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PHYTORESOURCES AND SOCIO ECONOMIC UPLIFTMENT OF TRIBALS WITH SPECIAL REFERENCE TO AMARKANTAK ACHANAKMAR BIOSPHERE RESERVE, M.P.

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ABSTRACT

Amarkantak Achanakmaar Biosphere Reserve is a predominantly tribal region; living close to forest tribals of this region are totally dependent on the forest for their daily needs. The role of NTFPs becomes more significant for not as much of agriculture dependent communities with small land holders residing in remote area of biosphere forests. Collecting and selling of phytoresources is considered as an important way of using vegetation in sustainable manner. Edible and medicinal plants are principle phytoresources. Types, species and amount of are different in different seasons and also influenced by the location. Economically important phytoresources plants species utilized by the local people have been recorded from the natural forest of amrkantak achanakmar biosphere reserve. The importance of phytoresources collection and trading in local communities has shown decreasing trend due to the exotic culture invading in the study region. Until date, no much work has been done on the economic aspects of phytoresources in the livelihood of tribal community of Amarkantak Achanakmaar Biosphere Reserve.

KEYWORDS: Non-timber forest products, livelihood, tribal communities, Amarkantak Achanakmaar Biosphere Reserve.

INTRODUCTION

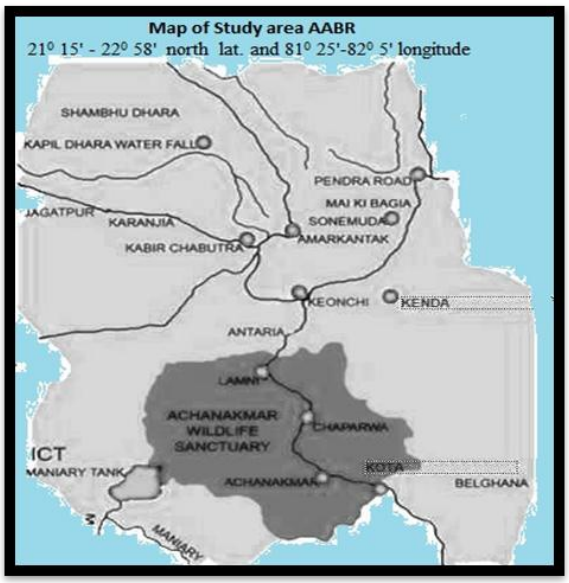
Madhya Pradesh holds highest rank in tribal population of India. There are 46 tribal communities in the state divided into more than 100 ethnic groups. The state is very rich in biodiversity and ethno-diversity of the country. Forests are inseparable part of the tribals. They are almost wholly dependent on forests for food, shelter, medicine and clothing. They collect Non Timber Forest Products (NTFP's) like roots, tubers, flowers, fruits, fibers, gum, resin, dye, tannins, honey and wax etc. to fulfill their day to day requirements. Very little work has been carried out on socio-economic aspects of tribal's for upliftment of their economic status through locally available raw materials or plant produces through selling of phytoresources. Some important studies from ethnobotanical point of view have been made at certain places (Bhalla *et. al.*, 1986, Jain 1988, Maheshwari 1990, Maheshwari and Painuli 1990, Sikarwar 1997, 1998, Singh 1993, Jain 2000, Jain and Patole 2001 and Jain and Vairale 2007). It is estimated that 30 million forest dwellers, mostly of tribal ancestry, depend on Non-timber Forest Products (NTFP) for their livelihood in Central India (Quang, 2006). Non-timber Forest Products can be defined as "all biological materials, other than timber, which are extracted from forests for human use" (Belcher, 2003, p. 161), Phytoresources include medicinal plants, mushrooms, fruits, resins, bark, roots and tubers, leaves, flowers, seeds, honey etc. NTFPs can be "Any commodity obtained from the forest that does not necessitate harvesting trees, including bush meat, fur-bearing animals and the gathering of deadfall fuel wood" (BC Ministry of Forests and Range, 2008).

