



## Trade of minor forest products in the rural markets of central India

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*(Received 28 June, 2015, Accepted 01 August, 2015)*

*(Published by Research Trend, Website: [www.researchtrend.net](http://www.researchtrend.net))*

**ABSTRACT:** Local markets or Haat Bazaar are markets that generally take place on a weekly basis in a playground or an open field, which is accessible to cluster of forest villages. Most of the of the population depending directly on small scale agriculture, Haat Bazaar offers a unique opportunity for producers to increase their profits and convert underutilized species, medicinal plants or Non Timber Forest Products (NTFPs). In recent years, the system of Haat Bazaar, which was generally practiced in the central India has now gained in popularity and the practice has spread to big village and or tahsil places. In remote forest villages, the tribals have only option left is haat bazaar, in which he can earn money after selling Amla, Mahua, Char, Bael and several unprocessed forest products. Looking to the importance of these haats, a study was undertaken in central region of Madhya Pradesh state. Atleast 83 traders in Dindori and 70 in Mandla district of Madhya Pradesh state are engaged in trading NTFPs in the local haat bazaars. Majority of profit margin goes to big trader's operative in the area. By and large Dindori markets were found more remunerative haat bazaar in comparison with Mandla. These local markets are more profitable than markets of big cities, particularly in case of Amla, Mahua flowers, Imli fruits etc. On average big traders gets lion profit ranging from Rs.3 to 8/ kg except in case of Char guthli, where it ranges from Rs.60 to Rs.109 /kg. Paper also recommends value addition options for few NTFPs, locally sold in the markets. Through this, forest dependent tribal family can get more remunerative prices of their value added products after selling the local markets without much transportation cost.

**Key words:** Haat Bazaar, Market, NTFPs, Forest, Medicinal plants.

### INTRODUCTION

Haat bazaars of tribal pockets of central India for sale and purchase of non timber forest products (NTFPs) and for some consumer goods are common in India. Many rural dwellers in tropical regions use non-timber forest products (NTFPs) for subsistence and as a source of income. Numerous local, national and world-level estimates exist of the number of people in different areas who are more or less dependent on NTFPs. It is estimated, for instance, that 1.5 million people in the Brazilian Amazon derive part of their income from extractive products (Non-Wood News, 1994). According to Zhong *et. al.* (1995) 700,000 people work in the bamboo sector in China, while a frequently quoted figure for India refers to 50 million tribal people living mainly from NTFPs (Poffenberger 1996). Increased urbanization (as a result of rural to urban migration) is an important factor that expands the size

of local NTFP markets because it creates a new type of consumer who, unlike rural inhabitants, has to buy rather than gather for subsistence use. Peri-urban markets not only supply consumers but are also an important source of employment for the traders concerned. Padoch (1992) estimated that more than 5,000 people were involved in NTFP trade. NTFP markets are also significant at the regional and international levels, providing revenues for the actors directly involved and for the government.

The present paper focuses on local markets and on market intermediaries (traders). Market intermediaries facilitate the co-ordination (or the matching) of supply and demand of NTFPs by providing market outlets to farmers and guaranteeing a source of domestic supply of NTFPs. Traders do not always deal with a single product.

Many rural dwellers in tropical regions depend on non-timber forest products (NTFPs) for their livelihood and their income needs. Local markets play an important role in enabling forest-dependent households to realize a significant part of their cash income through sale of NTFPs. Increased urbanization (as a result of rural to urban migration) is a significant factor that expands the size of local NTFP markets. Though some work has been done earlier on market surveys of forest products (Borthkur 1996; Chaudhury *et al.*, 1985; Hajra and Chakraborty 1981; Jain *et al.*, 1977; Sharma, 1992; Singh and Singh, 1985; Kumar and Jain, 2002).

The overall objective of the study reported in this paper was to examine profit margins of different category traders of local markets. Paper presents the results of a study which analyzed the ten main NTFPs sold in the tropical forests of central India.

