

PROBLEMS FACED BY TRIBES IN COLLECTION AND MARKETING OF NON-TIMBER FOREST PRODUCTS (NTFPs) IN CHHATTISGARH, INDIA

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Abstract

The present study was conducted in Bilaspur district of Chhattisgarh State during the year 2014-2015. In this study, 3 blocks namely; Pendra, Gaurela and Kota blocks were selected purposively because maximum numbers of tribes and maximum area under the forest comes under these blocks. From each selected block, 3 villages and from each selected village fifteen NTFPs collecting tribes were selected. In this way, total 135 tribes were considered as respondents for this study. The data were collected with the help of well structured pre-tested interview schedule through personal interview. The findings of this study reveal that cent per cent respondents were involved in collection of mahua. With regard to problems faced by the respondents in collection and marketing of NTFPs, majority of the respondents (95.56%) pointed out that they were facing the problem of low and fluctuated market price primarily, while; 95.56 respondents suggested for development of existing market infrastructure primarily, to overcome the problems faced by them in the collection and marketing of NTFPs.

Key words : NTFPs, tribes, collection, marketing, market price and market infrastructure.

Introduction

The term Non Timber Forest Products (NTFPs) appears to have been coined, for the first time, by De beer and Macdermott in 1989. According to FAO, NTFPs defined as "all goods for commercial, industrial or subsistence use derived from forest and their biomass". Non-timber forest products (NTFPs) are also known as minor forest produce (MFP) or non-wood forest produce (NWFP).

The Recorded forest cover in Chhattisgarh is 55,621 sq. km. which is 41.14% of its geographical area (Anonymous, 2013). In Chhattisgarh, where 11,185 villages out of a total of 19,720 villages are forest fringed, the importance of NTFPs in the livelihood security of the rural population has led the State government to declare seven NTFPs such as tendu leaves, saal seed, harra, gum (khair, dhawara, kullu and babool) as nationalized and establish the CGMFP Federation with an objective to promote trade and development of these minor forest produces (MFPs) in the interest of MFP collectors, mostly tribals. The remaining other MFPs were left free for trade because their distribution and production varied with respect to time and space. As a result, villagers would get assured minimum prices for nationalized NTFPs, but low collection prices and often exploitation by middlemen for the non-nationalized NTFPs due to inadequate market facility development in the remote rural areas. The tribe population of the State is 78.22 lakhs, which is 30.62 per cent of total population (Anonymous, 2011).

The forest cover of the Bilaspur district is 2494 sq. km. (Anonymous, 2013) and tribe population of the district is 4,98,469 (Anonymous, 2011). This tribe population mainly lives in and around the forest. For their sustainable livelihood, they mainly depend upon wage earning and agriculture. But due to predominance of monocropping and rainfed agriculture, the income generated through agriculture is not sufficient for their sustainable livelihood. Hence the tribal population also depends upon other alternative source of income like animal husbandry, forest produce (especially NTFPs) and non agricultural activities like business, government and private jobs. Among this alternative source of income NTFPs plays a very important role in their sustainable livelihood by providing them source of income and employment.

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Materials and Methods

Location of the study area

The study was conducted in Bilaspur district of Chhattisgarh state during the year 2014-2015. Bilaspur district was selected purposively because the maximum tribal population is residing in Chhattisgarh plains, comes under this district. Out of total 7 blocks in the Bilaspur district, Pendra, Gaurela and Kota blocks were selected purposively because maximum numbers of tribes and maximum area under the forest comes under these blocks. Three villages were selected randomly from each selected block to make a total of 9 villages in the sample. Villages namely Kodgar, Ghaghara, Bamnih, Kevachi, Taraigaon, Piperkhutee, Chaparapara, Bhasko, Barnarva were selected for the study.

Methods of data collection

Fifteen NTFPs collecting farmers were selected randomly from each selected village. Thus, the total 135 tribes ($9 \times 15 = 135$) were considered as respondents for this study. The data were collected personally in cooperation with forest officers and other officials of the district by using pre-tested interview schedule.

