

Harnessing the Potentials of Biotrade for Transitioning to a Green Economy: A Country Study for Nepal

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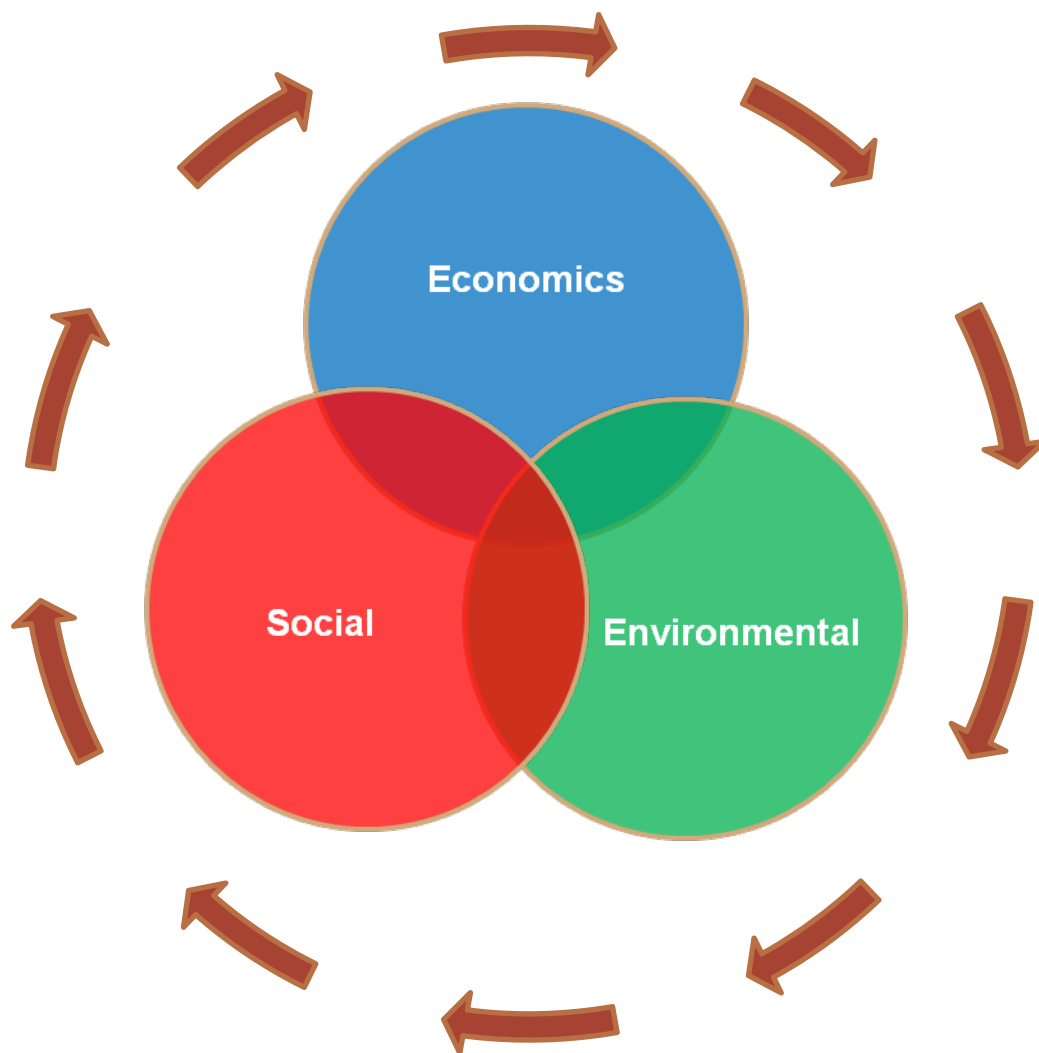
Biotrade: A Tool to Reach Green Economy

- UNEP-UNCTAD defines Biotrade as
 - *“those activities of collection, production, transformation and commercialization of goods and services derived from native biodiversity under the criteria of environmental, social and economic sustainability”.*

ICIMOD's Focus

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Biotrade: Using biodiversity to promote mountain products and services

