March 2024

UNDERSTANDING AND BUILDING INDIGENOUS PEOPLES' RESILIENCE TO CLIMATE SHOCKS 'CASES OF KONDH AND HILL-KHADIA TRIBES'

Presented By

VASUNDHARA IN COLABORATION CIPRED

VASUNDHARA
democratizing natural resource governance

Understanding and building Indigenous Peoples’ Resilience to climate shocks Cases of Kondh and Hill-Khadia Tribes

Declaration – This study has been done in collaboration with the Center for Indigenous Peoples' Research and Development (CIPRED) with the support of the World Bank, Nepal. This was part of a larger study conducted at the South Asia Region level including cases from India, Pakistan, and Nepal under the mentorship of Dr. Pasang Dolma Sherpa, Executive Director, CIPRED. For Vasundhara, Nityanand Rai coordinated the research in Odisha, India.

Executive summary

The following report discusses the case story of two indigenous communities of Odisha in India. It tries to explore the drivers and enablers for the resilience of these tribal communities to climate shocks.

The first case story is about the Kondh tribe from Jagannath Prasad village in Ranpur block of Nayagarh district of Odisha. Kondh tribe is the largest scheduled tribe among 62 scheduled tribes recognized in Odisha. Kondh are primarily dependent on forest produce and agriculture for their livelihood.

By the 1980s the forest in the region has got almost barren. Apart from the forest department, many timber mafias in the region were involved in exploiting the forest for commercial gains. The decrease in forest cover led to livelihood insecurity among the Kondh people. They started feeling the shortage of fuelwood, timber for the construction of houses, agriculture tools, NTFPs, etc.

In the early years of 1980, the Kondh tribe of Jagnnathprasad village came together to take charge of forest protection in their hand. They formed a forest protection committee at the village level and reinitiated the traditional system of forest protection known as *thengapalli.* Under this system group of households from the village take turns to go for forest patrolling duty with sticks or *Thenga.*

The community’s forest protection efforts of the last four decades have started showing results. The once barren forest has thick vegetation now and supports a very rich biodiversity. The community feels that their local climate and ecosystem have improved due to the growth of forests. They feel less effect of heatwaves in their village. Forest streams which earlier used to get dry in summer have become perennial now.

VASUNDHARA
democratizing natural resource governance

The collection of non-timber forest produce (NTFPs) like wild mushrooms, *siyali* leaves, wild mangoes, etc. from the forest has increased manifolds, strengthening the livelihood security of the villagers. Moreover, increased humus flow from forest to agricultural fields has enriched the soil. The moisture content of the soil has improved. Also, there is more availability of water from forest streams for agriculture leading to increased agricultural productivity.
The case story of Jagannathprasad village shows that indigenous communities are capable of managing their natural resources sustainably when they get control over them. Also, right over their natural resources makes them more resilient to climate and other shocks.

The second case study is about the Hill Kharia tribe living in and around Simlipal Tiger Reserve in the Mayurbhanj district. Hill Kharia or Pahari Kharia is a semi-nomadic tribe and they are largely dependent on hunting and gathering for their subsistence needs. They are one of the 13

particularly vulnerable tribal groups (PVTG) of Odisha. They are considered experts in gathering honey. Sell of wild honey contributes to a major portion of their annual income.

Hill Kharia has a very small population and they consider themselves as autochthones or original inhabitants of Simlipal forests.
Apart from livelihood needs, they have a religious and spiritual relationship with different elements of Simlipal forests. Sal trees are considered sacred and are never cut. It is considered an abode of deities and spirits of their ancestors. Hill Kharia considers honey bees as a messenger of God (devdoot) and honey as a sacred gift from God. They treat honey bees with gratitude and devotion and make sure that while collecting honey, bees don't get killed. They fetch honey only from mature beehives and leave a portion of the beehive intact so bees can come there again.
Despite the symbiotic relationship that the Hill Kharia people share with the forest and wildlife, they have become the victims of conservation policies. After the declaration of Simlipal as a 'tiger reserve' in 1973, and as a national park in 1980, there has been constant pressure on the Hill Kharia people of being displaced from Simlipal forests. Several Hill Kharias are already being displaced from Simlipal as far as 100 Km from their original habitat and resettled in rehabilitation colonies. Even those who are inside the Simlipal forests face several restrictions from the forest department on a day-to-day basis, affecting their livelihood activities like collection of wild honey and other NTFPs. For this case study, Hill Kharia from Badajhili village and Sialinoi rehabilitation colony have been interviewed. Badajhili village is located inside the Simlipal forest whereas Sialinoi rehabilitation colony is located outside the boundary of Simlipal Tiger Reserve. Hill Kharia people from both Badajhili village and Sialinoi rehabilitation colony feel that collecting forest produce is the most reliable livelihood activity for them.
Hill Kharias of Sialinoi feels that while living in the forest they used to get pure food. Outside food in the rehabilitation colony doesn't suit their body and they frequently fall sick. Moreover, they also feel that their traditional medicines, which were effective when they used to eat forest food, don't work on them after they started eating impure food from outside the forest.
The study shows that Hill Kharia feel more control over their life when they live inside the Simlipal forests. Due to their interaction with the forest for several generations, they can easily sense the changes happening in the forest and adapt accordingly. Uprooting them from the forest or restricting their NTFP collection makes them more vulnerable to market forces, diseases, and climatic shocks.

VASUNDHARA
democratizing natural resource governance

Report

1. Introduction

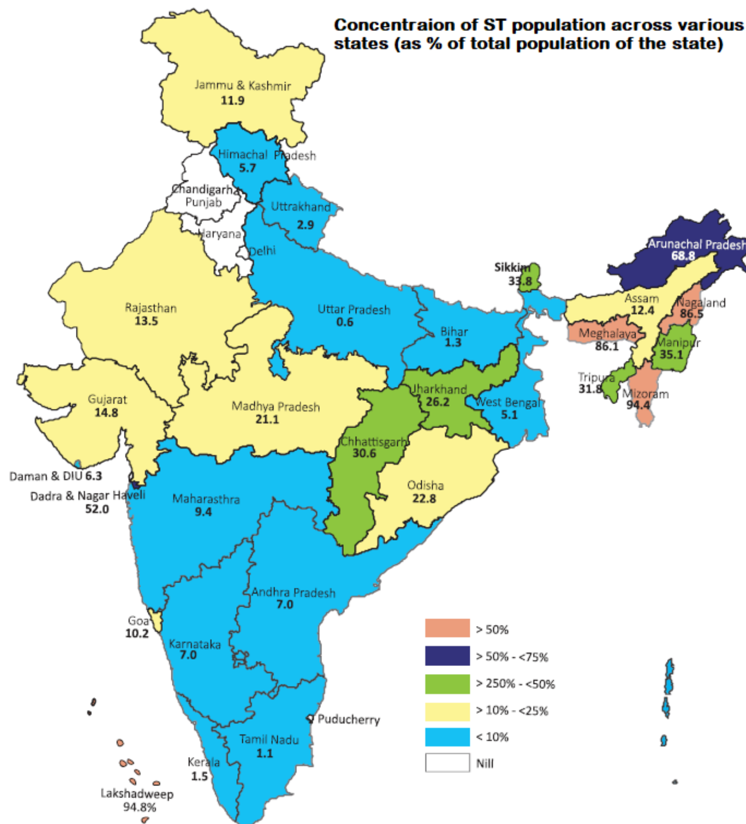
India's stand on recognizing Indigenous Peoples in international and domestic law, policy, and practice is paradoxical. India voted in favor of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) on the condition that after independence all Indians would be

Indigenous (IWGIA, 2023).[1] However, 705 ethnic groups have been officially recognized as Scheduled Tribes (ST) in India. In the domestic socio-political sphere, the STs are generally considered Indigenous Peoples. Apart from officially recognized ethnic groups, many more ethnic groups are not recognized officially (IWGIA, 2023). In India, the officially recognized ethnic groups are called scheduled tribes or STs.
According to census data of 2011, the estimated population of STs in India is 104 million, or 8.6% of the country's total population. Though numerically scheduled tribes form a tiny portion of the total population of India, their group diversity is enormous. They vary among themselves in language and linguistic traits, the ecological setting in which they live, their physical feature, rituals, beliefs, and many more things. They are spread over the length and breadth of the country but their geographical distribution is far from uniform. The majority of the ST population is concentrated in Central India, the Northeastern region, and the western belt of the country. Ten states, namely Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Rajasthan, Andhra Pradesh, and West Bengal share the largest share of the ST population. The Northeastern states share 12 percent of the total population of scheduled tribes in the country, about five percent live in Southern India whereas three percent of the ST population lives in Northern States (Xaxa V, et al., 2014).[2]
Northeastern states have the highest concentration of the ST population against the total population. According to the census of 2011, 94.4 percent of the population of Mizoram belongs to scheduled tribes whereas the concentration of ST population in Nagaland and Meghalaya is 86.5 percent and 86.1 percent respectively. In the mainland, Chhattisgarh has the highest concentration of ST population i.e., 30.6 percent, followed by Jharkhand with 26.2 percent and Odisha with 22.8 percent.

---

[1] IWGIA (2023). Indigenous Peopless in India. https://www.iwgia.org/en/india.html

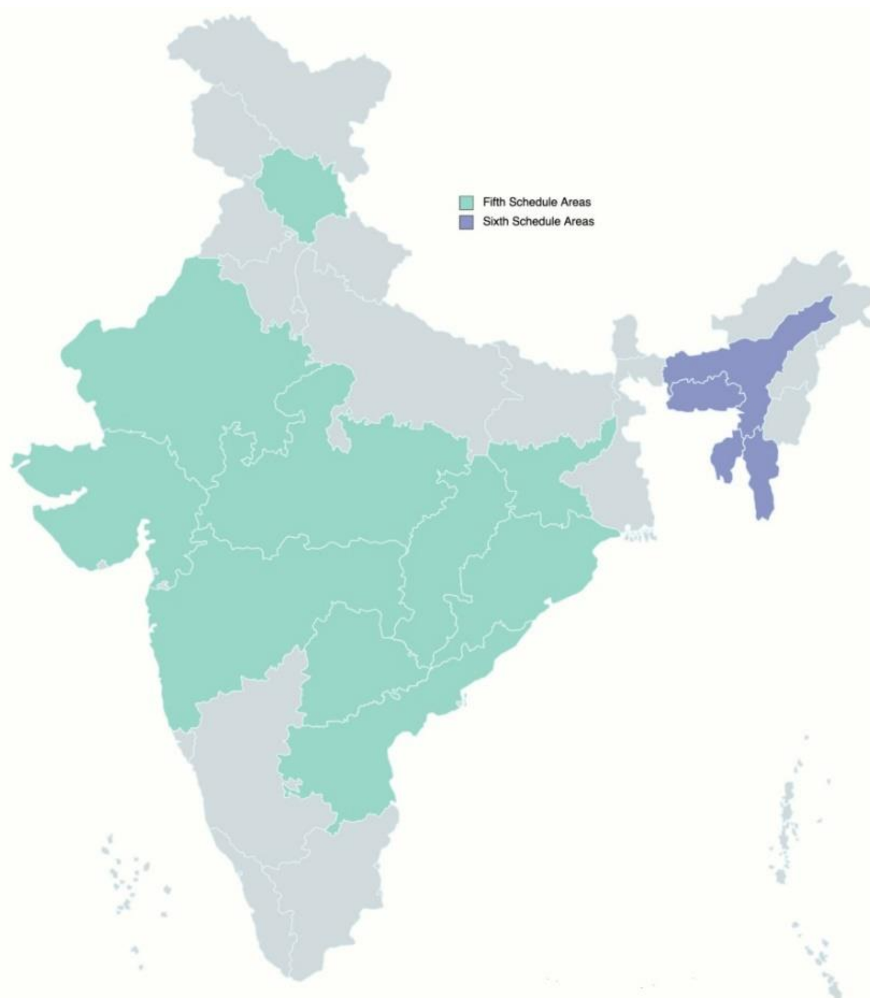
[2] Xaxa V, et. el (2014) Report Of The High Level Committee On Socioeconomic, Health And Educational Status Of Tribal Communities Of India. Page: 24. Ministry of Tribal Affairs, GoI.



