



Factors influencing marketing of non-timber forest produce: A study in Jharkhand state, India

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ABSTRACT

Non-Timber Forest Produce (NTFP) plays a significant role in improving the livelihood of the people living in the forest fringe. It can be helpful in sustainability as well as inclusive growth. In India, NTFP is the major source of income for the tribal population. Therefore, the Government has launched several schemes for raising the living standards of tribal population and management of non-timber forest produce. The objective of this study is to investigate the factors that help in successful implementation of these Government schemes to provide benefits to the tribal community and rural poor. The qualitative analysis of data was done by compilation of information through interviews of cooperative society members, SHG members, villagers and officials from agencies involved in implementation of these schemes. It was found that awareness related to these schemes is quite low among rural people. The study reveal that the villagers sell their produce in local markets rather than selling it to government agencies at minimum selling price due to lack of instant cash payment, distance factor, exploit of middle man/contractors, improper transportation & administrative discordination.

Key words: Forest produce, Jharkhand, livelihood, MFP, NTFP, tribal

INTRODUCTION

The Minor Forest Produce (MFP) referred to as Non-Timber Forest Produce (NTFP) is recognized internationally for its potential to raise the livelihood, if managed in an environment friendly manner (Arnold and Ruiz- Perez, 2001). It can lead to sustainable and inclusive growth of the economy of the nations. NTFP collectors mainly, comprise poor population who sell the important forest products such as wild fruits, honey, medicinal plants, latex etc. and earn money. They also collect tubers, fruits, fuel wood etc. for their own consumption (Stanley et al. 2012). The processing and sale of NTFP generate employment for local communities residing besides the forests. Thus, if regulated properly, NTFP can reduce the poverty and raise the living standards of people. Also, proper management of forest would be essential to

reduce deforestation and reduce pollution (Mandal et al., 2012). In India, NTFP is the major source of income for tribal population living in or in the proximity of the forests. According to Tewari and Campbell (1995), 55% of the people earn their income through forests and around 40% of the total revenue that generates through forest is contributed by NTFP. Recognizing the importance of forests for tribal population, National Forest Policy (1988), counsels that all the initiatives which are related to protection of the forest, regeneration or development of the forest or providing employment must involve the tribal people. Local collectors of NTFP can establish micro, small and medium enterprises with capacity building, financial and institutional support, and infrastructure development to earn their livelihood (Planning Commission, India, 2011). Government of India has launched several schemes

such as Forest Rights Act, 2006 and marketing of NTFP through Minimum Support Price (MSP) and development of value chain for it. Also, a budget of Rs. 659 billion has been proposed by the Government of India in 12th five-year plan for meeting various challenges and issues related to NTFP. NTFP are products obtained from forests that include plants such as fruits, flowers, grass as well as fauna and its related products like insects, honey (Shackleton et al., 2011). As per Belcher and Vantomme (2003), NTFP are subsistence source of income for rural people or people living in the proximity of the forest. They provide food, medicines, fuel and fodder, shelter, source of energy to human beings (Pandey et al., 2016). According to Shackleton and Shackleton (2004), NTFPs provide green social security to billions of people in the form of low-cost building materials, fuel, food supplements and traditional medicines (Ahenken and Boon, 2010). Ajazul-Islam et al. (2013) recognized the scope for development of NTFP based employment through value addition, commercialization, storage etc. However, NTFP is not adopted as a regular income generation activity by rural people, rather used to fulfill their livelihood needs, due to lack of knowledge and value addition facilities, proper market etc (Tripathi, 2016). In a study conducted by Ahenken and Boon (2010), it was diagnosed that commercialization of NTFP faces many critical challenges related to processing, labeling, packaging, and marketing. Menon et al. (2015) observed that consumers should take environmental aspect into consideration if awareness about environmental degradation is in their mind. Giri et al. (2005) studied that though NTFP can be used for medicinal purpose and in small cottage industries but still it is an unorganized sector in forest management. Aiyeloja and Ajewole (2006) asserted that NTFP harvesting is seasonal and lack of proper transportation facilities, credit, and capital facilities, deprive full utilization of NTFP for poverty reduction. Chaudhary et al. (2008) found that the primary collectors of NTFP dispose the products in the local market at throw away prices without any value addition. The major constraints

that affect the optimum utilization of NTFPs as identified by Kumar and Venkatasubbaiah (2017) are “Unfavorable Government policies, lack of awareness and techniques about harvesting, storage, processing and marketing; wide gap between the NTFP collectors and users due to physical distance and unfair trade practices by several tiers of middlemen; uncertain demand and competition from alternative synthetic products, lack of awareness among the public about the advantages of using NTFPs”. Verma and Paul (2016) also investigated that the factors such as lack of storage depot, technical knowhow of value addition, inadequate knowledge of market functioning and lack of awareness of government policies inhibit the use of NTFP as a sustainable livelihood solution for tribal people. Further, Chandrasekharan (1997) posited that there are certain anomalies, such as deficiencies in institutional set up, lack of value addition and inadequate focus on market, that affect the proper utilization of Non-Wood Forest Products (NWFP). Government of India has launched various schemes to overcome these challenges and for marketing of NTFP through minimum support price (MSP) and development of value chain. The minimum support price of NTFP is calculated based on cost involved in collecting NTFP which includes labor, storage, transportation, insurance and other material cost to the owner. Further, this cost of collection is adjusted to macro economic variables (Sharma et al., 2018).

