



2021

**STATUS OF ADIVASI
LIVELIHOODS REPORT**

JHARKHAND AND ODISHA

Published by: PRADAN



Supported by: The Ford Foundation



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PRADAN 2022

"2021-Status of Adivasi Livelihoods Report - Jharkhand and Odisha." Pradan, New Delhi.



2021

STATUS OF ADIVASI
LIVELIHOODS REPORT



अर्जुन मुंडा
ARJUN MUNDA



सत्यमेव जयते



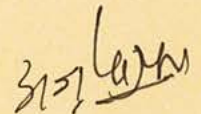
मंत्री
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संदेश

यह अत्यंत संतोषजनक विषय है कि "प्रदान" संस्था ने आदिवासी समुदायों के आजीविका के क्षेत्र में झारखंड एवं ओडिशा राज्यों में एक महत्वपूर्ण अध्ययन किया है। दोनों राज्यों के लगभग 5,000 परिवारों को सर्वेक्षण के अंतर्गत लाया गया है। मुझे ज्ञात हुआ है कि इस प्रयास के द्वारा जनजातीय समुदायों का शैक्षिक स्तर, भूमि संबंधी जानकारी, वन संपदा पर निर्भरता, जीवन-यापन के मार्ग एवं विभिन्न स्रोतों से आदान के व्याप्त जरियों के बारे में समुचित जानकारी उभरकर आई है।

किसी भी समुदाय के चहुर्मुखी विकास के लिए उनसे संबंधित मूलभूत जानकारी का होना अति आवश्यक है ताकि भावी योजनाओं की रूपरेखा को सुदृढ़ किया जा सके। मैं "प्रदान" के इस प्रयास की सराहना करता हूं और आशा करता हूं कि उनकी यह उपलब्धि दोनों राज्यों में आदिवासी समाज के कल्याण हेतु कारगर सिद्ध होगी।

मेरी शुभकामनाएं।


(अर्जुन मुंडा)

नई दिल्ली

दिनांक:- 29.03.2022

Foreword

As the original inhabitants of this land, the ones who came here before all of us, we might expect the Adivasis to be leading the most privileged lifestyle — accessing the best of the resources and enjoying the best of comforts. Of course, that is not the way things are. The stark reality we acknowledge in the heart but do not speak lest it upsets the apple cart. Leave alone enjoying the best of comforts, Adivasis of India do not even lead a halfway decent life- that is the travesty of the times.

Adivasis live in the abundant hills in our countryside, most of which were, some are even now, luxuriant with green forest cover. But, since the hills, mountains and forests they inhabited were exploited for economic gains, the Adivasis found themselves systematically disenfranchised of what was originally theirs. They have been displaced and dispossessed from their habitats, many of them multiple times, for construction of large dams, mining, the establishment of industries or in the name of protecting wildlife. That the fast growth and development of our economy, the benefits which a lot of us enjoy in great measure, has resulted in unending distress for our Adivasi communities is an inconvenient truth that we rather not articulate. It is estimated that about a crore of Adivasis, 40% of all displaced people in India, have been displaced since independence on account of 'development' projects. To be fair, the Government of India and the different state governments have put in place many welfare schemes for the Adivasis, but these lack both in design and implementation.



PRADAN has been working with the Adivasi communities in Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh and West Bengal for the last nearly four decades. PRADAN has been contributing in its own way to these communities in terms of helping enhance their livelihood options. The paradox of want and deprivation in the midst of both natural bounty and professed State support has puzzled us quite a bit. In this regard, it has been our considered view that we need a more nuanced understanding of the Adivasi livelihoods and the socio-cultural setting that shapes their livelihoods if we are to evolve an appropriate response to end their plight.

It is to this end that we have initiated the periodic 'Report on the Status of Adivasi Livelihoods', which we hope to institutionalise over the years to present to all interested stakeholders a periodic update on the status of Adivasis livelihoods. We are now ready with the first edition of the Report. This year the report is restricted to the Adivasi areas of Jharkhand and Odisha only. We expect to open up the study to all the Adivasi dominated areas of the country in due course.

This report is based on the survey of a sizable and representative sample of around 5500 Adivasi and non-Adivasi households from across 16 Adivasi dominated districts of Jharkhand and Odisha. The report shows that the Adivasis of Odisha and Jharkhand remain one of the most deprived sections of our society despite the efforts of their respective state and non-state agencies. It also compels us to think again about the development paradigm that benefits a lot of us but, at the same time, seems to adversely impact the Adivasis.

The report also points to many areas, action on which can lead to an acceleration of the pace of enhancing the overall well-being of the Adivasis. We are aware that Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA), the Forest Rights Act and the enhanced financial provisions under the 14th and 15th Finance Commissions have opened up significant windows of opportunity. We hope to use the understanding from this report to fine-tune our own interventions with the Adivasi communities and effectively bring to life the constitutional provisions.

We hope the regular publication of the Report on the Status of Adivasi Livelihoods (SAL) will contribute to a better appreciation of the Adivasi way of life, which can be quite instructive to modern civilisation. It is our firm belief that there are important lessons there that we can no longer ignore. Let the report trigger discussions and deliberations on the issues of the nature of development models we should pursue.

We hope the periodic report and the issues it surfaces will help us chart better pathways for all of us that will not only promise a better life for the Adivasis, but also be instrumental in evolving ideas and models that are aimed at the inclusive well-being of all.

D. Narendranath
Executive Director
PRADAN, New Delhi



Foreword

With 8.6 percent of the country's population, the Scheduled Tribes (STs) constitute an important segment of Indian society. They are spread over the length and breadth of the country and represent distinct languages, cultures, histories. Nearly 75% of the tribal population in India inhabit what is broadly referred to as the Central India belt. Most of them fall in the 5th Schedule areas of the Indian Constitution. Tribes of this region have suffered the worst among the tribes due to a long history of dispossession from their land and forest, from the colonial period to the present time. They remain the most impoverished of India's population. They also represent a disproportionate share of the population among tribes with low life expectancy at birth, low literacy rate, very high child or under-5 mortality rate, etc. Tribes in the region refer to themselves as Adivasis rather than tribes.

Since independence, government and non-government organisations have been working towards the well-being of Adivasis. Yet, as noted above, development has escaped them. Various reasons account for such a state of affairs. Continuous dispossession and displacement has been one of them. At the same time, the mainstream development policies and programmes have been an imposition from the above. They have been executed without taking into account the Adivasis' distinct economic, social, cultural features on one hand, and the ecological zones which they inhabit on the other.

PRADAN is working with the Adivasis in the central Indian belt for the last four decades. PRADAN's interventions in livelihoods of Adivasis have been helpful to an extent. This has been largely due to the development of a new model that recognizes the distinctive features of regions and households. However, by and large, the Adivasis in the vast central belt have remained deprived despite efforts of PRADAN and other similar well-meaning agencies and the government. PRADAN has thus decided to come up with a periodic status report of Adivasi livelihoods and development so that the organisation remains periodically informed. Such a report will also help the government and other agencies in formulating their policies and developmental plans.

I am delighted that PRADAN has come up with the first status report covering two states, Odisha and Jharkhand. The report shows a grim picture of Adivasi livelihood assets and outcomes. A functional literacy test result shows that in Jharkhand around 45% male and 63% female heads of their households or their spouses can't read or write at all. In Odisha, the corresponding figures for males and females are 55% and 75%, respectively. As many as 89% of respondents from Adivasi households in both Jharkhand and Odisha reported land holdings with less than 1 hectare (marginal farmers) or landless. The NSS report No 587 -77/33.1/1 of Government of India also shows that the landholding size of Adivasis in Odisha and Jharkhand is shrinking.

The average annual income of Adivasi households, both in Odisha and Jharkhand, is also much less compared to the average income of agriculture households in the country. The latter itself is too low as compared with the per capita GDP of India. The report also shows that a large percentage of Adivasi households in the Central Indian belt suffer from food insecurity. I hope the findings in the study will help PRADAN, other agencies, and government officials to rethink their policies and programmes in their engagement with Adivasis and that PRADAN will continue with this initiative and will add more states of central India in the future rounds of this study.

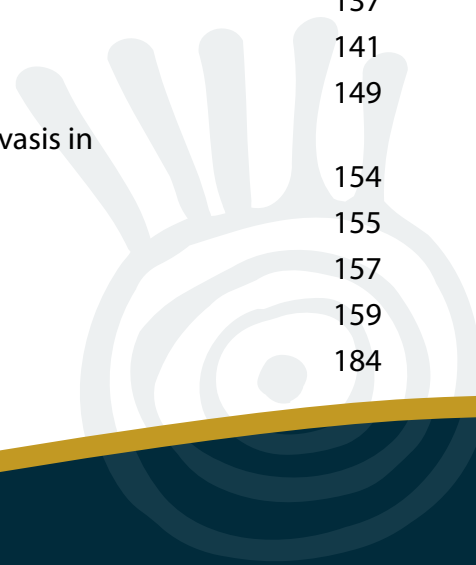
Virginius Xaxa
Visiting Professor, Institute for Human Development, New Delhi






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Executive Summary



Scheduled Tribes (STs) form about 8.6% of India's population. A large majority of them is classified as the "hills and forests" tribes. The Indian State has always been concerned with the twin goals of enabling Scheduled Tribes to preserve their identity and culture as well as include them in the country's broad development process. The tribal culture and way of life is characterized by their affinity for the forests and nature, togetherness and collective rather than individualistic aspirations and persistent struggle to preserve their own unique cultural identity. The Constitution of India (Art. 244) enjoins the State to identify areas inhabited dominantly by tribal communities, to nurture them and their identity in these regions and to integrate them in the development process. Article 275 makes explicit provisions for making a financial allocation to states towards that end. Several specific programmes have been formulated and implemented by several state governments to promote the welfare of tribal people, in addition to the centrally supported Tribal Sub-Plans funded under the above Article. However, little information is available on the outcomes of efforts for tribal development.

This report, *The Status of Adivasi Livelihoods*, is an attempt to understand the status of livelihoods of the Adivasi people. This report focuses on two states, namely Jharkhand and Odisha. We hope to work and produce similar reports periodically to cover Adivasi people living in other states of the Union. This report reflects the status of livelihoods of the Adivasi people with the purpose that it will engage all concerned in finding out ways for socio-cultural-economic wellbeing of the tribal population.

The report is based on three components: 1) A survey of 4994 households 4135 Adivasi and 859 non-Adivasi across 16 districts, 53 blocks, and villages in Jharkhand (3069 households) and Odisha (1925 households) ; 2) Focus Group Discussions (FGD) with Adivasi communities in 28 villages ; 3) interviews with 40 leading Adivasi and non-Adivasi intellectuals closely associated with and knowledgeable in the Adivasi issues. The survey was conducted during March-April 2021 in Jharkhand and April-May 2021 in Odisha. Movement restrictions in the wake of the COVID-19 pandemic constrained some of these exercises.

It is commonly observed and substantiated by the Socio-Economic Caste Census (SECC) results that despite a favourable Constitutional framework for the protection of Adivasi culture and several schemes for their welfare, the tribals are still one of the most marginalised sections in the country. We hope this report will be helpful in better comprehending and communicating the prevailing situation. The study aims to:

1. create a robust database that enables comparison between people belonging to Scheduled Tribes and other people living in the same agro-climatic regions;
2. provide data to assess the impact of diverse measures undertaken for welfare and development of tribal communities;
3. provide facts to the administration and policymakers charged with the responsibility of taking development to Adivasi people;

4. generate evidence for NGOs and other practitioners for improving the quality of their work and make their interventions more meaningful
5. inform the citizens of the country about the situation in which Adivasi people live, the struggles they face and how they are placed in the nation's economic progressions.

The study has been conducted considering a conceptual framework, consisting of the following six components:

1. the cultural ethos of Adivasi within which they socialize and form their world view;
2. the natural and human-made resource conditions under which Adivasi practice their livelihoods
3. the constellation of external interventions which affect their living and livelihood conditions;
4. the attributes of the households themselves;
5. the composition of the livelihood basket or the constellation of livelihood activities practiced
6. income and other livelihood outcomes

Different sections in the report are organised as below:

Section 1 elaborates on the methodology adopted in the study.

Section 2 describes how the Adivasi culture and worldview recommends living in harmony with nature and forests without any illusion to humans being the supreme beings. They advocate togetherness, non-exploitative engagement with surroundings and focus on need rather than greed.

Although their culture espouses greater space for women, patriarchy is innate in this society and it gets manifested in different forms. Of late, Adivasis have been observed to emulate patriarchal practices of non-Adivasis.

As resource conditions deteriorate, a greater incursion of non-Adivasi occurs in Adivasi heartlands resulting in greater inter-mixing of Adivasis in mainstream society. As the 'modern development' paradigm is forced on them, it displaces them and dispossesses them of their resources.

Section 3 presents the resource profile of the Adivasis inhabiting the undulating hill and forest terrains of Jharkhand and Odisha. They live in the undulating and mountainous terrain of the Chhota Nagpur Plateau and the Eastern Ghats regions in the Agro-Climatic Zone 7 (Eastern Plains and Hills Region). Many rivers like Subarnrekha, Damodar, Koel, Indravati etc., originate in these regions. With a rainfall of over 1200 mm per year and a sparse population, the region was densely forested till a few decades back. It is still a habitat of tropical semi-evergreen sal forests and to the Central Indian elephant herds. Individual land holdings tend to be small, under two hectares, and the farm lands are slopy, often with thin topsoil. Though only 8.6% of the total population, the Adivasis constitute 55% of the people displaced since independence due to mining activities, the construction of dams, industrial development and the creation of wildlife parks and sanctuaries (Source: a study by the Land Rights Initiative at Centre for Policy Research).

Section 4 is about the infrastructure and resource development i.e. presence of all-weather roads, telephones, educational institutions, health infrastructure, etc., — in the Adivasi villages. In terms of access to public services, both in Jharkhand and Odisha, villages inhabited by Adivasis (and Particularly Vulnerable Tribal Groups) are deprived even in the same geography as compared to villages inhabited by non-Adivasis. For instance, fewer Adivasi villages had good road connectivity with the block headquarters than the non-Adivasi villages. Further, the public-transport system connected far fewer Adivasi villages than the non-Adivasi villages. Mobile connectivity was 73% for Adivasi villages as compared to 90% for the non-Adivasi villages. Fewer Adivasi villages have access to the services of NGOs compared to the non-Adivasi villages. In the case of Community Forest Rights (CFR), in



Jharkhand 7% Adivasi and 3% non-Adivasi villages applied and 1% Adivasi villages and 3% non-Adivasi villages received CFR. In Odisha, 30% Adivasi, 35% Non-Adivasi and 40% PVTG villages applied for CFR and 6% Adivasi, 10% non-Adivasis and 20% PVTG villages received CFR.

Section 5 discusses the attributes of Adivasi households. It was found that a typical Adivasi household has a family size of five members, and a large majority of heads of the households are not educated (63% educated only up to primary school and less than 12% go past matriculation). The level of education among tribal women is worse. As much as 88% respondents in Jharkhand reported land holdings smaller than 4.9 acres, which classifies them as marginal or landless farmers. In Odisha the proportion of such marginal or landless farmers in the sample group of Adivasis was 84%. Of this meagre land holding of Adivasis, a mere 7% in Odisha and 18% in Jharkhand had the benefit of irrigation over two or more seasons. Thus, over 80% lands owned by Adivasis produced a single rainfed crop. The typical distance of the forest from Adivasi villages was 2 km in both the states. In the survey sample, about 60% Adivasi households in Jharkhand and 75% in Odisha reported collection of forest produce either for own consumption or for selling.

Section 6 elaborates on the livelihood activities of the households. A typical Adivasi household livelihood portfolio was found to comprise six activities: farming, animal husbandry, collection from the common property resources such as forests, wage work, salaries /pensions, non-farm activities and remittances. We considered both actual cash income as well as income imputed to forest or farm produce consumed at home to estimate total income. The average annual income for the Adivasi households was estimated at Rs. 75,378 and Rs. 61,263 in Jharkhand and Odisha, respectively. *It needs to be noted that even under rainfed conditions, and perhaps because of it, the Adivasi households reported growing crops from a menu of 20 crops. The crop diversity continues*

to be quite rich, and there is scope for conserving the diversity as most of these crops are grown from seeds saved from the crop in the previous year. When arranged in the decreasing order of monetary contribution, in Jharkhand the Adivasi livelihood activities stacked as — wage income, income from non-farm activities, farm income, remittances, income from animal husbandry, income from forest produce and income from salaries or pensions (averaged for the sample). In Odisha, this order was farm income, wage income, non-farm activities, pensions, animal husbandry, and the smallest contribution was from forest produce. In Odisha, for the PVTG households, too, the income from forest produce was very low.

Section 7 provides data on Adivasi livelihood outcomes of income, food security, dietary diversity and nutrition. In Jharkhand, we found that almost half of the surveyed Adivasi households (46%) have either “borderline” or poor food consumption, compared to the non-Adivasi households (23%). In Odisha, the largest proportion of undernourished households were among the PVTG (52%), followed by the Adivasi (31%) and the non-Adivasi (10%). As far as food security is concerned, only 47% of the sampled households of Adivasi and 54% non-Adivasi households in Jharkhand are food secure. In Odisha, 45% of Adivasi, 49% non-Adivasi and 31% PVTGs are food secure. The study also found that children in around 50% of the sampled households were undernourished —they recorded less than the standard range for head circumference. Section 8 attempts to assess what influences income, food security, literacy and similar parameters. In general, males show higher literacy scores and higher landholding; household income appears to be positively associated with its literacy score. Data show that the landless and the poorest of households have low levels of education in both the states.

[1] Owing to COVID19 pandemic, the Household surveys in PVTG villages could not be done in most of the sampled villages in Jharkhand. Therefore, this report does not cite any data for PVTG in Jharkhand.





Report at a glance

Conceptual framework

In this report, six aspects are studied in assessing the state of livelihoods of Adivasis.

1. Social and cultural ethos in which livelihoods are practiced
2. The resource base within which livelihoods are practiced
3. External interventions in terms of infrastructure and resource development
4. Attributes of households
5. The specific activities practiced in livelihoods
6. Livelihood outcomes

The overall data size -

1. The household survey included **4,994 households** (**3,069 Jharkhand** and **1,925 Odisha**) across **53 blocks** and **16 districts** in Jharkhand and Odisha; of these, 4,135 were Adivasi households and 859 were non-Adivasi households
2. Focus group discussions were conducted in **28 villages**
3. 40 leading Adivasi and Non-Adivasi resource persons knowledgeable in the Adivasi livelihood issues were interviewed in-depth

The entire data collection exercise was conducted during March-April 2021 in Jharkhand and April-May 2021 in Odisha



¹ In Jharkhand, household surveys could not be conducted in all the sampled PVTG blocks; hence this report doesn't have PVTG data for Jharkhand

Social and Cultural Ethos

The social and cultural ethos of a community influences its thinking in relation to life goals and interaction with the resources. Adivasi communities did not acquire the consumerist compulsions seen in non-Adivasi people. Their simple needs were easy to meet given the resource abundance. In this setting, the culture of sharing was institutionalized by communal ownership of natural resources. Harmonious living with the community members and harmonious interaction of the community with nature were considered more important than the acquisition of material wealth by one individual. Access to necessary forest resources and the absence of motivation for exploiting resources beyond basic need thus became the dominant traits.