Map – Concentration of ST Population across various states (as % of the total population of the state) created by – Vikaspedia

2. Fifth Schedule and Sixth Schedule Areas

For areas having a high concentration of ST population special administrative arrangements have been provided in the Constitution in the form of the Fifth and Sixth Schedules. The Sixth Schedule areas are some of the areas which were 'excluded' until the Government of India Act, 1935 in the erstwhile Assam and other tribal-dominant areas which became separate States. These areas have been given special provisions under Part XXI of the Constitution. The states with sixth schedule areas are Assam, Meghalaya, Tripura, and Mizoram. Similarly, there are States where the provisions of the Fifth Schedule are in force. The Fifth Schedule aims to provide protections to the tribal population through separate laws for Scheduled Areas, including a special role for the Governor and the institution of the Tribes Advisory Council. The provisions of the Fifth Schedule have seen further legal and administrative reinforcement in the form of the provisions of the Panchayats (Extension to Scheduled Areas) Act (PESA), 1996 (Xaxa V, et al., 2014).



Map – Depiction of the 5th Schedule area and 6th Schedule area in India. Created by – Forum IAS

3. The politics of terminology

The terms tribe, scheduled tribe, and Adivasi are generally used to refer to Indigenous Peoples in India. The term 'tribe' was introduced in India by the colonial rulers based on their experience in Africa. It denotes a group of people who are in their early stages of civilization, live in a kinship-based group, and do not have a written history. In India, the term was largely used for communities that were not part of the caste system. This is unlike the Dalits, who were part of the caste system either as shudras or outcastes. The Indigenous Peoples of central India recognize themselves as Adivasi or original inhabitants whereas the Indigenous Peoples of Northeastern states do not use the term Adivasi to denote themselves (Ghosh P & Chaudhauri D, 2022).[3]

The term Adivasi has a political connotation and it was brought into the political discourse by a prominent Adivasi leader, Jaipal Singh Munda during the constituent assembly debates. The term asserts that Indigenous Peoples do not only live on the natural resources around them but they are the rightful owners of the land and resources. This assertion was in response to the continuous alienation of Adivasis from their land and natural resources during the colonial and post-colonial periods. Unlike the Indigenous people of central India, in Northeastern states, the

[3] Ghosh P & Chaudhauri D (9 June 2022) Adivasi, Tribe or ST: The Debate on the Status of Adivasi Livelihoods. PRADAN.

communities largely retained their access to and control over the natural resources (Ghosh P & Chaudhauri D, 2022).
The term scheduled tribe is a politico-administrative category. Groups and communities identified and enumerated as tribes during British rule came to be re-classified as Scheduled Tribes after the constitution was adopted in 1950. Article 342 of the constitution provided for the listing of these groups in the schedule to extend certain administrative and political concessions to them (Xaxa V, et al., 2014). However, the power to grant a group ST status is with the state government. Therefore, we can find numerous examples where a group has been granted ST status in one state and not in other states. For instance, Santhals, Munda, and Oraon are considered ST in Jharkhand and Odisha but not in Assam. Gonds are considered ST in Chhattisgarh and Madhya Pradesh but not in Uttar Pradesh (Ghosh P & Chaudhauri D, 2022).

4. Alienation of Indigenous Peoples from Forest Before Independence

Most Indigenous Peoples do not view land as a ‘commodity’ which can be bought and sold in impersonal markets. On the contrary, the indigenous view is that land is a substance endowed with sacred meanings, embedded in social relations, and fundamental to the definition of a people’s existence and identity (Mathur M H, 2009).[4]

Before independence, many tribal areas were small principalities ruled by local kings. During that time agriculture was the main source of state revenue. To increase the revenue base this local chieftain encouraged non-Adivasi cultivators to migrate and settle in the hilly and forest tracts. Over time, these immigrants expanded their economic and political power in the Adivasi regions. When the British entered the scene, the situation became worse. The introduction of bureaucracy, Zamindari or landlord system, and institutional arrangements, which were earlier unknown to the Adivasi people, led to new forms of atrocities, suppression, and oppression (Patnaik K, 2009).[5]

In the early phase of British rule, the colonial rulers wanted to consolidate their control and maximize the revenue by extending cultivation in the forest land. The forest land was seen as a potentially cultivable land that had grown wild due to the lack of industrialism of native people. The extension of the cultivated acreage was an index for the Britishers to evaluate the success and failure of their policies (Rangarajan M, 1996).[6]

However, by the early 19th century, the British Royal Navy started feeling a shortage of timber for the construction of ships. Due to ongoing Anglo-French rivalry, Britain was continuously expanding its navy. There was a huge demand for wood for the construction of warships. As

[4] [4] Mathur M H (2009) Tribal Land Issues in India: Communal Management, Rights, and Displacement181. Asian Development Bank.

[5] Patnaik K (2009) Land Alienation and Other Land Related Issues in Tribal Areas – An Overview. Scheduled Castes & Scheduled Tribes Research and Training Institute. Bhubaneswar.

[6] Rangrajan M (1996) Fencing the Forest. Pg 17-18. Oxford University Press.

well as merchant ships. By 1809 only a few large trees were left in English Royal Forests and planting had been persistently neglected. Also, the retreat of wood was seen as a sign of progress in Britain. Crops like wheat and corn were more remunerative than slow-growing oak trees. The barbarous countries like India were seen as the right place for forests from where timbers could be sourced (Rangarajan M, 1996).[7]

The increased demand for timber by the Royal Navy of Britain started exerting pressure on woodland in the subcontinent. British policymakers started discussing ways to ensure a steady supply of timber for ship-making.

The pressure on Indian woodlands further increased after the beginning of railways in the subcontinent. The demand for timber for making railway sleepers for a rapidly growing railway network was huge. Till now the colonial government had no uniform system to control and manage the Indian forest lands. Forests in different parts of the country had different management systems. In princely states, local kings or feudal chiefs had the ownership right over forest lands. However, forest-dwelling communities in and around these forests used to enjoy their customary rights of access and use. In tribal-dominated Central India as well as in North East India, the local communities used to have ownership, access and use rights over the forest.

In the wake of increased demand for timber mainly from the Navy and railways British rulers wanted to ensure a regular supply of wood from Indian forest. The colonial government wanted to have control over the forest land and for this purpose, the Forest Department was formed in 1864. In 1865 the colonial government passed the Forest Act, 1865 by which local government authority was given the power to declare any patch of forest as a state forest. By this law colonial government started asserting its monopoly over the forest land and curtailed the communities' ownership rights over the forest. However, the Forest Act 1865 didn't alter the communities' existing use and access rights over the forest (Rangarajan M, 1996).[8] However, by the provision of declaring any forest as a state forest, the act transformed the customary 'rights' of Indigenous Peoples of use and access to the forest into 'privileges' granted by the government. (Tripathi P, 2016).[9]

The legal access and control of Adivasis and other forest-dwelling communities over forests started being curtailed by the Indian Forest Act of 1878. This was a comprehensive act and it extended the state's authority over the forests. By this act, the forest was divided into three parts namely reserved forests, protected forests, and village forests. The Act tightened the government's control of forests by prohibiting certain activities like trespassing or pasturing of cattle in the reserve forest. The villagers could only use protected forests and village forests for their use. Certain activities were declared as forest offenses and imprisonment and fines were

[7] Rangrajan M (1996) Fencing the Forest. Pg 19-20. Oxford University Press
[8] Rangrajan M (1996) Fencing the Forest. Pg 19-55 Oxford University Press
[9] Tripathi P (2016) Tribes and Forest: A critical appraisal of the tribal forest right in India. Research Journal of Social Sciences and Management.

prescribed for them (Kulkarni S, 1987)[10]. This legislation, obliterated centuries of customary use of the forest by rural populations all over India with one stroke of the executive pen.

The Indian Forest Act of 1878 was replaced by a very comprehensive act called the Indian Forest Act, of 1927. This act dissolved the communities' rights over forests, which was mentioned in the act of 1878. The act put some control on shifting cultivation considering it the biggest reason for the depletion of the forest. The restriction of communal ownership of forests by the State severely destabilized the subsistence economy of the forest people. It forced many communities to change their occupation (Sengupta N, 1988).[11] So, in the colonial period, the legal and policy instruments transferred the right over forests from the communities' hands to the government's hands. The common property became state property and the alienation of Indigenous Peoples from the forest began.

5. Alienation continued post-independence

For indigenous communities, the forest was not a commodity to be used for commercial purposes. In most regions, indigenous communities had de facto rights and access to forests. It was part of their life, culture, and livelihood. During British rule, indigenous communities were alienated from the forest, and a commercial value was attached to the forest. Even after the independence, the same tendency continued.

The Forest Policy of 1952 was passed with the stated aim of maximizing annual revenue from forests for the sake of nation-building. It followed the lines of colonial policymakers but it went beyond in infringing on the privileges of the Indigenous Peoples. The private forests of Adivasis that were not touched in the old policy were subjected to controls under the new one. Free grazing was recognised under the old policy but a fee was imposed on it in the new one. So, the 'rights' which were converted to 'privileges' in the colonial periods were turned into 'concessions' in this policy (Tripathi P, 2016).

The National Commission on Agriculture (NCA), 1976 recommended a drastic reduction in the people's rights over the forest and forest produce and advocated the commercialization of forest at all costs ignoring the sustenance of forest people derived from the forests. The report opted for the extreme conservationist approach towards the forest and forest products and considered tribals and forest dwellers as destructive agents. The local people were considered destructors of the forest as they extracted natural resources free of cost and contributed less to the maintenance of the forests (Tripathi P, 2016).

The subsequent laws like the Forest Conservation Act, of 1980, the Environment (Protection) Act, of 1986 along with Wildlife (Protection) Act, of 1972, strengthened the conservation regime in the country but were generally antagonists to the rights and interests of Adivasis and other forest-dependent communities (Pratap D, 2010).[12]

---

[10] Kulkarni S (1987) Forest Legislation and Tribals: Comments on Forest Policy Resolution. Economic and Political Weekly.
[11] Sengupta N (1988) Reappraising Tribal Movements-Ill, The Economic Basis. Economic and Political Weekly
[12] Pratap D (2010) Community Participation and Forest Policies in India An Overview. Pg: 235-56 Social Change.

VASUNDHARA
democratizing natural resource governance

6. Beginning of people's participation in forest management

A radical change occurred with the emergence of the National Forest Policy (NFP), in 1988. The focus shifted from revenue generation to forest conservation by securing the livelihoods of the Adivasis and other forest-dependent communities. while maintaining environmental stability, for the first time (Satpathy B, 2015).[13]

Following the NFP, the Government of India's resolution in June 1990 (the JFM circular) was passed which made the provision for the participation of village communities and village assemblies in the regeneration of degraded forest lands.