MATERIALS AND METHODS

It is an exploratory study conducted in the state of Jharkhand, India where the total forest cover constitutes 28.1% to the total geographical area.. Further, the tribal people comprising 26.21% of the state's population primarily depends on forest for their diverse socio-economic and cultural needs (India State of Forest Report, 2019). Within the state, the districts such as Bokaro, Dhanbad, Gumla, Khunti, Simdega and West Singhbhum, mainly covering the southern part of Jharkhand were considered for the study.

Table 1. Various NTFPs found in Jharkhand, near by area and their final use

Name of NTFP	Main focus area	Produces / uses
Tamarind	Chaibasa, Khunti, Lohardaga, Simdega	Seedless pulp, paste
Madhu/honey	Chaibasa, Gumla, Palamu, Simdega,	Food
Karanj	Chaibasa, Gumla, Lohardaga, Simdega,	Oil, ointment, spray
Dori	Chaibasa, Garhwa, Gumla, Khunti, Lohardaga, Palamu, Simdega	Medicinal
Sal seeds	Chaibasa, Gumla, Khunti, Lohardaga, Simdega	Oil / feed
Chironji guthli	Bokaro, Garhwa, Giridih, Khunti, Palamu, Simdega	Dry fruit, confectionary
Myrobalan (Harra)	Chaibasa, Gumla, Latehar, Lohardaga, Ranchi, Simdega	Harra powder and Triphala churna
Chakvar	Garhwa, Latehar, Palamu, Ranchi	Medicine
Niger seed	Chaibasa, Gumla, Hazaribhag, Latehar, Palamu, Simdega	Medicine
Mango pulp (Amsi)	Bokaro, Gumla, Hazaribhag, Khunti, Simdega	Food, pickle
Mahua flower	Chaibasa, Garhwa, Gumla, Khunti, Latehar, Lohardaga, Palamu, Simdega (most areas of Jharkhand)	local liquor /medicine
Tawar Gond	Garhwa, Palamu	Food
Gijan Gond	Garhwa, Palamu	Medicine and food
Kalmegh (Chiraita)	Latehar, Palamu	Medicine
Dhawai phool	Palamu	Medicine
Satawari	Gumla, Khunti, Palamu	Medicine
Sarpagandha	Giridih, Palamu, Simdega	Medicine
Aswagandha	Gumla, Lohardaga, Palamu	Medicine
Palas/ Tesuphool	Giridih, Khunti, Palamu, Simdega	Medicine
Bantulsi	Garhwa, Latehar, Palamu	Medicine
Kusum	Gumla, Simdega	Oil / feed
Kaunch beej	Chaibasa, Palamu	Medicine
Bael giri	Palamu	Food / medicine
Amla		Oil

Source: JHAMCOFED Website

Of the selected districts, the sample populations of tribal people who were residing in the proximity of forests and dependent on NTFP and were members of Self-Help Groups (SHGs) were considered on judgment basis. The data was also collected from the workers and officials of implementing agencies such as TRIFED (Tribal Cooperative Marketing Development Federation

of India Limited), JHAMCOFED (Jharkhand State Minor Forest Produce Cooperative Development and Marketing Federation Limited), JSLPS (Jharkhand State Livelihood Promotion Society). Research was based on primary as well as secondary data. While primary data was collected through semi-structured interviews and focus group discussions (FGDs) of the officials

of the government agencies, the secondary data was collected through various reports of the central and state governments. Also, the questionnaire survey comprising both close ended and open-ended questions was conducted for collecting data from the tribal population. The thematic analysis of data was conducted through interviews, FGDs and open-ended questions. The data was classified based on different identified themes such as selling at MSP, selling of product to government agencies like JSPLS or JHAMCOFED, participation of NTFP collectors in value addition process etc. Further, graphical analysis of data was done using MS Excel.

