Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

Geographical Impact of Deforestation on Gond Tribes in Dantewada district of Chhattisgarh state

[1]Dr. Kajal Moitra, [2]Sharmistha Manna
[1]Professor (Geography) and Head, [2]Research Scholar (Geography)
[1,2]Department of Social Science, Dr. C.V. Raman University Bilaspur

Abstract

Dantewada district of Chhattisgarh is largely inhabited by Gond tribes, whose traditional way of life is closely tied to forests. The dense forests of this region have long provided them with food, fuel, fodder, timber, and medicinal plants. However, in recent decades, widespread deforestation driven by mining, infrastructure projects, shifting cultivation, and commercial logging has significantly altered the geographical landscape, directly influencing the socio-cultural and economic conditions of the Gond community.One of the most visible geographical impacts is the reduction of forest cover, which has led to the shrinking of natural habitats. The Gond tribes, who depend on minor forest produce such as tendu leaves, mahua flowers, bamboo, and honey, now face difficulties in sustaining their livelihood. The decline in biodiversity has also reduced the availability of traditional herbal medicines, forcing a shift away from indigenous health practices. Deforestation has also contributed to soil erosion and land degradation. As the tree cover diminishes, the fertility of the soil decreases, making agriculture—the mainstay of Gond subsistence—less productive. Shifting cultivation, once sustainable due to the availability of vast forest land, has become increasingly difficult because of limited space and rapid soil exhaustion. This has created food insecurity and a decline in traditional cropping patterns.

Key words- Deforestation, Geographical impact and soil exhaustion.

Introduction-

The hydrological cycle of the region has been disrupted as well. With fewer trees to regulate groundwater recharge and maintain soil moisture, streams and seasonal rivers are drying up more quickly. Water scarcity during summer months has intensified, compelling the Gond population to travel longer distances for drinking and irrigation water. The depletion of water bodies has further reduced fish and aquatic resources, which were once part of their diet.Another geographical consequence is the increase in human-wildlife conflict. As forest habitats shrink, wild animals such as elephants and boars enter villages in search of food, destroying crops and creating insecurity among the Gond communities.

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

Review of literature-

Between 2015 and 2025 a consistent body of work — combining remote-sensing datasets, environmental impact assessments, ethnographic fieldwork, and policy reviews — has converged on the view that Dantewada remains a largely forested district while also experiencing measurable, localized losses of natural forest that disproportionately affect tribal life. Analyses from global forest monitoring platforms show that Dantewada retained a majority of its natural-forest cover into the 2020s (roughly half the district area in early 2020) but recorded steady tree-cover loss through the early 2020s, with a substantial portion of recent loss occurring in intact natural forest rather than plantations. These spatially concentrated losses — often clustered around mining leases, haul roads and expanded infrastructure — alter the landscape mosaic and reduce the availability of the specific forest patches that sustain local subsistence systems. (Global Forest Watch)

A second strand of literature links these localized forest removals to large-scale extractive activity in the Bailadila–Kirandul iron-ore belt. Environmental impact assessments and academic studies documented how open-cast mining, associated waste dumps, and access corridors fragment forest cover, accelerate topsoil removal, and increase dust and water pollution in adjacent catchments. Field studies and water-quality analyses specifically in the Bailadila area report elevated sediment loads and trace heavy-metal concerns in surface and groundwater near mine peripheries, suggesting that deforestation in extractive zones produces both on-site and off-site environmental degradation with direct consequences for land productivity and human health. Because Gond agricultural systems in Dantewada are largely rainfed and shallow-rooted (millets, pulses, shifting-or short-fallow systems), such erosion and hydrological disruption translate into lower yields, shortened fallows and increased crop risk for households reliant on customary plots. (enviscecb.org, ResearchGate, ijeas.org)

A large and policy-relevant literature emphasizes the dependence of Gond livelihoods on non-timber forest products (NTFPs) and common-property resources, and documents how deforestation reduces access, increases collection time and transaction costs, and magnifies market vulnerabilities. Empirical studies from Bastar and neighboring blocks show that NTFPs — tendu leaves, mahua, tamarind, honey, bamboo and seasonal tubers — form critical components of household cash flows and dietary buffers; even modest declines in local resource abundance often produce outsized income shocks because households lack alternative wage opportunities nearby. Several field reports from 2016–2023 further indicate that when forest patches are lost or access restricted (through leases, fencing or conflict-related controls), women in particular bear increased time burdens collecting fuel and NTFPs and face reduced autonomy over earnings from these products. (The Pharma Journal, Vikalp Sangam)