Meanwhile, several movements by social and human rights activists started that demanded constitutional recognition of sacrosanct and non-negotiable rights of Indigenous Peoples over local resources. These rights along with the Bhuria committee's recommendations forced the government to amend the Vth schedule of the constitution to bring the Panchayats (Extension to Schedule Area) Act (PESA), 1996. PESA provided a way to decentralize the existing forest governance by bringing Gram Sabha to the center stage and recognizing the traditional rights of Adivasis over "community resources" – meaning land, water, and forests. PESA is an important legislation as it provides a principle and basis for future law-making concerning indigenous communities (Patnaik S, 2007).[14]

The passing of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006 is the most significant milestone for community-led forest management in independent India. The act aims to rectify the historical injustice done to the tribal community of India. The act recognizes the scheduled tribe and other traditional forest dwellers' right to use and manage the forest which they have been doing for generations but which could not be recorded. The recognized right includes the right to hold and live in forest lands, the right to ownership and access to collect, use, and dispose of minor forest produce that has been traditionally collected within and outside the village boundaries. An important provision in the act is the vesting of authority in Gram Sabha to initiate the process of determining the nature and extent of forest rights. The act has been hailed as revolutionary as it opens the possibility of truly democratic forest governance and tries to break the hegemony of outsiders on life, livelihood, and homeland of forest-dwelling communities for the first time in one and half centuries (Pratap D, 2010).[15]

7. Socio-economic Life of Indigenous Peoples

Almost 90% of the tribal population of the country lives in rural areas. As per Census, 2011 over two-thirds of the tribal population is working in the primary sector as against 53% of the non-tribal population (Xaxa V, et al., 2014). The primary sector in which Indigenous Peoples are involved largely includes agriculture (both as a cultivator and agricultural laborers) and the collection of non-timber forest produce (NTFPs). The tribal people are increasingly moving from being cultivators to agricultural laborers. A comparison between the Census of 2001 and 2011 shows that the proportion of cultivators reduced by more than 10%, while the proportion

---

[13] Stapathy B (2015) Where are Tribals in Their Development? A Century of Indian Forest Legislations. Sage.
[14] Patnaik S (2007) PESA, the Forest Rights Act, and Tribal Rights in India. Paper presented at International Conference on Poverty Reduction and Forests, Bangkok.
[15] Pratap D (2010) Community Participation and Forest Policies in India: An Overview

of agricultural laborers increased by 9% among the ST population. It is estimated that, in the last decade, about 3.5 million tribal people have left agriculture and agriculture-related activities to enter the informal labor market. Displacement and enforced migration have also led to an increasing number of Scheduled Tribes working as contract laborers in the construction industry and domestic workers in major cities. (MoTA, GoI, 2008)[16]. Apart from agriculture tribals are dependent on forest for grazing, collection of fuelwoods, and non-timber forest produces (NTFPs). Selling of NTFPs forms a major portion of the tribal household income. For tribals of Odisha, NTFPs contribute 30-90% of their annual household income (Vasundhara, 1998).[17]

8. Indigenous Peoples in Odisha

Odisha is an Indian state located in Eastern India. Out of a total of 28 states in India, Odisha is the 8th largest state by area and 11th largest state by population. It neighbors the states of Jharkhand and West Bengal to the north, Chhattisgarh to the west, and Andhra Pradesh to the south.

Geographically, Odisha is a diverse state with fertile coastal plains to the east along the Bay of Bengal. In the center of the state, there are mountainous highlands and plains. Whereas the Western and Northwestern portions of the state consist of rolling uplands. The state also has some major floodplains encompassing the river systems. More than 30 percent of Odisha's geographical land is covered by forest. (Odisha Govt)[18].

The state has the third largest population of scheduled tribes in India. As per the 2011 census, the Scheduled Tribe (ST) population stands at 95,90,756 accounting for 22.85 percent of the total population of the state and 9.17 percent of the total tribal population of the country However, when we see the diversity within the STs, Odisha tops the rank. There are 62 officially recognised scheduled tribes in Odisha which is the highest in the country. Maharashtra and Madhya Pradesh have the second and third highest number of STs with 47 and 46 officially recognized STs respectively.

Among 62 tribal groups spread across the length and breadth of the state, there are 13 ethno-culturally-vulnerable tribal groups. During the 5th five-year plan of India, these tribal groups were identified as Primitive Tribal groups or PTGs. Later, these tribal groups were redesignated as Particularly Vulnerable Tribal Groups or PVTGs. Odisha has the highest number of PVTGs in India (MoTA, GoI).

The Kondha or Kandha is the largest tribe in the state in terms of population. The other major tribal groups include Santhal, Ho, Khariya, Lodha, Gadba, etc. While some of these tribes share common characteristics, each tribe varies greatly in terms of lifestyle, cultural traditions, religious beliefs, folklore, language, and appearance.

---

[16] Ministry of Tribal Affairs (2008). Migration of Tribals

[17] Vasundhara (1998), 'NTFP Policy in Orissa and A Comparative Analysis of NTFP Policy and Prices with neighboring states

[18] Government of Odisha official portal https://odisha.gov.in/odisha-profile/topography#:~:text=Odisha%20is%20one%20of%20the,line%20of%20about%20450%20kms.

Most of the tribal population lives around the ecological fringes, especially in the hilly and forest regions. They are directly dependent on the forest and rainfed agriculture for their livelihood and survival. This makes them more vulnerable to climatic variabilities.

9. Traditional Governance of Indigenous Peoples

Before the British colonization of tribal areas, these areas were largely independent realms. Although nominally these areas were part of the territory of local kingdoms, there was minimal interference from kings and their bureaucratic machinery in the day-to-day affairs of tribals. Their autonomous existence outside the mainstream led to the preservation of their socio-religious and cultural practices. The tribals remained outside the Indian caste system and most of the tribes maintained their traditional governance system even during the time of colonial rule (Bijoy CR, 2008).[19] Incursions and invasions into the Adivasis homelands by the British led to stiff resistance. The tribals revolted against the British as early as 1778 in the form Pahariya tribe of Bihar. The revolt of Tamars in Chotanagpur in present-day Jharkhand in the late 18th century, the Bhils of Western India in the early and mid-19th century, Mundas and Santhals of Jharkhand in different periods of the 19th century, revolts of Kondhs and Juangs of Odisha are few examples of tribal resistance to exploitation and external interference in their affairs (Bijoy CR, 2008).

The fierce opposition of tribals to outside interference compelled the British government to give special concessions to many tribal areas allowing them to manage their affairs according to their traditional governance system. As a result of Birsa Munda's led revolt in the late 19th century in the Chotanagpur region of Jharkhand, a special tenancy act called the Chotanagpur Tenancy Act 1908 (CNTA) was passed. The objective of CNTA is to protect the land rights of tribal. It prohibits land transfer from a tribal to a non-tribal and protects community ownership of the land. Similarly, for the Santhal Pargana region of Jharkhand Santhal Parganas Tenancy Act, 1949 (SPTA) was passed (Sundar N, 2009).[20]

Different tribal groups follow different socio-political governance systems. The governance system of the Kolho, Munda, and Bhumij tribes of Jharkhand is known as the *munda-maniki* governance system. Under this system, a traditional leader named *Munda* acts as the head of the village who is responsible for leading all religious rituals at the village level and adjudicating any kind of conflict at the village level. Similarly, a post called *maniki* is there at the regional level or for a cluster of villages (Sarkar D, 22 March 2021).[21]

The *Kutumb* system of the Dongaria Kondha tribe in Odisha is another example of a traditional socio-political governance system of tribals. *Kutumb* is a governing and decision-making body of Dongaria Kondhs. It functions at two levels. The clan-level affairs are managed by *Kuda*

[19] Bijoy CR (2008) Forest Rights Struggle The Adivasis Now Await a Settlement. American Behavioural Scientist, Vol 51. Sage Publication.
[20] Sundar N (Ed.) (2009) Legal Grounds: Natural Resources, Identity and the Law in Jharkhand. Pg 5. Oxford
[21] Sarkar D (22 March 2021) Village heads in J'khand's Kolhan set to get judicial powers under British rule still alive. Hindustan Times.

Kutumb whereas affairs at the settlement level are managed by Nayu Kutumb (Tapti M, Kothari A & Mishra R, 2016).[22]

The traditional governance system for most of the tribal groups is in the stage of degeneration. Almost all the tribal regions have come under the purview of a uniform modern governance system. On one hand, the three-tier Panchayat raj system has brought a uniform self-governance system to the village level on the other hand it has compromised the credibility of the unique traditional governance system of tribals. However, laws like PESA and FRA do recognize the customary governance system and dispute resolution. Section 4 (d) of the PESA empowers the Gram Sabha or village assembly "to safeguard and preserve the traditions and customs of the people, their cultural identity, community resources, and the customary mode of dispute resolution." Similarly, FRA gives rights to Gram Sabha to own and manage the forest and its biodiversity.

10. Impact of climate change on indigenous communities.

Most of the Adivasis in India are based on rainfed agriculture and forest ecosystems for their sustenance. The climate is one of the main determinants of both agriculture as well as for forest production systems. Therefore, it is logical to assume that climate change will impact both agriculture and forest production systems (Ravindranath et. Al, 2006).[23] The decrease in agriculture and forestry production has caused reduced household income and household food insecurity. In FGDs conducted with the Sauria Paharia Adivasi community in the state of Jharkhand, the community attributes local climatic variability in the form of low and erratic rainfall with long dry spells, reduced crop productivity, diversity, and availability of food from forests and water bodies. This has led to the shifts from a subsistence agricultural economy to migratory unskilled wage laboring. The impact of climate change is visible on the social, cultural, and economic integrity of Indigenous Peoples who are mostly smallholder subsistence farmers and gatherers of forest produce. (Ghosh S, et al., 2021).[24]
The climate change has led to a change in weather patterns. Although there is not much change in the annual average rainfall the spread of rainfall has been squeezed to a few days. In many areas, there is extremely heavy rainfall in a very short duration leading to a flood-like situation followed by long a spell of dry season. This has impacted both agriculture and the production of non-timber forest products (NTFPs) The livelihood of the Sahariya tribe of Madhya Pradesh depends on the collection of an NTFP called *gondra (Cyperus spp)* from the river bed of the

[22] Tapti M, Kothari A & Mishra R (2016) The Niyamgiri Story: Challenging the Idea of Growth without Limits? Pune, Maharashtra: Kalpavriksh.

[23] Ravindranath, N. H., Joshi, N. V., Sukumar, R., & Saxena, A. (2006). Impact of climate change on forests in India. Current Science, 90(3), 354–361. http://www.jstor.org/stable/24091869
[24] Ghosh S, Kapoor R, et al. (2021). Pathways of Climate Change Impact on Agroforestry, Food Consumption Pattern, and Dietary Diversity Among Indigenous Subsistence Farmers of Sauria Paharia Tribal Community of India: A Mixed Methods Study. Frontiers. https://www.frontiersin.org/articles/10.3389/fsufs.2021.667297/full

Sindh River. It has been reported that due to frequent floods in the river, the access of *gondra* to Sahariya people has been restricted (Goel P, 22 April 2023).[25]
The Bonda Adivasi community from Odisha feels the impact of climate change in the form of heavy and erratic rains. The frequent flash floods wash away the topsoil from the slopes affecting agriculture productivity. Also, modern agriculture techniques have changed millet-centered mixed cropping to paddy mono-cropping. This has further made the community vulnerable due to increased chances of crop failure and reduced availability of food (Mohanty A, 29 June 2021).[26]

As climate adaptive techniques Adivasi communities are reverting to the traditional wisdom of agriculture that focuses on climate-resilient millet crops. Women farmers of the Bonda community have again started growing native millet varieties like --finger (ragi), foxtail (kakum or kangni), barnyard (sanwa), proso (chena), and pearl (bajra) millets using traditional farming techniques. Unlike modern agricultural methods, traditional farming techniques do not rely on chemical fertilizers, pesticides, and other inputs (Pallavi A, 10 June 2021).[27]

In some parts of the country, Adivasi communities are continuing with the traditional practice of shifting cultivation. Shifting cultivation has been outlawed under the Indian Forest Act of 1927, but still, it plays an important role in ensuring food security for Adivasi groups like Baiga in Madhya Pradesh. The Baiga refer to this technique of cultivation as *Bewar.* A similar form of cultivation referred to as *penda* is practiced by the primitive Madia tribe in the hills of Bhamragadh in the Gadchiroli district of Maharashtra. Cultivation practices like *bewar* and *penda* have proved more climate resilient than mainstream agriculture techniques. This cultivation is much more resilient to environmental stress and gives an assured yield in both low and excess rainfall conditions. In recent years, tribal farmers have been seen to return to *bewar* and *Penda* due to increasingly erratic rainfall patterns and crop losses (Pallavi A, 10 June 2021).

