



Political economy and ownership of non-timber forest products: Tribes in India.

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Abstract: Non-timber forest products (NTFP) provide substantial inputs into the livelihoods of very large numbers of people in developing countries, mostly tribals. NTFP contributes to household self-sufficiency, food security, income generation, savings accumulation, and risk minimization. In light of legislation and policies, the issue of ownership and management of NTFPs by the tribal community as an NTFP primary collector is an important and neglected issue. There is a need to understand the political economy, ownership, and management of NTFPs in India.

The current study is a conceptual paper based on secondary data and the author's personal experiences in the NTFP field action project. In the first part of the paper, the relationship between forests and tribals in the Indian context is discussed, along with the role of the NTFP in tribal life, mainly including social, economic, cultural, political, and health aspects of tribal life. The second part of the paper examines the interplay between economics, legislation, and politics and how governments and other institutions develop in different social and economic systems in the context of globalization. Finally, this paper ends with an analysis of the political economy and ownership of the NTFP in the Indian context and its impact on the different aspects of tribal life in contemporary economic, social, and political contexts, along with strategies that need to be implemented in the future.

Index Terms - Non-timber Forest Products, Forest, Tribal, the political economy

I. INTRODUCTION

Non-timber Forest Products (NTFPs) are biological materials other than timber harvested from forests and include fruits, nuts, herbs, medicinal plants, resins, and fibers. NTFPs are vital to the livelihood, culture, and well-being of India's tribal communities, significantly contributing to food security, income, and risk minimization. These resources are deeply linked to tribal traditions, rituals, and indigenous knowledge systems, providing sustenance, medicine, and raw materials for cultural activities. However, issues of ownership, management, and sustainable harvesting pose challenges as tribal communities navigate complex socioeconomic and political landscapes, striving to maintain traditional lifestyles and assert forest resource rights. The commercialization of NTFPs has increased market demand, potentially impacting traditional harvesting practices and the ecological balance in forest ecosystems. This shift creates both opportunities and challenges as tribal communities balance economic benefits with sustainable resource management and cultural preservation. Additionally, government policies and conservation efforts sometimes conflict with tribal rights and practices, necessitating a balance between environmental protection and the socioeconomic needs of indigenous communities.

Non-timber forest products –

The term 'forest product' typically evokes images of timber and related products; however, non-timber forest products (NTFPs) are equally significant. NTFPs encompass all the botanical and natural resources harvested from forests, excluding timber. Non-timber forest products (NTFPs) are comprised of a wide range of biological materials collected from forests for human use, excluding timber. These include medicinal plants, resins, gums, essences, bark, fiber, fruits, nuts, and various other products (Jadhav, 2019; Latifah & Lubis, 2020). NTFPs play a crucial role in rural economies, contributing significantly to household food security, income generation, and poverty reduction in many countries (Awe et al., 2011; Latifah & Lubis, 2020). While NTFPs are vital for rural livelihoods, their management and scientific knowledge are not well-developed (Modi & Trivedi, 2013). This presents a challenge for sustainable forest management because the health of forest ecosystems and rural communities depends on the sustainable use of NTFP resources. Additionally, the market demand for NTFPs has increased substantially over the last decade, raising concerns regarding the ecological sustainability of these resources (Modi & Trivedi, 2013). NTFPs are essential components of forest ecosystems and rural economies, and provide diverse products and services. Their economic value can be substantial, as demonstrated in various studies (Latifah and Lubis, 2020; Yadav et al., 2020). However, to realize the full range of benefits and ensure sustainability, it is imperative to include NTFPs in scientific forest management practices and address challenges, such as marketing, deforestation, and overexploitation (Modi & Trivedi, 2020; Modi & Trivedi, 2013). Proper management and development of the NTFP sector can bring significant economic, social, and environmental benefits to forest-dependent communities and regions (Sundriyal, 2021).

The political economy of NTFPs in India is complex, and involves various stakeholders, policies, and economic factors. NTFPs are crucial to tribal livelihoods and contribute to food security, income, and cultural practices. However, their ownership and management are contentious. Policies such as the Panchayats (Extension to Scheduled Areas) Act (PESA) aim to empower tribal communities in managing NTFPs; however, challenges persist. The monopurchase policies of Tribal Development Societies often exploit the primary collectors. The informal NTFP economy and lack of organized tribal representation complicate this situation, while globalization threatens traditional knowledge and practices related to NTFPs. Balancing economic development, while preserving tribal rights and cultural heritage, is a significant challenge. These policies face implementation issues owing to limited tribal awareness and inadequate institutional support. Monopurchase policies and the informal NTFP economy create power imbalances, leading to unfair pricing and limited market access for the tribal collectors. The increasing global demand for NTFPs has led to unsustainable harvesting practices, threatening the balance between tribal livelihoods and environmental conservation.

