

### Recommended Citation

Tamang DD, Shrestha SL, Dangol BDS, Tamang DS (2014), Prospects in Marketing of Timber and Non-Timber Forest Products from Community Forestry in Nepal, In R. Mandal, S. Dhakal, and N. Hamal, (eds), Proceedings of 6th National Community Forestry Workshop, Lalitpur, Nepal, 16-18 June, 2014, pp 130-145.

## ५.१.८ Prospects in Marketing of Timber and Non-Timber Forest Products from Community Forestry in Nepal<sup>1</sup> (नेपालको सामुदायिक वनको काठ तथा गैरकाष्ठ वन पैदावारको बजारको सम्भावना)

- Deepak D. Tamang; Subarna Lal Shrestha, Bishnu Das Singh Dangol, Dipanker S. Tamang)<sup>2\*</sup>

### Abstract

Nepal's national forest in general and Community Forests in particular have made impressive progress in the past three decades. These progresses are tangible in several areas such as forward looking liberal policies; framing of regulatory rules of forest management; the development of forest professionals; development of human resources at the village and community level; building capacity of community user groups; the institution of User Groups as forest managers and the rise of community pressure groups such as Federation of Forest Users Group-Nepal (FECOFUN). After thirty years of consolidation and growth in the forest sector, it is now the time to move from a primary stage of growth to a more complex secondary stage, where community members can benefit from income, jobs and community development through the commercialization of national, community and private forests in Nepal. The paper below argues for this cause based on step by step approach in improved policy, regulatory framework, institutional development, improved forest management or operational plans and developed infrastructure. These synergistic and coordinated developments, from the local to the national level, can usher commercialization of the forestry sector in the country through improved market access and outlet, thereby, facilitating mutual benefits for the community as well as the nation.

**Introduction:** This paper examines the issue of enabling timber and non-timber forest (NTFP) products from community forestry to take advantage of available markets in Nepal and neighboring countries such as India and China. In attempting this, the paper analyzes generally:

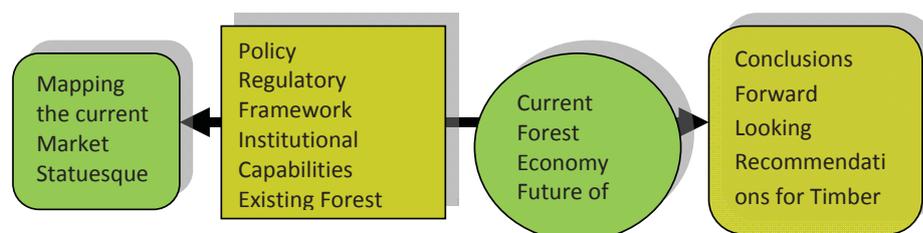
- 1 This paper is a work-in-progress (WIP). It is being developed as one of the journal papers for international publications. Based on this paper the Market mechanism and action research of “**Enhancing Livelihood and Food Security from Agro-forestry and Community forestry in the middle hills of Nepal (EnLiFT)**”; is also being carried out currently in Kavrepalanchowk and Lumjung Districts by the authors.
- 2 The writers are natural resource professionals engaged in a research project called “**Enhancing Livelihood and Food Security from Agro-forestry and Community forestry in the middle hills of Nepal (EnLiFT)**”; which is being implemented by the government of Nepal and Australia (ACIAR), inter alia since April, 2013.

- (a) The Historical precedents examining export and internal marketable sales of forest products from Nepal before 1950s. It also examines the export of timber to third country and sales with the internal markets until 1990s;
- (b) Furthermore, more specifically, the paper examines the export and internal market sales of forest products from 1990 until 2014;
- (c) Drivers, dynamics and para-statal institutions created to promote market products such as the Timber Corporation of Nepal (TCN);
- (d) The drivers and dynamics led by the private market forces for marketable sales of forest products in the post modern Nepal, i.e. after 1950;
- (e) Constraints, prospects and opportunities for marketing timber and non-timber forest products from community forests in Nepal owing to regulatory policies and management challenges including transportation and technology.

**Content:** The paper is based on primary data and secondary literature reviews, interviews with key informants, evaluation reports, market survey, field visits, interviews, focus group discussions (FGDs) and research reports by relevant institutions and professionals. It also makes use of the recent primary data obtained from the just concluded Baseline Survey (EnLiFT-Nepal/ACIAR, April/November, 2014), carried out in Lamjung and Kavepalanchowk districts under , “*Enhancing Livelihood and Food Security from Agroforestry and Community Forestry in the middle hills of Nepal* (EnLiFT-Nepal/ACIAR)”.