Shifting cultivation is also practiced in many parts of Odisha by tribal communities. Indigenous communities like Saora, Kotia Kondh, Dongaria Kondh, Bonda, Hill Juang, and Paudi Bhuiya practice shifting cultivation. This form of cultivation is not just a mode of cultivation but it incorporates a strong sense of social, cultural, and religious beliefs. It requires a great knowledge of the local ecosystem and climate conditions. Sanghamitra Sethi and Paramananda Naik (2020) have shown how shifting cultivation is interwoven into the culture of the Dongria Kondh tribe of Rayagada district of Odisha. They have also elaborated on the specialized

---

[25] Goel P (22 April 2023) Climate change is stealing the livelihood of one of the most vulnerable communities in India. Mongabay.
[26] Mohanty A (29 June 2021) How A Tribal Community In Odisha Is Battling Climate Change With Traditional Farming. Indiaspend. https://www.indiaspend.com/climate-change/tribal-community-odisha-battling-climate-change-with-traditional-farming-758207

[27] Pallavi A (10 Jan 2014). How Central Indian tribes cope with climate change impacts. Down to Earth. https://www.downtoearth.org.in/news/how-central-indian-tribes-cope-with-climate-change-impacts-43226

knowledge of local climatic conditions and ecosystems; this form of cultivation requires (Sethi S and Nayak P, 2020).[28]

Moreover, almost all the Adivasi communities are dependent on forests for resilience against climate shocks. Forest provides a wide range of provisioning services like fuel wood, and non-timber forest produce. In the case of agriculture crop failure due to climatic variabilities, the forest supports the Adivasis by providing various foods and other forest products that can be sold to generate income (FAO, 2023).[29]

The laws like Forest Right Act, 2006 (FRA), Panchayat (Extension to Scheduled Areas) Act, 1996 (PESA), and Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGNREGA) have acted as great enabling factors in building the resilience of tribal people against the climate shocks. The FRA has vested communities with rights to forest resources, including the right to "protect, regenerate or conserve or manage" forest land to which the community traditionally had access, through the gram sabhas. The act secures the tenurial rights of communities over the forest.

FRA provides an enabling framework for an alternative paradigm to achieve climate-positive outcomes through the democratic governance of over 40 million hectares of India's forests and the legal authority of forest-dependent communities to be at the core of decision-making in climate change mitigation and adaptation strategies (Right+Resources, 2023).[30]

MGNREGA which came into existence in 2005, offers unskilled guaranteed manual work to rural households in India and has turned out to be a major source of relief in times of distress like droughts. Apart from providing livelihood, MGNREGA has enormous environmental benefits as most of its activities are related to natural activities like water, land, and trees. A study by researchers at the Indian Institute of Science has revealed that under the Mahatma Gandhi National Rural Employment Guarantee scheme, 102 million tonnes of carbon dioxide (MtCO2) was captured in 2017-18 through plantations and soil quality improvement. Not only the carbon capturing but the social security and natural assets created under the program have also helped to build the resilience of the most vulnerable people to the climate crisis. The environmental benefits from MGNREGS activities range from improved groundwater levels to improvement in biodiversity and tree cover (Moudgil M, 3 Nov 2021).[31]

11. Case Study 1 –Kondh Tribe

[28] Sethi S and Nayak P (2020) Sanghamitra Sethi and Paramananda Naik. International Journal of Applied Research 2020; 6(2): 145-148

[29] FAO (2023). Forest-dependent survival strategies of tribal women

[30] Right + Resources (2023) Effective implementation of the Forest Rights Act can help India secure a just and sustainable pathway to climate change mitigation and adaptation, new study says

[31] Moudgil M (3 Nov 2021) NREGA: A pathway to climate resilience. IDR

a. Introduction

Out of 62 scheduled tribes in Odisha, Kondh is the largest in terms of population. They comprise 17.13% of the total tribal population of the state (Census 2001). Apart from Odisha, the Kondh tribe also lives in Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh and West Bengal.[32] Kondhs are broadly divided into three sections based on their habitat. These are Kutia Kondhs, Dongria Kondh and Desia Kondh (Mahananda R, 2015).[33] Kutia Kondhs generally live on highlands and practice shifting cultivation, Dongria Kondhs are expert horticulturists and they are mainly concentrated in Koraput Rayagada, and Kalahandi districts in South Odisha. Desia Kondhs is largely settled in plains and practices settled agriculture (Patnaik N & Patnaik P S D, 2015).34 Like other indigenous communities, Kondh people also have a very intrinsic and symbiotic relationship with their surrounding environment including hills, forests, streams, etc. Kondhs are nature worshipers. The Earth goddess Dharini has the highest place in the Kondh belief system. Kondhs perform different rituals such as Jhagadi or Kedu or Meriah Puja, Sru Penu Puja, Dharni Penu Puja, Guruba Penu Puja, Turki Penu Puja, and Pitabali Puja that involve showing their gratitude towards the nature and mother Earth (Satpathy S, 2005).[35]

Since ancient times, Kondhs have been forest dwellers, and their day-to-day life is dependent on the forest. Right from Sal and Karanj twigs for brushing teeth, many NTFPs are collected from the forest for personal and commercial purposes. Kondh women collect fuelwood from the forest. Other products like bamboo, timber, etc. are collected from the forest for making bamboo baskets, agricultural tools, and construction of houses. The Kondh people believe that if the forest deity gets angry with them, misfortune may befall the villagers and the forest will not provide them with enough products (Nayak A, 2019).[36]

The strong religious and spiritual connections of Kondhs with the forest have historically kept them motivated to struggle for the preservation of the forest. There are numerous examples where the Kondh people have fought to protect their forests even in the most adverse conditions. The famous Niyamgiri movement is one such example. After a long social movement and legal battle, Dongoria Kondhs, a PVTG, and sub-section of the larger Kondh community from the Rayagada district of Odisha won a legal battle in the Supreme Court of India against a multinational company Vedanta. Dongoria Kondhs worship Niyamgiri hills as their deity Niyam Raja, who is considered the protector of Dongoria Kondhs residing in the region. The hill also has a huge deposit of Bauxite ore which the Vedanta company wanted to exploit. In the Orissa Mining Corporation Ltd vs. Ministry of Environment & Forest case, the

---

[32] Census India. List of Notified Scheduled Tribe.
[33] Mahananda R (2015) Tribal Communication Technology: A Case Study of Kondhs of Kandhamal of Odisha. Odisha Review.
[34] Patnaik S & Patnaik P S D (2015) Kondhs of Orissa. SCSTRTI. Bhubhneshwar.
[35] Satpathy S (2005). Shifting Cultivation by Juangs of Odisha. The Tribal tribune. Vol 1, issue 7. https://www.etribaltribune.com/index.php/volume-1/issue-7/shifting-cultivation-by-the-juangs-of-orissa

[36] Nayak A (2019) Gender, Resource Management, and Social Unrest: An Ethnographic Case Study. Sage Publication.

VASUNDHARA
democratizing natural resource governance

Supreme Court recognized the cultural, religious, and spiritual rights of Dongoria Kondhs on the Niyamgiri Hill, over Vedanta Company's claim to exploit the hills for bauxite (Down To Earth, 19 April 2023).[37]

In Nayagarh district of Odisha, there is a long history of forest protection and management by the communities. At present at least 750 villages in the district are protecting and managing a forest on a total area of 2.5 lakh acre (Nayak A, 2019). The villages with Kondh (Desia Kondh) tribes are at the forefront of this protection and management regime. In the district, the present community-led forest movement started around the early 1980s against the indiscriminate exploitation of forests by state machinery as well as forest mafias (Vasundhara, 2010).[38] After the passage of the Forest Rights Act (FRA), 2006, the movement got solid legal backing as the act provided a legal provision by which gram sabha is entitled to protect and manage the forest under the traditional boundary of the village. The FRA, 2006, and its propagation by several non-government organizations (NGOs) made the Kondh people of Nayagarh more aware of their rights over the forest (Nayak A, 2019). Many Kondh and other forest-dwelling villages in Nayagarh have successfully got the community forest rights (CFR) title under FRA whereas lot many villages are continuing their struggle to get the CFR title over the forest land they are traditionally protecting and managing. In many villages, the struggle for legal rights over the forest as well as its protection and management are exclusively led by women. Here we will try to understand the socio-economic and spiritual relation of the Kondh community with the forest through a case of a small Kondh village, Jagannath Prasad. We will also try to understand the impact of climate change-related shocks on the Kondh people and how their access to and control over the forest is helping them build their resilience against climate shocks.

b. Context of Jagannathprasad village

Jagannathprasad is a small village in Khatia Gram Panchayat of Ranpur block in Nayagarh district of Odisha. The village has a total population of 110 and it has 22 households all belonging to the Desia Kondh tribe. The village has been protecting a forest patch of more than 200 hectares for the last four decades. The once barren forest patch has grown lush green.

The village has claimed a Community Forest Right (CFR) under the Forest Right Act, 2006 over 239.72 hectares of land. Getting a CFR title will not only ensure the tenure security of the village but also strengthen the community's preparedness and resilience to climatic shocks.

Image – Map of Jagannathprasad village with its customary boundary, Nayagarh, Odisha (Source – Vasundhara)

[37] Sharma K (19 April 2023) Niyamgiri: 10 years since India's first environmental referendum. Down To Earth. Accessed on 15 Sep 2023. https://www.downtoearth.org.in/blog/governance/niyamgiri-10-years-since-india-s-first-environmental-referendum-88850

[38] Vasundhara (2010). The Semantic of CFM – People's Narration. Pg: 169-175

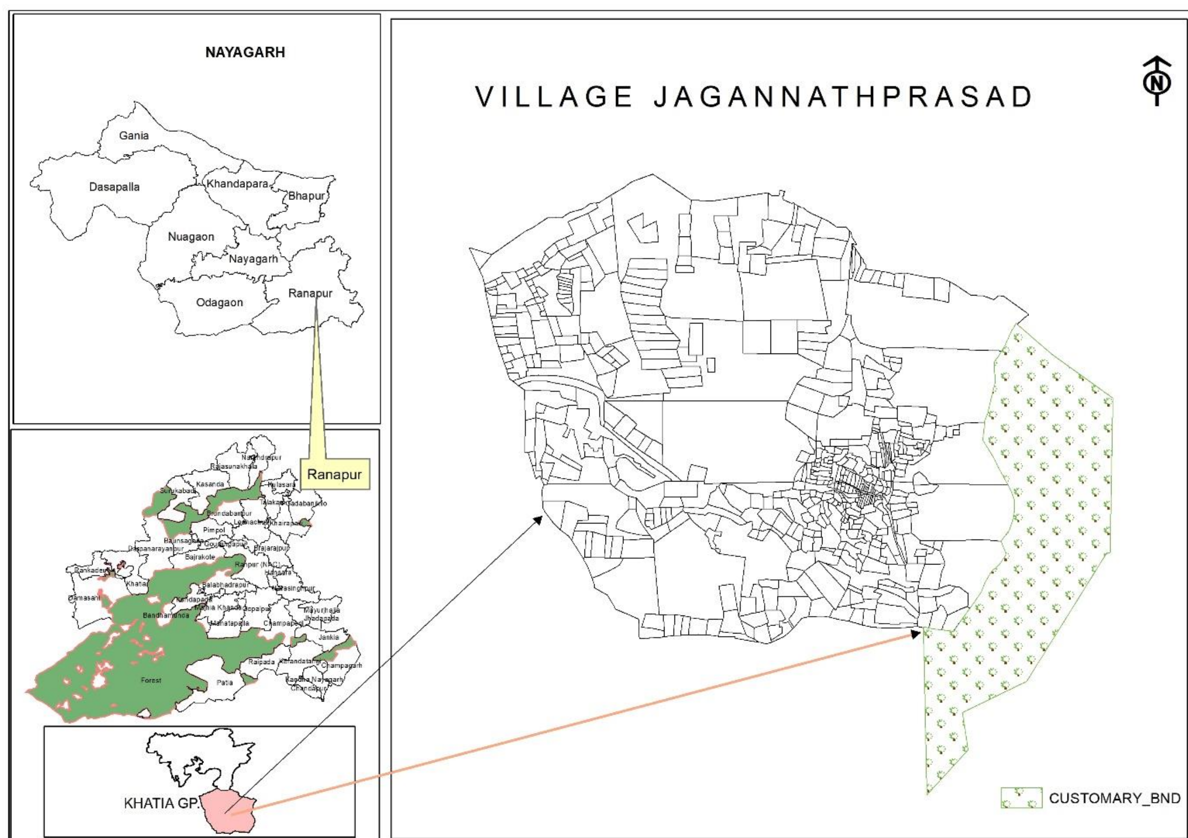
VASUNDHARA
democratizing natural resource governance

The history of the community-led forest protection movement in Jagannathprasad village is linked with the larger movement of community-led forest protection in Nayagarh district particularly in the Ranpur block of Nayagarh district. Ranpur has a glorious history of community forest protection. As of today, 217 villages in Ranpur block are managing and protecting the forests surrounding their village with zeal and vigor from any kind of danger to the forest from outside. Most of these villages belong to the Kandha tribe.

a. Increased climatic vulnerabilities due to the community's alienation from the forest

In Ranpur, the prolonged alienation of the forest from the community resulted in the apathy of the community towards forest protection. After independence, Odisha Forest Development Corporation (OFDC), the commercial arm of the forest department, started exploiting the forest to maximize revenue. On one hand, the damage to bio-diversity was done by clearing native species on the other hand monocropping of fast-growing species further destroyed the bio-diversity.