Akay Minz

Folklores and folksongs of the Adivasis have taught them to love their water, forest and land; not to destroy those.



Gunjal Ikir Munda

Adivasis always have a practical approach towards life. They believe in what is visible and immediate. That's why they have not created any heaven seven seas across where there is an invisible power. There is a tree, from the tree you get food to eat, so, there is God in it. If the river is flowing inside, there is god in it.



Ranendra Kumar

Adivasi philosophy does not consider human beings and other living beings to be different. They view the entire world in unity. There is no sense of hierarchy among living beings, be it plants or animals.



Dayamani Barla

Our language, culture and society are interconnected with water, forests and land. Our society cannot sustain without water, forests and land whereas in case of other groups they can adjust in some other environment too.



Mary Bina Surin

An element of individualistic mentality does not exist among Adivasis. It becomes stronger when there is an economic implication.



Anuj Lugun

The relation of Adivasis with the jungle is to live together. It is not about supremacy or about control.





Infrastructure and Resource Development



Simon Oraon

None of the government schemes is successful in benefiting the Adivasi people. Adivasi people can be their own engineers for the development of their villages.



Anuj Lugun

If today we want to develop the Adivasi society or deal with the social challenges, economic challenges, or political challenges, it is very necessary to understand their concerns and their philosophy.

Manik Chand Korwa

Development should be done from the needs and perceptions of the tribal people and not by the thinking of mainstream people

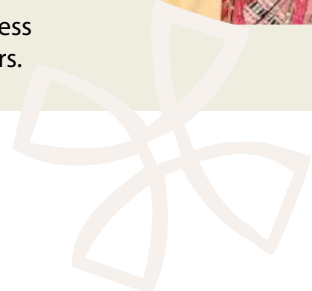


Akay Minz

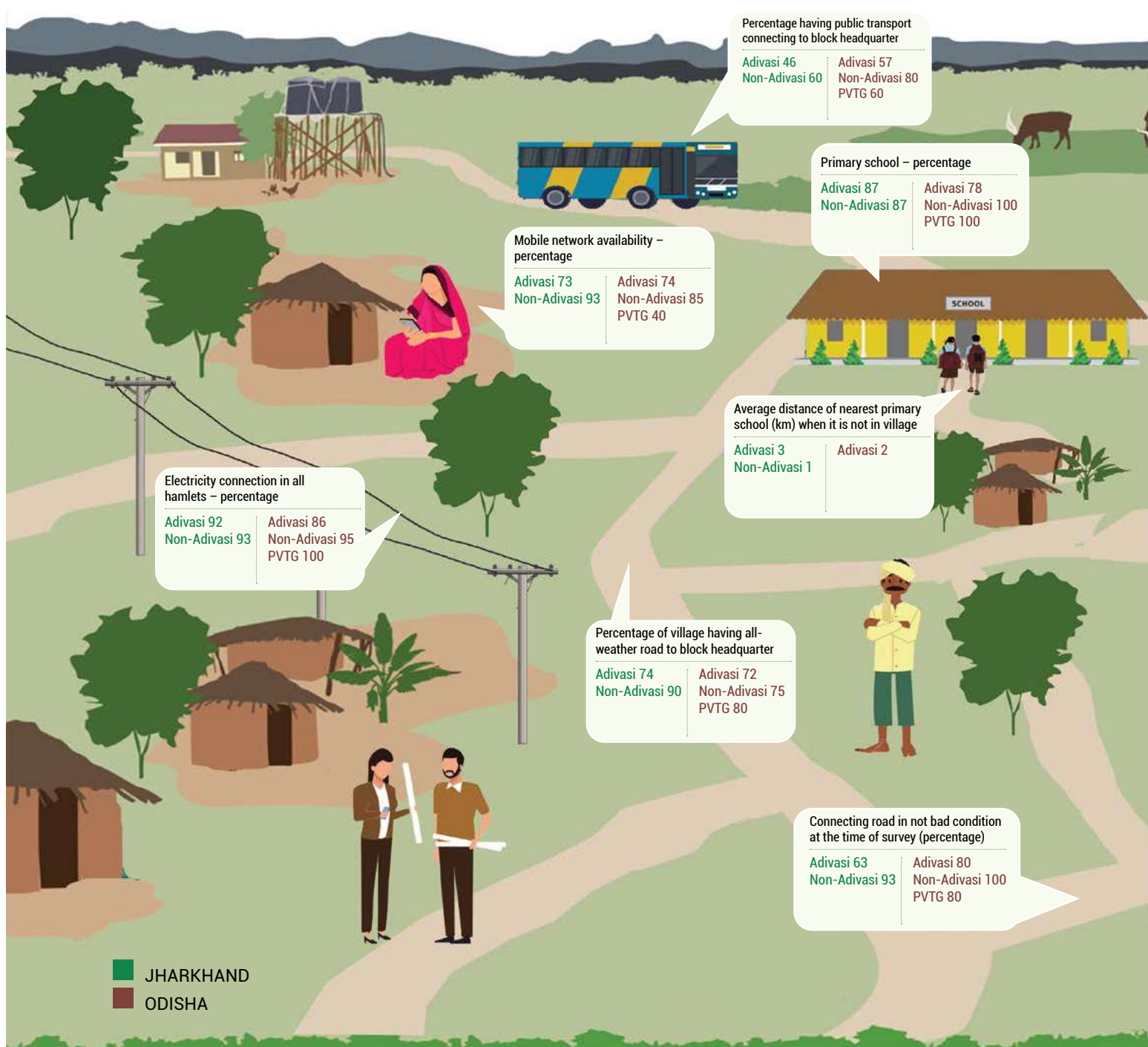
The flagship programmes of the government set up grassroots institutions. Those institutions could have worked strongly for the villages. It did not work because the middlemen wouldn't be able to take away the money.

Archana Soreng

With respect to the Forest Rights Act there are challenges in terms of understanding the Act and in implementation. The policymakers still think that the legislation is only for the tribal people and not for the other traditional forest dwellers. The political will among the policymakers and implementers is still lacking. Further, there is a need for strengthening of institutions, in order to ensure that the process of claim filing happens right, and the same is not rejected by the decision-makers.



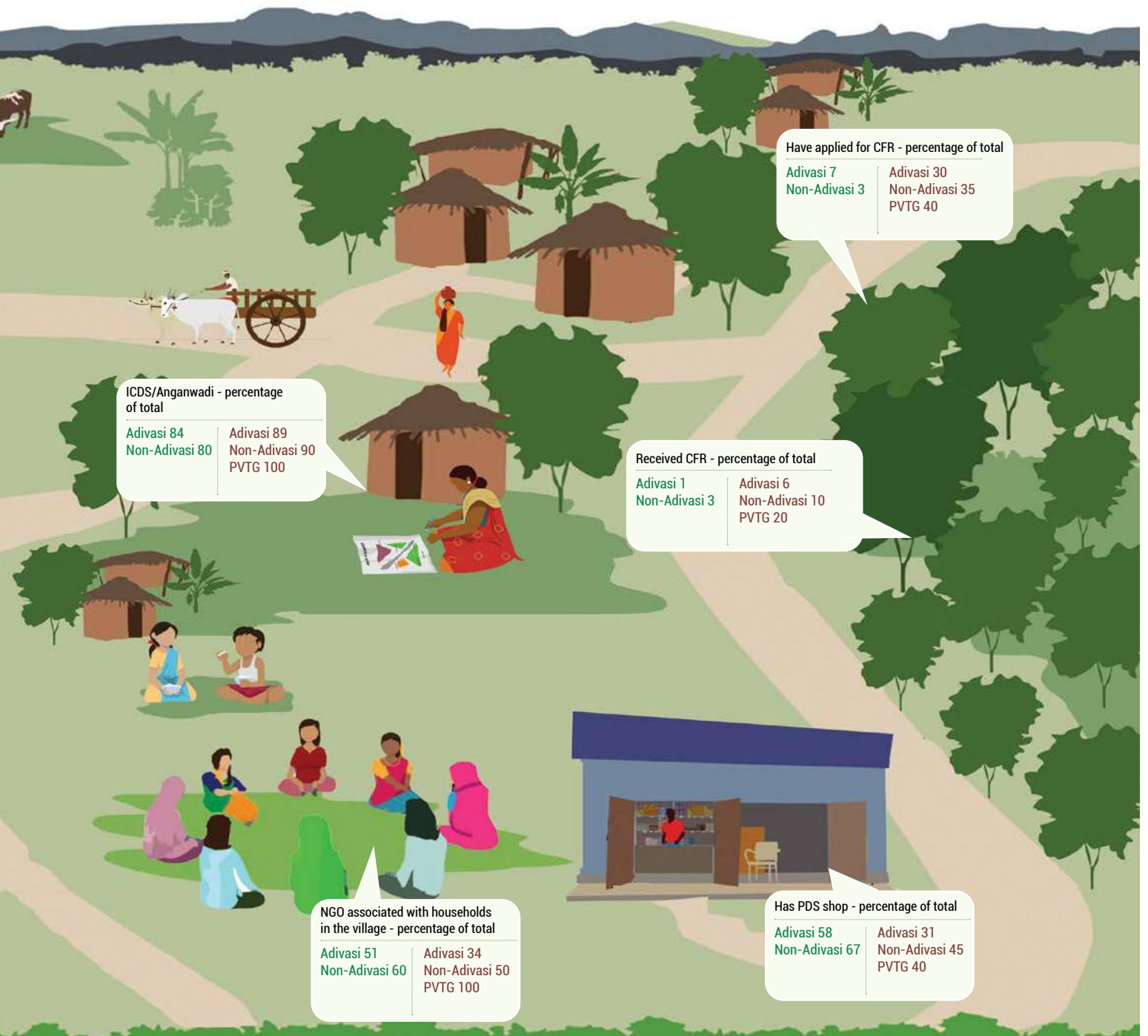
Public service access in villages



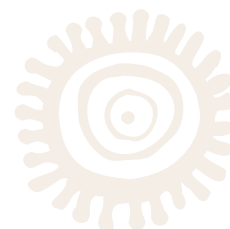


Adivasi and PVTG villages are deprived even in the same geography as compared to Non-Adivasi villages in terms of availability of public services in both Jharkhand and Odisha.

In the case of Community Forest Rights (CFR), 7% Adivasi and 3% non-Adivasi villages applied whereas 1% Adivasi village and 3% non-Adivasi villages received CFR in Jharkhand; In Odisha, though the figure is much larger, 30% Adivasi, 35% Non-Adivasi and 40% PVTG villages applied for CFR whereas 6% Adivasi, 10% non-Adivasi and 20% PVTG villages received CFR.



Attributes of Households



Bipin Jojo

The local language or mother tongue, whether it is Kui, Mundari or Santhali or Sundargarhi or Sambalpuri, should be used as a medium to impart education at the primary level. That would aid the Adivasi children to comprehend better. Then gradually you introduce them to other languages. But at the early stages, to comprehend the concept, it is important that the child is taught in his or her mother tongue.



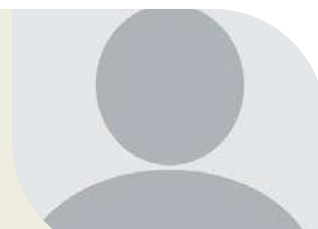
Archana Soreng

Though the education system itself is often demeaning to the Adivasi community, there is a need to enter that system and sail through the system and reach a level we are able to advocate for our community. At the same time, it is very important to ensure that our education system acknowledges and emphasises the importance of indigenous values and knowledge of Adivasi communities.



Narayan Murmu

I have worked as BDO in different tribal districts. If I today ask me - did any implementation of the government programmes benefit the community? My answer to that is that the Adivasis have not been benefitted as much we had expected.



Sebati Singh

The health infrastructure in Adivasi villages is not good. The Adivasi dominated villages are mostly in remote rural areas and the health system is very inadequate in those parts. There are no good doctors. There is often no health staff and even if they call 108 which is the ambulance helpline, the ambulances are unable to reach the village sometimes.



Tulasi Munda

Every work today is getting mechanised. Suppose there is the construction of a pond, earlier hundred people used to earn livelihood during its construction. Now one machine does the work for one pond. The works of road repair and construction are also getting mechanised, thus reducing the need for labour. So, after being educated too, many Adivasi people would need (vocational) training. In absence of training, the youth would not be able to operate the machines and wouldn't get any work.





Education attainment of household head

Heads of households of over 82% Adivasi and 72% non-Adivasi homes are educated less than matriculation (10th) in Jharkhand. These numbers are 90%, 87% and 82% for PVTG, Adivasi, non-Adivasi respectively in Odisha. Except for non-Adivasi in Jharkhand, the percentage of females with matriculation and above is more than males.



MATRICULATION AND ABOVE

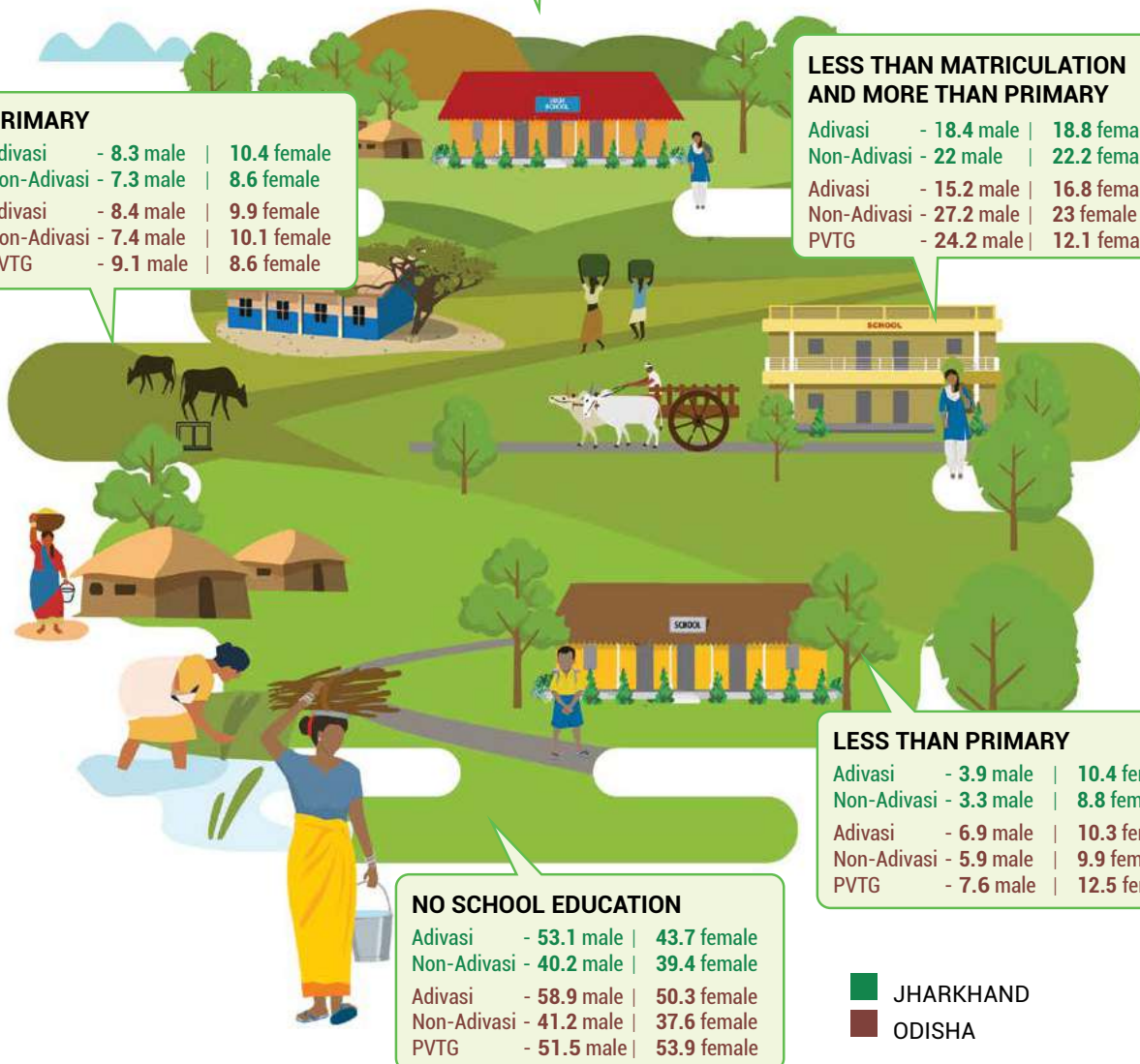
Adivasi	- 16.1 male		16.6 female
Non-Adivasi	- 27.3 male		21 female
Adivasi	- 11 male		12.8 female
Non-Adivasi	- 18.3 male		19.4 female
PVTG	- 7.6 male		12.9 female

PRIMARY

Adivasi	- 8.3 male		10.4 female
Non-Adivasi	- 7.3 male		8.6 female
Adivasi	- 8.4 male		9.9 female
Non-Adivasi	- 7.4 male		10.1 female
PVTG	- 9.1 male		8.6 female

LESS THAN MATRICULATION AND MORE THAN PRIMARY

Adivasi	- 18.4 male		18.8 female
Non-Adivasi	- 22 male		22.2 female
Adivasi	- 15.2 male		16.8 female
Non-Adivasi	- 27.2 male		23 female
PVTG	- 24.2 male		12.1 female



NO SCHOOL EDUCATION

Adivasi	- 53.1 male		43.7 female
Non-Adivasi	- 40.2 male		39.4 female
Adivasi	- 58.9 male		50.3 female
Non-Adivasi	- 41.2 male		37.6 female
PVTG	- 51.5 male		53.9 female