**Conclusion:** The paper makes a number of recommendations related to quality standards, green wood certification, packing and packaging, pricing structure and standardization of products - at one end of the value chain. At the same time - at the other end -it points to the fact that enabling environment for market development in this sector can be enhanced through community and producer friendly regulations; availability of financial; technical and trade related institutions; trading intermediaries; storage and handling facilities and simple policies and rules pertaining to tariff, trade and initial tax-breaks *inter alia*. Such forward looking strategies and policies including development of timber/lumber trading companies and NTFP trading intermediaries, along the value chain, can increase the sales of forest products thereby improving economic well being of the CF communities and individual households by guaranteeing income, job, food security and secure livelihood.

### Framework of Market Research Analysis (Value Chain Analysis)



## 1.0 Background and Context

Nepal's Community forests, currently covering one third of the total forest area, has the potential to deliver significant economic benefits for local communities. To do so, it needs to move beyond providing mainly subsistence goods and become a vehicle for the development of forest enterprises that can contribute to a genuine new forest economy. Don Gilmour, the pioneering personality behind the Nepal Australian Forestry Project (NAFP) in the 1990s in writing a proposal, "*Unlocking the wealth of forests for community development*", states an important observation for Nepal and the wider global forestry community<sup>3</sup>. He observed that most efforts in community forestry to date have been devoted to implementing the initial stages of the community forestry process, i.e. the establishment and formal recognition of community forests and their membership groups. This might be described as the first generation stage of community forestry. Issues addressed in this initial stage include: sorting out tenure, identifying appropriate communities and their forest area, developing enabling regulatory frameworks, repairing management plans, building strong local level institutions and in some cases rebuilding forest assets. However, a growing number of countries are now facing a new set of issues associated with moving to a second generation stage of community forestry, i.e. one involving the commercialization of forest products.

In most countries, even when community rights are secure, multiple and complex bureaucratic procedures imposed by public forest and other government agencies place significant impediments in the path of communities that effectively prevent them from managing their forests to deliver their economic potential. Other constraints also apply, including a lack of entrepreneurial and business management skills in communities (and remote rural areas generally) plus a range of legal and market related issues<sup>4</sup>.

## 2.0 Overview and History of Forest Related Products.

Nepal's community forest (CF) which began from Thokarpa village in Sindupalchowk, some 30 years ago, has shown the way for successful ownership and management of community forest to the globe. Currently, numbering over 18,733 Community Forest User Groups (CFUGs); it covers around 1.7 million hectares thus benefiting 2.23 million households and conserving and restoring much precious community forests (CF). The authors believe that given the right support and regulatory prescriptions leading to a "CFUG member friendly" enabling environment for timber and non-timber forest products from community forestry; Nepal will, in future, manage to take advantage of available markets in Nepal and neighboring countries such as India and China. Nepal can also export to wider global market leading to economic progress and prosperity for all. Currently, however, this is not the case. It is rather unfortunate that Nepal who claims to be rich in wood and forest resources, is importing semi-

---

3 Commercializing products from community forests, Don Gilmour, October, 2012, Draft Proposal for discussion with forest professionals.

4 Commercializing products from community forests, Don Gilmour, October, 2012, Draft Proposal for discussion with forest professionals.

hard wood and hard wood from countries as far as Pakistan, Myanmar, Thailand, Vietnam, Indonesia, Malaysia and China *inter alia*<sup>5</sup>. An international commercial forestry agenda, with a national and community emphasis, is suggested to promote the potential of community forests to move beyond a focus on subsistence so that they contribute significantly to local community development. The key elements of such an agenda could include:

1. Document examples of successful community forestry enterprises,
2. Enhance understanding of factors for success,
3. Analyze the constraints that prevent communities from realizing the full economic potential of their community forests,
4. Advocate for the removal of constraints and support for communities to obtain economic benefit from the sustainable management of their community forests,
5. Support the development and spread of appropriate technologies,
6. Develop/improve marketing approaches that fit community forestry enterprises,
7. Support capacity building of members of community forestry enterprises, and
8. Ensure that the active Forest Management plans/Operational Plans (OPs) have the provision and plan to sell timber and non-wood products from the forests for equitable sharing of benefits with community members.

While these rather general elements could be the starting point of an agreed agenda, more specific activities will need to be identified for action if substantial change is to take place, and some of these continue to be debated and discussed at expert meetings around the globe. Real change needs to take place at the national level and particularly at the community level, as each country and community has its own unique historical, cultural, economic and political context. Among the actions that could be considered are mechanisms for:

9. National dialogues to keep the policy discourse alive and focused on commercialization of community forestry products;
10. Lobbying arrangements to operate on behalf of community forestry enterprises;
11. Working with governments (across all relevant sectors) to ensure harmonization of policies that impinge on the commercialization of community forestry products;
12. Working with the private sector, including producer organizations and federations;
13. Formation and support of producer organizations;
14. Mobilizing technical and other support to communities and government;

---

<sup>5</sup> Primary data gathered from focus group discussions (FGDs) with wood depots in the Kathmandu Valley.

