

**RESEARCH ARTICLE :**

# Entrepreneurship development of tribal women in Bastar district of Chhattisgarh

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**SUMMARY :** This paper aims to examine and study the entrepreneurship skills of the tribal women involved in NTFP collection and marketing in Bastar district of Chhattisgarh. Bastar district is endowed with dense forest covering 75.54% of the total area with abundant resource of economically important non-timber forest products. 80% NTFPs gatherers are women and out of those 55% women belongs to age group of 18-30 years, and 53% of the women were illiterates in the study area. The average labour days involved in the collection was 134.33 per annum per household and 68.23% women were involved in collection followed by men and children at 19.29% and 12.48% respectively. On an average Rs. 20258.69 per household per annum were generated through the selling of NTFPs, which is majorly contributed by women collectors with 65.62 per cent followed by 23.01 and 11.37 per cent by male and children collectors respectively. The labour employment indicated that 80.85 per cent women were involved in processing of NTFPs and only 19.15 per cent men were contributing them. The contribution of women in marketing of NTFPs in contrarily less and they sell only 27.56 per cent and rest 72.44 per cent are sold by men. The profit margin obtained after processing is 53.79% instead of selling unprocessed is only 44.25%. On an average the highest profit margin after reducing the processing cost gained through Kalmegh with 65.40 per cent followed by Cashew nut, Tamarind, Tikhur, Chironjee and Mahua with 51.26, 44.71, 42.23, 32.75, and 29.79 per cent respectively. Although the scenario looks satisfactory but still there is scope because the producer's share in consumer rupee is very less ranging from 53-54 per cent, which may rise upto 85-95%, if proper guidance and training provided to enhance women's marketing skill to grow their cottage industries and at the same time teaching them time-saving and sustainable methods to harvest NTFPs which also may protect the ecosystem.

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## **BACKGROUND AND OBJECTIVES**

Forests are the rich sources of energy, housing, firewood, timber and fodder and they also provide employment and income to a large section of the rural population in country

like India where it contributes 1.7 per cent to the total national GDP (Gubbi and Macmillan, 2008). It plays an important role in the socio-economic development livelihood improvement of rural people and tribal communities residing

near forest areas. Currently about 75% of poor people in the world depend on NTFPs for their subsistence (Aiyelaj and Ajewole, 2006). The collection and sale of NTFPs is the main economic activity for the majority of the tribal population in India as well as in the world (Muthyalu, 2008). About 92 per cent tribal population lives in rural areas and 35 to 55 per cent of the total income of their households comes from NTFPs (Johnson *et al.*, 2013).

Chhattisgarh being the third largest forest covered state of India endowed with 5.6 million hectares of dense forest which is 46.39% of state and 8.06% of the country (Forest Census, 2011). Out of the total population of Chhattisgarh 32.5 per cent are tribals. The Forest Department, of Chhattisgarh state helps the rural people in collection, procurement, processing and export of NTFPs through Chhattisgarh Minor Forest Products Marketing Federation, with a scheme to share 80% of profit from NTFP trading to the collectors 15% for collection, Sale and warehousing and the remaining 5% for reimbursement to Societies (Johnson *et al.*, 2013). Bastar district yields a net income of Rs. 2,00,000 through NTFPs harvested in every 10m<sup>3</sup> per 20 years (Sinha, 2008).

Bastar is the land of tribes and about 70% of the total population of Bastar comprises tribal like Gond, Maria, Muria, Halba, Bhatra and Dhurva etc. Among the NTFPs which are available in forest of Bastar Mahua, Tamarind, Tendu Leaves, Mushrooms, Harra, Baheda, Chironjee, Aonla, Honey, Mahul Leaves, Lac, Gums, Resins, Tikhur, Cashew-nut etc. have larger economic importance. The tribal women have indigenous and traditional knowledge of sustainable extraction and processing of NTFPs at farm level or domestic level, so they collectively gather these NTFPs by making co-operative Self-Help Groups and engaged in collection, processing and marketing of NTFPs as small cottage industries to contribute their family income, uplift their livelihood and grow their economy as a whole.

## RESOURCES AND METHODS

### Selection of study area and respondents:

The Study was conducted in Bastar district of Chhattisgarh which is situated between 19° 12' and 20° 34' North latitude and 81° 56' and 82° 15' East longitude. Bastar contains more than 75% forest cover which contributes about 30-40% of the total NTFPs production of the state. Six villages from three blocks of the district namely, Kolawal and Chhindgaon from Bakawand block, Puspall and Bamhni from Jagdalpur block and Kotwarpara and Koleng from Darbha block were selected for the study. 60 respondents (NTFPs collectors) were selected randomly out of which 38.33% small farmers followed by medium 23.33%, marginal 21.67% and large 16.67%.