LESS THAN PRIMARY

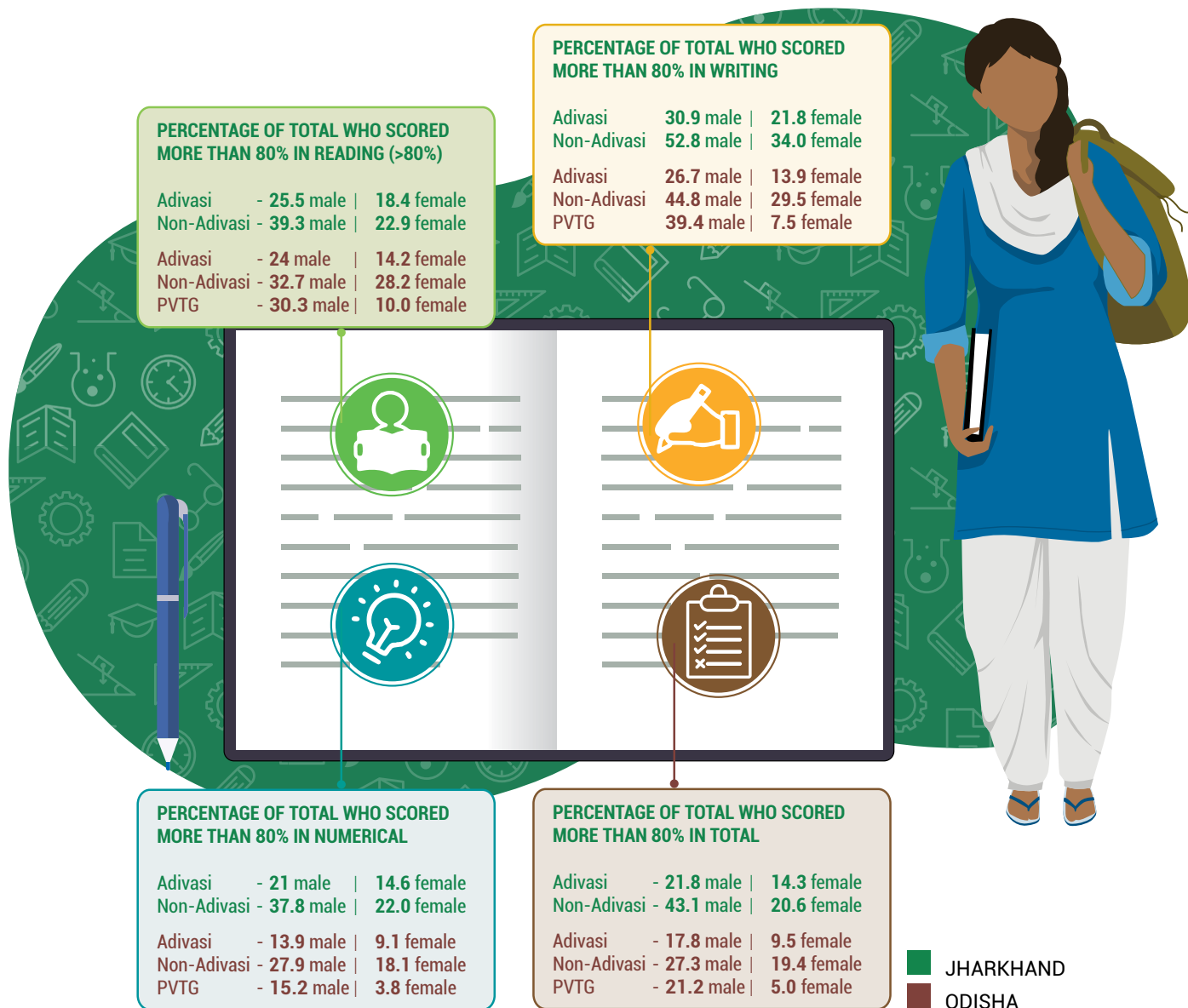
Adivasi	- 3.9 male		10.4 female
Non-Adivasi	- 3.3 male		8.8 female
Adivasi	- 6.9 male		10.3 female
Non-Adivasi	- 5.9 male		9.9 female
PVTG	- 7.6 male		12.5 female

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Functional literacy

The average total functional literacy score out of 30 for males were 12 for Adivasi and 18 for non-Adivasi in Jharkhand. In Odisha, these were 11, 10 and 14 for PVTG, Adivasi, non-Adivasi respectively. Scores for women were generally lower in all categories and extremely low for PVTG women in both States.

A functional literacy test was conducted with the respondents and their spouses, wherever available, from the sampled households. The test result shows that around 45% male and 63% female from Adivasi households in Jharkhand can't read or write at all. For the non-Adivasi households, the corresponding figures from Jharkhand are 30% and 52%. In Odisha, 55% male and 75% female from Adivasi households can't read or write at all. The corresponding figures for Non-Adivasi are 38% and 55%; for PVTGs these are 42% and 73%.





Resources and access to resources

Anil Gudiya

Adivasis are interconnected with nature and forests; their livelihood, living condition and progress are dependent on the forests.

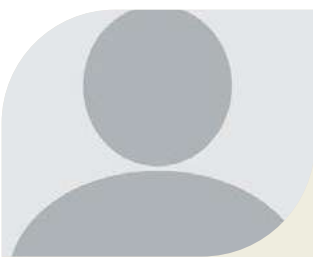


Kariya Munda

Nowadays the forest department and other mafia cut forest in such a way that it is not growing again. So in this way the forest is ending. There are some trees like if you cut a tree from March to May then a new plant will grow from that tree. And if they are cut before and after this period then the new plant would be like a shrub and would not be high, even in the rainy season it would be like a shrub.

Archana Soreng

Imposition of “development” worldviews from outside might have changed our relationship with nature. But the change in economic occupation [due to external pressures] will not decide whether we are Adivasi or non-Adivasi. Our identity is way more rooted.



Simoni Jhudia

The composition of the forest has been changed a lot. Earlier we used to get forest products like honey, bamboo, sal seeds etc, but nowadays we are not getting all these from forests. Earlier we used to get medicinal plants and bark of certain trees for fighting malaria but those are not available these days. Earlier there were sambar deer, barking deer, spotted deer, peacock etc in our forests. After the intervention of industry and mining which has resulted in the rapid destruction of forests, there is the extinction of flora and fauna.

Ashish Tigga

Gram Sabha says that the jungle of the village is the collective right of the villagers but the forest department claims their right and that is why the conflict between tribal and forest departments happened.



Umi Daniel

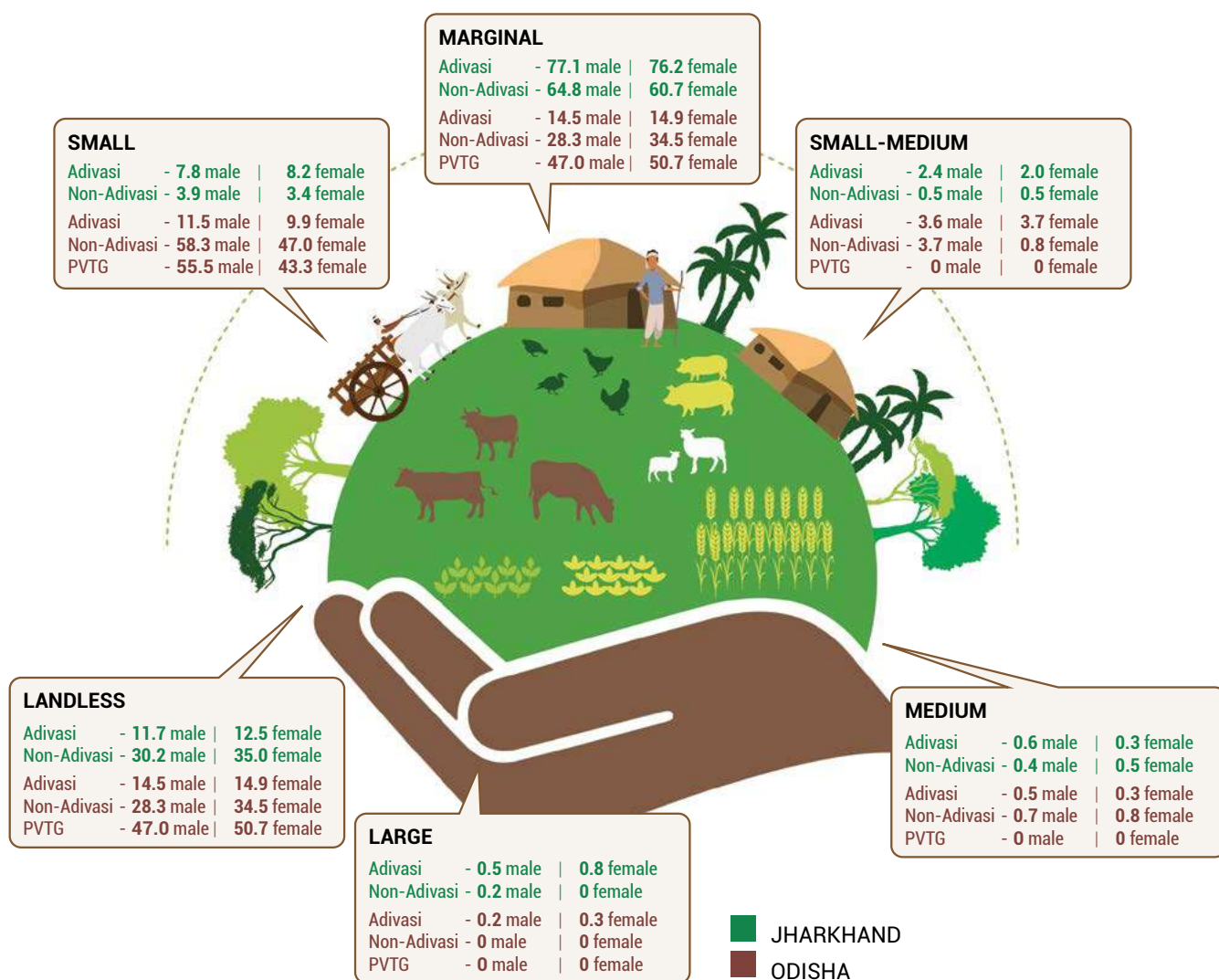
Tribal land alienation is huge and that actually has affected tribal agriculture. Many of the tribal farmers, don't have land. They don't have the kind of land that they used to have. I think tribal agriculture is at a cross-road.

Landholding



In Odisha, as many as 14% of Adivasi respondents, 28% of non-Adivasi respondents and 47% of the PVTG respondents declared that they were landless. In Jharkhand, these proportions were 12%, 30% for Adivasi and Non-Adivasi respectively. Landlessness is significantly more in female-headed households across categories in both the states.

The average landholding in Adivasi households in Jharkhand was found to be 2.3 acres for Adivasi households and 1.3 acres for Non-Adivasi households. The average landholding for female-headed households in these categories was 1.8, 1.3 acres respectively. Average landholding in Odisha was 1.9 acres for Adivasi, 1.7 acres for Non-Adivasi and 1.2 acres for PVTG households. These figures for female-headed households in Odisha were 1.8, 1.3, 1.2 acres respectively.



(National figure: Average area owned by agricultural households: 2.16 acres and average landholding by ST agricultural households 1.44 acre, 2018-19, Source: NSS report No 587 -77/33.1/1)

(At national level: 2.6% of agricultural households are landless and 70.4% are marginal, during 2018-19: source NSS report No 587 -77/33.1/1)



Dependency on forest



18.5% Adivasi households and 16.4% Non-Adivasi households in Jharkhand have irrigation facilities for all seasons. The corresponding figures for Odisha are 7.4, 12.4 and 42.9 for Adivasi, non-Adivasi and PVTG households respectively.

53% Adivasi households depend on forest in Jharkhand. The corresponding number for Odisha is 75%.

Average distance from forest for households dependent on them for livelihood (km)

Adivasi	- 2.2 Km
Non-Adivasi	- 2.3 Km
Adivasi	- 1.9 Km
Non-Adivasi	- 2.6 Km
PVTG	- 0.2 Km

Households depending on forest for livelihood

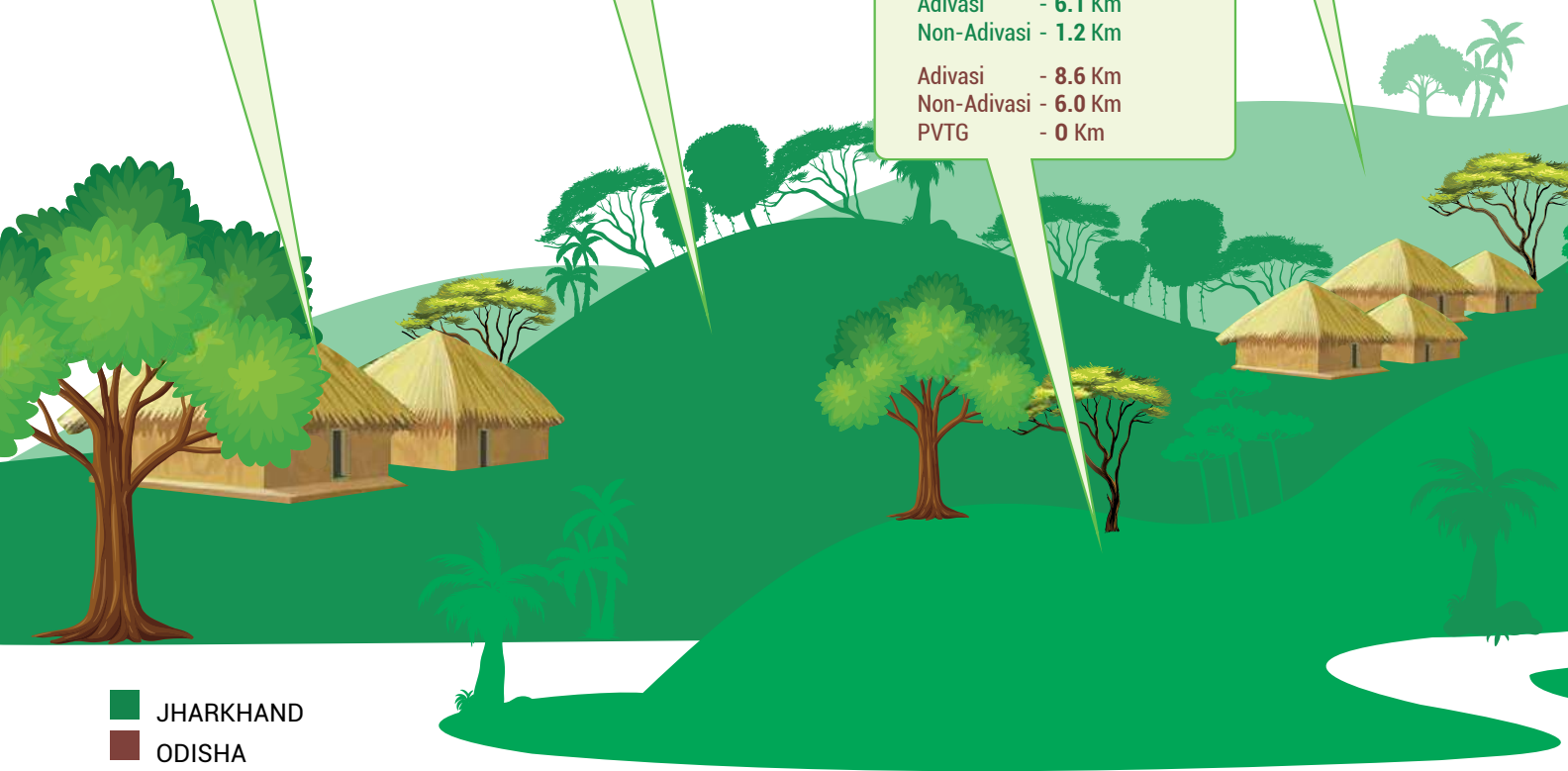
Adivasi	- 53%
Non-Adivasi	- 28%
Adivasi	- 75%
Non-Adivasi	- 63%
PVTG	- 91%

Average distance from forest for households not dependent on forest for livelihood (km)

Adivasi	- 6.1 Km
Non-Adivasi	- 1.2 Km
Adivasi	- 8.6 Km
Non-Adivasi	- 6.0 Km
PVTG	- 0 Km

Households not dependent on forest for livelihood

Adivasi	- 47%
Non-Adivasi	- 72%
Adivasi	- 25%
Non-Adivasi	- 37%
PVTG	- 9%



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Livelihood outcomes



Umi Daniel

The government has not provided more options to the Adivasi youth. The government in the name of skill development is now training young people, by taking them away from schooling, their regular studies, their higher education, such that they become the source of cheap labour in the urban pockets.

Manik Chand Korwa

Presently, community-based farming is being replaced by the introduction of machines. Now the enjoyment of each raindrop has been put aside by new technologies. In earlier days, community farming used to be very pleasant. Farmers used to sing together and work together on their agricultural fields. Today the happiness associated with agricultural practices is damaged because the human touch in the crops is getting replaced by tractors and irrigation facilities



Anuj Lugun

The control which Adivasi society used to have on the bazaar/haat, that control is now not in the hands of them. Though in PESA the control of the local markets, or to start any market or to close it, is the right of the Gram Sabha, practically that control is now in the hands of merchants and businessmen

Father Nicholas Barla

The market was a place where Adivasis used to bring their products and they either exchanged with one another or they sold them to the buyer, the traders. Also, the market was commonplace to share different news. The market also became a place where they were exploited. For ordinary Adivasis, the market is akin to exploitation and extortion.



Jacinta Kerketta

The Adivasi people do not perceive agriculture from a business perspective. They believe in subsistence agriculture. They think that, once the agricultural yield reaches their yearly food requirement, then the soil also needs time to rejuvenate itself.

Bipin Jojo

The Adivasi youth from the industrial fringe areas are neither illiterate nor properly educated. So, neither do they want to go back to their parental occupation like agriculture nor can they get a job in the industry or office, as they do not have the required technical training or skills to get some government or private job. At the same time, they have high materialistic aspirations. So, they find it best to go to either Mumbai or Karnataka, Tamil Nadu, Kerala, Maharashtra, Goa or Delhi.



Sonajhariya Minz

Adivasis always grow adequate for their consumption, they grow only for need not for greed.