15. Applying Marketing Analysis & Development and similar approaches to assist people to develop income generating enterprises; and
16. Sharing information and experiences at all levels, nationally, regionally and internationally.

The ultimate challenge for policy makers is to look beyond the forests and trees to the markets that facilitate the development of enterprises based on the sustainable management of community forests, while avoiding low value-added forest exploitation and allowing traditional forest uses to continue.

SWAN (South Asia Women's Network), a network of strong women environmentalist in 9 countries aiming to implement meaningful Intervention Programmes (IPs) in the SAARC region, advocates similar "just, equitable and sustainable" benefit sharing from forests. The SWAN ecological, economic and social (SEE) agenda emphasizes on sustainable forest management for improved food sovereignty, equity, equality, substantive participation and social inclusion of women as forest users, tribal, ethnic minorities and Dalits<sup>6</sup>.

## 2.1 CF Products Sold in the Internal Market and External Markets (2010 – 2014 periods)

Currently, the commonly found timber and fuel wood available in Nepal's urban markets which are extracted mostly from community and private forests are:

- a. Saal (*Shorea rubusta*), Saaj (*Terminalia alata*), Adna (*Terminalia spp*), Haldu, and Karma (*Adina cardifolia*) in the lower altitudes below 1,500 feet; and
- b. Chhanp (*Michelia champaca*), Chilaune (*Schima wallichii*), Sallo (*Pinus roxburghii/wallichiana/excelsia*), Lapsi (*Choerospondias axillaris*), Katus (*Castanopsis tribuloides*), phalant oak (*Quercus glauca/Quercus spp*), walnut (*Juglans regia*), and Utis (*Alnus nepalensis*), in the mid-hills from 1,500- 5,000 feet comprising mostly the Churai/Siwalik belt;
- c. Anecdotal evidence point to the fact that Juniper shrub (*juniperus*) and caragana spp, are used as fuel-wood in high mountains. The timber in the higher altitudes or the Mahabharat Lekh is blue pines or Tingre Sallo (*Abies pindrow*).
- d. The combined annual average revenue to the central exchequer from forest products, timber and fuel wood, NTFP and other non-wood products from the fiscal year 2007/2008 till 2012/2013 have been around NRs. 529, 690, 153 Or US\$ 5,296,902 (see Table 1). This gives a fairly good picture of the entire economy of the wood based revenue to the government annually. In the last fiscal year, revenues have "spiked sharply" and have shown a strong upward mobility in revenue collection. It shows, according to the

6 SWAN's pathways for sustainable development in South Asia, The Colombo Declaration, August 2013.  
SWAN's Declaration on "Women, Poverty Reduction, and Sustainable Development", The Thimpu Declaration September, 2014.  
SWAN's "Women and Eco-Tourism for Sustainable Development", Thimpu, Bhutan August, 2014.

Department of Forests (DOF) records a record of NRs. 830,780,744 or US \$ 8,307,807 annual revenue collection.

These figures may show impressive growth and indicate a general trend for the forest' based economy, including the NTFPs which are covered in Table 2.0. However, it must be noted that in terms of regional and global comparison, such an amount would be tantamount to a modest family owned lumber company's annual budget in the major timber producing economies of the world. This just goes to show that Nepal has a long way to go in timber trade, marketing and value addition including moving on to second generation economic or commercial forestry.

The actual economy and size of forest products in reality could be much higher than the US \$ 5-8 million calculated in this table based on the DOF "revenue" only data (see Table 1 & 2 below). The "formalism" and "mathematical model" used to calculate the near-exact wood based economy of Nepal may/will have to factor in gain to "value chain addition," actual market price and relevant value chain addition through processing, semi-processing, transportation, storing and branding. In the end, it is probable that the government revenue earning formulated at certain per cent point of say 13 to 15 per cent and up to 25 per cent for CF products may not be wholly adequate to represent the real economy of wood based products. The-back-of-the-envelope rough and ready approximation may be 4-6 times the revenue figures cited by the Department of Forests (DOF) statistics.

**Table 1.0: The Aggregated/ Disaggregated average approximation of timber, fuel wood and NTFP economy in Nepal's Forest**

Forest Category	Average Revenue (1USD = NRs. 100)		Remarks  Fiscal Year (Timber and Fuel wood combined)
	NRs.	US \$	
Aggregate Average All Forest	529,690,153	5,296,902	2007/2008 till 2012/2013
Aggregate All Forest	830,780,744	8,307,807	2012/2013
Average National Forest (Hills)	7,533,711	75,337	2007/2008 till 2012/2013
Avrg. National Forest (Tarai)	342,192,672	3,421,927	2007/2008 till 2012/2013
Avrg. Total Tarai Forest	349,726,583	3,497,264	2007/2008 till 2012/2013
Average Community Forest	39,193,274	391,933	2007/2008 till 2012/2013
Average Private Forest	63,406,919	634,069	2007/2008 till 2012/2013

