



Policy Brief

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Improving Rural Livelihoods Through Sustainable Management of Non-wood Forest Products in South Asia

Summary

Non-wood Wood Forest Products (NWFPs) have emerged as one of the most important renewable resources for rural population who depend directly on them for their livelihoods. Sustainable management of NWFPs species is crucial to ensure its future supply to rural households and for improving rural livelihoods. Unsustainable harvesting techniques and over-exploitation of NWFPs due to increasing market demand is threatening its sustainability and the livelihoods of rural communities in South Asia. This policy brief examines the problems of managing NWFPs sustainably and suggests policy recommendations for sustainable management of NWFPs and improving rural livelihoods.

Why is Non-wood Forest Products (NWFPs) important?

The Non-wood Forest Products (NWFPs) are important renewable natural resources for livelihoods and food security for the rural population in South Asia. Over 64 percent of the population in the region lives in rural areas (FAO, 2020), and these rural population depend heavily on NWFPs for their livelihoods in one way or another. NWFPs, in South Asia, include medicinal and aromatic plants, leaves, fruits, seeds, resins, gums, mushroom, honey, lac, bamboos, canes etc (Figure 1). NWFPs form a vital component of people's everyday livelihood, and provides food for households, energy, herbal medicine, raw materials for making houses and animal enclosures, and agricultural tools and implements. Rural communities also use NWFPs for social, cultural and religious purposes. NWFPs are harvested from surrounding environment, grazing lands, forests, woodlands, and natural habitats, and it serves as 'food safety net' during seasonal food shortage brought by extreme climatic conditions, drought, floods, and economic crises. However, excessive harvesting of NWFPs beyond the productive capacity in response to market demands has led to the degradation of NWFPs resources and subsequent decline of resource availability.

Policy Message

- **Develop** enabling policies and regulatory frameworks for sustainable management of NWFPs to ensure a constant supply of its resources.
- **Establish** sustainable management system of NWFPs for sustenance and improving rural livelihoods.
- **Promote** domestication of high value and promising NWFPs species to generate income and reduce harvesting pressure on natural forests.
- **Develop** NWFPs marketing information system to protect rural communities from exploitation and fetch better price for their products.
- **Encourage** to establish small and medium scale enterprises for employment and to get fair price of the products.
- **Build** capacity of rural communities and other stakeholders for sustainable management of NWFPs and improving rural livelihoods.

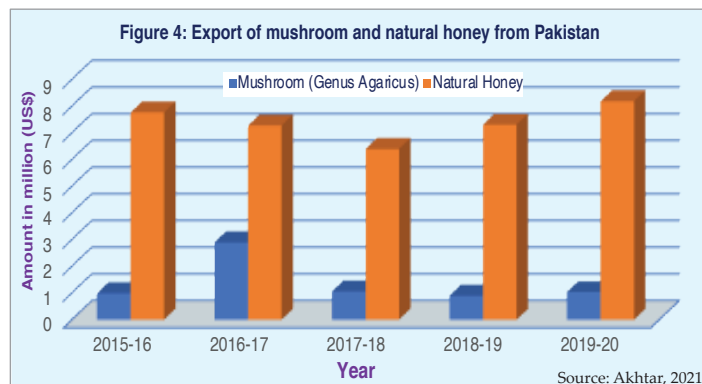
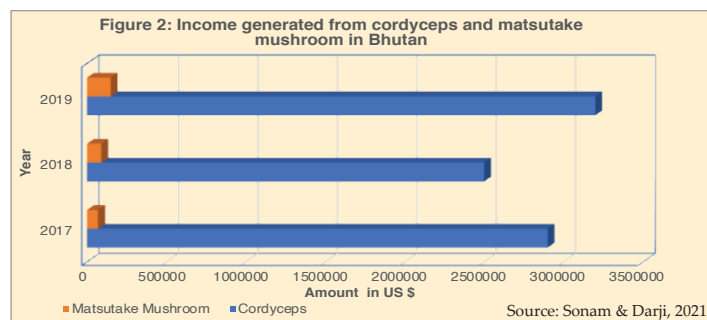
Figure 1: Non-wood forest products



Non-wood Forest Products for improving Rural Livelihoods

The contribution of NWFPs to improving rural livelihoods and alleviating poverty is increasingly recognized regionally as well as globally. In South Asia, rural households themselves consume about 60 percent of NWFPs harvests, which indicates that it is an important source of food and other subsistence needs. A series of studies on NWFPs conducted in South Asian region revealed a pivotal role of NWFPs in improving rural livelihoods and contributing to biodiversity conservation. It contributes significantly to the livelihoods of rural communities in all countries of the region in terms of household food security and nutrition, additional employment and income, and opportunities for NWFPs-based enterprises.