RESULTS AND DISCUSSION

The data collected through questionnaire survey of NTFP collectors is analyzed graphically using MS Excel and Chi square test of independence using SPSS 20 to determine the association between two parameters. Also, the thematic analysis of data was collected through interviews, FGDs and open-ended questionnaires. Fig. 1 represents that more than 50% of individuals are unaware of MSP and around 30% of them sell their NTFP at MSP. The figure also illustrates that more than 80% NTFP collectors are members of a cooperative society and more than 60% of them have taken training related to storage, processing, and value addition

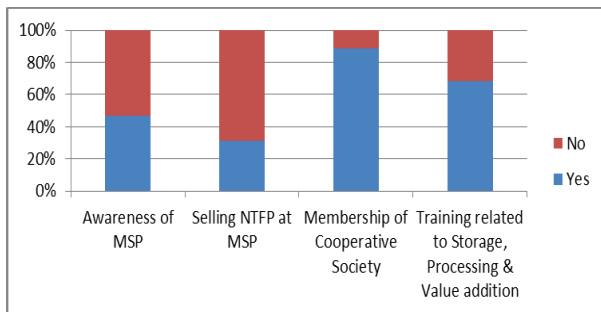


Fig. 1. Collective response from all the districts

Fig. 2-5 shows comparison among different districts surveyed by the researcher. Fig. 2 exhibits the awareness of people in different districts of Jharkhand about Minimum Selling Price. It is evident from the figure that in districts Dhanbad, Simdega, West Singhbhum, Khunti it is quite high. However, in districts like Bokaro it is very low, i.e., just 15%.

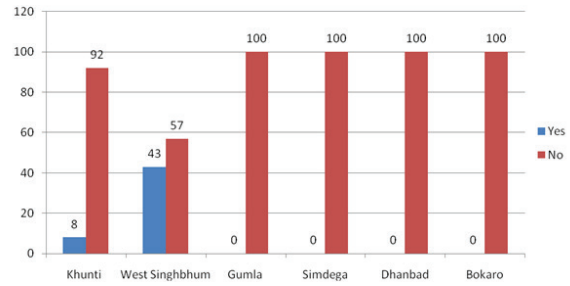


Fig. 2. Awareness of MSP in different districts

The analysis of data on selling NTFP at MSP (Fig. 3) indicates that in West Singhbhum 43% and Khunti just 8% people sell at MSP while in other districts selling of NTFP was not made at MSP.

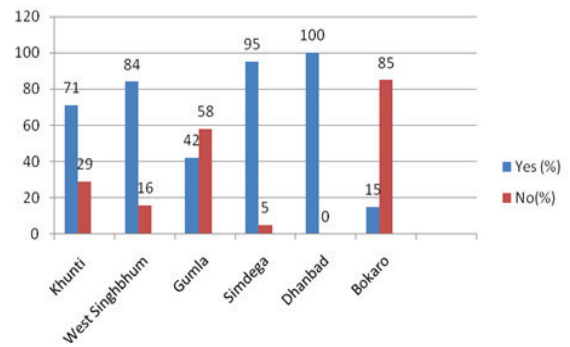


Fig. 3. Selling non-timber forest produce at minimum selling price

Fig. 4 illustrates the membership of cooperative society or SHG in different districts studied. It shows that membership percentage is high in all the districts except Simdega where 48% people are not members of any cooperative society.

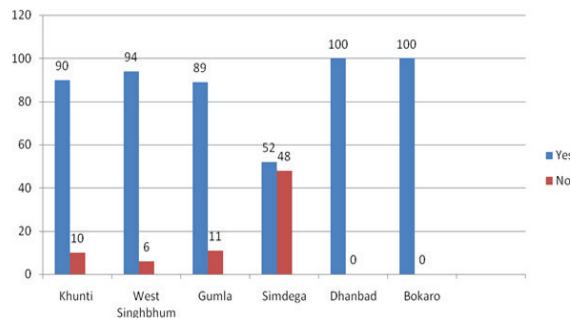


Fig. 4. District-wise membership of Cooperative Society/SHGs

Fig. 5 indicates that a large part of the NTFP collectors in Khunti, West Singhbhum, Simdega and Dhanbad attended training related programmes

for storage and processing of NTFP, but in Bokaro 0% and in Gumla 64% people did not attend any training.

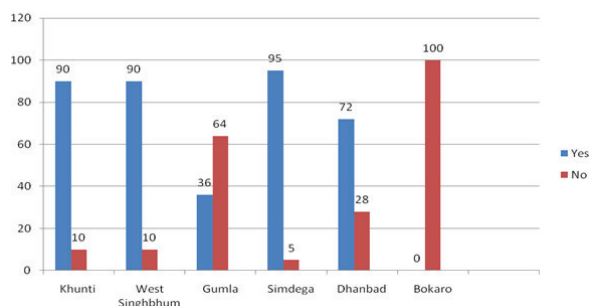


Fig. 5. Training related to storage and processing of NTFP (District-wise)

Chi - square test for independence

After graphical analysis Chi Square test for independence was carried out to determine the association between two variables. The results obtained are summarized in Table 2.

