International Journal of Applied Research 2015; 1(7): 891-893

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2015; 1(7): 891-893
www.allresearchjournal.com
Received: 11-04-2015
Accepted: 15-05-2015

Sarita Bodalkar
Department of Forestry, College of Agriculture, IGKV Raipur, Chhattisgarh, India

Correspondence:
Sarita Bodalkar
Department of Forestry, College of Agriculture, IGKV Raipur, Chhattisgarh, India

The contribution of NTFPs to rural livelihoods and tribal economies in Chhattisgarh

Sarita Bodalkar

Abstract
Chhattisgarh, endowed with abundant forest resources, possesses a wealth of non-timber forest products (NTFPs) that are vital to the livelihoods of many rural and tribal communities. Yet, both societal attitudes and policy frameworks have historically underestimated their significance. In numerous tribal regions, NTFPs constitute the principal means of subsistence and serve as the economic backbone for local populations. Women, especially from diverse tribal groups, are deeply involved in the gathering and marketing of these forest products, resulting in notable income generation for their families. The state's forests yield a diverse range of major and minor NTFPs-such as sal seeds, tendu leaves, lac, mahua, baheda, harida, amla, and karanj-sourced from a wide array of trees and plants. This overview explores the types and distribution of NTFPs in Chhattisgarh, emphasizing their socioeconomic relevance to indigenous peoples. It also highlights the practical and institutional hurdles faced by villagers during collection, processing, and commercialization, and proposes policy reforms and sustainable strategies to combat resource depletion and ensure equitable benefits for forest-dependent communities.

Keywords: Tendu leaves, lac, Mahua, Sal seeds, marketing, income generation

Introduction
The non-timber forest products are also called minor forest products, these are categorized as edible products, grasses and grazing, fodder trees and shrubs, bamboo and canes, fibers and flosses, animal products, leaves, miscellaneous products etc. Gathering NTFPs from the local forest for getting cash income or used by indigenous people can be traced back thousands of years ago. Forest is an inseparable part of the tribal people. They are almost completely dependent on forest for food, shelter, medicine and clothing. They collect NTFPs like roots, tubers, flowers, fruits, fibers, gums, resins, dyes, tannins, honey and wax etc. to fulfill their day to day requirements. Forests are a cornerstone of ecological balance and rural sustenance, offering not only timber but also a wide range of non-timber forest products (NTFPs) that directly support human livelihoods. While the economic value of timber is often emphasized, NTFPs-comprising fruits, nuts, medicinal plants, gums, resins, bamboo, honey, lac, and leaves-constitute a vital yet underappreciated component of forest-based economies. Globally, over one billion people rely on forests for food, income, and cultural needs, with NTFPs serving as a buffer against poverty and vulnerability. In India, approximately 275 million rural poor derive part of their subsistence and cash income from NTFPs**,** with nearly 70% of collection concentrated in tribal-dominated regions**.** Moreover, 55% of employment in the forestry sector is attributed to NTFPs**,** highlighting their critical role in rural economies. Within this national context, Chhattisgarh-a state with 44% forest cover and a predominantly tribal population-stands out as one of the most NTFP-dependent regions. Often referred to as the "Herbal State" of India**,** Chhattisgarh harbors immense biodiversity, and its rural and tribal households are deeply integrated with NTFP-based livelihoods. Studies indicate that more than 80% of forest dwellers in Chhattisgarh rely heavily on NTFPs for subsistence and cash income (Ojha, 2006). Seasonal products such as tendu leaves, mahua flowers and seeds, tamarind, chironji, sal seeds, harra, bahera, amla, lac, and honey dominate local economies. Nontimber Forest Products (NTFPs) are important tools for addressing poverty issues for the marginalized, forest dependent communities, by contributing to livelihoods, including food security, income, health and sustainable human

development Globally, an estimate 350 million people mostly in developing countries depend on NTFPs as their primary source of income, food, nutrition, and medicine (UND, 2004; FAO, 2005). Similarly, mahua serves as both a subsistence food and a cash crop, with significant contributions to household nutrition and women's earnings. The contribution of NTFPs in Chhattisgarh goes beyond mere income. They play a multifunctional role-ensuring food and nutritional security, supplementing agricultural income, providing employment during lean seasons, and safeguarding households against economic shocks. Ahirwar (2015) [5] reported that total 41 plants species belonging to 26 families and 37 plant genera were identified. A field survey was conducted at three different study sites in Boridand forest, district Korea, Chhattisgarh. Local consumption is substantial, most of collected NTFPs are used domestically**,** while surplus products such as tendu leaves, tamarind, and lac are sold through organized markets. Importantly, the state government has institutionalized a three-tier cooperative system for NTFP procurement, ensuring minimum support prices (MSP) and welfare benefits, thereby strengthening tribal economies.

Major NTFPs and Their Uses

The diversity of NTFPs in Chhattisgarh reflects both ecological richness and cultural practices. While over 60 different NTFPs are collected across the state, a handful dominate procurement volumes and household cash flows.

Tendu Leaves

Tendu leaves (*Diospyros melanoxylon*) are perhaps the most economically significant NTFP in Chhattisgarh. They serve as the primary raw material for beedi rolling**,** a major cottage industry across India. Collection typically occurs during May–June**,** involving entire households but with women and children playing the largest roles. A single household may collect thousands of leaves in a season, which are then bundled and sold to the cooperative societies.

Sal Seed

Seeds of the Sal tree (*Shorea robusta*) are collected between May and June. They are processed for sal fat, which is used in confectionery, vegetable ghee, and cosmetics. Chhattisgarh procures Sal seed in significant volumes under MSP, contributing both to household income and industrial raw material supply.