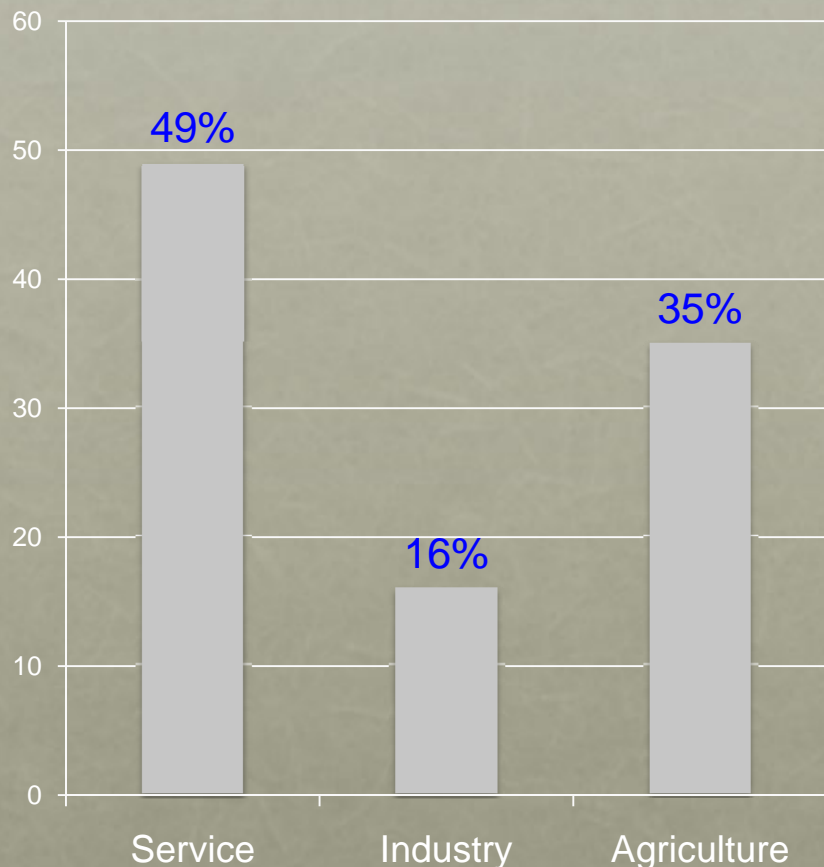
- Interest in biodiversity products is on the rise because of :
 - biotechnology, and changes in consumer behaviour
 - demands of more ‘organic’ and natural products for consumption
 - the growing industrial search for recyclable products,

Why Biotrade for Nepal?

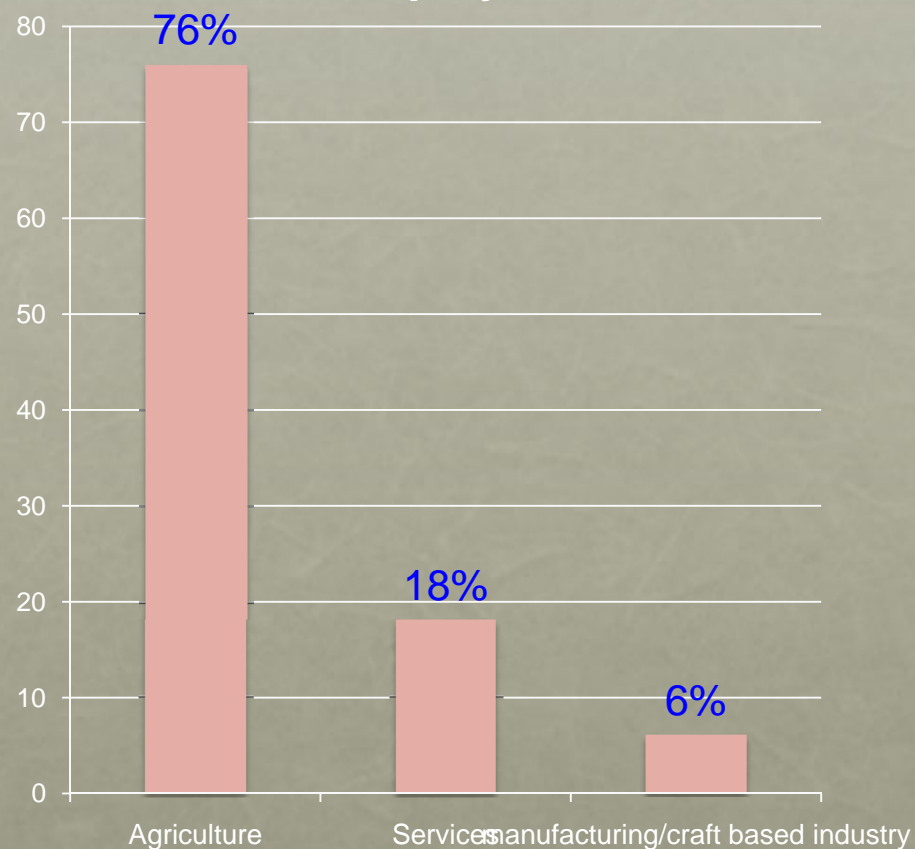
- Nepal's economy is heavily dependent on its biological resources.
- Nepal's climatic variation gives rise to tremendous potential in terms of natural biodiversity of plants and animals, which can be extended to agriculture.
- Nepal lies in a transition zone and is part of one of four biodiversity hotspots in the Himalayan region.
- Forestry is an integral part of agriculture and rural livelihoods. Even the tourism sector is greatly dependent on forests and the natural environment