Cultural and socio-spatial studies add a complementary dimension: for the Gond, many forest patches are not merely resource sites but hold ritual, mnemonic and governance value — sacred groves, hill shrines and ancestral water-sites anchor customary law, oral history and seasonal

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

calendars. Research and journalistic accounts from the 2015–2024 period document instances where infrastructure and mining encroachments into such culturally significant spaces produce losses that are ecological and intangible: erosion of inter-generational knowledge, weakening of customary management institutions, and fraying of place-based social cohesion. Where these losses combine with environmental damage, the result is cumulative vulnerability — households lose livelihood options and the social mechanisms that coordinated local resource management. (Vikalp Sangam, enviscecb.org)

Governance and rights literature between 2015 and 2025 focuses heavily on the mediating role of the Forest Rights Act (FRA, 2006) and PESA in shaping outcomes for forest-dependent communities. Case studies and policy reviews from Bastar/Dantewada indicate that secure community forest resource (CFR) recognition or well-implemented individual titles can empower villages to manage resources, check diversion and pursue sustainable local enterprises; conversely, procedural lapses, contested title processes, and the practice of prioritizing diversion for leases have left many communities without effective protections. Recent practitioner reports and training initiatives also show promising examples of CFR management planning in Dantewada when civil-society facilitation and local capacity building occur — suggesting institutional pathways that can buffer ecological losses if implemented at scale. Nonetheless, comparative analyses repeatedly stress implementation gaps, delays in claims settlement, and conflicts between conservation, security, and extractive priorities in this conflict-affected region. (IWMF, cfr.atree.org)

Finally, scholars identify several research gaps and methodological needs for the next phase of work on Dantewada. First, while district-level remote sensing quantifies tree cover trends, there is a shortage of longitudinal, village-level panel data that link precise land-use change to household income, nutritional status and migration trajectories among Gond families. Second, gendered and youth perspectives remain under-represented in quantitative surveys even as qualitative accounts point to differentiated burdens and coping strategies. Third, there are few micro-catchment studies that quantify the loss of specific ecosystem services (water yield, pollination, fuelwood production) after diversion or clearance, limiting the capacity to value and cost-out impacts for policy. Addressing these gaps — by combining spatial change detection with household panels, participatory mapping of sacred ecologies, and targeted hydrological measurements — is the recurring recommendation across recent literature. (Global Forest Watch, The Pharma Journal)

In synthesis, the post-2015 literature portrays Dantewada as a district where the physical footprint of forests remains significant but where geographically concentrated deforestation — primarily linked to mining and infrastructure — disproportionately affects Gond lifeways. The impacts are multi-scalar: biophysical (erosion, altered hydrology, biodiversity loss), economic (NTFP declines, cropping stress and migration), socio-cultural (loss of sacred sites and knowledge), and institutional (the protective or failing role of FRA/PESA). Empirical and policy studies over the past decade converge on the view that rights-based local governance,

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

rigorous environmental safeguards around leases, and targeted livelihood support are necessary to reduce the geographic vulnerability produced by deforestation in Dantewada. These findings should guide any empirical design that seeks to quantify impacts between 2015 and 2025 and to test whether CFR recognition, proximity to mines, and gendered labor burdens explain intra-village variation in household outcomes. (Global Forest Watch, enviscecb.org, IWMF)

Objectives of the study-

1. To analyse geographical factors of deforestation in Chhattisgarh state.
2. To analyse impact of geographical factors of deforestation in Chhattisgarh state.

Research Methodology:

The presented research paper is based on primary and secondary data. Observation and interview method has been used for collection of primary data and for secondary data, relevant data has been obtained from offices.

Analysis-

This has altered settlement patterns, with some families migrating closer to roads or towns, thereby reducing their traditional isolation but also exposing them to external influences and cultural changes.In the long run, the combined effect of deforestation in Dantewada is not only altering the physical geography—through degraded soils, reduced water resources, and fragmented forests—but also reshaping the Gond tribes' relationship with their environment. The weakening of their resource base has led to economic vulnerability and a gradual erosion of their cultural identity that was once rooted deeply in the forest ecosystem.

