

Original Research Article

Effectiveness of MPIS in Benefit Sharing and Sustainable Management of NTFPs in Nepal

Rana Bahadur Rawal* and Devendra Kumar

Department of Forestry, Faculty of Agriculture and Veterinary Sciences,
Mewar University, Rajasthan, India

*Corresponding author

ABSTRACT

Not-Timber Forest Products (NTFPs) are the natural resources provides the employment opportunity and skill of income generation for the rural people; basically people living close to the forest areas. NTFP include fruits and nuts, vegetables, fish and game, medicinal plants, resins, essences and a range of barks and fibers such as bamboo, rattans, and a host of other palms and grasses which are used for different purpose so people collect and sells it. Market Price Information System (MPIS) is the source of information for the usufructs about the market and price of NTFP so the study aims to identify the effectiveness of MPIS in benefit sharing and sustainable management of NTFPs in Nepal. The study was conducted in Banke, Salyan and Dolpa district among the 466 usufructs. Structured questionnaire survey was done to collect the data. The study revealed that there was very weak performance of MPIS in benefit sharing and sustainable management of NTFPs. Very less numbers of people were benefited by getting the price information of NTFPs and very less were encouraged to involve in sustainable management of NTFPs. So, this study has recommended the need to establish the effective MPIS to sustain the NTFPs. Sustainable management of NTFPs will be long term beneficial for the usufructs and nation will get more income also.

Keywords

Effectiveness,
Management,
Nepal, NTFP,
MPIS, Sustainable

Introduction

Nepal is rich in natural resources; basically for the green forest and forest product. Non-timber forest products are much more in mid and upper hill areas of Nepal. A survey was conducted H.B. Chhetri and V.N.P. Gupta in Upper Mustang for the documentation of NTFPs using PRA (Participatory Rural Appraisal) and vegetation sampling methods. Altogether 101 species of NTFPs belonging to 36 families and 79 genera were recorded in Upper Mustang (Chhuksang to Lomanthang) (Chhetri & Gupta, 2007). It is noticed that

Non-Timber Forest Products (NTFPs) have been extensively used since long ago as the source of livelihood; it is also source of income for the rural people. NTFPs are most significantly associated with the life of the indigenous ethnic groups who are living in remote areas and very familiar with the forest products. Rural people collect the NTFP and sells in the market but it is well noticed that collectors are not getting the real value of their NTFP because of the lack of access on market price information system. In Nepalese context, because of the inadequate service of market price information system, collectors

of NTFP are not getting the real price as their labour and value of NTFP. A study conducted by B. H. Pandit, R. Subedi and C. Kumar on profitability analysis of Non-timber forest product in Eastern hills of Nepal reported that collectors were receiving the much less of a profit margin compared to road-head and wholesale traders. The profitability has been heavily influenced by collection and transportation costs at the collector's level. While at the road-head and wholesale traders' level, royalty and processing costs are very important factors to determine profitability. This study revealed that the profit from NTFP marketing has been limited and constrained by several socio-economic and policy related factors (Pandit, Subedi, & Kumar, 2007).

Market Information Systems (MIS) collect, process and disseminate information on the situation and the dynamics of markets in order i) to improve public policies through increased awareness of market realities and ii) to increase market transparency and, by this way, to lead to a fairer and more efficient allocation of resources (David-Benz, Galtier, Egg, Lançon, & Meijerink, 2011). These authors also stated that MIS information can be used by farmers both for advocating for more producer-friendly policies and to guide their production and marketing decisions (choice of what, when and where to sell). In addition, as small farmers' market power is hindered by their lack of information on price levels and changes at different points of the marketing chain, strengthening smallholder farmers' access to information can improve farmers bargaining position. MIS includes the information of price of products of particular goods. MPIS is also known as Market Price Information System (MPIS). In the case of Nepal, MPIS is established for non-timber forest products (NTFP). While effectiveness of MPIS among the usufructs, scholar Shepherd find out in his marketing analysis

