Prioritising scarce resources for facilitated support of small forest and on-farm tree enterprises

Proceedings of the third international Forest Connect workshop

12-15 February 2013
Everest Hotel, Kathmandu, Nepal

Forest Connect

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Acronyms

ANSAB	Asia Network for Sustainable Agriculture and Bioresources
CF	Community Forestry
CFUG	Community Forest User Group
CFM	Community Forest Management
CREF	Centre de Recherche en Écologie et Foresterie
CSO	Civil society organisation
DFID	UK Department for International Development
EPL	Eastern Plains Landscape
FAO	Food and Agriculture Organization of the United Nations
FECOFUN	Federation of Community Forestry Users, Nepal
FFF	Forest and Farm Facility
FLEGT	Forest Law Enforcement, Governance and Trade
FSC	Forest Stewardship Council
GACF	Global Alliance for Community Forestry
GHG	Greenhouse gas
Ha	Hectare
HBTL	Himalayan Bio Trade Private Limited
IAITPTF	International Alliance of Indigenous and Tribal Peoples of the Tropical Forests
IBRD	International Bank for Reconstruction and Development
ICRAF	World Agroforestry Centre
IDA	International Development Association
IFC	International Finance Corporation
IFFA	International Family Forest Alliance
IIED	International Institute for Environment and Development
ILCF	Investing in Locally Controlled Forestry
IPAM	Instituto de Pesquisa Ambiental da Amazônia
LPG	Liquefied Petroleum Gas
MAFF	Ministry of Agriculture, Forestry and Fisheries
MAP	Medicinal and aromatic plant
MECNT	Ministry of Environment, Nature Conservation and Tourism
MONUSCO	United Nations Organization Stabilization Mission in the DR Congo
NGO	Non-governmental organisation
NORAD	Norwegian Agency for Development Cooperation
NTFP	Non-timber forest product
NTFP-EP	Non-Timber Forest Products – Exchange Program
OCEAN	Organisation concertée des écologistes et amis de la nature
PES	Payments for Environmental Services
PROFOR	The Program on Forests
RECOFTC	The Center for People and Forests
REDD+	Reduced Emissions from Deforestation and Forest Degradation; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
SDC	Swiss Agency for Development and Cooperation
SMFE	Small and medium forest enterprise
SSI	Semi-Structured Interviews
TBI	Tropenbos International
UNFF	United Nations Forum on Forests
UNIKIS	University of Kisangani
WCS	Wildlife Conservation Society

Executive summary

Multi-functional land use solutions are required for the complex inter-related challenges facing humanity. To avoid catastrophic climate change, we need to reduce deforestation and degradation. To maintain adaptive resilience, we need to conserve biodiversity. To enhance food security for growing populations, we need to enhance soil fertility and intensify production. To meet future energy needs sustainably, we need to make more and better use of renewable energy. To achieve poverty reduction, we need solutions to involve greater rural income generation. To avoid conflict, solutions must also be just and respect local marginalised groups and the livelihood roles that both men and women play. Fostering locally controlled forest and on-farm tree enterprises that generate income and protect mosaics of vital natural resources is complex work. But while it may not be a quick win, it is both a just and necessary part of any multi-functional land use solution.

Forest Connect is an ad hoc global alliance that shares approaches, business models and tactics to support locally controlled forest and on-farm tree enterprises. It 'connects' practitioners facilitating such support on the ground. Independent assessment of the work of the alliance over the last four years concludes, "With the impressive 'reach' (array of networks and partners) it has already established, and its strong technical platform, it is difficult to see what other organisation, or even organisations, could match what Forest Connect has created...". Despite such affirmation, the shear numerical scale of small forest enterprises world-wide is both an opportunity and a curse. On the one hand, their numerical scale makes them decisive in pursuing the integrated land use solutions that humanity needs. On the other hand, reaching them is costly, due to their spread across remote forest frontiers where infrastructure and services – including education – are weak. Financial resources to support small forest enterprises are scarce and there is only ever a fraction of what is needed for the enabling investments required to scale-up sustainable and profitable business models.

The third international Forest Connect meeting in Kathmandu was held from 12 to 15 February 2013, hosted by Asia Network for Sustainable Agriculture and Bioresources (ANSAB). It addressed this key issue: how to prioritise scarce resources for facilitated support of small forest and on-farm tree enterprises. The first day served to both review past Forest Connect work and share eight in-country reports on the prioritisation of enterprise support. The second and third days involved field visits to study successful models of small forest and on-farm tree enterprises in Dolakha and Kathmandu. The final day introduced the relationship between the Forest Connect alliance and the new Forest and Farm Facility. It then went on to discuss and prioritise ingredients that should form part of future Forest Connect work.

Nepal was chosen as a host venue for this meeting because of its pioneering role in developing locally control forest and on-farm tree enterprises across more than 18,000 community forest user groups (CFUGs) involving more than 1.5 million hectares of land and 40 per cent of Nepal's population. The challenge advanced by both the director of the host institution (ANSAB) and the keynote speaker (Radhesh Pant, CEO of the Nepal Investment Board) was that for the majority of the landscape, in which the majority live, and from which the majority of products and service might be sourced, too few resources were supporting green economic growth with social justice.

With so much at stake, eight in-country presentations (Brazil, Burkina Faso, Cambodia, DRC, Mexico, Nepal, Tanzania and Vietnam) assessed which forest and on-farm tree sub-sectors might optimise impact against multiple social and environmental criteria – while also having substantial market prospects. Each country's ecological and socio-economic context and consequent priorities varied. What was striking was that each report rejected a single sub-sectoral monotypic priority – irrespective of how profitable that sub-sectoral option might be. Meeting multiple social and environmental criteria for both local and global publics required a blend of different sub-sectoral enterprise support activities involving multi-functional mosaic landscapes.

In each country context it did prove possible to identify a blend that might do the job. In Brazil: blended support to both natural forest reserve and agroforestry timber production alongside NTFP domestication in forest-farm settlements. In Burkina Faso: blended support to tree-crop food enterprises and agroforestry fertiliser trees that support agricultural yields, with secondary woodlot energy and NTFP enterprises. In Vietnam: blended tree-based cash crops, for example, rubber, coffee, and pepper, with community plantation wood and NTFPs. In Mexico: blended tree-based cash crops, such as coffee and honey, with timber and fuelwood from managed natural forest areas. In Tanzania: blended woodlots for timber and fuelwood, plus briquetted farm waste, with fertiliser trees and indigenous fruit trees development. In Cambodia: blended NTFP options (other options were not assessed). In Nepal: blended ecosystem-based farming, bio-briquette charcoal and timber. In DRC: blended timber, wood energy, cash crops and NTFPs; but in this case all requiring significant governance interventions towards formal and sustainable supply.

The main conclusion was that a blend of different enterprise options is both necessary and desirable. A mix of short- and long-term suits farmers' cash flow needs. Mixing high return cash crops and lower return social or environmental options suits their broader environmental and social needs. And a diverse portfolio suits farmers' cautious attitude to risk, which climate change reinforces. This diversity was necessary to achieve the integrated, intensified and climate-smart solutions that will be required to build a fair green economy.

The field trip to Sindhupalchok and Dolakha districts further emphasised this point. Community groups that had gained valuable experience in wintergreen oil production were now manufacturing charcoal briquettes for the Kathmandu market, through a wholly owned retailing business. Community forest user groups near Dolakha that had started with timber production were now also selling hand-made FSC certified paper through a wholly owned processing and marketing firm in Kathmandu. The latter group was also piloting potential REDD+ payment options. Integrated forest and farm management that embraces both ecological diversity and economic diversity was strongly preferred by local communities, due to risks from ecological and socio-economic shocks.

Forest Connect is not alone in pursuing an agenda towards locally controlled forest and on-farm tree enterprises. Forest Connect members have also informed the design of a new FAO-hosted Forest and Farm Facility. The Facility will strengthen the organisation and capacity of forest and farm producer groups to engage with markets and decision-makers, help catalyse cross-sectoral policy processes with which they can engage, and ensure that resultant policies reflect their knowledge and priorities. Steering committee members are drawn from forest right-holder groups, such as the International Family Forest Alliance (IFFA), the Global Alliance for Community Forestry (GACF), the International Alliance of Indigenous and Tribal Peoples of the Tropical Forests (IAITPTF) and Agricord, among others. Four key pre-requisites are targeted: secure commercial forest rights; better market access and business capacity; more responsive technical and financial support services and; stronger enterprise-oriented associations. Related initiatives, such as the Agricord farmers fighting poverty programme, the work of the World Agroforestry Centre (ICRAF), and the work of the Programme on Forests (PROFOR), also showcased how this agenda fits with their priorities.

In the concluding sessions of the workshop, participants debated the broad focus of any future Forest Connect initiative, its governance, and the priority ingredients that would maximise its utility to participants. It was generally agreed that the Forest Connect alliance should indeed pursue diverse portfolios of locally controlled forest and on-farm tree enterprise support activities. This was not to preclude more focused, regional, sub-sectoral working groups that shared knowledge and the technical and market specificities concerned. It was agreed that some form of international governance was required but with greater clarity on the roles of the international team and Steering Committee – which might potentially be combined with that of the Forest and Farm Facility. It was also agreed that greater flexibility in regional exchanges and networks should be encouraged under the ownership of in-country and regional hub institutions.

In terms of ingredients for future Forest Connect alliance work, the following four ingredients were selected as the core for future work:

- Developing in-country platforms that link responsible entrepreneur investors and community businesses.
- Research, capture and share successful business ‘models’ for locally controlled forest and on-farm tree enterprises that emerge.
- Develop training materials in small forest enterprise support for facilitators and extensionists based on those business models.
- Maintain regional and international learning and networking events and exchanges.

It was also agreed that subsidiary activities might include:

- Sharing models of how climate change finance or carbon finance can best support the development of successful locally controlled forest and on-farm tree enterprises.
- Developing international and national advocacy materials for investment in locally controlled forest and on-farm tree enterprises.
- The development of a series of communication products, such as films or booklets, which tell stories of successful business models in line with the above activities.

Rationale

Locally controlled forest enterprises and their associations offer particular advantages for poverty reduction. They accrue wealth locally, empower local entrepreneurship, strengthen social networks and engender local social and environmental accountability. The environmental, social and financial sustainability with which they operate is also fundamental for the success of Forest Law Enforcement Governance and Trade (FLEGT) action plans, strategies for Reducing Emissions from Deforestation and Forest Degradation (REDD+) and attempts to build green economies that deliver food, fuel and construction materials to those who need them most.

In least developed countries, structures that connect with and support those enterprises and their associations are weak. The result is all too frequently economic failure, social conflict and degradation of the forest resource on which locally controlled forest enterprises depend. The Forest Connect alliance addresses this lack of connectedness. It helps to build social, economic and environmental sustainability amongst locally controlled forest enterprises by connecting them:

- to each other – with a focus on strengthening associations and alliances;
- to service providers – with a focus on building business capacity through facilitation of financial service and business development service provision;
- to buyers and investors – with a focus on enhancing market links and brokering fair deals; and
- to governance processes – with a focus on securing commercial forest rights and incentives through shaping policies and institutions that control the broader business environment.

Forest Connect was established in 2007 and is global in scope, involving 10-15 in-country teams in more direct attempts to support small forest enterprises, a co-management team led by FAO and IIED, supported by a steering committee and a wider network of over 1000 interested individuals and institutions from 94 countries worldwide. It has also played an active part in the design of the new FAO-hosted Forest and Farm Facility, which aims to support the organisation of forest and farm producer groups and help them engage with more cross-sectoral policy processes.

At the first Forest Connect workshop in Edinburgh, held from 02 to 04 July 2008, supporters of small forest enterprises from around the world identified what types of guidance they needed to do their job better. Since that date, with the support of The Program on Forests (PROFOR), the UK Department for International Development (DFID), the Swiss Agency for Development and Cooperation (SDC), DANIDA and the Norwegian Agency for Development Cooperation (NORAD), the Forest Connect alliance has both assisted in-country partners to support Small forest enterprises, and also developed, tested and enriched guidance modules for the facilitation of support for local forest enterprises.

The second Forest Connect workshop in Addis Ababa, held from 16 to 18 February 2010, shared lessons and case studies from this testing and enriching process. The result has been a toolkit on how to support small forest enterprises in English, French and Spanish.

Following the completion of this phase of support, in mid-2012 an independent review was commissioned of the work of the alliance between 2007 and 2012. The aim was to take stock of what had been achieved and to learn which elements of the work had proved successful and which needed revision. The results of that review were discussed at the meeting in Nepal.

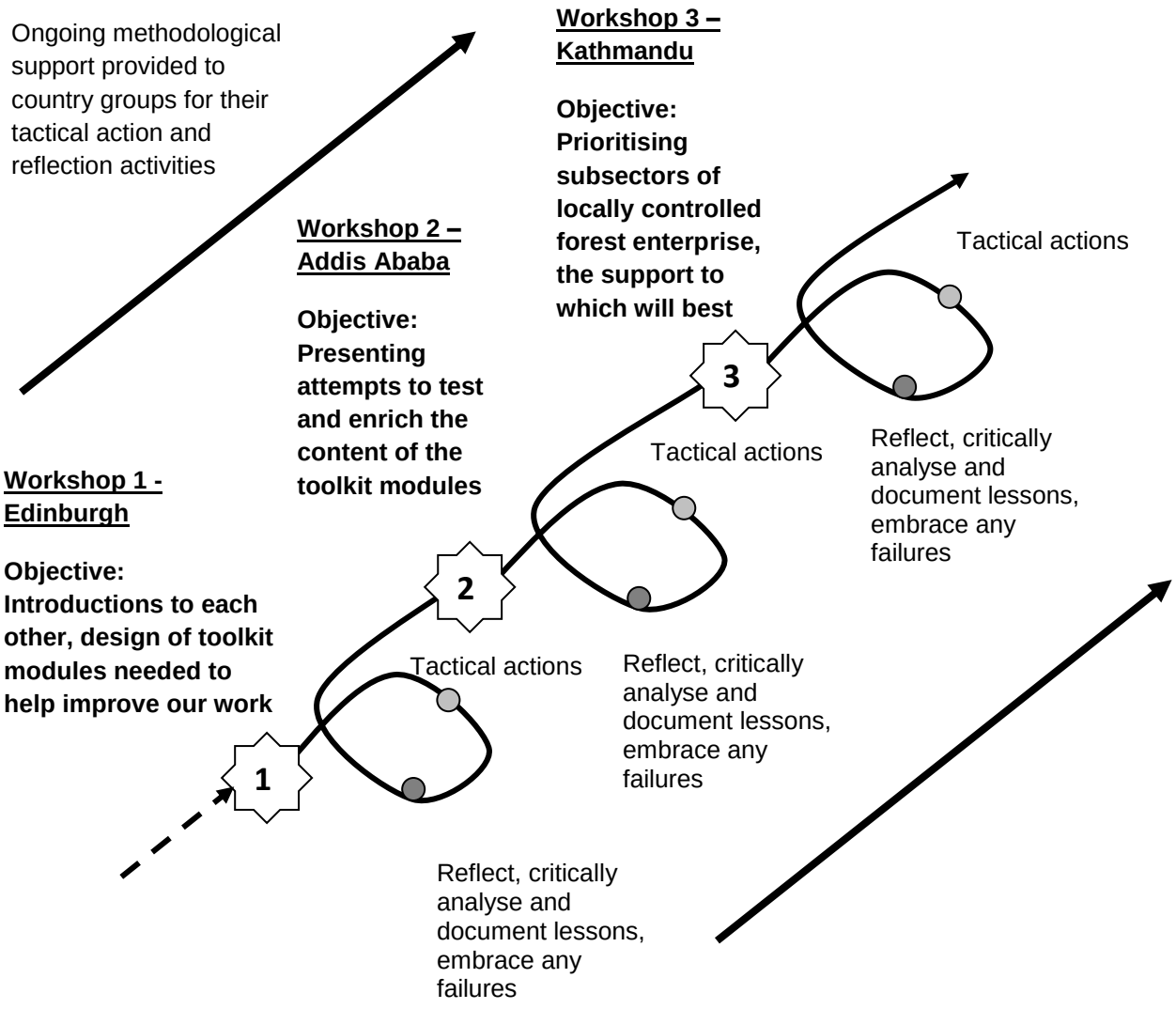
A major issue confronting the Forest Connect alliance since its inception, but increasing with the global downturn, has been the scarcity of financial support for in-country enterprise support work. With locally controlled forest enterprises so critical for forest protection and better livelihoods, the alliance now feel it

imperative that the allocation of enterprise-support finance is allocated to where it can achieve most impact. Prioritising support to small forest enterprises therefore is the theme of the meeting in Nepal.

In preparation for the meeting in Nepal, country teams from across the world were invited to prepare short, forward-looking reports – responding both to the increasing threats of global climate change, biodiversity loss and excessive nitrogen use associated with forest land use change but also to the increasing need to secure social foundations among the poorest groups of income generation, food and energy security for both men and women. In an era of scarce financial resources for support to local forest enterprises, prioritising the sectors that are likely to deliver against multiple pressing criteria is seen as an important next step for the Forest Connect alliance.

An iterative process of action learning of which this workshop forms part is captured in Figure 1 below:

Figure 1. Iterative process of action learning of which this workshop forms part



Taking stock of past support to locally controlled forest enterprises

The following chapters provide a synopsis of presentations given at the workshop.

1.1. Opening remarks

Bhishma Subedi, ANSAB

The Forest Connect alliance

Forest Connect is committed to understanding and learning how forest enterprises can be helped, especially in terms of their connectedness – to each other, to markets, to service providers and to governance processes. In this third workshop, we are focusing on the prioritising support for locally controlled forest enterprises. We at ANSAB are working in this field and we see the challenges of not getting enough resources, there is always a lack of finance for support work with these enterprises.

Context

Globally, too much effort is being spent on improving prospects for too few people, who control only a fraction of the landscape. Few resources are reserved for the majority of the landscape, in which the majority live, and in which small forest enterprises operate. Although they are small, these small forest enterprises are big in terms of opportunities and big in terms of challenges, with huge numbers of people depending on them for their livelihoods. If we can ensure these enterprises manage the forest in a sustainable way, these enterprises have great potential. Market prospects in many forest subsectors are growing. In Nepal, the forest generates nearly US$250 million per year from timber and NTFPs. Additional ecosystem services from these mountain forests is also remarkable, especially forest carbon, water and recreation.

Small forest enterprises can help local people in many ways, including in facing current global social and environmental problems. Enterprises help both to mitigate and adapt to climate change; sustainable enterprises can help to enhance the biodiversity of landscapes; and approaches to small enterprise can help reduce the widening gap between the rich and poor that gives rise to multi-level conflicts.

Visiting an ANSAB project site a few years ago, a group of women from the community forest who harvested nettle and produced fabrics and handicrafts, reported on their experiences. They related that, through the enterprises they were involved with, they were happy, making their own money, and teaching other women how to manage forests sustainably and how to make fabrics. There are many similar examples of such enterprises. ANSAB have worked with 1,100 small forest enterprises but although there is great potential, there are also many challenges.

Challenges

A key issue is **equity**: with the lack of incentives to run their own businesses, the poor are getting poorer. The practicalities of **understanding** and implementing sustainable management is another key challenge.

More broadly, there are legislative, economic, environmental and social **costs** that impede enterprise development. It is the responsibility of NGOs and of government to reduce these costs, build capacity, improve tenure security, build infrastructure and increase market access for the benefit of who depend on small forest enterprises. National concerns about **food security** and **energy security** are an issue. At the same time, there are problems of **climate change** and the need to improve the landscapes capacity to mitigate and adapt to climate change. Growth therefore needs to be not just economic growth, which is making the gap between rich and poor wider, but economic growth alongside **social justice**.

Throughout this workshop, the group can work together with government, scientists and communities. The focus on small forest enterprises and working with communities to attempt to solve the problems at the grassroots level is imperative.

1.2. Keynote on the importance of locally controlled forest enterprises in Nepal

Radhesh Pant, CEO, Nepal Investment Board, Government of Nepal

Context and importance at global level

Locally controlled forest enterprises are established close to the forest by or with local people, and are therefore inherently tied to communities. Enterprises operate both formally and informally, and while they individually employ relatively small numbers of people, collectively they are substantial. There are no exact economic figures available for small forest enterprises but it is estimated that they employ over 20 million people worldwide – and this may be closer to 140 million when informal enterprises are taken into account.

Small enterprises tend to be labour intensive and cater to local and domestic markets, and are therefore important locally, particularly because of the range of products they provide. Aside from the tangible source of income they offer, they have broader opportunities in terms of providing ecosystem services, watershed protection, biodiversity protection, and in mitigating or adapting to global climate change.

In the 2011 Session of the United Nations Forum on Forests (UNFF) – which focused on the theme of forests for people, livelihoods and poverty eradication – it was noted that community based forest enterprises are more likely to provide livelihood benefits than large corporate alternatives. A resolution from this Session called to promote small forest enterprises in sustainable forest management.

Importance of locally controlled forest enterprises in Nepal

Small forest enterprises can provide economic incentives for conservation. In several cases, the development of locally controlled forest enterprises is seen to provide opportunities for employment, alongside the conservation of biodiversity. Nepal's rich natural resource base provides great scope for enterprise development. Altitudinal and climatic diversity provide a rich diversity of natural resource products, on which rural communities rely for food, medicine, energy and construction.

Looking at the economic use and dependence on forest products, it is clear that traditional collection and trade of forest and farm products are often the only source of cash for rural communities, with products often collected by the remotest communities in the mountains. A recent conservative estimate from ANSAB shows that Nepal can generate US$162 million from timber annually and US$66.6 million from NTFPs from its forests.

As ANSAB's experience shows communities without economic incentives to conserve have been found to be indifferent to conservation. In the highlands of Karnali, for example, people used to burn the forests, which destroyed plants. Despite several attempts led by government, there was no interest in changing this. Yet

with the introduction of community-based enterprises, interest arose in securing forest tenure, to assure a sustained income. The communities started to enforce the exclusion of outsiders and began to manage the forest sustainably because it allowed them to make economic gain.