Table 1: Key Geographical Impacts of Deforestation on Gond Tribes

Aspect	Impact of Deforestation
Soil	Soil erosion, decline in fertility, reduced productivity of shifting cultivation.
Water	Drying of streams and rivers, reduced groundwater recharge, increased summer scarcity.
Biodiversity	Loss of medicinal plants, decline in forest produce, disruption of wildlife habitats.
Settlements	Migration towards roadside areas/towns, rising human-wildlife conflicts, cultural shifts.

Source: Analysis By researcher.

- **Dependence on Physical Inputs**

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

The people of Dantewada rely heavily on forest-based physical resources to meet their everyday needs. These tangible inputs from the forest ecosystem are vital for both livelihood and household sustenance. Local communities depend on them directly, either for self-consumption or for limited commercial use. The main forest-based provisions include firewood, timber, edible forest products, medicinal herbs, fodder, fish, reeds for handicrafts, and various non-timber forest produce (NTFPs).

Firewood for Household Use

In Dantewada, firewood remains the principal source of fuel for cooking and heating among both forest-dwelling and fringe communities. The reasons for this dependence are the easy access to forests and the lack of financial capacity to switch to alternative fuels such as LPG or kerosene. This over-dependence indicates limited opportunities for livelihood diversification and puts significant pressure on forest regeneration. When extraction surpasses the natural replenishment rate, it accelerates forest degradation and indirectly contributes to deforestation.

Table 2: Firewood Dependence in Dantewada

Dependence level	Forest settlers in %
Very high dependence	100
High dependence	0
Medium dependence	0
Mild dependence	0
No dependence	0

Source : Primary data

For families living near the forest fringes, a gradual shift has been observed toward collecting firewood from nearby private farmlands and plantations. However, most agricultural crops cultivated in Dantewada—such as paddy, maize, pulses, and small horticultural crops—do not generate adequate twigs or wood for fuel purposes. As a result, many households are compelled to gather fuelwood from private plantations, often by providing unpaid labor in exchange for collection rights.Traditionally, firewood collection from forests has been a collective family task, reducing the workload on individuals. In contrast, gathering firewood from plantations is often carried out individually, with women bearing the greatest share of the responsibility. This practice increases their workload, as they must also contribute labor in plantations alongside household duties. About 16% of families in fringe areas continue to depend on such arrangements, especially where plantations are located close to settlements.

Due to declining forest resources, even those households that remain solely dependent on forests (about 81% of fringe families) are now forced to make more frequent trips to gather

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

sufficient firewood. Earlier, families could collect wood once every week or fortnight, which ensured an adequate stock. At present, reduced forest availability has compelled them to collect smaller amounts more frequently, highlighting the depletion of natural resources .In Dantewada district, families dependent on forests for their daily needs adopt different strategies to cope with the shortage of fuel wood. Two main options are generally identified—either involving a greater number of family members in collection activities or increasing the frequency of visits to the forest. However, the second option is usually discouraged by forest officials. As a result, the more common practice is to involve additional family members in the task. Both choices bring extra burden in terms of time, labor, and loss of working hours. An alternative such as using LPG, kerosene, or other modern fuels is sometimes suggested, but local households rarely accept it. The high cost, limited financial capacity, and unstable income sources make such options unaffordable for them.

Almost every household living in forest-based settlements of Dantewada relies entirely on forest resources for cooking fuel. Their awareness about alternative sources of energy is very limited, and most of them have never considered shifting to such practices. Other concerns, such as the risk of wild animal attacks during fuel collection, also prevent them from exploring new options. Collecting firewood continues to be seen as a shared family responsibility, and even children and elderly members participate according to their ability. Due to their proximity to dense forests, families generally go once a week to gather wood. Usually, groups of neighbors venture together, which not only makes the task less exhausting but also provides safety against wild animals.

Compared to earlier generations, today the demand for fuel wood has increased significantly. This change is linked with shifting lifestyles and food habits. During the time when shifting cultivation was widely practiced, people consumed many uncooked forest products such as fruits, roots, and edible leaves. Cooking was relatively limited. However, with the move towards settled agriculture, cooked food became a central part of the diet. Alongside, the shift towards cash crops reduced the cultivation of food crops, increasing dependence on markets for basic items. This in turn created a greater need for cooking fuel.

