

RESEARCH ARTICLE

Role of NTFPs among Forest Villagers in a Nagbhir Tehsil, District Chandrapur (MS), India

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Manuscript details:	ABSTRACT
<p>Available online on http://www.ijlsci.in</p> <p>ISSN: 2320-964X (Online) ISSN: 2320-7817 (Print)</p> <p>Editor: Dr. Chavhan Arvind</p> <p>Cite this article as: Zode Ravindra and Chaturvedi Alka (2016) Role of NTFPs among Forest Villagers in a Nagbhir Tehsil, District Chandrapur (MS), India, <i>Int. J. of Life Sciences</i>, A6: 161-164.</p> <p>Copyright: © Author, This is an open access article under the terms of the Creative Commons Attribution-Non-Commercial - No Derives License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.</p>	<p>The present work was taken up in Nagbhir Tehsil, District Chandrapur in state Maharashtra which is a forested area with a high occupancy by tribal communities whose live and livelihood closely integrate and interact with forest community. During the investigation 50 species of 43 genera representing 29 families are found to be used by the tribal communities as a Non Timber Forest Products (NTFPs). The Dicot families are most commonly used than the Monocot. The investigation shows that, 50 species were used in different purpose such as Medicinal, Edible, Sacred, Commercial and Construction. During the investigation information was collected from the traditional knowledge were found that, in the month of Jan-April most of the NTFPs are available while during the month of May-August the availability of NTFPs are less. These NTFPs are indirectly helpful for the farmers.</p> <p>Keywords: NTFPs, Tribal communities, Livelihood, Traditional knowledge.</p>
	<p>INTRODUCTION</p> <p>Studies in India have shown that, NTFP provide substantial inputs to the livelihoods of forest dependent population. The peoples have limited non-agricultural income opportunities (Chandrashekar, 1994). NTFPs truly play a very important role in the rural economy in terms of providing employment, income potential and life support sustenance (Negi <i>et al.</i>, 2011). NTFPs are providing the alternative source for food as well as income especially those people's lives in and around forests (Hedge <i>et al.</i>, 1996). In the tropical countries the socio-economic value of NTFPs are now well recognized (FAO, 1995). From an investigation, around 500 million peoples surviving in forest or near to forest are totally governed by NTFPs for their livelihood needs (Alexander <i>et al.</i>, 2002). Keeping the view of importance of NTFPs and socio-economic development of stockholder in and around the forest. Studied aims to explore the role of NTFPs in lifestyle of rural forest villagers of Nagbhir Tehsil of Chandrapur district in Maharashtra state of India. During investigation, it has been observed the people use NTFPs for Edible, Construction, commercial and Medicinal purposes.</p>

MATERIAL AND METHODES

Study Area:

Nagbhir is a Tehsil in Chandrapur District of Maharashtra State, India. Chandrapur district lies between 18.4 to 20.5 degree North Latitude and 78.5 to 80.6 East longitudes. Nagbhir is located 92 KM towards North from District headquarters Chandrapur. Nagbhir consist of 124 Villages and 65 Panchayats. For the present research work 4 villages were selected, these are Balapur Khurd, Alewahi, Balapur Buj, Ghodazari. The four villages are covered by 40414.709 ha forest area. The villages were selected due to densely covered forest area. In Nagbhir Forest division, Ghodazari has found largest forest area i.e. 18088.997 ha than other selected villages. The present study carried out during the month of January to December 31, 2015. Extensive Village surveys were conducted to collect information of NTFPs dependence and its use patterns in the villages. The data collection team also contained knowledgeable older individuals and youths from each village. Thus, a simple random sampling technique was used to select household respondents from the village in and around the forest of Nagbhir Tehsil. Primary as well as secondary sources were used for collection of data and information. A total of 120 individual, 30 individuals from each village actively involved in collection of NTFPs were interviewed through the household survey.

RESULTS AND DISCUSSION

Total 50 plants were found as NTFP from the selected villages. (Table1). Nagbhir tehsil shows that angiosperms have major contribution in the 'nontimber forest produce' in form of 50 species of 43 genera representing 29 families (Table 1). An analysis of habits of the species generating NTFPs reveals that out of 50 species 28 are trees, 11 shrubs, 10 herbs and 1 climber (Table 1). Thus, the tree species are more exploited than others. The present studied shows that, Ghodazari and Balapur Khud Villagers are known to use more NTFPs than the Alewahi and Balapur Buj (Fig. 1).