Emerging opportunities

Community forest enterprises are gaining increasing attention from both government and the private sector; including recognition by the government of Nepal. A paradigm shift is taking place at national level, toward policies that support community-based management of resources. We welcome the provision of innovative models of community-based enterprises, including carbon and other payments for ecosystem services and ecotourism, as these can help develop economic uses and opportunities. Small forest enterprises are important for income generation but there are challenges that limit the functioning of the enterprises – all of which have to be addressed for the smooth operation of the enterprises.

Remarks on the Nepal Investment Board

The Nepal Investment Board is a high-powered board, central to government, and includes the involvement of ministers. The board's priority sector is agriculture, since two thirds of Nepalese are related to the agriculture sector, yet at the same time only one third of GDP is from agriculture. The focus of the board's projects is in one sense larger but we could develop pilot projects in Nepal; there are ways for the Board to assist. There is a lot of focus on community development in Nepal, and we want people in rural areas to be self-sufficient. Nepal has a lot of natural resources – hydropower, forest, flora, fauna – which need to be capitalized on properly, taking into account the impact on the environment and taking into account that every part of Nepal is different. If the government of Nepal can help this forum to achieve its goal, we will be more than happy to sit down and talk with you, and we hope the workshop will be a great success.

1.3. Discussion on the Nepal context

Although there are **risks** associated with investing in forest-based enterprises, small community-based producers have historically been the ones that pay back on time, whether funded by banks, companies or micro finance institutions. In rural locations in Nepal, organisation of enterprises has improved in the last fifteen years. Further risks could be mitigated by the government providing micro-insurance, which is currently under discussion.

Nepal is a largely import **economy** with few industries; yet comparing different types of forest enterprises, timber is substantial, with even a conservative estimate for harvesting accessible forests in Nepal showing the sector is making billions of rupees. It is economically important, but how the government should prioritise this, under what model, is not yet clear.

Most of the resources from outside do not reach the poor communities in the forest, making livelihoods very difficult, often without being formally recognised or legalised and with insecure rights. **Soft investments** are needed to attract hard investments; such as in improving policies, investment in business skills at the grassroots level to develop an entrepreneur mind-set. Processes of organization are an under-invested area, but allow groups to improve prices through bulk selling, pool accountants, managers and so on, and begin to shape the policy environment.

Specifically in regards to Nepal, there is a sense from bankers that investment in agriculture or forestry is unsafe and therefore investment goes to hydropower or other sectors; perhaps there is potential for the investment board to **facilitate** bankers and financial institutions to invest in agriculture and forest sectors. One of the mandates of the investment board is to work on the policy framework – and even laws – to promote investment. The investment board is also looking at bringing investments for large processing

plants, and on storage facilities in various parts of the country. For the agriculture sector, the Nepal bank requires 3-4.5 per cent of its portfolio to go to deprived sectors – we need to focus on making it happen and ensure it goes where it belongs.

In terms of African investment and the **incentives** in place, most investment authorities are there to serve the interests of foreign direct investors, which has attracted investors from the developed world to exploit African resources. Incentives should be in place for the Nepalese enterprises, to design packages to link small entrepreneurs to big investors. Transforming the economy by mobilising foreign and domestic investment and mobilising cooperatives is the goal of the investment board; with two thirds of the Nepali people relying on agriculture, it is one of the country's highest priorities and it is important to learn from those mistakes.

1.4. Introduction to the Forest Connect alliance

Sophie Grouwels, FAO

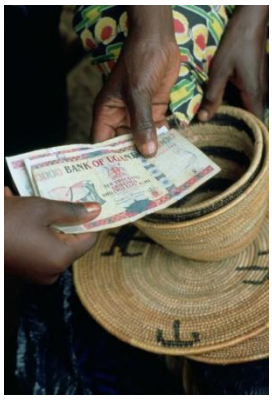
Aims and management of the Forest Connect initiative:

- Aim: Reducing poverty by linking small and medium forest enterprises with each other, markets, service providers and decision-makers

Forest Connect co-managers identified a **support gap** that exists for small forest-farm enterprises. This support-gap extends principally to three areas: firstly, support to secure commercial forest resource rights and sustainable management know-how, which undermines sustainability; secondly, support for business capacity development, which undermines profitability; and thirdly, support for enterprise-oriented associations, which undermines socio-political influence.

There are numerous difficulties in addressing these gaps. In practical terms, reaching small forest-farm enterprises can be difficult due to their geographic isolation. In funding terms, forestry businesses can be seen as risky investments by existing financial service providers. Further, inter-sectorial outreach is essentially nonexistent, so support services provided to agriculture do not find their way into the forest sector. Finally, there are insufficient forestry extension services in existence to give the necessary business support to rural communities.

The central aim of Forest Connect is to connect small forest-farm enterprises to: each other, in order to stimulate the formation of forest producer associations; emerging markets; service providers (strengthening their capacity to provide training and finance); as well as national forest programmes, thereby empowering small forest enterprises to be heard by policymakers. Forest Connect aspires to achieve more organised forest enterprise groups that can improve income generation, build greater business and forest management capacity, learn from each other, access finance and have a voice in policy development.



Forest Connect is comprised of two key elements, the national and the international. At the **national** level, it works to identify national hubs to conduct national diagnostics, carry out practical work to support small forest-farm enterprises and act as a service provider for local level businesses. Forest Connect hubs are selected to facilitate support to small forest-farm enterprises from within each pilot country. National 'hubs' are each responsible for conducting a diagnostic about the existing in-country small forest enterprise conditions, an inventory of potential service providers, and an analysis of policies relevant to small forest-farm enterprises and options for future activities to strengthen those enterprises within the country. Each in-country stock-taking process looks different, depending on the context and available financing for the country. Activities include developing an in-country Forest Connect website, both as a resource for small forest-farm enterprises within the

country and to connect with the international Forest Connect peer-to-peer exchange website. But the main focus of the national hub is to undertake or commission value chain analysis of specific forest-farm enterprises and act as a facilitator for service provision for local level businesses, identifying the right people to provide support for capacity development, network development, and technical assistance on enterprise development

At the **international** level, there is an international steering committee to provide strategic direction and oversight and an information sharing platform (http://forestconnect.ning.com), plus the development of guidance on facilitating support to small forest enterprises. Regular international workshops for learning and exchange are complemented by this social networking site, developed for peer-to-peer exchange of ideas and information. This site is targeted towards those within countries, as well as international donors, NGOs, development agencies and other interested entities. Additionally, the hubs that operate within each country are selected at the international level.

In effect, Forest Connect now comprises a considerable asset-base of partner institutions in twelve core countries (Burkina Faso, China, Ethiopia, Ghana, Guatemala, Guyana, Laos, Malawi, Mali, Mozambique, Nepal, and Liberia) with in-depth links and support capabilities for small forest-farm enterprise subsectors and broader membership in 82 more. Over the course of the last five years, Forest Connect has catalysed impact-oriented in-country work and lesson learning, culminating in the development of a toolkit of guidance for facilitators of small forest enterprise support.

Results of Forest Connect that have been seen – include examples of small forest-farm enterprises that

- Benefit from peer-to-peer learning
- Formally register as enterprises
- Take advantage of economies of scale
- Achieve lower costs for and reach more people in capacity development activities
- Access finance
- Showcase how local groups can sustainably manage their forests and adapt to climate change
- Have a louder voice and ability to lobby in policy processes
- Be an instrument for poverty reduction and greater inclusion of the traditionally disempowered

Following the completion of the toolkit for facilitators wishing to support small forest-farm enterprises, the Forest Connect alliance discussed and mapped out where priorities lay for the future support to such enterprises. This new vision points towards supporting climate-smart, biodiversity-integrating, small forest-farm enterprises in the food, energy and construction sectors. This is in the understanding that the overall goals are: integrated land-use that enhances prospects for both the well-being of local people and biodiversity conservation; climate change adaptation and mitigation; legal recognition of business models based on local control.

An independent review of the Forest Connect initiative has recently been commissioned and will provide feedback and guidance for the way forward.

1.5. Independent review of the Forest Connect alliance 2008-2012

Andy Inglis

The objectives of this review were to assess the success of Forest Connect in supporting small forest enterprises through international communication platforms, in-country work, learning events, toolkit development and testing, and communication and advocacy work; and to distil lessons about the key factors that have led to success (or failure), in order to inform best practice for any follow-on.

Methodology

The review involved brief visits of the two main partners, IIED and FAO ('Forest Connect central'), and two country teams, Nepal and Ethiopia. Over fifty partners, stakeholders and observers were interviewed on their experiences, opinions and perceptions of Forest Connect in general and / or of the performance of the national hubs. Representatives from other Forest Connect countries, plus international stakeholders or observers, were then interviewed 'ex-situ'. The methods used included timelines and H-forms as part of group key informant or participant Semi-Structured Interviews (SSIs). Most SSIs were face-to-face, with some via telephone or Skype, and some by email. Most were informal; a few (in Nepal and Ethiopia) were semi-formal. Some interviews were pre-arranged, others were ad hoc or opportunistic, with no bespoke events. Documentation regarding PDF downloads, website hits, Forest Connect membership and a wide range of Forest Connect publications were provided and drawn upon.

Knowledge exchange findings

Forest Connect has attracted, inspired and brought together individual practitioners and respected institutions. There has been a steady stream of (more than 60) high-quality publications from both IIED and FAO, with distribution and dissemination of Forest Connect publications being both conventional (i.e. packages of hard copies shipped to capital cities), and, increasingly by soft copy, in the form of PDF downloads. There has been a general decline in hard copy dissemination systems from capitals in the 'South' but healthy Asia (22%) and Africa (19%) percentages of downloads figures.

	Asia-pacific	Africa	Mid East	South Am.	Cen. Am.	N. Am.	Europe	2012	Total
Toolkit (English)	171	123	4	35	11	130	189	663	663
Toolkit (French)	7	27	0	1	0	46	57	138	138
Workshop Report 1	27	4	0	2	1	40	25	108	460
Workshop Report 2	66	85	1	4	1	81	76	314	500
Nepal	47	9	0	1	0	19	15	91	91
Mozambique	0	3	0	0	0	0	0	3	3
Guyana	8	7	0	7	2	51	18	93	93
Guatemala	1	2	0	0	0	2	5	14	14
Ghana	8	19	0	1	1	20	22	71	71
Burkina Faso	9	19	0	0	2	28	34	92	92
Totals	344	298	5	51	18	417	441	**1574**	**2125**
% 2012 downloads	21.9	18.9	0.3	3.2	1.1	26.5	28.0		

Number of pdf downloads in 2012 (and totals) from IIED website

Knowledge exchange recommendations

- Forest Connect publication production should be kept going in whatever form possible; it is an important mechanism for peer learning, as well as stimulating inputs and formal recognition of authors or contributors.
- Forest Connect national hubs should be reminded, prodded or even incentivised to keep their hard copy dissemination systems well-oiled and functioning.
- Longer international meetings should be held with more structured, well-planned field trip(s). If the future of Forest Connect can be fully funded, international meetings should be twice a year.

Communications platforms findings

Forest Connect communication platforms have initiated and facilitated dialogue between both individuals and institutions in North and South. The Forest Connect social networking site (http://forestconnect.ning.com) has helped to create a solid membership platform (of 940+ members from 94 countries). Partner Forest Connect websites (and pages) have also made a contribution, although their quality has been variable. All partner Forest Connect websites and pages or links look different in terms of branding, design and arrangements; this reflects the scope, flexibility, autonomy and innovation that 'Forest Connect central' encourages. If resources are unavailable, it is better to just have a good page on partner's website (with functioning links to other better populated sites).

Two further findings were that the soft versus hard copy dilemma has been a growing issue; and that most direct bilateral communication was task-generated or orientated (tasks set up by 'Forest Connect central').

Country	Website address/link	Comments
Guyana	http://iwokrama.org/forestconnect/products/medicinal.htm	Not stand alone, a page on Iwokrama site (new FC site hosted by NRDBB planned soon)
Nepal*	http://www.ansab.org/fcn/	Stand-alone site
Burkina Faso	http://www.treeaid.org.uk/our-work/where-we-work/forest-connect-in-burkina-faso	Not stand-alone 'dedicated' site
Mali	http://www.aopp-mali.org/spip.php?article48	Comes across that Forest Connect is an "FAO project"
China	http://www.lknet.ac.cn/page-2/index-1.htm	Not stand alone
Guatemala	http://www.mipymecomunitaria.com/	Not stand alone
Laos	http://edclaos.com/lfc/	Website not accessible – 'use warning'
Mozambique	http://www.ctv.org.mz/fc.html	Website/link not working

Forest Connect national websites

Forest Connect Social Networking

The 'ning' platform site has proved to be a good pioneer for Forest Connect's social networking. Only 16 per cent of the around 940 members are in Forest Connect partner countries, however, and most members (39

per cent) are in high-income countries. Barriers exist to some members of the Forest Connect constituency in terms of joining it and fully participating because the site is not as business or 'real world' friendly or accessible as it could be, requiring users to be proactive in joining and keeping up to date. This discourages groups such as private sector customers or traders in 'southern' slower internet environments.

Total number of members (September 2012)	918*
Members with country specified	771
Largest national membership: United States	79
Largest Forest Connect national partner membership: Ghana	37
% Members in high income countries	39%
% Members in medium income countries	25%
% Members in low income countryies	36%
% Members in Forest Connect funded partner countries	**16%**
*November 12th: 942 members	

Possible alternatives to the current social networking site are Facebook, LinkedIn, Twitter or Skype. Of these, 'LinkedIn' is the most business-friendly and popular, and the one where the largest proportion of groups and individuals of the Forest Connect network and constituency are already members.

Communications platforms recommendations

- It should be investigated whether the 'ning' website can be migrated to LinkedIn.
- Conduct a consultation process regarding the name 'Forest Connect'.
- Create additional categories of Forest Connect membership to increase Forest Connect's internet presence and traffic.
- Partner with more organisations who are big players in elements of support to small forest enterprises but for whom forestry is not their core business as ('light touch') members of the Forest Connect alliance.
- Options for increasing the number of hits and return visits to the Forest Connect websites should be investigated, for example Search Engine Optimisation.

Peer-to-Peer Learning: Findings and Lessons

The success of the Forest Connect peer-to-peer learning events has predominantly due to having been consultative, innovative and selective – also to providing strategic small levels of financial and technical support. The strong response from members in the field has been due to the quality of work done, particularly with regard to the development of the Facilitator's Toolkit but also during the research for the country-level small and medium forest enterprise diagnostic studies. Those who participated in the production of the Toolkit were proud to have been involved and of being named as contributors. The Toolkit itself is of very high quality and has been well-received but the hardcopy version requires some fine-tuning and the soft copy version made more interactive.

There is scope to enhance and broaden Forest Connect peer-peer learning via specific interest or topic 'sub-groups'.

Peer-to-Peer Learning: Recommendations

- Other social networking platforms (such as LinkedIn) should be considered from a purely peer-to-peer learning point of view.
- The Toolkit would benefit from being continually updated; it could also usefully be fine-tuned and/or reproduced on CD/DVD as an interactive (non-internet-based) format.
- Mentoring materials, powerpoint presentations could usefully be developed.

- Over time initiate and develop topic-based hubs and more multi-country, single-interest sub-groups, sharing innovation and experiences about a single topic or product, from one place to another – with structured field trips and e-forum discussions.

Forest Connect interest group suggestions

Single issue or product groups and networks have started to informally emerge. Subjects / issues / products include:

- Experiences of legalising and formalising (moving from illegal to legal);
- biomass energy enterprises (including firewood, charcoal, briquettes);
- locally controlled timber production enterprises (pitsawing / chainsaw logging);
- hunting enterprises;
- tourism enterprises (for example, forest hotels, trophy hunting, cultural and educational trails);
- fire management;
- how to deal with itinerant / non-local illegal cutters / settlers;
- the potential of domesticated tree crop enterprises;
- forest / tree supported 'mainstream' agriculture enterprises; and
- specific products, such as honey, shea in West Africa, Irvignia and Gnetum in West and Central Africa, etc., ginger, vanilla, and pepper.

In-country support: findings

'Forest Connect central' has been both reactive and proactive in providing research reports, advocacy support and practical advice. Its pro-small forest enterprise enthusiasm, philosophy and practice has been subsumed into and added to that already held by the national hubs. ("Whatever Works").

Direct support activities from the centre to in-country partners have been limited, however, primarily due to the relatively low levels of funding available to 'Forest Connect central'. National hubs in both countries visited using their own resources and blending with other funding streams to implement Forest Connect work plans (although in the process making it difficult to attribute specific activities or successes to Forest Connect). It is not clear whether national hubs have sufficiently reached out to or involved new players, especially organisations who are de facto competitors as 'secondary partners'.

In-country support: lessons

Optimal national 'secondary partners' are: democratic, ethical private sector forest produce businesses umbrella organisations (such as agriculture producer associations); national- and regional-level chambers of commerce; and decentralised technical parastatal. Further, it was the right decision to try and work through in-country facilitators.

Most of Forest Connect's materials could be used for college and university courses, to train future professionals or service providers.

International (and national) trade fairs, conventions and expos are very valuable for increasing the exposure of small forest enterprises to markets, customers, importers, exporters, competitors, and so on, and might serve as a platform to recruit new members.

In-country support: recommendations

- Consider modifying Forest Connect materials for use in training colleges and universities: SME components in a forestry curricula, and SMFE in business/enterprise curricula.

- Forest Connect national hubs should try to increase their balance of work with democratic producer groups.
- Provide resources and technical support where required for ad hoc neighbouring country exchange visits – with structure and report formats, regional, smaller-scale meetings and bilateral exchange visits (perhaps via a challenge fund system).
- At major forest product trade events or expos, Forest Connect should book a display or stand where Forest Connect partner countries could attend and display products and meet peers. If possible, Steering Committee meetings or international workshops could be held as side or before or after.

Governance arrangements: findings

The International Steering Committee was well-structured, proportionate and representative but under-used: well-intentioned but under-resourced. It tended to be reactive more than proactive, with a lot of trust in key personnel of lead partners, in part due to overburdened staff capacity on all fronts. A troika-type arrangement existed, with a triumvirate composed of: i) IIED / Duncan Macqueen; ii) FAO / Sophie Grouwels; and iii) the Steering Committee (which itself has Duncan / IIED and Sophie / FAO as members).

The two lead figures are well-respected in and beyond their organisations and, within advisory guidelines set by the Steering Committee, both are at liberty to make day-to-day decisions. The high level of flexibility ("intelligent flexibility") works well if, as in Forest Connect's case, the lead figures are trusted and have big trust in each other (i.e. individualised). Both IIED and FAO have equitably shared the leadership of Forest Connect and used their complementary strengths to good effect, with no problems regarding adjusting budgets or depending on who actually holds the resources for Forest Connect activities. There is a question over what happened to the idea of setting up national level Forest Connect steering committees.

Governance arrangements: recommendations

If more funding could be secured for Forest Connect in the future, the Steering Committee should be given a stronger mandate and be extended or increased by: inviting entrepreneurial champions with bright ideas (from outside the NGO world); seeking outside experts, private sector experts, government representatives, members of high-level regional economic cooperation organisations; and should considering inviting foundations, or trade organisations/unions.

Future plans for Forest Connect

- There is a great opportunity to build on significant progress with improving the policy situation and political climate with regard to small forest enterprises
- It is early, early days for designing and channeling support tailored to small forest enterprises so there should, indeed, there must, be a future for an entity that is trying to do what the Forest Connect has been doing.
- With the impressive 'reach' (array of networks and partners) it has already established, and its strong technical platform, it is difficult to see what other organisation, or even organisations, could match what Forest Connect has created: the completely blended combination of poverty reduction, development of microfinance, improving security of tenure, livelihood gains, new enterprise and trade opportunities, private sector enlargement; which make a compelling case for carrying on, moving on to a future vision for Forest Connect
- Even from partners who were expecting much more in terms of resources from FC there were no dissenting voices – in fact the opposite, a real, unanimous desire to see FC forge ahead, using the strong platform it has established to scale up and make important positive contributions to many of the international, national and local challenges relating to forests.

Attracting support for future Forest Connect work

Some donors have not been able to see or have enough faith in links between what Forest Connect has been doing and their own intentions to work more with the 'private sector' (REDD+) and the 'domestic market' (FLEGT). But there are strong Forest Connect messages and themes that donors usually like to hear:

- It is not technologically difficult;
- it addresses market failures;
- it is promoting ethical trade;
- it is in a lot of cases implementing existing laws, and does not need a lot of, if any, new legislation compared to other sectors, since existing laws and policies are adequate on paper but are not being implemented or enforced;
- it is generating brand new tax revenues;
- it is reducing government personnel (with fewer forest patrols);
- it is creating new opportunities for CSOs, NGOs and private sector entities as intermediaries or service deliverers;
- it is enhancing local rights and tenure;
- it is pro-business/enterprise;
- it has strong numbers/metrics that provide evidence of poverty reduction;
- it involves cross-society and – usually – cross-party political positive consensus;
- it is adding to economic growth; and
- it is improving stewardship of global public goods, with positive national and local impacts.

There is a need to generate more figures showing that Forest Connect's approach is a viable alternative to international companies, for those donors wishing to engage more with the private sector in their forestry investment or development programmes, due to lower transaction costs, better poverty reduction and better forest management results.

A central component should be to continually update, improve and add to the Toolkit but in a new format of an interactive CD/DVD/website version of the Toolkit, with films and powerpoint presentations being an integral part of it. Linked to this, it might also be useful to develop more specific SMFE guidance for the big value sectors of biomass energy, tree-supported agriculture, timber and carbon.

