

Non-Timber Forest Produce (NTFP) and its Impact on Rural Communities

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Abstract

Rural communities worldwide, comprising approximately 350 million people, have a profound reliance on forest resources as primary sources of food, nutrition, and medicinal provisions. This dependence is especially pronounced in regions where essential resources are scarce. Non-Timber Forest Produce (NTFP) assumes a critical role in sustaining the livelihoods of these communities. This research, situated in Maharashtra, aims to assess the importance of NTFPs, analyse their impact on forest-dependent communities, and advocate for sustainable management practices. Rural communities, constituting a substantial portion of the global population, face challenges related to food security, nutritional access, and healthcare. For approximately 350 million individuals, forests serve as crucial reservoirs of sustenance and medicinal resources. The significance of forests is particularly evident in regions where conventional means of livelihood are limited or inaccessible. NTFPs, ranging from fruits to medicinal plants, emerge as lifelines for these communities, providing a diverse array of biological materials that contribute to their daily well-being. In the Indian state of Maharashtra, where the study is conducted, the reliance of rural communities on forest resources is deeply ingrained in their way of life. Agriculture and animal husbandry, complemented by the collection of NTFPs, form the backbone of their sustenance. This study aims to delve into the specific dynamics of NTFP utilization in Maharashtra, recognizing the unique cultural and ecological context of the region.

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1. Introduction

Rural communities, deeply connected to nearby forests, traditionally rely on these ecosystems for daily sustenance. The interdependence between agriculture, animal husbandry, and forest resources is crucial. Non-Timber Forest Produce (NTFP) encompasses diverse biological materials, forming integral components of forest ecosystems. Sustainable management of these resources not only supports local livelihoods but also contributes to forest conservation. The study aims to empower forest-based communities for the sustainable management of NTFPs.

It is crucial to address poverty within communities that depend on forest resources. Globally, around 350 million people rely on forest resources as their primary sources of food, nutrition, and medicines. Non-Timber Forest Produce (NTFP) plays a pivotal role in sustaining the lives of these communities, especially in regions where essential resources are scarce. NTFPs vary across regions, reflecting the cultural and ethnic diversity of communities and their unique traditions. The utilization of these forest products serves as a

vital means of subsistence, particularly in areas with limited resources.

2. Objectives of the STUDY

The study aimed to achieve the following objectives:

- To investigate the contribution of NTFP collection and trade to the livelihood and economy of tribal communities.
- To identify key NTFPs for trade and business, considering their potential, associated risks, and opportunities.
- To evaluate the availability of NTFPs in selected villages.

3. Indicators

To assess these objectives, the study considered various indicators:

- Internal factors, including availability, accessibility, collection time, quality, and the process of NTFP collection.

- b) External factors such as market conditions, intermediaries, market prices, market demand, and government regulations.

4. Study Location

The study was conducted in 37 selected villages across Yavatmal, Amravati, and Chandrapur districts in Maharashtra. These villages were chosen due to the significance of NTFPs in the lives of the forest-dwelling communities in these areas.

5. Research Methodology

The research methodology employed for this study embraced a multi-faceted approach, recognizing the need for a comprehensive understanding of the intricate relationship between Non-Timber Forest Produce (NTFP), forest-dependent communities, and the ecological landscape. Field visits served as a foundational element, allowing researchers direct engagement with the selected villages in Maharashtra. These visits facilitated firsthand observation of the local dynamics and contextual nuances, laying the groundwork for subsequent data collection.

Group discussions emerged as a pivotal methodological tool, fostering open dialogues with forest collectors. These discussions provided qualitative insights into the lived experiences, challenges, and aspirations of the communities directly involved in NTFP collection. Structured and semi-structured questionnaires, meticulously designed to capture both quantitative and qualitative data, formed the backbone of the primary information collection process. These questionnaires were strategically focused on the outcomes of group discussions, ensuring a cohesive and comprehensive data gathering process.

Recognizing the diverse roles played by women in NTFP collection and management, a concerted effort was made to actively involve them in the data collection process. This inclusive approach not only provided a more holistic perspective but also acknowledged the integral role that women often play in sustainable resource management within these communities.

Community-based surveys were instrumental in gauging the broader socio-economic impact of NTFP collection and trade. The participatory rural appraisal methodology further enriched the research process by involving community members directly in the analysis and interpretation of data. This participatory approach aimed to foster a sense of ownership among the participants, ensuring that their voices and insights were integral to the research findings.

The utilization of a combination of qualitative and quantitative data collection methods, along with an emphasis on participant engagement, aimed to triangulate information and enhance the credibility of the study. The research methodology, therefore, stands as a thoughtful and participatory framework designed to unravel the complexities of NTFP utilization in Maharashtra's forest-dependent communities.

6. Scope of the Study

The study focused on NTFPs and performed a SWOT analysis in the Yavatmal, Amravati, and Chandrapur districts. The study's duration was from April 2022 to March 2023, covering a one-year period and examining villages where forest produce collection is significant. While the results of this study are specific to the selected geographic areas, they highlight the importance of NTFPs in the livelihoods of forest-dependent communities.

7. SWOT Analysis Outcome Matrix

A SWOT analysis, which examines both internal and external factors, was conducted. The analysis highlighted internal factors that strengthen and provide opportunities for the NTFP trade, as well as external factors that pose risks or challenges. This analysis is essential in identifying strategies for better NTFP management and promotion. The goal is to maximize strengths and opportunities while minimizing weaknesses and threats.