Forestry significantly affects national socioeconomic and environmental goals and rural livelihoods. In India, forestry is the second-largest land use after agriculture, covering approximately 641,130 square kilometers or 22% of the total land area. Approximately 275 million impoverished rural Indians, or 27% of the population, rely on forests for subsistence and monetary needs, sourcing fuel timber, fodder, poles, and non-timber forest products, such as fruits, flowers, and medicinal plants. (Chandrasekharan, 1998) Seventy percent of India's rural population depend on fuel timber for domestic energy. Half of India's 89 million tribal people, the most disadvantaged group, live near forests and have strong cultural and economic ties with them. In 2001, forestry and logging contributed 1.1% to India's GDP, but included non-market benefits such as environmental services, subsistence fuel timber, fodder, and non-timber products doubles this contribution. Many households earn income by trading forest products.

The relationship between tribal communities and forests is symbolic and interconnected with social, economic, political, health, and cultural aspects. However, this close connection can impede socioeconomic progress by limiting access to modern education, healthcare and urban economic opportunities. The preservation of traditional forest-based lifestyles may marginalize these communities in a globalized world. Non-timber forest products (NTFPs) are integral to tribal rituals, from birth to death. Despite these potential drawbacks, forests remain vital to tribal life, particularly through NTFPs in cultural practices. Tribal communities in India have unique perspectives and knowledge bases regarding NTFPs. Their economic and political lives are intertwined with NTFPs and their ownership. Since independence, tribal communities have struggled with NTFP ownership, focusing on water, forests, and land (Jal, Jangle, Jamin). Understanding the tribal perspectives on NTFPs is crucial for addressing ownership challenges. It is necessary to examine the political and economic aspects of NTFPs before addressing these issues.

Ownership of Non-Timber Forest Products

Examining tribal perspectives on Non-timbers crucial insights into indigenous relationships with forest resources, which is essential for sustainable forest management that respects tribal rights and knowledge. Investigating NTFP ownership and political economy reveals power dynamics and resource distribution in India's socioeconomic context. NTFPs significantly impact rural economies and forest-dependent communities, globally. Ownership and management involve various stakeholders and policy considerations. Traditionally, local communities have relied on NTFPs for subsistence and income. In Cameroon, NTFPs and farming engage 90.8% and 80.4% of the workforce, respectively, contributing 31% of the local economy (Ngwatung & Roger, 2013). In Marancar Godang Village, Indonesia, NTFPs are valued at 2,441,416,000 IDR/year, underscoring their role in local livelihood (Latifah & Lubis, 2020). However, NTFP management faces challenges such as inadequate policies leading to over-exploitation and inequity (Laird et al., 2011). In Nepal, regulatory issues hinder the development of NTFP enterprises (Kunwar et al., 2009). Decentralization and community-based management, as in Cameroon since the mid-1990s, have increased the local benefits from NTFPs (Ngwatung & Roger, 2013).

Although NTFPs are vital for rural livelihoods and forest conservation, their management remains complex. Addressing these issues requires policy reforms, collaborative management, and involvement of civil society. Future strategies should optimize forest benefits, shift from extensification to intensification, and implement network management approaches (Gusmailina et al., 2020).

II. HISTORICAL CONTEXT OF OWNERSHIP OF NTFPS IN INDIA

The ownership of Non-Timber Forest Products (NTFPs) in India has a complex history. Traditionally, local communities have usufruct rights over NTFPs, enabling them to collect and use forest products for subsistence Non-timber (Appasamy, 1993) However, colonial policies introduced by the British restricted these rights and placed forests under state control, alienating the tribal communities from their resources. This shift accelerated as timber and industrial wood prices increased, leading to increased state regulation. India struggled to balance state control and community rights, resulting in various policies and legal frameworks that addressed NTFP ownership and access. State control aimed to protect forests but also created challenges for forest-dependent communities. In response, some Indian states developed their own NTFP harvesting policies, balancing sustainable management with socioeconomic needs. For example, Tamil Nadu, Orissa, and Andhra Pradesh implemented state-specific policies, whereas West Bengal followed central guidelines (Ghosal, 2013). Initially, post-independence policies focused on timber production and revenue, but a gradual shift recognized the rights of forest-dwelling communities. The 73rd Constitutional Amendment Act of 1992 and the Panchayats (Extension to Scheduled Areas) Act (PESA) of 1996 were pivotal in decentralizing power to local communities for managing forest resources, including NTFPs.