There has been a disproportionate interest so far in NTFPs as opposed to timber, with too much focus and comfort-zone thinking with respect to NTFPs by some national hubs. Community Payments for Environmental Services (PES), including carbon payments, are an area where more could be done or promoted by Forest Connect. This could include linking up with voluntary carbon market and community development focused and benefit sharing carbon or PES standards, such as Social Carbon or Plan Vivo. In general, more efforts are needed to work with other sectors, such as energy, agriculture, fisheries or health, which have SMEs; especially those which interface or relate to trees. Connections to farming SMEs should be the easiest, as there is much in common, including experiences of product value chains, of dealing with market(s) and customers, logistics, and storage. There should be a lot to gain from collaboration with the new Forest Farm Facility, hosted by FAO.

The name

There is some confusion when people first hear about Forest Connect, for those who wonder what it actually does – not least because 'Forest Connect' doesn't actually do what its name implies for all those engaged in multiple different areas of 'forest' activity. Some respondents stated that their first assumption was that Forest Connect is a pressure group for biodiversity corridors or linking patches of forest together. Most respondents said that if the name were to be changed, the new name should definitely include 'Connect', and it would be desirable to keep 'Forest' in any new name. Some renaming suggestions are: Forest

Enterprise Connect; Forest Product Connect; Forest Business Connect; Forest Market Connect; Forest Community Connect; Forest Poverty Connect; Forest Sustainability Connect; or SMFE Connect.

1.6. Background paper – Going with the grain

Duncan Macqueen, IIED

The main conclusion from Rio+20 is that the current model of economic development is both inequitable and at odds with the sustainability of ecosystem services upon which the planet ultimately depends. Key environmental planetary boundaries in climate change, biodiversity loss and soil fertility / excessive nitrification, look from recent analysis to be being surpassed.

We need a different trajectory – a system of economic development that 'goes with the grain' of natural ecosystem functions and tries to enhance them while delivering livelihood benefits that are fairly apportioned. This trajectory might be called a 'fair green economy', as it considers issues of social equity alongside environmental sustainability. This presentation explores this trajectory within the context of the Forest Connect alliance, which has emerged through facilitated support to small farm-forest enterprises.

For the poor, key social foundations that are critical in farm-forest landscapes but yet to be successfully achieved for the poor in many countries include adequate income generation, food security and energy security. We need to develop a model of forest enterprise support that puts control back into the hands of local people so that they can meet these pressing needs.

Given the challenges above, support for small forest enterprises should focus attention towards: **entrepreneurial options** that enhance bio-capacity – local agency is critical (there are a few thousand state forest authority staff but multiple millions of forest-dependent poor); **income generation** – 1.4 billion people are on less than US$ 1.25 per day; **food security** – 925 million people currently go hungry; **energy enhancement** – 1.3 billion people are without access to electricity; **climate smart solutions** – forest loss and agricultural practices contribute around 17 per cent and 14 cent of global carbon emissions, respectively; **biodiverse** – extinction rates are currently at roughly 100-1000 times the historical background rate; **nitrogen efficiency** – the doubling of industrial nitrogen use is leading to soil acidification and the killing aquatic life; and **gender and age balance** – pervasive inequities must be addressed.

The Forest Connect alliance has a **comparative advantage** in several respects. We know how to support small forest enterprises and have a toolkit now in English, French and Spanish. We know the economic rationale behind our approach: small forest enterprises add US$ 130 billion annually; community management generates four times the revenue of state management per unit area; and each dollar generated locally creates a multiplier of ten in income, jobs and potential tax revenue. We also know the environmental benefits of our work: local control is better than protected areas for conservation (Porter-Bolland et al. 2011); local control benefits the environment (Molnar et al. 2007); but transfer to local people has stagnated (RRI, 2011).

Investing in Locally Controlled Forestry (ILCF) is a framework that captures our approach. ILCF matches four areas of 'enabling investments' in: (i) advocacy (towards secure commercial farm-forest rights); (ii) enterprise support (towards local business capacity); (iii) organisation building (towards strong enterprise-oriented organisations); and ultimately (iv) brokering deals – through which 'asset investment' or hard financial investment can flow into sub-sectors that have strong prospects for integrated, intensified and climate-smart land use.

Discerning enabling investment in particular sub-sectors in particular geographical regions requires a process of assessment of sub-sector support options. The aim is to arrive at a balanced portfolio of 'enabling

investments' that both optimise contribution to local livelihoods and sustainable natural resource management, and also addresses the global challenge to sustainable development so clearly apparent at Rio+20. It is hoped that as we hear the results of each country team – with each having considered this set of questions in a range of different country contexts – the Forest Connect alliance might be in a better position to take strategic decisions that enhance its contribution both nationally and globally.

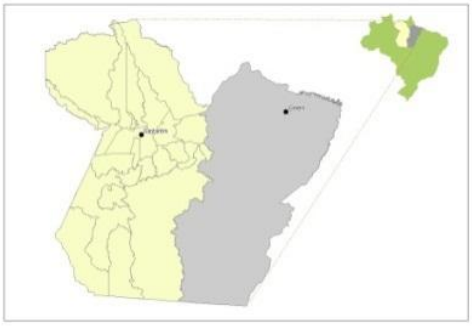
2. Country scoping studies: prioritising support to particular small farm-forest enterprise subsectors

2.1. Brazilian Amazon

Shoana Humphries, IPAM (with Stella Schons and David McGrath)

Introduction to IPAM

Instituto de Pesquisa Ambiental da Amazônia (IPAM), the Amazon Environmental Research Institute, was founded in 1995 as a scientific, non-governmental and non-profit organisation. It pursues sustainable development of the Amazon, including economic growth, social justice, and the protection of the region's ecosystems. It collaborates with local communities to analyse, develop, and share sustainable resource management practices throughout the region. IPAM's four lines of work are prioritized as: (i) Amazon scenarios; (ii) climate change; (iii) community forest management; and (iv) international program.



IPAM's geographical focus for this study is the Brazilian Amazon and western Pará. The Brazilian Amazon covers 49 per cent of Brazil, across seven states ("northern region"). The region has had frequent boom/bust cycles for NTFPs, such as natural rubber and cacao. Government programmes to settle the region brought roads, cattle, and rural settlements. The population includes colonists, indigenous and traditional peoples, with 26 per cent rural, and 32.5 per cent living in poverty. Challenges to producers in the region include poor soils, insufficient infrastructure, and limited access to technology, finance, and markets. Social movements have led to the transfer of 36 per cent of the Amazon to indigenous and traditional peoples. Western Pará has around 1 million people, with high pressure for deforestation from its infrastructure. The main products include: timber, açaí, cocoa, and the Brazil nut – and there have been extensive experiments in agroforestry and company-community partnerships.

Locally controlled forestry in Brazilian Amazon

There are 400,000 family farmers in the Brazilian Amazon, and 62,000 other producers. Family farmers are often referred to as "Agro-extrativistas" due to their diversified production of agricultural and agroforestry crops, as well as the extraction of timber and non-timber forest products. These family farms account for eighty per cent of farms, but cover only 30 per cent of total farm area, as follows:

- Colonists - 6% of farm area
- Traditional peoples - 14% of farm area
- Indigenous peoples - 22% of farm area

In terms of their rights and responsibilities, farmers must maintain 80 per cent of the legal forest reserve but they are able to harvest and sell forest resources with permission. Timber can be harvested from legally deforested areas with a permit, and from legal forest reserve areas with a forest management plan. In 2006, 4,750 farmers sold timber from legally deforested areas. In 2010, there were a total of 775 forest management plans for family forestry and 126 for community forestry. A notable trend is the increasing domestication of NTFPs, rather than collection from the wild.

Main forest-farm subsectors and market potential

The **timber** market includes sawnwood, charcoal and firewood. With around 80 per cent of timber consumed domestically, there is strong domestic market potential and smallholders are already important suppliers. The market faces challenges, including bureaucracy, and the need for technical and financial assistance but opportunities can be found in bureaucratic simplification, as well as partnerships among small and community enterprises and with industry. The resilience of this market in the face of climate change is high.

The **NTFP** market contains 33 species, including açaí berry juice, andiroba oil, cocoa and bananas. There is both domestic and international demand, which is driving the domestication of NTFPs. Smallholders have been increasing agroforestry production, both to meet market demand and to maintain their livelihoods. Challenges faced include that of documentation and of regulations regarding biodiversity products. Yet there are opportunities in supportive state procurement programmes and in the growing market demand for "natural" and "sustainable" products. Resilience to climate change in natural forests is high, and agroforestry systems are adaptive to changes.

Main social impacts

Social impacts of **timber** include increased income and indirect positive impacts on food security. Though men do most harvesting and primary processing, women's involvement is more indirect, including various services and, in some cases, secondary processing. Timber income is an important source of capital for innovation, diversification, and adaptation, and it provides energy security either directly through firewood or through use of residues.

NTFPs also contribute to increased food security (either directly – or indirectly due to increased income), increased income, and a slight (indirect) increase in energy security. Again, men do most of the collection but here women are involved in primary processing.

Main environmental impacts

Natural forests timber and NTFPs are critically important for carbon storage, soil stabilisation, and mitigating climate change. High grading and over harvesting can reduce biodiversity; and high impact removal of trees can negatively impact NTFP sources, water supplies, and hunting opportunities.

Agroforestry for timber and NTFPs is also important for carbon storage and soil stabilisation; it can help to recover the minimum legal forest reserve and improve biodiversity. There are potential pest problems in domesticated crops and more intensive production may require fertilisation.

Conclusions regarding potential impacts of support

Summary of Assessment of integrated impacts for each potential sub-sector

Issue Assessed	Score*		
	Timber products	NTFPs	Agroforestry
Gender analysis: What is the likely contribution of each subsector to income generating opportunities for women — and thereby (he likely impacts on household wellbeing (including any issues to do with reproductive health)?	1-2	3-5	2-4
Impacts on food security of those options — What is the likely contribution of each sub-sector either directly or indirectly?	2-4	4-5	4-5
Impacts on energy security — What is the likely contribution of each sub-sector to the provision of household energy — either directly or indirectly?	5	2	2-4
Impacts on climate change mitigation and adaptation potential What is the likely contribution of each sub-sector to carbon emissions reductions (including replacement of alternative emissions sources) and how important is ii likely to be intents of adapting to and building resilience to known future climate change scenarios?	4	4	3-4
Impacts on biodiversity within actual system and on adjacent natural systems — what is the likely contribution of each subsector to biodiversity conservation? For example, to what extent does the sub-sector in question require the maintenance of biodiverse natural ecosystems, or enhance the degree of agro-biodiversity through its operations?	4-5	2-3	2-3
Impacts on soil fertility and nitrogen inputs —What is the likely contribution of each sub-sector in question to the use of natural forest management or on-farm soil husbandry techniques that enhance long-term soil fertility without the excessive use of nitrogen fertilizers?	4-5	2-5	3-4

** Score: 5 = highly likely; 4 = moderately likely; 3 = no likely effect or not applicable; 2 = unlikely or small adverse effect; 1 = strong adverse effect.*

Timber offers improved income and energy security; it generates capital to invest and this can improve food security and improve livelihoods. It is good for biodiversity and soils, and is climate friendly. However, income opportunities are usually for men.

NTFPs from both natural forests and agroforestry systems offer improved food security and income with some improved energy security. They are adaptable and climate friendly and offer more income opportunities for women.

The government presents both the biggest blocks and the greatest opportunities. On the positive side, the government has implemented some required sourcing of smallholder products and price supports; but on the negative side, there is substantial bureaucracy and a lack of services to producers.

Conclusions about the priorities

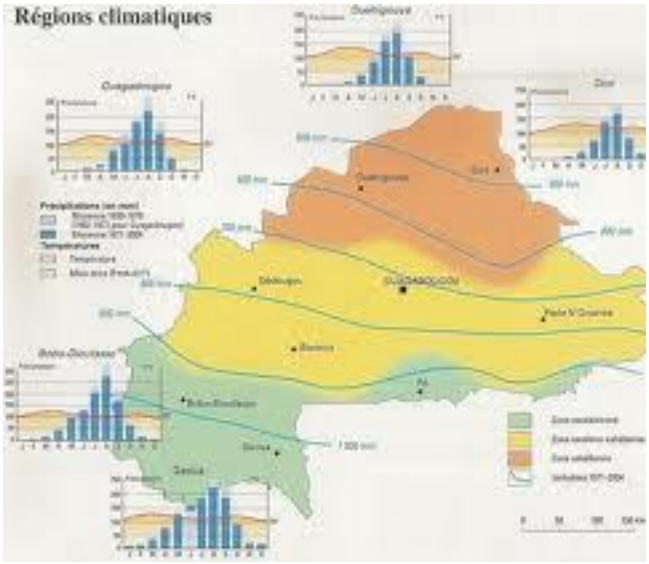
The priority is support across the various different timber and NTFP enterprise options in both natural forests and agroforestry systems for: organisation to support production and sales; further development and adoption of agroforestry systems; and primary processing for timber, andiroba, and açaí. This support should go to traditional and colonist families in western Pará. Recommended activities include training, organisation and collaboration, research and policy outreach.

2.2. Burkina Faso

Elvis Paul Tangem, TreeAid

Introduction to TreeAid

TreeAid works to improve lives and the environment with its key programme themes by supporting communities in enterprise, access and rights, and food security. TreeAid has a focus in the drylands of Burkina Faso, Ghana, Mali, Niger, Ethiopia and Kenya.



Locally controlled forestry in Burkina Faso

Burkina Faso is typified by long dry season, with very vulnerable populations whose main activities include animal husbandry and agriculture. Burkina Faso, like Mali and Niger, is generally Sahelian (70%). It is characterised by low rainfall, with typically about 300-400mm falling in three to four months of the year. Specifically, there are three climatic zones (Guinéen, Sudanian and Sahelian). In the southern part, there are semi-deciduous tree species and higher rains; further north is the pure Sahel, with low rains and capricious weather, prone to floods and drought. These zones have more resources than have been acknowledged, with big NTFP potential, which is under-utilised and neglected. An investment in low cover forest in the drier Sudano – Sahelian zone will have more impact, due to the high reliance and the political need to boost the integration of tree production in climate smart agriculture.

Overview of sub-sectorial entrepreneurial options

1. Agro-forestry food product enterprises.
2. Tree-crop food enterprises.
3. Biomass energy enterprises.
4. Construction material enterprises.
5. NTFP enterprises.

Within each sub-sector, options are recognised across a range of landscapes from natural forest, through parkland and intensive agro-forestry, to orchards and woodlots.

Market assessment

Agro-forestry food product enterprises, where trees serve to improve soil fertility for conventional agricultural crops – has anticipated increases in; cereal and vegetable crop demand, fertiliser costs and

livestock feed costs. Integration of trees into the agricultural landscape will reduce the risk of soil degradation through periods of drought, flood and storm events, maintaining the fertility of the soils which will in turn support better crop (and tree

For **tree-crop food enterprises**, where tree fruits, leaves, stems or nectar products such as honey are used directly for food, existing markets for tree foods are growing with the population. There is potential for greater use of tree foods for nutritional security. There are particularly good market prospects for NTFPs. Production is species-specific, therefore there is potentially less flexibility to adapt to environmental trends related to climate change.

For **biomass energy enterprises**, where on-farm or natural forest wood products are used for energy, with a growing population and currently limited alternatives, demand for wood fuel is increasing and the supply-demand balance is probably in deficit in most regions. There is, however, medium-term potential for substitution with liquefied petroleum gas (LPG), solar energy, and possibly more hydro power.

Construction material enterprises are where on-farm or natural forest trees are used for sawn-timber, carpentry and thatching. Much timber has come from the South of the country and even more from across the southern borders of the country but these supplies will dry up as forest resources in Ghana and Côte d'Ivoire are exhausted.

For **NTFP enterprises**, where on-farm or natural forest trees are used for medicinal, cosmetic, craft or other purposes, there are strong traditional local, national and sub-regional markets. These are an attractive option for income generation, particularly for rural women. The sub-sector boasts the third most important source of employment in Burkina Faso.

Overall, the market prospects for all five sub-sectors appear relatively strong and the balance of advantages and disadvantages is finely balanced between them, even between tree-crop food enterprise and the other sub-sectors.

Gender analysis of those options

Impact on energy security: contribution to provision of household energy
Biomass is likely to remain the major source of energy in Burkina Faso for the foreseeable future. All forms of agro-forestry offer farming house-holds valuable options in terms of fuel wood self-provisioning to offset growing pressure on natural forest formations.

Impacts on biodiversity within actual system and on adjacent natural systems
Enterprises that depend on – and invest in the maintenance of – natural forest formations will have the greatest positive impact on biodiversity; this is a TreeAid Fundamental Hypothesis.

Analysis by sub sectors

Sub-sectors	Q 4	Q 5.1	Q 5.2	Q 6.1	Q 6.2	Q 7.1	Q 7.2	Q 8	Q 9		Balanced Rank
Agro-forestry food product enterprises, where trees serve to improve soil fertility for conventional agricultural crops											
1.1 Naturally regenerating field trees (Parkland Savannah)	3	5	3	N/A	3	3	4	4	5	**30**	**A**
1.2 Intensive agro-forestry systems (planted with exotics)	2	4	4	N/A	3	2	4	3	5	**27**	**B**
Tree-crop food enterprises – where tree fruits / leaves / stems / or nectar products such as honey are used directly for food											
2.1 Natural forest formations	3	5	3	N/A	2	2	4	5	5	**31**	**A**
2.2 Naturally regenerating field trees (Parkland Savannah)	4	3	4	N/A	3	3	4	4	5	**30**	**A**
2.3 Intensive agro-forestry systems (planted)	3	4	3	N/A	3	2	4	3	5	**27**	**B**
2.4 Orchards and woodlots	3	4	3	N/A	3	2	3	2	3	**23**	
3. Biomass energy enterprises – where on-farm or natural forest wood products are used for energy											
3.1 Natural forest formations	3	N/A	3	5	N/A	3	3	4	5	**26**	**B**
3.2 Orchards / woodlots	2	N/A	4	5	N/A	3	3	2	3	**22**	
4. Construction material enterprises – where on-farm or natural forest trees are used for sawn-timber, carpentry, thatching											
4.1 Natural forest formations	1	N/A	3	N/A	2	2	2	4	5	**19**	
4.2 Naturally regenerating field trees	1	N/A	2	N/A	3	2	2	4	5	**19**	
4.3 Intensive agro-forestry systems (planted)	2	N/A	4	N/A	3	3	3	3	4	**21**	
4.4 Woodlots	2	N/A	5	N/A	3	3	3	2	3	**21**	
5. NTFP enterprises – where on-farm or natural forest trees are used for medicinal, cosmetic, craft or other purposes											
5.1 Natural forest formations	5	N/A	5	N/A	2	2	4	5	5	**28**	**B**
5.2 Naturally regenerating field trees	4	N/A	4	N/A	3	2	4	4	5	**26**	**B**

Priorities

The primary priorities would be agro-forestry food product enterprises, especially in parkland savannah (but also in more intensified systems), where trees serve to improve soil fertility for conventional agricultural crops; and tree-crop food enterprises – but bearing in mind the slightly lower market potential of this option.

Secondary priorities would be NTFP enterprises, including the production of commodities traded for cash (notably shea nuts and gum arabic); and biomass energy production based on natural forest formations, since markets for biomass energy are strong and growing. Women, girls and youths are already involved in marketing fuelwood, especially during the dry season.

These questions and issues have been gathered to think through and find the way forward; similar issues exist over the entire Sahel, such as in Mali.

2.3. Vietnam

Martin Greijmans (and Tan Nguyen), RECOFTC - Vietnam

Introduction to RECOFTC

RECOFTC – The Center for People and Forests was founded in 1987 as a not for profit organisation. RECOFTC's mission is to enhance capacities to promote stronger rights, improved governance and fairer benefits for local people in sustainable forest landscapes in the Asia-Pacific region. The headquarters is in Thailand, with country offices in Vietnam, Lao PDR, Cambodia, Myanmar and Indonesia. RECOFTC's outputs are capacity building, analysis, demonstration and strategic communication across four thematic areas: securing community forestry; people, forests and climate change; enhancing livelihoods and markets; and transforming forest conflicts. RECOFTC engages with government bodies, international and UN agencies, NGOs, research and educational institutes, civil society, private sector and local people.

Locally controlled forestry in Vietnam

In the early 1990s, a legal framework was set up for devolution of forest and land rights to local people (individuals and households), and the 1990s saw piloting of community forestry by donor support projects. In the early 2000s, there was a revised legal framework to include village collectives. National Community Forest Management (CFM) was piloted in ten provinces. CFM rights include use rights (timber and NTFP from plantation and natural forest) and commercial rights (plantation and NTFPs, and natural forest timber under piloting. Locally controlled forestry covers 28 per cent of the country's forest area, with 2.5 million ha contracted for protection.

Geographical focus

The geographical focus of the scoping study is the Central Highlands Region, where there is a complex ethnic composition, including around 46 out of the 54 national groups. There is a high poverty rate of 22.2 per cent, compared to the national average of 14 per cent. The poverty rate among local (in situ) ethnic groups is higher than that of the migrating ones. There is pressure from markets on forest resources (timber and

land for cash cropping) and from the growth of migrants. There is also a high forest cover of 52 per cent, compared to the national average of 39.7 per cent.

Main forest-farm subsectors

	Market trends	Competitive advantage issues	Enabling environment issues	CC resilience
Rubber	Growing	high investment, 7 yrs to be productive	Strongly support by GoV	Prone to CC
Coffee	Growing but fluctuating	High investment, 3 yrs to be productive	Support by GoV	Highly vulnerable to CC
Pepper	Gradually growing	High investment, 3 yrs to be productive	Support by GoV	Highly vulnerable to CC
Plantation wood	Fast growing	Medium investment, 5-6 years to harvest	Support by GoV, but need legal process for logging	Resilient
NTFPs	Stable	Time to harvest varies on products	Support by GoV	Depends on products

Main social impacts

Rubber provides high – and likely to be stable – income generation and food security when productive; it can also contribute to energy security. **Coffee** provides high – but sometimes unstable – income generation and food security when productive; the pruned branches can use as fuel. **Pepper** provides a good and stable income generation, as well as food security when productive. **Plantation wood** provides good income generation and food security when it is harvested; it is also very good for energy security. The income generation of **NTFPs** varies, though it is a reliable source for food security and can contribute to energy security.