studies that Market Information Services (MIS) as a means of increasing the efficiency of marketing systems and promoting improved price formation. Improved information, it has been argued, enables farmers to plan their production more in line with market demand, schedule their harvests at the most profitable times decide to which markets they should send their produce and negotiate on a more even footing with traders. Other benefits have been seen for traders. Improved information should enable traders to move produce profitably from a surplus to a deficit market and to make decisions about the viability of carrying out storage, where technically possible. With few dissenting voices these arguments are generally accepted and a large number of countries in the developing world and, increasingly, Eastern Europe and the former Soviet Union have established or are establishing Market Information Services (Shepherd, 1997). In Nepal some of the organizations such as Jadibuti Association of Nepal (JABAN) and Asian Network on Sustainable Agriculture and Bio-resources (ANSAB) were providing the information of NTFPs but respondents felt inadequate and not felt reliable. The current price fixing practice is dominated by traditional very informal method; negotiation between sellers and buyers. Sellers have no adequate knowledge of actual price and source of price information of NTFPs so they believe on the decision of buyers especially local vendors. So, in this context, the question is what is the effectiveness of MPIS for sustainable management of NTFP in Nepal?

Following this question, the study aims to identify the effectiveness of MPIS for sustainable management of NTFP. MPIS is important to get the knowledge of market and price of particular products so that usufructs will be equally benefited. If collectors will not get the real value of their NTFP or they

will have no proper knowledge of conservation and harvesting of NTFP then gradually available NTFP will be destroyed and will not be sustainable. So, in this ground, the study is important to explore the knowledge.

Materials and Methods

The study was conducted in the Banke, Salyan and Dolpa district which represents the three geographical layers: hill, mountain and plain region. Total 466 respondents were selected for the survey by using the simple random sampling technique. The study has described the existing status of MPIS and its effectiveness for the sustainable management of NTFPs. There is big market of NTFPs in Nepal, India and other countries. The major concern of collectors is to get the real information of market and price of NTFP. The cross-sectional study design was used and quantitative approach was adopted during the data collection and analysis. The structured questionnaire survey was done and side by side some observation and discussion was also done to know the real practice of MPIS and its effectiveness in the practice of usufructs in sustainable management of NTFPs.

Results and Discussion

One of the important objectives of this study was to identify the effectiveness of MPIS in benefit sharing and sustainable management of NTFP so accordingly respondents were asked about their experience.

Encouraged by MPIS to involve in sustainable activities of NTFPs

Sustainable management of NTFP is important from the perspective of protection of NTFP; especially herbal plant and improvement in income of usufructs. Nepal is

rich in the natural resources, among them herbal plant is one.

Table No. 1 illustrates how the launch of MPIS encourages the respondents for the sustainable management of the NTFPs. The findings show 20.2 percent of the respondents were encouraged to direct seeding of the NTFPs followed by “encourage me to establish nursery of NTFPs” (12.7%), “Encourage me to conservation/ enrichment of natural seedlings and plants” (5.6%), “Encourage me to conservation/ enrichment of NTFPs and other tree species” (3.3%), “Encourage me to plantation of the seedlings in appropriate places of the community forest” (4.7%), “Encourage me to safe guard the NTFPs during the cleaning operation of community forest” (1.8%), “Encourage me to use appropriate technology during harvesting” (1.8%), “Provides information on right time of the harvesting adopted (different parts of the day or season)” (2.2%), “Provided right techniques of drying (not under direct sun or fire)” (1.3%), “Encourage me to use appropriate tools of harvesting were used” (.7%), “Encourage me to use appropriate and safe place of storing” (1.1%).

Majority of the respondents who reported that they have been encouraged in anyway by launch of the MPIS were from Banke and among CFUG members. Regarding the Dolpa district, no one feel the effectiveness of MPIS in benefit sharing and proper management of NTFP.

Regarding the sustainability of NTFP through MPIS, Government Officers (Assistant Botanist of Banke, District Forest Officer of Dolpa and Salyan) shared that there is work plan with District Forest Office and Community Forest User Group too which has clearly mentioned about the techniques of cultivation, plantation, harvesting, irrigation, collection, storing, processing etc of NTFP

which should be strictly followed by usufructs so that NTFP could be managed sustainable way.

Made easiness to get the price information of NTFPs by MPIS

Table No. 2 illustrates the respondents view on if the launch of the MPIS has made easy for them to get the price information of NTFPS. Of the total respondents only 2.6 percent of the respondents said “yes”.

In case of the Banke, Salyan and Dolpa, 93.9 percent, 99.6 percent and 100 percent of the respondents said that launch of the MPIS does not made them easy to get the price information of the NTFPs respectively while no retailers feels easy to get the price information of NTFPs by the launch of MPIS.