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, or Forest Rights Act (FRA), marked a pivotal change in forest governance aimed at correcting historical injustices and restoring rights to forest-dwelling communities. It acknowledged these communities' rights to access, use, and manage Non-Timber Forest Products (NTFPs), defining the ((MFP) as encompassing all non-timber products of plant origin and granting ownership rights to Gram Sabhas (village assemblies). Community involvement in forest management has, with Joint Forest Management (JFM) initiatives promoting shared

responsibilities between forest departments and rural communities (Appasamy, 1993). This legislative framework empowered local communities and fostered a more inclusive and sustainable approach to forest resource management, particularly concerning NTFPs. Critics argue that FRA may unintentionally lead to increased forest degradation because of potential overexploitation by newly empowered communities. Implementation inconsistencies across states have resulted in uneven benefits and conflicts between stakeholders. Concerns also exist regarding the impact of the Act on wildlife conservation, as expanded human activities could disrupt critical habitats and ecological balance. Challenges persist in its implementation, including monopoly purchase policies by Tribal Development Societies, the informal nature of the NTFP economy, and the lack of organized representation for tribal communities. The tension between traditional rights, conservation efforts, and commercial interests remains a critical aspect of NTFP ownership in India's historical and contemporary contexts.

III. CURRENT LEGAL FRAMEWORK GOVERNING THE OWNERSHIP OF NTFPS

The legal framework for non-timber forest product (NTFPs) ownership in India is complex and has evolved over time, resulting in discourse regarding its efficacy in forest-dwelling communities and sustainable NTFP management. Some scholars advocate comprehensive reforms to empower local communities and integrate traditional ecological knowledge with contemporary conservation practices to enhance NTFP management.

3.1. The Forest Rights Act (FRA) 2006 formally recognized forest-dwelling communities' rights to access, utilize, and manage NTFPs, defining the Minor Forest Produce (MFP) to encompass all non-timber forest products of plant origin and granting ownership rights to Gram Sabhas (village assemblies). The FRA permits forest communities to collect, store, process, and sell NTFPs from their Community Forest Resource (CFR) areas (Edlabadkar & Gadgil, 2021), marking the first legislative recognition of community ownership of MFP in independent India (Tm & Chandrashekar, 2014). However, the implementation of FRA has encountered obstacles. Local politics can either facilitate or impede access to forest rights (Sen & Pattanaik, 2018). Issues such as asymmetric information flow, poor coordination, undemocratic participation, and lack of accountability hinder the effectiveness of the FRA, limiting its capacity to protect the rights of marginalized local communities (Satpathy, 2017). Although the FRA 2006 represents a significant step towards recognizing forest-dwelling communities' rights to NTFPs, its uneven implementation across the country (Sahu & Sahoo, 2019) presents challenges. Addressing these issues is crucial for improving the livelihoods of forest-dependent communities and enhancing forest conservation efforts (Hebbar, 2022). The necessity to overcome local political barriers, improve information flow, and enhance accountability is critical to ensuring that forest-dwelling communities fully exercise their rights over NTFPs, thereby improving their livelihoods and contributing to effective forest conservation.

3.2. The Panchayats (Extension to Scheduled Areas) Act (PESA) 1996 The aimed to empower local communities in Scheduled Areas to manage forest resources, including NTFPs, through decentralized governance (Choubey, 2015; Tripathy, 2019). PESA extended the Panchayat Raj system to these areas to safeguard tribal rights over natural resources. It conferred special authority on Gram Sabhas, recognizing traditional tribal self-regulation systems (Rajeshwar & Roy, 2021). However, PESA's implementation of PESA has been inconsistent and inadequate across states (Akhter and Ali, 2022; Choubey, 2015). The Act intended to support tribal livelihoods through NTFP management, but policy and livelihood outcomes have been inconsistent (Tripathy, 2019), revealing a discrepancy between legislative intent and practical execution. Despite its poor implementation, PESA has increased awareness among tribal communities about their rights, fostering 'legalism from below' and democratization in Scheduled Areas (Choubey, 2015). In conjunction with the Forest Rights Act (2006), PESA has been instrumental in recognizing tribal rights over forest resources, although effective implementation remains challenging (Bara, 2022; Choubey, 2016).