Income generation and spending is often done at household level. Any gender difference is often associated with difference in household structures, such as widow headed households. Further, investment costs are often too high for the poor for rubber, coffee, pepper, and plantation wood.

Main environmental impacts

Both **rubber** and **coffee** can absorb CO_2 but their expansion is associated with the clearance of natural forest and thus biodiversity loss. Coffee also has a high use of chemicals, such as fertilisers and pesticides. The expansion of **pepper** is often associated with the logging of tree poles in natural forest. **Plantation wood** represents a great solution for climate change adaption and mitigation but mismanaged logging may have adverse impact on the climate. Current practices in the collection of **NTFPs** sometimes have negative impacts on the forest resources and on biodiversity.

Summary table of impacts

	Rubber	Coffee	Pepper	Plantation wood	NTFPs
Gender	5	5	5	3	4
Food security	2	4	4	2	5
Energy security	5	5	5	5	5
Climate change	2	2	2	4	2
Biodiversity	1	1	1	3	3
Soil fertility/ nitrogen use	1	1	1	3	5

Score: 5 = highly likely; 4 = moderately likely; 3 = no likely effect or not applicable; 2 = unlikely or small adverse effect; 1 = strong adverse effect

Conclusions

Clarification of tenure rights is the first step or a precondition. Priorities would be a mixture of relevant NTFPs and coffee or pepper to begin with, then tree plantation and rubber coming later. There needs to be attention given to improve the value added to the products, particularly at the farm level – this links to technology, finance and organisation. There is a link with capacity development for forest managers in terms of business capacity, such as group formation or organisational skills, negotiation power, business planning, and access to finance. Assistance is needed in improving existing farming practices to mitigate the negative impacts. Improving local governance and empowering the poor would be the long term objective.

2.4. Chilón, Chiapas, Mexico

Ernesto Herrera Guerra, Reforestamos Mexico

Introduction to Reforestamos Mexico

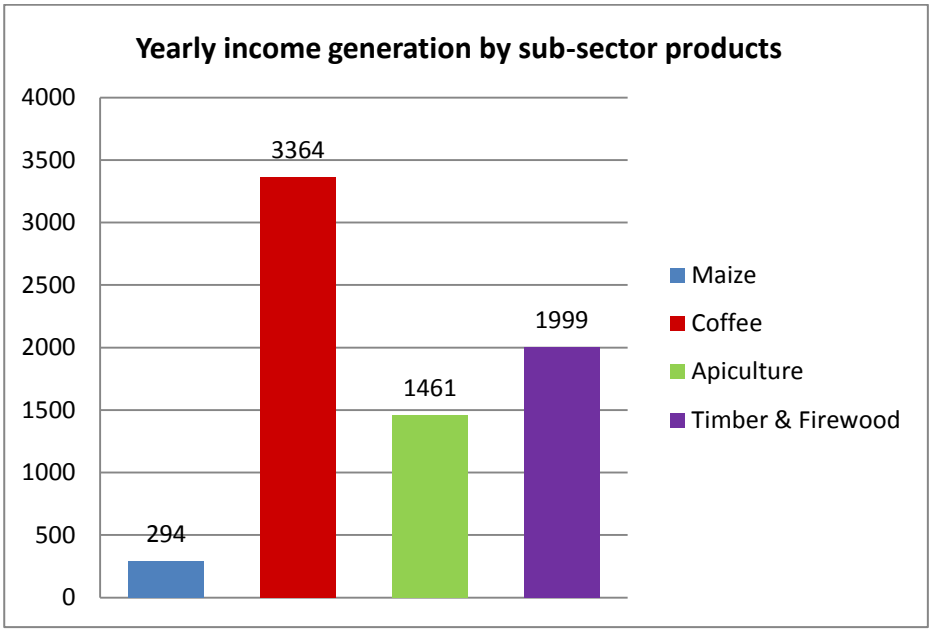
Reforestamos Mexico is a ten-year-old organisation, which has evolved significantly over time in its focus, from planting trees (2002-2005), to organising community groups for planting trees (2005-2008), productivity and profitability of wood in locally controlled forestry (2008-2012), entrepreneurial mentality based on locally controlled forestry (2010-2013), public advocacy for a better enabling environment (2011-2013), and most recently, to private sector engagement in value chain (2012-2013).

Model Reforestamos Mexico has the following model in view: government facilitates and encourages sustainable commercial management; markets flourish at the service of forests; private sector invests responsibly; forest enterprises provide sustainability; local leaders engage in business ventures for their forests; and better forests for Mexico's development.

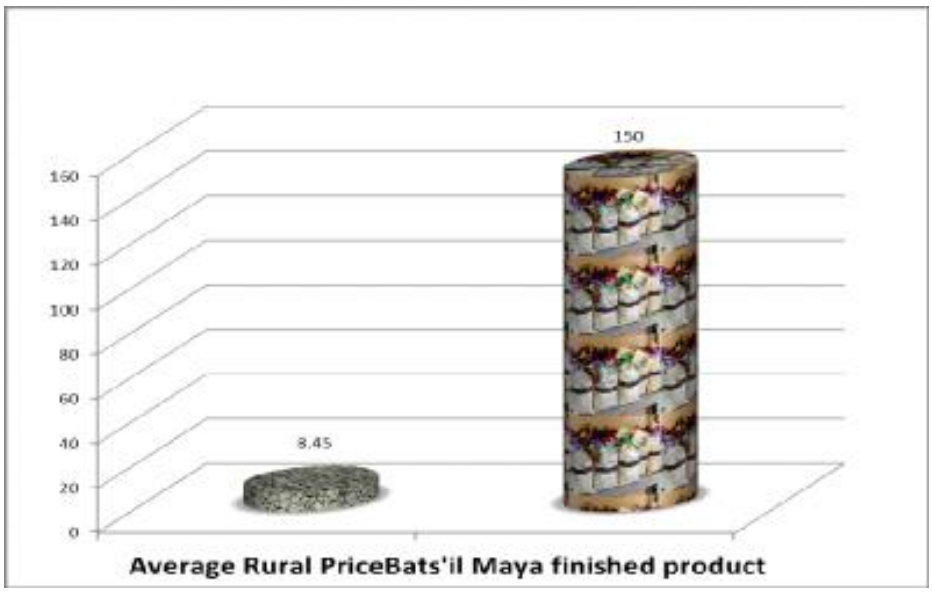
Locally controlled forestry in Mexico

Geographical focus	Mexico	Chilon, Chiapas
Population	112 million	112 thousand
Area	195 million ha	249 thousand ha
Forest area	64 mill ha*	2/3?
Average size of households	3.9 people	5.7
GDP per capita	14,800 USD	2,500 USD
Human development index (HDI)	0.80	0.63**

The people of Chilon depend on three main land use types: natural forest (which they use for honey production), coffee plantation under shade, and maize cultivation.



Yearly income by subsector



Value addition critical to the prospects of different sectors

Main social impacts

Existing enterprise options	Gender impacts	Food security	Energy security
Coffee	Side by side – not eye to eye	Risky cash crop	No coffee, no shade trees, no wood energy
Apiculture	Women's soap production	Pollination important for food production (plus honey itself)	Honey producers, not wax candle makers
Firewood from natural forests	Women's activity in Chilon	Fruit trees in natural forest maintained + cooking requires fuel	Main business focus
Timber from natural forests	Man's activity in Chilon	Fruit trees in natural forest can be maintained + indirect through better income	Waste wood is energy

Main environmental impacts

Existing enterprise options	Climate change potential	Biodiversity	Soil conservation
Coffee	Plan Vivo certified for additional carbon stocks	Generalised green practices for coffee under shade	At least one major shade species (Inga) is nitrogen fixing
Apiculture	Not applicable	The more biodiversity the better the honey	Not applicable
Managed firewood	Carbon neutral	Tree and shrub diversity can be maintained	?
Managed timber	Better carbon stocks	High biodiversity	Improved fallow

Overall assessment

Existing enterprise options	Gender impacts	Food security	Energy security	Climate change potential	Biodiversity impacts	Soil conservation
Coffee	3	4	4	4	5	4
Apiculture	4	5	2	3	5	3
Managed firewood	5	4	5	4	5	3
Managed timber	2	4	5	4	5	3

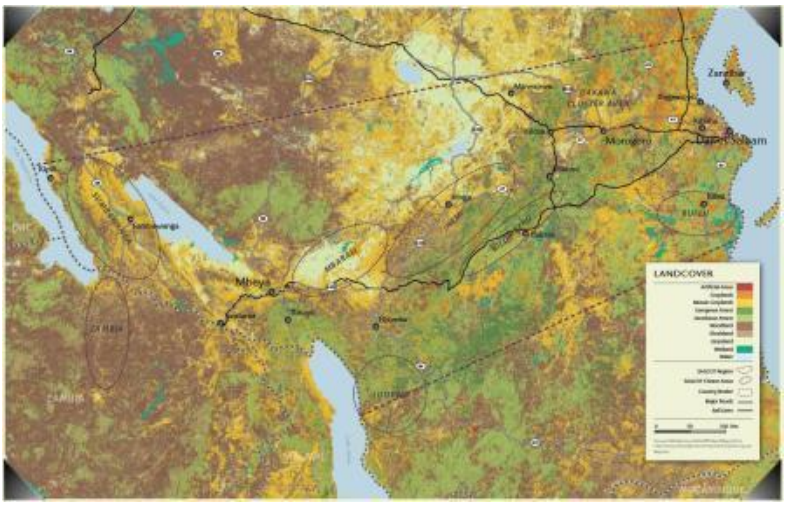
Conclusions

All the subsectors are reasonably good, with the measuring the impact of carbon projects still pending. Public and philanthropic support has developed technical skills for production but the added value is not enough; people are still poor, there is too much support and too many subsidies needed. Entrepreneurial mentality and intentionality has to be developed for better impact.

2.5. Tanzania

Simon Milledge, IIED

Locally controlled forestry in Tanzania



The land area in Tanzania is 94.5 million ha, with an economy highly dependent on agriculture. There are 33.4 million ha forests (41.5 million ha in 1990), with 13.5 million ha gazetted as national or local government forests; 82,000 million ha of industrial plantations; 50-100,000 ha of small-scale woodlots and medium-scale plantations; and 3.6 million ha (1,800 villages) under Participatory Forest Management (PFM). There is also Community Based Forest Management, where villages take full ownership and management responsibility for forest within their jurisdiction; and Joint Forest Management, a collaborative management approach between government and forest adjacent communities. There are links between PFM and forest regeneration, biodiversity, forest growth and human well-being (Blomley, et al. 2008).

The geographical focus is the SAGCOT corridor, which is a major development corridor. It has high forest cover with significant ecological diversity. There are substantial populations and good links to infrastructure (but not the very poorest region), as well as significant investment plans and potential links between smallholders and private sector.

Market prospects

Most subsectors selected for the assessment had good scores for growth market due to them having strong current or projected demand and demonstrating profitability. Exceptions include nitrogen-fixing trees and indigenous fruit trees. Several subsectors showing signs of a growth market are accessible to smallholders, although not exclusively, such as timber production from plantations and sawmilling. Several subsectors with low market growth prospects are among the most accessible to smallholders, including nitrogen-fixing trees, indigenous fruit trees and butterfly farming. Subsectors demonstrating the most favourable overall assessment of market prospects for smallholders are timber production from woodlots (and to a slightly lesser extent from natural forests), cocoa and coffee farming, beekeeping and butterfly farming. In general, the three categories of biomass energy enterprise can be classified as having very favourable market trends, which is somewhat undermined by a lack of competitive advantage and enabling environment. Specific entrepreneurial opportunities appear to exist with butterfly farming and cocoa production, both for export markets.

Sub-sector	Market trends		Competitive advantage	Enabling environment	Climate resilience
	Growth market	**Accessibility**			
Construction timber enterprises					
Plantations	5	2	4	4	3
Woodlots	5	5	4	5	5
Natural forests	4	3	4	2	5
Sawmilling	3	2	3	3	3
Non-timber forest product enterprises					
Beekeeping	4	4	4	3	3
Butterfly farming	3	5	4	4	2
Tree-crop enterprises					
Indigenous fruit	2	5	3	2	5
Coffee	5	5	4	3	2
Cocoa	4	5	4	3	2
Agro-forestry food product enterprises					
Fertiliser trees	1	5	2	3	3
Biomass energy enterprises					
Natural forests	5	4	2	2	3
Woodlots	5	4	3	2	3
Agricultural residue	5	5	3	2	3

Social impacts

In terms of social impacts, timber production from plantations and woodlots scored highest. As to be expected, biomass energy enterprises scored highly for energy security, although construction timber enterprises also ranked relatively high. Also as to be expected, indigenous fruit trees and fertiliser trees scored highly for food security, and were matched by timber production from plantations and woodlots.

Sub-sector	Social impacts		
	Gender analysis	Food security	Energy security
Construction timber enterprises			
Plantations	4	5	4
Woodlots	4	5	5
Natural forests	3	4	4
Sawmilling	3	4	4
Non-timber forest product enterprises			
Beekeeping	5	5	3
Butterfly farming	5	4	3
Tree-crop enterprises			
Indigenous fruit	5	5	3
Coffee	4	4	3
Cocoa	4	4	3
Agro-forestry food product enterprises			
Fertiliser trees	5	5	3
Biomass energy enterprises			
Natural forests	2	4	5
Woodlots	3	4	5
Agricultural residue	3	4	5

Environmental impacts

The best environmental impacts were predicted for timber production from natural forests, nitrogen fixing trees and indigenous fruit trees, whilst at other end of spectrum the biomass energy enterprises had the worst environmental impacts.

Sub-sector	Environmental impacts		
	Climate change	Biodiversity	Soil fertility
Construction timber enterprises			
Plantations	4	3	3
Woodlots	4	3	3
Natural forests	5	4	4
Sawmilling	3	3	3
Non-timber forest product enterprises			
Beekeeping	3	5	4
Butterfly farming	3	5	4
Tree-crop enterprises			
Indigenous fruit	4	5	4
Coffee	2	3	3
Cocoa	3	3	3
Agro-forestry food product enterprises			
Fertiliser trees	4	4	5
Biomass energy enterprises			
Natural forests	3	2	2
Woodlots	2	2	2
Agricultural residue	2	3	2

Summary

Subsectors demonstrating the most favourable overall assessment of market prospects for smallholders are timber production from woodlots (and to a slightly lesser extent from natural forests), cocoa and coffee farming, beekeeping and butterfly farming. Sub-sectors with the highest overall integrated impacts were indigenous fruit trees and nitrogen fixing trees (but ironically having low market prospects). An integrated approach is proposed – a portfolio that brings diversity necessary in a potentially volatile marketplace while delivering on social needs and environmental pressures.

Conclusions

Characteristics of the portfolio would be that it is meeting income, food and energy needs; it is adequately accessible by poorer smallholders; it is feasible over the entire landscape despite varying agro-ecological conditions; it contains a mix of shorter and longer term returns; it provides an integrated approach to help reduce risk; it interfaces with agriculture, the main economic activity and political priority; it provides opportunities for both private and communal financial gain; it enables potential linkages with larger-scale commercial actors; and it is reflective of the priorities relating to social and environmental impacts.

A manageable portfolio of enterprise support activities would focus on timber production from woodlots (and fuel wood), be augmented by capacity to briquette agricultural waste/residue, and give additional support to fertiliser trees and indigenous fruit trees.

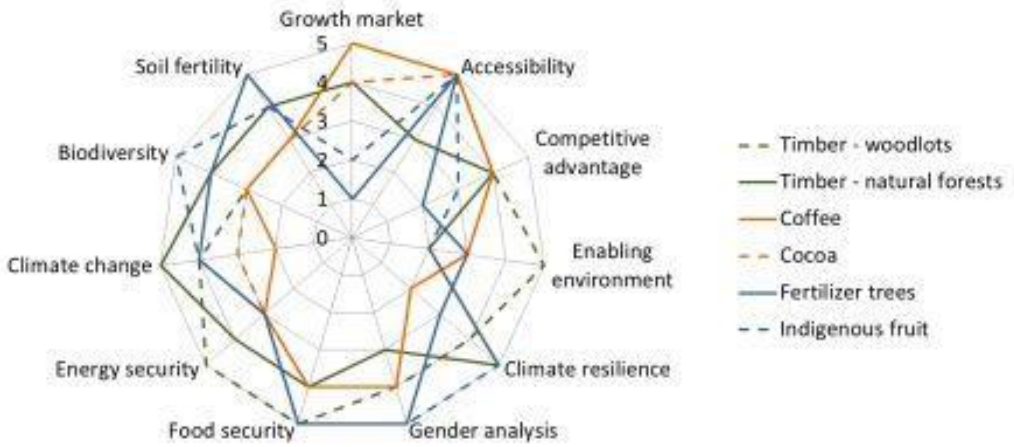


Figure showing required combination of options for a balanced portfolio

2.6. Eastern plains landscape, Mondulkiri, Cambodia

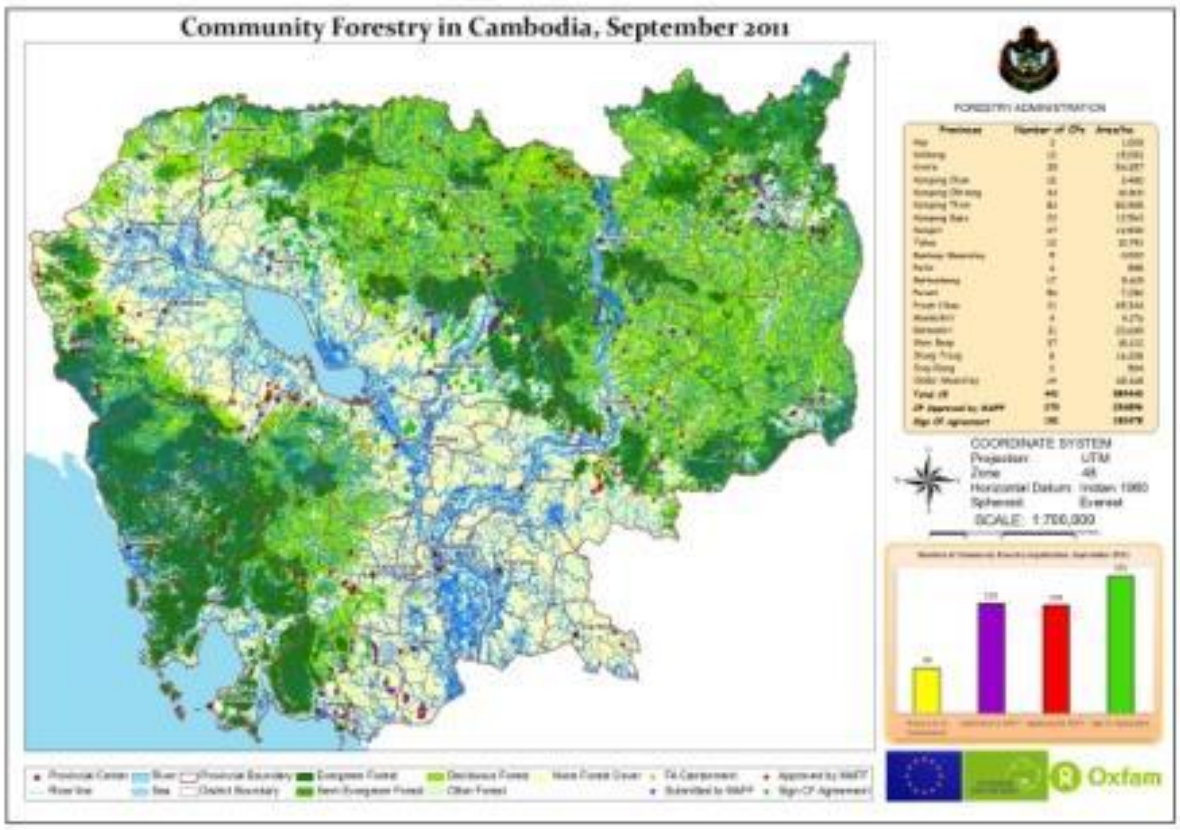
Emmanuelle Andaya, Non-Timber Forest Products – Exchange Programme Cambodia

Introduction to NTFP- EP & WWF Cambodia

The Non-Timber Forest Products – Exchange Program (NTFP-EP) is a network of non-governmental and community-based organisations in South and Southeast Asia working on land tenure, sustainable NTFP enterprise development, and resource management, through capacity building, market facilitation, information exchange and advocacy and policy lobbying. NTFP-EP is present in the Philippines, Cambodia, India, Malaysia, Indonesia, and Vietnam. WWF has been working in Cambodia since 1995 and its mission in Cambodia is to ensure that there will be strong participation and support from all people to conserve the country's rich biological diversity. Through the encouragement of sustainable use of natural resources, WWF-Cambodia promotes new opportunities for the benefit of all people, enhancing local livelihoods and contributing to poverty reduction in the Kingdom of Cambodia.

Locally controlled forestry in Cambodia

As of December 2011, there have been 441 community forests initiated (389,270 ha). Of these, 272 community forests (237,844 ha) have been recognised by the Ministry of Agriculture, Forestry and Fisheries (MAFF) in 18 provinces (12 per cent of the target); 169 community forests (151,426 ha) have signed agreements in 14 provinces; and 68,739 households (185,749 individuals) are community forestry members. In Mondulkiri, four applications have been submitted and are awaiting MAFF signature.