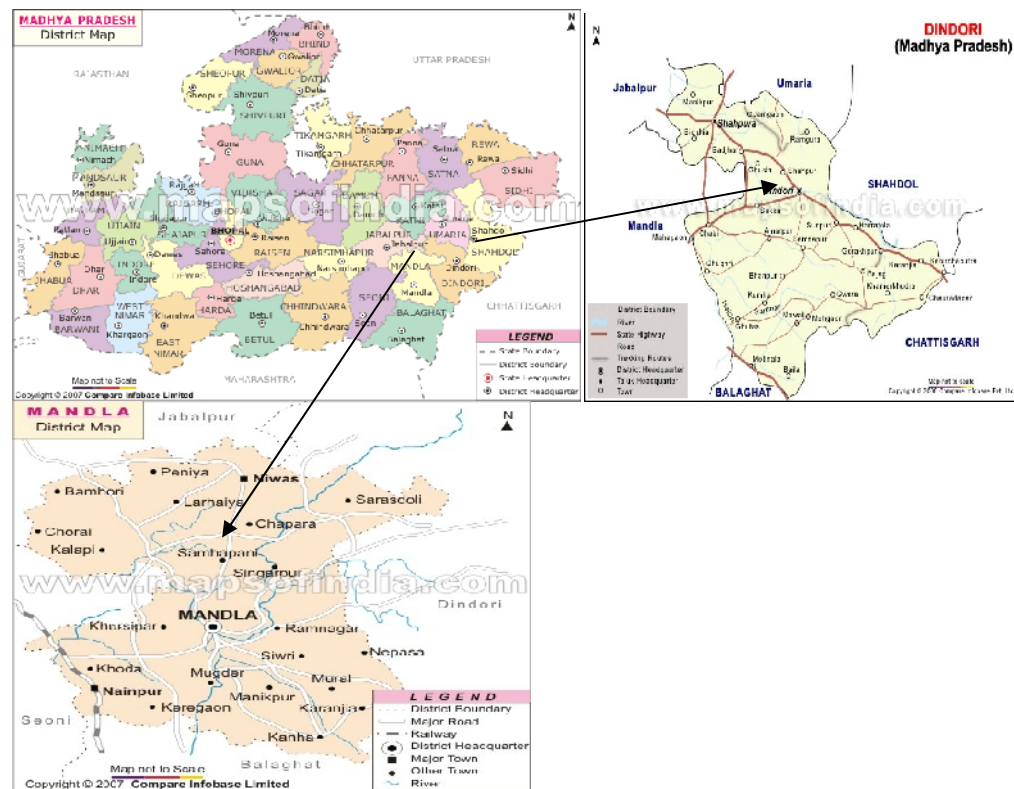
## MATERIALS AND METHODS

### A. Study Area

**Mandla:** The district Mandla is situated in the east-central part of Madhya Pradesh. It lies in the catchments of river Narmada and its tributaries.

Mandla has been richly endowed with dense forests. The world famous Kanha National Park is pride of Mandla and of the state. The majestic tigers add to the beauty of Kanha forests. The length of the district is about 133 km. from north to south and breadth is 182 km. from east to west. The population is 8,94,236. There are 9 blocks 4 Tehsils and 1247 villages. The district forms a part of Satpura hills, which separates the cotton growing of the south from the wheat growing extension of the Malwa Plateau on the north. The tropic of cancer thus passes through the north of the district. The total area of the district is 13,269 square km. Before bifurcation it was the 6th largest district in the state.

**Dindori:** The Dindori district is situated at the eastern part of Madhya Pradesh touching Chhattisgarh state. The district touches Shahdol in east, Mandla in west, Umaria in north, and Bilaspur district of Chhattisgarh State in south. It is located at 81.34° longitude and 21.16° latitude. The holy river Narmada passes through the district. It is situated at a height of 1100 m above sea level amongst herbal-rich, Maikal mountain ranges.



**Fig. 1.** Map showing location of Madhya Pradesh and selected study area- Mandla and Dindori district.

Dindori has many historical as well as spiritual places. The district is covered in seven block namely Dindori, Shahpura, Mehandwani, Amarpur, Bajag, Karanjia and Samnapur. The Baigas are very particularly vulnerable tribal groups which can be found only in this district. The Baigas are also known as the "National Human". The Baigas are the most primitive and interesting forest tribal of the district. Their few implements of agriculture or the chase are supplied by the local smith, and their food, supplemented by countless roots and fruits they obtain by their own slight excursions. The Baiga takes coarse food and shows no extravagance in this aspect. They eat coarse grain, kodo, and kutki, drink pe, eat little flour and are normally content with what little that they get. Also, beyond doubt they eat several items from the forest that includes primarily Chirota Bhaji, Gular leaves such as chirota, chinch, chakora, sarroota, peepal etc. They also eat Birar Kand, Kadukand and other rhizomes. Mushroom is also a delicacy. Numerous fruits such as mango, char, jamun, tendu are also eaten.