GDP and Employment in Nepal

GDP

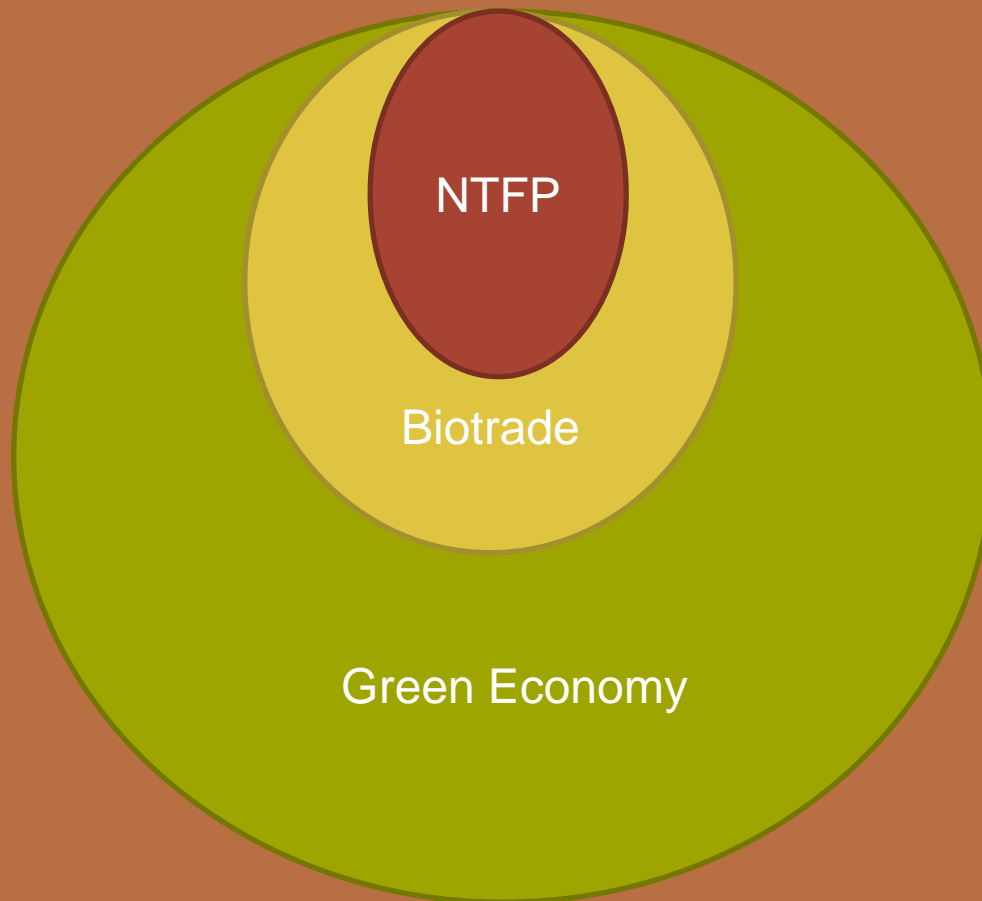


Employment



Percentage GDP and Employment division in Nepal as of 2004

Biotrade: A focus in NTFPs sector



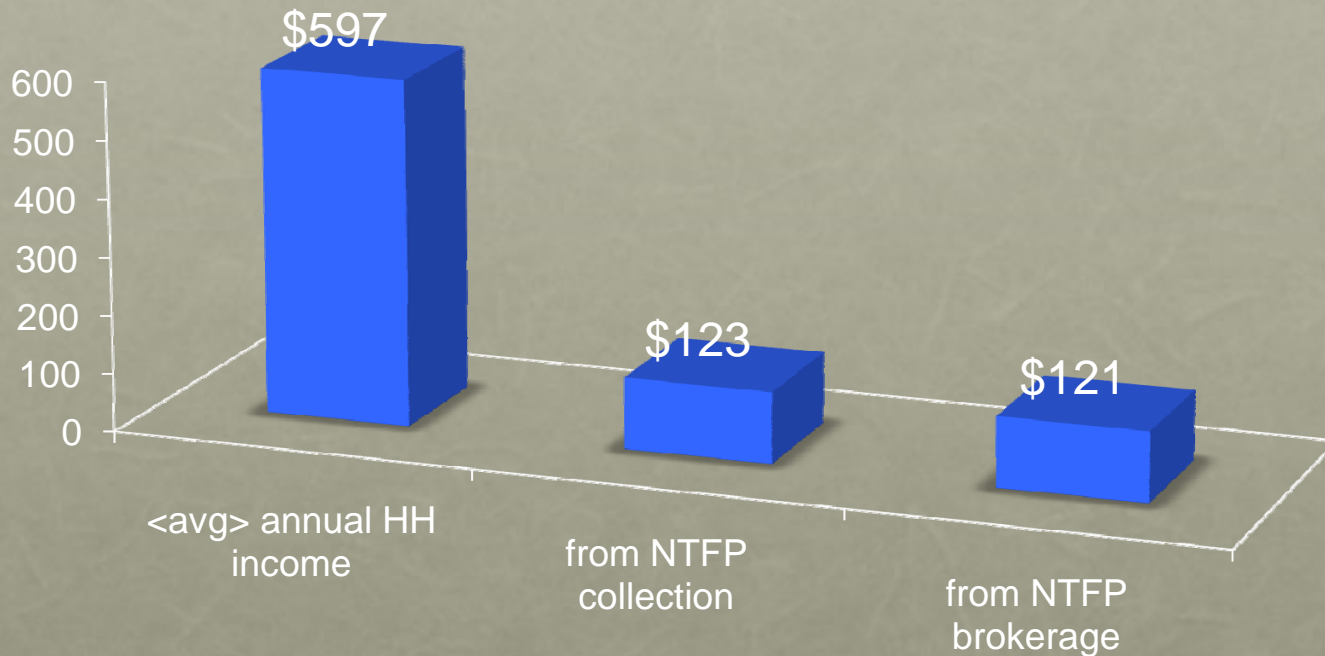
Rationale for Selecting NTFPs Sector

- **Trade prospect:** The term biotrade in Nepal is not always used broadly to refer to biodiversity based products under trade, it is more synonymous with NTFPs and MAPs
- **Focus of government:** It is important to note that the Nepal Trade Integration Strategy (NTIS) 2010 identifies medicinal herbs/essential oil as one of 19 priority sectors for potential export
- **Outreach:** NTFPs have been recognised as a key component of health care and livelihoods of mountain people of Nepal who are marginalized and disadvantaged in all facet of life

A Case : Benefits of NTFPs for Small Households

A Research carried out in 2008 in 8 villages of Khagaalgaun and Syaandaa VDCs situated in upper Humla (Roy 2010).

Average annual household income (in \$)



Findings from a SWOT Analysis of the NTFP Sector in Relation to Biotope Principles

Strength and Opportunities of the NTFP Biotrade Sector

Opportunity of the Biotrade sector in compliance with Biotrade principles

1. Conservation of biodiversity
2. Sustainable use of biodiversity
3. Equitable sharing of benefits derived from the use of biodiversity (economic benefits)
4. Socioeconomic sustainability and Respect for the rights of actors involved in biotrade activities (management, production, and markets)