3.3. State-specific policies on Non-timber Forest Products (NTFPs) are essential for the livelihoods of rural and tribal communities in India, contributing significantly to their income and subsistence. These policies and NTFP ownership vary across states, which underscores the complexity of forest management. States such as Tamil Nadu, Orissa, and Andhra Pradesh have developed their own NTFP harvesting policies to promote sustainable forest management and improve the socioeconomic conditions of forest inhabitants (Ghosal, 2013). These policies address micro-level geophysical variations, forest-human interactions, and regional forest characteristics. In contrast, states such as West Bengal continue to adhere to the central government's Joint Forest Management Guidelines, which may not be equally effective due to local variations (Ghosal, 2013). Over time, the ownership and control of NTFPs has undergone transformation. Historically, rural communities have possessed usufruct rights over forest resources; however, these rights have diminished with increasing state control, particularly as timber and industrial wood prices have escalated (Appasamy, 1993). This shift presents challenges for sustainable resource management and equitable benefit distribution. The formulation of state-specific NTFP policies represents an endeavor to balance conservation with the socioeconomic needs of forest-dependent communities. However, the erosion of traditional rights and diverse management approaches across states emphasizes the necessity for comprehensive, tailored policies that consider local contexts, promote sustainable forest resource utilization, and ensure the well-being of forest-dependent communities.

3.4. The Biodiversity Act focuses on documenting and protecting indigenous knowledge related to Non-Timber Forest Products (NTFPs) and other biological resources, establishing a strong connection between the Indian Biodiversity Act and NTFP ownership. This relationship significantly influences the forest-dependent communities and biodiversity conservation. The Forest Rights Act of 2006 was instrumental in addressing community ownership of the ((MFP), including NTFPs (Tm & Chandrashekar, 2014). It recognized the tenure and occupational rights of forest dwellers, representing a legislation in independent India concerning the MFP and forest management rights. This legislation substantially impacted NTFP collection and marketing through organizations such as Large-scale Adivasi Multi-Purpose Societies (LAMPS) (Tm & Chandrashekar, 2014). Despite advancements in community ownership recognition, sustainable management practices face challenges. More precise NTFP harvesting policies are necessary to account for micro-level geophysical variations, forest-human relationships, and forest characteristics (Ghosal, 2013). Balancing the economic needs of forest-dependent communities with biodiversity conservation is a complex issue.

3.5. Joint Forest Management (JFM) in India has influenced the ownership and utilization of NTFPs by local communities. JFM is a collaborative arrangement between state forest departments and local communities, granting NTFP access in exchange for participation in forest protection and regeneration (Patra, 2015). This approach aims to balance forest conservation with the livelihood needs of the forest-dependent communities. Studies indicate that households in forest-fringe areas depend heavily on forests for their livelihoods, with NTFP reliance varying by region and income group (Jana et al., 2017). The effectiveness of JFM programs varies geographically, both between and within states (Patra, 2015). The resistance movement of forest communities in western Midnapore, West Bengal, which preceded JFM, was driven by the survival needs of impoverished forest communities, particularly their reliance on NTFPs (Sarker & Das, 2006). Although JFM has improved community access to NTFPs, concerns persist regarding its effectiveness in providing sufficient incentives to offset forest use restrictions (Gelo et al., 2015). States such as Tamil Nadu, Orissa, and Andhra Pradesh have developed state-specific NTFP policies to address local needs and promote sustainable forest management (Ghosal, 2013). However, the implementation of JFM and NTFP policies varies significantly across India, highlighting the necessity for localized approaches that consider specific geophysical, socioeconomic, and forest characteristics (Ghosal, 2013; Patra, 2015).

Overall, the legal framework governing NTFP ownership in India reflects both progress and persistent shortcomings. While laws like the FRA and PESA represent significant steps toward recognizing the rights of forest-dwelling communities, their inconsistent implementation has limited their impact. Furthermore, state-specific policies and collaborative models like JFM illustrate the complexity of managing NTFPs across diverse ecological and socio-political contexts. For the legal framework to achieve its full potential, it must address these challenges by fostering better coordination, enhancing local accountability, and ensuring that the rights of forest-dependent communities are fully realized. Only then can India achieve a balance between sustainable forest management, biodiversity conservation, and the socio-economic well-being of its rural and tribal populations.