**NTFP resources:** Minor forest produce like Tendu Patta, Mahlon patta, Mahua, Harra, Bahera, Amla, Bael & char is collected every year by rural people which are means of their livelihood. NTFP of more than 30 crores rupees is transported every year from the selected districts. The temperate climate and the equitable distribution of rain make forest of Dindori an ideal plateau for dense vegetation cover. The forest of Mandla and Dindori districts are home to various invaluable medicinal plants like brahmi, gulbakawali, safedmusli, kalimusli, tejraj, bhojraj, patalkumhna, kali haldi, devraj, hatahjadi, jatashankari, ashva gandha. These herbaceous tubers were largely sold in the local weekly markets by Baiga and Gond tribes during the year especially just after the rainy season. Winter is the best season found for sale of various NTFPs of the area.

### B. Methodology

The study covered 153 haat bazaars in the tribal district of Mandla and Dindori of central India. The study was conducted in all the three seasons in the year 20012 to 2013 in the two selected districts (i.e. Mandla and Dindori). Markets were selected based on the role they play in the assembly and distribution of NTFPs, their

accessibility, their links with other markets in other districts. The sales of few NTFPs were recorded, including medicinal plants as these are normally sold in specialized places and would have accounted for many more products. Traders were selected based on the number of NTFPs they handled, their knowledge of NTFP markets and their willingness to respond to the questionnaires after an explanation of the purpose of the study. The 83 traders interviewed in Dindori and 70 in Mandla district, operating in the study area. The markets were visited between 2-3 times during the study period, depending on their relative importance and accessibility. For the markets visited only once we tried to retrieve seasonal variations in prices and quantities based on a 'memory recall' questionnaire. This information was checked against the markets that were visited several times in order to assess its validity.

**Haat Bazaars of central India.** NTFP traders play a very important role both in providing market outlets for gatherers and in distributing the products to consumers. Weekly markets in tribal areas of Madhya Pradesh state are important socio economic institutions. Some times traders of big cities come to these markets to purchase forest produce others set up small shops for selling consumer goods such as toiletries, cloths, stationery, plastic goods, match boxes and some cereals etc. These markets are held on certain days fixed for each village or area. The tribal's live in small villages inside or near forests areas. Local tribal peoples come from 5 to 10 kilometers distance to sell, purchase or barter. Agriculture is the main occupation, but also gathers medicinal plants, fuel wood, several NTFPs for selling in weekly markets called haat bazaars. They also buy certain consumer items, salt, spices, clothes, utensils, cosmetics, as well as other items for body ornamentation. The market starts in the forenoon and remains open till evening (before sunset). The peak hours of the market are between 2- 6 pm. Tribals have great enthusiasm for attending these local markets, and men, women, children's eagerly look forwards to the market day. Each market village/ haat bazaar site located in the forests of Mandla and Dindori district were visited 2-3 times, and all categories of traders were interviewed separately for collecting information (Table 1).

**Table 1: List of surveyed markets, Traders of Dindori district, Madhya Pradesh.**

| Name of forest range | Surveyed Markets/Villages   | No. of small traders | No. of medium traders | No. of Big traders |
|----------------------|---|----------------------|-----------------------|--------------------|
| Samnapur             | Dhaba, Paudi, Ajar, Kandavani, Dhurkuta, Jeelang                  | 20                   | 5                     | 2                  |
| Karanjia             | Do-muhani, Kandatola, Ladradar, Kharidih, Pandripani, Kindrabehra | 26                   | 7                     | 3                  |
| Bajag                | Jalda- Bauna, Khamera, Chadha, Tatar, Silpidi, Tarach             | 15                   | 4                     | 1                  |

Each market village/ haat bazaar sites located in the forests of Dindori district were visited 2-3 times, and all categories of traders were interviewed separately for collecting information regarding sale and purchase prices, margins etc. Traders interviewed appear to be of similar average age (38 years) across all the markets. On average traders have 10 years of experience in dealing with NTFPs. Overall, the vast majority (90 %) of traders of NTFPs are men.

This may be attributed to a number of factors: the gathering of NTFPs (with the exception of those which require climbing) is done exclusively by men; NTFP trade is traditionally considered a marginal activity reserved for men and children and not attractive to women; and the traditional division of labor within the household leads women to specialize in the sale of NTFPs and food crops, vegetables etc.