Deforestation and the loss of large trees in Dantewada have further reduced the easy availability of firewood. Households are now compelled to enter forests more frequently to meet their requirements. Rising demand for cooked food, combined with the absence of affordable substitutes, has deepened dependence on fuel wood. Both fringe and forest-dwelling communities remain heavily reliant on this source, while supply shortages and growing demand have intensified pressure on forest resources.

Timber for House Construction

In Dantewada district, the construction of traditional houses is still largely dependent on forest resources. Due to the high cost of modern materials and the persistence of age-old practices,

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

timber remains a primary choice. Wooden logs and poles are mainly used to support walls and roofs, while in tiled houses, timber provides the framework on which tiles are placed.

Table 3: Dependence on Timber for Housing in Dantewada

Dependence level	Forest settlers in %
Very high dependence	0.00
High dependence	4.76
Medium dependence	70.48
Mild dependence	20.00
No dependence	4.76
Total	**100**

Source: Primary survey

The level of reliance on timber shows clear differences between households located deep inside the forests and those living on the fringes. Among fringe settlers, only about 3.61% report a high dependence on forest timber. These families are often financially weak, unable to buy wood from markets or afford concrete housing. Many belong to landless or marginal landholding groups.

Households with **medium dependence (25.90%)** attempt to replace other forest materials, such as reeds, with timber. In some cases, they use trees from their own fields. When these resources are inadequate, they either appeal to forest officials or resort to cutting small branches discreetly.

A significant proportion of fringe families (68.85%) expressed **mild dependence** on timber. Most of them mentioned restrictions from forest authorities and strict monitoring, which discourage timber collection. To manage housing needs, such families often postpone repairs or rely on substitutes like reeds, bamboo, or small quantities of wood from their farms. Families living in concrete houses also fall into this group, as they require little or no timber.

Those who reported **no dependence** were households already living in fully concrete structures.

In fringe areas of Dantewada, three main factors influence the use of timber:

1. **Accessibility** – Forest fencing, strict regulations, and forest degradation have reduced easy access to timber.
2. **Nature of Housing** – As most houses are thatched or tiled, timber continues to be an essential input, while concrete houses remain rare.

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

3. **Alternative Building Materials** – Families either use concrete (costly) or non-timber forest products (limited due to resource depletion).

Overall, the reliance on timber for housing in Dantewada highlights both the socio-economic conditions of rural households and the pressures of forest conservation policies.

Use of Timber for Agricultural Equipment

In Dantewada district, timber continues to play an important role in the preparation of agricultural tools such as ploughs, hoes, axes, poles, and ladders. Farmers rely on these wooden implements to carry out cultivation and harvesting. The following table illustrates the extent of dependence on timber among forest-dwelling and fringe household

Table 4: Dependence on Timber for Agricultural Equipment in Dantewada

Dependence level	Forest settlers % (n=105)
Very high	79.05
High	20.95
Medium	0
Mild	0
No dependence	0
Total	**100**

Source: Primary data

In the interior villages, long wooden ladders are frequently used to collect produce such as tamarind, mahua flowers, and other non-timber forest products. These ladders are often shared among families due to restrictions on cutting bamboo and reeds from forests. Fringe households, however, increasingly substitute such forest-based materials with resources available on their farmland or by purchasing from local markets.For agricultural implements like the plough, hoe, and axe, timber demand remains, but regulations and forest protection measures have reduced the direct extraction of wood by fringe households. A large share of these households (89.51%) reported only medium dependence on forests, while 3.61% have completely stopped using forest timber for equipment, relying instead on local markets or farm-based substitutes. Another 6.88% rarely depend on forests, managing instead by borrowing or purchasing equipment locally.

By contrast, forest settlers show a much stronger dependence. Nearly 79.05% rely heavily on forests for timber, while 20.95% manage partially with alternatives from their landholdings. The greater reliance of forest dwellers is linked to their limited access to substitutes and their

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

continued cultivation of traditional food crops that require durable wooden tools. However, even for them, forest degradation—particularly the spread of open and degraded forests in some parts of Dantewada—has reduced the supply of quality timber.Overall, poorer households with few alternative options continue to depend most on forests. Proximity to forests and lack of substitutes are the main reasons behind this dependence. While fringe households are gradually shifting towards markets and farmland resources due to restrictions and changing cropping patterns, forest households maintain a stronger link with forest timber. This distinction between the two groups also reflects the current ecological condition of the forests in Dantewada

Food Dependence

The forests of Dantewada have traditionally provided a wide variety of edible resources such as fruits, tubers, and leafy plants. In earlier times, these food items formed the staple diet of tribal communities, offering nutrition without any monetary cost. Today, however, complete reliance on forest-based foods has significantly declined, even among families living inside or near the forests. While dependence has reduced, many households still consume these products either to retain their traditional food culture or as a supplementary diet, particularly during times of crop failure. In this sense, forests continue to function as a buffer, ensuring food security during droughts, agricultural loss, or other emergencies by bridging seasonal food shortages.