Spatial map of community forests in Cambodia

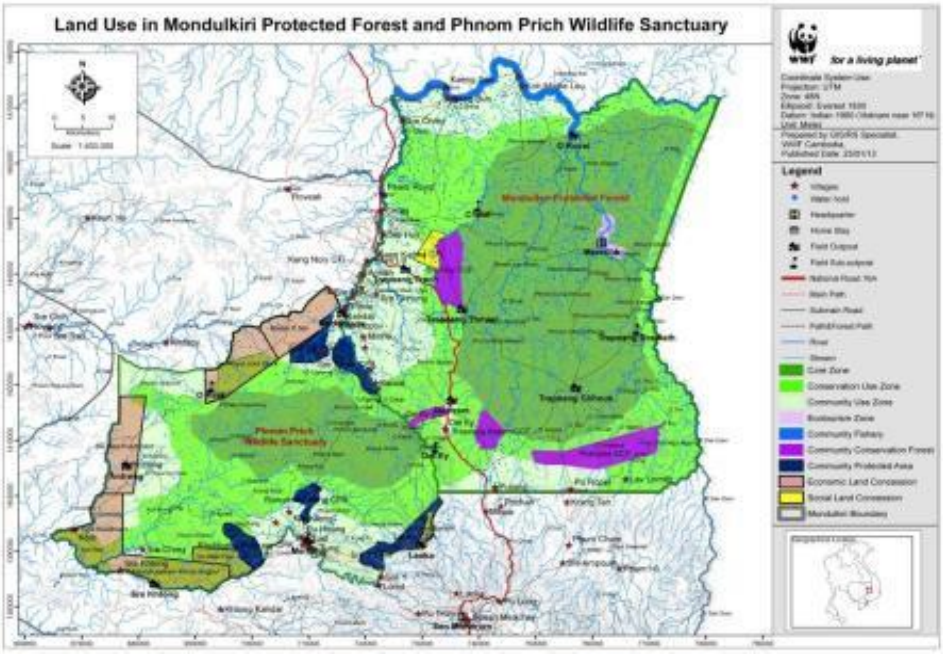
The **roles and duties** of community forestry members are to follow the instruction of the Forestry Administration and MAFF; to participate in developing and implementing CF Regulations, CF Agreement and CF Management Plan in compliance with Prakas of MAFF; to participate in forest resources management in compliance with CF Regulation, Community Forest Management Plan and other legislation related to forestry sector; to participate in sharing benefits from the community forest; to participate in monitoring the use of community forest resources by secondary users; to participate in conserving, protecting and planting the forest to ensure the sustainability of forest resources and environment.

Based on the CF Agreement, a CF Community has the rights to plant, manage, harvest forest products and NTFPs and sell tree species as approved in a CF Management Plan (Source: Article 10, Sub-decree on Community Forestry (2003).

The **user rights** of CF Community members include: Customary User Rights prescribed in Article 40 of the Forestry Law; the right to barter, process, transport and sell NTFPs as described in Article 40(B) in point 5 of the Forestry Law; that the CF Community may continue to practice traditional swidden agriculture during specific periods of time as determined in the CF Management Plan, as authorised in Article 37 of the Forestry Law; the right to appeal decisions which impact CF Community rights; the rights granted under a CF Agreement within a specific area that shall ensure the sustainable use of forest resources.

Communities under a CF Agreement may harvest, process, transport and sell forest products and NTFPs in accordance with the following conditions: harvest of forest products for selling or bartering shall not be allowed within the first five years of approval of the CFMP; payment of any required royalties or premiums on forest products and NTFPs is as prescribed in Article 55 of Forestry Law; and Terms and conditions in an approved Community Forest Management Plan (Source: Article 11-12 Sub-decree on CF).

The Eastern Plains Landscape (EPL), Mondulkiri Province is a biodiversity hotspot in Southeast Asia and a balanced natural landscape (WWF 2012). It is one of the most lightly populated provinces, which offers a unique opportunity to secure its biodiversity at a large scale. Mondulkiri province makes up more than 70 per cent of the EPL, with over 65 per cent of its forests Protected Area or Protected Forest, a total area of six declared protected areas (approximately one million hectares), which makes it one of the largest intact tropical dry forest ecosystems in Southeast Asia. There is a population of 65,000, with 70 per cent Indigenous Peoples (IPs). Mondulkiri is the poorest province in Cambodia (Mekong ARCC 2012), with communities highly dependent on forest resources for livelihood. Major threats include deforestation through ELCs, farm conversion and settlement; unsustainable use of natural resources; and climate change.



Land use in Mondulkiri

Non-timber Forest Products Sector in Mondulkiri

NTFP collection is one of the important livelihoods of communities living adjacent or in the forests, with 90 per cent of communities engaging in it (Mekong ARCC 2012). It complements other livelihoods, such as agriculture, fishing and labour; and and other forest enterprises, such as eco-tourism, and the REDD+ Carbon Financing Scheme.

The main sub-sectors are Oleoresin and honey, with other high value and high demand products being orchids, strychnos nux vomica (sleng) seeds and solid resin. NTFPs collected for household consumption and minor trade are bamboo, bamboo shoots, mushrooms, rattan, medicinal plants. NTFPs are collected within and beyond Community Forests.

Market trends

NTFP	Market trends	Competitive edge	Enabling environment	Resilience to climate change
Overall	Demand for natural sustainable products	Access to variety of natural products but limited value chain knowledge / skills	NGO assistance in enterprise development, market information and facilitation.	Varied resilience
Resin	Price increase in last 5 yrs (USD$ 7-5-10 to USD$ 15-20) Demand steady	Traditional ownership, access to trees, and some price knowledge	Honey: network development Rattan: national value chain development Limited forest access and deforestation reducing availability of resources. Commercialisation beyond community requires permits and fees – difficult to comply with. Unofficial transport 'fees' Weak local markets (except for honey and orchids) requiring export.	Resilient to drought and floods but longer term temp. change may affect growth. Other threats include forest fire, insect infestation and unsustainable harvesting
Solid Resin	Steady demand increases prices	See above		See above
Honey	Growing local and Japan market plus increasing price	Pure wild honey, sustainability, collection skills		May affect behaviour of bees / production in long term
Strychnos (sleng) seeds	High value high demand from Vietnam	Knowledge of location		No data
Orchids	High value, high demand	Knowledge of location, local demand		High vulnerable (Mekong ARCC 2012)
Bamboo poles	Demand for sustainable materials	Limited skills and market knowledge and equipment for value addition		Contributed to mitigation but may be vulnerable to change
Bamboo shoots	Growing demand	See above		See above
Mushrooms	Market in some areas unknown – needs promotion	Knowledge of location		Moderately vulnerable – but heat that facilitates decay may enhance growth
Rattan	Some market demand	Limited: not traded widely in the region – existing species are not marketable		Moderately vulnerable – may be able to adapt

Social impacts

Impacts	Resin (Liquid / Solid)	Honey	Other NTFPs (mushroom, orchids, sleng, bamboo etc.)
Gender	Collection mostly by men, but in women-headed families women also do with male protection	Collection mainly by men but management, processing, packaging may offer women opportunity	Collection by both men and women and processing, trading, and enterprise management may offer women opportunity
Income generation	Contributes from USD 476-1050 (liquid) or USD 130-240 (solid) to annual household income (for families with average 30-50 trees	Provides USD 125-280 annual household income. Dividends from honey enterprise provide additional income of USD 10-20 per year	Combinations of bamboo shoots, orchids, rattan, oleoresin can contribute USD 85-115 to annual household income
Food security	70-100% of communities surveyed tap resins for income that contributes to food security	20-30% of communities harvest honey – and growing trainings through association	Mushrooms, rattan shoots, wild fruits, vegetables are consumed or sold – 20% are NTFPs
Energy security	Not widely used but may provide alternative for light and as a fire starter	Not applicable	Peelings and waste can make biogas.

Environmental impacts

Impacts	Climate change mitigation	Climate change adaptation	Biodiversity conservation
Oleoresin / Honey	Production needs standing trees	Enrichment planting and NTFP domestication in multifunctional forest (not monoculture) and sustainable harvesting	For NTFPs multi-functional enterprises and sustainable harvesting methods lead to resource conservation.
Other NTFPs (mushroom / sleng etc	Possibility of diversified forest based livelihoods contributes to forest conservation		
NTFP enterprises	A percentage (10-15%) of community enterprise profits support forest management, forest patrols to prevent logging.	For community adaptation - diversification helps, plus use of resilient wild resources, as does income to safeguard against shocks	Overall it maintains forest ecosystems that host wildlife – and lessens pressure on forest resources

Support to enterprises in different subsectors

1) Landscape approach to development plans
Integrated landscape approach and land-use and ecosystem services mapping in the EPL should be applied in order to support a more adapted socio-economic-natural-climate smart development; Such approach incorporates security of land and resource access for communities; integrated, diversified livelihood options; and multiple (diversified) NTFP enterprises, such as resin, honey, bamboo and wild food.

2) Strengthening of Community-based Enterprises
To achieve enterprise development with a strong resource management and social component, there needs to be an improvement of enterprise viability, which would increase the economic incentive to contribute to

sustain a forest ecosystem or agro-forestry system, through value addition, market facilitation, enabling conditions, and so on. Further, support would include the integration of resources monitoring and regeneration activities, such as enrichment planting and domestication as part of resource management and climate change adaptation, in enterprise planning. Lastly, it would include strengthening of community dynamics to incorporate social and environmental component in enterprise development and management; such as benefit sharing, gendered opportunities and resource management.

3) NTFP sector development
Developing the NTFP sector includes market development – such as research, product development, technology upgrades, value chain actors strengthening, promotions, enabling conditions for NTFP commercialisation, research on new applications of NTFPs. Value addition and advancement of community members in the value chain is needed, in order to gain benefits beyond subsistence, through capacity building, technology or equipment upgrades. Finally, NTFP supplier network development is needed for market information, sub-sector development, supply consolidation, and so on.

Conclusions about the priorities

NTFP community enterprises have to be mainstreamed in general into socio-economic development and land use plans at the provincial and national level, including the forest and agricultural development landscape, through partnership with local authorities and different higher level government institutions. The private sector is also an important actor in such landscape development, to anchor them to environmental and social components aside from investments. The Community Forestry framework can be built on to strengthen NTFPs and forest enterprises and their link to sustainable resource management, climate change adaptation and mitigation, and social impacts. Final priorities are market development, facilitation and enterprise management, and capacity building.

2.7. Nepal

Bhishma Subedi, ANSAB

Introduction to ANSAB

The Asia Network for Sustainable Agriculture and Bioresources (ANSAB) is a civil society organisation that was established in 1992 and is governed by an International Board. ANSAB work in South Asia and are headquartered in Kathmandu, Nepal. Their vision of rich biodiversity and prosperous communities, and their mission is to generate and implement community-based, enterprise-oriented solutions.

Locally controlled forestry in Nepal

Community Forestry was introduced 30 years ago, with the goal of fulfilling basic forest needs of the people. There are about 18,000 Community Forest User Groups (CFUGs) managing about a quarter of the nation's forest. Community Forestry in Nepal has now been considered pioneering in terms of community-based natural resource management.

Methodology

The study area was selected by looking at the impact in terms of income generation and sustainable resource management. Enterprise options were shortlisted according to their scoring against the study criteria, a review of the current national trade strategy, a rapid markets visit and interaction with concerned stakeholders.

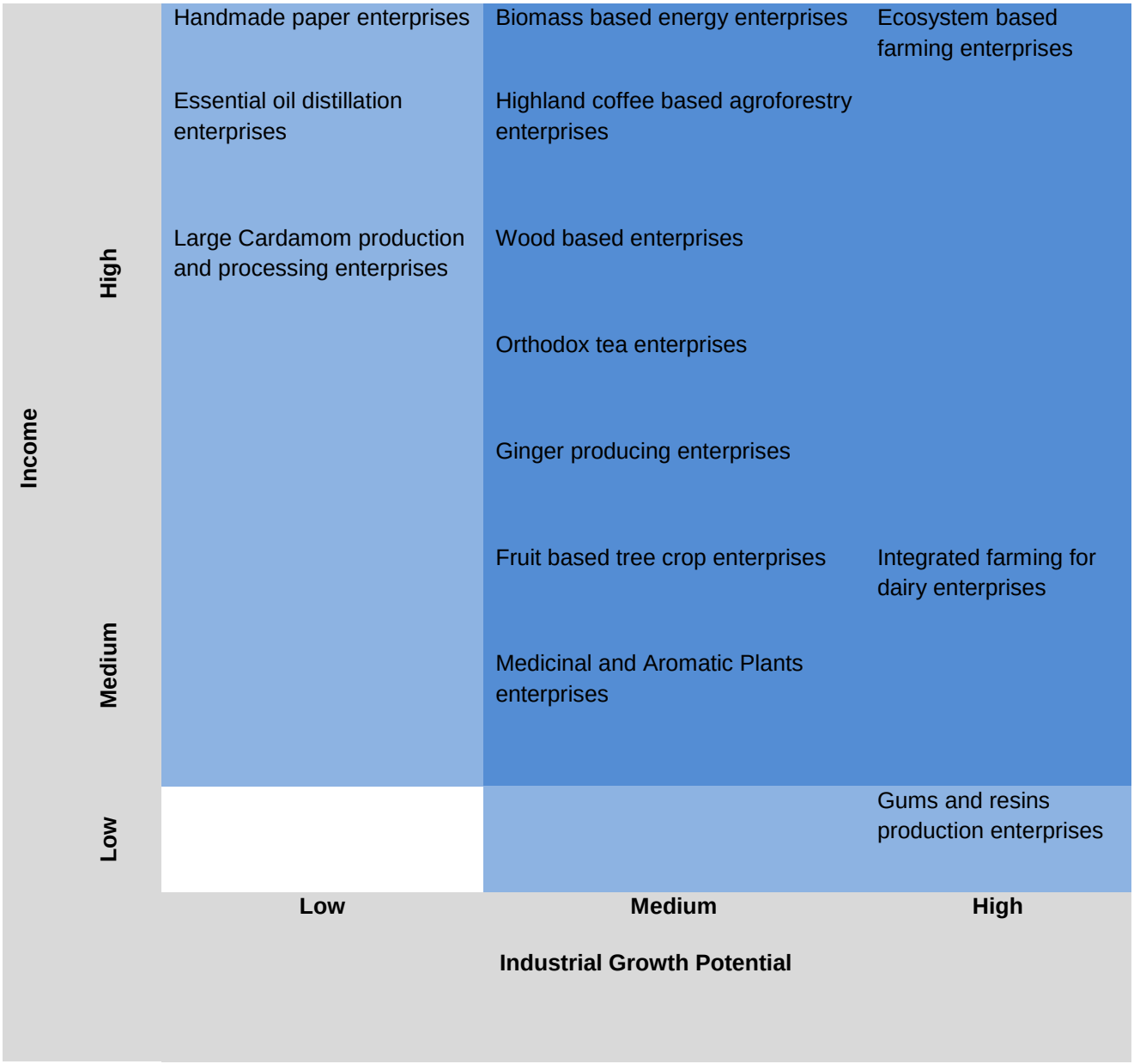
A preliminary screening of thirteen identified options was undertaken, looking at the industrial growth potential; a review of market demand (trends, comparative and competitive advantages); a review of the enabling environment; a review of resilience in the face of climate change; the income potential for smallholders; and mapping attractiveness. A final screening of nine options considered an assessment of integrated impacts: gender, food security, energy security, climate change mitigation and adaptation, biodiversity, soil fertility and nitrogen inputs. Using a framework for support options, three options were chosen, and a detailed review of challenges and an assessment of support needed was undertaken.

Assessment of geographical focus

Nepal is endowed with rich biological diversity, with 7,000 species of higher plants – over 700 medicinal and aromatic plants (MAPs) – and 250 endemic species. Rural communities rely on plants for food, medicines and other products. Nepal has the potential for the operation of natural resource-based enterprises for employment and livelihood improvement.

The study area of 22 districts included the Central and Western mid-mountain regions, represents the major ecological zone and fertile valleys, has the highest agro, socio-cultural and ethnic diversity and has the major market centers – Kathmandu and Pokhara with good road networks. There is the availability of finance, technology and other services and a high proportion of the educated population – the farmers are aware of improving their farming knowledge and practices.

The thirteen shortlisted enterprise options were: **fruit-based tree crop** enterprises, including citrus species (mandarin, sweet orange, lime, lemon) and pears, lapsi, peaches and plums; **integrated farming for dairy** enterprises; **highland coffee-based agroforestry** enterprises; **orthodox tea** enterprises; **handmade paper** enterprises, including Lokta (*Daphne*) and Argeli (*Edgeworthia gardeneri*); **essential oil processing and marketing** enterprises, including Wintergreen (*Gaultheria procumbens*) and Juniper (*Juniperus*); **medicinal and aromatic plants** enterprises, including Tejpat (*Cinnamomum tamala*), Dalchini (*Cinnamomum zeylanicum*) and Chiraito (*Swertia chirayita*); **gums and resins production** enterprises; **biomass-based energy** enterprises; **cardamom production and processing** enterprise; **ginger production** enterprise; **wood-based** enterprises, such as timber harvesting, sawmills, plywood, furniture and wooden handicrafts; and **ecosystem-based commercial farming** enterprises.



Attractiveness matrix

Final Screening
Assessment of integrated impacts: Gender, Food security, Energy security, Climate change mitigation and adaptation, Biodiversity, Soil fertility and nitrogen inputs.

Integrated impact scoring

	Fruit based tree crop	**Integrated dairy farming**	**Coffee based agroforestry**	**MAPs**	**Biomass based energy**	**Ecosystem based farming**	**Ginger**	**Wood based**	**Orthodox tea**
Gender	4	4	4	4	5	4	4	4	5
Food	4	5	4	4	4	5	4	4	4
Energy	3	4	3	3	5	4	3	4	3

Climate change	4	4	4	4	5	4	4	4	4
Biodiversity	4	4	4	4	4	5	3	5	2
Soil fertility	4	4	4	4	4	5	4	4	3
Total	**23**	**25**	**23**	**23**	**27**	**27**	**22**	**25**	**22**

Assessment of balance of support

Biomass-based energy enterprises

Briquette production at the commercial scale emerged recently. It can be operated at small scale with the use of waste biomass and creates employment in rural areas. Briquettes are used for cooking, room heating, baby massage and home-barbeque, and substitute for imported fossil fuels. There has been a significant growth in demand, with 5,000 pieces sold in 2007 and 500,000 in 2012.

Proof of concept for briquettes to be tested and ready for scaling-up and expansion, needs the following **issues and challenges** to be addressed: efficiencies in the production and distribution and sustainability of the value chain; and the scope to diversify and upgrade the products (pellets, briquettes) and accessories for market expansion, especially the industrial segment.

Required **support activities** are: support for new technologies; testing and demonstration of appropriate pellet making technology; introduction and testing of accessories, especially for industrial use; quick ignition techniques; market expansion and appropriate promotion strategies; organising, capacity building and demonstration at various levels; strengthening value chains; sustainable production and harvesting of biomass; relationship among the value chain actors; efficiency of value chain; improving policy provisions and practices; recognition as a green energy and provision of incentive; removal of trade barriers, including transportation; and support for certification.

Ecosystem based farming enterprises

About 800,000 ha (26 per cent) of agricultural land is estimated to be organic by default in Nepal. There is an increased awareness of organic and eco-friendly products and they offer resilience against adversities, especially climate change.

The **issues and challenges** of this sub-sector are: subsistence farming with traditional farming practices; the perception of farming as menial, tedious and an un-prestigious employment; youth migration in search of better alternatives, which is negatively affecting the adoption of technologies, rural entrepreneurial activities; ineffective regulation of chemical (pesticides and fertilisers) use; and no appropriate agribusiness model suitable for mountainous regions.

The required **support activities** are: realising the potential to contribute to the transformation of conventional forestry and agriculture into climate smart and prestigious business; the need to develop business case from production to marketing; identifying sets of farming components, practices, inputs and technologies;

exploring options for agribusiness models; design initial farm production and agribusiness models; testing the effectiveness of potential farm production and agribusiness models at pilot scale; increasing access to finance, markets and technologies; buyer seller meetings, participation in exhibitions and trade fairs, marketing campaigns, meetings and linkages with financial institutions, identification of technology suppliers and interaction with them, and meetings between farmers and technology suppliers; and finally, transferring practical knowledge and skills through training and demonstration.

Wood-based enterprises

Contribution of wood on national revenue in Nepal is significant consisting about US $8.33 million in 2008/09 that has remained over 90 percent of the total forestry sector revenue. Wood is also the main source of income for CFUGs. Wood is harvested for the production and trading in the forms of logs, sawn wood, poles, posts, fuel wood, plywood and furniture.

The **issues and challenges** of this sub-sector are: timber issues have not received such importance in general public, media and the government, often limiting the growth of wood-based enterprises in Nepal, mainly due to misperception about the timber business; the forestry sector has not been able to portray the message to the general public that the timber is a renewable resource and it can and should be harvested with a planned management that assures sustainability; there are cases of forest encroachment, illegal logging, misuse of authority and corruption in the country, often depicting timber beyond the reach of the smallholders for trade; the timber entrepreneurs are discouraged to invest on timber industries because they face constraints including insufficient finance for investment, maintenance of quality and quantity of products, transportation and export expansion.

The required **support activities** are: building constituencies and providing recommendations with the scientifically backed information concerning the regenerative nature of the resource, and the source for high value added uses, such as furniture manufacturing to address misinformation among the public; assistance in timber certification so as to contribute to and ensure sustainable forest management and transparency of timber business; design of a study to identify the preferred species from users' perspectives; mapping out the smallholders and applying business model of community-private-partnership to improve smallholders participation**;** improving current policy provisions and practices that are currently limiting transportation and trade of wood and wood-based products, which in turn would improve investment from the entrepreneurs in the subsector.

