

NTFP Sub-sector in Karnali, Nepal: Opportunities for Leveraged Intervention for the Benefits of Local Communities

By Bhishma P. Subedi
Coordinator, ANSAB
(ANSAB and CBED/CECI, Nepal)

INTRODUCTION

NTFPs are an important part of the Nepalese economy

These products were previously an understudied and neglected resource in Nepal, despite their multi-million-dollar export earnings potential, importance to poor populations, and significance to biodiversity conservation

Every year, 10,000 - 15,000 MT of NTFPs are harvested in the Middle Hills and High Mountains of Nepal

The value of these NTFPs, which are almost all sold in India, is US\$ 8.6 million per year

Of this amount, roughly 15-20% is believed to be from Karnali

A preliminary study was done as a first step towards strengthening the overall marketing capacity of NTFP harvesters, FUGs, local traders and processors in Jumla and the rest of the Karnali zone

The study was sponsored by HMG/N, NARMSAP and CIDA and conducted by ANSAB and CBED/CECI

STUDY OBJECTIVES

To increase stakeholders' knowledge about the Karnali NTFP sub-sector, especially its marketing aspects

To identify and analyze main market channels, their participants and their respective functions, along with the quantity estimates, marketing margins and profit distribution

To determine issues for intervention and further investigation

KARNALI: SOCIO-ECONOMIC CONDITIONS & THE NTFP SUBSECTOR

See Chart 1. Map of Nepal and Karnali

One of the most remote areas of Nepal with the lowest “Human Development Index” (HDI)

Population has a low literacy rate, poor economic and health conditions, very limited access to services, lacks basic infrastructure, and suffers from low agricultural productivity

Rich in biodiversity: Karnali is an area of high floral diversity, with distinctive vegetation, including many internationally traded plant species

Many NTFPs are commercially traded as well as used for subsistence

METHODOLOGY

Followed a subsector analysis methodology for the Karnali NTFP sub-sector

The study period: November 1998 - January 1999

The process involved:

- Formation of the study team and development of the study design and the plan of work
- A brief review of literature
- Development of data collection tools: checklists, sub-topics, product samples, etc.
- Selection of study sites:
 - Jumla district for the field visit in the Karnali zone, as it is the most accessible district
 - Other study sites along the marketing routes followed by the products: Nepalganj, Krishnanagar and Kathmandu in Nepal, and Lucknow, Kanpur, Kannauj and Delhi in India
- Informal interviews with:
 - FUG members, NTFP harvesters, village traders, airport traders, processors, local healers and farmers, as well as the DFO and representatives of the District Development Committee (DDC) and local banks (ADB/N and RBB) in Jumla
 - NTFP traders, processors and other organizations involved in the NTFP sector in the selected cities of Nepal and India
- Participatory selection of NTFPs for the investigation
- Development of a matrix of the NTFP sub-sector functions, participants and technology and preparation of a preliminary sub-sector map
- International market assessment: contacted about fifty companies and business associates of study team members in Europe, Japan, USA and Canada

Limitations:

- Reluctance of Delhi traders and sub-sector traders to provide information on markets, prices and products
- Secretive transactions for several NTFPs
- Requirement of international companies for giving information on prices, volumes and markets - beyond the scope of the present study

IDENTIFICATION OF THE SUB-SECTOR AND NTFP SELECTION

The selection of NTFPs for investigation was completed in Jumla with the participation of local actors and based on the following criteria:

- Abundance of resources with potential for harvesting in commercial quantities
- Potential for sustainable harvesting, domestication and cultivation on private lands
- Sufficient economic value to attract local participation
- Established market demand
- Potential for adding local value through improved trade and processing
- Harvesters' preference (social factors)

Table 1. Selected NTFPs for the Investigation

NTFP	Scientific Name	NTFP	Scientific Name
Atis root	<i>Aconitum heterophyllum</i>	Jatamansi root	<i>Nardostachys grandiflora</i>
Bhutkesh	<i>Jurinea dolomiaea</i>	Kaladana tuber	<i>Eulophia spp.</i>
Bojho root	<i>Acorus calamus</i>	Kutki root	<i>Picrorhiza scrophulariiflora</i>
Gutchichyau	<i>Morchella conica</i>	Padamchal root	<i>Rheum australe</i>
Jatamansi oil	<i>Nardostachys grandiflora</i>	Sugandhawal root	<i>Valeriana jatamansii</i>

REGULATORY & INSTUTIONAL ENVIRONMENT

National Regulation

Perhaps the best policy and legislative framework for NTFP utilization in Nepal among all developing countries

To encourage value added in Nepal by providing artificial protection for Nepali processing businesses, against their Indian competitors:

- Two species banned for collection: Panchaule (*Dactylorhiza hatagirea*) and Yarsagumba (*Cordyceps sinencis*)
- Eight species banned for export in their unprocessed form: Jatamansi, Sarpagandha, Sugandhakokila, Sugandhawal, Jhyau, Silajit (a mineral), Talispatra and Lauth Salla

The definition of processed form?