Study Sites:- Achanakmar-Amarkantak Biosphere Reserve lies between 21^0 15' - 22^0 58' north lat. and 81^0 25'-82^0 5' longitude. It is all around associated by street from Bilaspur and Raipur in Chhattisgarh and Anuppur and Pendra street railroad station in Madhya Pradesh. Pendra Road, Belgahana and Kota are on the move zone and transport can be masterminded from these regions moreover.

A large portion of the domain of the anticipated Achanakmar-Amarkantak BR are either thick or open or corrupted and clear woods with made assorted variety together with horticulture fields in the middle. The save woods inside the BR is concerning sixty six of the generally speaking land territory of the BR. Zonation of anticipated BR is determined to existing Indian life Protection Act and no new confinement are compulsory. It has intended to coordinate learning on eco-topographical angles, socio political economy of local

networks, extent of decent variety and classes of Individuals United Nations office utilize it. The zonation wherever the ensure interior region, is covered by cushion zone clarify the phytobiological and socio reasonable autonomy among the regions.

Map of Achanakmar- Amarkantak Biosphere resevrve



MATERIAL AND METHODS

Thorough survey was conducted in different weekly markets of Achanakmar Amarkantak biosphere reserve between Dec. 2016 to April 2017. The method adopted for collection of information was the interview with tribal people and local traders. During the survey background information of the phytoresources peddlers and consumers was also gathered. Voucher specimens were also collected, identified from published literature and deposited in the herbarium of School of Studies in Botany, Govt. Model Science College, Rewa. Information as vernacular names, parts used and market price of the phytoresources was also recorded. The main periodic markets in study region were Bhejri, Damgarh, Chuktipani, Thadapattar, kewachi, Achanakmaar, kharedi, karanjiya, marwahi region and amarkantak. All the markets are held once in a week with a fixed rotation in the same locality.

RESULT AND DISCUSSION

The present study reveals that a good number of villagers have knowledge of exploring NTFPs as about 25% of their income is generated from the collection of NTFPs while 50% from agriculture and remaining 25% from other sources. The people in majority prefer to collect the NTFPs having high prices. They obtain tentative prices of the NTFPs and their market demand from the traders and local. shopkeepers. It was also observed that mostly poor and unemployed people collect and sell NTFPs in large quantities. They retain large part of the produce for their own use and sell remaining part in the market. The income generated by the sale of NTFPs is utilized for buying clothes, salts and other necessary items. The collectors mostly recognize NTFPs by leaves, flowers or by smelling. According to them, now a days, the NTFPs are not easily available in the forests. The collectable quantity of NTFPsis decreasing day by day as compared to past years. In the study region the trading process is still keeping a traditional style.

There are a limited number of species collectors and sellers usually do not bother about accurate quantification of their NTFPs. Major and minor forest products happen to be moreamarkantakfollowedby Bhejri, Damgarh, Chuktipani, Tha dapattar, kewachi, Achanakmaar, kharedi, karanjiya, marwahi. Their aim is only to get expected returns, so the sellers can finish the trading process easily without any tool such as weights and balances. Different kinds of NTFPs are available seasonally.

Table 1: The stalls or temporary shops selling.

Photoplate: Interveiw and Local market

Table: List of plant species sale in market with price.