Source: Extrapolated from the publication *Hamro Ban* (DOF) Fiscal Year 2069/70 BS (2012/2013 AD)

Likewise, the common popular non-timber forest products (NTFPs) are mainly; *Yarsha gumba* (*Cordyceps sinensis*), *Jatamansi* (*Nardostachys jatamasnsi*), *Chairato* (*Swertia chiraito*), *Kurilo* (*Asparagus racemosus*), *Timur* (*Zanthoxylum armatum*), *Tejpat* (*Cinnamomum tamala*), *Tejbokra* (*Cinnamomum tamala*), *Tendu paat* (*Diospyros embryopteris*), *Pine needles*, *Panchauwle* (*Dactylorhiza hatagirea*), *Padamchaal* (*Rheun emodi*), *Pakahan bedh* (*Bergenia ciliate*), *Naghibeli powder* (*Seelahare jhyau*), *Pipla* (*Piper longum/peepuloides*), *Ritha* (*Sapindus mukorossi*), *Sugandha kokila/walla* (*Valeriana jatamansi/Wllichii*), *Satuwa* (*Paris polyphylla*), *Majitho* (*Rubia manjitha Roxb.*), *Kaulo bark* (*Machilus odoratissima/duthiei*), *Kala dana*, *Kutki* (*Picrorhiza scrophulariacfolia*) and mushrooms, etc. In aggregate, the NTFP has provided the exchequer with around NRs. 256 million in the fiscal year 2011/2012.

**Table 2.0: Disaggregated average approximation of NTFP economy in Nepal's Forest**

Non Timber Forest Products (NTFP)	Average Revenue (1USD = NRs. 100)		Remarks  Fiscal Year (Timber and Fuel wood combined)
	NRs.	US \$	
Aromatic & Medicinal Plants	221,783,062	221,783	2007/2008 till 2012/2013
Forest Resources such as sand, stones, aggregates etc.	35,185,268	351,853	2007/2008 till 2012/2013

Source: Extrapolated from the publication Hamro Ban (DOF) Fiscal Year 2069/70 BS (2012/2013 AD)

There is also a growing demand for construction materials found in the forest such as stones, aggregates/pebbles and sand. The commercial extraction of *lokta* (Daphney shrub bark) for paper, pine *khoto* (resin) for resin/turpentine industries, *allo* nettles and hemp for fiber and fabric is also growing. Similarly, there is also the potential for extracting ornamental plants for the floriculture industry and aromatic plants for perfumery and other household applications. Food items such as nettles, wild berries, walnuts, water cress, and wild rock honey are also growing and have the potential for substantial earnings for the local communities, CFUG members as well as revenue for the State.

#### 4.0 CF Products for potential Internal Market

A recent baseline survey research study carried out in 12 CFUGs in Kavrepalancowk and 12 CFUGs in Lamjung pointed out the following tree and fodder species, *Saal* (*Shorea robusta*), *Chilaaune* (*Schima wallichii*), *Katus* (*Castanopsis tribuloides*), *Utis* (*Alnus nepalensis*), *Dudhilo* (*Ficus nemoralis*), *Kutmero* (*Litsea monopetala*), *Sisso* (*Dalbergia sissoo*), *Bakaino* (*Milea azaderach*), *Thotne* (*Ficus hispida*), *Padke* (*Myrsine spp*), *Timilo* (*Ficus auricolata*),

*Botdhyangro (Anogeissus latifolius), Sallo (Pinus wallichiana), Lapsi (Choerospondias axillaris), Rudrakshya (Elaeocarpus sphericus), Paiyu (Prunus cerasoides), Bans (Bamboo spp) and Bhimsenpati (Buddleia asiatica) etc*<sup>7</sup>.

The semi-hardwood varieties, such as *Utis (Alnus nepalensis)*, can be used for timber/lumber and fiber for construction, paper, pulp, woodcarvings and plywood industries. The fodder trees can be utilized for improving the production of livestock goods such as milk, dairy products, meat, farm yard manure and even hide/leather and bones for various minerals and artifacts such as buttons and statues.

Nepal's sub-tropical climatic conditions are ideal for mass production of biomass, twigs, shrubs and small trees. These in turn can be utilized on the long run to produce pellets, bio-briquettes, bio-char and wood chips for co-generating electricity together with a combination of hydroelectric or diesel generated thermal electricity. This will help augment the supply of electricity and ensure sustainable management and harvesting of biomass based energy from the community forest. The leafy biomass can also be turned into vegetative/organic manure through compositing and EM (effective micro-organism) technology, thereby, adding fertility to the soil.