Anuj Lugun

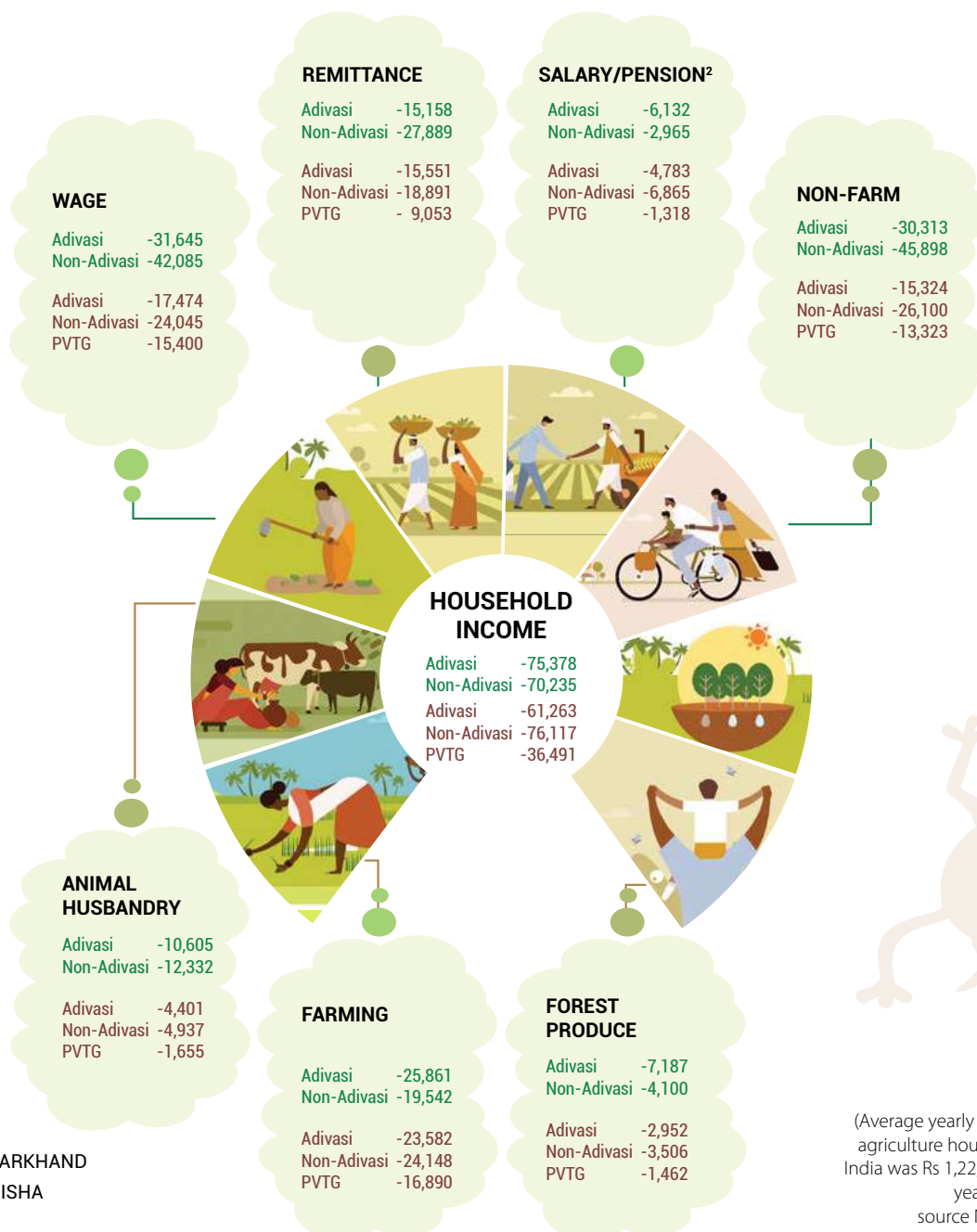
We talk about MSP for crops. For forest products, there is no talk on MSP.





Income from different sources

On average, Adivasi homes in Jharkhand earned Rs. 75,000 per year. In Odisha they earned Rs. 61,000. Non-Adivasi homes in the same resource setting in Jharkhand earned Rs. 70,000. In Odisha non-Adivasi homes earned Rs. 76,000. Major sources are farm, wage work, salaries, pensions and non-farm businesses.



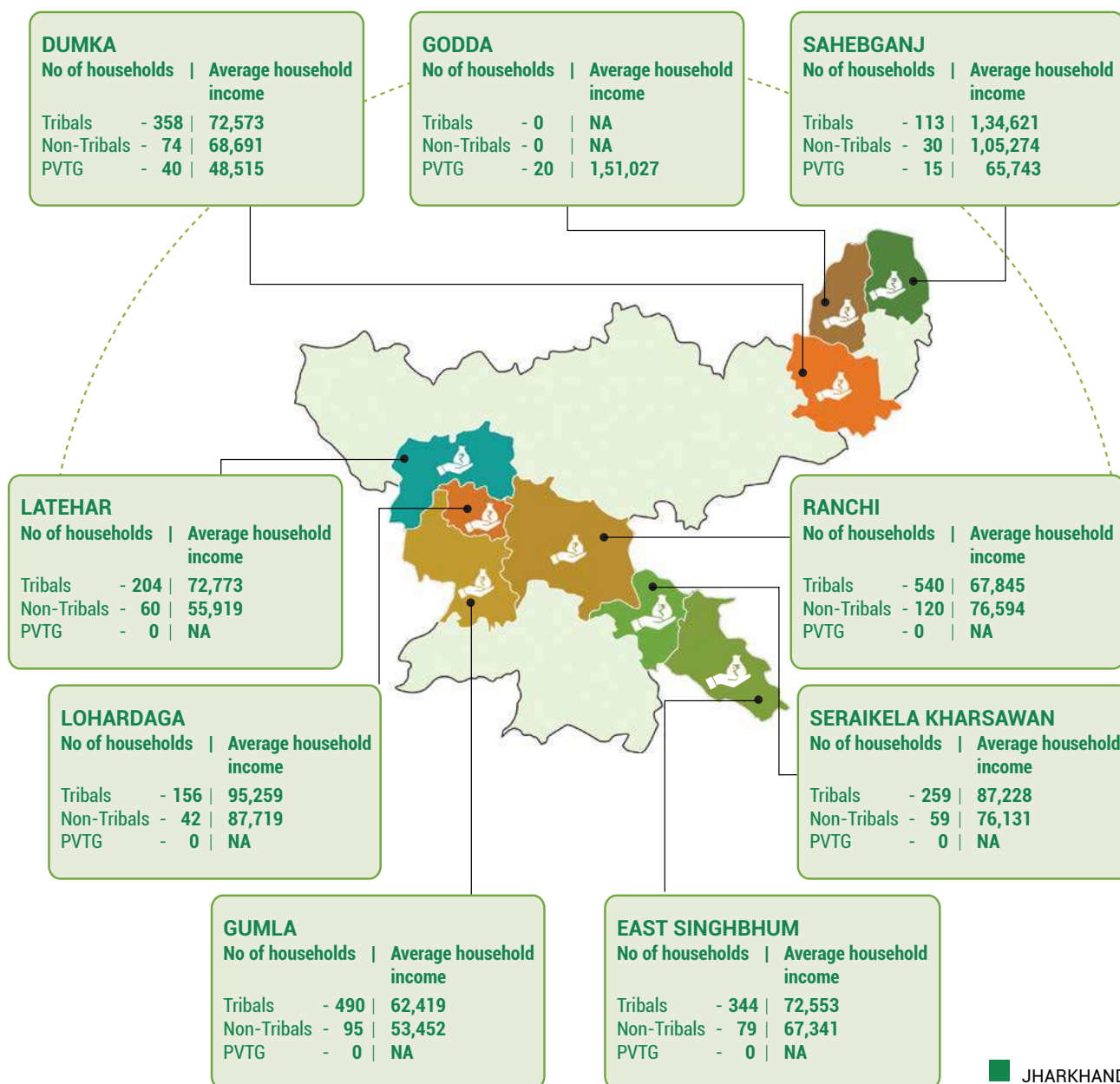
(Average yearly income of agriculture households in India was Rs 1,22,616 in the year 2018-19: source NSS report No 587 -77/33.1/1)

² Income from Salary/Pension, wherever mentioned, is on monthly basis unless mentioned otherwise



Household income in selected districts

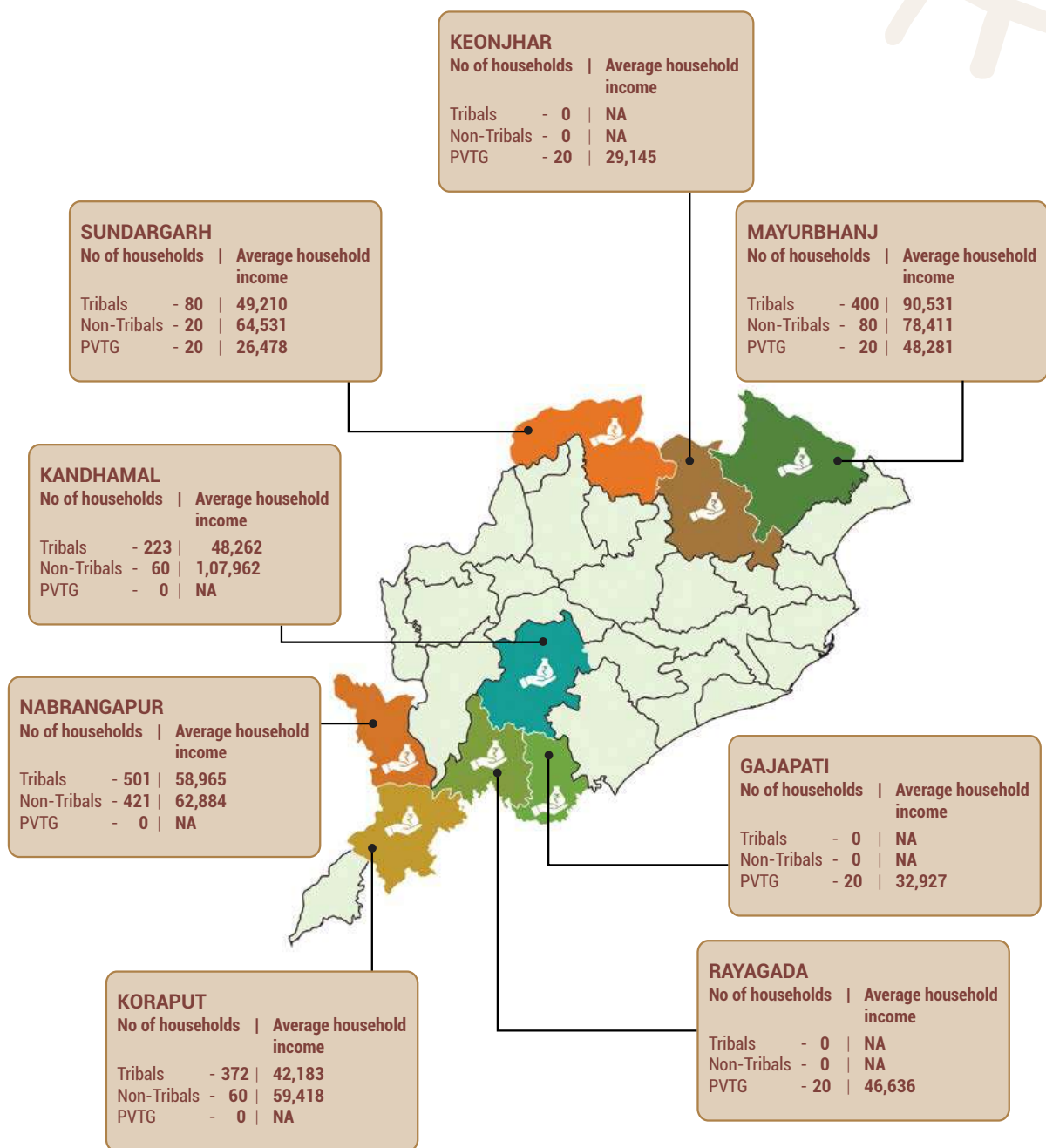
Caveat: The sample size in some of the cases is too low to reach to any conclusion at the level of a district.



JHARKHAND

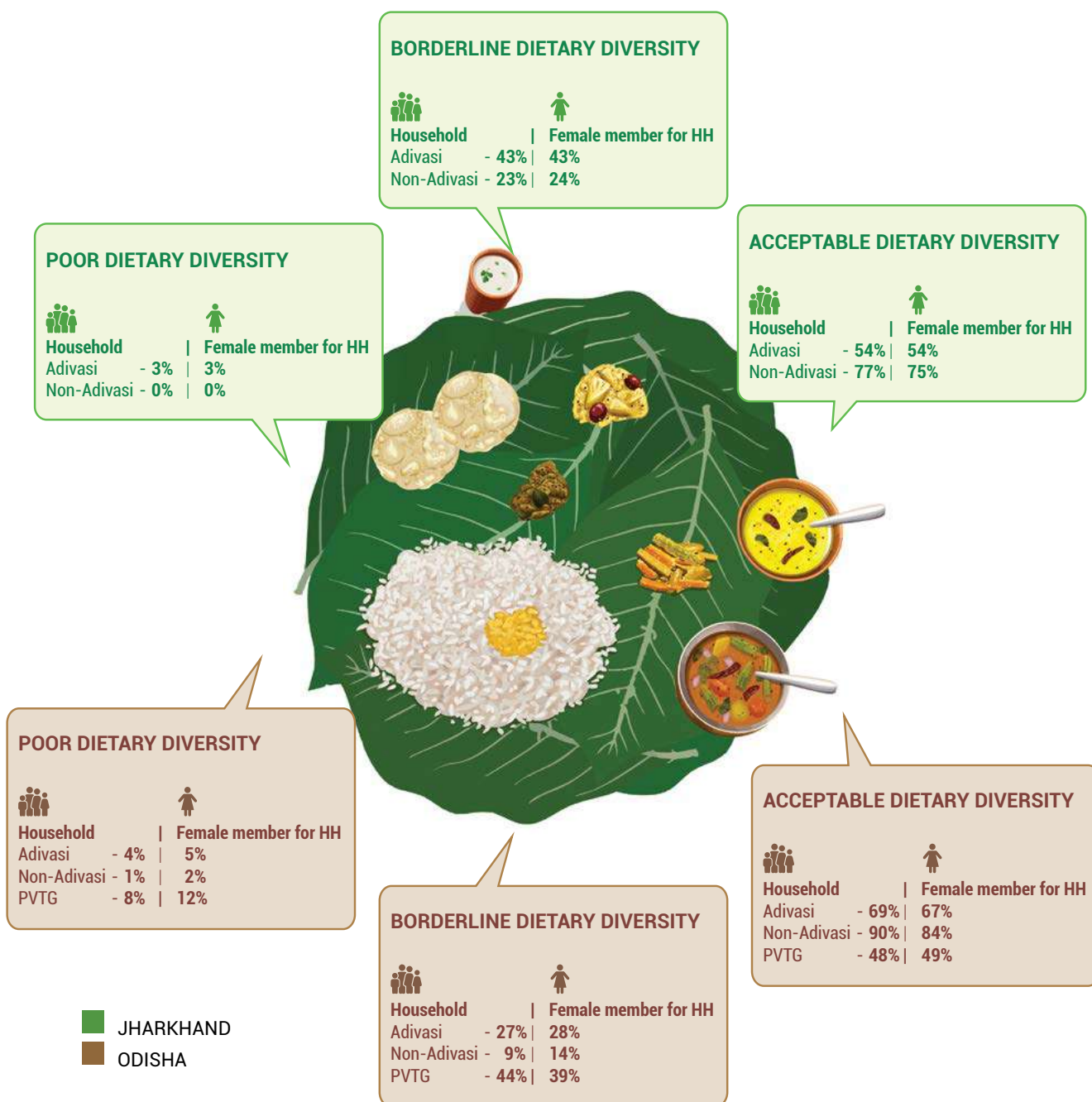


Household income in selected districts



Dietary Diversity

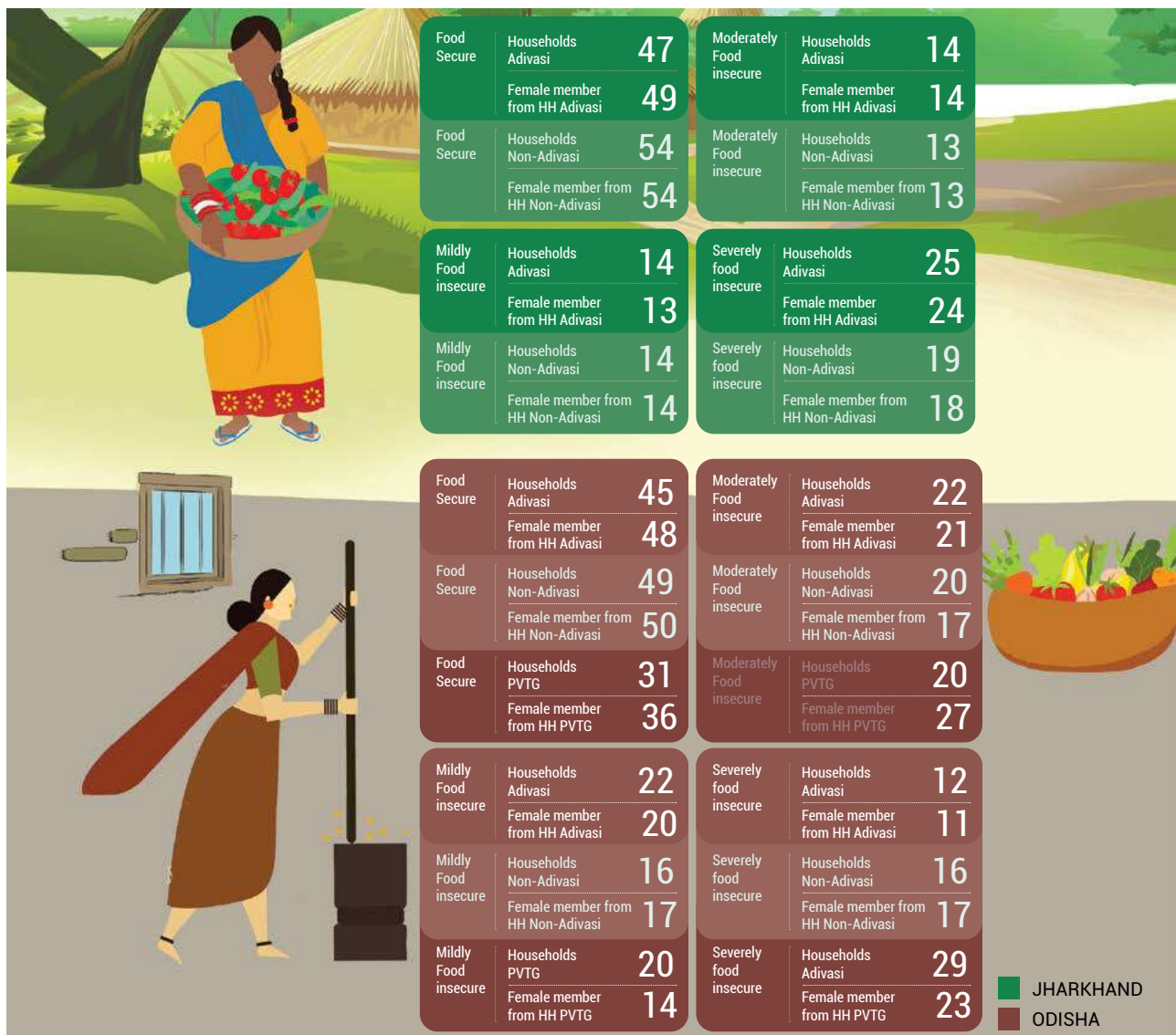
In Jharkhand, 54% of Adivasi households and 77% of Non-Adivasi households have acceptable dietary diversity. The data from Odisha shows a better situation with 69% Adivasi and 90% Non-Adivasi having acceptable dietary diversity. Only 48% of PVTG households in Odisha have acceptable Dietary diversity. Data for the female members of the household in Jharkhand shows a pattern similar to that of the other members of the household; in Odisha, the female member of the households in both Adivasi and Non-Adivasi households have lower dietary diversity as compared to other members. The score for PVTGs in Odisha shows a bleak picture as compared to both Adivasi and Non-Adivasi.