Results and Discussion

Involvement of households in collection of NTFPs

Table 1 represents the involvement of the respondents in the collection of particular NTFP. The findings revels that out of 135 selected households, cent per cent respondents were going for mahua collection, followed by 96.30 per cent for aam, 95.56 per cent for jamun, 94.81 per cent for tendu leaves, 92.59 per cent for sitaphal, 91.11 per cent for bihi, 82.96 per cent for tendu fruits and only, 75.56 per cent respondents were involved in the collection of putu and chhatani. So, we can infer from these findings that these products were easily accessible and available to them and act as an important source of food, nutrition, employment and income. With regard to remaining NTFPs namely ber, sal seed, char seed, harra, sahad, bel, bhelwa, emli, aawla, bahera, kathal, lakh, gond, kheksha, sahatoot and jimikand is concerned 56.30, 51.85, 48.15, 39.26, 22.96, 22.22, 20.74, 20.00, 18.52, 14.81, 12.59, 10.37, 7.41, 5.19, 4.44 and 1.48 per cent respondents were engaged in the collection of corresponding NTFPs. These products also serve as an important source of their food, medicine, nutrition, employment and income.

Marketing pattern of NTFPs

The data regarding existing marketing pattern of NTFPs are presented in table 2. Regarding the place of marketing of NTFPs, the data reveals that majority of

the respondents (98.52%) were selling of their NTFPs in weekly market, followed by 94.81 per cent of the respondents had sold only tendu leaves and sal seed in government society (*i.e.* Zila Laghu Vanojpaj Sahakari Samiti), 54.81 per cent sold their NTFPs in village market and only 5.19 per cent respondents were selling their NTFPs in home. Regarding means of transport, data reveals that majority of the respondents (97.04%) had used bicycle to transport their NTFPs, for marketing followed by 34.07 per cent had used vehicles on paid basis (Auto, Bus etc.) and 11.11 per cent had used motor bike. While, none of the respondents had no means for transportation of NTFPs.

Factors associated with marketing pattern

Table 3 represents the factors associated with marketing pattern. It was found from the data that out of all selected fifteen factors, the two factors viz. Cosmopoliteness and Employment generation were found to be positive and having highly significant correlation with marketing pattern at 0.01 per cent level of probability. Social participation, occupation, size of land holding and extent of sustainable livelihood were found to be negative and highly significantly correlated at 0.01 level of probability. While, sources of information was found to be positive and highly significantly correlated at 0.05 level of probability and economic motivation was found to be negative and highly significantly correlated at 0.05 level of probability. There were no significant correlation with the education, family size, experience in collection of NTFPs, livestock possession, expenditure pattern, level of aspiration and annual income.

Problems faced by the respondents in the collection and marketing of NTFPs

Table 4 demonstrates that respondents' distribution according to the problems faced by them in the collection and marketing of NTFPs with priority.

The result reveals that majority of the respondents (95.56%) pointed out that they were facing the problem of low and fluctuated market price of NTFPs primarily followed by existence of bad weather and lack of developed market infrastructure for NTFPs (94.07%), injury caused by attack of wild animals (88.15%), deforestation (82.96%), over collection of NTFPs by outsiders (74.07%) and obstruction caused by forest rule and regulations in collection of NTFPs from restricted forest area (57.78%).

Lack of transport facilities for marketing of NTFPs (48.89%), lack of skill oriented training programme related to collection, processing and marketing of NTFPs (44.44%), lack of subsidy and bonus on all NTFPs