2.8. Democratic Republic of Congo

Monga Ngonga Maindo, Tropenbos DRC

Introduction to Tropenbos DRC

Tropenbos International (TBI) is a non-profit international NGO founded in 1986; it is headquartered in the Netherlands, with country programmes in Indonesia, Vietnam, Suriname, Guyana, Colombia, Ghana, DRC, and others. It aims to contribute to better forest governance for sustainable development through research and knowledge generation, capacitation (training), multi-actor dialogues and networking. TBI's target groups are, among others, forest-dependent people, policymakers and regulators, practitioners, forest managers, forest owners and forest users, non-governmental organisations and civil society, researchers and educators. TBI are working in partnership with the State (Ministry of Environment, Nature Conservation and Tourism (MECNT), province authorities (the Governor, MECNT and administration), the University of Kisangani (UNIKIS), Organisation concertée des écologistes et amis de la nature (OCEAN), the Wildlife Conservation Society (WCS), United Nations Development Programme in DRC (PNUD), the Food and Agriculture Organization of the United Nations (FAO), United Nations Organization Stabilization Mission in the DR Congo (MONUSCO), Centre de Recherche en Écologie et Foresterie (CREF), and different NGOs.

Locally controlled forestry in the Democratic Republic of Congo

The Forest Code (2002) classified forests, protected forests and permanent production forests. Community forestry legislation has just been designed, and is to be implemented (at 50,000 ha max per unit). Artisanal logging also takes place in 50 ha plots, which are approved by the Governor. Industrial exploitation, however, is decided by MECNT. Forest concessions, set-aside forests and planted forests are also in operation.

Six sub-sectors of locally controlled forestry chosen in regard of their importance in the region: lumber; charcoal and wood energy; non-timber forest products (NTFPs), such as gnetum spp, and rattan; baked bricks; oil palm tree, hevea (latex).

Chosen geographical focus

The focus is the Kisangani region, around the provincial capital, which is the third city of DRC and has a high threat on its forests. Artisanal (industrial) logging has developed to satisfy an increasing local market demand from post-conflict reconstruction, such as power, building and baked bricks, planks, furniture and so on. There is an involvement of state actors in business, including military, politics and administration. There is also a depth of poverty in the area.

Main forest-farm subsectors and their market potential

Expansion depends on access ways between forest resources and regional markets. Market trends include rapid development in recent years with the city growing and also profits growing. There is a weak formalisation of activities due to bureaucratic hurdles, credit restrictions and limited state control. The natural resilience to likely climate change depends heavily on how these sub-sectors evolve.

Main social impacts

About 80 per cent of people use timber and charcoal as their main energy source. Many people also depend on forest resources for food and construction materials for housing. There is much local migration with city-dweller staying intermittently in the country for employment, so urban rural links are strong. In terms of promoting gender, women are key actors in the value chains of all products; more so in certain products, such as NTFPs, but not in others such as timber and bricks. Sub-sectors provide increasing income and even main livelihoods for many families but the production of certain products is a source of tension and conflicts between rulers and those rural people who are ruled.

Main environmental impacts

A key impact is deforestation, especially due to artisanal logging and wood energy collection. There are also deteriorating forests, lands and soil fertility in rural areas, as well as an effect on biodiversity in forest areas. Sub-sectors also contribute negatively to climate change, though regenerating forests could redress this. As

urban expansion takes place, there is an increasing vulnerability of city-dwellers' environment, but an improvement in living conditions, especially in urban areas.

Summary table

Scoring is based on perceptions of local people through interview, not necessarily a scientific or technical assessment. There is quite similar scoring; though lower scores for baked bricks and lumber reflect the lack of sustainable forest management in the use of raw materials, which could be addressed.

Legend of score : 5 (high likely) ; 4 (medium likely) ; 3 (no effect or not applied) ; 2 (not probable or low negative impact) ; 1 (high negative impact).

Subsector/assessing criteria	Lumber	Oil palm tree	Baked bricks	Charcoal& energy wood	Hevea (Latex)	Non Timber Forest Products (NTFP)
Income opportunity for women	4	5	4	5	4	5
Food security	5	5	5	5	5	5
Energy security	4	4	2	5	4	3
Climate change mitigation	2	4	2	2	4	4
Biodiversity conservation	2	4	2	2	4	4
Soil conservation potentials	3	3	2	2	3	3
TOTAL	20	25	17	21	24	24

Conclusions

The critical priority is to improve the way natural resources are governed, and the efficiency with which value is added. There is a need to empower poor, women and local communities in the face of resource capture by elites, and improve capacity of the poor among local community in issues such as rights and income management. Different sub-sectoral priorities would exist in different regions in the DRC but as populations and local enterprises are often interdependent, support activities would have to mix sectors.

Implementing existing laws is a pressing concern in order to move towards sustainability; formalising small forest enterprises would help on this road. Diversifying the local economy can be achieved by giving attention to multiple sub-sectors, including improving access to financial and business in the process and breaking the isolation of rural groups by developing basic infrastructures.

3. Field trip to enterprises in Nepal

3.1. Briefing and key criteria through which to engage with the field trip

Leianne Rolington, IIED

The field trip will help consider how examples in the field rate in terms of the economic, social and environmental criteria we have been using to screen best-bet sub-sectors. Participants can also consider questions to do with the four pillars of successful locally controlled forest enterprise development: commercial forest rights; business capacity; enterprise-oriented organisation; and fair and balanced asset investment deals.[1] Participants can pick an area of particular interest, for example, a consideration of commercial rights might consider the following:

Rights

This could consider the current ownership status of the land, whether it is state, private, common or open access; the rights that are held over the land, whether they are freehold, leasehold or non-possessory; and the issues that may result from these, such as whether the type or duration of right is appropriate, whether there are management restrictions on commercial activities or whether there is sufficient security of tenure for a business. Specific questions could include: who owns the land; what restrictions are placed on the rights enjoyed; and are the rights in place suitable for the enterprise: can they sell the goods or services? Are there burdensome management restrictions? Is the duration sufficient to incentivise labour or investment? Can they exclude encroachers?

Responsibilities

Responsibilities of forest users or rightsholders may affect the commercial viability of the land. This may include changes in legislation or new regulations that affected requirements; bureaucratic barriers that inhibit efficient usage of the land; management plan requirements and any support to preparing it; restrictions in place, such as amounts harvested or sales restrictions in terms of quantity, price or geography; direct financial burdens, such as rents payable; or non-regulatory social barriers.

Security

Security may affect whether the land can act as a safety net, in terms of welfare. It would be helpful to establish whether tenure systems and rights allocated secure, clear and suitable and where and insecurity of tenure may exist. This will include enforcement mechanisms in place, such as courts or customary or informal procedures.

Equity

Equity considerations may consider the processes involved, such as in acquiring rights; whether it is prohibitively costly to formalise rights;[2] whether inequities in distribution before land reform been improved or

[1] Macqueen, D., Buss, C. and Sarroca, T (2012) *TFD Review: Investing In Locally Controlled Forestry - A Review of TFD's Initiative on Investing in Locally Controlled Forestry 2009–2012* The Forests Dialogue, USA.
[2] Heltberg, R (2002) *Property Rights and natural resource management in developing countries* Journal of Economic Surveys, Vol. 16, No.2, Blackwell Publishers, UK and Delville, P. *Registering and Administering Customary Land Rights: PFRs in West Africa* discussing Hernando de Soto's "Glass Bell Jar" theory.

resolved or if discriminatory practices or norms have or could be entrenched by formalisation;[3] and whether any procedures of change followed international norms for inclusion.[4]

Considerations may also look at the systems in place; whether there is more than one system in practice and which is most secure in terms of what the enterprise needs. It can also consider whether any conflict has resulted from any reform, titling or changes in system.

Commercial implications

In terms of tenure security and business, uncertainty tends to be considered a risk and any resulting inefficiency equates to a cost. Considering this, it would be useful to establish whether the enterprises have sought finance and if there were any barriers to finding credit, as a result of insecure tenure or lack of collateral. Climate change funding could be considered, as to whether enterprises have been able to attract climate change investments and if different levels of tenure security are needed.

To mitigate risk, it would be useful to understand if there are there sufficient structures, state or social, to support security of tenure to mitigate costs in case of any conflict and how reliable land records are,[5] including whether they include customary claims.

Conclusions

Each participant is invited to explore an area that is particularly interesting to them – so that in the group discussions and feedback which are enriched by different perspectives.

3.2. Briefing for three sites to be visited on field trip

Sudarshan Khanal, ANSAB

Sikre Briquette Enterprise in Sindhupalchok will be the first site. It was started in October 2007 by the community at Sikre village of Sindhupalchowk district, Central Nepal. The success is due to the good leadership, adoption of suitable technology and efficient management. They have started a new briquette marketing company, 'Himalayan Naturals' in Kathmandu in 2009.

Charnawati Watershed, Dolokha is an FSC certified community forest user group. There are 58 CFUGs, out of which five are FSC sustainable forest management certified, as of 2005. All the CFUGs have approved constitutions and operational plans and this CFUG has been a part of the pilot community REDD+ project since 2009.

Himalayan Bio Trade Private Limited (HBTL) in Kathmandu is a natural products processing and trading company owned by a consortium of community based forest enterprises. They produce certified handmade paper, which is crafted from Lokta bark (Daphne bholua) and essential oils. Aveda, an international manufacturer and distributor of cosmetic products, has featured their certified handmade Nepali paper in their Christmas line since 2008.

[3] Fitzpatrick, D. (2005), 'Best Practice' Options for the Legal Recognition of Customary Tenure. Development and Change, 36: 449–475. doi: 10.1111/j.0012-155X.2005.00419.x

[4] Advocated by United Nations Human Settlements Programme (UN-HABITAT) (2008) *Secure Land Rights for All* UN-HABITAT, Kenya, among others.

[5] The Munden Project (2012) *Financial Risks of Insecure Land Tenure: An investment view* Rights and Resources Initiative, USA.

3.3. Field trip to enterprises near Dolakha

Sikre Bio-briquette enterprise

The enterprise was founded in 2007, after the earlier establishment of a Wintergreen oil processing plant. This is one of four bio-briquette factories that source waste wood for charcoal from seven neighbouring CFUGs. In 2009, after problems with the reliability of buyers, the members formed a retailing company Himalayan Naturals that opened in Kathmandu and now has 51 retail outlets there. They have developed quality bio-briquettes that can be produced in quantity (500,000 briquettes were sold in the first three years) all sold in Kathmandu with attractive packaging and accessories (stoves and tripods) for convenient burning at remunerative price.

Across the bio-briquette enterprises alone there is direct employment to 94 people (52 men and 42 women). The product is competitive with comparable fuels in Kathmandu and tends to retail well with slightly better off household consumers. Both ANSAB and the local communities have an interest in developing other products for the commercial market (for example the large-scale brick production sites around Kathmandu that require wood energy).

A key feature of the business model is that CFUG members can be shareholders in the bio-briquette plants, but only if they work in the business – either in the production of charcoal in the forest or in the production of briquettes in the factory, where pay is at agreed rates per unit of production. The businesses also part own through a shareholding structure, the retails outlets in the Himalayan Natural retail business. Profits are redistributed according to agreed formulae and all financial information, including the salary of the director, are publically available and pinned to the factory wall.

Dolakha FSC certified community forest user group

The Community Forest User Group (CFUG) has a 15 member committee (five women and ten men) to manage the community forest, and all 315 members of the community are involved in the CFUG activities. The committee members rotate regularly and are chosen by selection (not election). The CFUG produces timber (FSC certified), paper (FSC certified), oils and medicines. The paper is sold via Himalayan Biotrade to

Aveda cosmetics in the USA and oils and medicines are also sold to the same processing firm which was established in association with their CFUG and others and in which they are shareholders. They have been supported with seed money and technical support from ANSAB and the local government office – but have also used some money self-invested from CFUG and private members. Any profits are redistributed in line with shareholdings.

This particular CFUG was one of 412 in the district, coordinated on behalf of FECOFUN. Of this number, 58 groups have been part of a REDD+ pilot also coordinated by ANSAB. The district has a FECOFUN coordinator who spoke of her daily work in advocating for rights to government, helping make rules and regulations for the CFUGs, facilitating training programmes and so on. FECOFUN has played a major role in advocacy for better policy environment for CFUGs and their enterprises – including lobbying for construction roads, schools and so on for CFUGs. There work together with the communities has reaped substantial benefits. For example, before the CFUG was established the area was almost barren but now contains a standing forest with harvestable timber. As it became harvestable ten years ago, the Government imposed a thirty per cent tax on forest products. FECOFUN undertook many campaigns to have that decision revoked. Similarly in Dolokha district the Government decided to declare it conservation area and it was only after substantial lobbying by FECOFUN that the Government agreed to community conservation areas in which CFUGs could work.



3.4. Field trip to enterprise in Kathmandu

Himalayan Biotrade Limited (HBTL), Kathmandu



HBTL was established in 2000, and processes product from 4,800 households within the FSC certified area in which the member CFUGs operate. Production activities are divided into groups of collectors, a group who manage and administer transport, and a group of processors – fewer in oil, more in paper production. Production is carried out in communities (for example, making natural coloured paper) and then sent to the office Kathmandu. Here it is dyed with non-toxic natural dyes.

The company is a shareholding of local companies in which five FSC certified CFUGs are shareholders. ANSAB helped coordinate HBTL to get FSC certified in 2003. There has been a strong emphasis on quality control. Much training is done about sustainability and the products have also now been certified organic and wildlife friendly.

The company has been approached by buyers wanting organic certification and also now for fair trade (there is only one group in Nepal, FTG Nepal, where members agree to principles but are not audited or certified). In 2008 their major buyer, Aveda, started to purchase paper products for its Christmas line and also some essential oils for Europe. They sell approximately 1.5 million sheets of paper to Howard Packaging who make the product lines for Aveda. HBTL also produces nettle products, hemp fabric and vegetable oils. The heavy reliance on Aveda is a cause for concern and HBTL are looking to diversify products in the domestic market and to expand their international partnerships.

3.5. Group feedback on the field trip

Group one

Impressions from the field trip included the group being impressed with level of control communities have on each part of chain. There are clear and respected roles at different levels; people participate, possibly because they feel this. The government seem to have a facilitating, rather than controlling, role, without much intervention.

Questions raised by the first group were whether, if there is space in the briquette-making, the manager will build capacity in the group for others to have those skills in the future. There was also speculation as to how the benefit-sharing is calculated, and how it is judged as being fair. A concern raised was over the age of some members of the group, which was hard to judge, but it raised the potential issue of child labour. The field trip also raised questions over whether Forest Connect will focus on specific sub-sectors in the future.

Further **comments** from the group were an interest in seeing something on the resource management side, to see the whole chain.

Group two

This group were **impressed** by the value chain analysis; the collectivity in the group in production process and marketing; the leadership of the group; and the partnerships on the business side and on the NGO side. There was an impression that communities are making most of their agricultural environment, rather than moving to cities. The social business model appeared tight and probably had lessons to share with others. The knowledge communities came across strongly, with a level of awareness of PES, REDD+ and so on, reflecting well on both FECOFUN and ANSAB, as it means they have done a good job of education.

Questions raised from this group included how sustainable the marketing company is, and whether it relies on donor finding or shareholders – it would be useful to understand the fuller picture or how much it actually costs to do this work, when you include volunteer time and so on. The sustainability of Lokha was discussed, though they were informed it is growing back. The group also asked whether the community could compete and maintain their advantage, for example in the briquette market, if the government put in money and another competitor came in. There was interest in how much time it took for FECOFUN to lobby the government and what it meant to run group certificate. There was discussion of how to sustain and replicate the model: what factors are contributing to the growth and how it could be used as a model in other parts of the world; how Forest Connect could help; and how to define the terms to bring the ideas into other communities. Similarly to the first group the health and safety of briquette manufacturing was raised.

Group three

Group three had the **impression** that the enterprises appeared viable and they noted the policy environment to make that so. In line with others, they were struck by the strong community ownership, the participation in governance, the community cohesion and producers organizing, the pride in the enterprises and ANSAB's keen support and facilitation of enterprises. The group noted the transparency and accountability, particularly at briquette enterprise, where the owner said his salary quite openly and all knew the numbers at their fingertips of numbers involved and so on. There was evidence of high entrepreneurship strong women's involvement and leadership. It was also seen as an encouraging sign that volunteers are attracted from abroad.

There seemed to be an ecological base to the enterprises; members spoke of it being focused on resources and environment. Community labelling is new direction being explored; the group noted the positive benefit of small-scale certification through FSC and others, which was clearly demonstrated at the paper making enterprise. In some cases, the group felt there needed to be a Plan B in evidence (briquettes and paper), in case something happened to plan A. There was an observation that within the forest producers group, the value and income generation potential of certification was not clear this, and it would be an interesting point for discussion of whether it came from the producer group perspective or whether it is what donors want to hear.

Other non-cash benefits from that CFUG were noted – the legalities, the governance, the tenure and the emphasis on gender participation; the woman in the group was strong and elected at local government level. It was felt, however, that this particular CFUG maybe should concentrate on small scale business; certification might be putting the cart before horse. The group commended ANSAB for their scope and reach, and also for the tour.

Questions raised were how to manage competition from other groups; and the gender and health and safety of the women's group, for example where a mother was doing manual labour with a baby. There could perhaps be appropriate technology that could keep women employed in more appropriate roles without the technology removing the job opportunities for the women.

4. Introducing the Forest and Farm Facility and mapping future priorities for the Forest Connect alliance

There is potential to build on the links between the two initiatives, Forest Connect and the new Forest and Farm Facility. Both co-managers of Forest Connect, Sophie Grouwels and Duncan Macqueen, have been involved with the Growing Forest Partnerships initiative, which funded work of The Forest Dialogue (TFD) to coordinate a dialogue stream about Investing in Locally Controlled Forestry (ILCF). One of topics of discussion in that dialogue stream was to find a facility to fund Investing in Locally Controlled Forestry (ILCF) – with experiences drawing heavily from Forest Connect, including one dialogue in Burkina Faso hosted by the Forest Connect partner TreeAid.

Considerable negotiation by those designing the new Forest and Farm Facility (FFF) has led to the selection of representatives on steering committee of producer groups – International Family forest Alliance; International Alliance for Indigenous and Tribal Peoples of the Tropical Forest; Global Alliance for Community Forestry; Agricord (Farm forest producers associations); Alianza in Guatemala, and so on. The control at steering committee level by representatives of producer groups should mean that funding is steered towards the aims of those producer groups themselves, which includes: secure commercial rights, business capacity development and market access, freedom of association and fair investment. The Forest Connect initiative and the FFF might therefore dovetail well. It is also critical for the FFF that it has widespread support – it is still unclear to some donors why supporting small user groups is important to alleviate poverty and forest protection.

4.1. Forest and Farm Facility – the importance of supporting forest and farm producer groups

Peter De Marsh, Chair IFFA and Steering Committee Member of FFF

In looking at the importance of producer groups we are talking about groups at all levels – community, province, national, international. When we speak about producer groups, it is all of the above.

The international Family Forest Alliance (IFFA) has 23 national member organisations. It goal is that the perspective of small scale locally controlled forests has representation. IFFA believes in sustainable management – the protection of forests and improvement of livelihoods of people in and near forests. This ensures ongoing supplies of water for drinking and for agriculture, as well as protections of biodiversity and carbon.

IFFA also believes that forests can play much larger role in improving livelihoods and local economies. Many people with great influence on forests believe they are two conflicting agendas – that one cannot protect forests and improve livelihoods without significant trade-offs. IFFA does not believe there is such a distinction but rather that it is all one problem and we need to win the argument with those who believe there is a conflict. Our argument is not a theory or a romantic hypothesis; it is rooted in concrete examples that we encounter in our daily lives.

There are four basic **preconditions** to pursue a solution to the single problem of unsustainable forest use and inadequate livelihoods: tenure – rights to land have to be clear, secure and enforceable; market access, which has to allow farm-foresters to sell on reasonable terms; availability of good extension and other support services, which are critical to increase the productivity of forests and increase incomes; and

representation by effective associations – to represent and to advocate for the first three preconditions is critical requirement. When we talk about effective associations, we are talking about democratically controlled associations that are seeking or have succeeded in establishing relationships with governments.

The **problem** is that in many villages around the world, farm-foresters are told things like, "If you plant this tree, all will be well". To which a farmer will ask four questions: when the tree is ready to harvest, will I own it? Will I be able to sell it on reasonable terms? Will I have access to the information to properly plant it and keep it free from disease? Do I have an association to represent me to ensure that the first three are maintained and strengthened? Hence the four preconditions.

Our role is the advocacy role of the associations, to establish the absolute need for these preconditions, and to help to improve extension services – sometimes in association with government. These conditions are a package, you cannot pick and choose. If you consider a farmer exposed to a tree pest, it is of no use having tenure and market access if the tree dies. So we need to think about the risks: removing any one of preconditions greatly increases the risks to the farmer. We have developed own capacity as alliances, and developing own capacity to support the work.

These challenges were in our minds as we work with the FFF to design its operational programme, and they raised two **questions**. Firstly, we need associations to advocate for the preconditions – and these are often general purpose association, as distinct from one to advocate for manufactures of particular product. They have a broad mandate with many issues to address. So the question is how the work of these general purpose associations can more effectively encourage enterprise development. Forest Connect talks much about capacity building for enterprise development and access to markets, while FFF talks about strengthening producer organisations. Both fit within the IFFA agenda and the four preconditions. A second question, however, is how we make the connection between the FFF and Forest Connect-type work more effective, clearer and more directly producing stronger local enterprises; ensuring it does not undermine it and risk division.

Ghan Pandey, Chair, GACF and Steering Committee Member of FFF

The FFF is new but at the same time, it is a continuation of past activities. We are excited to see what the FFF wants to achieve with this approach based on locally controlled forestry.