In Afghanistan, Pistachio and pine nuts generated more than 40 million USD per year in export earnings and rural communities greatly benefited from NWFPs. Bangladesh also generated significant income and revenue from an array of NWFPs species available in the country. The rural communities benefited from sale of NWFPs and employment at various stages of NWFPs processing chain. In Bhutan, among the major NWFPs, a highly valued *Cordyceps* (*Ophiocordyceps sinensis*) generated income of millions of USD for rural people (Figure 2). The amount is used for improving living standards and development of rural communities. NWFPs like tendu leaf, lac, gum, *amla*, *dona pattal* etc., generated significant income for rural communities and provided employment opportunities in India (Figure 3), thereby contributing to improving tribal and rural livelihoods. Nepal is rich in NWFPs and they play an important role in increasing rural income and alleviating poverty through promotion and domestication of NWFPs. In Pakistan, rural communities collect major NWFPs species like morel mushrooms, honey, pine nuts, medicinal plants etc. and earned substantial income which helped in improving rural livelihoods. The export earnings from NWFPs are quite substantial thereby contributing to national economy (Figure 4). Similarly, NWFPs play a major role in improving rural livelihoods in Maldives and Sri Lanka.



Sustainable management of NWFPs for rural communities

The sustainable management of NWFPs is crucial for the livelihoods of majority of rural population who depend heavily on NWFPs for food, shelter, medicines, fibres, energy, cultural artefacts, employment, and alternative income. It is important to manage NWFPs sustainably to ensure constant supply of NWFPs to rural households for improving the living standards of rural communities. The sustainable harvesting and management of NWFPs offers an immense opportunity to improve the livelihoods of rural communities. It is of utmost importance to implement sustainable management interventions through a participatory approach for sustenance of rural livelihoods and local economy.

What are the problems associated with sustainable management of NWFPs?

SAARC Regional Consultation Meeting on Sustainable Management of Non-wood Forest Products for Improvement of Rural Livelihoods in South Asia, held in November 2020, has pointed out number of challenges and problems associated with sustainable management of NWFPs and its processing and value chain development. Among them, four problems are the most important ones associated with sustainable management, marketing, institutional and enterprises development, capacity development, and government support for rural communities. Decision-makers should critically look into each problem and make policy decision to implement policy recommendations to solve these problems, so that rural population in South Asia will be able to manage NWFPs sustainably and reap significant benefits for improving their livelihoods.

Lack of enabling policy and regulatory framework

Existing policies, regulatory frameworks and institutional setup are not helping to realize the full potential of NWFPs in improving livelihood and reducing poverty. Policy and governance of NWFPs resources subject rural communities to conditions, restrictions and prohibitions. In most countries in the region, regulatory frameworks are not clearly defined and fine-tuned to provide adequate access rights for rural communities. The policies and regulations pertaining to NWFPs are integrated with core National Forest Policies and Regulations of South Asian countries which are inadequate to address a complex processing chain of the NWFPs from collections to consumers, involving multiple stakeholders

(Gyeltshen, 2021). There is clearly a lack of enabling policies and regulatory frameworks for establishing appropriate institutions responsible for management, development, processing, storage, value addition, and marketing of NWFPs to ensure better return to rural communities, and to contribute to national economy.

Unsustainable harvesting of NWFPs

Economic growth, demographic shifts, and competition are driving rural population living in and around forested areas to collect increasing quantity of NWFPs for commercial purposes, leading to the degradation of NWFPs resources. Increased commercial utilization of NWFPs resources make rural communities to over-harvest the products by ignoring sustainable traditional harvesting practices (Sheppard et al., 2020). Excessive harvesting of NWFPs beyond the productive capacity in response to market demands has led to the degradation of NWFPs resources. Most of the rural population are not aware of the rules and regulations pertaining to harvesting and management of NWFPs. The sustainable harvesting practices are not followed due to lack of knowledge and training in rural communities. There is inadequate monitoring and enforcing system to prevent harvesting of NWFPs beyond harvesting limit of each species.

Inadequate marketing arrangements for NWFPs

The contribution of NWFPs towards improving rural livelihoods primarily depends on strengthening marketing opportunities and resultant income, and creating employment opportunities (Rasul et al., 2008). In the South Asian context, the market of NWFPs is highly unstructured and underdeveloped. Rural communities collect NWFPs and sell to middlemen and other intermediaries which in turn sell to the urban centre and finally reach consumers. Primary collectors depend on intermediaries to sell their products due to lack of direct access to credit and market, and as a result, intermediaries pay for the products prices far below the market rates. There is no effective marketing information system of NWFPs species easily accessible by the primary collectors to prevent them from being exploited by intermediaries and primary processing enterprises. Inadequate small and medium scale enterprises in rural area for processing and value addition of NWFPs species directly affect rural communities to get fair price of their products.

Inadequate knowledge and capacity of rural communities

Rural communities have inadequate knowledge of NWFPs policies, rules and regulations, conservation and management, sustainable harvesting techniques, domestication, processing chain and value addition, market information, and products development and branding. They have indigenous skills and knowledge of NWFPs management and use, but not the adequate knowledge to take advantage of domestic and international markets. Lack of adequate knowledge and capacity of rural communities on NWFPs led to unsustainable harvesting, decline in availability of resources, exploitation by intermediaries in terms of products prices, low employment opportunities in various processing enterprises, and decline in income of rural communities.