Table 5: Level of Dependence on Forest Food in Dantewada

Dependence level	Forest settlers % (n=105)
Very high dependence	0
High dependence	77.14
Medium dependence	15.24
Mild dependence	7.62
No dependence	0
Total	100

Source: Primary survey

The table highlights a striking contrast between households living deep in the forest and those on its fringes. None of the groups show complete dependence on forest produce, yet nearly three-fourths of forest settlers (77.14%) rely heavily on it for food needs. These households have limited interaction with the outside market economy and continue to prefer self-sustained practices. Their diet mainly comes from subsistence farming—such as cultivating minor cereals like ragi and arrowroot—supplemented by wild edibles.Forest-dwelling families do not

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

extract food items on a fixed schedule; rather, their gathering practices are subsistence-oriented and rooted in conservation ethics. They walk long distances in search of new collection sites, avoid repeated harvesting of the same resource from one place, and follow cultural norms that align with ecological protection. This practice is similar to shifting cultivation, where the same plot is not used continuously. For these communities, forests are seen as sacred spaces, integral to survival, and disturbing them is believed to threaten the very existence of their society. Medium-level dependent households (15.24%) and mildly dependent families (7.62%) increasingly use rice from ration shops but continue to retain some connection with forest foods.In contrast, fringe villages show a different pattern. A large majority (67.21%) have only mild reliance on wild edibles. The shift in lifestyle, combined with the availability of such foods only in the deeper forests, discourages greater dependence. Extraction is carried out occasionally, either out of curiosity or during periods of crisis. However, villagers acknowledge that resource depletion has made gathering more time-consuming. About 30.49% of fringe households do not depend on forests at all, fulfilling their food needs entirely through market purchases. Those with minimal reliance (2.30%) turn to forest products largely to experience traditional tastes or to reduce household food expenses.

Forest-Based Labour

In Dantewada, a large section of households located inside the forest areas continue to rely heavily on forest-based resources for construction and daily needs. The majority of homes are built in the traditional style, with thatched roofs made from locally available grasses, bamboo, and palm leaves. Only a few households have tiled roofing, while cement or concrete houses are almost absent in such settlements. Kitchens are often built as separate structures using palm leaves or bamboo mats. The preference for such materials is shaped by easy availability, affordability, cultural practices, and the nearness of forest resources. Maintenance is also simpler because raw materials can be easily collected from nearby forests.The data reveals that about 84.76% of forest settlers are completely dependent on forest produce for house construction and household articles. Another 15.24% report high reliance, indicating that forests remain the sole source of these resources. Unlike agricultural by-products or market substitutes, forest produce provides the cheapest and most accessible option.In contrast, households on the fringe settlements show a different trend. Due to limited forest access and stricter regulations, only 37.38% show high dependence, while the majority (58.36%) exhibit medium reliance. These households often combine forest products with farm-based substitutes. Many of them live in mud-brick houses with tiled roofs, but continue to use forest grasses for kitchens and backyards. New concrete houses in fringe areas show only mild dependence. However, even in these settlements, complete independence from forest resources is rare.

Table 6: Level of Dependence on Forest Labour

Dependence Level	Forest Settlers % (n=105)

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

Very high	40
High	35.24
Medium	24.76
Mild	0
No dependence	0
Total	**100**

Source: Primary data

Engagement in forest-based labour is another important source of livelihood in Dantewada. Among forest settlers, about 40% of households are actively engaged in seasonal work such as planting saplings, fencing, fire prevention, and forest patrolling. This participation is not only economic but also linked with their traditional knowledge and cultural association with the forest. Another 35.24% combine these jobs with other livelihood activities, while 24.76% take up such work only in particular seasons.In fringe settlements, dependence is far lower. Nearly 89.51% of households show only mild reliance, as most of them are engaged in agriculture or casual labour outside the forest. For them, forest work is a backup option during lean agricultural periods. Only 5.57% of families participate in forest labour as a livelihood choice, while a small fraction (4.92%) do not engage at all.The factors driving this variation differ between the two groups. For forest settlers, close proximity, cultural ties, and limited economic alternatives push them towards forest-based labour. For fringe settlers, agriculture and local employment reduce their dependence, making forest labour a supplementary rather than primary activity.