Procedure of fixing the royalty rates are not clear

Table 2. Legal Steps for NTFP Collection, Trade and Export

Raw Material		Jatamansi Oil	
Requirement	Issuing Agency	Requirement	Issuing Agency
Collection Licence	DFO/FUGs	Collection Licence	DFO/FUGs
Royalty Payment	DFO/FUGs	Royalty Payment	DFO/FUGs
Release Order	DFO	Product Certification	DPR
Export permission	DFO	Certificate of Origin	FNCCI/NCC
Export Licence	Department of Industry	Export Licence	Department of Industry
Export Duty	Customs, Nepal	Export Duty	Customs, Nepal
Import Duty	Customs, India	Import Duty	Customs, India

Source: HMG/N (1995), Forest Regulations No. 11 (2 and 3) and 13 (1 and 3).

Implementation of Rules and Regulations

At the district level, the DFO is responsible for implementing the forestry legislation; the DFO office holds several roles that can, at times, be contradicting each other

In practice, the DFO issues the NTFP collection licence to traders who can produce an income tax certificate, not to harvesters; traders holding these licences are able to strongly influence prices if they can collude, since harvesters can only sell these plants to one of them

The DFO rangers have difficulties correctly identifying NTFPs because they are often referred to by various local names

The transport permit, known as the “Release Order”, is issued by the DFO to the traders and is valid for fifteen days

NTFP harvesters of the Karnali zone generally do not know about the national rules and regulations; most of them believe that all NTFP collection and trade is illegal and hence are reluctant to provide any information about NTFP use, collection and trade

Despite the ban on the export of unprocessed Jatamansi and Sugandhawal, it is public knowledge that significant quantities, the majority in fact, are exported to India each year

Recently, the DDC in Jumla has started imposing a tax on NTFPs and derived products and the VDCs may start doing the same

FUNCTIONS, PARTICIPANTS AND TECHNOLOGY IN THE SUBSECTOR

Subsector matrixes were developed for the following three product groups:

- Raw Medicinal and aromatic products
- Jatamansi essential oil
- Gutchichyau (morel mushroom)

See Chart 2. Sub-sector matrix for the trade of medicinal and aromatic plants

See Chart 3. Sub-sector matrix for the trade of Jatamansi oil

See Chart 4. Sub-sector matrix for the trade of Gutchichyau

MARKETING CHANNELS AND TRADE POTENTIAL

See Chart 5. Sub-sector market channels for aromatic plants

Table 3. Quantity Traded, Source of Supply and Harvesting Season

NTFP	Volume traded in Karnali (1997/1998)	Other sources of supply	Harvesting season in Nepal and India	Harvesting season in Europe and America
Gutchichyau	6 tons	India, Pakistan, Europe, Canada, USA	February to May	March to June
Jatamansi roots	250 tons	India	August to October	n/a
Jatamansi oil	250 kg	India		n/a
Kutki roots	60 tons	China, India	August to October	n/a
Sugandhawal roots	60 tons	India, Germany	August to October	n/a

Table 4. Potential Markets and Products

Studied NTFP	Derived products	Potential market	Market Demand & Price Trend
Jatamansi root (<i>Nardostachys grandiflora</i>)	Jatamansi oil	Tobacco, food and medicine industries in India / perfume industries in Europe and Middle East	Fluctuating
	Marc	Incense industries in south India	Up
Sugandhawal root (<i>Valeriana jatamansii</i>)	Sugandhawal oil	Perfume industries in Europe and Arab countries	Up
Kutki root (<i>Picrorhiza scrophulariiflora</i>)	Ayurvedic medicine	Ayurvedic companies in India	Up
Gutchichyau (<i>Morchella conica</i>)		Restaurants in Europe	Up

PROFIT DISTRIBUTION AND RISKS

See Chart 6. Pie-diagram showing the distribution of profit margins for four NTFPs in 1997/98