Moreover, due to the non-recognition of the legal right over the forest, communities showed little interest in the protection of forests and started seeing forests for short-term benefits. Although the plantation of horticulture plants like cashews emerged as a source of income for the local population, it adversely affected the biodiversity of the region due to mono-cropping in large forest areas.



The loss of forests and biodiversity made the indigenous communities like Kondh and other forest dwelling communities, more vulnerable to climatic shocks. Indigenous communities like Kondh are directly dependent on forest and its associated ecosystem services for their livelihood and subsistence. Loss of forest cover led to the drying up of the streams which were used for drinking and irrigation purposes.

Photo – Meeting of community forest protection committee of Kondh women in Jaganathparasad village, Nayagarh

Traditionally, the indigenous communities of the region do not use any kind of chemical fertilizer in their agriculture field. Apart, from dung manure, they remain dependent on humus from the forest flowing into their field with rainwater, to maintain the fertility of their field. With the loss of forest cover the humus flow from the forest to the agriculture field was reduced. This along with the drying of streams led to decreased agriculture productivity.

Non-timber forest produce (NTFPs) like *sal* and *siyali* leaves, *amla, mehua*, etc. has a major contribution to the Kondh community household income. Also, many tubers, wild mushrooms, green leaves, etc. add to their food and nutrition security. The decrease in forest cover led to a scarcity of NTFPs hence affecting their household income as well as food and nutritional security.

In a meeting with community representatives in Ranpur block, it was told that the loss of forest cover led to increased droughts and heat waves. The community representatives agreed that the number of seasons or *ritu* in a year has decreased to three from six. It's now only Summer (*Grishm*), Monsoon (*Varsha*), and Winter (*Shishir*) in contrast to the time of their grandfathers when they also used to witness Autumn (Sharad), Pre-winter (Hemanta) and Vasanta (Spring).

It is difficult to ascertain how much the loss of local forest cover is responsible for these climatic abnormalities and how much it is a result of global climate change. However, the experience of Ranpur shows that when the community regained control over the forest, the natural forest cover improved, and the resilience of the community to the climatic variabilities also strengthened.

b. Reclaiming of the forest by the community

Traditional forest management system was present in villages of Ranpur even before the colonial era. Although, the king was at the apex of these traditional governance systems local community leaders had an important role to play in these systems. These community leaders were known as *Sarbarkar*, *Gauntia, etc.* Gradually this traditional management system became exploitative during the colonial period. It was largely due to states' approach of utilizing the forest for commercial and revenue generation goals. With pressure from the king to maximize the revenue, community leaders like Sarbarkar and Gauntia became agents of exploitation. This was the period when forest land started getting alienated from the communities. The exploitation and alienation of forest land from the community were further amplified after the independence (Vasundhara, 2010).[39]

The forest land which was earlier a common property, either became state property or open property which could be accessed and exploited by anyone. Forests were cleared indiscriminately and timber smuggling was rampant. It was around the 1980s, that communities started reclaiming the forest land. Forest protection committees were formed at the village level and traditional systems of forest protection like *thengapali* were re-initiated to check proliferation from the forest which the village used to treat as its resource base. There were several incidents where more than one village came together for forest protection (Vasundhara, 2010).

The village-level community forest management committees (CFMs) also frame rules and regulations for the management of their forests. Livelihood security was the most common factor for the initiation of forest protection by the communities.

A federation named *Ma Maninag Jungle Surakshya Parishad*, of all the forest protecting the villages of Ranpur was formed in 1995 with the help of an NGO Vasundhara. The federation remained at the forefront of conflict resolution among the villages as well as asserting the community's right over the forest with the state at different platforms.

[39] Vasundhara (2010). The Semantic of CFM – People's Narration. Pg: 169-175

VASUNDHARA
democratizing natural resource governance

c. Drivers and enablers of resilience in Jagannathprasad village

By the 1980s, like many other villages, forest land around the Jagannathprasad village had gone nearly barren. Around the same period, the community-led forest protection movement, which had already started in various parts of the Ranpur block of Nayagarh district, reached Jagannathprasad village. The neighboring villages like Dengajhri, Mardakot, etc., secured their traditional forest boundaries and initiated a community-led forest protection and management system. A traditional forest protection system called *Thengapali* was being re-initiated in these villages. *Thenga* means a wooden stick and *pali* means to guard or patrol. Explaining the *thengapali* system Uma Pradhan (52) who is president of the community forest protection committee of Jagnathprasad says, "*Under the thengapali system, every day a group of people patrols the forest with thenga or wooden sticks in their hands on a rotational basis. At the end of the day, the Thenga is kept in front of those households whose members are supposed to go for guarding duty the next day*."

Photo – Women member of the forest protection committee of Jaganathprasad showing the Thenga
(stick) used in thengapali system of forest protection

The community members who go on guarding duty are known as *palia.* Palia has to check the entry of any outsiders or unauthorized persons in the forest. As the *thengapali* regime around

the neighboring villages of Jagannathprasad strengthened, the forests of the village started feeling more pressure. More and more people started accessing Jagannathprasad's forest as neighboring village forests were closed to outsiders.

To check the rapid depletion of their forest, members of Jagannathprasad village also decided to initiate *thengapali* for forests around their villages. The traditional gram sabha or village assembly was called where rules and regulations for *thengapali* and the benefit sharing mechanism of forest resources were decided. A village-level forest protection committee or *Jungle Surakshya Committee* was formed to look after the day-to-day affairs of forest protection and governance. It was decided that every day four male members of the village go to the forest as *palia.* The *palias* are supposed to catch anyone who enters the forest or cuts timber without authorization. The culprits are presented to the forest protection committee and fines are imposed on them.

Anita Pradhan (25) who works as a community volunteer for Vasundhara explains the reason behind transferring the responsibility of forest protection from male members of the village to women, "*For 30 years male members were involved in thengapali. However, it was found that male palias are a little lenient in dealing with culprits. Since male members have their friends in neighboring villages, they tend to oversee the matter when offender involve their friends. To deal with this problem women came into action and started doing thengapali. For the last 10 years, thengapali in Jagannathprasad village has been exclusively done by women palias. Male members are only called during any emergency or if an issue arises during nighttime*."

The women-led forest protection regime in the village has support from male members. The forest protection efforts of the village have now started showing the results. Summarising the village forest protection journey, an elder male member from the village says, *"When there was forest department, there were only stones; when men protected the forest, trees grew, it was only when women entered the forest, rainfall increased, consequently agriculture flourished, NTFP's increased and the soil has now become much richer."*

Apart from *thengapali,* the Kondh community has many other drivers that promote the conservation of nature around them. Kondh people worship various elements of nature. A ritual called *Jhar Puja* involves the worship of streams. The streams are considered sacred and it is in the culture of the Kondh people to keep the streams free from any kind of pollution. Another ritual called *giri gobardhan* puja involves worshiping the hilltop. This ritual is performed before monsoon for good rain. The area where the ritual is performed is considered sacred and it is taboo to harm the forest around this area in any manner.

Moreover, the Kondh community worships *Banadurga* as a deity of forest, and *Dharani* as the supreme deity of land and fertility. The community believes that both *Banadurga* and *Dharani* need to be kept appeased for the well-being of the community. Activities like deforestation, pollution of water sources, use of pesticides, etc. make the deities unhappy. So, the community refrains from such activities and tries to protect their *Jal, jungle, and Jamin* (Water, forest, and Land) at any cost.

There are some new drivers which the community has adopted in recent times. Three years back a festival called *siali uschav* or celebration of the *Bauhinia vahlii* plant initiated in a few villages of Ranpur including Jagannathprasad. *Siali* leaves are used for making leaves plates.

Leaves plate making is one of the major livelihood activities for many Kondh households. To ensure a steady production of *siali* leaves, every year in June seed balls of *siali* leaves are broadcasted in a forest patch after an elaborate ritual. This practice has helped build the resilience of many households whose livelihood depends on *siali* leaves.

Forest Rights Act, 2006 has emerged as one of the major enablers for community resilience. Although Jagannathprasad village has *de-facto* rights over its forest, it is still struggling to get *de-juro* rights. FRA, 2006 promises to provide the legal framework by which customary rights of forest-dwelling individuals and communities can be recorded as legal rights. The act also keeps gram sabhas in the center as a unit of local self-government for the governance of the forest.

After the FRA, 2006 came into force, Jagannathprasad village filed a claim for CFR title over 239.72 Hectares of forest land under their protection back in 2010. However, due to the forest department's unwillingness to let go of its power over forest lands, the village is still waiting to get its title.

The Biological Diversity Act, 2002 is yet another enabler. The act aims at the conservation of biological resources, managing their sustainable use, and enabling fair and equitable sharing of benefits arising out of the use and knowledge of biological resources with the local communities (Down To Earth, 21 Feb 2019).[40]

The other enablers include the Panchayati Raj system. By the Constitution (73rd Amendment) Act (CAA) or the Panchayati Raj Act, 1992 a uniform 3-tier system for local self-governance has been laid down in the entire country. The act brought the democratically elected government in the form of a gram panchayat (GP) to the village. Section 243G of the act mandates the GP to plan and implement a social socio-economic development plan in the panchayat. Also, the GPs are made accountable to the gram sabha which ensures direct democracy at the village level. The 73rd CAA lays down the framework for a bottom-up approach to plan and implement development programs as per the local needs and context of villages.

The central government rural employment guarantee scheme under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005 is yet another enabler for building the resilience of rural communities against climatic shocks. MGNREGA guarantees 100 days of assured employment to the adults of every household in rural areas. The willing adults with an MGNREGA job card are offered manual work at a fixed wage rate under the scheme. Most of the works undertaken under MGNREGA are related to water conservation, drought-proofing, plantation, and land development that have a direct bearing on reducing vulnerability to climate change (Down To Earth, 22 March 2021).[41]

d. Opportunities and Way Forward

[40] Sundararaju V (21 Feb 2019) Implement the Biological Diversity Act in its true spirit. Down To Earth. https://www.downtoearth.org.in/blog/wildlife-biodiversity/implement-the-biological-diversity-act-in-its-true-spirit-63322

[41] Reddy A (22 March 2021) How MGNREGA is promoting climate-smart villages. Down To Earth.

The forest protection efforts by the community over the last four decades have now started showing results. There is now a lush green forest around the village. Many species of flora and fauna which has gone extinct locally have returned to the forest. According to the villagers, now they spot wildlife like Indian Bison, barking deer, Indian sloth bear, giant flying squirrels, pythons, etc. more often than before. The production and diversity of NTFPs in the forest have increased. The villagers also feel that the rainfall in their region has improved in the last decade. They feel that it has happened because of improved forest cover. Now there is more water in the streams in the forest. The moisture content of agricultural land has improved and soil has grown rich resulting in improved agricultural productivity.

The community's internal drivers have helped them to build their resilience against the climatic shocks. Now it is important that formal enablers like FRA, the Panchayati Raj system, MGNREGA, etc. work in the manner they have been envisioned in the constitution of the country. The community is struggling to get community forest rights (CFR) title under FRA for the forest land they have traditionally using and conserving for more than one decade. The CFR title will not only ensure tenure security for the community but also give formal recognition to the efforts they have put into conserving the forest and improving the biodiversity of the region.

Non-implementation of the Biological Diversity Act, 2002 at the local level is another matter of concern. Although the act came into force two decades back, a proper mechanism hasn't been laid down to implement the act on the ground. As per the provision of the act Biodiversity Management Committee should be established at the gram panchayat level. The committee will ensure the conservation and sustainable use of biodiversity, preservation of traditional knowledge related to biodiversity as well as ensure equitable benefit sharing from the local bio-diversity. However, this committee hasn't been established in most parts of the country. The act also has the provision to maintain the People's Biodiversity Register (PBR) to record the biodiversity available in the region. However, like many other states of the country, Odisha has also not taken any initiative for the preparation of PBR. The proper implementation of the Biological Diversity Act is not only necessary for accessing the available biodiversity of the region but it also gives tools to the community to claim their intellectual property rights (IPR) on their traditional knowledge related to biodiversity. It will also give them a formal incentive to conserve their biodiversity (Down To Earth, 21 Feb 2019).