Need of Sustainability of MPIS of NTFP

NTFPs have been playing the vital role to generate income for the rural people who are more dependent on the forest. The previous literatures have also shown the importance of NTFP in livelihood of people. Sarmah *et al.*, (2006) stated that NTFPs like fuel-wood, medicinal plants, wild edible vegetables, house building materials etc. are an integral part of day-to-day livelihood activities, especially for tribal people.

The present study has shown that NTFP is one of the regular sources of income for the forest users. Basic needs of rural communities are being managed by the income of NTFP whereas there is not effective MPIS of NTFP. Basically, people of high hill like Dolpa are very back from the access of MPIS and other reliable source of information. They were getting the very nominal price of their NTFP because price was fixed by the buyers especially by middle

people. So, the study has felt the need of sustainability of MPIS of NTFP in Nepalese context.

The previous literatures have also explored the contribution of NTFP in socio-economic development of rural community and the need of sustainable management of NTFP. Pravat Kumar Shit and Chandan Kumar Pati has stated in their research article that forest resources in the form of NTFPs play an important role in protecting the socioeconomic and ecological safety net of the forest dwellers. Their study reveals that almost all of the forest- dwellers depend on the forest products other than timber to varying degrees. It is also observed that 63% of forest- dwellers depend on the forest even for their cash income. It is the motivation of the people involved in a system that determines its social sustainability (Shit & Pati, 2012). NTFPs are also important in most developing countries, such as Cameroon (Ambrose-Oji, 2003), Vietnam (Quang & Anh, 2006) and Brazil (Pattanayak & Sills, 2001) as well as many developed countries such as wild berry and mushroom use and sale in Finland (Richards and Saastamoinen, 2010; Laird *et al.*, 2011). The current study has also shown the need of sustainable management of NTFP by improving in effectiveness of MPIS. Proper knowledge of cultivation, harvesting and distribution of NTFP is must for the usufructs so that they can properly handle the NTFP to sustain it in long run. The usufructs had reported some social and technical problem to properly manage the NTFPs. They shared that lack of market system of providing price of NTFPs, dominance of middleman/traders, lack of accessibility of big markets, lack of awareness of price of NTFPs, lack of proper knowledge of NTFPs, lack of accessibility to MPIS, scarcity of water, low market price etc. were some challenges for the sustainable management of NTFPs.

Table.1 Encouraged by MPIS to involve in sustainable activities of NTFPs

Encouraged by MPIS to involve in sustainable activities of NTFPs	Total		District					
			Banke		Salyan		Dolpa	
	N	%	N	%	N	%	N	%
Encourage me to direct seeding of the NTFP	92	20.2	88	48.9	4	1.1	0	0
Encourage me to establish Nursery of NTFP	57	12.7	57	31.7	0	0	0	0
Encourage me to conservation/enrichment of natural seedlings and plants	25	5.6	25	13.9	0	0	0	0
Encourage me to conservation/enrichment of NTFPs and other tree species	15	3.3	15	8.3	0	0	0	0
Encourage me to plantation of the seedlings in appropriate places of the community forest	21	4.7	21	11.7	0	0	0	0
Encourage me to safe guard the NTFPs during the cleaning operation of community forest	8	1.8	8	4.4	0	0	0	0
Encourage me to used appropriate technology during harvesting	8	1.8	8	4.4	0	0	0	0
Provides information on right time of the harvesting adopted (different parts of the day or season)	10	2.2	10	5.6	0	0	0	0
Provided right techniques of drying (not under direct sun or fire)	6	1.3	6	3.3	0	0	0	0
Encourage me to use appropriate tools of harvesting were used	3	.7	3	1.7	0	0	0	0
Encourage me to use appropriate and safe place of storing	5	1.1	5	2.8	0	0	0	0

Source: Field Survey, 2017

Table.2 Made easiness to get the price information of NTFPs by MPIS

Made easiness to get the price information of NTFPs by MPIS		District		
		Banke	Salyan	Dolpa
Yes	N	11	1	0
	%	6.1%	.4%	0.0%
No	N	169	269	16
	%	93.9%	99.6%	100.0%
Total	N	180	270	16
	%	100.0%	100.0%	100.0%

Source: Field Survey, 2017

So, concerned authorities; basically Nepal Government should focused to solve these problems. All the respondents of questionnaire survey and key informants interview realized the importance and contribution of NTFP in the socio-economic status of rural people.