Table 2. Summary of Results of Chi Square test for Independence

	Training	Selling at MSP	Membership of Cooperative Society
NTFP Form	Significant	Significant	Significant
Selling at MSP			Significant

The table exhibits that the form in which NTFP is sold, and the training imparted to villagers related to storage, processing and value addition are associated. Also, the form in which NTFP is sold and selling at MSP are related. Further, NTFP form and selling at MSP are also found to be associated with the membership of cooperative society or SHG of villagers.

Qualitative analysis

The data collected through semi-structured interviews and group discussions with officials of government agencies and with villagers was analyzed qualitatively using coding and fetching the similar points derived out of discussion. While discussion on selling of products to the cooperative

societies set up for collection and value addition or government agencies, it was found that villagers still prefer to sell the products in the local markets rather than to cooperative society or government agencies for many reasons. (i) they can get better prices in the local market because government agencies or cooperatives buy their produce at minimum selling price set by the government (ii) by selling in local markets they get cash payment instantly while for government agencies Direct Benefit Transfer (DBT) is applicable which delays their payment. Further, officials stated that MSP for the produce is set at central level by the team of experts and is applied throughout the country but the quality as well as the demand varies region wise or state wise, due to which at times, MSP yields less benefits to the collectors of NTFP. It was found that the allocation of work among the state government agencies is not done properly leading to lack of coordination among the state agencies; rather leads to conflict and competition among them. The decision to set up production unit for processing of NTFP is taken up by the Ministry of Agriculture, Animal Husbandry and Fisheries where the consultation of cooperative members is not taken. The production unit is being set by the contractor as per their own convenience without considering the distance of the unit from the villages. So, due to large distance of units from villages and lack of transportation facilities villagers sell their produce in local markets. (vi) Also, Gram Sabhas are not involved during implementation of any project related to NTFP which acts as a barrier to effective implementation and execution of the project.

The discussion with primary collectors of NTFP and members of SHG found the following issues viz. (i) transportation is very poor in the state, roads are not well constructed, and rail network is not available in many parts of the state (ii) lack of proper cold storage and warehouses leads to wastage of non timber forest produce such as tamarind, lac etc (iii) exchange of non-timber forest produce for agricultural produce is still prevalent in few areas of the State which leads to loss to the growers and collectors of NTFP (iv) electricity problem exists in many areas of the State which gives birth to other problems such as operations of cold storage,

production unit etc. (v) females are active members in the collection of NTFP and males are less active. So, due to limited information regarding selling and distribution of non timber forest produce the collectors of NTFP bear losses.

CONCLUSION

The above study (both quantitative and qualitative analysis) identified the factors that affected the effective implementation of the government policies related to marketing and selling of NTFP. The quantitative analysis concluded that the awareness of rural people about MSP was very low in the study area. Also, it varied from district to district. Mostly rural people collect NTFP through the cooperative society or SHGs. It was found that 70% of rural population received training related to storage, processing, and value addition of NTFP. Training to NTFP collectors covered mostly on storage, processing, and value addition. The strong connectivity between NTFP collectors and cooperative society/ SHG was also confirmed. The qualitative analysis of data collected through semi-structured interviews and discussion with the officials of the government agencies concluded that the NTFP collectors received better price in selling their products in local market; hence, they prefer it than MSP fixed by the government. The local market distance was found out to be less. They also preferred to get cash in return but from cooperatives and government agencies payments are delayed due to Direct Benefit Transfer. The Government officials have the opinion that the MSP for different produce is set at central level without any consultation with the local officials who can provide more insights into the quality and demand of the produce. So, the prices that are decided centrally are not applicable at the regional level. The government agencies do not often take the opinion of Gram Sabhas. Hence, the contractors/ middlemen exploit the situation and establish their production units as per their feasibility but the distance of villagers/ households from unit is not considered. So, lack of proper transportation facilities also discourages villagers to sell their products to these units. The administrative set up didn't have

proper coordination. There were bottlenecks in the transportation, electricity supply and storage of NTFP in the warehouses which led to wastage of produce.

Limitations and scope for future research

Only six districts of Jharkhand were considered for the study due to lack of time and poor connectivity. Also, the prevailing pandemic situation of COVID-19 affected the study. Further, the research also inherits the disadvantages of an interview with local people. Qualitative data is collected through interview and discussion with the officials of government agencies involved in setting up of marketing channel. Hence, there are possibilities of biased opinion or judgment in drawing the interpretation. Also, the data collected is from a smaller number of informants. Future studies can be undertaken involving longer time, covering wider area and large number of districts and surveying large number of people. Also, quantitative studies can be conducted to assess the impact of the government schemes for the welfare of the tribal people.

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