The community also feels that social security schemes like MGNREGA should be implemented more transparently and efficiently. At present the implementation of MGNREGA has been captured by middlemen and contractors. Also, due to untimely payments, people are losing interest in MGNREGA work. Proper implementation of MGNREGA can help in climate change mitigation by sequestrating large amounts of carbon as well as building the resilience of the community as it focuses on asset building that can strengthen the livelihood of the community (Moudgil M, 3 Nov 2021).[42]

---

[42] Moudgil M (3 Nov 2021) NREGA: A pathway to climate resilience. IDR https://idronline.org/article/climate-emergency/nrega-a-pathway-to-climate-resilience/

Decentralization and devolution are key to building the community's resilience. Local democratic institutions like Gram Sabha, Gram Panchayat, Panchayat Samiti, etc. must be strengthened by building their capacity. These institutions are closer to people, understand the local context, and resources better, and can devise better local solutions for local issues. Apart from this traditional institutions, rituals, and practices of people also need to be formally recognized and promoted under progressive acts like FRA and the Biological Diversity Act.

c. Case study 2 – Hill Kharia tribe

a. Introduction

Hill Kharia is a small tribe and its population is largely concentrated in and around Simlipal National Park in the Mayurbhanj district of Odisha. It is a semi-nomadic, pre-agriculture community and depends on the unique Simlipal forest ecology for its livelihood needs. Apart from livelihood, they are intricately associated with forests through their culture, spiritual beliefs, and religious practices (Ota A. B & Sahoo T, 2008).[43]

Photo – A Hill Kharia woman in Bodajhili village, Mayurbhanj explaining the plight of her community

[43] Ota Ab & Sahoo T (2008) Hill Kharia (Photo handbook). SC&STRTI, Bhubaneswar

In the year 1973, Simlipal forest was declared a 'Tiger Reserve' under the national flagship conservation program 'Project Tiger' (Dash M & Behera B, 2018).[44] After this several restrictions have been imposed on the collection of NTFPs in the tiger reserve area which jeopardized the livelihood of indigenous communities like Hill Kharias living in and around Simlipal Tiger Reserve (Tudo F, 2017).[45] In 1979 Government of Odisha declared 2750 sq km. area of Simlipal as a Wildlife sanctuary. A further blow to the indigenous communities of Simlipal came when in 1980 state government proposed to declare 303 sq. Km. of the sanctuary as National Park which was increased to 845.70 sq. km. in 1986 (WWF India, 2023).[46] In 2007 the area of the proposed national park was increased to 1194.75 Sq Km. This engulfed 5 villages in the core area and 61 villages in its buffer zone (Environmental Justice Atlas, 2018).[47]

Interestingly, Simlipal Tiger Reserve (STR) with its 'transitional Zone' of 2250 sq. km, has been included as a part of the World Network of Biosphere Reserves by UNESCO in 2009 and it's the sixth largest Biosphere Reserve in the country. This tiger reserve also comes under Mayurbhanj Elephant Reserve which includes the adjacent Hadgarh and Kuldiha Wildlife Sanctuaries. Thus, the STR is a rare kind of PA having been simultaneously declared a biosphere reserve, a wildlife sanctuary, and a designated national park, having two flagship conservation programs, namely – Project Tiger and Project Elephant (Dash M & Behera B, 2018).

It is estimated that a population of around 12500 in 66 villages of the core and buffer zone is directly dependent on STR for their livelihood Elephant (Dash M & Behera B, 2018). However, under the Wildlife Protection Act, 1972, no human activities are permitted inside the core area of the National Park. For this reason, the government of India has yet to approve the National Park status for Simlipal. On the other hand, the state government seems determined to get full-fledged national park status for Simlipal. Odisha's government is constantly trying to relocate the people from inside the Simlipal Tiger Reserve (STR) area and rehabilitate them outside the reserve's buffer zone (Sahoo M, 2012).[48] The Forest Department is trying to relocate about 453 families from the core and buffer zones. This has led to several conflicts between indigenous communities and the forest department on several fronts (Environmental Justice

---

[44] Dash M & Behera B (2018) Biodiversity conservation, relocation and socio-economic consequences: A case study of Similipal Tiger Reserve, India. Land Use Policy. Vol 78

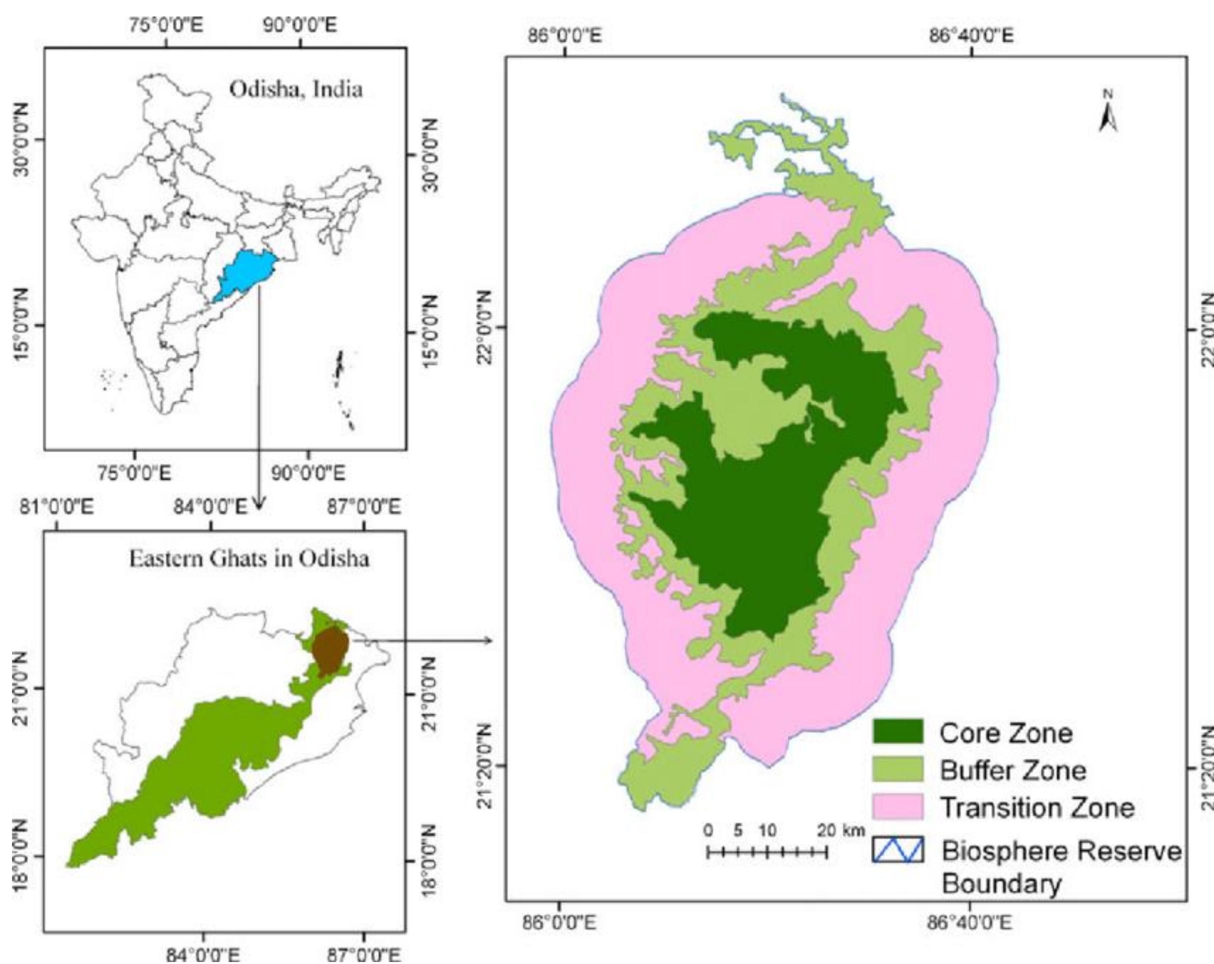
[45] Tudu F (2017) Socio-Cultural History of the Hill Kharia Tribe of Mayurbhanj district, Odisha. International Journal of Research 3(2): 58-71

[46] WWF India (2023) Simlipal Tiger Reserve

[47] Environmental Justice Atlas (19 July 2018) Simlipal National Park, conflict over conservation project, Odisha, India https://ejatlas.org/conflict/simlipal-national-park-conflict-over-conservation-project#

[48] Sahoo M (2012) Anthropology of displacement: Case of conservation induced displacement and its impact on Indigenous Peopless in Simlipal Tiger Reserve, Odisha. Afro Asian Journal of Anthropology and Social Policy. Vol 3

Atlas, 2018). Hundreds of households of Indigenous Peoples' including Hill Kharias have already been displaced and those still inside the park are constantly facing the threat of getting evicted (Mongabay, 30 March 2020).[49] From the core zone, 4 out of 5 villages have already been relocated. Only one village, Bakua of 61 families, situated in the core zone is still resisting relocation (The New Indian Express, 11 July 2022).[50] However, those families that have already relocated, finding it difficult to survive in the new atmosphere outside the STR. Many of these families now want to come back to their original habitation (The New Indian Express, 22 Nov 2021).[51]



Map- Similipal Tiger Reserve. Source: ENVIS Centre on Wildlife & Protected Areas

Till recently, displaced families were offered Rs. 10 Lakh as compensation along with a concrete or Pucca house under the state's housing scheme and 10 decimal homestead land (The New Indian Express, 22 Nov 2021). However, this amount is hardly enough to compensate for the loss of their steady source of livelihood. The hunter-and-gatherer community like Hill

[49] Prava P (30 March 2020) Relocation of tribal people living around Similipal Tiger Reserve forceful, claim locals. Mongabay.
[50] The New Indian Express (11 July 2022) Odisha: Similipal Tiger Reserve needs relocation of one village for getting national park status
[51] The New Indian Express (22 Nov 2021) Relocated from Similipal, Khadias want to return

Khadia who is completely dependent on their local forest for almost every aspect of their life, find it very difficult to get accustomed to a new environment. Devoid of their traditional livelihood, resource base, uncertain future, and alien environment makes the already vulnerable Hill Kharia tribe more exposed to climate shocks.

Here an effort has been made to understand the resilience of the Hill Kharia tribe against climate shocks in the wake of hostile and complex forest policies and their alienation from their traditional habitat. To understand this a study has been conducted in an original Hill Kharia village Badajhili in Jashipur and a Hill Kharia rehabilitation colony at Sialinoi village in Karanjia block of Mayurbhanj district.

b. Context

Hill Kharia or Pahari Kharia is one of the 13 Particularly Vulnerable tribal Groups (PVTGs) of Odisha. Out of 705 officially recognized scheduled tribes (STs) in India, 75 STs have been identified as PVTGs. They were previously known as Primitive Tribal Groups (PTGs). The government of India renamed them as PVTGs in 2006. The PVTGs are spread across 18 states and one union territory. The state of Odisha has the highest number of PVTGs in the country.