Household food security

25% Adivasi and 19% Non-Adivasi people in Jharkhand are severely food insecure. In Odisha, 12% of Adivasi households and 16% of Non-Adivasi households are severely food insecure. The female member of the households is slightly more food secure across categories in both the states.

The Head circumference of a child should be within 3-97 percentile of the recommended population scores. Malnourished³ children: In Jharkhand 50% male and 53% female Adivasi children are malnourished. For non-Adivasi in Jharkhand, the corresponding figures are 61% and 46%. In Odisha, 48% male, and 60% female children from the Adivasi community are malnourished. The corresponding figures for PVTG are 71% and 60%. For Non-Adivasi in Odisha, the corresponding figure for both male and female children is 55%.

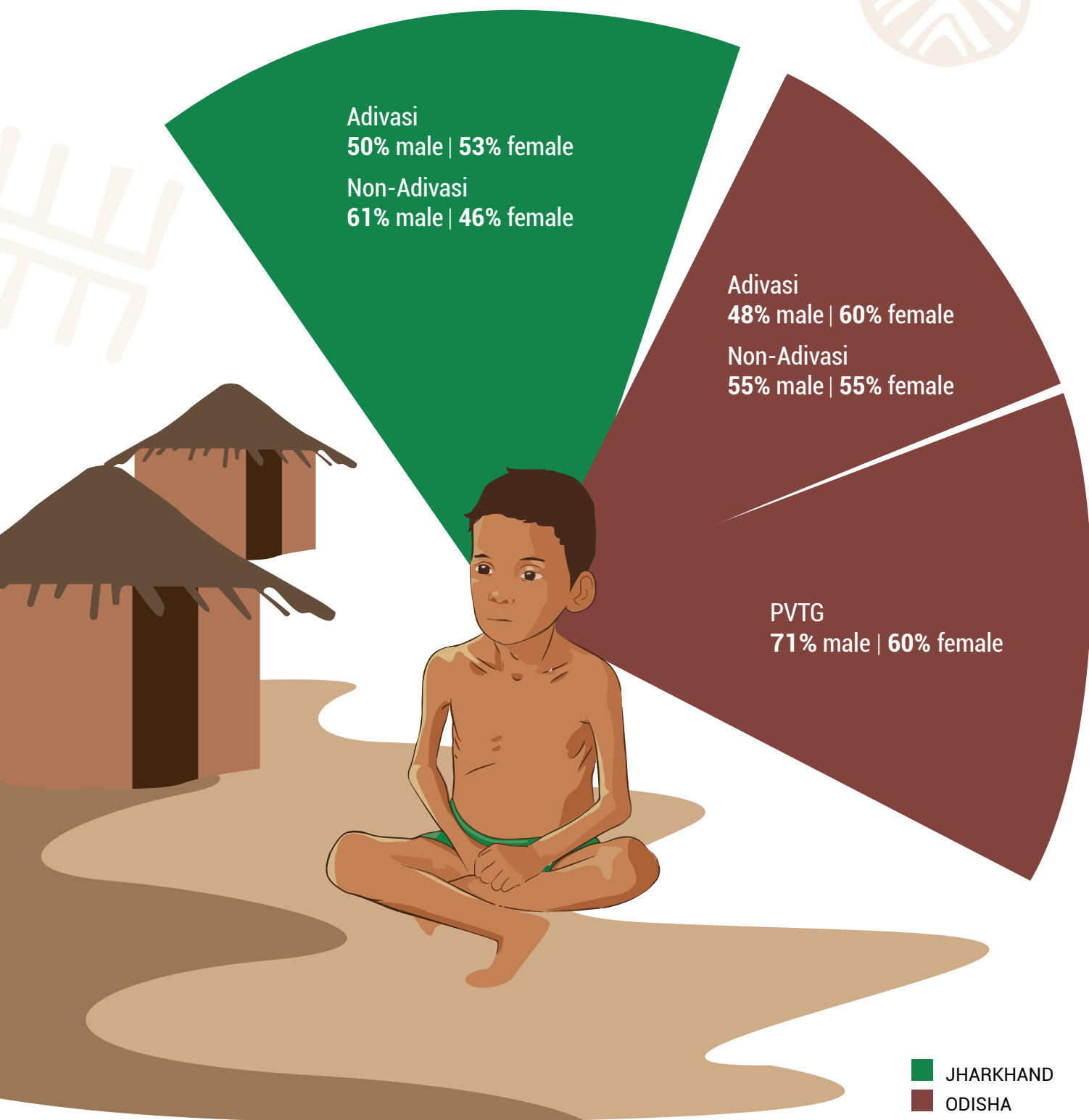


*All figures in percentage

³ We collected data on the Head circumference of children below 60 months of age. The head circumference of a child should be within 3-97 percentile of the recommended population scores

Malnourished children

The Head circumference of a child should be within 3-97 percentile of the recommended population scores.



JHARKHAND
ODISHA

Introduction



Scheduled Tribes in India

With around 8.6% (Census 2011) of the country's population, Scheduled Tribes (STs) make for a sizeable number. The tribals were originally not a part of the caste-based societies in this sub-continent. Throughout history, they have been subject to displacement and dispossession either by the caste society for the sake of settled agriculture or by various rulers/governments and private business houses, for forest and mineral resource extraction and dam construction.

The term 'tribe' was first used by the British colonisers, who, from their experience of Africa and America, thought of Adivasis as kinship-based grouping and in a stage of evolution. The term 'Adivasi' became popular among the tribals when Jaipal Singh Munda, a member of the Constituent Assembly (and the captain of the gold-winning Indian Hockey team in Amsterdam Olympic, 1928), claimed that the tribes are the original inhabitant of this sub-continent. It got further popularity during the Jharkhand and Chhattisgarh movement when tribal groups came together to protest against displacement and dispossession, claiming that they were not only dependent on the natural resources where they stay but also had a right to their original homeland. These claims might not have been based on historical evidence, however, these are symbolic manifestations of resistance against oppression in different forms throughout history — dispossession and displacement being the most disruptive.

Adivasis or tribals are mostly concentrated in the northeastern hills and central plateau. A small portion of their population also lives in the north-western plains. The tribes in the north-eastern hills mostly speak languages belonging to Sino Tibetan (Bodo, Meitei, etc.) families. Adivasis in the Central Indian Plateau (CIP) speak languages of either Austroasiatic (Santhal, Munda, Ho, etc.) or Dravidian (Gond, Oraon, etc.) origin. Some tribes (Bhil, Garasia, etc.) in the western part of India speak

languages of the Indo-European family, of which Hindi, Bengali, Odiya, Gujarati and many other North Indian languages are a part.

The terms tribe, Adivasi and Scheduled Tribe are generally used interchangeably. However, they do not mean the same thing. The inclusion of a group of people in the list of Scheduled Tribes is a task of the state governments. Therefore, the list of Scheduled Tribes may vary from one state to another depending on many socio-political factors. For example, Santhals in West Bengal and Jharkhand are designated as Scheduled Tribe, whereas Santhals in the Tea Estates of Assam are not. There are other similar examples.

About 29 lakh persons in the category of scheduled tribes were sub-classified as "particularly vulnerable tribal groups" or PVTG (source: Ministry of Tribal Affairs, GoI). PVTGs are either artisans or practise shifting agriculture, unlike most of the major tribes who practise settled agriculture. There are around 250 tribal groups in this category. They form about 3% of the population in the Scheduled Tribes category.

A small portion of their population also lives in the north-western plains.



Terms such as *Adim Jati* or Adivasi (both meaning “earliest or original inhabitants”) have been used to describe these groups. Another school refers to the “hills and forest tribes” as *vanvasi* or forest dwellers. The Scheduled Tribes, in the central Indian plateau in particular, prefer to call themselves Adivasi — the preference is supported by some scholars working on the subject. Each of these terms is laden with subtle meanings of the social beliefs of the user. The term indigenous people, as used in the Indigenous and Tribal Peoples’ Convention, 1989, an International Labour Organisation (ILO) Convention, subsumes the right of these people to choose to either integrate with the State in which they live or to maintain their cultural and political independence. The states in the Union of India, however, do not recognize this right to choose political independence and therefore the term ‘indigenous people’ is not used in India. During the interview and focus group discussions, people of the ST community repeatedly referred to themselves as Adivasi. Most of them said that they wanted to be referred to as Adivasi as they are dependent on natural resources and have a historical right to the land where they live now.

However, in this report, we have used the terms ST, tribe and Adivasi interchangeably. While they are very much “Adivasi”, we will use the term PVTG for the communities so designated and provide information about them wherever available separately.

Development of the Adivasi people

During the British occupation, the geographical areas inhabited by Adivasis were “exempted or partially excluded” (vide Government of India Act 1935) from the ambit of the Government of India Act, 1935. These geographical areas included (what are now known as) Nagaland, Mizoram, Tripura and Meghalaya, certain parts of Assam and Manipur, areas lying under the jurisdiction of Godavari Agency in Madras Presidency, the Chhota Nagpur and Santhal Pargana region, Bastar, and parts of the then Gondvana (tribal inhabited parts of Odisha) etc. The Constitution of India borrowed from this Act both the spirit of the need and the responsibility of the State in protecting and nurturing the Adivasi people and the geographic demarcation of their areas. Article 244 of the Constitution and Schedules V and VI thereof lay down the

said Constitutional provisions. The Article enjoins upon the Governor of every state functions for the wellbeing of the tribes as per recommendations of the constitutionally mandated Tribal Advisory Council of the State. Article 275(1) of the Constitution ordains a portion of the Consolidated Fund of India as grant to states with Tribal Scheduled areas to facilitate the states in the implementation of their plans and programmes for the protection and nurturance of the tribes as decided by the Governor in consultation with the Tribal Advisory Council. Subsequent Finance Commissions were expected to honour this sentiment. Over and above this, since the independence, a number of Commissions and Committees¹ have looked at the issues concerning the conservation and integration of the tribal socio-economic-cultural way of life with the mainstream. Under the Fifth Five Year Plan (1974-79), a separate allocation, under what was then called Tribal Sub-Plan (TSP), was made for the states with areas under Schedule V or VI. Earlier funds allocated under Article 275(1), referred above supported the tribal development. From the Fifth Plan, TSP became a part of the state plan document approved by the Planning Commission and incorporated in the various National Development Plans. Funds were allocated under TSP to support development work in Adivasi education, health services, promotion of livelihoods and preservation and promotion of Adivasi culture.

After the merger of Plan and Non-Plan expenditure in 2017, the TSP was renamed as Scheduled Tribe Component (STC) by the Ministry of Finance. A total of 41 Central Ministries / Departments were identified for earmarking of STC. Besides, the state governments earmarked TSP funds in the State Plan in proportion to their respective ST population (Census 2011). In 2018-19 financial year (FY), the monitoring of the STC plan was given to the Ministry of Tribal Affairs. In the Union Budget 2021-22, an amount of Rs. 78,256.31 crore was allocated as STC funds (Rs. 7524.87 crore to the Ministry of Tribal Affairs alone), which is over 50% increase in the STC budget of the previous financial year, and over four-fold increase in 2014-15 allocation.

In more recent years, the state governments have launched specific programmes for the development of Adivasi people. A detailed list of such programmes and schemes in Jharkhand and Odisha is provided in Annexure I.

¹ For instance, the National Commission on Scheduled Tribes submitted several reports, starting with the Report of the Commission Chaired by Late UN Dhebar in 1961. Also see Virender Kumar, Committees and Commissions in India 1947-73; multiple volumes



In addition to the programmes specifically targeted for the development of the Adivasis, there are sectoral programmes (in agriculture, irrigation, animal husbandry, skill-building) as well as area-based programmes (development of Western Odisha and KBK districts) with a large concentration of Adivasi populations.

It may also be mentioned that a large number of educational institutions and health facilities managed by missionary institutions have come up in the regions dominated by Scheduled Tribes. Public sector organizations engaged in mining and related activities have also undertaken 'development' programmes for the Adivasi communities in the villages near mines or factories.

At the same time, it must be noted that as Adivasi people occupy the erstwhile forested uplands overlaying rich mineral deposits, their homelands have always been poorly connected. Worse, they have suffered a disproportionate burden of displacement and dispossession under forest and wildlife conservation programmes (setting up sanctuaries, national parks etc.), construction of dams and construction of mineral-based manufacturing facilities. Though only 8.6% of the total population, the STs constitute 55% of the people displaced since independence due to the construction of dams, mines, industrial development and the creation of wildlife parks and sanctuaries (Source: a study by the Land Rights Initiative at Centre for Policy Research).

Socio, Economic and Caste Census (SECC) 2011 data shows that Adivasis are deprived in comparison to other people. The bullet points below show the comparison. Annexure C provides a comparison across several parameters.

Adivasi households in Jharkhand and Odisha compared with rural households in India:

1. **Occupation:** Nationally 30% of rural households reported cultivation as the main source of income. In Jharkhand, 39% and in Odisha only 25% of tribal households reported cultivation as the main source of income
2. **Occupation outside farms:** While nationally and in Jharkhand, over half of the rural and Adivasi households report manual casual labour as a source of income, in Odisha this proportion goes up to 67%. Aside from this, while 2.5% of rural households report domestic service as a source of income, in Jharkhand this is 4% while in Odisha it is around 2%.

3. **Income slabs:** While nationally, 75% of rural households reported that the highest-earning member earned less than Rs. 5000 per month, this proportion rises to 84% in ST households in Jharkhand and 95% in ST households in Odisha.
4. **Salaried jobs:** Nationally, 5% of rural households reported that a member was a salaried employee in government and 4% reported that a member was a salaried employee in the private sector. In Jharkhand ST households, such employments were 4% and 1% respectively. In Odisha ST households, salaried employments were 3% and 0.5%, in government and the private sector, respectively. Considering the high prevalence of the mining industry in these two states, such a low proportion of Adivasis in salaried jobs, public or private sectors, appears to be particularly galling.
5. **Irrigation:** Around 40% of farmlands in the country as a whole are unirrigated. This proportion is 58% and 70% respectively for Jharkhand and Odisha and worse for Adivasi households.
6. **Refrigerators:** While 5% of rural households reported having refrigerators, possibly poor electricity supply and market infrastructure causes this proportion to reduce to 3% for Jharkhand ST homes and 1.5% for Odisha Adivasi homes.
7. **Motorised assets and implements:** Nationally, 21% rural homes had motorised assets and 4% owned mechanised farm implements. In case of ST households in Jharkhand it is 13% and 1.5% respectively and in Odisha it further reduces to 4% and 0.5% respectively. The Adivasi households are clearly at a disadvantage due to remoteness and poverty.

The data on the state of literacy, education, health, nutrition and life expectancy all tend to paint a dismal picture of the level of development of Scheduled Tribes. (Ref: Report of the Expert Committee on Tribal Health, Gol, 2013 and Verma et al, 2020.²)



2 Verma, Arvind, Sharma RK and Saha K; "Diversity in child mortality and life expectancy at birth in major tribes of Central India", Indian Pediatrics, 58: 20-24; October 2020.

The question that surfaces from this data is - why are the basic development indicators among the tribals so dismal despite the targeted ST programmes. Lack of infrastructure and public services, initial “backlog” and poor livelihood outcomes might be the possible reason. Hence it was thought appropriate to closely look at the state of livelihoods of the people belonging to the Scheduled Tribes.

About this report



This report is aimed to be the first among a series of periodic reports on this subject. The report records the current state of livelihoods of Adivasi people given the backdrop of formal State efforts on one hand and the woes of displacement and dispossession on the other. The report delves into the current state of the livelihood situation of the STs in Jharkhand and Odisha. In forthcoming years, PRADAN will bring out similar reports for other states with significant tribal populations. This report aims to:

- Create a robust database that enables comparison between people belonging to ST and other people living in the same agro-climatic regions;

- Provide data to assess the impact of diverse measures being undertaken for welfare and development of tribal communities;
- Provide facts to the administration and policymakers charged with the responsibility of bringing the fruit of development to Adivasi people;
- Generate evidence for NGOs and other practitioners to engage meaningfully for improving the quality of work
- Inform the citizens of the country about the situation in which Adivasi people live, the struggles they face and how they are placed in the nation’s economic progressions

Note: The study has gathered voluminous data. But this report provides only the key points and tables. Annexes contain the details of data and analysis. These are also referred to throughout the report. Readers are recommended to read the full relevant Annexure if it interests them.





1.

Method of the study



The conceptual framework

In this report, six aspects are studied in assessing the state of livelihoods of Adivasis. These are:

- Cultural ethos in which livelihoods are practised
- Resource base within which livelihoods are practised
- External interventions in terms of infrastructure and resource development
- Attributes of households themselves
- The specific activities practised in livelihoods
- Livelihood outcomes

We examine these aspects in the following sections. It would be clear that information on some of these factors need to be gathered from the households themselves, some from the village community and some from even more remote sources who have a broader perspective. This section explains the rationale for the methodology.

Cultural ethos and life goals

The cultural ethos of a community influences its thinking in relation to life goals and interaction with the resources. Aspirations and life goals guide the activities and efforts undertaken by an individual household and the community. The aspirations are in turn shaped by the cultural ethos that evolves over generations and reflects itself in child-rearing and socialisation practices, which in turn influence the thinking of the people when they grow up. Adivasi communities did not acquire the consumerist compulsions seen in non-Adivasi people. Their needs were easy to meet given the abundance of natural resources. In this setting, the culture of sharing was institutionalised by communal ownership of natural resources. Harmonious living with the community members and harmonious interaction of the community with nature were considered more important than the acquisition of material wealth by one individual. Access to necessary forest resources and absence of motivation for exploiting resources beyond basic needs thus became



the dominant traits. The cultural ethos of sharing, of not exploiting and of living in harmony with the community and with the natural resources in which they live characterise the thinking of the Adivasis.