**Table 2: Sampled markets and surveyed villages in Mandla District.**

| Name of forest range | Surveyed Markets/villages                       | No. of small traders | No. of medium traders | No. of Big traders |
|----------------------|---|----------------------|-----------------------|--------------------|
| 1.Motinala           | Baila, Tatma, Nonadar, Devgaon, Chemaghundi     | 13                   | 8                     | 4                  |
| 2. Mawai             | Sathiya, Sajalagan, Patpara, Amwar, Awlaghughra | 19                   | 5                     | 2                  |
| 3.Anjaniya           | Ghot, Medhatal, Magdha, Umariya, Sajpani        | 15                   | 3                     | 1                  |

## RESULTS AND DISCUSSION

**Table 3: Extensively traded NTFPs and profit margins among traders of Dindori haat bazaars (Price in Rs./Kg.).**

| S.no. | Name of species                                   | Average of Collectors sale price | Avg. of small Traders | Avg. of medium traders | Avg. of big traders |
|-------|---|----------------------------------|-----------------------|------------------------|---------------------|
| 1     | Amla<br>( <i>Embllica officinalis</i> )           | 3.50(±0.85)                      | 4.50(±1.02)           | 5.00(±0.66)            | 7.50(±1.02)         |
| 2     | Harra<br>( <i>Terminalia chebula</i> )            | 3.00(±0.24)                      | 3.50(±0.79)           | 4.00(±0.43)            | 5.00(±0.79)         |
| 3     | Baheda<br>( <i>Terminalia bellerica</i> )         | 2.50(±0.33)                      | 3.00(±0.36)           | 3.50(±0.89)            | 4.50(±0.36)         |
| 4     | Imli<br>( <i>Tamarindus indica</i> )              | 6.00(±0.25)                      | 7.50(±0.90)           | 8.00(±0.22)            | 9.50(±0.90)         |
| 5     | Mahua flowers<br>( <i>Madhuca latifolia</i> )     | 8.00(±0.85)                      | 10.00(±0.55)          | 13.00(±1.16)           | 15.00(±0.55)        |
| 6     | Mahul patta<br>( <i>Bauhunia vahlii</i> )         | 10.00/bundle<br>(±0.11)          | 11.50(±0.96)          | 12.00(±1.22)           | 15.50(±0.96)        |
| 7     | Bael<br>( <i>Aegle marmelos</i> )                 | 8.00(±1.22)                      | 10.00(±0.77)          | 11.00(±0.34)           | 14.50(±0.77)        |
| 8     | Char guthli<br>( <i>Buchanania lanzan</i> )       | 55.00(±0.77)                     | 65.00(±0.67)          | 85.00(±0.88)           | 109.00(±0.67)       |
| 9     | Tendu fruit<br>( <i>Diospyros melanoxylon</i> )   | 6.00(±0.76)                      | 7.00(±0.55)           | 7.50(±1.00)            | 9.00(±0.55)         |
| 10    | Bhilma fruits<br>( <i>Semecarpus anacardium</i> ) | 4.50(±0.12)                      | 5.50(±1.06)           | 6.00(±0.55)            | 7.50(±1.06)         |

It is evident from the data presented in Table 3 that collectors get very low prices of their produce as compared to trader's (which they get after selling to big traders located in the city). Bhilma fruits (*S.*

*anacardium*) were sold at a meager rate of Rs. 4.5/kg by the collectors which was sold at the rate of Rs.5.5/kg to small and than at Rs.7.5/kg to big traders.

Similarly Baheda (*T. bellerica*) and Harra fruits (*T. chebula*) were sold at a lower rate varies from Rs.3/kg to 5/kg respectively in the local markets of Dindori district whereas Imli (*T. indica*) was also sold at a lower rate (i.e. from collectors Rs.6 to big traders 9.5/kg). The traders' margin (for the duration of the season) shows

increasing profit margin but does not much varies except in Char guthli (*B. lanzan*) where it ranges from collectors Rs.55/kg to big traders Rs.109/kg. Markets for Amla, Imli and Bael fruits (*A. marmelos*), Mahua flowers (*M. indica*), a widely consumed product, are concentrated in the vicinity of the large urban centers.