8. Key NTFP Issues

The study identified several key issues in the NTFP sector:

- Lack of technical knowledge and expertise for fair pricing.
- Difficulty in connecting remote villages with external markets.
- Competition with agricultural produce in local markets.
- Limited and often inefficient market infrastructure.
- Restrictions on access and regulations affecting NTFP collection.
- Conflicts between wildlife and human presence impacting NTFP collection.
- Insufficient investment in plantation, cultivation, and propagation of NTFPs.
- Loss of trees during the collection process, leading to resource depletion.

9. Primary Forest Produce

The study found that the primary forest produce in the selected villages included Mahua, Palas, Charoli, Dinka, Chinch, Bibba, Bihada, Jamun, and Aawla. Mangoes, Palas, Dhawada, Chinch, Bibba, and Salai trees were some of the most abundant forest produce in the region. The study also focused on the economic potential of the gum extracted from Salai trees.

10. Source of Forest Produce

Forest communities, either individually or in groups, collect various raw forest produce, including Mohua flowers, Mohua seeds, Charoli, and Kusum resin. The Forest Rights Act of 2006 has granted local communities the rights to forest property, known as Community Forest Rights (CFR). This has enabled them to propose forest conservation and management plans. Mohua flowers are collected and sold to local traders, benefiting Adivasis. Mohua seeds are processed and sold at low prices, while Charoli is collected in its raw form. Gum collection from the forest, including resin from the Kusum tree, is also a significant source of forest produce.

In conclusion, the study emphasizes the importance of Non-Timber Forest Produce (NTFP) for forest-dependent communities and the need to address various challenges to ensure sustainable management and fair trade of these resources. The findings of this study have implications for the well-being of forest-dependent communities and the conservation of forest ecosystems. Recommendations should focus on improving technical knowledge, market access, and infrastructure while ensuring the protection of forest resources and the rights of forest-dependent communities.

11. Findings

- i) **Significance of NTFPs:** The study underscores the vital importance of Non-Timber Forest Produce (NTFP) in the lives of forest-dependent communities. NTFPs serve as a crucial source of food, nutrition, and livelihoods, especially in regions where essential resources are scarce.

- These products not only contribute to subsistence but also play a role in forest conservation.
- ii) **Challenges in NTFP Sector:** Several challenges were identified, including a lack of technical knowledge for fair pricing, difficulties in market access for remote villages, competition with agricultural produce, limited and inefficient market infrastructure, restrictive regulations, wildlife-human conflicts, inadequate investment in cultivation, and resource depletion during collection.
- iii) **Role of Women:** Women play a substantial role in NTFP collection and management. Involving women in NTFP-related activities is essential for equitable and sustainable resource management.
- iv) **Local Market Dynamics:** The study highlights the significance of local markets in trading NTFPs. Enhancing market access and infrastructure in these areas can lead to better prices and livelihood opportunities for forest-dependent communities.
- v) **Abundance of Specific NTFPs:** The study identified specific NTFPs, such as Mahua, Palas, Charoli, Dinka, Chinch, Bibba, Bihada, Jamun, Aawla, and Salai, which were abundant in the study areas. The economic potential of products like Salai gum and Charoli was emphasized.
- ## 12. Recommendations
- i) **Capacity Building:** Provide technical training and expertise to forest-dependent communities, empowering them with knowledge of fair pricing and sustainable resource management.
- ii) **Market Access:** Improve infrastructure and connectivity to connect remote villages with external markets. This will ensure fair prices for NTFPs and enhance the livelihoods of these communities.
- iii) **Local Market Development:** Invest in local market infrastructure and support efficient trading systems. This will enable forest-dependent communities to access a wider consumer base and secure better prices for their products.
- iv) **Regulatory Reforms:** Streamline regulations governing NTFP collection and trade to reduce complexities and provide forest communities with better access to resources.
- v) **Conflict Resolution:** Develop strategies to address conflicts between wildlife and human presence, ensuring the sustainable collection of NTFPs and the protection of local ecosystems.
- vi) **Investment in Cultivation:** Promote investment in the plantation, cultivation, and propagation of NTFPs to reduce pressure on wild resources and ensure their long-term sustainability.
- vii) **Protection of Forest Resources:** Encourage the conservation of forest resources by implementing sustainable management practices and involving local communities in decision-making processes, as granted by the Forest Rights Act.
- viii) **Empower Women:** Actively involve women in NTFP collection and management, recognizing their pivotal role in these activities.
- ix) **Community-Based Conservation:** Promote the formation of Community Forest Rights (CFR) and support local communities in developing forest conservation and management plans, ensuring the sustainability of NTFPs.

- x) **Research and Documentation:** Continue research efforts and documentation of NTFP resources, market trends, and their impact on forest-dependent communities for informed decision-making.
- xi) **Scaling Success Models:** Identify and scale successful NTFP initiatives and models from the study areas to other regions, with similar socio-economic and ecological contexts.
- xii) **Government Support:** Advocate for government support and incentives for NTFP-based businesses, fostering economic growth in these regions. By implementing these recommendations, it is possible to enhance the sustainable management and trade of Non-Timber Forest Produce (NTFP) while improving the quality of life for forest-dependent communities and contributing to forest conservation efforts. These efforts should prioritize the active involvement of local communities, women, and adherence to regulatory and environmental standards.

Conclusion

The study underscores the vital importance of NTFPs for forest-dependent communities, emphasizing the need to address challenges for sustainable management. The findings have significant implications for community well-being and forest conservation.

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