The resource base

This passage describes the typical resource base of the villages inhabited largely by Adivasis in the two states. The specific constellation of resources varies widely across villages. Land, water, trees, forests and animals comprise the resource base which defines how rural people practice their livelihoods. The tribals in these two states live in Agro-Climatic Zone VII (Eastern plains and hills region). The terrain is undulating, hilly and mountainous. The average annual rainfall is generally above 1200 mm. Red lateritic soils are commonly found here. In some regions, the soil is sandy. The region was earlier under dense forests but is currently depleted to varying extent. Non-Timber Forest Products (NTFPs) (mahua, kendu, chironji, wood lopping, sal and karanj seeds, siali leaves etc.) is quite abundant in many parts. Households, particularly in villages close to forests, including the households of the PVTGs, engage in NTFP collection in non-crop seasons. Human-animal conflicts, particularly elephant raids on crops, are common in significant parts of the two states. The farmlands are generally slopy, deprived of irrigation, and divided into three categories: uplands, medium uplands and low lands. The uplands are very slopy and suit either forestry, tree crops or broadcast crops of minor millets or paddy. However, paddy is the most preferred crop in the uplands which are terraced for paddy cultivation. Soil profile in the uplands and medium uplands is generally very shallow with relatively limited

Land, water, trees, forests and animals comprise the resource base which defines how rural people practice their livelihoods.



water holding capacity. Low lying lands are loamy, more fertile and do retain water. High rainfall ensures good drainage density even though the perennial water resources in the region are scarce. Dug wells and village ponds are the chief water resources in most villages. Recently several villages have tapped streams for irrigation, based either on diversion or on pumping, but still, farm irrigation in tribal areas remains much lower as compared to the rest of the country. Small ruminants dominate the domesticated animal population. Cattle are small and non-descript and reared as draught animals. The region does not have a vibrant dairy culture. Male buffaloes are used for the puddling of paddy farms.



Reshaping of resources through external interventions

The principal factor that has completely transformed the lives of Adivasis relate to external interventions that have reshaped their resource base. Most had a negative influence on their resources and lives. These external influences relate to the extractive use of forests or the creation of large structures either for the extraction of minerals or for impounding water. The Forest Act of 1882 usurped the right to the forest and forest lands from the Adivasis and placed it with the State. This made the Adivasi people unwanted interveners in their lands, giving them only a meagre *nistar* rights. The construction activities needed for mining structures, the huge mining wastes, and in the case of dams, the submergence upstream, led to the destruction of the Adivasi settlement. Through the years, Adivasis have suffered from very large-scale displacement and dispossession of their lands³. In some cases, the same communities have been displaced more than once. Such 'development initiatives' in Adivasi inhabited areas bring them in conflict with a value system that is alien to them. The demographic change usually has worked to the disadvantage of Adivasis. Up to the 1940s, Adivasis were the predominant community in the region now known as Jharkhand but are now reduced to just about a fourth of the population. The interference caused by external interventions, whether actual or impending, fundamentally disturbs the life and livelihoods of the Adivasi communities, creating a wholly uncertain future for them.

Some positive influences of the external interventions relate to Adivasi access to healthcare railways, road and electronic

3 See for instance Buch MN, "The Madhya Pradesh Forests, their Degradation and its Implications"; India International Centre Quarterly; Vol. 17, No. 2 (Monsoon 1990), pp. 117-124 (8 pages)



(and more recently digital) connectivity. While access to healthcare has contributed to increased life expectancy among Adivasis, rail, road and electronic connectivity opens up possibilities of commerce and mobility.

practising cultural arts and crafts, traditional medicine and engagement in government wage programmes such as MGNREGA are common. Adivasi households are also recipients of remittances from their kin working elsewhere and cash support under government schemes.

Attributes of Adivasi households

Size of the operational holding, land topography, soil quality, access to irrigation, labour availability at home, farm assets, family size, age and education profile, the minimum income needed, household indebtedness, the health status of family members, sources of non-farm income (if any), access to credit, market, social and institutional assurances (for instance membership of a local SHG) are the attributes of interest in shaping the livelihoods choices and status of a family. Families from the same clan and within the same village also differ on many of these parameters leading to differential livelihoods choices and overall wellbeing for them.

Livelihood outcomes

Quality of housing, consumption of adequate and nutritious foods, health status, education of children, other dimensions of consumption such as clothing, tobacco and alcohol, entertainment, consumption of digital infotainment and acquisition of household and productive assets (TV, LPG connection, refrigerator, motorcycle, tractor or power-tiller, pump sets, draught animals, weeding equipment, storages) are some of the key livelihood outcomes.

Livelihood activities

Adivasis farm their lands, engage in small ruminant animal husbandry, gather NTFPs for household consumption and sale and undertake wage work in nearby farms. A substantial number of them migrate, at times with families, for seasonal occupations in distant locations. Certain non-farm activities such as running petty shops,

Three-level investigation

On the cultural ethos of the Adivasi communities, their traditional resource base and external interventions, this study has obtained information from intellectuals, community leaders, activists and academia. Information concerning the local resource base and issues of external influences, as relevant to the village situation, was also obtained from the community through Focus Group Discussions (FGD). Information on household attributes and livelihood was obtained through household-level surveys.



Sample size and sampling method



The survey and fieldwork had several constraints. It is known that while on one hand ‘sampling error’ of a parameter tends to fall with the increase in sample size, the ‘non-sampling’ error due to non-response, faulty investigation and incorrect recording etc. tends to rise faster than the sampling error. The overall reliability of such an exercise depends on error control, which is the sum of these two. This exercise was aimed at understanding several parameters. However, fixing the sample size based on the population size and estimated variation in the parameter within the population was not possible. Based on these considerations, it was decided to limit the sample size to a total of 5000 households and the focus was kept on “tribal dominated” administrative blocks covered under the Intensive Tribal Development Program (ITDP). The basic sampling unit was a village. In one village 20 households, chosen based on systematic sampling, were surveyed. Since the PVTG population is barely 4% of the tribal population and concentrated in a few villages, it was decided to allot 4% of the total sample size to PVTGs. The spatial distribution of PVTG households was decided by the location of PVTGs rather than restricting to blocks where the rest of the Adivasi sample was chosen. We allocated 10 villages (or hamlets) for PVTG households. Of these, five each were chosen from Jharkhand and Odisha.

Sampling for non-PVTG villages



Random household samples were drawn from 254 villages across eight districts (from 15 districts with ITDP blocks) in Jharkhand and eight districts (from 13 districts with ITDP blocks) in Odisha.

The 254 villages across 16 districts were identified in proportion to population: if X is the total population of these 14 districts and m^i the ratio of the population of i^{th} district to total population of randomly selected 16 districts. Then villages allocated to i^{th} district will be $254 \times m^i$.

A maximum of five villages per block were identified for the survey. Based on this criterion, survey blocks for each district were selected randomly from the ITDP blocks in that district. For example, if the district has 17 sample villages, then four blocks were randomly selected from which those 17 villages were selected. Sample villages in a block were selected randomly from the total villages known to have an Adivasi population in the block.

Based on this criterion, survey blocks for each district were selected randomly from the ITDP blocks in that district.



Table 1.1: Sampled PVTG blocks

S. No.	Jharkhand		Odisha	
	District	Block	District	Block
1	Dumka	Gopikandar	Gajapati	Guma
2	Pakur	Pakur	Rayagada	Kalyanasingapur
3	Sahibganj	Rajmahal	Keonjhar	Bansapal
4	Pakur	Mahespur	Rayagada	Muniguda
5	Godda	Sunderpahari	Sundargarh	Lahunipara



Due to the movement restrictions in the wake of COVID-19 pandemic, household surveys could not be conducted in the three of the five sampled blocks for PVTG in Jharkhand. So, in this report, we are not providing any data on PVTG in Jharkhand.

The survey instrument, the guiding questions to steer the FGDs in villages and the points around which interviews were held are given in Annexure – L.

Table 1.2: Sampled district and number of villages

S. No	State	District	Number of sample blocks	Number of villages
1	Jharkhand	Dumka	5	24
2	Jharkhand	East Singhbhum	4	21
3	Jharkhand	Gumla	5	30
4	Jharkhand	Latehar	3	14
5	Jharkhand	Lohardaga	2	10
6	Jharkhand	Ranchi	6	33
7	Jharkhand	Sahebganj	2	8
8	Jharkhand	Saraikela-Kharsawan	3	16
Subtotal			30	156
9	Odisha	Gajapati	1	1
10	Odisha	Kandhamal	3	14
11	Odisha	Keonjhar	1	1
12	Odisha	Koraput	4	24
13	Odisha	Mayurbhanj	5	26
14	Odisha	Nabarangapur	4	25
15	Odisha	Rayagada	1	1
16	Odisha	Sundargarh	4	6
Subtotal			23	98
Total			53	254





The overall data size is as below:

- The household survey included **4,994** households across **53** blocks and 16 districts in Jharkhand **3069** and Odisha **1925**; of these, **4,135** were Adivasi households and **859** were non-Adivasi households
- FGDs were conducted in **28** villages
- 40** leading Adivasi and Non-Adivasi resource persons knowledgeable in the Adivasi livelihood issues were interviewed in-depth

The entire data collection exercise was conducted during March-April 2021 in Jharkhand and April-May 2021 in Odisha. While discontinuities introduced by the pandemic constrained some of these exercises, we have gathered substantial qualitative and quantitative data about the situation regarding the livelihoods of the Adivasi people.

Explanatory Note

The sampling method is given in the previous section. The data and its inferences are presented hereunder:

- 1.** Data from Jharkhand has two categories: Adivasi people and Non-Adivasi people. Data from Odisha has three categories: Adivasi people, Non-Adivasi people and PVTGs. PVTGs are essentially Adivasi, but data on them is shown separately since they are considered a special category among Adivasi people. The “Non-Adivasi” category is not homogeneous. The households included in this category belong to different castes, including those of scheduled caste in some villages of Odisha and OBCs in Jharkhand.
- 2.** Data for female-headed households is also presented separately in the section on gender and livelihoods.

- 3.** An attempt is made to present the picture “as is” without necessarily offering explanations as to why it is so.
- 4.** Household income comprises two components: actual cash income earned during the year from the farm produce, wages received, pension etc. credited in bank accounts, income from businesses, etc. The second component is of “imputed value” of goods produced or collected but consumed at home.
- 5.** Income figures are net⁴ out-of-pocket costs. The cost of applied family labour or homegrown inputs (farmyard manure, animal draught power) has not been netted in the gross sales proceeds.
- 6.** For income from crops in Kharif, Rabi, and summer seasons, Minimum Support Prices (MSP) from the government of India for years 2020-21 were considered. Where MSP was not available, the farm income was calculated using the sell value (aggregated across the households) and sell quantity (aggregated across the households). Where such calculation was not possible, but a price estimate was required to calculate the imputed consumption value, reasonable assumptions were used. For example, an average of various oilseed MSP was used as the price for linseed.
- 7.** Income from vegetables was calculated using the ratio of aggregated sell value and aggregated sell quantities. In some cases, all the production of a vegetable in that season across the households were used for own consumption. In such cases, reasonable assumptions were made to get the price estimate required for imputed value calculation. For example, the summer prices of coriander in Odisha are estimated as an average of coriander prices in Kharif and Rabi. For garlic prices in Odisha, Jharkhand prices are used since all garlic consumption from surveyed households was reported for own consumption.
- 8.** Where information was not available on the prices for Phapra, Kodra, Gangdi and Kulthi crops and own consumption was reported, Rs 1000 per quintal was used as an estimate.

Very minor and incidental crops, the produce of which was entirely consumed at home, and where no estimate of quantity was available were not included in the income calculation. Such underestimate has happened for only a handful of households.

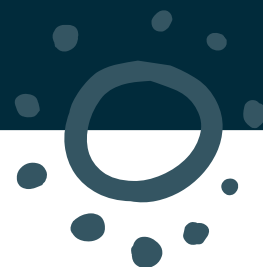


⁴ Income has been calculated by subtracting the operating cost from the revenue earned from the particular activity



2.

Social and cultural ethos in which livelihoods are practiced



Forty resource persons deemed knowledgeable in the tribal way of life were interviewed on various aspects of this study. In addition, FGDs were conducted with village communities, including women and youth. The objective of the FGDs was to get the village level collective perspective or the commonly shared views on the state of Adivasi livelihoods. Altogether some 25 FGDs were analysed as part of this study⁵. Of these, 18 were conducted in Jharkhand and 7 were conducted in Odisha. The 18 FGDs in Jharkhand were spread over seven districts — Dumka, East Singhbhum, Saraikela-Kharsawan, Latehar, Gumla, Lohardaga and Ranchi. The seven FGDs in Odisha were conducted in Koraput and Mayurbhanj districts.

The FGDs were designed to take collective perceptions of three distinct groups within the Adivasi community — Adivasi women, Adivasi youth and general (mixed). Therefore, three different types of FGDs were conducted — women FGD, Youth FGD and general (mixed group) FGD. Of the 25 FGDs, 10 were women FGDs, little more

than nine were youth FGDs and the remaining six were general mixed group FGDs. The ratios had slight changes between Jharkhand and Odisha. In Odisha, the proportion of women FGDs (three out of seven) was higher compared to Jharkhand (seven out of 18). While in Jharkhand the proportion of youth FGDs [seven out of 18] was more than in Odisha [two out of seven].

This section is based on information, views and data obtained from these investigations. In these three different FGDs, there was a convergence of views on some issues, while on some other issues convergence was less than complete. This section focuses on the issues that have a bearing on the state of livelihoods of the Adivasi people. This study attempts to derive a coherent line of thought from the mixed views received.

Annexes A and B give the full details of the views obtained through the interviews and the FGD, respectively.

⁵ Around four FGDs were not included in this analysis due to apprehensions about the data reliability.



2.1 Resources, Income and Wealth



Almost all of the interviewees claimed that Adivasis are different from non-Adivasis in their worldview, though not all of Adivasis were entirely alike. The worldview referred here includes their perspectives about their life and ecosystem. It also includes the basic principles that structure their social relationships — within the family, neighbourhood, own community, the other communities, governance systems, gender relations and coping strategies.

Though various respondents shared various things, two aspects were mentioned by all: (1) non-hierarchical and mutual or symbiotic relationship among themselves and with all other elements and creatures in nature and (2) togetherness and sense of community.

Both these aspects are reflected in their livelihood practices as well as in language, dance, songs, paintings, and other aspects of their life. Celebrations of Adivasi religious rituals connect them to nature while bringing the community together. Anuj Lugun said, “The relation of Adivasis with the jungle is to live together. It is not about supremacy or control.” Archana Soreng said, “Every [Adivasi] group in Odisha, irrespective of its language, culture and tradition, identifies itself as Adivasis, and the thing that binds them together is their outlook of land and forest.”

Celebrations of Adivasi religious rituals connect them to nature while bringing the community together.



Human values like mutual support, collaboration and cooperation are the integral parts of Adivasi society. Biju Toppo said, “If one wants to build a house, the entire village would help in building the house. If one wants to lay a thatch, everyone would come together to lay it. Everyone would together get wood and bamboo from the forests and then will make the house. The same happens during the transplantation.”

Most respondents added that Adivasis have their distinct collective identity and they prioritise collective wellbeing over individual progress.

The chief attributes of Adivasi social and cultural ethos are captured in the “Modes of Thinking” as posited by anthropologist Georg Pfeffer. He states that living in an abundance of nature, which makes the satisfaction of basic needs relatively easy for the Adivasi, they evolve a mode of thinking which he calls “immediate return system”. This mode facilitates oneness with nature, collective living, sharing of nature’s bounty within the clan. It makes savings, planning and acquisition of goods and assets superfluous since the belief is that nature will provide for each basic need when it arises. The reason for this mode of thinking is the natural resource abundance. Economist E. Boserup suggests that as resource abundance reduces and (land) scarcity appears many practices of this mode of thinking will give way.

2.2 Issues Related to Adivasi identity



There are 32 different Adivasi groups in Jharkhand and 62 in Odisha. Groups relatively large in number — such as Santhal, Oraon, Munda, Kandh, Kharwar, Gond, etc. — are referred to as major tribes. The major groups mostly practise settled agriculture and gather minor forest produce for livelihood. The smaller groups are often artisans; some of them practise shifting cultivation. One respondent mentioned that the Adivasi middle class has gradually emerged in the cities. It comprises academicians and government employees.



Some respondents see the heterogeneity in the following aspects:

- ❏ Adivasis in central India are divided into two major language families – Dravidian (e.g. Gond, Kurukh) and Austroasiatic (e.g. Santhal, Munda).
- ❏ Rituals, songs, dress, dance vary among the Adivasi groups.
- ❏ Based on religious beliefs, Adivasis are divided into three categories— traditional belief, Hindu and Christian
- ❏ Based on the primitivity of origin or settlement, there is some discrimination even within an Adivasi group. A clan that first came to a particular village has a higher social status in that village as compared to the ones who came later.

However, the common thing that makes them one group is that they live in harmony with nature. The ethos that all the Adivasi groups uphold in their collective actions in agriculture, harvesting forest produce, dancing and singing together, etc. is also their common trait. Non-hierarchical social order is yet another common value among various Adivasi groups.

Though all interviewees said that Adivasis are not a homogeneous category, many of them also said that as far as political issues were concerned, Adivasis, especially in Jharkhand, remained united by and large. The political issues of particular concern to them are related to access and control over forests, land rights, land acquisition, and a separate religious code for the Adivasis. On all these counts, Adivasis portray one identity. "Jharkhand movement happened because we went beyond the factional identity in connecting to our larger identity as Adivasis," said Biju Toppo.

2.3 Adivasis and forests



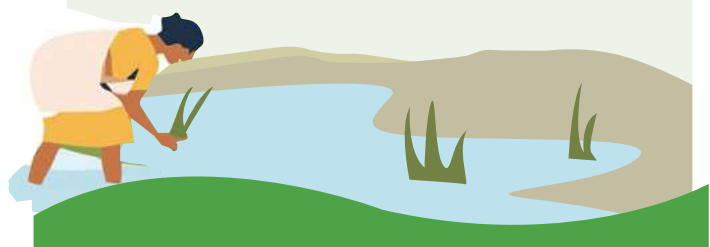
As one tribal leader Anil Gudiya pointed out, "Adivasis are interconnected with nature and forests; their livelihoods, living condition and progress are dependent on the forests. How can Adivasi people destroy their forests?" Another leader Karia Munda argues that Adivasis have an intimate understanding of the forest and its flora and fauna. He points out that there are ways and seasons/ months of cutting as well as planting trees for ensuring forest sustainability. Adivasi leaders strongly feel that the deterioration in forest quality is a direct consequence of the incursion of non-Adivasi people in their land and the installation of dams and mineral-based industries.