**Table 4: Extensively traded NTFPs and profit margins among traders of Mandla haat bazaars (Price in Rs./Kg.).**

| S. no | Name of species                                   | Average of Collectors price | Average of Traders price | Avg. of medium traders | Avg. of Big traders |
|-------|---|-----------------------------|--------------------------|------------------------|---------------------|
| 1     | Amla (green)<br>( <i>Embllica officinalis</i> )   | 3.50(±1.12)                 | 5.00(±1.01)              | 5.00(±0.66)            | 6.50(±0.79)         |
| 2     | Harra<br>( <i>Terminalia chebula</i> )            | 3.00(±0.77)                 | 4.00(±0.55)              | 4.50(±0.43)            | 5.00(±0.67)         |
| 3     | Baheda<br>( <i>Terminalia bellerica</i> )         | 2.50(±0.85)                 | 3.00(±0.90)              | 3.50(±0.89)            | 4.50(±0.43)         |
| 4     | Imli<br>( <i>Tamarindus indica</i> )              | 6.00(±1.10)                 | 8.00(±0.33)              | 9.00(±0.22)            | 12.50(±1.00)        |
| 5     | Mahua flowers<br>( <i>Madhuca latifolia</i> )     | 8.00(±0.23)                 | 10.00(±1.05)             | 11.00(±1.16)           | 14.00(±0.77)        |
| 6     | Mahul patta<br>( <i>Bauhinia vahlii</i> )         | 10.00/bundle<br>(±0.56)     | 11.0(±0.66)              | 12.00(±1.22)           | 14.50(±1.06)        |
| 7     | Bael<br>( <i>Aegle marmelos</i> )                 | 8.00(±0.13)                 | 9.00(±0.78)              | 10.00(±0.34)           | 12.50(±0.89)        |
| 8     | Char guthli<br>( <i>Buchanania lanzan</i> )       | 60.00(±1.26)                | 70.00(±1.45)             | 85.00(±0.88)           | 105.00(±0.67)       |
| 9     | Tendu fruit<br>( <i>Diospyros melanoxylon</i> )   | 5.50(±0.89)                 | 6.00(±0.44)              | 7.50(±1.00)            | 8.00(±0.47)         |
| 10    | Bhilma fruits<br>( <i>Semecarpus anacardium</i> ) | 4.00(±0.33)                 | 4.50(±1.05)              | 5.00(±0.55)            | 6.50(±1.30)         |

The data depicted in Table no. 4 shows that primary collectors get very low prices of their raw produce after selling to the medium and big trader's. Bhilma fruits (*S. anacardium*) were sold at a low rate of Rs. 4/kg by the collectors which was sold at the rate of Rs.5/kg to small and than at Rs.6.5/kg to big traders. Similarly Baheda (*T. bellerica*), and Harra fruits (*T. chebula*) were sold at a lower rate varies from Rs.2.5/kg to 5/kg respectively in the local markets of Dindori district whereas Imli (*T. indicus*) was also sold at a lower rate (i.e. from collectors Rs.6 to big traders Rs.9.5/kg). By and large profit margin of Rs. 4-6 per kilogram was observed in most of the NTFPs traded in the local markets of Mandla. In case of Char guthli (*B. lanzan* fruit), a huge margin by big traders (Rs.60/kg from collectors to Rs.105/kg) was observed in comparison with other NTFPs sold in the haat bazaars of Mandla district. The traders' margin (for the duration of the season) shows increasing profit margin but does not much varies except in Char guthli. The above discussion shows that

in cash terms, the market margins for NTFPs in Mandla district vary enormously.

## CONCLUSIONS

NTFP traders play a very important role both in providing market outlets for gatherers and in distributing the products to consumers. This study analyses some features of NTFP markets and marketing in the Mandla and Dindori districts of central India. As has been shown, NTFP markets are mainly run by men, offering them an employment opportunity. At least 83 traders in Dindori and 70 in Mandla are engaged in trading NTFPs in the haat bazaars. The study shows that there is great margin in selling and purchase rate given to collectors by small, medium and big traders. A huge profit of margin (by big traders) was observed in case of Char guthli, Mahua, Imli, Amla etc. On the other hand a very low profit margin was observed in case of Harra, Baheda and Bhilma fruits.

However, a meager amount was given to the primary collectors/ local villagers by the haat bazaar traders. Big traders sometimes after value addition sold NTFPs with a good margin to Ayurvedic industry peoples later on. Over all Dindori was found more remunerative haat bazaar market in comparison with Mandla district.

The rates of NTFPs are highly fluctuating and there were no regulating agency, and hence, rate in these markets are govern by big traders. Thus there is need to conduct study on regular basis. The study has shown that traders play a pivotal role that enables gatherers to realize the value of the NTFPs in their environment, thereby increasing the incentive for forest conservation. Traders are often accused of exploiting gatherers. Some cooperative societies, including those of the forest department and tribal welfare department do sometimes assist the tribal folk in getting proper price for NTFPs, but more organized effort is suggested There is, however, a need to recognize that traders carry out many useful marketing functions and that they are the ones who have to bear most of the risk of difficult markets and costly transport. In general terms, these local haat bazaar or local markets are more profitable than markets of big cities, particularly in case of Char guthli, Amla, Mahua flowers, Imli fruits etc.

#### ACKNOWLEDGMENTS

The author is thankful to the divisional forest officer Mandla and Dindori districts and the field forest staff. Local traders of haat bazaar and weekly markets and NTFP collectors of Mandla and Dindori districts were greatly acknowledged for providing primary information's. The authors are also thankful to the Director, IIFM Bhopal and Dr. D. Debnath for providing necessary assistance to complete the work.

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