Mahua

Mahua (*Madhuca longifolia*) is culturally and economically vital. Its flowers are used for fermentation (country liquor), food preparations, and as livestock fodder, while seeds yield edible oil. Tribal communities regard mahua as a "family tree" and depend on it for food security during lean months.

Tamarind, Harra, Baheda

These products are used as condiments, in ayurvedic medicine, and for tanning. Tamarind pulp, in particular, is traded extensively in rural markets.

Lac, Gums, and Medicinal Plants

Lac cultivation on palas (*Butea monosperma*) and kusum (*Schleichera oleosa*) trees has been an important livelihood source in Bastar. Similarly, gums and resins are collected for food and pharmaceutical uses. Medicinal plants like harra, amla, and giloy are widely used locally and traded regionally.

Together, these NTFPs provide a blend of subsistence value (food, medicine, fuel) and marketed commodities that link tribal households with regional and national markets.

Scale of household dependence and contribution to livelihoods

Empirical studies show that NTFPs contribute between 20–40% of annual cash income among the poorest households in tribal belts of Chhattisgarh. Seasonal NTFP earnings, particularly from tendu leaves, provide vital cash during agricultural lean months. In Bastar and Bilaspur districts, studies found that households collect 800-1200 kg of mixed NTFPs annually, retaining some for consumption but selling the majority.

Value chains and opportunities for value addition

Most NTFPs in Chhattisgarh are marketed in raw form, meaning collectors capture little value. For example, tendu leaves are sold unprocessed despite potential in herbal packaging and value-added product. Similarly, Sal seed processing at local levels could provide higher margins to producer groups, but infrastructure and training are lacking. Opportunities exist for decentralized oil extraction, herbal drying and packaging, and eco-certification, which could connect communities to higher-value markets.

Social and gender dimensions

NTFP collection is highly gendered. Women predominate in the collection and primary sorting of certain products (notably tendu leaves and many edible/medicinal NTFPs), providing them direct cash control in many households. This pattern has multiple implications:

- **Empowerment:** Direct cash from NTFPs enhances women's bargaining power and contributes to household welfare.
- **Exclusion from higher value nodes:** Despite their role in collection, women are often excluded from processing, value addition and leadership positions in primary organizations, limiting their share of the value chain.
- **Cultural roles:** NTFPs have social and cultural roles for tribal communities, which are important to consider in interventions to avoid undermining traditional practices.

Policy and future directions

The **National** Agroforestry Policy (2014) and MSP schemes provide a supportive policy environment, but scaling requires: (i) stronger producer organizations, (ii) decentralized processing, (iii) gender-sensitive enterprise support, and (iv) linking NTFPs with climate finance mechanisms (Dhyani, 2014; TRIFED, n.d.).

Conclusion

- NTFPs are the lifeline of rural and tribal economies in Chhattisgarh, offering seasonal income, food security, and cultural identity**.** While MSP procurement and federated societies have improved market access, their impact remains partial due to systemic and structural challenges. Strengthening institutions, embedding value addition, ensuring ecological sustainability, and empowering women are essential for unlocking the full potential of NTFPs. Study on different districts of

Chhattisgarh suggest that NTFP can be the alternative source of rural income & employment through effective, scientific & nondestructive harvesting of NTFPs. NTFP increasing the income level & employment opportunities followed by effective marketing & at the same time making people come forward to project the forest. It will help in maintaining the plant population for extracting NTFPs for generations to come.

- It means efforts has to be made to train the people in a organized way in Chhattisgarh for make aware with proper technique regarding proper time of harvesting & its processing, value addition marketing avenues will enhance the income that ultimately help in improvement of livelihood of the economically poor inhabitants of Chhattisgarh.
- If effectively managed, NTFPs could play a transformative role in poverty reduction, tribal empowerment, and sustainable forest management in Chhattisgarh.

References

1. Nautiyal S, Kaul AK. Non-timber forest product of India. Dehradun: Jyoti publishers and distributors; 2003.
2. Sarmah R, Saikia A. Non-timber forest products: diversity and used pattern at Majuli the Brahmaputra river Island of Assam, India. J Bot Sci. 2014;3:41-7.
3. Food and Agriculture Organization of the United Nations. The State of Food Insecurity in the World: Eradicating World Hunger Key to Achieving the Millennium Development Goals. Rome: FAO; 2005.
4. Mukherjee AK. India's forests: a status report: concepts, definitions, trends, controversies. Paper presented at: International Workshop on India's Forests Management and Ecological Revival; 1994 Feb 10-12; New Delhi, India.
5. Ahirwar RK. Diversity of ethno-medicinal plants in Boridand forest of District Korea, Chhattisgarh, India. Am J Plant Sci. 2015;6(02):413-23.
6. Bansode SB, Deorukhakar AC, Kumtheker RM, Mahajan TS. Marketing of medicinal plant products in Sindhu durga District of Maharastra state. J Non-Timber For Prod. 2005;12(3):127-30.
7. Jha KK. Non-timber forest products, their vulnerability and conservation in a designated UNESCO heritage site of Arunanchal Pradesh, India. Not Sci Biol. 2015;7(4):444-53.
8. Singh U, Bharti AK. Ethno-botanical study of plants of Raigarh area, Chhattisgarh, India. Int Res J Biol Sci. 2015;4(6):36-43.
9. Sinha MK, Patel DK, Kanungo VK. Medicinal plants used as antidotes in northern part of Bastar district of Chhattisgarh. J Ecobiotechnol. 2012;4(1):58-60.
10. Rajasekaran A, Prasad SN. Medicinal plants sold by tribals in the Vellingiri hills, Boluvampati Reserve Forest, Tamilnadu. J Non Timber For Prod. 2005;12(2):88-90.