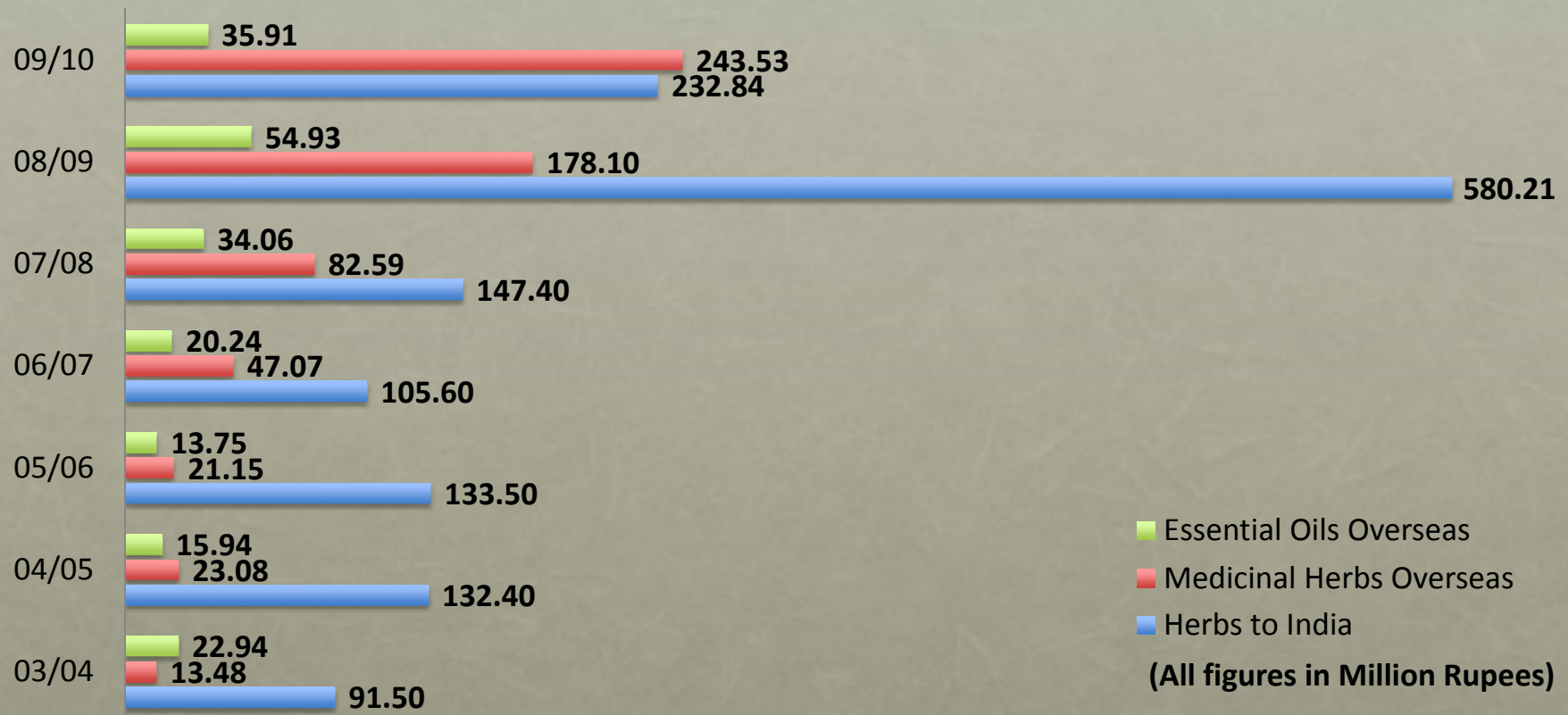
Conservation and sustainable use of biodiversity

- With Nepal's topography, NTFPs are well suited to serve conservation
- NTFPs are important to reduce pressure on the environment and protect biodiversity
- NTFP's can be cultivated on fallow land allowing farmers to use multi-cropping to reap double benefits by maximising the use of limited land
- NTFPs can also be used to produce fuel and gas
- If people are educated about sustainable harvesting practices and their benefits, then unsustainable forest exploitation can be reduced

Economic Potentials and Equitable Sharing of Benefits

- Nepal generates around NPR 2.5 billion (USD 35 million) from the NTFP trade
- Close to 200,000 people derive benefits from MAPs harvesting, processing, and trade (Joshi 2008)
- Exports of medicinal herbs and essential oil amounted USD 11.3 million in financial year 2008/09 (Source: TEPC 2010)
- High value NTFPs are more abundant at high altitudes. Mountain people will receive more benefit
- NTFPs are going also to be economically valuable for their inherent genetic materials and associated benefits in the future

NTFP Exports from Nepal



Source: Trade and Export Promotion Centre 2010

Socioeconomic sustainability & Respect for the rights of actors

- The concept of community involvement in forest management has been deeply embedded in the forest management ethos in Nepal.
- The community forestry through the CFUGs and FECOFUN etc provide a very good platform for respecting the rights of various actors in the biotrade

Constraints for NTFP Biotrade Sector

1. Compliance with national and international legislation and agreements
2. Information and Knowledge
3. Infrastructure and market mechanism
4. Quality standards and certification issues