Sr. No.	Botanical name	Family	Habit	Local name	Parts traded/used	Market price INR
1.	*Abrus precatorius*	Fabaceae	Climber	Lal Ratti	Seed is use as abortifacient.	70/Kg
2.	*Acacia nilotica* sub sp.*indica*	Mimosaceae	Tree	Babul	Gum is used in weakness.	200/Kg
3.	*Aegle marmelos*	Rutaceae	Tree	Bel	Dried pulp used in soothing effect.	50/Kg
4.	*Amorphophallus paeniifolius*	Araceae	Herb	Jangali Suran	Corm used in intestinal disorder	35/-Kg
5.	*Annona squamosa*	Annonaceae	Shrub	Sheetaphal	Dried fruit powder is given in Diarrhoea.	100/-Kg
6.	*Asparagus racemosus*	Liliaceae	Climber	Sesliya ghas	Tuberous root is used for lactation	200/- Kg
7.	*Azadirachata indica*	Meliaceae	Tree	Neem	Fruit is used for sterility in men.	20/-Kg
8.	*Bambusa arundiniaceae*	Poaceae	Shrub	Bans	Seed is used for curing Kidney stone.	25/-Kg
9.	*Buchanania lanzan*	Anacardiaceae	Tree	Chironji	Seed is used for urinary disorder	200/-Kg
10.	*Butea monosperma*	Fabaceae	Tree	Dhak	Gum is used for backache	150/Kg
11.	*Caesalpinia bonduc*	Caesalpiniaceae	Shrub	Ghatar	Seed is used against scorpion sting.	75/Kg
12.	*Cassia fistula*	Caesalpiniaceae	Tree	Garmala	Seed powder is used in diarrhoea	80/-Kg
13.	*Cassia tora*	Caesalpiniaceae	Herb	Puadiya	Seed is used against snakebite	50/-Kg
14.	*Celastrus paniculatus*	Celastraceae	Climber	Kangan	Seed oil is used in arthritis	150/-Kg
15.	*Chlorophytum borivilianum*	Liliaceae	Herb	Dhawali musli	Tuberous root is used to increase the strength.	300/-Kg
16.	*Costus speciosus*	Costaceae	Herb	Jangali Aadu	Rhizome is used in cold and cough.	80/-Kg
17.	*Diospyros melanoxylom*	Ebenaceae	Tree	Tendu	Unripe fruit is used in dysentery.	50/-Kg
18.	*Gloriosa superba*	Liliaceae	Climber	Ranchendi	Tuberous root	90/-Kg
19.	*Helicteres isora*	Sterculiaceae	Shrub	Atodi	Pod is used in stomach disorders.	150/-Kg
20.	*Hibiscus vitifolius*	Malvaceae	Herb	Jangali Kapas	Stem fibre is used for making rope.	20/-Kg
21.	*Jatropha curcas*	Euphorbiaceae	Shrub	Ratanjyot	Seed oil is used in Joint pain.	40/Kg
22.	*Madhuca longifolia var. latifolia* (Roxb.)	Sapotaceae	Tree	Mahua	Seed oil is used against skin diseases.	50/-Kg
23.	*Moringa oleifera*	Moringaceae	Tree	Sehajana	Pod is used as appetizer.	30/Kg
24.	*Mucuna pruriens*	Fabaceae	Climbe	Kewanch	Seed is used against muscular weakness.	125/Kg
25.	*Ocimum canum*	Lamiaceae	Herb	Karahi	Pounded seed decoction given in fever.	125/- Kg
26.	*Phyllanthus emblica*	Euphorbiaceae	Tree	Aonla	Dry fruit powder is used in stomach disorders.	25/Kg
27.	*Pongamia pinnata*	Fabaceae	Tree	Kanji	Seed oil is used in Arthritis.	40/-Kg
28.	*Ricinus communis*	Euphorbiaceae	Shrub	Arandi	Seed oil is used in joint pain.	35/Kg
29.	*Sapindus emarginatus*	apindaceae	Tree	Reetha	Fruit is used for washing clothes and hair.	40/-Kg
30.	*Schleichera oleosa*	Sapindaceae	Tree	Kusumda	Seed oil is used in Arthritis.	65/-Kg
31.	*Syzygium cumini*	Myrtaceae	Tree	Jamun	Fruit is used to cure diabetes.	40/-Kg
32.	*Terminalia arjuna*	Combretaceae	Tree	Arjun	Bark is used against cardiac disorder.	80/-Kg
33.	*Terminalia bellirica*	Combretaceae	Tree	Bahera	Fruit is used against stomach disorders.	30/-Kg

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