Locally Controlled Forestry

Locally controlled forestry means "the local right for forest owner families and communities to make decisions on commercial forest management and land use, with secure tenure rights, freedom of association and access to markets and technology". It leads to responsible, long-term sustainable forest management, including protection of biodiversity, improved livelihoods, multiple forest products and services, local enterprises and benefits to society. LCF requires respect for communities, families and indigenous peoples and their customary use and traditional and local knowledge. By way of an example, LCF can be seen in the forestry owned and managed by community, Indigenous and family of farmers, such as community forestry in Nepal

Forests, people and institutions

In Nepal we have invested in forests, people and institutions since the 1970s. There is a good forest policy, with 1.5 million ha of forest under local control, including 18,000 CFUGs totalling 1.8 million households, which is 40 per cent of the population. There are strong federations and civil society movements as well as gender balance action. This investment in LCF is leading to a green economy.

In the 1970s, under government management, the forests had disappeared. From the 1970s onward, community forest management restored the forests. What is now needed is to turn that green forest into economic opportunity – a green economy.

Way forward

Future steps are to change the investment approach, putting the last first. This means: secure tenure and rights; capacity and association building; support for networking; climate justice in the way payment mechanisms are developed; technology transfer; enterprise development and market services; more action than talking; focusing on poverty reduction.

Previously, investment was all at the top and the decision-makers wanted to see it trickle down. We want to see from FFF a reversal in this picture, with investment at the bottom rather than the top and more action than talking. The FFF facility and Forest Connect can work productively together. If Forest Connect helps to build businesses, FFF can focus on strengthening rights-holders groups. And if there are producer associations, Forest Connect can work together to build enterprises.

4.2. What the Forest and Farm Facility (FFF) is and how it links to Forest Connect

Sophie Grouwels, FAO

The National Forest Programme Facility (NFP-Facility) works with 80 partner countries. Small grants going directly to 900 beneficiaries make up 55 per cent of the Facility, with 70 per cent going to NGOs and 30 per cent to government. Activities include training, coordination, studies, pilots and information sharing. South – South cooperation, knowledge and information sharing makes up 25 per cent of the Facility and 20 per cent is programme delivery through coaching, teaching assistance and training.

The **impacts** of the NFP-Facility include country leadership at national and sub-national levels and stakeholder participation in general, but still with gaps. There has partly been an impact through integration with national strategies, namely Poverty Reduction Strategies (PRS), climate and financing; there are only a few examples (water and financing) but no impact in collaboration across sectors.

Various **initiatives** have contributed to the design of the new FFF: the NFP Facility; Growing Forest Partnerships (GFP); Forest Connect; Investment in Locally Controlled Forestry (ILCF); community based enterprise development (CBED); and IUCN's Livelihoods and Landscapes Strategy (LLS). **Partners** who have contributed to the design process include: in-country civil society; national governments; IUCN; IIED; G3 (IFFA, GACF, IAITPTF); World Bank – PROFOR; AgriCord; and FAO.

The FFF **mission** is to promote sustainable forest and farm management by supporting local, national, regional and global organisations and platforms for effective engagement in policies and investments that meet the needs of local people. FFF will **support** organisation and capacity of smallholders for policy dialogue engagement and to build enterprises that have access to financing and investment. It will support multi-sectoral stakeholder policy platforms at local and national levels and communication and dissemination of key information and learning to connecting local reality to the global dialogue – for example, in Reducing Emissions from Deforestation and Forest Degradation (REDD+), the Forest Investment Program (FIP), the EU's Forest Law Enforcement, Governance and Trade (FLEGT) initiative, and food security initiatives.

FFF **outcomes** envisaged are threefold. Firstly, that local forest and farm organisations are strengthened and cooperate in networks, alliances, federations and so on; that they have access to financing mechanisms and collaborate with private sector and gain investments; and that they are actively engaging and contributing to national policy development. Secondly, for cross-sectoral collaboration, experience sharing and consensus building established by government at all levels. And finally, that national policies and global agendas reflect the knowledge and priorities of local people.

Six **countries** have been selected by the FFF Steering Committee for early implementation: Nepal, Myanmar, Guatemala, Nicaragua, Liberia and The Gambia.

4.3. Mutual support between northern and southern producer groups – the way forward

Anssi Kainulainen, AGRICORD

Introduction to Agricord

Agrcord is a global network of agri-agencies mandated by the farmers' and rural people's organisations in their country. Its vision on poverty reduction is to build strong farmers' organisations, to contribute to democracy, economic growth and a more equal income distribution. Agricord's mission is to lobby and advocate stronger roles of farmers' organisations in developing countries; to mobilise technical and financial resources for farmers' organisations in developing countries; to promote joint learning and pooling of experiences between members of the network; to develop joint planning, implementation, monitoring and evaluation; and to stimulate and facilitate the presence of its members in international fora on development cooperation.

Member agri-agencies of Agricord include Agriculteurs Français et Developpement International (AFDI), France – Agri-agence de la FNSEA, APCA, Jeunes Agriculteurs, CNMCCA; Agriterra, Netherlands – Agri-agency of LTO, the foundation of rural women's organisations SSVO, NCR and NAJK; Trias, Belgium – Agri-agency of Boerenbond, Landelijke Gilden, KVLV and KLJ; Union des Producteurs Agricoles-Développement international (UPA DI), Canada – Agri-agence de l'UPA, Union des Producteurs Agricoles (Québec); Formation pour l'Epanouissement et le Renouveau de la Terre (FERT), France – Agri-agence partenaire du Groupe "Céréaliers de France"(AGPB, ARVALIS, UNIGRAINS); Swedish Cooperative Center (SCC), Sweden – Agri-agency of LRF (Lantbrukarnas Riksförbund), Federation of Swedish Farmers; CSA Fédération Wallonne d'Agriculture, Belgium; AsiaDHHRA Asian Partnership for the Development of Human

Resources in Rural Asia, Indonesia, Philippines, Malaysia, Thailand, Vietnam, Cambodia, Myanmar, South Korea, Taiwan-ROC and Japan; and Asprodeb Organisation agricoles du Sénégal members d'Asprodeb, Senegal.

Associated organisations of Agricord are MTK Central Union of Agricultural Producers and Forest Owners, Finland; Confederazione Italiana Agricoltori (CIA), Italy; Union de Pequeños Agricultores y Ganadores (UPA), Spain; Confederaçao dos Agricultores de Portugal (CAP), Portugal; and Deutscher Bauernverband (DBV), Germany.

Agricord's main initiative is 'Farmers Fighting Poverty'. There are several basic tenets of this initiative. Firstly, that only proposals from membership based farmer organisations are eligible. Support combines funding with advisory services (a two-pronged approach) and funding is mobilised by the agri-agencies, with the support of OECD farmer organisations and their governments. Advisory services are based on the "peer-to-peer" principle, whereby advice is provided by farm leaders and staff from other farmer organisations in the North and South. The initiative is flexible, and can be of short or long duration, with small or larger budgets, and consists of funding and advisory services. It is also comprehensive, covering all genuine needs of farmer organisations.

The target group consists of smallholder farmers and their farmer-controlled organisations that are membership based and democratically managed. 'Farmers Fighting Poverty' is about capacity building of farmers organisations for the purpose of combatting poverty. The initiative allows for capacity building in a broad range of areas of interest for a farmers' organisation. Based upon the inventory of past experience, reflecting the existing dynamics of farmers' organisations, 17 different areas of support to farmers' organisations can be supported within this programme.

Capacity building and operational support for producer organisations

Farmers Fighting Poverty (FFP) **Work Areas**
Work area 01: **Organisational Strengthening**
Work area 02: **Institutional Development**
Work area 03: **Policy elaboration and advocacy**
Work area 04: **Economic operations**

http://www.agricord.org/about/approach

Twinning support

The initiative has had good experiences, particularly with forestry producers' associations. Twinning has involved peer-to-peer cooperation between private sector forest producers. The support is to establish and strengthen member-based organisations in the forestry sector, similar to those already existing in the agricultural sector; it enables dialogue and business development for forestry smallholders through organised groups. A leaflet on twinning support is available for download. The report 'Strength in numbers – effective forest producer organisations' is available in English, French and Spanish and will soon be available in Chinese.

4.4. Integration of farm and forest enterprises for food, fuel and fibre

Aulia Perdana, ICRAF

Introduction to the World Agroforestry Centre (ICRAF)

The World Agroforestry Centre (ICRAF) is a CGIAR Consortium Research Center. Its **vision** is a rural transformation in the developing world, as smallholder households strategically increase their use of trees in agricultural landscapes to improve their food security, nutrition, income, health, shelter, energy resources and environmental sustainability. ICRAF's mission is to generate science-based knowledge of trees in agricultural landscapes, and advance policies and practices that benefit the poor and the environment.

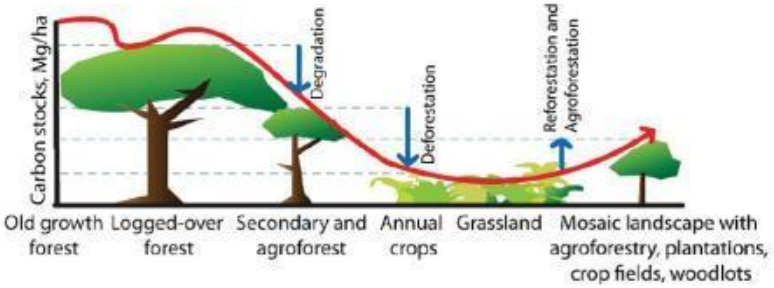
ICRAF is headquartered in Nairobi, Kenya, with regional offices located in India, Brazil, Indonesia, Cameroon, Kenya, and Malawi, and conduct research in eighteen other countries around the developing world - www.worldagroforestrycentre.org.

The role of ICRAF is to improve the livelihoods of smallholders and improve the sustainability and productivity of agricultural landscapes; broadening the range and diversity of trees, maximising the productivity of agroforestry systems, and improving the income of poor households by facilitating their access to markets.

According to the International Energy Agency (IEA), the world population is predicted to reach 9 billion by 2050 and will need food and energy. Depending on the land-use policy adopted, deforestation by 2050 could reach between 232 and 55.5 million hectares. The rapid growth of the bio-energy sector and increasing demand for food and fiber will strongly affect land-use globally. Given these trends, how can demands be met while maintaining the long-term sustainability of forests, businesses, and communities that depend on them?

Natural forests are critical for the survival of forest-dwellers, including many indigenous peoples, and they help deliver clean water to agricultural lands by protecting catchments. Farmers can increase food security by retaining trees on agricultural land, by encouraging natural regeneration and by planting trees and other forest plants. For most of the year, herders in arid and semi-arid lands depend on trees as a source of fodder for their livestock. Forests, trees and agroforestry systems contribute to food security and nutrition in many ways, but such contributions are usually poorly reflected in national development and food security strategies. Coupled with poor coordination between sectors, the net result is that forests are mostly left out of policy decisions related to food security and nutrition.

Trees play a fundamental role in almost all the Earth's ecosystems and provide a range of benefits to rural and urban people. Landscapes without trees can quickly erode and **agroforestry** may be, once again, one viable answer for stopping degradation and increasing food production.



Forest and land use transition curve

Focusing on **farmers**, ICRAF assess ways of expanding smallholders' access to value chains for agroforestry products and improve the effectiveness and efficiency of value chains. Problems faced by two sets of actors are addressed: small-scale farmers and entrepreneurs, and agencies, both private and public.

ICRAF's science domain on **Tree Products and Market,** and our recent research in **Rural Advisory Services** contributes to the integration of farm and forest enterprises for food, fuel and fibre by (i) identifying the best-fit practices for improved market access for the poor and the vulnerable, (ii) developing tools for improving value chain analysis and development, iii) identifying mechanisms and approaches to better engage local and multi-national private sector actors and iv) assessing how standards and certification can benefit smallholders. Improving women's access to markets is a key element of our goal, as is improving stakeholder capacity to analyse and take advantage of market opportunities, improving the organization and development of rural enterprises (including cooperatives), and designing effective government policy for creating a more enabling environment for pro-poor value chain development.

Further, extension change agents and advisory service (EAS) providers in particular will be called upon to serve as both the critical link between farmers and sources of information and tools, and as the facilitators of widespread behavioural adaptation. As we move forward, persistent problems, past failures and new challenges within EAS provisioning have the potential to converge in an effort to adapt to the increasing utilization of agroforestry systems.

4.5. Importance of Integrating Forest and Farm Activities – a World Bank / PROFOR perspective

Diji Chandrasekharan, PROFOR

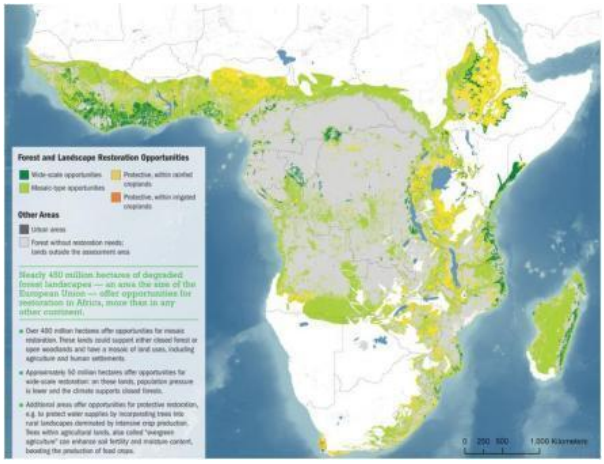
Introduction to the Program on Forests (PROFOR)

PROFOR is a multi-donor partnership that supports in-depth applied analysis, innovative processes and knowledge-sharing and dialogue, in the belief that sound forest policy can lead to better outcomes on issues ranging from livelihoods and financing, to illegal logging, biodiversity and climate change. It has four thematic areas: improving livelihoods of forest dependent communities and households; enhancing forest governance; financing sustainable forest management; and coordinating forest policy with other sectors. Since 2002, PROFOR has been housed at the World Bank, with development practitioners, policymakers and beyond being the clients

To date, the world has seen two decades of unprecedented growth, with the poverty rate declining from 42 per cent to 25 per cent (1990-2005) and projected to decline to 15 per cent in 2015. Yet this has come at a cost, with 13 million hectares of forest lost per year (2000-2010); three times greater water withdrawal over the past 50 years; 550 million tonnes of CO_2 emitted globally (1990-2010); and US$1 trillion spent per year on subsidising the extraction of natural capital, including fossil fuels.

Looking ahead, by 2050 the global population will exceed nine billion. The food supply will have to increase by 70 percent but climate change will affect crop yields. Biofuels and wood fuel demands will also greatly increase and there will be intensive competition for arable land for food, fiber and fuel. The challenge is whether this will be at the expense of forests.

Opportunities for landscape restoration



Trees integrated in farm and livestock systems

Trees are improving resilience

Faidherbia Trial Results in Zambia			
	Maize Yields (tons per ha)		
	2008	2009	2010
With Faidherbia	4.1	5.1	5.6
Without Faidherbia	1.3	2.6	2.6
Number of trials	15	40	40

… and increase soil carbon - Carbon sequestration rates under different land management practices (kg ha-1 yr-1) in Africa

Practice	Mean	Lower 95% CI of mean	Upper 95% CI of mean	Number of Estimates
Nutrient management				
Chemical fertilizer	264	169	359	30
Manure	325	224	427	30
Crop residues and tillage management				
Crop residues	374	292	457	46
Mulches	377	159	595	6
Cover crops	406	298	515	24
No-tillage	370	322	418	108
Crop rotation and intercropping				
Rotation diversification	378	306	451	49
Rotation intensification	342	277	407	55
Intercropping	629	162	1421	14
Water management				
Rainwater harvesting	839	556	1122	33
Cross slope barriers	1193	581	1805	22
Terracing	421	267	566	15
Agroforestry				
Include trees in field	1204	798	1610	125
Alley farming	1458	869	2047	46
Tree-crop farming	1359	755	1964	44
Improved fallow	2413	1886	2941	71
Land-use changes				
Afforestation	1163	619	1706	37
Grazing management	799	469	1129	32

There is the potential for **markets or payments for ecosystem services** (PES) to help, by shifting household demands for forest products from forest to farm, increasing tree cover in farming areas to meet demands for tree products, and improving the management of forests and woodlands to meet changing demands.

In terms of forests in a **Green Economy**; depending on the country-specific context, the role of forests for green growth is different. It could be through jobs, environmental services, or low emissions development. Low emission development involves carbon sequestration and avoiding emissions, including through wood-based biomass energy and product substitution.

Wood energy remains principle energy source, with roughly two billion people lacking access to commercial energy. In Africa, Asia and Latin America wood energy accounts for 89 per cent, 81 per cent, and 66 per cent of total wood consumption, respectively. Most of the wood energy is used for cooking and then heating, but it is also used industrial purposes. In many industrialised countries (such as the UK, the USA, Denmark and parts of Germany) wood is increasingly used as an energy source. The rationale behind this is greenhouse gas (GHG) emission reduction or low emissions development. In some countries, the role of forests in the energy sector seems to have large potential for low emissions development.

In considering wood energy in a green economy, the potential for charcoal in Tanzania can be considered. This would mean changing the 'business-as-usual' in the charcoal subsector; there would be significant potential for GHG emission reduction along the value chain and other co-benefits. It could create an economic incentive for the restoration of degraded lands or for planting trees on farms, and could promote the development of a vibrant private sector driven by local SMEs.



There are **opportunities** for Forest Connect activities to inform the World Bank's engagement in forestry SMEs. This includes through the International Finance Corportation (IFC), the private sector arm of the World Bank. The IFC acknowledges that working with communities can be positive – and plenty of people are doing it well – and it is a sound economic development strategy. IFC is proposing to engagement with communities by building an out-grower programme to increase fiber supply from farmer production units; improving extension techniques; developing farmer-friendly agro-forestry models; and facilitating farmer finance.

With the International Development Association (IDA) or the International Bank for Reconstruction and Development (IBRD), the public sector arm of the World Bank, there are opportunities for Forest Connect activities to link up with the implementation of regional strategies, especially in Africa where there is an emphasis on formalisation of the informal sector. Other opportunities to inform and tie up with World Bank engagement could be through the agricultural action plan which includes increasing agricultural productivity, especially of poor smallholders; through productive alliances and clusters in Latin America; through the World Bank's jobs agenda; and through activities on increasing agricultural resilience in the drylands of Africa.

The most immediate opportunities exist for collaboration with other PROFOR supported activities. These include raising awareness regarding the potential of SMEs and CFEs and the importance of alliances; addressing overregulation of CFEs and SMEs; domestic timber market diagnostics; national procurement policies and their impact on SMEs; and ICT and SMEs.

4.6. Plenary discussion on how the FFF links to Forest Connect

From the key presentations and from the governance structures, some expressed concern of a lack of African involvement. Though some of the Steering Committee of the FFF do represent the **African perspective**, there is a practical challenge, in that some of the stronger national forest federations and

producer group organisations are from Latin America and Asia. Focusing attention on building those producer groups in Africa could be discussed in terms of the future priorities of Forest Connect.

The extent to which Forest Connect should focus on **sustainability** in forest management was raised and how to fit that in within the Steering Committee skillset. Markets that demand provable sustainability are niche but can be high value – so this ties into the thinking about how best to link producers with special markets; involving actors with specialist understanding of these markets both in Forest Connect and FFF could be useful. Forest Connect has focused foremost on getting enterprises productive and profitable, in the knowledge that local forest and farm producer groups – when incentivised to undertake forestry – and with all the preconditions outlined above, often then pursue sustainability out of self-interest.

Forest Connect has been downplaying sustainable forest management and talking more about forest enterprises – but there is a danger of starting enterprises and then realising they are not sustainable. Looking at sustainability from the market point of view is critical alongside **policy** work to improve the enabling environment; if the market needs standards such as the FSC, for example, currently local communities will have to cover the costs to maintain the sustainability and pay for the certification audit. Relying on the market to bear these costs will take years. The FFF represents a potential solution by strengthen the organization of smallholders – and therefore the scale efficiency with which they can pursue sustainability. But a problem is that FFF creates a boundary – notably with corporates. We need to do a lot of modeling work and adapt what the big companies do to what the small companies need. We need to start to attract more the people driving corporate development.

World Bank priorities focus on agriculture and agroforestry systems, but it is important not to disregard the management of natural forest, where it is much more difficult to maintain an enterprise. The focus needs to include natural forest dwellers while new areas not yet explored enough – trees-on farm or agroforestry – are also looked at.

The FFF is based on **Investing in Locally Controlled Forestry** (ILCF) and that has a framework now that is built on these pillars of tenure security, business capacity, enterprise-oriented organisation and fair investment. The specific focus of the FFF is organisation at the producer group level, complementing other initiatives and policy platforms, building on things in-country through facilitation and work with partners working on forest and farm issues, and helping to make the ILCF Guide more of a core operational document.

4.7. Focus and governance of Forest Connect

Duncan Macqueen, IIED

Participants discussed in groups based on their geographical focus areas two main questions: (i) should forest connect go more **focused** (onto specific forest sub-sector enterprise options like biomass energy, carbon markets, and so on) – or **broader** towards integrated approaches at the landscape level? And (ii) how should the Forest Connect alliance be **governed**?

Asian report back

In considering the **focus** of future Forest Connect work, the Asia group considered that best practice would be regional-level sharing informed by detailed analysis at the national level, to see how and why it has worked well. There was discussion of a narrower sub-sector focus, to share best practice or experiences for a specific enterprise type between actors and between countries – such as national or regional – but the group also felt it best to maintain an integrated approach with enterprise support across the whole landscape as the focus.

Discussion also covered how best to harmonise with other initiatives around world on small forest enterprises – adding value by doing market analysis, for example. The question remained; what kinds of deliverables could be best developed for Forest Connect? Another question was how to develop entrepreneurship – the necessary balance between encouraging entrepreneurship not dissuading it, but not encouraging it in a way that infringes on communities' rights, especially on those not involved in the enterprises. It was felt it would be useful to develop cross-site "product focused" groups, doing more lateral communications between national hubs, instead of coming up to the international level.

There is a need to foster engagement of unusual suspects: social technology entrepreneurs that could be engaged, and considering how to promote Forest Connect to other groups, or connect them. Forest Connect needs to ensure it is engaging those with innovative ideas and solutions, and work out how we can get those people involved. Building or welcoming in additional hubs was also raised.