IV. CHALLENGES IN OWNERSHIP OF NON-TIMBER FOREST PRODUCTS

Despite progressive legislation such as the Forest Rights Act and PESA, significant implementation challenges persist. Numerous forest-dwelling communities encounter difficulties in asserting rights over NTFPs because of bureaucratic obstacles and insufficient awareness. NTFPs are essential for the livelihoods of forest-dependent communities in India; however, **gaps remain in the legal framework for NTFP ownership and management**. A primary concern in many states is the absence of a comprehensive NTFP harvesting policy. While certain southern states, Tamil Nadu, Orissa, and Andhra Pradesh, have established their own policies, others, such as West Bengal, adhere to central government guidelines (Ghosal, 2013). This results in inconsistencies in NTFP management, as central guidelines may not account for state-specific geophysical variations, forest-human relationships, or unique forest characteristics. The unorganized and clandestine nature of intermediary operations in the NTFP sector exacerbates market imperfections, frequently disadvantaging collectors and cultivators (Yadav & Misra, 2012). This can lead to unsustainable harvesting practices and underscore the need for improved market information systems and transparent supply chains. Consequently, implementation gaps in legal frameworks for NTFP ownership in India stem from the absence of state-specific policies, inadequate market information systems, and insufficient local community involvement. Addressing these issues requires comprehensive and tailored NTFP policies that consider local contexts, enhance market transparency, and engage forest-dependent communities in NTFP management and conservation (Ghosal 2013; Krishnakumar et al. 2014).

4.1. Monopolistic practices:

Tribal Development Societies frequently implement monopurchase policies that restrict the bargaining power of primary collectors, thus resulting in exploitation. In Maharashtra, these societies encounter challenges associated with such policies, although specific examples have not been provided. Monopurchase policies adversely affect NTFP primary collectors by limiting their bargaining power and facilitating their exploitation. The current NTFP market system is highly exploitative, with benefits predominantly transferred from producers to middlemen (Mishra, 2014). Primary collectors face constraints, such as middlemen's price monopoly, lack of market information, and improper weighing practices (Magry et al., 2023). The unorganized nature of intermediary operations results in market imperfections that disadvantage collectors and cultivators (Yadav & Misra, 2012). While tribal development societies aim to support indigenous communities, their monopurchase policies inadvertently contribute to these issues. NTFP policies often demonstrate weak connections between policy aims, tools, and field realities (Larsen et al., 2000), allowing stakeholders at different levels to influence their own interests and perpetuate exploitative practices. Several recommendations have been made to address these challenges. Implementing a market information system can mitigate market imperfections by providing demand and supply data to collectors (Yadav & Misra, 2012). Establishing weekly markets, offering formal credit sources, and increasing local human resources could improve trade conditions (Mishra, 2014). Promoting cooperative societies and eco-development committees with value-added units could ensure better livelihoods through increased NTFP income (Jerin et al., 2022). These measures, combined with policy changes that consider the political context and stakeholder objectives, could reduce exploitation and improve the economic conditions of the NTFP primary collectors.

4.2. The NTFP sector in India predominantly operates within the informal economy,

where primary collectors, often tribal communities, lack organized representation and encounter challenges with fair pricing and market access. This sector plays a critical role in rural and forest-adjacent communities and is characterized by complex governance structures and socioeconomic dynamics. Governance combines formal and informal institutions based on statutory, customary, and market norms (Wiersum et al., 2013) with forestry and agrarian regimes, multilevel and multi-actor involvement, and distinct institutions governing resource access and markets. Traditional knowledge and practices of local communities are crucial for sustainable forest management and NTFP harvesting (Gautam & Watanabe, 2002). A study in central India found that villages with greater market access exhibited less dependence on NTFP harvest but more degraded forests, whereas remote villages demonstrated higher dependence on forests for livelihood and income (Ghate et al., 2009). This underscores the vulnerability of forest-dependent communities and the necessity of strengthening local institutions for sustainable management, particularly in remote areas. The NTFP economy is characterized by complex governance, traditional knowledge systems, and varying degrees of

market integration. NTFPs significantly contribute to household income and function as safety nets during agrarian distress (Magry et al., 2024). Future policies should focus on strengthening local institutions, providing alternative income sources, and integrating traditional knowledge into sustainable forest management practices.