In the longer term and on more ambitious basis, Nepal's community forests can produce cellulosic bio-diesel and "methanol oil" to supply energy for both industrial requirements and fuel for automobiles, power generators and other energy consumption needs. In the short run, Community forests and private forests, together with the evolving leasehold and partnership contract forest, can supply much needed fuel wood and timber to the urban towns and municipalities. Imagine the sheer volume of raw timber that is needed in the housing sector in burgeoning growth of 200 big and small towns of Nepal. Together with fuel wood, the demand for wood products, timber and furniture, constitute an effective demand for market led commercialization of forestry products in Nepal's domestic market. In the absence of domestic supply these products are currently imported into the country thereby draining much needed foreign currency reserve. The current on-going market research and value chain analysis of timber trees from community forests reveal that the community members from 24 forests selected from Kavrepalanchowk and Lamjung would like to develop and market the following trees for potential market.

### **5.0: Timber Trees for Potential Market in Kavrepalanchowk and Lamjung**

Reviewing the above trees that are currently available in 24 CFUGs in the two districts, the frequently mentioned tree species that are available for market are *saal, sallo, Utis, chilaune, champ, tooni and katus*. These mixed species are also representatives of most timber or fuel-wood trees found in the middle hills of Nepal.

<sup>7</sup> Baseline Survey Research Study "Enhancing Livelihood and Food Security from Community and Agro-forestry in the mid-hills of Nepal", May 2014, EnLiFT/ACIAR, SEARCH-Nepal.

S.N.	Sites	Timber Species Ranking	Optional
1.	Dhungkharka	1. Uttis, 2. Salla (thingre, gobre)	Lapsi found in lower belt
2.	Chaubas	1. Salla 2. Uttis 3. Chilaune 4. Chanp 5. Paheley	Lapsi found in lower belt
6.	Mithinkot	1. Sallo (Khote sallo) 2. Saal 3. Tooni 4. Uttis 5. Chilaune	Lapsi found in lower belt
6.	Dhamilikuwa	1. Sal 2. Chilaune 3. Uttis/Sissoo, 4. Kattus	
7.	Jita Taksar	1. Sal, 2. Chilaune, 3. Katus, 4. Karang (Turmeric color), 5. Tooni	
8.	Nalma	1. Sal, 2. Utis, 3. Chilaune, 4. Chanp	

### 5.1 CF Products for potential External Markets

Currently, it is rather unfortunate to see lumber, fiber, furniture and fixtures made of wood coming to Nepal from China, Indonesia, Malaysia, India, Pakistan, Myanmar, Thailand and even Vietnam. Although, Nepal is well known for its re-generation and conservation of over a third of its forest through community forestry, yet it has not been able to compete, harvest and sell wood and wood products in the neighboring Asian region. Potential exists to sell raw timber to Tibet (China) and India through legal channels and obtain revenues for the government's central exchequer. Furthermore, Nepal can rapidly upgrade and obtain the latest technology in engineered wood products (EWP) such as finger joints, medium density

fiberboards (MDF); fittings, fixtures, moldings, furniture and sell these products to overseas clients and countries. The woodwork and woodworkers of the Kathmandu Valley are famous for its craftsmanship.

Observing and looking at the intricate, complex and highly skilled woodworks of the houses and palaces of Kathmandu, Bhaktapur and Lalitpur, one can easily imagine the skills possessed by Nepali woodworkers and carpenters. Such wealth of knowledge and skills in woodwork must be put to good use and export Nepali wood products to both Asian and global markets. If IKEA, a Swedish furniture and woodwork multi-national giant can sell its “minimalist designed,” geometric shaped furniture throughout the world; then one can imagine the wealth of potential that Nepal has for popularizing its wood products and furniture in the global marketplace. It will create employment, revenue, brand name and fame for Nepal. After all the word Kathmandu itself denotes a *Mandap* and a city that was built on the edifice of the famed Chhanp (*Michelia champaca*) wood.

Engineered wood products (EWPs) for Nepal can also rapidly adapt new technologies and manufacture the orientated strand board (OSB) for multiple uses in interior decorations and partition works. One only needs to look into the “imported ceilings” of the National Planning Commission (NPC) and the Prime Minister’s Office (PMO) in Singha Durbar to see how such application of “OSB” technology can be adapted and commercialized in Nepal. Nepal can manufacture its on “OSB” and export to the global market.

## 6.0 Non Timber Forest Products (NTFPs - What are they and what can be done?)

The Department of Forest lists 164 varieties of NTFPs (herbs and aromatic plants) for revenue generation. Among them the following are found commonly in the mid-hills and mountains in Nepal. These are *Yarsha gumba*, *Jaatamasi*, *Chairato*, *Kurilo*, *Timur*, *Panchawle*, *Sugandha kokila* etc.

According to the recent baseline study, the NTFP (herbs and aromatic plants) found in 24 CFUGs of Kavrepalanchowk and Lamjung are Neem (*Azadirachta indica*), Tejpaat (*Cinnamomum tamala*), Bojho (*Acorus calamus*), Allainchi (*Elettara cardomomum*) and Timur (*Zanthoxylum armatum*)<sup>8</sup>.