In terms of funding focus: discussion centred around whether Forest Connect could and should be a funding intermediary, and whether that could that help the Forest Connect steering committee to set the agenda. If so, whether it would need to be more formally constructed, and require monitoring and evaluation.

In terms of the **governance** structure, the focus and whether this was narrower or broader would say a lot about the level of formal commitment members make; and have implications on how we resource Forest Connect. The group talked about becoming wider as an alliance – and about the Steering Committee – or an alternative advisory group. It was emphasised that any Steering Committee should link to existing regional, national and international networks and not try to build parallel processes. It is important to keep it flexible, so that members are able to wear both hats – Forest Connect and their own organisations.

Latin American report back

Capturing lessons learned and information on different business models, rather than focusing on specific sub-sectors, would be the way to go for the future **focus**. This includes thinking about ways to categorise different models – such as looking in terms of scale or in terms of rights – then sharing between situations that are similar. Models in Forest Connect could be looked at, described, fitted into categories, then potentially deepened by telling their full story - such as innovations that led to success, or major mistakes. The models could be categorised in terms of the degree to which they fostered land use integration, using a scale that showed some that were less integrated, some that were more. Looking at success, it could be considered whether these models meet the four pillars Peter deMarsh described, and if so, they could fit into that framework and could be described using a matrix.

The group then discussed tools that might be useful across subsectors, such as public policy tools, advocacy, engagement, associations building, public private partnerships, education, finance mechanisms, and developing trust. This would be based not on sub-sectors but topics on which experience can be shared. Another idea that came up in a discussion was to have a Forest Connect list of companies that we rate, comparable with the Fortune 500.

From the **governance** side, it would be useful to better understand the strategic plan of the governance committee and the work plan, including the time frames associated with different outputs. Information on the role of the Steering Committee is not currently clear. Perhaps including a company that has been engaged, such as Aveda, or a donor would be a positive move.

African report back

The Arica group felt the future **focus** should be more of an integrated set up; that developing business models would be better to learn from. If only a few sub-sector are focused on at a higher level, there is the danger of losing some people. As an alliance, it is important to make sure that at the higher levels we are approaching issues in ways that can be shared and attract people in.

Much as an integrated approach at the higher level is preferred, there should also be people able to link up those working on the same sub-sector issues – technical issues relating to particular sub-sectors. It was noted that if we started looking only at the specific sub-sector alone, there would be more issues on the governance side for Forest Connect.

The issue of strengthening associations was raised: if we are trying to promote business models, they need to focus on strengthening local ownership and associations. Similarly to the other prerequisites mentioned, the focus needs to be more on strengthening capacity and less on tenure and markets, as this is covered well by other groups.

The group wondered whether there would be the need to have a **governance** structure outside of FFF. It is important that they are kept separate – so that we take advantage of whatever FFF has to offer – but there seems to be no reason why the governance structures should not overlap. A main global team in charge of the Forest Connect brand, with forestry experts there, would need to be retained, but growing expertise in things like finance and marketing could be considered.

Comments

It was notable that the thinking is integrated: all the groups chose to go with the conjunction of both integrated and sub-sectorally more focused, rather than an either/or approach. There remains an appetite for best practice business models that are developed through an integrated landscape approach to business support, plus some more specific sub-sector work and capacity building. There seems also to be encouragement for regional networking as well as an international team – and including those regional leaders in the international team too. In terms of the governance, we need to try to be more transparent and clear about what the Forest Connect Steering Committee is and does, and report to the members of Forest Connect on agreed timelines, ensuring the information flows two ways.

4.8. Group auction to identify and then prioritise future work streams

Each participant was asked to write on meta cards the ingredient or component they felt was most important in the future of the Forest Connect alliance. This could reflect what individuals have found most useful in belonging to Forest Connect in the past and would like to see in the future. The cards were then grouped and summarised as possible ‘ingredients’ of future Forest Connect work. These ten ‘ingredient’ cards were then used in an ‘auction’ between four teams.

Each team was given a hypothetical US$ 100 to spend, to try and win the ingredients that they think would combine make the best future Forest Connect work programme. Only the things secured would form the basis of future work.

Results of auction by the price paid for each different ingredient

The numbered heading was the item was bid for, with the subsequent bullets giving the exact wording on the cards that were grouped under that title. The number in brackets denotes how high bidders had to go in order to procure that item.

1. **(US$85) Develop linking / matching platforms between responsible entrepreneur investors and community businesses.**

- Links between industry- and markets.
- Social investor/entrepreneur and community enterprise matching platform.

2. **(US$ 67) Research and capture successful business 'models' that can be shared across country hubs.**

- Developing models that countries can learn from.
- Real support to small forest enterprise groups – but which is captured in 'business models' to be shared across forest connect members.
- Research on community forest enterprise models and lessons learned.
- Best practice on producer group shareholding mechanisms along supply/trade chains.
- Producer group models
- Integration of hardcore business model.
- Good practices dissemination and incubation of innovative practices.
- Sharing technology and enterprise model within regional and continent.
- Forest/farm products technology and market studies database or platform.
- Centre of excellence for best practice – knowledge brokers for national hubs, government, small forest enterprises and market actors.
- Social enterprise model; smallholder marketing model.
- To develop business plan for group non-timber.

3. **(US$ 45) Training in SMFE support for facilitators and extension staff.**

4. **(US$ 28) More regional international learning and networking events and exchanges.**

- Networking at international, regional and national level.
- Stronger robust network. Regional and international.
- Networking at international, regional and national levels.
- International exchange of experiences in supporting SMEs – like this meeting.
- Exchange between country groups.

5. **(US$ 22) Share models of how climate change / carbon finance can best support SMFE development.**

- Models of how climate change / carbon funds can best support sustainable SMFE enterprise development.

6. **(US$ 17) International and national advocacy for investment in SMFE development.**

- In-country: advocacy for small forest-farm enterprises. Capacity development – entrepreneurship, organisation. Linking with private sector.
- Policy platforms facilitating engagement of communities in SFE.
- Advocacy and knowledge of information hub.

7. **(US$ 10) Series of communication products (e.g. film, booklets) that tell stories of best practice.**

- Documentation and sharing of best practices.
- Learning actions based on country lessons.

- Forest Connect ‘stories’ in short film/text told in community voices and visuals: successes; failures; lessons; future risks/solutions; future plans for growth / sustaining partners in the process. Featuring quality of life and balance with nature.

8. **(US$7) Local community-level training and capacity building in business, markets and entrepreneurship.**

9. **(US$ 3) Programme to develop and share successful models of biomass energy enterprises.**

10. **(US$2) Incubating urban-based entrepreneurs marketing entities selling SMFE products.**

Plenary discussion of auction exercise

This method of prioritisation is statistically as good as pair-wise comparisons for determining group priorities. It seems that the **top four “ingredients” were high priorities** for at least two of the four teams in the auction bidding process – and they are a potentially exciting agenda for a future Forest Connect initiative. The idea of both creating platforms that linked small forest enterprises with responsible entrepreneurs and developing and sharing business models that worked for different products would be useful for the alliance as a whole. The training element was geared towards facilitators – rather than enterprises themselves – and this was appropriate given the fact that the alliance shares knowledge among such facilitators and it is then the work of the in-country teams national programmes to training individual enterprises. Having learning events and exchanges to make that training possible also was seen to be critical.

A second tier of useful ingredients could be tailored into specific fundraising bids for the work of the alliance. For example Forest Connect could look in more detail about how REDD+ finance flows could support the enabling investments that make small forest enterprises ‘investible’. It could develop stronger advocacy stances based on the development of functional business models that have been seen to work in different parts of the world. It could develop a series of communication products in order to fuel that advocacy work.

Finally, there were some **good ingredients but that attracted less support**. Local level training of enterprises was perhaps deemed to be more the function of national facilitators, rather than the international alliance that links them. Biomass energy business models are important but perhaps only one subset of the possible business models that we would like to develop and share. Incubating urban entrepreneurs that could source rural products from small forest enterprises is a subset of the activities that might be contemplated within linking platforms between responsible entrepreneurs and community forest enterprises, and so on.

Some remarked that the wording relating to the business models noted ‘research and capture’ rather than ‘develop and share’, which might have altered the weighting given. Others felt that as there are no models available yet, rather than works in progress, it would be premature to share these rather than sharing the development.

The communications ingredient is about community voice, which should be linked to the research element through its application by communities.

Some ingredients clearly had broad support – for example, the researching and capturing successful business models and the training of facilitators of enterprise support. There is often a need to keep piloting

things to take the risk out of experimentation for small entrepreneurs, like a series of small grants, and therefore identifying opportunities and investing in those enterprises is critical. This represents a business model that could be pursued, bringing in all the dimensions of livelihoods, self-help savings groups, shareholding and so on.

Community level training appeared fairly low down on the rankings, yet combined with research and capture of business models, this is a solid ingredient. The role and level of Forest Connect changes the chosen ingredients: Forest Connect's job is to create the networks and alliances to make the capacity building possible, rather than undertaking that directly. Of the two ingredients based on training, that of training facilitators appeared higher – perhaps because it was seen as more of the role for an alliance. The FFF, which is directly supporting producer groups, could cover in-country training.

Groups found different reasons for low scores: the biomass ingredient was scored low for one group because it was felt that it could be subsumed into the researching and capturing business models. Incubating urban based entrepreneurs on the other hand was highly rated by the group who placed the bid, who felt that if the products are not sold, then all the rest is in vain. Urban and high value market, and the international dimension in the investment market would need to be tapped through entrepreneurs, to avoid reliance on development funding. Yet the price remained low because other groups ranked it differently, considering again that it formed part of others, like the linking of platforms between responsible entrepreneurs and community businesses. When discussing community products, seeing action on the ground was deemed important; yet from the value chain perspective, incubating entrepreneurs allows those at ground level to connect to markets.

The business value proposition was deemed important by some; ensuring that the small forest enterprise fits appropriately into the value chain and that the right people are there and being trained to take on new roles. This was exemplified in the Himalayan Naturals, where the small charcoal briquette producers had moved into urban retail to solve a specific problem in their value chain.

Deciding the relative priority of the international work and the national work in Forest Connect will require a lot of work at many different levels. One of the benefits of the alliance is that it incorporates people acting at all levels, learning and networking. National organisations' responsibility is to do what they do best, and the whole is better than the sum of the parts.

Forest Connect can help as international partners finding funds for activities, but the national hubs should see Forest Connect as something that should be owned and taken up nationally. It is an alliance around an issue and it needs to be dynamic.

Governance

The governance structure of Forest Connect was raised by the organisers because of the feeling that it was an area of confusion to some in the alliance. There are some proposals for ways forward:

- An email list of the hub point persons for relatively frequent updates of what was going on, such as proposals being prepared, news from national hubs.
- An organogram of the structure.
- Improving ways of running the Forest Connect ning site or another site: this could be another social networking site such as Facebook or LinkedIn.

Web presence and networking was discussed in greater detail, including considering exploring existing social networking sites. Considering potential benefits, for example, enterprises having the benefit of existing platforms with LinkedIn; or having an alert sent for news through Facebook and its pervasiveness amongst the younger generation. Also problems would need to be considered, such as Facebook mixing business and private life and the privacy issues generally around the site. With LinkedIn, it may be necessary to

create a way of sharing information, such as through a blog or a googlemail account to set up a google group. There could be a portfolio used, rather than just one option.

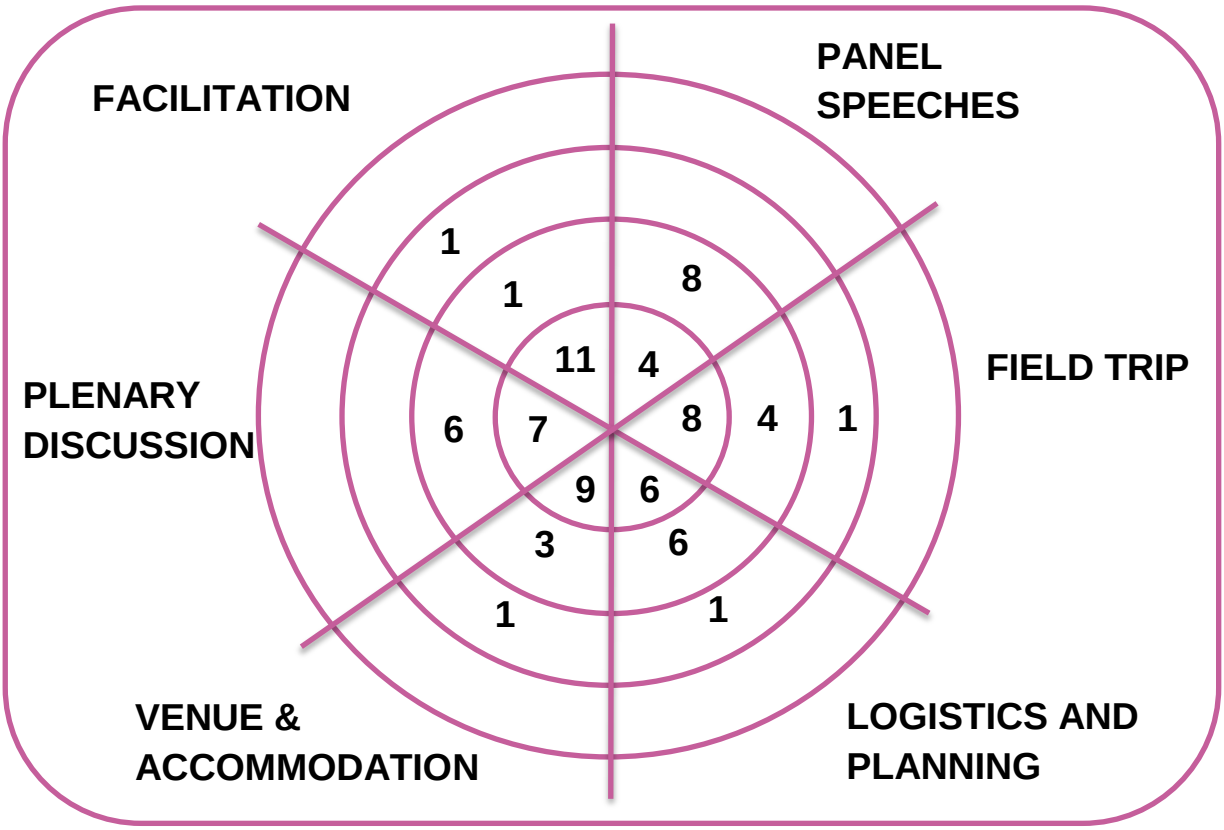
These communication strategies are useful for many, but providing that information to the grassroots or those without internet connection is a challenge. Potentially, Forest Connect could develop some kind of information posters and communication materials. By providing regular news updates, people who have ideas on communication could share examples.

4.9. Future action points

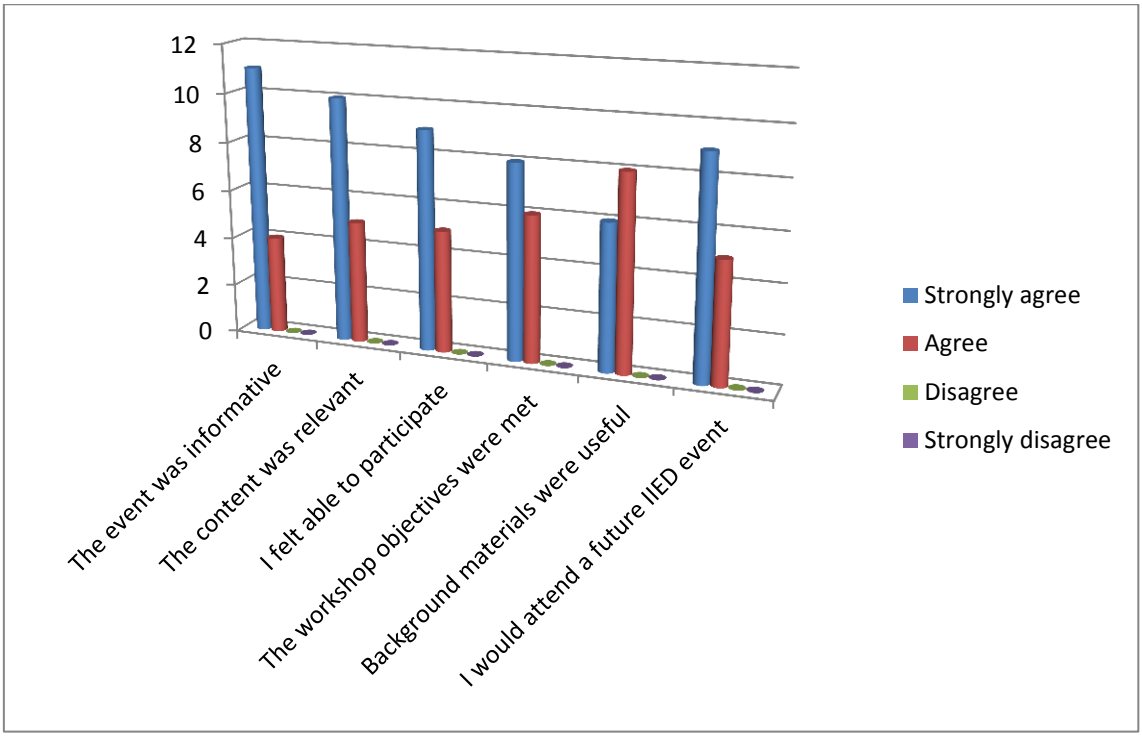
- All nine country prioritisation reports to be completed by the end of March 2013.
- Finalised prioritisation reports to be put together into a small booklet, including the background report, 'Going with the grain' as an introduction, and a concluding section analysing the chapters and weaving in some of the final conclusions from this workshop.
- Workshop report to be completed and shared.
- Briefing on that report to be written.
- Developing the prioritization processes into a proposal for funding. This could be at national level or at international level.
- Consider all the points raised here about the future governance of Forest Connect, to respond in a suitable way.
- To continue low level support in three partner countries and hold a meeting in a couple of years' time through DFID funding.
- Potentially to make use of FFF implementation funds.
- RECOFTC agreed to join the international coordination and contribute to mobilize resources.

5. Workshop Evaluation

Participants were asked anonymously to put a cross in each quarter of an evaluation target. The numbers below summarise what participants thought, from ‘excellent’ at the centre, to ‘good’, ‘fair’ or ‘poor’ on the outside ring. Where numbers do not total the same, there were either blanks, or the scoring could not be interpreted.



Participants were then asked to rate the content, relevance and usefulness of the workshop, which is presented in the bar chart below.



Participants were then asked to write anonymous comments both positive and negative. An unedited list of these comments is given below.

Further comments – content and practicalities

- The presentations on day 4 could have been tighter.
- It was a great opportunity for me to see Nepal, share and learn and network, further renewing some old content. Do it again!!
- All fantastic – would be great to have five days next time.
- Excellent level of participation.
- Leianne Rolington was champion organiser and facilitator behind the scenes.
- ANSAB did a brilliant job in every regard – a most impressive organisation (they could run the country!).
- IIED and FAO are a really good and productive combination and the world is a better place for the presence of Forest Connect.
- This workshop is organised in a very professional manner that I may need to follow such style in my country.
- Need more opportunity for discussions.
- Workshop exceeded the expectations.
- I would suggest to have the next meeting in a hotel where internet is free or cheaper. Organising committee should visit the place before the group in order to avoid being lost as at the HBTL.
- Very good but will be better if; more discussion time; speeches/presentations tailored to time allocation (some need to rush to finish as their PPT is too long).
- Great to be part of Forest Connect and see where we are, we all struggle with and what directions we will take – look forward to more exchange in whatever manner!
- Need to email the key presentations and any necessary documents for easy follow up of resolutions and lessons learned.
- Thank you for facilitating the event! I learnt a lot from person to person conversations.

Further comments – workshop overall

- Fantastic opportunity for learning and networking.
- The location was great, the host organisation perfect, the sites visited fabulous.
- Perhaps there could have been an opportunity to more concretely discuss each topic we covered, i.e. Forest Connect governance, future direction of Forest Connect.
- For the others, workshop translate in most language.
- The 'auction' was a good, productive 'fun way' to end. Good discussion after, too!
- The theme of this workshop is critical to me. I could learn new knowledge of this field and hope to share to my colleague in the country.
- Next time it would be better to give some time to participants for visiting the city.
- I learnt new models, approaches and also influenced final decisions.
- Thank you! I really enjoyed the event.

What did you find most useful about the workshop overall?

- Opportunities for sharing, reflecting and learning.
- Identifying opportunities for collaboration.
- The field visits and the enterprises selected. So so useful.
- Working groups on prioritization of focus and governance of Forest Connect – would have been good to discuss that more in the plenary though. Please see us the write-up of each working group.
- The group work.
- The country/regional presentations were very informative.
- The field trip was carefully organised and a really good first-hand introduction and glimpse of the practical work and growing community forest businesses on the ground.
- Information about farm and forestry enterprise and networking on this area.
- Learning of others organisations' work.
- Assessment report that gave a chance to look at our work in the ground from a different perspective.
- To get overall picture of what Forest Connect is all about.
- The auction on priorities.
- The plenary discussions.
- Get connected with actors on community forestry and enterprise development.
- Day 4 after day 3 putting it all together and answer the question: what's next!
- The transparency in information provision and feedback mechanisms.
- Connections. It was very interesting the bidding exercise, excellent activity to get to know everybody's perspective in the way they are putting value of Forest Connect future focus.

What did you find least useful about the workshop overall?

- The part we didn't get to was governance and really discussing next steps – *how* to implement agreed upon priorities.
- Nothing was least useful. Sorry can't honestly point anything.
- Difficult to say. Perhaps the large number of country examples on the first day – better selection prior to event could have helped.
- No part of this workshop is least useful.
- Certification.
- Summing up and papers tends to lose interest and difficult to remember all country details.
- N/A
- The presentations of the subsectors, very little time to discuss so, reading the papers would've been good enough.

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