4.3. Dearth of value addition initiatives:

Tribal collectors predominantly sell NTFPs in an unprocessed form, receiving low remuneration due to a dearth of value addition initiatives that could potentially augment their income. NTFPs contribute significantly to the livelihoods of tribal and rural communities in India (Krishnakumar et al., 2015; Krishnakumar et al., 2014). However, the market system is exploitative, with substantial benefits accrued to intermediaries (Mishra, 2014). Tribal communities encounter constraints such as intermediary monopolies, insufficient market information, inadequate transport facilities, and improper weighing practices (Magry et al., 2023). These issues impede the value addition of the tribal communities. Despite NTFPs contributing 19-32% of household income (Saha & Sundriyal, 2011), insufficient institutional mechanisms hinder effective collection and marketing (Mishra & Rao, 2021). Effective implementation of NTFP policies, establishment of periodic markets, formal credit disbursements, and increased local human resources are necessary (Mishra, 2014). Promoting sustainable extraction, efficient processing, and appropriate forest management are essential for the sustainable development of tribal villages and maximizing the NTFP value (Misra, 2000).

4.4. The equilibrium between preserving traditional rights and implementing conservation measures remains an important issue.

Stringent environmental policies occasionally restrict customary Non-Timber Forest Product (NTFP) collection methods. The increasing global demand for certain NTFPs has resulted in unsustainable harvesting practices in various regions. There is potential for the loss of traditional knowledge and sustainable practices due to commercial endeavors. Despite efforts to document traditional NTFP knowledge, concerns regarding the protection of indigenous communities' IPR persist. Disparities in the NTFP regulations across states generate inconsistencies in ownership and management. Forest-dwelling communities frequently encounter difficulties in accessing credit and training, which can enhance their NTFP resource management and utilization. Achieving a balance between economic growth through NTFP commercialization and the preservation of tribal cultures and customs remains an ongoing challenge.

In conclusion, the ownership and management of Non-Timber Forest Products (NTFPs) in India present a complex interplay of legal, economic, and socio-environmental challenges. Despite the introduction of progressive legislation like the Forest Rights Act and PESA, bureaucratic hurdles, inconsistent state policies, and market exploitation continue to undermine the rights and livelihoods of forest-dependent communities. The lack of state-specific NTFP harvesting policies and insufficient market information systems contribute to unregulated and unsustainable practices, while intermediary monopolies exacerbate economic disenfranchisement. Furthermore, the absence of value addition initiatives restricts tribal communities to low-remuneration roles in the NTFP supply chain, entrenching poverty rather than offering a pathway out of it.

Traditional knowledge, critical to sustainable forest management, is increasingly marginalized by commercial pressures, threatening both ecological sustainability and cultural heritage. The governance of the NTFP sector, split between formal and informal institutions, often fails to reflect local needs, while conservation policies sometimes conflict with the traditional rights of forest dwellers. These gaps highlight the need for a more integrated, context-sensitive approach that prioritizes local involvement, fosters value addition, and safeguards traditional knowledge.

To resolve these issues, comprehensive reforms must address the socio-economic realities of forest-dependent communities, promote market transparency, and ensure equitable distribution of benefits. Strengthening local institutions, facilitating market access, providing credit and training, and balancing conservation with livelihoods are key to sustainable NTFP management. Only by addressing these systemic issues can NTFPs serve as a true vehicle for economic empowerment and ecological preservation.

V. CONCLUSION:

Non-timber forest products (NTFPs) play a crucial role in the livelihoods of tribal communities in India, contributing to household self-sufficient social security, income generation, and risk minimization. The ownership and management of NTFPs by tribal communities is a complex issue that involves social, economic, political, and cultural aspects. Historically, tribal communities enjoyed usufruct rights over NTFPs, but these rights eroded during the colonial and post-independence eras. The current legal framework, including the Forest Rights Act (2006), PESA (1996), and state-specific NTFP policies, aims to empower tribal communities to manage NTFPs. However, challenges persist in its implementation due to bureaucratic obstacles, insufficient awareness, and the informal nature of the NTFP economy. Monopolistic practices by Tribal Development Societies, the lack of value addition initiatives, and the need to balance traditional rights with conservation efforts further complicate the effective ownership and management of NTFPs by tribal communities. Addressing these challenges requires a holistic approach, including policy reforms, collaborative management, and the involvement of civil society groups, to ensure the sustainable utilization of NTFPs while safeguarding the rights and livelihoods of tribal communities.