What can policy-makers do to manage NWFPs sustainably for improving rural livelihoods?

The role of NWFPs in improving the rural livelihoods and alleviating poverty is globally accepted. The NWFPs are of significant subsistence and socio-cultural importance with multi-faceted adaptive livelihood components for rural communities in South Asia. This policy brief has six policy recommendations emerged from SAARC Regional Consultation Meeting on Sustainable Management of Non-wood Forest Products for Improvement of Rural Livelihoods in South Asia, held in November 2020:

Develop enabling policy and regulatory framework

Developing enabling policies and regulatory frameworks of NWFPs are critical for sustainable management of NWFPs to ensure a constant supply of NWFPs resources to rural communities and for equitable sharing of benefits among the rural communities. It is crucial to review existing policies and develop national NWFPs policies with an emphasis on developing legal frameworks, providing incentives, setting minimum support prices, providing market access, developing marketing infrastructures, promoting trade, domesticating species, and providing government support for primary collectors (Gyeltshen, 2021). NWFPs laws and policies should promote ecological sustainability, equity in trade, and improve rural livelihoods through more information, close stakeholder consultations and strategic approaches in developing policy. Further, devolution and empowerment of local institutions and community groups in the collection, processing, marketing and trade is imperative for effective management and to reap higher return from the products. NWFPs policies and regulations should be reviewed and developed for creating enabling environment for sustainable management and development of NWFPs for improving rural livelihoods in the region.

Establish sustainable management system

Establishing sustainable management system of NWFPs is important to guarantee a sustainable supply of products to rural communities for sustenance and improving their livelihoods as the products provide a wide array of uses and income for rural communities. The sustainable management system of NWFPs encompasses resource assessment, resource management planning, sustainable harvesting limit, sustainable management plan, monitoring, and its governance. It is crucial to devolve the management of NWFPs to the rural community where community-based regulations and decisions can set criteria for judicious harvesting as well as impose penalties for over-harvesting. Decision-makers should also empower local institutions for promoting conservation and strengthening monitoring of NWFPs resources for sustainability.

Promote domestication of important NWFPs species

Promoting domestication of high value and promising NWFPs species on private, community and government-owned land is important to increase the

productivity of certain products and reduce the harvesting pressure on natural forests. Governments should develop an enabling policy to promote the domestication of NWFPs species by focusing on land tenure, incentive, research and development, technical and extension support, and financial support to promote the cultivation of important NWFPs species widely. In south Asia, few species of medicinal and aromatic plants are cultivated in small scale, and these cultivations were found to be successful in generating income and reducing pressure on forests. The successfully domesticated NWFPs models should be disseminated to rural communities for adoption in their private and community land for extensive cultivation to increase production and generate income for their livelihoods.

Develop NWFPs marketing information system

Developing NWFPs marketing information system for rural communities is crucial to protect rural communities from exploitation and have a better bargaining power for their products with intermediaries and small enterprises. In order to provide an effective marketing information to rural communities, NWFPs market prices should be incorporated with the well-established agricultural marketing information system easily accessible by the farmers in different networking forums. The marketing information should be opened access and freely accessible even to rural communities who are heavily dependent on NWFPs resources and interact with the forests. As information is a powerful tool, relevant government agencies should develop social networking forums for exchanging information among different community groups. In addition, governments of the region should protect and support rural communities by establishing minimum support price scheme like the one established in India. This scheme guarantees minimum price to the primary collectors for their products even if the market price fall.

Encourage to establish small and medium scale NWFPs enterprises

Government should encourage and create a conducive environment to establish small and medium scale enterprises to processing and value addition of NWFPs. This will help the rural communities to sell their products at a fair price to these enterprises and get employment opportunities. Incentives and other necessary supports from the governments are essential to establish local level processing enterprises to bring immediate benefits to local communities in the forms of employment, better prices and reduced exploitation by intermediaries. In South Asia, the enterprise development at the local and regional levels have contributed to local economy. Governments should encourage primary collectors of NWFPs to establish community enterprises, especially small-scale processing and value addition enterprises. This will lead to free access to market, get better returns from their products, generate employments, develop community bonding, and ultimately improve rural livelihoods.

Build capacity of rural communities and other stakeholders

Building capacity of rural communities and other stakeholders in conservation and management, sustainable harvesting techniques, domestication, processing and value addition, market information, and products development and

branding is important for sustainable management of NWFPs and improving rural livelihoods. There is a pressing need to build capacity at various levels of NWFPs value chain, starting from the NWFPs management and collection in the forests to the final product development. It is also vital to build capacity of rural communities in NWFPs policies, rules and regulations, incentives and market information by creating awareness and providing adequate open access information. It is critically important to provide training, exposure visit and skill development programmes for forestry extensions, the key personnel responsible for imparting training to rural community on various aspects of NWFPs management. Further, capacity building of processors, traders, and entrepreneurs involved in the product development and branding is also imperative for the development of NWFPs and consequently improve the rural livelihoods in the South Asian countries.

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