Table 5. Profit distribution for Jatamansi roots, Sugandhwal roots, Kutki roots and Gutchichyau in 1997/1998

Participants	Total Estimated Profit (Rs)	Estimated Number of Actors	Estimated Profit per Person (Rs)
Collectors	8772000	15000	585
Village traders	3422000	30	34,220
Airport traders	12138000	20	606,900
Nepalganj traders	12600000	5	2,520,000
Indian traders	8455000	100	84,550
Total	45387000		

Note: The total profit was estimated after evaluating the total quantity of NTFPs traded in the Karnali zone. It was assumed that for the selected species, Karnali zone was the only supply source for Nepalganj traders and represents 80 percent of the supply source for the concerned Indian traders.

The analysis of profit distribution for four products shows that for the products for which export is legal, the risks related to the trade are much smaller and the trade is less controlled by Nepalganj traders, with more benefits remaining at the local level

THREE IMPORTANT OPPORTUNITIES FOR LEVERAGED INTERVENTIONS

- 1. Increase the sustainable supply of NTFPs by promoting the management and sustainable harvesting of NTFPs by harvesters**
- 2. Explore international market potential and encourage export business to Europe and America before promoting more processing enterprises (for essential oils and Ayurvedic medicine)**
- 3. Revise NTFP related National Policy to support the harvesters and local entrepreneurs**

Increase the sustainable supply of NTFPs by promoting the management and sustainable harvesting of NTFPs by harvesters

Current practices or level of skills for NTFP extraction/harvest and production management are not satisfactory. If the regeneration of NTFPs is not protected, the supply will decrease. In the medium- to long-term, some NTFP species, especially the ones with high commercial value, may become endangered. Therefore,

- Give priority to handing over of NTFP areas to FUGs
- Increase legal awareness and capacity of FUGs
Clarify the following three issues between the DFO and the FUGs:
 - The collection of royalties for NTFPs harvested in community forest
 - The trade of NTFPs by FUGs
 - Management of high altitude NTFPs
- Provide support for the *in situ* management of NTFPs by FUGs
The following steps are proposed to ensure sustainable harvesting by FUGs in community forests:
 - Provide training and conduct educational activities on NTFPs for extension workers and forest users to improve their technical skills on *in situ* management, cultivation and harvesting
 - Select NTFPs: Market Analysis and Development method is recommended
 - Conduct a quantitative assessment of the selected NTFPs in the community forest
 - Identify the best harvesting season and method to ensure the regeneration for the species selected
 - Define rules related to the forest access for NTFP harvesting such as rotational access systems, or by differentiating the rights of primary and secondary users
 - Include NTFP selection, quantitative assessment, rules related to NTFP harvesting access, the season and method in the FUG operational plan
 - As per the law, transfer the right to charge royalties from the DFO to the FUG
 - Support FUGs implement the new rules related to NTFP harvesting in the community forest

Explore international market potential and encourage export business to Europe and America before promoting more processing enterprises (for essential oils and Ayurvedic medicine)

- A very limited profit from the sale of essential oil for local processors
- Lack of market linkages and unstable price trends for Jatamansi oil
- Lack of quality control technology at local processing plants; traders reported the quality of essential oils produced in Karnali is high but uneven

Therefore,

- Explore international market potential
- Encourage export business to Europe, America and the Middle East
- Improve current processing practices
- Improve quality of products as per market demand
- Identify value-adding processing methods for local development

Revise NTFP related National Policy to support the harvesters and local entrepreneurs

Some aspects of the existing regulation are neither in favor of local harvesters nor effective for the conservation of resources. The legislation on NTFP collection and trade affects all NTFP collectors and traders, estimated at over 15,000 persons in Karnali. Streamlining the current application of the legislation and removing some specific counter-productive rules are steps that could benefit the whole sector, and increase government revenue. Therefore,

- Re-examine the ban on the unprocessed export of the key NTFPs; lifting this ban would result into:
 - More competition in Terai
 - More transparency and hence easier monitoring of trade
 - Lower transaction costs contributing more benefits to Karnali harvesters
 - More government revenue
- If ban is maintained, improve the definition of "unprocessed"
- Simplify export regulation
- Develop a clear process and criteria for fixing and revision of royalty rates and implement the process
- Terminate the contract with private party for collection and trade of forest products from community forests at or before the time of handing over
- Add provisions whereby a FUG can use standing biomass of forest as security for getting loan form a financial institution