VI. REFERENCES:

Appasamy, P. P. (1993). Role of non-timber forest products in a subsistence economy: The case of a joint forestry project in India., *Economic Botany*, 47, (3), 258–267. <https://doi.org/10.1007/bf02862292>

- Choubey, K. N. (2015). The Public Life of a 'Progressive' Law: PESA and, Gaon Ganarajya, (Village Republic). , *Studies in Indian Politics*, ,3, (2), 247–259. <https://doi.org/10.1177/2321023015601745>
- Edlabdkar, V., & Gadgil, M. (2020). Non-timbering Modern ICT Tools to Develop Gram Sabha Level Plans for Conserving and Managing Community Forest Resources. , *Journal of Ecological Society*, ,32–33, (1). <https://doi.org/10.54081/jes.027/10>
- Gautam, K. H., & Watanabe, T. (2002). Silviculture for non-timber forest product management: challenges and opportunities for sustainable forest management. , *The Forestry Chronicle*, ,78, (6), 830–832. <https://doi.org/10.5558/tfc78830-6>
- Gelo, D., Muchapondwa, E., & Koch, S. F. (2015). Decentralization, market integration and efficiency-equity trade-offs: Evidence from Joint Forest Management in Ethiopian villages., *Journal of Forest Economics*, 22, 1–23. <https://doi.org/10.1016/j.jfe.2015.10.003>
- Ghate, R., Mehra, D., & Nagendra, H. (2009). Local institutions as mediators of the impact of markets on non-timber forest product extraction in central India. , *Environmental Conservation*, ,36,(01), 51. <https://doi.org/10.1017/s0376892909005311>
- Ghosal, S. (2013). The Significance of the Non - Timber Forest Products Policy for Forest Ecology Management: A Case Study in West Bengal, India. , *Environmental Policy and Governance*, ,24, (2), 108 - 121. <https://doi.org/10.1002/eet.1630>
- Gusmailina, G., Saputra, N., & Sumadiwangsa, S. (2020). Management prospects through development of non-timber forest products. , *IOP Conference Series: Earth and Environmental Science*, ,591, (1), 012042. <https://doi.org/10.1088/1755-1315/591/1/012042>
- Hebbar, R. (2022). Undoing Historical Injustice? Critical Reflections on India's Forest Rights Act, 2006. , *Social Change*, ,52, (4), 491–504. <https://doi.org/10.1177/00490857221125562>
- Jana, S. K., Ahmed, M. U., & Heubach, K. (2017). Dependency of Rural Households on Non-Timber Forest Products (NTFPs). , *International Journal of Sustainable Economies Management*, ,6, (2), 37–50. <https://doi.org/10.4018/ijsem.2017040104>
- Jerin, V. A., Lazarus, T. P., Gopakumar, S., Durga, A. R., Nishan, M. A., & Gopinath, P. P. (2022). Role of Non-Timber Forest Products in Income Generation of the Tribal Population: A Review. , *Asian Journal of Agricultural Extension, Economics & Sociology*, 285–294. <https://doi.org/10.9734/ajaees/2022/v40i111711>
- Kunwar, S. C., Ansari, A. S., & Luintel, H. (2009). Non-timber Forest Products Enterprise Development: Regulatory Challenges in the Koshi Hills of Nepal. , *Journal of Forest and Livelihood*, ,8, (2), 39–50. <https://doi.org/10.3126/jfl.v8i2.2307>
- Laird, S. A., Wynberg, R., & Mclain, R. J. (2011). , *Regulating Complexity: Policies for the Governance of Non-timber Forest Products*, (pp. 227–253). springer berlin heidelberg. https://doi.org/10.1007/978-3-642-17983-9_11
- Larsen, H. O., Olsen, C. S., & Boon, T. E. (2000). The non-timber policy process in Nepal: actors, objectives and power. , *Forest Policy and Economics*, ,1, (3–4), 267–281. [https://doi.org/10.1016/s1389-9341\(00\)00013-7](https://doi.org/10.1016/s1389-9341(00)00013-7)
- Latifah, S., & Lubis, N. A. (2020). Economic value of non-timber forest products - A Case study from Panuli, North Sumatra, Indonesia. , *IOP Conference Series: Earth and Environmental Science*, ,454, (1), 012001. <https://doi.org/10.1088/1755-1315/454/1/012001>
- Magry, M. A., Cahill, D., Narula, S. A., & Rookes, J. (2024). Non-timber forest products: evolution, development and research. , *Biodiversity*, ahead-of-print, (ahead-of-print), 1–22. <https://doi.org/10.1080/14888386.2024.2336216>
- Magry, M. A., Narula, S. A., Rookes, J., & Cahill, D. (2023). , *Marketing Constraints of Non-timber Forest Products: Evidence from Jharkhand, India*, (pp. 221–237). springer nature Singapore. https://doi.org/10.1007/978-981-19-6454-1_11
- Mishra, B. (2014). Non-Timber Forest Product Market in the Tribal Areas of Odisha. , *International Journal of Social and Economic Research*, ,4, (2), 165. <https://doi.org/10.5958/2249-6270.2014.00493.0>
- Mishra, N., & Rao, M. S. (2021). , *Forest Right Act and the problems and prospects of non-timber forest product management-timber* 141–155). routledge India. <https://doi.org/10.4324/9781003000983-11>
- Misra, M. K. (2000). Biomass and energetics of non-timber forest resources in a cluster of tribal villages on the Eastern Ghats of Orissa, India. , *Biomass and Bioenergy*, ,18, (3), 229–247. [https://doi.org/10.1016/s0961-9534\(99\)00086-0](https://doi.org/10.1016/s0961-9534(99)00086-0)
- Modi, D. A. G., & Trivedi, J. Y. (2013). Non-Timber Forest Products in Sustainable Forest Management. , *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.2195929>
- Ngwatung, A., & Roger, N. (2013). The role of non-timber forest products to communities living in the Northern periphery of the Korup National Park. , *GOT - Geography and Spatial Planning Journal*, 4, 197–222. <http://dx.doi.org/10.17127/got/2013.4.009>