2.4 Adivasis and their agriculture



When compared to farmers in the alluvial plains, the agricultural resource conditions of Adivasi people are much poorer. Topography is hilly, lands slopy and soils thin. The conditions in which Adivasi undertake cultivation varies among groups and resource conditions. PVTGs have followed Jhoom cultivation for long, and when prevented, they undertake farming on slopy and poor-quality land. Broadcast seeding of a plethora of crops has remained a dominant practice. Even to this day, as our survey reveals, as many as 21 crops were reported by respondents. Their practices characterise communal farming and intermeshing of cultural life, including festivals, with farming. Traditionally, farming is done to meet the family subsistence needs, which makes it odd for Adivasis to deal with the markets. Like several other farming communities, most of the farm work is done by the women while men prepare the land for sowing.

Even to this day, as our survey reveals, as many as 21 crops were reported by respondents.



2.5 Adivasis and Migration for work



Because of the low farm output, decreasing access to and increasing pressure on the forests force the Adivasi to migrate out of the village for work. As their education levels are low, a majority of Adivasi youth migrate for the low paying casual manual work, as was also noted in the SECC quoted in the Introduction. For a large number of households, wage income from migration is an integral part of their budget. In some of the more distressed locales, illegal systems of trafficking, often camouflaged as employment-service agencies, have come up. This pull of a consumerist lifestyle works in tandem with the push from the stagnant and low-income economy and life within the village. This combination makes a lot of people to migrate for low-income urban odd jobs. Dr. Bipin Jojo, quoting a study, mentioned that 90% of the Adivasi families in Odisha have at least one member working in some distant town.



2.6 Urban and Outside Influence on Adivasi people



When the Adivasi migrate to urban areas for work or when they come in contact with mining and industrial operations in Adivasi lands, an influence is exerted on their way of living and thinking. An important source of institutionalized influence on the Adivasi way of life is from the schools run by government or other agencies. Here children from Adivasi and non-Adivasi communities learn together. In these schools, as pointed by some interviewees, the non-Adivasi way of living is portrayed as superior by the teachers. This bias is also reflected in the institutions of higher education. This forces the Adivasis to emulate the behaviours of non-Adivasi, which later translates into their way of thinking and living. This is how individual progress rather than community wellbeing, acquisition and wealth enhancement rather than sharing with the community, and the urban elements of patriarchy have made inroads in the Adivasi way of life and thinking.

2.7 How government schemes and programs influence Adivasi life



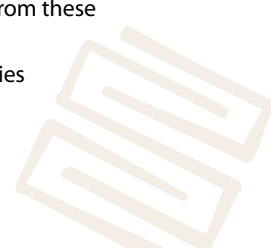
Aside from programmes and schemes specially designed for Adivasi people under the Tribal Sub-Plan, funded under Article 275(1), respective state and the central government have also undertaken programmes for the improvement of infrastructure, supply of drinking water, education, health, Panchayati Raj, etc., in Adivasi lands. Two issues tend to dominate the way these programmes impact Adivasis.

The first deals with their worldview as stated by some of the interviewees. Adivasis are less aggressive and persuasive and reluctant to assert or come forward to claim benefits. Sonajharia Minz said that in a mixed population village, electricity, drinking water, etc. would reach the Adivasi hamlet in the last. Most of the time, this lack of persuasiveness is interpreted as the lack of awareness by the mainstream society. The second deals with the degree of fit of the scheme design and the Adivasi way of life. Often, in centrally designed schemes, ground-level preparations of projects and procedures do not fit well with the way Adivasis live and the administrative procedures do not permit much flexibility in their implementation. On the other hand, non-Adivasi people have a much stronger social connect and traction with the lower bureaucracy and can manage to implement the schemes meant for Adivasi people in a manner that benefits them rather than the Adivasis. This has been seen in almost all Adivasi lands, particularly when they pertain to the PVTGs. As a consequence, seldom do Adivasis find government schemes and development programmes of much relevance to them.

2.8 Women in Adivasi Society



Women have enjoyed greater freedom and equality in an Adivasi society than in the non-Adivasi communities. This is more apparent in matters such as free movement and free practice of occupations. However, Adivasi women suffer the same, if not higher, degree of drudgery in relation to household and farm and other livelihoods work and a similar lack of control on incomes earned from these sources. Issues of land rights are as strongly loaded against women in Adivasi communities as elsewhere. Thus, patriarchy is practised in Adivasi communities as well but its specific manifestations are somewhat different.





3.

The resource base within which livelihoods are practised



The natural resource base of a region has a profound and defining influence on the livelihoods of its people. This natural resource base comprises land, water, forests and animals. This section gives an overview of the natural resource base in the region inhabited by Adivasi people in the two states. The entire area falls under the Central Indian Plateau and comes under Agro-ecological zone VII. The landscape of Adivasi areas in the two states is undulating, hilly and mountainous. A large part of the region was under dense forests till a century ago.

Of the 0.8 cr. hectares of land in Jharkhand, 30% is under forests, 5% is under scrub forests, 9% is wasteland, 2% is under water bodies and 37% is classified as cultivable. Of the 1.6 cr. million hectares of land in Odisha, 37% is under forests, the cultivable area is 35%, 5% is under pastures and miscellaneous trees, 5% is wasteland, and the remaining is in non-agricultural use.

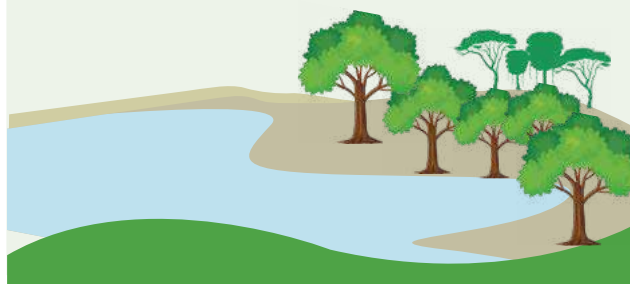
With fairly well-defined uses, land in the region can be grouped into three categories: uplands, medium uplands and low lands. Both the states are well endowed with rains; in most places, the states receive above 1200 mm annual rainfall and have a high drainage density. A substantial number of streams in the region have water flow up to the start of summer. The Adivasi homelands are also replete with rich and variegated minerals, **mainly bauxite, iron ore and coal**. Forests are of the tropical semi-evergreen category, dominated by sal trees. However, forest resources have been under severe pressure. Elephants rule the forests in a substantial part of the region. Human-elephant conflict is quite common in the region given growing fodder shortages as a result of depleting forest cover. This leads to elephants raids of the farmlands proximate to the forests. Animal husbandry is dominated by small ruminants in both the states. Local cattle are small-statured with a relatively small yield of milk. As a universal norm in the region, cattle grazing is largely free

or unrestricted after Kharif crops are harvested. Piggery and backyard poultry are also very common.

Natural and man-made resources available in Adivasi villages are summed up in Annexure D for both states. The key points are summarised hereunder:

Water for domestic use as well as irrigation is a critical natural resource. The location of water source in the landscape determines the extent of the vulnerability of Adivasi households to water-induced stress. In the survey in Jharkhand, 52% of the Adivasi villages and 43% of the non-Adivasi villages reported having a pond or a tank or a water reservoir to meet their domestic water needs. About 96% Adivasi villages and 97% non-Adivasi villages had access to public sources of drinking water. In Odisha, almost all the villages had access to public sources of drinking water. However, only 44% Adivasi, 60% non-Adivasi and zero PVTG villages had a pond, water

The location of water source in the landscape determines the extent of the vulnerability of Adivasi households to water-induced stress.



reservoir or tank. Many households had made dug wells for irrigation and other domestic requirements. Access to ponds and even wells substantially relieves the households from dependence on uncertain power supplies or water supply through tankers. However, access to village water reservoirs in the region has its own hazards. About a fifth of the villages in Jharkhand, Adivasi or otherwise, reported contamination of water resources due to proximate mines. In Odisha, a third of the Adivasi villages suffer water contamination from nearby mining activity.

Adivasi people and forests are considered to be very closely linked. In Jharkhand, we found that 80% of Adivasi villages and 57% non-Adivasi villages were located within three kilometres of forests. In Jharkhand, however, implementation of the Forest Rights Act seems to have lagged as only 7% of the Adivasi villages had applied for community forest rights and virtually none had been granted these rights over resources so intimately connected with their life. In Odisha, all PVTG villages, 88%

of Adivasi villages and 75% of non-Adivasi villages were within two kilometres of forests. All PVTG villages were within forests. Again, the implementation of the Forest Rights Act can easily be made more people-friendly as only a few villages had applied for community forest rights and even fewer were given these rights (see section 4). The travesty is that, though forest resources are both shrinking and kept out of the control of the villages, the villages suffer the most from wildlife attacks and loss of crops and livestock from the marauding wild animals. Over 50% of the Adivasi villages in Jharkhand and 75% in Odisha reported increasing damage to their crops from elephant and other wild animal raids.

The study finds the need to improve Adivasi household access to natural resources of critical importance. The situation regarding access to human-made resources is covered in the next section.





4.

Infrastructure and resource development



4.1 Secondary data

4.1.1 Electrification

Electricity access for irrigation is not available in several Adivasi villages of Jharkhand and Odisha. Electricity supply for farms is comparatively much better in areas dominated by non-Adivasis, such as coastal Odisha. As a consequence, Adivasi people need to depend on non-grid power sources. In some patches, Adivasis were using kerosene and diesel operated pumps for irrigation until quite recently. Solar power-based irrigation schemes have made an appearance, though not widespread yet. Only 1.5% of Adivasi households in Jharkhand have motorised farming equipment. Such low use of powered machines is both a result and a cause of low power consumption in the Adivasi rural areas.

4.1.2 Road density

Jharkhand has 2616 km of national highways and 1886 km of state highways for a land area of 79,710 sq. km. Odisha has 3806 km of state highways and 5762 km of national highways for its land area of 1,55,707 sq. km. These two States in general and the Adivasi areas within them, in particular, have lagged behind the nation in terms of the road network. As in 2019, Jharkhand had a road density of 86 km per 100 sq. km of the land area against the national average of 182 km per 100 sq. km. Odisha is better positioned at 230 km. Several Adivasi dominated villages in the two states have zero road connectivity or connectivity only in the dry seasons. The absence of an all-weather road network impedes the movement of goods and people and acts as a constraint in economic and educational activities (Source: Basic Road Statistics).



4.1.3 Petrol pumps

As of 2016, Jharkhand had 1200 petrol pumps serving all its urban areas and 32,620 villages. In Odisha, 1554 petrol pumps served all of the state's urban areas and 53,135 villages. The density of petrol pumps naturally tends to follow the population and traffic density, and hence they are located away from the villages. In 2016, India had 61,000 petrol pumps serving all its cities and 8 lakh villages. Thus, on average one petrol pump catered to 34 villages in Odisha, 27 villages in Jharkhand and 13 villages nationally. These figures give a rough indication of the development of infrastructure in these two states. Even within the states, areas closer to industrial hubs and urban concentration have a far greater number of petrol pumps compared to less urbanised districts such as Simdega or Jamtara. Low penetration of energy sources discourages the use of motorised transport and irrigation in these regions. (Source: compiled from websites of Bharat Petroleum, Hindustan Petroleum and Indian Oil).

4.1.4 Health infrastructure

The state of Odisha had 6688 health sub-centres, 1288 Primary Health Centres (PHC) and 377 Community Health Centres (CHC) in 2018-19. Corresponding numbers for Jharkhand are 3848, 298 and 171 respectively. These facilities are based on population norms rather than the distance or number of villages dependent on them. As per the 2011 Census, the rural population in Jharkhand was 25 million, and in Odisha it was 35 million. One sub-centre catered to 6500 persons in Jharkhand and 5233 persons in Odisha (national average 5616). One PHC catered to 83,000 persons in Jharkhand and 28,000 persons in Odisha (national average 35,567). A CHC catered to 1,46,000 persons in Jharkhand and a little over 53,000 persons in Odisha (national average 1,65,000). The population norms for Sub-Centre, Primary Health Centre and Community Health Centre are 5000, 30,000 and 1,00,000, respectively. The community access to healthcare is better in Odisha than in Jharkhand, though neither is very badly off compared to the national averages. (Source: Rural Health Statistics, Government of India, 2018-19, page 104)

4.1.5 Reach of Public Distribution System (PDS)

Jharkhand boasts of 25,522 PDS outlets;⁶ Odisha has 28,306.⁷ The reach of the Public Distribution System, popularly called PDS, appears to be better in Jharkhand with one PDS outlet for 1.4 villages; in Odisha it is one PDS outlet for near about 2 villages.

4.1.6 Reach of banks

A total of about 2100 bank branches of 40 leading banks (nationalised banks, new generation private sector banks and other prominent private banks) operate in Jharkhand.⁸ In Odisha, there are 3321 bank branches. However, these banking branches are concentrated in industrial hubs and urban centres. Additionally, 453 branches of Regional Rural Banks operate in Jharkhand and 994 in Odisha.⁹ Taken together, on average one bank branch serves 12.5 villages in each of these two states. For Uttar Pradesh, the same source lists 9769 mainstream bank branches and 4323 RRB branches for 97,941 villages, amounting to 7 villages per branch. A comparison with more developed states would of course show much larger gaps. The deficit in banking reach in these two states is obvious, and perhaps linked to the remoteness of the villages but also to niggardly rural incomes in these two states.



6 <https://aahar.jharkhand.gov.in/district-reports/district-dealer>
 7 <http://portal.pdsodisha.gov.in/FPS/OnlineFPSReport.aspx>
 8 <https://www.theifscode.com/state/jharkhand>
 9 <https://www.theifscode.com/state/odisha-orissa>



4.1.7 Mines, dams and displacement



The two states are rich in mineral wealth. This has led to the establishment of a large number of mining institutions both in the public and private sectors. The upper reaches of the two states also have dams on rivers like Mahanadi, Koel, Karo, Subranrekha, Indravati, Damodar etc. In fact, the dam construction and mining enterprises are the most noticed external intervention in the two states. And both have strong negative consequences for the Adivasi people as they bear the brunt of displacement and loss of land. As per the portal of the Jharkhand Government, a total of 4058 mining leases are given.¹⁰ Odisha lists 600 mines in the state, mainly of bauxite and iron ore.

4.2 Findings from this study

In this report, the village level information is collected from every village selected for household surveys. A village with Adivasi population in majority was termed Adivasi village. It was termed a PVTG village, if the majority population belonged to the PVTGs. These villages were located in very similar agro-climatic and physical settings. As we note from Table 4.1, even though Adivasi and non-Adivasi villages were in similar geographies, for a majority of parameters, Adivasi villages were more resource deficient as compared to non-Adivasi villages. Further, PVTG villages tended to lag behind even more. For instance, the average Adivasi village was further away from block headquarters. When compared to non-Adivasi villages in the same area, fewer Adivasi villages had good road connectivity with the block headquarters. When our teams visited the villages for the survey, road conditions were generally poor.

The same holds for intra-village roads. Worse, the public transport system connected fewer Adivasi villages than the non-Adivasi villages. Mobile connectivity was available in 73% of the Adivasi villages and 90% non-Adivasi villages. Few Adivasi villages had a working school, and secondary and high schools were located farther from Adivasi villages compared to non-Adivasi villages. Also, ration shops were located in fewer Adivasi villages than non-Adivasi villages. The Mid-Day Meal scheme was not functional in most Adivasi villages. Thus the “development deficit” of Adivasi villages as compared to non-Adivasi villages is fairly discernible. With regard to the above parameters, the situation of Adivasi villages in Odisha is more sombre compared to Jharkhand (see table 4.2).

In Jharkhand, 7% Adivasi villages and 3% non-Adivasi villages applied for Community Forest Rights under Forest Rights Act and 1% Adivasi village and 3% non-Adivasi villages received the CFR. In Odisha, 30% Adivasi villages, 35% non-Adivasi villages and 40% PVTG villages applied for CFR and 6% Adivasi, 10% non-Adivasi and 20% PVTG villages received CFR.

The tables show that fewer of the Adivasi villages have access to services of NGOs compared to the non-Adivasi villages. More non-Adivasi villages are granted benefits under the Forest Rights Act than Adivasi villages. This report merely presents the data. It can be argued that the legacy of the road network is such that a non-Adivasi village becomes “central” and a “gateway” to surrounding Adivasi villages rather than deliberate neglect of the Adivasi villages. However, one can assert that neither the State nor the NGO/civil society has made specific efforts to overcome this legacy and the development deficit of Adivasi villages persists.

