry professionals seeking capital for projects and other non-investing forestry industry professionals.

The questionnaire used is as following:

- I. What is your interest in the forestry sector: (investor, distributor of forestry related investments, forestry / project developer, consultant, academic, land owner, government employee, environmentalist, etc.)?
- II. What are the primary motivations for considering an investment in Asian forestry assets? (Carbon credits, project return forecasts, strategic investment, environmental concerns, low correlation to existing portfolio assets).
- III. What are the primary reasons why investors, after consideration, do not execute a transaction to invest in Asian Forestry: concerns over land title transparency, insufficient return forecasted, lack of opportunities, illiquidity of project, long investment horizon, and lack of experienced forestry developers / managers in the region?

- IV. If you are an investor, or the representative of an investor, that has considered forestry investments previously please clarify the source of funds: Pension fund, family office, individual investor, forestry company, hedge fund / private equity fund, and the region in which the investor is domiciled?
- V. Which region (Asia, Africa, North America, South America, Europe or Australasia) currently offers the best opportunities for forestry investment, taking into consideration local laws, land title rights, land costs, forecasted returns, ease of doing business, etc.?
- VI. Which forestry projects are most attractive to prospective investors and why? (For example, teak, jatropha, agar wood, palm oil, bamboo, sandalwood).
- VII. What reasons can you offer why the forestry investment market is more mature in North America and Europe relative to Asia?
- VIII. What is your current assessment of the reputation of the forestry investment industry and in particular the Asian forestry industry?
- IX. Over the past 10 years has your opinion of the Asian forestry investment industry improved or worsened? If it has changed, why?
- X. Please suggest a solution that would help increase private-sector investment into the Asian Forestry sector.

The questionnaire deliberately used open questions to secure more detailed qualitative views rather than closed questions inviting 'yes' or 'no' responses, and often in more lengthy interactions the initial answer enabled the researcher to dig deeper to gain a thorough understanding of the participants views.



## Annex 4b: Representative list of institutions contacted by Treedom Group

Advanced Agro (Thailand), Abbott and Booth Ethical Financial (UK), Access Foundation (India), Agar Siam (Thailand), Arannayk Foundation (Bangladesh), Ashbury Park (UK), Asia Forests (Viet Nam), Asia Pacific Certifications (Indonesia), Australasian Trade Sales (Australia), Capital Alliance (Sri Lanka), Carbon Basis (US), Carbon Strategic (Singapore), CarbonFix (Germany), City Uni of New York (USA), Clean and Green Resorts (Australia), CO2 Forestry (US), CO2 Prospects (UK), CO2 Sense (UK), Conservation International (Congo), Craigmoresustainables (US), Dana Forestry (NZ), Dow Corning (US), ECO FOCUS (Nepal), Ecoanalytics (US), Ecological Economic Development (Germany), ERM Certification (UK), Ethical Financial Planning (UK), First Climate (Switzerland), Flora and Fauna International (Indonesia), ForClime (Indonesia), Forest Carbon Asia (Sri Lanka), Forest Carbon Markets (US), Forest Re Holdings (UK), Forestry Trading Ltd (Gibraltar), Futuro Forestal (Panama), Global Finance Marketing (Monaco), Global Green Carbon (US), Global Plantations (UK), Green Energy Group (Hong Kong), Growth Consultants (India), Heritage Rice (Thailand), Infinity Advisers (Thailand), International Forestry Cooperation (Thailand), International Woodland Co (Denmark), Investing Ethically (UK), Islamic Banking UK (UK), Lambung Mangkurat University (Indonesia), Landmark Consulting (UAE), Life Partners (Japan), Medler Advisors (UK), Metlife Timberland Finance (US), MFC Asset Management (Thailand), Ministry of Agriculture (Portugal), Namalere Forest Conservation (Kenya), Natural Enterprises (Uganda), NEWSif (UK), Omran (Oman), Pan Asia Biofuels (Canada), Parfums Nicolas Danila (France), Plant Genetic Conservation Project (Thailand), Rainforest Alliance (US), Royal Forest Department (Thailand), SAS Advisory (Thailand), Sell Buy Advisory (India), Six Senses (Thailand), Stafford Timberlands (UK), Sustainable Options (UK), Task Force for Climate Change (PNG), TERI University (India), Texas University (US), Thai Natural Estates (Thailand), The Ethical Partnership (UK), The Forest Trust (Malaysia), Topan Woodlands (UK), Track of the Tiger (Thailand), Tree Power (Canada), US Aid (Thailand), Virgin Forests (Australia), Waka Forest Investment Services (Switzerland), World Agroforestry Centre (Peru).

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# GUIDELINES FOR FORMULATING NATIONAL FOREST FINANCING STRATEGIES

" This volume has been prepared by FAO with support from SIDA. One of the major constraints frequently highlighted in achieving sustainable forest management has been the lack of finances available for government agencies. This work outlines the issues that have to be covered in increasing financing for forestry. They include the roles and concerns of public institutions, how the interests of communities would have to be safeguarded in such an initiative, what additional sources of funding are available beyond that from timber harvesting, and how to make the sector attractive for private sector investment. Based on the above issues and concerns, a set of guidelines were developed for formulating national forest financing strategies. It is hoped that this work, based mainly on developments in the Asian region, will serve as a stimulus to invigorate the forestry sector, and raise its role in the overall economic development of the countries in the region. The guidelines should equip the country with the means to increase its funding sources for enhancing sustainable forest management."



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ISBN 978-92-5-107476-3



9 789251 074763

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