Compliance with Legislation & Agreements

- Nepal has agreed to international legislations as well as drafted policies of its own for conservation. These policies are however too idealistic due to budgetary and infrastructural restrictions and consequently difficult to implement.
- Implementation plans mostly based on 'assumed' capacity, support, and funds beyond the country's own pool
- Inadequate coordination between two or more institutions

Information and Knowledge

- Unavailability of thorough and dynamic resource database/inventory on NTFPs
 - Including information on their cultivation, post-harvest management, processing, and marketing
- Largely unmapped national and international actors involved in the harvesting of NTFPs across Nepal.
 - Experiences and best practices are hence 'hidden' or not shared.
- Lack of identification and official records of species collected
 - Difficulty in calculating the total annual financial value of the transaction of NTFPs.
- Difficulty in estimation of sustainable supply volume

Infrastructure and Market Mechanisms

- Lack of / inadequate infrastructure, research, and resource mapping
 - lack of roads hinders access to markets
 - potential for a greater volume of NTFPs has not been explored
- Non transparent market mechanisms have led to high prices and attraction of illegal trade and exploitation of the environment

Quality Standards and Certification Issues

- Unorganised value chain for NTFPs in Nepal
 - Unawareness of the quality standards of the exporters and end markets (mainly harvesters at the bottom of the chain)
- Stringent import regulations at International Market
 - Lack of testing laboratories in Nepal (such as certifying labs)
 - Lack of systematic and standardised methodologies in the harvesting and processing of NTFPs make obtaining international certification difficult. (leading to doubts about reliability, traceability, and sustainability)
 - Consequently, Nepal, is forced to export unprocessed NTFPs.

Public Policy, Tariff and Non-Tariff Barriers

- Nepal's national policy objectives do not seem to be properly translated into regulations.
- Current policies and regulatory framework is focused on controlling the extraction, use, and trade of NTFPs.
- The current system of determining royalty rates is arbitrary and rates remain fixed until the rules are changed.
- The NTFPs produced in remote areas are sold through a long marketing channel, which is inefficient and costly from the perspective of the collectors.
- There is no organized market to trade NTFP in Nepal

Public Policy, Tariff and Non-Tariff Barriers

- Inter and intra-ministerial coordination, as well as institutional coordination among the stakeholders is poor.
- Despite the trade agreements between India and Nepal, traders face many issues in transit.
 - India does not open all borders and there are limitations on the seaports available to Nepal. There are constant reports of trucks from Nepal being forced to unload their goods and reload them onto Indian trucks increasing the costs. There are also several undocumented issues in relation to the quarantine of goods and corruption (SAWTEE 2007)

Investment Opportunities in Biotrade

- A comprehensive mapping of NTFP resources and their value chains to understand the potentials has not been done
- Investment opportunities exist to add value at the community level
 - Basic processing around the harvest/collection area
 - Establishment of collection centres at strategic locations
 - Small processing facility for cleaning and drying would drastically increase the quality of the products being traded in Nepal, and, hence, increase the sale value of the product to local communities

Investment Opportunities in Biotrade

- Formation of national level accredited certification body (Forest management unit certification/Organic certification/Fair Trade certification)
- Establishment of equipped accredited laboratories
- Domestication and cultivation of NTFPs
 - The cultivation of MAPs on community and private land is considered to be one of the best ways of conserving biodiversity and generating income and supports process documentation and certification
- Capacity building on collection, maintenance of data on identification, collection/harvesting, processing, and export
- Requirement of infrastructure support for processing
 - Technology, Industry and Technical expertise /skills

Conclusions

- There is abundance of NTFP in forest however country lacks inventory of plants as well as knowledge on sustainable harvesting and use
- Have traditional knowledge of the use of NTFP but needs capacity building to make value added products and have market orientation
- Outreach to the poor and disadvantage but need to build capacity and strengthen horizontal and vertical integrations.
- High value-higher the altitude higher is the value but lack of capital or access to capital to address accessibility problem
- Biotrade and NTFP trade is synonym and has high export potential but unorganized and long market channels with no certification body and accredited laboratories

Main Recommendations

- Proper identification and inventory of NTFPs
- Promote domestication and cultivation of NTFPs
- Capacity building on collection/harvesting, processing, and trade
- Provide/facilitate access to finance for value addition and for enhancing business
- Develop system to ensure and maintain quality standards
- Formation of national level accredited certification body
Establishment of equipped accredited laboratories
- Form 'Legalisation' of biotrade to facilitate trade
- Create organised market channels and market information
- Promotion of responsible business practices

Thank you

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