The tribal were seen to collect different plant parts without felling the trees to put them in various domestic uses as source of Medicinal, Commercial, Edible, Sacred and Construction. In all 5 categories of use could be recorded from the traditional knowledge of which the most important was the medicinal use. Out 50 species, 32 species are used for medicinal, 29 for Edible, 18 for Sacred and 15 for Construction and 16 for Commercial (Table 1). In the month of Jan-April most of the NTFPs are available while during the month of May-August the availability of NTFPs are less (Fig.2). In many parts of India, the local peoples are using NTFPs for various purposes. Like Zode et al (2014, 2015) in Tirora tehsil of Gondia district, Maharashtra, Basu and Mukharjee (1996) in Purulia district of West Bengal have also reported the same.

Table 1. A species wise account of TK-contribution by selected villages regarding their NTFPs use

Sr. No.	Botanical name	Local name	Habit	Used pattern					Parts in use	Availability (Season)
				M	CM	E	S	CN		
1	<i>Andrographis paniculata</i>	Bhuinimb	Herbs	√					Leaves, Root	All season
2	<i>Alangium sulvifolium</i>	Akawal	Trees			√			Ripe Fruit, Root, Dry Branches	Feb-March
3	<i>Achyranthes aspera</i>	Kutri, Chilati	Herbs	√			√		Whole plants	All season
4	<i>Buchanania lanzan</i>	Charoli	Trees	√	√	√			Leaves, Seed, Stem bark, Fruit	Sept-Dec
5	<i>Semecarpus anacardium</i>	Bhelau, Bibba	Trees	√	√	√		√	Ripe fruit, Seed, nut oil, young flower	Oct-Dec
6	<i>Mangifera indica</i>	Aam	Trees		√	√	√		Ripe and Unripe fruit, Seed, Leaves	March-April
7	<i>Holarrhena pubescens</i>	Pandharakud a	Trees	√	√	√			Flower	March-April
8	<i>Carissa carandus</i>	Karvanda	shrubs	√	√	√			Fruit, Dry branches	June-July
9	<i>Amorphophallus campanulatus</i>	Suran	Herbs	√		√			Tuber	Oct-Nov

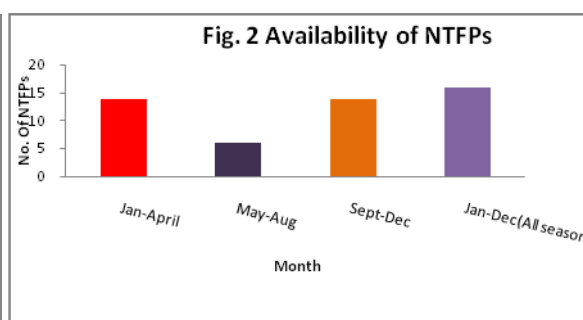
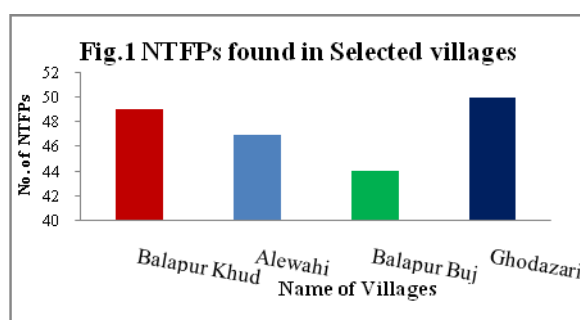
Table 1. Continued...