Patra, P. (2015). , Joint Forest Management in India, (pp. 449–460). springer netherlands. https://doi.org/10.1007/978-94-017-9771-9_24

Rajeshwar, K., & Roy, S. M. (2021). , An Approach Towards Protecting Tribal Lands Through ICT Interventions, (pp. 283–291). springer nature Singapore. https://doi.org/10.1007/978-981-16-6369-7_25

Saha, D., & Sundriyal, R. C. (2011). Utilization of non-timber forest products in humid tropics: Implications for management and livelihood. , Forest Policy and Economics, ,14, (1), 28–40. <https://doi.org/10.1016/j.forpol.2011.07.008>

Sahu, G., & Sahoo, U. (2019). Twelve Years Later: Implementation of the Schedules Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006., The Indian Journal of Social Work, ,80, (4), 423. <https://doi.org/10.32444/ijsw.2019.80.4.423-438>

Sarker, D., & Das, N. (2006). Towards a Sustainable Joint Forest Management Programme: Evidence from Western Midnapore Division in West Bengal. , South Asia Research, ,26, (3), 269–289. <https://doi.org/10.1177/0262728006071708>

Satpathy, B. (2017). Forest Rights Act Implementation in Odisha. , South Asia Research, ,37, (3), 259–276. <https://doi.org/10.1177/0262728017725621>

Sen, A., & Pattanaik, S. (2018). The political agenda of implementing Forest Rights Act 2006: evidences from Indian Sundarban. , Environment, Development and Sustainability, ,21, (5), 2355–2376. <https://doi.org/10.1007/s10668-018-0138-7>

Sundriyal, M. (2021). Development of NTFPs Sector for Income Generation and Environmental Conservation. , Journal of Graphic Era University, <https://doi.org/10.13052/jgeu0975-1416.915>

Tm, S., & Chandrasekhar, D. H. M. (2014). Impact of New Forest policies on Collection and Marketing of Minor Forest Produce in Karnataka, with Special reference to LAMPS. , IOSR Journal of Humanities and Social Science, ,19, (11), 09–14. <https://doi.org/10.9790/0837-191150914>

Tripathy, S. N. (2019). , Non-timber Forest Products (NTFPs) and Livelihood Promotion of Tribes of Odisha, (pp. 185–202). springer Singapore. https://doi.org/10.1007/978-981-13-8090-7_10

Wiersum, K. F., Ingram, V. J., & Ros-Tonen, M. A. F. (2013). Governing access to resources and markets in non-timber forest product chains. , Forests, Trees and Livelihoods, ,23, (1–2), 6–18. <https://doi.org/10.1080/14728028.2013.868676>

Yadav, M., & Misra, S. (2012). Sustainable development: a role for market information systems for non - timber forest products. , Sustainable Development, ,20, (2), 128 - 140. <https://doi.org/10.1002/sd.470>