S. no.	Name of Particular NTFPs	No. of households involved in collection			
		Frequency	Percentages		
1	Mahua (Madhuca longifolia)	135	100.00		
2	Char seed (Buchanania lanzan)	65	48.15		
3	Putu and Chhatani (Wild edible mushroom)	102	75.56		
4	Tendu fruit (Diospyros melanoxylon)	112	82.96		
5	Tendu leaves (Diospyros melanoxylon)	128	94.81		
6	Sitaphal (Annona squamosa)	125	92.59		
7	Jamun (Syzygium cumini)	129	95.56		
8	Bihi (Psidium guajava)	123	91.11		
9	Sahad (Honey)	31	22.96		
10	Aam (Mangifera indica)	130	96.30		
11	Ber (Ziziphus mauritiana)	76	56.30		
12	Bel (Aegle marmelos)	30	22.22		
13	Kheksha (Momordica subangulata)	7	5.19		
14	Emli (Tamarindus indica)	27	20.00		
15	Aawla (Phyllanthus emblica)	25	18.52		
16	Sahatoot (Morus nigra)	6	4.44		
17	Kathal (Artocarpus heterophyllus)	17	12.59		
18	Jimikand (Amorphophallus paeoniifolius)	2	1.48		
19	Sal seed (Shorea robusta seed)	70	51.85		
20	Gond (Gum)	10	7.41		
21	Harra (Terminalia chebula)	53	39.26		
22	Bahera (Terminalia bellirica)	20	14.81		
23	Lakh (Lac)	14	10.37		
24	Bhelwa (Semecarpus anacardium)	28	20.74		

 Table 1: Involvement of households in collection of NTFPs.

(n=135)

 Table 2: Distribution of the respondents according to marketing pattern of NTFPs

 (n=135)

S. no.	Particulars	Frequency*	%
1.	Place of marketing		
а	From home	7	5.19
b	From village market	74	54.81
с	From weekly market	133	98.52
d	From government society*2	128	94.81
2.	Means of transport		
а	No means	0	0.00
b	Bicycle	131	97.04
с	Motor Bike	15	11.11
d	Vehicles on paid basis (Auto, Bus etc.)	46	34.07

^{*} Data are based on multiple responses

*² Only tendu leaves and sal seed are selling at government society on msp

(39.26%), lack of availability of timely market information about NTFPs (33.33%), lack of good road connectivity of villages with market (26.67%) and lack of low cost storage facilities (25.93%) were also reported as other problems faced by the respondents.

Ahenkan and Boon (2010) reported that the NTFPs marketing in rural areas of Ghana are unorganized, dispersed and farmers also lack the necessary marketing skills and information required for optimal performance. Almost similar findings were also reported by Tejaswi (2007-2008), Patel *et al.* (2008) and Nedanovska (2012).

Suggestions given by the respondents to overcome the problems faced by them in the collection and marketing of NTFPs

Table 5 displays the suggestions pointed out by the respondents to overcome the problems faced by them in the collection and marketing of NTFPs with priority.

It portrays that majority of the respondents (95.56%) suggested for development of existing market infrastructure by the government for marketing of

(n = 135)

Table 3 : Correlation	analysis	of	factors	associated	with
marketing par	ttern.				

		(n=135)
S. No.	Independent variables	Coefficient of correlation "r" value
1.	Education	-0.15206 NS
2.	Family size	0.032276 NS
3.	Social participation	-0.33281**
4.	Experience in collection of NTFPs	0.066177 NS
5.	Occupation	-0.25795**
6.	Size of land holding	-0.30525**
7.	Livestock possession	-0.13201 NS
8.	Expenditure pattern	-0.1272 NS
9.	Sources of information	0.19477*
10.	Cosmopoliteness	0.3265**
11.	Level of aspiration	-0.13512NS
12.	Economic motivation	-0.20266*
13.	Annual Income	0.02745 NS
14.	Employment generation	0.653513**
15.	Extent of sustainable livelihood	-0.27759**

*Significant at 0.05 level of probability ("r" value = 0.168). ** Significant at 0.01 level of probability ("r" value = 0.219). NS = Non-Significant. NTFPs; followed by 84.44 per cent respondents suggested for deforestation should be checked, 83.70 per cent respondents for purchasing of all NTFPs by government should be assured, 82.22 per cent respondents for selling prices of various NTFPs should be fixed by the government, 66.67 per cent respondents for checking of over collection of NTFPs by outsiders and 54.81 per cent respondents for flexibility in forest rule and regulations for NTFPs collection.