Sr. No.	Botanical name	Local name	Habit	Used pattern					Parts in use	Availability (Season)
				M	CM	E	S	CN		
10	<i>Tridax procumbens</i>	Kambarmodi	Herbs	√					Leaves	All season
11	<i>Calotropis gigantea</i>	Rui	Shrubs	√			√		Milky juice, flower	All season
12	<i>Calotropis procera</i>	Rui	Shrubs	√			√		Milky juice, flower, leaves	All season
13	<i>Bombax ceiba</i>	Katesawar	Trees	√		√			Stem Bark, Flower	Feb-April
14	<i>Bauhinia sp.</i>	Kanchanvrush	Trees			√	√		Flower, Fruit, stem Bark	Oct-Dec
15	<i>Tamarindus indica</i>	Chinch	Trees			√			Fruit, Young branches	March-April
16	<i>Terminalia arjuna</i>	Arjun-Ajn	Trees	√				√	Stem Bark, strong branches	May-June
17	<i>Terminalia bellerica</i>	Behada	Trees	√	√	√			Stem bark, seed	Aug-Dec
18	<i>Terminalia alata</i>	Ain	Trees	√				√	strong branches , Leafy Branch, leaves	May-July
19	<i>Ipomoea obscura</i>	Kumbharichawel	Climbers	√					Leaves, Stem	Oct-Dec
20	<i>Dioscorea bulbifera</i>	Matalu	Herbs			√			Tuber, stem with leaf	Aug-Oct
21	<i>Diospyros melanoxylon</i>	Tendu patta	Trees		√	√	√	√	Leaves, Ripe Fruit, stem	May-June
22	<i>Embilca officinalis</i>	Awala	Trees	√	√	√	√		Unripened Fruit	Feb-April
23	<i>Butea monosperma</i>	Palas	Trees	√			√	√	Leaves, Flower ,Root bark , Dry branches	Feb-April
24	<i>Pongamia pinnata</i>	Karanja	Trees	√					Dry branches ,twig, seed	Feb-April
25	<i>Abrus precatorius</i>	Gunj	Shrubs	√					Seed, Leaves	Sept-Dec
26	<i>Ocimum sanctum</i>	Tulas	Herbs	√		√	√		Whole plants	All season
27	<i>Gloriosa superba</i>	Karkari	Herbs				√		Flower, Leaves	Sept-Oct
28	<i>Asparagus racemosus</i>	Shatavari	Shrubs	√			√		Root, Twig	Aug-Dec
29	<i>Aloe vera</i>	Korphad	Herbs	√					Leaves	All season
30	<i>Sida sp.</i>	Chikana	Herbs					√	Dry plant	Aug-Nov
31	<i>Azadirachta indica</i>	Kadunimb	Trees	√		√	√	√	Stem ,Fruit , Leaves, Seed, twig, Dry branches, stem bark	Feb-May
32	<i>Pithecellobium dulce</i>	Chichbili	Trees			√			Fruit	Jan-April
33	<i>Acacia nilotica</i>	Babul	trees	√				√	branches ,Gum, fruits	Jan-April
34	<i>Acacia leucophola</i>	Hivar	Trees	√					Branches, leaf	Aug-Nov
35	<i>Ficus racemosa</i>	Umber	Trees	√		√	√		Fruit, dry branches	Sept-Oct
36	<i>Ficus benghalensis</i>	Wad	Trees	√			√		Stem bark , Milk of trees	All season
37	<i>Phoenix sylvestris</i>	Sindi	Tall palm			√		√	Leaves, Ripe fruit	Jan-May
38	<i>Dendrocalamus strictus</i>	Bamboo	Shrubs			√		√	stem	All season
39	<i>Bambusa sp.</i>	Bamboo	Shrubs			√		√	Stem	All season
40	<i>Cynodon dactylon</i>	Durva,Harali	Herbs	√			√		Whole plants	All season
41	<i>Ziziphus jujuba</i>	Ber	Shrubs		√	√			Fruit, Branches	Jan-March
42	<i>Ziziphus xylopyra</i>	Katbor	Shrubs		√	√			Ripe Fruit	July-Aug
43	<i>Ziziphus oenoplia</i>	Aeroni	Shrubs		√	√			Ripe Fruit, Branches	Nov-Dec

Table 1: Continued..

Sr. No.	Botanical name	Local name	Habit	Used pattern					Parts in use	Availability (Season)
				M	CM	E	S	CN		
44	<i>Limonia acidissima</i>	Kawath	Trees	✓	✓	✓			Fruit,Leaves,stem Bark	Aug
45	<i>Aegle marmelos</i>	Bel	Trees	✓		✓	✓		Leaves, Fruit	All season
46	<i>Chloroxylon swietenia</i>	Bhera	Trees					✓	stem	All season
47	<i>Madhuca longifolia</i>	Mahua	Trees	✓	✓	✓	✓	✓	Leaves, Fruit, Seed, stem, stem bark , root	Jan-April
48	<i>Datura sp.</i>	Dhotra	Shrubs	✓	✓				Seed , leaves	All season
49	<i>Tectona grandis</i>	Sagwan	Trees		✓			✓	Dry branches, stem, Leaves	All season
50	<i>Lantana camera</i>	Ghaneri	Shrubs			✓			Ripe fruit	All season
				32	16	29	18	15		

M=Medicinal,CM=Commercials=Sacred, E= Edible, CN=Construction



CONCLUSION

The survey and observation provides the clarity about to the dependence of lives of tribal people on primary basis and secondary basis. Thus the forest products in the form of NTFPs play an important role in the socio-economic security net on the forest dwellers. The study reveals that forest dwellers depend on the forest product i.e. NTFPs in different purposes. The rich NTFPs resource and its systematic harvesting will provide increase employment opportunity for the forest dwellers. With the increasing of scientific and sustainable harvesting of NTFPs.

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