Solicited to provide their preference for which type of NTFPs and agro-forest that the farmers wanted to plant? They replied in the following manner in order of preferences, i.e. *Pakhuri* (*Ficus glaberrima*); *Ghans* (*Imparata spp*); *Badahar* (*Artocarpus lakoocha*); *Ipil-Ipil* (*Leucaena spp*); *Allainchi* (*Elettara cardomomum*); *Suntala* (*Citrus chyracarpa*); *Litchi* (*Litchia chinensis*); *Aap* (*Mangifera indica*); *Naspati* (*Pyrus communus*); *Kagati* (*Citrus spp*); *Bakaino* (*Milea azaderach*); and *Kimbu* (*Morus alba*) etc.

8 Baseline Survey Research Study, 2014 ;( EnLiFT/ACIAR) “Enhancing Livelihood and Food Security from Community Forestry and Agro-Forestry in the mid-hills of Nepal”.

The Nepal Himalayas are perhaps the only remaining source where so many NTFPs are still found in abundance. The Community forests can preserve these precious biologically diverse resources (guess-estimated around 7,000 plants) and put them to good use<sup>9</sup>. Currently, less than one per cent of this vast potential is turned into marketable products such as *sancho*, *sanjavini*, *chawan pras*, *chooran* and other Ayurvedic medicines and products. Vast potential exists in this sector to turn this into a “green gold” for Nepal. One needs to go back and research as far as the *Vedas* and *the Upanishads* to fathom the value of these plants for medicinal, aromatic and herbal beauty products.

The 27 million people of Nepal are an internal market for *Ayurvedic*, beauty and health products. The one point three billion people in India and China are the external market for Nepal. Likewise, Ayurvedic industries, spice industries and health product markets are vast in Nepal as well as for Tibetan medicine in Tibet, China and Nepal itself. The traditional “*Amchhi*” doctors in the Kathmandu Valley and the northern districts of Nepal are also a great source for NTFPs found in the community forests<sup>10</sup>.

### **7.0 Conceptual Management Challenges: Moving from the first to third generation commercial forestry in Nepal.**

Worldwide substantial problems were reported in implementing business plans for commercializing community forestry. Among the constraints were:

- 1) Lack of financial capital, limiting investment, notably in improving product quality;
- 2) Declining tree and forest resources, leading to declining supplies of NTFPs;
- 3) A shortage of outlets and wholesale buyers Problems in storing products, resulting in gluts on the market, depressing prices Lack of skills in processing;
- 4) Large price fluctuations, with limited access to useful market information;
- 5) Transport problems, i.e from the place of harvest to the village and further along the supply chain to to major markets;
- 6) Limited experience in enterprise organization among small producers and community members<sup>11</sup>.

9 Nepal National Conservation Strategy, IUCN/GoN, 2002, Kathmandu, Nepal.

10 *Amchi* system and *Amchi* doctors are found in the mountainous region of Nepal where they follow traditional healing based on *lamaistic* traditions and medicines made from herbs. The *Amchi* system is based on traditional Buddhist Tibetan medicine.

11 Commercializing products from community forests, Don Gilmour, October, 2012, Draft Proposal for discussion with forest professionals

### 7.1 Selection and Development of Commercial Tree Species

The Department of Forest has a tree improvement section and a tree improvement programme. It also has improved tree orchards in most of the regions and eco-climatic conditions of Nepal. It is now a right time to put into “silvicultural practice” active forest management to encourage commercial cultivation practice of 5-6 improved trees such as *Chhanp*, *Chilauni*, *Utis*, *Sisau*, *Sal* and *termnelia* spp., for commercializing in national, community, leasehold and private forests. This has to be carried out in professional joint ventures together with public and private efforts in a new government policy of Private-Public-Partnership (PPP) approach.

### 7.2 Native versus the Exotic choices (SWOC) debate

There is always a running debate as to what is preferred and good for sustainable management of the forest. Is it the “old growth” original “native forest” or the introduction of economically viable tree species? Although, monocultures are somewhat abhorred the world over currently, for a more diverse forest, exotic species have a place of their own. The Kathmandu valley was once a verdant green arboreal garden of biodiversity. With the draining of the waters of the valley and introduction of settled life, one witnessed over eons, the cutting down of most of the valleys *Chhanp* and other hardwood variety of trees such as *Katus* and *Chilaune*<sup>12</sup>.