As the theory of sustainable development, the sustainable management of NTFP can directly contribute in the three aspect of

development: Social, Economic and Environment. From the social perspectives, there were different user groups who are working in the conservation of forest and forest products. If there will be effective MPIS of NTFP, then usufructs can be able to get the knowledge of market and price of NTFP. It will increase their motivation, communication skill, level of confidence increased, aware on the different source of information, interrelation with different types

of sellers and buyers, increase in bargaining power which ultimately improve in their practice of cultivation and harvesting of NTFPs.

Similarly, from the economic perspective, sustainable management of NTFPs will directly contribute in the income of usufructs. Economic status supports in the improvement of livelihood, health and education of family members. Economic improvement will support to maintain the food security and contribute in poverty reduction too.

Sustainable management of NTFP is important for the environment also. It will maintain the greenery environment, natural beauty and protection of forest which ultimately protect the people from the effect of climate change. If people can protect the forest then it will protect the wild animals, flora and fauna, medicinal plants, source of water and water quality. It will also support in the livestock farming by providing the grass and grass land for livestock. On the other hand, it can support in eco-tourism also. Nepal is a very beautiful country for the tourism and very reliable source of national income also.

All these discussion come to the point that there is need to improve and strengthen the status of MPIS for the sustainable management of NTFP for the social, economic and environmental sustainability.

The study found that there was not so effective implementation of existing system of market price information system because of the inadequate knowledge of source of MPIS, not accessible, inadequate technical knowledge to search the price list from website and on the other hand, usufructs did not believe on the price list available in MPIS of different concerned organization. So, price was finalized from the mutual understanding

of sellers and buyers. In total respondents, not more than 20% reported that they were encouraged by MPIS to involve in sustainable management of NTFPs which is unsatisfactory result from the perspective of effectiveness of MPIS. Similarly, very less than 7% respondents reported that MPIS made them easy to get the market and price information of NTFP which indicates the very poor performance of MPIS. Some government and nongovernmental organization have developed the MPIS of NTFP but usufructs were not aware on that and not getting benefit. So, there is need of close concern of Government to establish the effective MPIS to sustain the NTFP. Nepal can get many more benefit from the production and sells of NTFPs.

References

- Ambrose-Oji, B. (2003). The contribution of NTFPs to the livelihoods of the 'forest poor': evidence from the tropical forest zone of south-west Cameroon. *Int. For. Rev.*, 5, 106–117.
- Chhetri, H., & Gupta, V. (2007). A Survey of Non-Timber Forest Products (NTFPs) In Upper Mustang. *Scientific World*, 5 (5), 89-94.
- David-Benz, H., Galtier, F., Egg, J., Lançon, F., & Meijerink, G. (2011). *Market Information Systems*. ESFIM.
- Pandit, B. H., Subedi, R., & Kumar, C. (2007). Profitability Analysis of Non-Timber Forest Products Marketing in Eastern Hills of Nepal: Looking for an Alternative Marketing Approach to Benefit the Poor. *Center for International Forestry Research (CIFOR)*, 16-28.
- Pattanayak, S., & Sills, E. (2001). Do tropical forests provide natural insurance? the microeconomics of non-timber forest product collection in the Brazilian Amazon. *Land Econ.*, 77, 595–612.

- Quang, D., & Anh, T. (2006). Commercial collection of NTFPs and households living in or near the forests: Case study in Que, Con Cuong and Ma, Tuong Duong, Nghe An, Vietnam. *Ecology and Economic*, 60, 65–74.
- Sarmah, R., Arunachalam, A., Majumder, M., Melkania, U., & Adhikari, D. (2006). Ethno-medico-botany of Chakmas in Arunachal Pradesh, India. *The Indian Forester*, 132, 474-484.
- Shepherd, A. W. (1997). Market Information Service Theory and Practice. *FAO Agricultural Service Bulletin*, 125, 1-50.
- Shit, P. K., & Pati, C. K. (2012). Non-Timber Forest Products for Livelihood Security of Tribal Communities: A Case Study in Paschim Medinipur District, West Bengal. *Journal of Human Ecology*, 40 (2), 149-156.