### Method of enquiry and collection of data:

The primary data for the economic year 2011-12 was collected from March to June 2013 from randomly selected respondents through personal interview method with the help of pre-tested schedule. The secondary data was collected from the forest department and Chhattisgarh Minor Forest Produce Marketing Federation (CGMFPFED), Government of Chhattisgarh.

## OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well as discussions have been summarized under following heads:

### Socio-economic status of selected household :

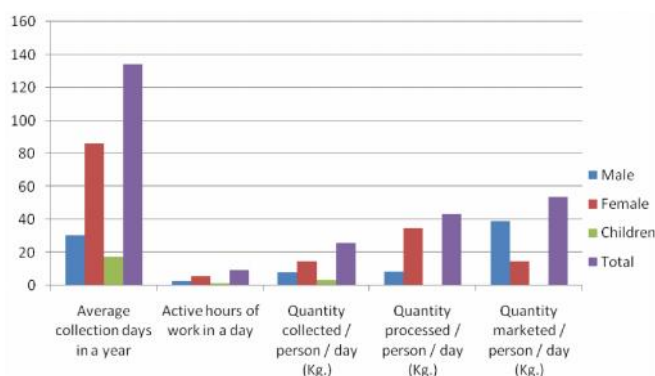
The results revealed that the average size of per capita land holding was 0.35 hectares and average land holding size was 2.02 hectares per farm family along with the average cropping intensity of 122.53%. The average family size was 5.70 and literacy rate was 63.08% for the selected households.

**Table 1 : Socio-economic status of selected household**

Sr. No.	Particulars	Farm size				Overall
		Marginal	Small	Medium	Large	
1.	Total number of sampled households	13	23	14	10	60
2.	Average holding size (ha.)	0.71	1.38	2.50	4.51	2.02
3.	Average family size	5.69	5.70	5.93	5.60	5.73
4.	Cropping intensity (%)	109.52	131.64	118.23	138.72	122.53

**Table 2 : Collection pattern of NTFPs amongst selected households**

Sr. No.	Particulars	Male	Female	Children	Total
1.	Average collection days in a year	30.58 (22.76)	86.33 (64.27)	17.42 (12.97)	134.33 (100.00)
2.	Active hours of work in a day	2.68 (27.89)	5.75 (59.83)	1.18 (12.28)	9.61 (100.00)
3.	Quantity collected / person / day (kg.)	8.00 (30.71)	14.73 (56.55)	3.32 (12.74)	26.05(100.00)
4.	Quantity processed / person / day (kg.)	8.27 (19.15)	34.92 (80.85)	00.00 (00.00)	43.19 (100.00)
5.	Quantity marketed / person / day (kg.)	38.83 (72.44)	14.77 (27.56)	00.00 (00.00)	53.60 (100.00)
6.	Income earned / person / day (Rs.)	11.63 (23.01)	33.17 (65.62)	5.75 (11.37)	50.55 (100.00)


**Fig. 1 : Pattern of collection of NTFPs amongst selected households**

### Involvement of women in collection, processing and marketing of NTFPs :

Results shows that the average collection days for NTFPs was 134.33 annually per household which is dominated by female collectors with 86.33 days followed by male and children at 30.58 and 17.42 days respectively. The average quantity collected by the household came out 26.05 kg per day out of which 56.55 per cent is sole collected by women followed by men and children. Out of the total processing of NTFPs tribal women process 80.85 per cent and rest 18.15 per cent is processed by

male members of family.

### Impact of NTFPs in their family annual income :

The results also reveal that the average annual income per family per year for sampled household came to Rs. 71643.03 which was largely contributed by farm income with 58.44 per cent and the contribution by NTFPs was 18.15 per cent in their total annual income. On an average Rs. 20258.69 per household per annum were generated through the selling of NTFPs, which is majorly contributed by women collectors with 65.62 per cent followed by 23.01 and 11.37 per cent by male and children collectors respectively.

The labour employment indicated that 80.85 per cent women were involved in processing of NTFPs and only 19.15 per cent men were contributing them. The contribution of women in marketing of NTFPs is contrarily less and they sell only 27.56 per cent and rest 72.44 per cent are sold by men.