During the Rana period, one witnessed a plethora of exotic trees, introduced into the Kathmandu Valley. If one takes a bicycle tour of the valley and stops at interesting places such as the Narayanhiti Palace Museum, the Swayambhunath forest, Pashupati forest; Changu Narayan, Ichangu Narayan, Buddanilkantha, Godavari, Pulchowki, Kakani, Bajrabarahi and on the edges of the Valley floors, one notices many varieties of exotic trees growing. They range from monkey puzzle (*Aurucana* spp) to eucalyptus, poplar, silver oak, bottlebrush, weeping willows to avocados etc. Some of them have been here for over 200 years or more. Many of the ornamental trees and shrubs have escaped into the wild and have turned into invasive plants such as the *banmaras* and especially the lantana spp. However, many have adapted well and their health, form, shape, girth and size show that they are viable candidates for plantation, management and propagation even in community forests, leasehold forests, private forests and road side plantations for commercial purpose.

In recent years there have been a glut of plantations in private lands with species such as paulownia (*Paulowniaceae*) trees, poplar (*populous tremula*) and willows (*Salix Babylonia*) for either ornamental or commercial purposes. This growth in “urban forestry” shows that a number of such exotic species can be cultivated and grown for commercial benefit in the community, leasehold and private forests. The national forests already have experience the growing of exotic species such as the Mexican pine (*Pinus patula*); *Eucalyptus camuldulensis*; *American pine (Pinus Americana)* and teak (*Tectona Grandis*) or Japanese black pine (*Cryptomeria japonica*). The current imported timber flooding the Kathmandu market with

12 Kathmandu the Eternal Kumari, Naraya Prashad Shrestha, Jore Ganesh Press, Kathmandu, 1996.

“*Malaysian sal*” and “*Indonesian hardwood*,” show that there is potential to grow exotic species in Nepal in order to *substitute import* of wood from abroad.

### 7.3 Agro-forestry products from CF

Although, current Forest Act 1993 and its accompanying Regulatory Frameworks and bye laws and regulations (1995), are inimical to growing agro-forestry products in community forest, it would make sense to experiment incrementally with growing of fruits, flowers and honey bees. Asked what they would prefer to grows on agro-forestry land, both private and common, the farmers said they would prefer to plant Suntala (*Citrus chyracarpa*), Kera (*Musa sapientum*), Mewa (*Carica papaya*), Bhogote (*Citrus maxima*), Nibuwa (*Citrus spp*), Aap (*Mangifera indica*), Katahar (*Ananas comosus*), Aaru (*Amygdalus persica*), Amba (*Psidium guajava*), Naspati (*Pyrus communus*), Litchi (*Litchia chinensis*), Khurpani (*Prunus armeniaca*), mushrooms and keep bee hives for honey.<sup>13</sup>

Experimentations are being carried out currently in leasehold and collaborative forests to enhance food security, livelihood, income and employment by the DOF (CDF) and the User Groups. It may be opportune to experiment similar income generating and commercial farming of products in the CFUGs where it is feasible. One could begin with keeping aside (2-5 per cent) of the CF land to allow the CFUGs to grow agro-forestry products including fruits, honey bees and medicinal plants (NTFPs) for the market, as is done commonly on other parts of the globe. This would provide valuable learning opportunities for the future especially when the forest is being lauded as a natural asset for creating welfare and wealth for the forest dwellers and users in Nepal.<sup>14</sup>

## 8.0 Policy, Planning, implementation and Regulatory Framework(s)

Community forests in Nepal, currently numbering 18,700 CFUGs and counting, have seen rapid growth, development and maturity in the past two decades under various Forest Acts, legislations, regulatory frameworks, rules and regulations. The major departure being the Forest Act 1993 and the bye-laws, plus regulatory frameworks that followed. These legal tools have been useful to promote a variety of forest management regimes in Nepal from national, experimental, community, leasehold, and partnership to private forestry. The recent baseline research study carried out by EnLiFT/ACIAR (Enhancing Livelihood and Agro-forestry and community forestry in the mid-hills of Nepal) reveals a number of constraints for growth, development, conservation, utilization and benefit sharing of community forest products. Some of the perceptions that the farmers articulated were severe limits on the use of forest products from community forest; no clear rules and regulations on extraction and harvesting from forests and cumbersome procedures for obtaining permits, among others.

13 Baseline Survey Research Study, 2014 ;( EnLiFT/ACIAR) “Enhancing Livelihood and Food Security from Community Forestry and Agro-Forestry in the mid-hills of Nepal”.

14 The Society of American Foresters (SAF) estimates that around 10 million small family owned woodlot farmers provide much of wood and wood products including NTFP, fruits and nuts to the nation (SAF) Annual Meeting, Eugene, Oregon 2012.

These constraints in turn create market distortions such as rent seeking, undue influence and abuse of authority on the part of contractors, forest officials and CFUG office bearers. Furthermore, an overwhelming majority of households reported that they were unable to sell the CF forest products including timber and fuel wood due to various reasons. These were inability of the rules and regulations to usher an enabling environment for commercializing CF products; inability of the CFs to produce adequate amount of products for sale outside the CFUGs difficult transportation; lack of know-how and technology for efficient, advanced and easy harvesting. Furthermore, the CFUGs themselves have either not en-vised commercializing their forest products in the management plans/ (OP) or have not managed the utilization of forest products in a mutually beneficial manner for the member households, especially the poor, women, *Janajatis* and disadvantaged *Dalits*.