About 45.93 per cent respondents were also suggested about availability of transport facilities for marketing of NTFPs, 44.44 per cent respondents for regular training programme should be organized for skill development in collection, processing and marketing of NTFPs, 41.48 per cent respondents for government should provide subsidy and bonus on all NTFPs, 31.85 per cent respondents for availability of timely market information about NTFPs, 28.15 per cent respondents for good road connectivity of villages with market and 26.67 per cent of respondents suggested for low cost storage facilities should be provided.

Acharya (2013) suggested few measures to overcome the problems related to collection, marketing and processing of NTFPs. This measures includes, afforestation should be promoted through distribution of plants to the farmers to avoid deforestation, Proper storage facilities should be available in panchayat bhavan

Table 4: Problems faced by the respondents in the collection and marketing of NTFPs.

(n = 135)

S. no.	Particular	Frequency*	Percentages
1.	Existence of bad weather	127	94.07
2.	Injury caused by attack of wild animals	119	88.15
3.	Obstruction caused by forest rule and regulations in collection of NTFPs from restricted forest area	78	57.78
4.	Over collection of NTFPs by outsiders	100	74.07
5.	Low and fluctuated market price of NTFPs	129	95.56
6.	Lack of developed market infrastructure for NTFPs	127	94.07
7.	Lack of transport facilities for marketing of NTFPs	66	48.89
8.	Lack of low cost storage facilities	35	25.93
9.	Lack of skill oriented training programme related to collection, processing and marketing of NTFPs	60	44.44
10.	Lack of availability of timely market information about NTFPs	45	33.33
11.	Lack of good road connectivity of villages with market	36	26.67
12.	Lack of subsidy and bonus on all NTFPs	53	39.26
13.	Deforestation	112	82.96

*Data are based on multiple responses.

S. no.	Particular	Frequency*	Percentages
1.	Flexibility in forest rule and regulations for NTFPs collection	74	54.81
2.	Checking of over collection of NTFPs by outsiders	90	66.67
3.	Selling prices of various NTFPs should be fixed by the government	111	82.22
4.	Purchasing of all NTFPs by government should be assured	113	83.70
5.	Low cost storage facility should be provided	36	26.67
6.	Regular training programme should be organized for skill development in collection, processing and marketing of NTFPs	60	44.44
7.	Development of existing market infrastructure by the government for marketing of NTFPs	129	95.56
8.	Availability of transport facilities for marketing of NTFPs	62	45.93
9.	Good road connectivity of villages with market	38	28.15
10.	Availability of timely market information about NTFPs	43	31.85
11.	Government should provide subsidy and bonus on all NTFPs	56	41.48
12.	Deforestation should be checked	114	84.44

Table 5 : Suggestions given by the respondents to overcome the problems faced by them in the collection and marketing of
NTFPs.(n = 135)

*Data are based on multiple responses.

at village level to save the collectors from distress selling of NTFPs, Formulation of State level marketing board should regulate and promote the purchase and sale of products within the state as well as outside the state at remunerative price and proper and regular training programs should be conducted for the collectors of NTFPs regarding the processing of NTFPs. Tejaswi (2007-2008) was also found almost similar findings.

Conclusion

NTFPs play an important role in sustainable livelihood of the tribes living in forest fringes. NTFPs also serve as an important source of food, nutrition, medicine, income and employment. But due to some prevailing problems like low and fluctuated market price, lack of developed market, existence of bad weather causes significant interruption in collection and marketing of NTFPs. Due to poor market infrastructure and fluctuated market price the respondents were not getting remunerative prices for their NTFPs. Thus, they were derived less profit from the marketing of NTFPs. So, there is a need to take necessary stapes by the government to eliminate these existing problems faced by the respondent of study area. In this context, suggestion that obtains from the respondents to overcome these problems should be involved in the strategies made by the government to solve such problems.

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