Table 7: Forest Services, Substitutes & Challenges in Dantewada

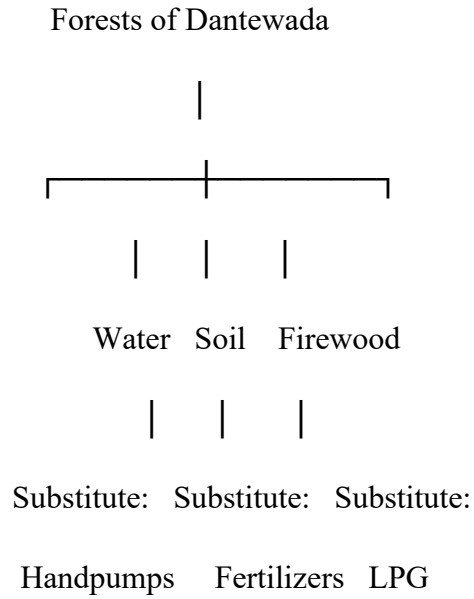
Forest Service	Possible Substitute	Current Challenges
Drinking water from streams & springs	Handpumps, piped water supply	Irregular supply, poor quality, high dependency on govt. schemes
Soil nutrients (organic matter, leaf litter)	Chemical fertilizers	Costly, limited access, lack of awareness
Firewood for cooking & heating	LPG, kerosene, solar cookstoves	LPG costly & irregular, solar adoption limited
Timber for tools & housing	Market-purchased wood, cement/steel	Institutional restrictions, high market cost

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

Non-Timber Forest Products (NTFPs) – tendu leaves, mahua, honey, medicinal herbs	Market-bought food & medicines	Declining availability, low market price, middlemen exploitation
Pollination & biodiversity support	Artificial pollination, hybrid seeds	Loss of insects, reduced yields, increased farming costs
Climate regulation & rainfall support	No direct substitute	Erratic rainfall, deforestation impact
Clean air & serene environment	None	Degradation, forest fires, mining impact

Source: Analysis by researcher.

Forests in Dantewada district provide a wide range of ecological services that are vital for the communities living in and around them. These services play a major role in shaping the social, economic, and cultural dimensions of tribal life. They include clean drinking water from natural sources, rainfall support, crop pollination by insects, natural soil enrichment through organic matter, regulation of local climate, and maintenance of fresh air and a healthy environment. Among these, only water and soil nutrients can be externally supplied through institutional mechanisms, while all other services are directly dependent on forest ecosystems regardless of whether the community resides inside the forest or along its fringes.



Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

| | |

Challenge: Challenge: Challenge:

Irregular Costly & Expensive,

supply limited irregular supply

The external provision of water and soil nutrients, however, is neither free nor reliable. Access often depends on purchasing power, efficiency of supply networks, and the community's ability to negotiate with government institutions. In Dantewada's remote tribal settlements, awareness and integration with such institutions are extremely limited. Communities are often unaware of available schemes or hesitate to engage with external systems, which significantly weakens their negotiating power. This lack of capacity results in deprivation, preventing them from availing benefits like subsidized fertilizers, affordable credit for irrigation, and other agricultural support. Further, poor connectivity with markets, geographical isolation, and weak infrastructure restrict economic opportunities, leaving people more dependent on forests compared to urban or semi-urban communities.