These reasons point to the opportunity for examining the existing legal mechanisms and tool kit of regulatory framework under the Forest Act 1993 and “tease out” the barriers for making efficient and effective use of CFs and benefits to the CFUG member households. A “dispassionate and scientific” constraint analysis of the regulatory framework(s) will enable the government and forestry professionals including stakeholders such as Federation of Forest Users Group-Nepal FECOFUN “cull-out” a number of contradictory and barrier-causing legal provisions and amend them such that it becomes pro-poor; pro-economic; pro-commercialization and pro-CFUG member household friendly. This in turn will help the forest as a whole and the nation to promote sustainable forests and benefits from its economic returns. It will also allow for optimum utilization of potentials from forests timbers, fuel-wood, biomass and NTFPs.

## **9.0 Conclusions and Forward looking recommendations**

Over the past few years and especially after the introduction of the multiparty political system in Nepal since 1990, with its more forward looking democratic civic policies, liberal socio-economic and human rights approach based on the rule of law – have allowed forests to become resurgent in Nepal. Forest area has bounced back from a low of 29 per cent in the early 1990s, to a high of approximately 40 per cent currently. This development augurs well for Nepal. However, despite these impressive figures in Nepali Rupees 83 crores (NRs. 830,000,000) revenue for the central government exchequer in the last fiscal year; in US dollar terms it is just over US \$ 8 million. This is less than a turnover of a family owned modest enterprise of say a lumber trading house in the US state of Oregon called Parr Lumber. Hence, tremendous potential exist to improve the marketing and sale of timber, fuel wood and NTFPs from Nepal’s forests.

Likewise, NTFPs with less than a quarter million US\$ also have the tremendous potential for growth and development. They can be marketed in Nepal in the food, beauty and traditional *Ayurvedic* medicine industries. It has huge market in India and equally huge market in China

for both health food, traditional medicines and in the spices and other edible industries. In order for the forestry sector to take advantage of all these potential markets, the forestry sector in Nepal has to view and approach this important “industry” with a new paradigm which considers a “systems thinking” and “systems approach”. Forests and the revenues generated from them must be viewed as a one continuous spiral of ever growing circles. A web in which everything is connected such as the CFUG members, distant users, and the total natural resources potentials of Nepal’s forest. This has to be overlaid with an enabling template of “interdependent and interconnected enabling environment” in the form of:

- (a) good forward looking policies, plans, programs and regulatory framework;
- (b) good institutional models including (civic, market and state);
- (c) good models of sustainable forest management including harvesting, transportation, storage, seasoning, treatment, processing and manufacturing; plus
- (d) good market mechanisms with well developed value chain/value chain analysis which includes forward and backward linkages, brokerage firms, finances and lumber companies as intermediary traders; and
- (e) In Quality assurance and buying consumer confidence in the international market, green wood certifications with recognized wood brands and marks such as SFI (Sustainable Forest Institute) or SFM (Sustainable Forest Management) certifications - can also be obtained for forest products.

At its best and strongest, the forests of Nepal in general and Community Forests in particular, have the potential to usher improved life situations for every Nepali citizen and guarantee income, livelihood and employment, food security and human happiness.

## Reference

- EnLiFT/SEARCH-Nepal 2014. Baseline Survey Research Study, Kathmandu, Nepal.
- Department of Forest, *Hamro Ban*; Monthly Publication, Fiscal Year (2009/10 – 2012/13). Kathmandu, Nepal.
- Department of Forest, *Hamro Kalpa Briksha*; Monthly Publication, No.260 – No. 275, Kathmandu, Nepal.
- Gilmour Don et. al, October 2012. *Commercializing Products from Community Forests*, Draft Proposal for discussion with forest professionals.
- IUCN/GoN, 2002. *Nepal National Conservation Strategy*. Kathmandu, Nepal.

South Asia Women Network, August 2013. *SWAN's Pathways for Sustainable Development in South Asia*, The Colombo Declaration.

Tamang, Deepak Dorje, 13 -15 May, 2014. *Democracy, Inclusive Good Governance and Sustainable Development for Women of South Asia*. SWAN, Kathmandu, Nepal.

A.K. Howland and P.Howland, May, 1984. *A Dictionary of the Common Forest and Farm Plants of Nepal*. Edited by Forest Research and Information Center, Forest Survey and Research Office, Department of Forest, Kathmandu, Nepal.

Dr. S.M. Amatya et al., 28-29 November, 2013. *Women in AgroForestry: Proceedings of an International Seminar*, Sponsored by Department of Forest, Nepal/International Union for Forest Research Organisation (IUFRO), Vienna, Austria. Organized by Shtrii Shakti and SEARCH-Nepal.