In 1973 Government of India created a sub-category within the scheduled tribes to identify those ST groups that are on much lower level of development even among the STs. The decision was taken based on the Dhebar Commission report (1960-61) and other studies which observed that within the ST category stark inequality in the level of development exists (Singh A K, 2017).[52] The subcategory was named Primitive Tribal Groups (PTGs). The criteria adopted to identify such groups are Pre-agriculture level of technology and high dependency on hunting and gathering for food, low level of literacy compared to other STs, economic backwardness, and a declining or stagnant population (Singh A K, 2017). In the beginning, 52 such groups were identified as PTGs based on the recommendation of the respective state governments. By 1993 the list of PTGs grew to 75 as 23 more STs were added to the group (MoTA, GoI, 2015).[53]

Hill Kharia is one of the three sections of the larger Kharia tribe. The other two sections are Dhelki Kharia (early comers), and Dudh Kharia (Pure Kharia). The Dhelki Kharia and Dudh Kharia are much better than Hill Kharia in human development indices and they are not considered as PVTGs. These sections of the Kharia community are into settled agriculture and live in plain lands. Their dependency on forest products is much less in comparison to Hill Kharias. In contrast, members of the Hill Kharia tribe live a semi-nomadic life. They are largely dependent on food gathering and hunting (Tudu F, 2017). Population-wise Hill Kharia is a very small tribe. Their population was just 1673 according to the 2001 census. According to Hill Kharia and Mankidia Development Agency (HKMDA), Jashipur survey report, the population

---

[52] Singh A K (2017) Status Of Particularly Vulnerable Tribal Groups (PVTGs) In India: Special Reference To The State Of Chhattisgarh. Geo-Analyst, ISSN 2249-2909

[53] Ministry of Tribal Affairs, GoI (2015) Scheme of Development of Particularly Vulnerable Tribal Groups (PVTGs). F. No. 22040/37/2012-NGO

of Hill Kharia rose to 1908 in 2010 (Tudu F, 2017). Their population is mainly concentrated in Odisha and a small population resides in Jharkhand. In Odisha, Hill Kharia mainly inhabits the Mayurbhanj, Keojhar, Balasore, Sambalpur, and Dhenkanal Districts. Out of these 5 districts, much of the Hill Khariya population is concentrated in the Jashipur, Karanjia, Morada, and Udala blocks of the Mayurbhanj district (Behera M & Panigrahi KC, 2020).[54]

The Hill Khariya consider themselves autochthones or original inhabitants of Mayurbhanj hills. They consider Simlipal hill ranges as their hearth and homes. They live in the remote hilly and forest region of Simlipal forests. As a foraging tribe, their livelihood is intricately dependent on the unique ecology of the Simlipal forest. The Similipal forest and hills are hospitable for the natural growth of honey. Hill Kharias are considered expert honey collectors and fetching wild honey is one of their major livelihood activities. Apart from this, Hill Kharia also collects NTFPs like sal resin (Jhuna), wild arrowroot (palua), tussar cocoon, wild tubers, fishing, etc. They also make sal and siali leaf plates for their use and also for sale. Most of the Hill Kharia peoples don't possess any agricultural land and even if they possess a small patch of land, they practice a very rudimentary form of agriculture. However, some Hill Kharia members work as daily wage laborers in the agricultural fields of other communities (Ota A. B & Sahoo T, 2008).[55]

Today the Hill Kharia tribe is struggling for its survival and to protect their traditional culture, knowledge, and livelihood. On one hand, Hill Kharia people consider them autochones of Simlipal on the other hand forest department treats them as encroachers and antagonists to the biodiversity of STR. The exclusionary conservation methods of the forest department have inculcated deep-seated doubt and fear among the Hill Kharia people. On one hand ban on hunting has compromised their nutrition security by substantially decreasing their protein intake on the other hand restrictions on the collection of NTFPs have squeezed their livelihood avenues. To compensate for this Hill Kharia people have tried to diversify their livelihood activities. Now they have also started working as wage laborers mainly in the agriculture fields of other communities or take land on lease as Hill Kharias don't own much land themselves.

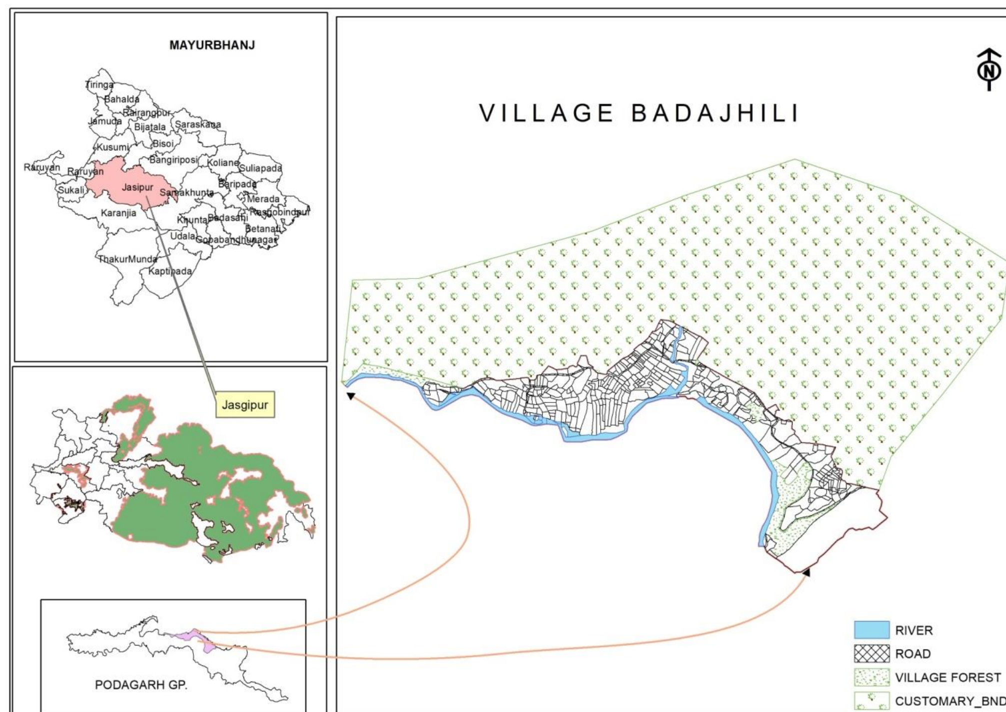
c. Hill Kharias of Badajhili village

Badajhili village of Jashipur block in Mayurbhanj district lies in the buffer zone of STR. There are a total of 95 households divided into two hamlets. One hamlet with 32 households belongs to the Hill Kharia tribe whereas the other hamlet with 63 households belongs to the Santhal tribe. For this study, we interacted with the residents of Hill Kharia hamlet.

---

[54] Behera M & Panigrahi K C (2020) Livelihood Challenges and Survival Strategies of the Hill-Kharia and Mankadia Tribes in Mayurbhanj District of Odisha. Journal of the Department of Sociology of North Bengal University, Vol. 7.

[55] Ota Ab & Sahoo T (2008) Hill Kharia (Photo handbook). Pg: 8-16. SC&STRTI, Bhubaneswar.



Map- Badajhili. village with its customary boundary, Mayurbhanj, Odisha. Source - Vasundhara

According to Hill Kharias of Badajhili village, restrictions from the forest department in accessing the forest freely added to changing climate patterns are severely impacting their livelihood. Kaushalya Dehuri (35) a resident of Badajhili village in the buffer zone of STR says, "Nowadays we are struggling to get proper leaves of sal (*Shorea robusta*) and siali plants (*Bauhinia vahlii*) for making leaf plates. The size of leaves is decreasing with each passing year. The forest department doesn't allow us to put fire on the forest floor that promotes the growth of new leaves in siali plants." Kaushalya Dehuri thinks that a decrease in the size of sal and siali leaves is linked to changing weather patterns. Gurubari Dehuri (37) another woman from the same village says, "the changing weather pattern is also impacting agriculture. There has been unpredictable rainfall in the last few years. Either it rains very little or very high in a very short duration. Both the condition is harmful to agriculture. Due to unpredictable rainfall agriculture productivity has decreased and we are suffering losses on the land we take on lease for agriculture. We generally do paddy cultivation on these lands."

VASUNDHARA
democratizing natural resource governance

Photo – Meeting of Hill Kharia women producer group at Bodjhili village, Mayurbhanj, Odisha

The Hill Kharias of Badajhili feels that collecting forest produce is a more reliable livelihood activity than agriculture if they can get free access to the forest. For generations, the Hill Kharia tribe has lived as forest gatherers and they are not very accustomed to working in agricultural fields in high temperatures without the forest cover. Gopal Dehuri (25) feels that for the last few years temperature around STR has been increasing. He says, "It's becoming very difficult for us to work in the agricultural field under sunlight in such hot weather. We often fell ill while working in agricultural fields. But we are now forced to do agricultural work either as cultivators or as wage laborers for our survival."

Still, the major source of income for the Hill Kharia people is fetching wild honey. The community follow elaborate ritual while going to collect the wild honey. A group of young male members go to the forest to fetch honey. Before embarking on their journey, they worship at Zahirathan. It is a sacred grove near the village consisting of a patch of sal tree forest. It is considered that village deities reside in Zahirathan and protect the village and villagers. There are restrictions in entering into zahirathan and trees of zahirathan are never harmed in any manner. Ritual is performed in zahirathan before starting the journey for a safe and successful collection of honey. Once the group leaves the village to fetch honey, they maintain complete silence and do not talk with each other. Everyone in the group knows their role. The group can

VASUNDHARA
democratizing natural resource governance

wander in the forest for days in search of a sufficient quantity of honey. Before the first harvest of honey 'bhandar puja' ritual is performed where honey is first offered to the mother goddess. When they return to the village safely, they again worship at zahirathan thanking the village deity for a safe and successful harvest. The honey is collected from March to June and then from October to November in a year.

Hill Kharia also collects sal resin or *Jhuna*, arrowroots, tubers, *mahua* (*Madhuca indica*), tamarind, chiraunji, and many medicinal plants. Most of the time they are forced to collect these forest products in secrecy as officials of the Forest Department harass them when they find them collecting NTFP. According to the Hill Kharia of Badajhili village, "Forest Department people don't allow us to carry any sharp object inside the forest. They even snatch our axes from us. We are Adivasi and our axe is our identity. Without the axe, we cannot survive in the forest. We don't always take our axes to cut trees or hunt. But we need our axes for collecting fuel wood, honey, and other forest produce on which we survive."

According to Hill Kharia, getting fair prices for the forest products they collect is yet another challenge. Due to the inaccessibility of the market, most of the product is sold to local traders and middlemen who offer very low prices for these products. To increase the bargaining power of the forest, produce collectors by promoting collective marketing a women producer group has been formed with the help of an NGO, Vasundhara. However, the group members find it very difficult to maintain a standard quality of product from every member leading to lower prices for their products.

Although residents of Badajhili are not facing the threat of getting displaced from STR but restrictive rules and regulations of the Forest Department, diminishing forest produce, and increasingly hostile climatic conditions are pushing many young Hill Kharia to migrate to cities or plains to work as wage laborers and to do other odd jobs. They are getting detached from their roots, culture, and traditional knowledge associated with their microenvironment. In the alien land and unfamiliar socio-ecological conditions, they become even more vulnerable.

d. Condition of Hill Kharia in a rehabilitation colony

In a rehabilitation colony located in Sialinoi village in Karanjia block of Mayurbhanj district, 58 families of Hill Khadia have been resettled from STR. The rehabilitation colony consists of a total of 73 households out of which 58 belong to Hill Kharia, 7 belong to the Gond community and 8 belong to the Kolho community. Sialinoi is located outside the STR, several km away from the original habitat from where these Indigenous Peoples have been relocated. At present, each family is living in concrete houses of two rooms constructed under the state housing scheme named 'Biju Pucca Awas Yojna.' Accustomed to living in mud huts in the lush green environment of Simlipal Tiger Reserve, the Indigenous Peoples are struggling to get comfortable in these concrete blocks which are which are quite hotter on summer days and their built quality is also very poor visibly. Many of these houses have started leaking within 5 years of its construction. The rehabilitated families have been given Rs 10 lakh cash and 10

decimal of homestead land as compensation package but they have been alienated from their traditional livelihood source i.e., STR, and also no agriculture land has been given to any of the family. Here we will try to focus on the challenges faced by the Hill Kharia community due to displacement from their original habitat.

Photo – Hill Kharia rehabilitation colony at Siyalinoi village, Mayurbhanj, Odisha

The family of Pratap Dehury (28) was relocated to Sialinoi rehabilitation colony in 2017 from Ramjodi village which is about 35 km from here and lies in the buffer zone of the STR. He says, "*Before relocation, we were promised that the government would take care of all our needs. But when we reached here the houses were not complete. We were kept in makeshift tents made up of plastic. For 2-3 months we were served food from the common kitchen. We were not in the habit of eating such kind of food and we started falling ill. We couldn't go back to our old village as our houses were demolished by the forest department as soon, as we left the village*."

The resident of the rehabilitation colony said that once their makeshift plastic tents caught fire which forced them to spend many nights in the open. Now every family has been allotted concrete houses of two rooms under the Biju Pucca Awas scheme of the state government. However, most families don't find these houses habitable in its current form. Some of them have expanded their houses with the money they have got as a compensation package.