Unfortunately, forest-based services in Dantewada are deteriorating due to deforestation and degradation. Irregular rainfall, shrinking water sources, decline in soil fertility, and loss of pollinators are reducing the productivity of agricultural fields and other livelihood activities. As a result, families who once relied on abundant forest resources now face increasing risks and deteriorating quality of life. With limited alternatives to replace these ecosystem services, local communities often become the "silent sufferers" of environmental decline. Findings suggest that both changing demand and shrinking supply are shaping the extent of forest dependence in Dantewada. Interestingly, shifts in demand often arise because of supply shortages. The degree of dependence varies depending on market accessibility, livelihood diversification, substitution options, and proximity to forests. Tribal settlers show high dependence on firewood, timber for tools, edible forest produce, medicinal plants, non-timber forest products for trade, and raw materials for handicrafts. Medium and low dependence is seen in areas like timber for housing or fishing, largely due to institutional restrictions and resource scarcity. Fringe settlers, in contrast, are highly dependent only on firewood, where substitutes are either unavailable or too costly. Agricultural diversification and limited access to forest resources reduce their reliance on other forest services, though substitutes come with added financial burdens. Thus, while forest dependency continues to define rural livelihoods in Dantewada, the degradation of natural resources combined with institutional and economic barriers has made their survival more vulnerable than before.

According to the forest classification system given by Champion and Seth (1968), the forests of Chhattisgarh are grouped into two main categories—Tropical Moist Deciduous and Tropical Dry Deciduous, which are further divided into 12 sub-types. The dominant tree species of the

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

State are Sal (Shorea robusta) and Teak (Tectona grandis), while other important species include Bija (Pterocarpus marsupium), Saja (Terminalia tomentosa), Dhavdha (Anogeissus

References

1. Mokashi, S., & Lele, S. (2021, October). *Community forest rights recognition in Chhattisgarh State: Progress and challenges*. ATREE. Retrieved from ATREE website (atree.org)
2. Sharma, S. D., & Sahu, K. (2019). Importance of non-timber forest products for livelihood of tribals in Bastar region of Chhattisgarh: A review. *International Journal of Agriculture Extension and Social Development, 2*(1), 48–52. https://doi.org/10.33545/26180723.2019.v2.i1a.24 (extensionjournal.com)
3. India: Iron ore mining in Chhattisgarh drives deforestation. (2021, September). *Mongabay-India*. Retrieved from Mongabay-India website (Mongabay-India)
4. Sanyal, S., & Singh, R. (2022, June). Livelihood sources of Gond Tribes: A study of village Mangalnaar, Bhairamgarh block, Chhattisgarh. *National Geographical Journal of India, 66*(2), 174–185. Retrieved from https://ngji.in/index.php/ngji/article/view/2 (ngji.in)
5. Niyogi, D. G. (2023, April 30). Forest rights in Chhattisgarh – Individual vs community. *The Citizen*. Retrieved from The Citizen website (IWMF)
6. Jha, S., & Zumbish. (2022, August 29). Taking ownership: How forest-dwellers in Chhattisgarh, Odisha claimed rights over traditional boundary. *Down to Earth*. Retrieved from Down to Earth website (Down To Earth)
7. Mishra, [First initial unknown]. (2025, January 18). Conflicts over natural resource extraction and development in Bastar. *Economic & Political Weekly, LX*(3), 47–? Retrieved from ResearchGate (ResearchGate)
8. ICCA Consortium. (2025, January 10). *Alert: Adivasi communities in Bastar, India, face escalating state violence while resisting land grabs and destructive mining*. Retrieved from ICCA Consortium website (iccaconsortium.org)

- **Mokashi & Lele (2021)** – Examines FRA's community forest rights (CFR) in Chhattisgarh, highlighting recognition processes and challenges at state and local levels.
- **Sharma & Sahu (2019)** – Reviews therole of NTFPs in Bastar tribal livelihoods, emphasizing dependency and access issues.
- **Mongabay-India (2021)** – Focuses on mining-induced deforestation in Dantewada, including forest diversion for iron-ore mining near sacred Gond sites.
- **Sanyal & Singh (2022)** – Empirical village-level study on Gond livelihoods, especially forest-based sources in a Chhattisgarh village.
- **Niyogi (2023)** – Highlights implementation of FRA for individual vs. community claims, including cases from Dantewada (e.g., Masauri, Badegudra).

Innovation and Integrative Research Center Journal
ISSN: 2584-1491 | www.iircj.org
Volume-3 | Issue-6 | June - 2025 | Page 194-208

- **Jha & Zumbish (2022)** – Narrative on how forest dwellers assert CFRR under FRA in Chhattisgarh and Odisha, focusing on legal and community mobilization.
- **Mishra (2025)** – Critical analysis of resource extraction conflicts in Bastar, impacts on ecosystems and Adivasi socio-cultural relations.
- **ICCA Consortium (2025)** – Documentation of tribal resistance, state violence, and resource grab dynamics in Bastar, up to early 2025.