### Conclusion :

Study suggested that NTFPs can be the alternative source of rural income and employment through effective, scientific and sustainable harvesting of NTFPs followed by effective marketing and at the same time

**Table 3 : Income distribution of sample household (Rs. / Family / Year)**

Sr. No.	Categories of household	Source of income					Total household income
		Farm	Off-farm	Non-farm			
				NTFPs	Others	Total	
1.	Marginal	17138.76 (42.85)	4332.55 (10.83)	15096.89 (37.74)	3432.55 (8.58)	18529.44 (46.32)	40000.75 (100.00)
2.	Small	29572.10 (50.36)	7845.52 (13.36)	13943.32 (23.74)	7364.26 (12.54)	21307.58 (36.28)	58725.20 (100.00)
3.	Medium	48410.91 (66.10)	345.36 (0.47)	12023.42 (16.42)	12456.39 (17.01)	24479.81 (33.43)	73236.08 (100.00)
4.	Large	93143.96 (66.93)	00.00 (00.00)	8372.50 (6.02)	37651.91 (27.05)	46024.41 (33.07)	139168.37 (100.00)
	Average	41869.24 (58.44)	4026.75 (5.62)	12998.59 (18.15)	12748.49 (17.79)	25747.04 (35.94)	71643.03 (100.00)

Note: Figures in parenthesis indicates percentage to total

making people come forward to protect the forest. It will be helpful in maintaining the plant population for extracting NTFPs for generations to come. The tribal women of Bastar district have a very good skill and traditional knowledge of processing of edible NTFPs, so they should be promoted, trained and properly guided to grow their cottage industry which make them enable to contribute for their family income and improve their standard of living. But still there is a huge scope of improvement for positive changes in livelihoods of the poor forest dwellers by commercialization of NTFPs. The contribution of NTFP-related incomes, and the profitability of NTFP-related enterprises is no doubt helps the poor to strengthen their socio-economic status but it is quite indispensable to switch and shift them towards the sustainable extraction.

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## REFERENCES

- Appasamy, P. P.** (1993). Role of Non-Timber Forest Products in a Subsistence Economy: The Case of Joint Forestry Project in India. *Econ. Bot.*, **47**(3): 258-267.
- Awais, M.**, Tosib Alam and Mohd. Asif (2009). Socio-Economic Empowerment of Tribal Women: An Indian Perspective, *Internat. J. Rural Studies*, **16**(1): 1-11.
- Das, S.K.** (2012). An analysis of constraints in women empowerment in tribal area: Evidences from Assam, *Asian J. Res. Soc. Sci. & Humanities*, **2**(4): 61-74
- Delang, D.O.** (2005), The Economic Evaluation of Non-Marketed Non-Timber Forest Products: A Case Study of The Pwo Karen in Thailand, *Paper Submitted to Kyoto University, Japan*.
- Dishan, E.E.**, Agishi, R. and Akosim, C. (2010). Women's Involvement in Non Timber Forest Products Utilization in Support Zones of GashakaGumti National Park, *J. Res. Forestry, Wildlife & Environ.*, **2**(1): 73-84
- Ghosal, S.** (2011). Importance of Non-Timber Forest Products in Native Household Economy. *J. Geography & Regional Planning*, **4**(3): 159-168.
- Gubbi, S.** and Macmillan, D.C. (2008). Can Non-Timber Forest Products Solve Livelihood Problems? A Case Study from Periyar Tiger Reserve, India, *Fauna & Flora Internat., Oryx*, **42**(2): 222-228.
- Johnson, T.S.**, Agarwal, R.K. and Agarwal, A. (2013). Non-Timber Forest Products as a Source of Livelihood Option for Forest Dwellers: Role of Society, Herbal Industries and Government Agencies, *Curr. Sci.*, **104**(4) : 440-443.
- Maraseni, T.N.**, Shivakoti, G.P., Cockfield, G. and Apan, A. (2006). Nepalese Non-timber Forest Products: An Analysis of the Equitability of Profit Distribution across a Supply Chain to India, *Small-scale Forest Economics, Mgmt. & Policy*, **5**(2): 191-206
- Maske, M.**, Mungole, A., Kamble, R., Chaturvedi, A. and Chaturvedi, A. (2011). Impact of Non-Timber Forest Produces (NTFP's) on Rural Tribes Economy in Gondia District of Maharashtra, India, *Archives Appl. Sci. Res.*, **3** (3):109-114.
- Muraleedharan, P.K.** and Sreelakshmi, K. (2007). Economic aspects of sustainable extraction of non-timber forest products. *J. Non-Timber Forest Products*, **14**(4): 249-254.
- Muthyalu, M.** (2008). Collection and marketing practices of non-timber forest produce (NTFP) - An empirical analysis. *Blue Ocean Res. J.*, **2**(1): 121-130.
- Puttaraja, L.** and Heggade, O.D. (2012). Economic empowerment of tribal women in Karnataka: A case study in Mysore and Chamarajanagara districts. *Studies Tribes & Tribals*, **10**(2): 173-181
- Sinha, G.K.** (2008). An economic analysis of collection and marketing of non-timber forest products in Kanker district of Chhattisgarh. M.Sc. (Ag.) Thesis, Indira Gandhi Krishi Vishwavidyalaya, Raipur, C.G. (India).

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