The cash compensation of Rs 10 lakh has been given as a fixed deposit to the displaced families. It has come with the condition that any money from the principal amount can only be withdrawn with the written permission of the District Collector. This money can only be withdrawn for needs like the construction of houses, marriages, etc. However, families can withdraw interest on this amount every month. In fact, for most rehabilitated families the monthly interest on the deposited amount serves as the main source of income for the household. Being away from the Simlipal forests, they have lost the livelihood opportunities

provided by STR. Anita Dehury (41) says, "*We are completely dependent on the interest amount of our compensation money and ration from government public distribution system (PDS) for our survival. We have no other income. Here it is difficult to get fuelwood for cooking also*."

Moreover, withdrawing money from the principal amount of the cash compensation leads to lower monthly interest. This results in lower monthly income.

The rehabilitated families have lost their autonomy over their livelihood and they are largely dependent on the monthly interest of compensation amount and government welfare schemes and programs for their day-to-day survival. Due to alienation from their original habitat, they are also losing their traditional knowledge, culture, and practices associated with their microenvironment. According to Pratap Dehury, "*When we were in the forest, we never needed modern medicine. We used to treat ourselves with medicinal herbs from the forest. These medicinal herbs used to work on us very well because we were eating pure food from the forest without any chemicals. Here it's difficult to get these medicinal herbs and even if we get them, these herbs don't work on us anymore because we are no longer eating pure food from forests. Since we are eating unpure food from outside that contains a lot of chemicals, our body has stopped responding to our traditional medicines. Now we need modern medicine if we fall sick*."

Hill Kharia of the rehabilitation colony says that only half of the residents from their original village agreed to rehabilitate. There was no consensus in the Gram Sabha about rehabilitation. Ramesh Dehury (45) says, "*Our fellow villagers advised us not to resettle. They said that once we settle outside, we will need to buy everything, unlike life in the forest where we used to buy only cooking oil and salt. But we got lured by the promises made by the forest department. They promised us to give houses, land, and trees like that in our original village. However, we got only a house. For land, we were told that we would receive money but we never got money for our agricultural land. In the name of trees, we got a few saplings of trees to plant but at that time we didn't have water for drinking, how could we have given water to the saplings so all the saplings died.*"

The rehabilitated Hill Kharia feels a sense of betrayal and loss. They say that they have made their Zahirathan near their colony but it is not in natural sal forest. Still, some Hill Kharia from the rehabilitation colony go to fetch honey from the forest but they find it very difficult to get to the forest. Surendra Dehury (25) says, "*From here we need to walk for around 15 km to get into the forest. We need to travel another 15-20 km to reach the place where we can find honeycombs. Collecting honey regularly has become difficult from here. The frequency of our trips has reduced significantly*."

VASUNDHARA
democratizing natural resource governance

Photo – Meeting with Hill Kharia women of rehabilitation colony, Siyalinoi village, Mayurbhanj, Odisha

The women of the rehabilitation colony admit that alcoholism and domestic violence by the men have increased after resettling in the colony. They attribute this behavior of men to a lack of meaningful engagement. They also say that their domestic chore has increased after coming to the colony. Now they have to travel larger distances to collect fuelwood. It has also become difficult to find wild mushrooms, tubers, etc. which was part of their food culture.

The youth members of Hill Kharia from the colony are forced to migrate to cities in search of work. Some of them also try to find work as daily wage labor in construction sites and agricultural fields in nearby villages. The residents of the colony claim that they have not received any record of rights (RoR) for their new houses and still, they are using the RoR of their original village for admitting their children to schools and for other requirements.

The experience of the displaced Hill Kharia members shows that relocation from their original habitat has made them even more vulnerable. They don't feel a sense of belongingness in the rehabilitation colony. They feel less control over their life. They are losing their culture, traditional knowledge, rituals, and practices which were built over many generations living in a particular geography and ecological setup. Their resilience to shocks including climatic shocks has reduced significantly.

VASUNDHARA
democratizing natural resource governance

a. Drivers and enablers of resilience for Hill Kharia

The traditional and specialized knowledge of Hill Kharia about the Simlipal forest and its produce is the biggest driver of their resilience. Due to their interaction with the forest for several generations, they can easily sense the changes happening in the forest and adapt accordingly. They know the best spots in the forest where they can find honey, sal resin, medicinal plants, and other NTFPs. They have elaborate rituals, cultures, and belief systems to ensure the sustainable harvesting of forest products. Hill Kharia considers honey bees as a messenger of god (*devdoot*) and honey as a sacred gift from god. They treat honey bees with gratitude and devotion and make sure that while collecting honey, bees don't get killed. They fetch honey only from mature beehives and leave a portion of the beehive intact so bees can come there again.

While interacting with Hill Kharia at Ramjodi village in the buffer zone of STR it was found that they have an elaborate socio-religious belief system to keep their local environment free from any kind of pollution. It is taboo to use streams for washing and cleaning near its source. They believe that if the forest is polluted or exploited for greed, the forest goddess (*Bandurga)* sends wild animals like tigers to their village to punish them. Hill Kharia has immense respect for Keystone species like tigers and elephants. They are considered protectors of the forest on behalf of the forest deity.

Elephants are considered good friends of Hill Kharia as they make paths in dense forests allowing Hill Kharias to enter into virtually inaccessible forests for collecting forest produce (Dash M & Behera B, 2018).

While in Forest Hill Kharias are almost self-sustainable and they hardly need anything from outside for their sustenance. Even their dependency on modern healthcare services is negligible and they mostly depend on their indigenous knowledge of traditional medicinal plants found in the forest. The natural forest production system doesn't require any input from outside and due to its diversity, it is much more reliable than the agriculture system in the wake of climate change. Forest-dependent communities like Hill Kharia understand the rhythm of the forest very minutely and consider themselves as a part of the forest ecosystem. They find forests much more reliable than any other means of livelihood.

Several laws like the Panchayats (Extension to Scheduled Areas) Act, 1996, (PESA) The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, or FRA, Biological Diversity Act, 2002 are enablers of the Hill Kharia's resilience to climate shocks. The other enablers include government agencies like the Integrated Tribal Development Agency (ITDA), Hill Kharia and Mankirdia Development Agency (HKMDA), and government programs like Odisha PVTG Empowerment and Livelihoods Improvement Programme (OPLEIP), MGNREGA and other social security schemes of Government.

The entire Simlipal region falls under the 5th Schedule area referred to in Article 244 (1) of the Indian constitution (Dash M & Behera B, 2018). It means PESA, 1996 is applicable in this region. The PESA Act ensures self-governance through Gram Sabhas (village assemblies) for

people living in the Scheduled Areas. It recognizes the right of tribal communities, who are residents of the Scheduled Areas, to govern themselves through their systems of self-government, preserve their traditional culture, and acknowledge their traditional rights over natural resources. The act empowers gram sabha to have control over NTFPs, and minor water bodies and prevent land alienation among other things (The Indian Express, 10 Aug 2022).[56] However, PESA has not been implemented on the ground in letter and spirit in most parts of the country. Since the Odisha government hasn't notified the state PESA rule, a lot of confusion persists in its implementation on the ground.

If FRA, 2006 is considered, the resettlement of tribal communities from STR including Hill Kharia seems against the law. Section 4 (2) (e) and Section 4 (2) (f) of the law require the free and informed consent of the Gram Sabha and the completion of facilities and land allocation at the resettlement location before the resettlement. Moreover, according to sections 4 (2) (b) and (c) of the law the resettlement of forest dwellers under the Wildlife (Protection) Act, 1972 can only be initiated if the concerned agencies of the state government sufficiently prove that the presence of the forest-dwelling community can cause “irreversible damage and threaten the existence of said species and their habitat” also the “state government has concluded that other reasonable options, such as co-existence are not available.” These procedures under FRA have not been followed in the resettlement of Hill Kharia and other tribal communities during resettlement.

Since Hill Kharia is a PVTG, section 3 (1) (e) of FRA applies to them and provides the right of “community tenures of habitat and habitation” for PVTGs and pre-agriculture communities. A claim for habitat rights for Hill Kharia in the Simlipal region has been filed with the support of Vasundhara. This is one of the first claims for habitat rights under FRA in the entire country.

The Biological Diversity Act, of 2002, like in many other parts of the country hasn’t been implemented on the ground in the Simlipal region.

ITDA is a nodal agency in tribal-dominated districts to implement development schemes of government-focused tribal communities. ITDA of Mayurbhanj district is implementing many programs for improving education, healthcare facilities, and other infrastructure development. ITDA also focuses on facilitating land and forest rights for tribals and the preservation of their unique culture and heritage.

HKMDA is an agency established by the state government of Odisha that specifically focuses on the development of two PVTGs i.e. Hill Kharia and Mankirdia in the Mayurbhanj district. The Special Officer of HKMDA, Bijay Kumar Nayak said that the authority is taking many initiatives under OPLEIP for livelihood development, education, and healthcare facilities for their target PVTG groups. According to HKMDA interventions like providing microfinance services through SHGs, training in scientific collection of honey, and other livelihood activities are helping to build resilience of the community.

---

[56] The Indian Express (10 Aug 2022). Explained: The PESA Act, and the background of the AAP’s election promise in Gujarat https://indianexpress.com/article/explained/everyday-explainers/explained-pesa-act-background-aaps-election-promise-gujarat-8077958/

VASUNDHARA
democratizing natural resource governance

MGNREGA has a great scope in building the resilience of Hill Kharia, especially for those who have resettled in rehabilitation colonies as they have lost their traditional forest-based livelihood sources. However, the community has not been made properly aware of the provisions of MGNREGA. Moreover, due to delay in payment, involvement of middlemen, and corruption, the community sometimes feel reluctant to work under MGNREGA. The ill implementation of MGNREGA is one of the major reasons for forced migration.

b. Opportunities and Way Forward

The most important aspect of building the resilience of Hill Kharia is to secure their tenurial rights. It is also important to build community assertiveness about their rights. In Badajhili village the community has got community forest rights title but still forest department is imposing many restrictions on them in freely accessing the forest for their livelihood need. Gurubari Dehuri (48) of Badajhili village says, "*We have always lived in the forest. We don't know much about the life outside the forest. If we will be allowed to access the forest freely for honey and other forest products, we can survive ourselves*."

Since Hill Kharia are semi-nomadic people they can't be limited to a fixed community forest boundary. Biranchi Dehury (32) of Siyalinoi rehabilitation colony says, "*Our movement in the forest depends on the availability of beehives. Sometimes we travel for days up to 50-100 km in search of honey. No one can be sure, where honeybees will make their next hive*."

For Hill Kharia recognition of habitat rights under FRA will not only provide tenurial security but also help preserve their traditional governance system, religious beliefs, rituals, etc., and give them enough resource base to sustain themselves. This will give them more negotiation power to deal with outside traders to get a fair price for their products.

According to Hill Kharia community leaders of the Siyalinoi rehabilitation colony, a proper inquiry into the process adopted during resettlement should be made and families that want to move back to their original villages should be allowed to do so. Further displacement from STR must be stopped and facilities like health, education, road, electricity, and drinking water must be improved.

To further strengthen the resilience of Hill Kharia government development agencies like ITDA and HKMDA as well as NGOs should focus on the proper implementation of social security schemes like MGNREGA, PDS, social pension, various insurance schemes, etc. Apart from these new livelihood opportunities should be created keeping the traditional skills, culture, and knowledge of Hill Kharia in mind.

c. Lessons for broader Indigenous Peoples engagement

VASUNDHARA
democratizing natural resource governance

Tribal and forest have a symbiotic relationship with each other. The forest department should act as a specialized agency to provide technical support in forest management and not as a landlord of the forest.

We saw in the case of Hill Kharia that the presence of enablers is no guarantee of their effectiveness. The assertiveness of the indigenous communities must be built to claim their rights. Also, there should be continuous advocacy with policymakers, media, and other national and international platforms so that the voices of Indigenous Peoples can be heard.

Lastly, it is important to ensure the free, prior informed consent (FPIC) of the Indigenous Peoples. They must not be made victims of development and conservation projects of government and private players. Not respecting the FPIC of Hill Kharia has increased their vulnerability manifolds.

.