¹⁰ https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/T_142CBD09DD20FB846F796384D6A29E8069B.PDF

¹¹ <https://portal.jharkhandminerals.gov.in/portal/MisReports/DistrictWiseLeaseeSummaryReport.aspx>

Table 4.1: Jharkhand public service access in the villages

Aspect	Adivasi	Non-Adivasi
Average distance from block headquarters (km)	13	11
% of villages with all-weather road to block headquarters	74	90
Pucca intra-village road at the time of the survey (%)	63	93
% of villages connected to block headquarters by public transport	46	60
% villages with all-weather intra-village road	66	83
Pucca intra-village road at the time of survey (%)	62	97
Electricity connection in all hamlets %	92	93
Mobile network access %	73	93
Village with primary school %	87	87
Average distance of the nearest primary school (km) when not in village	3.0	1.0
Villages with secondary school %	10	20
Average distance of the nearest secondary school (km) when it is not in village	6.0	5.0
Villages with higher secondary school %	3.0	7.0
Average distance of the nearest higher secondary school (km) when it is not in village	11	8.0
Villages with college %	3.0	7.0
Average distance of the nearest college (km) when it is not in village	18	14
Villages with mines nearby %	10	13
Villages with polluted waterbodies as a result of mining %	17	25
Villages close to forest %	80	57
Average distance from forest (Km) when nearby	2.8	2.1
Villages applied for CFR %	7.0	3.0
Villages received CFR %	1.0	3.0
Villages with ICDS/Anganwadi %	84	80
Villages associated with at least one NGO %	51	60
Villages with PDS outlet %	58	67
Villages with functioning Take Home Ration (THR) programme of Anaganwadi %	55	57
Villages with functioning Mid-day meal scheme %	50	53

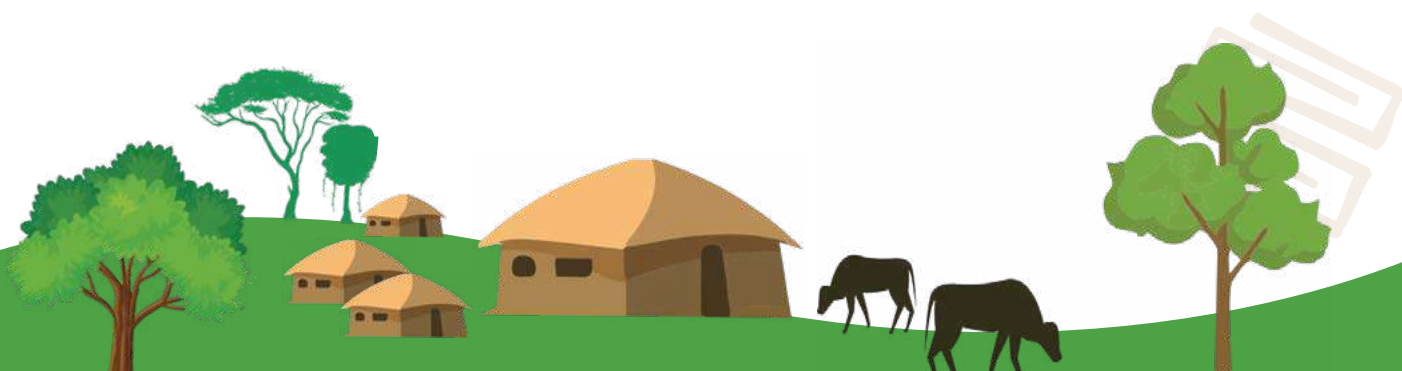


Table 4.2: Odisha Public service access in villages

Aspect	Adivasi	Non-Adivasi	PVTG
Average Distance from block headquarter (km)	14	8.0	20
Villages with all-weather road to block headquarter %	72	75	80
Villages with good condition connecting road at the time of survey (%)	80	100	80
Villages with public transport connecting to block headquarter %	57	80	60
Villages with all-weather intra-village road %	70	90	80
Villages with good condition intra-village road at the time of survey %	66	85	80
Village with electricity access in all hamlets %	86	95	100
Villages with access to mobile network %	74	85	40
Villages with primary school %	78	100	100
Average distance of the nearest primary school (km) when it is not in village ¹²	2.0		
Villages with secondary school %	5.0	25	40
Average distance of the nearest secondary school (km) when it is not in village	5.0	5.0	4.0
Villages with higher secondary school %	11	20	40
Average distance of the nearest higher secondary school (km) when it is not in village	8.0	7.0	8.0
Villages with college %	2.0	5.0	20
Average distance of the nearest college (km) when it is not in village	13	11	18
Villages close to mines %	3.0	0.0	0.0
Waterbodies contamination due to presence of mines has declined % of villages with mines nearby ¹³	33		
Villages close to forest %	88	75	100
Average distance of forest when nearby	1.7	8.9	0.0
Villages applied for CFR %	30	35	40
Villages received CFR %	6.0	10	20
Villages with functioning ICDS/Anganwadi %	89	90	100
Villages associated with NGO %	34	50	100
Villages with PDS outlet %	31	45	40
Villages with functioning THR programme %	48	50	20
Villages with functioning Mid-day meal scheme %	48	50	60

12 All non-Adivasi and PVTG villages have primary school.

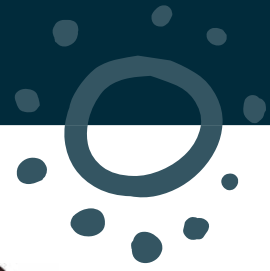
13 In the villages surveyed, non-Adivasi and PVTG villages were not found to be in a close proximity of mines.





5.

Attributes of households surveyed



5.1 Sample Characteristics



Household size

Table 5.1: Average household size in Jharkhand

	Adivasi	Non-Adivasi
Average HH size	5.1	4.9
Households	2,464	559

Table 5.2: Average household size in Odisha

	Adivasi	Non-Adivasi	PVTG
Average HH size	4.7	4.3	4.9
Households	1,496	300	100



Table 5.3: Education level of household head in Jharkhand (all values are the percentage of total)

Education level	Adivasi (2160 households)	Non-Adivasi (508 households)
No school education	53.1	40.2
less than primary	3.9	3.3
Primary	8.3	7.3
More than primary and less than matriculation	18.4	22.0
Matriculation	8.2	14.8
More than matriculation and less than HSC	2.5	2.2
HSC	3.4	4.7
Attended college but did not complete	0.6	1.0
College graduation/ incomplete post-graduation	1.0	2.8
Post-graduation	0.1	1.2
More than post-graduation	0.3	0.6
Professional diploma	0.0	0.0

Table 5.4: Education level of household head in Odisha (all values are the percentage of total)

Education level	Adivasi (1376 households)	Non-Adivasi (272 households)	PVTG (98 households)
No school education	58.6	41.2	70.4
Less than primary	6.9	5.9	3.1
Primary	8.4	7.4	9.2
More than primary and less than matriculation	15.2	27.2	7.1
Matriculation	6.0	7.0	5.1
More than matriculation and less than HSC	1.9	4.4	2.0
HSC	1.9	2.2	2.0
Attended college but did not complete	0.3	1.1	0.0
College graduation/ incomplete post-graduation	0.4	0.7	0.0
Post-graduation	0.3	2.9	0.0
More than post-graduation	0.1	0.1	1.0
Professional diploma	0.1	0.0	0.0



Table 5.5: Education level of female members of the households in Jharkhand (all values are the percentage of total)

Education level	Adivasi (6444 households)	Non-Adivasi (1312 households)
No school education	43.7	39.4
Less than primary	10.4	8.8
Primary	10.4	8.6
More than primary and less than matriculation	18.8	22.2
Matriculation	7.0	8.3
More than matriculation and less than HSC	2.9	2.8
HSC	4.0	5.3
Attended college but did not complete	0.8	1.1
College graduation/ incomplete post-graduation	1.6	2.7
Post-graduation	0.1	0.5
More than post-graduation	0.1	0.2
Professional diploma	0.1	0.1

Table 5.6: Education level of female members of the households in Odisha (all values are the percentage of total)

Education level	Adivasi (3510 households)	Non-Adivasi (604 households)	PVTG (232 households)
No school education	50.3	37.6	53.9
Less than primary	10.3	9.9	12.5
Primary	9.9	10.1	8.6
More than primary and less than matriculation	16.8	23.0	12.1
Matriculation	6.2	6.3	5.6
More than matriculation and less than HSC	1.6	3.0	3.0
HSC	2.8	4.1	2.6
Attended college but did not complete	0.6	1.5	1.3
College graduation and incomplete post-graduation	0.7	1.8	0.0
Post-graduation	0.5	2.0	0.4
More than post-graduation	0.2	0.2	0.0
Professional diploma	0.2	0.5	0.0

In the surveyed villages, heads of households and their spouses were given a functional literacy test. The test result shows that around 45% male and 63% female from Adivasi households in Jharkhand can't read or write at all. In non-Adivasi households the corresponding figures from Jharkhand are 30% and 52%, respectively. In Odisha, 55% male and 75% female from Adivasi households can't read or write at all. The corresponding figures for non-Adivasis are 38% and 55%; and for PVTGs, 42% and 73%, respectively



Table 5.7: Male functional literacy, Jharkhand

	Adivasis	Non-Adivasis
Average reading score (out of 10)	3.8	5.3
Average writing score (out of 10)	4.6	6.6
Average numeracy score (out of 10)	3.8	5.7
Average functional literacy score (out of 30)	11.9	17.1
Percentage of men who scored more than 80% in reading test	25.5	39.3
Percentage of men who scored more than 80% in writing test	30.9	52.8
Percentage of men who scored more than 80% in numeracy test	21.0	37.8
Percentage of men who scored more than 80% in overall functional literacy test	21.8	43.1
Percentage of total number of men with more than 80% overall functional literacy score	21.8	43.1

Total number of male members given functional literacy test: 1150 Adivasis and 267 non-Adivasis

Table 5.8: Male functional literacy, Odisha

	Adivasis	Non-Adivasis	PVTGs
Average reading score (out of 10)	3.3	4.6	4.9
Average writing score (out of 10)	3.7	5.5	4.8
Average numeracy score (out of 10)	2.7	4.3	3.2
Average functional literacy score (out of 30)	9.5	14.2	11.4
Percentage of men who scored more than 80% in reading test	24.0	32.7	30.3
Percentage of men who scored more than 80% in writing test	26.7	44.8	39.4
Percentage of men who scored more than 80% in numeracy test	13.9	27.9	15.2
Percentage of men who scored more than 80% in overall functional literacy test	17.8	27.3	21.2
Percentage of total number of men with more than 80% overall functional literacy score	17.8	27.3	21.2

Total number of male members given functional literacy test: 854 Adivasis, 165 non-Adivasis and 33 PVTGs



Table 5.9: Female functional literacy, Jharkhand

	Adivasis	Non-Adivasis
Average reading score (out of 10)	2.7	3.4
Average writing score (out of 10)	3.1	4.2
Average numeracy score (out of 10)	2.6	3.5
Average overall functional literacy score (out of 30)	8.0	10.9
Percentage of women who scored more than 80% in reading test	18.4	22.9
Percentage of women who scored more than 80% in writing test	21.8	34.0
Percentage of women who scored more than 80% in numeracy test	14.6	22.0
Percentage of men who scored more than 80% in overall functional literacy test	14.3	20.6
Percentage of total number of women with more than 80% overall functional literacy score	14.3	20.6

Total number of female members given functional literacy test: 1976 Adivasis and 423 non-Adivasis

Table 5.10: Female functional literacy, Odisha

	Adivasis	Non-Adivasis	PVTGs
Average reading score (out of 10)	1.9	3.5	2.0
Average writing score (out of 10)	2.1	3.9	2.1
Average numeracy score (out of 10)	1.7	3.2	1.4
Average overall function literacy score (out of 30)	5.4	10.1	4.5
Percentage of women who scored more than 80% in reading test	14.2	28.2	10.0
Percentage of women who scored more than 80% in writing test	13.9	29.5	7.5
Percentage of women who scored more than 80% in numeracy test	9.1	18.1	3.8
Percentage of men who scored more than 80% in overall functional literacy test	9.5	19.4	5.0
Percentage of total number of women with more than 80% overall functional literacy score	9.5	19.4	5.0

Total number of female members given functional literacy test: 1073 Adivasis, 227 non-Adivasis and 80 PVTGs

5.2 Assets and access



Landholding: The average landholding in Jharkhand was found to be 2.3 acres for Adivasi households and 1.3 acres for non-Adivasi households. The average landholding for

female-headed households in these categories was 1.8 acres and 1.3 acres, respectively. Average landholding in Odisha was 1.9 acres for Adivasi, 1.7 acres for non-Adivasi and 1.2 acres for PVTG households. These figures for female-headed households in Odisha were 1.8, 1.3, 1.2 acres, respectively.

Based on landholding pattern in the two states, households were classified in following categories:

- ☒ Landless: no owned land
- ☒ Marginal: own up to 2.47 acres
- ☒ Small: own between 2.47 and 4.94 acres
- ☒ Small-medium: own between 4.94 and 9.88 acres
- ☒ Medium: own between 9.88 and 24.7 acres
- ☒ Large: own more than 24.7 acres.

Based on landholding pattern in the two states, households were classified in following categories:

Table 5.11: Landholding pattern of households in Jharkhand (percentage)

S.No	Landholding class	Adivasi	Non-Adivasi
1	Landless	11.7	30.2
2	Marginal	77.1	64.8
3	Small	7.8	3.9
4	Small-medium	2.4	0.5
5	Medium	0.6	0.4
6	Large	0.5	0.2

Number of households: Adivasi 2464; Non-Adivasi 559

Table 5.12: Landholding pattern of female-headed households in Jharkhand (percentage)

S.No.	Landholding class	Adivasi	Non-Adivasi
1	Landless	12.5	35.0
2	Marginal	76.2	60.7
3	Small	8.2	3.4
4	Small-medium	2.0	0.5
5	Medium	0.3	0.5
6	Large	0.8	0.0

Number of households: Adivasi 911, Non-Adivasi 206



Table 5.13: Landholding pattern of households in Odisha (percentage)

S. No.	Landholding class	Adivasi	Non-Adivasi	PVTG
1	Landless	14.5	28.3	47.0
2	Marginal	69.7	58.3	47.0
3	Small	11.5	9.0	4.0
4	Small-medium	3.6	3.7	2.0
5	Medium	0.5	0.7	0.0
6	Large	0.2	0.0	0.0

Number of households: Adivasi 1496, Non-Adivasi 300, PVTG 100

Table 5.14: Landholding pattern of female-headed households in Odisha (percentage)

S. No.	Landholding category	Adivasi	Non-Adivasi	PVTG
1	Landless	14.9	34.5	50.7
2	Marginal	72.1	55.5	43.3
3	Small	9.9	8.4	3.0
4	Small-medium	2.3	0.8	3.0
5	Medium	0.3	0.8	0.0
6	Large	0.3	0.0	0.0

Number of households: Adivasi 596, Non-Adivasi 119, PVTG 67

A note on the shrinking landholding size of the Adivasi households has been given in Annexure M based on available secondary data. The Tables in Annexure M show how the average operational landholding for Adivasi households is falling. The fall can be inferred from the declining household cultivated land area and the steadily rising number of households.

without a PDS card is much smaller. However, among Adivasis and non-Adivasis in Odisha, almost half of the households did not have BPL cards (Tables 5.15 and 5.16).

5.3 Access to the public distribution system

About 14% of Adivasi households and 19.1% non-Adivasi households surveyed in Jharkhand reported not having any PDS card. Thus, the PDS reach appears to be in need of strengthening. In Odisha, the proportion of households



Table 5.15: PDS card type Jharkhand (percentage)

	Adivasi	Non-Adivasi
APL	1.1	0.7
BPL	63.6	63.1
Antyodaya	20.9	17.0
No Card	14.4	19.1

Number of households: Adivasi 2464, Non-Adivasi 559

Table 5.16: PDS card type Odisha (percentage)

	Adivasi	Non-Adivasi	PVTG
APL	46.3	49.0	5.0
BPL	28.9	27.3	11.0
Antyodaya	19.3	17.3	79.0
No Card	5.5	6.3	5.0

Number of households: Adivasi 1496, Non-Adivasi 300, PVTG 100

5.4 All-season access to irrigation

Table 5.17: All season irrigation availability in Jharkhand

	Adivasi	Non-Adivasi
Households having own land	2,233.0	421.0
Percentage of these having all season irrigation	18.5	16.4
Households having leased land	199.0	35.0
Percentage of these having all season irrigation	14.1	17.1
Households having shared land	269.0	36.0
Percentage of these having all season irrigation	10.4	13.9

Table 5.18: All season irrigation availability in Odisha

	Adivasi	Non-Adivasi	PVTG
Households having own land	1,305.0	225.0	56.0
Percentage of these having all season irrigation	7.4	12.4	42.9
Households having leased land	158.0	20.0	7.0
Percentage of these having all season irrigation	5.1	25.0	0.0
Households having shared land	120.0	18.0	4.0
Percentage of these having all season irrigation	5.8	11.1	25.0

5.5 Distance from forests

Table 5.19: Distance from forest in Jharkhand

	Adivasi	Non-Adivasi
Average distance from forest for households dependent on them for livelihood (km)	2.2	2.3
Households dependent on forest for livelihood (%)	53.0	28.0
Average distance from forest for households not dependent on forest for livelihood (km)	6.1	1.2
Households not dependent on forest for livelihood (%)	47.0	72.0

As Table 5.20 shows, in Odisha both the dependence and proximity to the forest for the PVTG households are higher as compared to that of Adivasi and non-Adivasi.

Table 5.20: Distance from forest distance in Odisha

	Adivasi	Non-Adivasi	PVTG
Average distance from forest for households dependent on forest for livelihood (km)	1.9	2.6	0.2
Households dependent on forest for livelihood (%)	75.0	63.0	91.0
Average distance from forest for households not dependent on forest for livelihood (km)	8.6	6.0	0.0
Households not dependent on forest for livelihood (%)	25.0	37.0	9.0







6.

Adivasi livelihood practices



6.1 Introduction

Farming, animal husbandry, wage work, non-farm activities, collection from common property resources, salaries, pensions and remittances constitute the income streams of rural households. Forests are the major common property resource for the Adivasis. *Nistar*¹⁴ rights provide them access to certain forest produce, while forest regulations define their access to forests for the purpose of collection of diverse products, such as flowers, fruits, roots, leaves and tubers, having economic value. A substantial part of their farm produce and forest collection is directly used for self-consumption. As a consequence calculation of the value of farm and forest produce and the household

Forests are the major common property resource close to the Adivasis.



incomes is difficult. On the other hand, activities that are based on the engagement of the households in the “mainstream” economy relatively more easily yield data about monetised incomes. This study has made an effort to obtain data from the respondents about monetised incomes, recognizing that this may still have gaps in assessing their total income.

As can be seen from Table 6.1, of the 2443 Adivasi households surveyed in Jharkhand, 2206 (90%) households reported engaging in farming activity, 12% each reported incomes from animal husbandry and collection from forests, 68% reported income from wages, 22% received pensions of various kinds or were salaried, close to 18% received remittances from children or kin working in distant places and 30% had income from non-farm activities. The numbers do not add to 100 as households typically engage in more than one activity. They do so either to reduce their total income risk or because one activity is not enough to sustain the family. The latter is more common. It is noteworthy that a mere eighth of the Adivasi households had income from collection from forests.

6.2 Forest dependence

A mere 12% of Adivasi households and 6% of non-Adivasi households reported income from forests.

Table 6.2 shows that in Odisha about 25% of Adivasi households, 40% PVTG households and 15% non-Adivasi households get income from forests. The table indicates that the income dependence of tribals on forests is greater in Odisha. Whether this reduced dependence on forests in

¹⁴ Nistar' means the concession granted for removal from forest coupes (a small area of forest within a compartment that is harvested in a single operation) on payment at stipulated rates, specified forest produce for bonafide domestic use, but not for barter or sale.

Jharkhand is due to dwindling forest resources in the state or due to the opening up of alternate and larger income opportunities is a matter that may need further probing. There is no difference in forest dependence between average Adivasi households and female-headed Adivasi households.

The second point worth noting is the large prevalence and dependence on wage work in Jharkhand: 68% of Adivasi households and 66% of female-headed Adivasi households derive income from wage work. In Odisha, these numbers are 61% and 56% respectively. Thus, wage dependence is slightly lesser in Odisha.

(Note for Tables 6.1, 6.2, 6.3 and 6.4: Incomes reported from different components are averages for the number of households that reported income from that activity and not averages for the whole sample. As such, rows will not add to the total household income figure. All figures are in Rupees for one year, derived from recall data)



Table 6.1: Average annual income from different sources in Jharkhand

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension ¹⁵	Remittance	Non-farm	Households Income
Adivasi (Rs.)	25,861	10,605	7,187	31,645	6,132	15,158	30,313	75,378
Adivasi households that reported income from the source (Nos.)	2,206	295	302	1,673	537	444	746	2,443
Non-Adivasi (Rs.)	19,542	12,332	4,100	42,085	2,965	27,889	45,898	70,235
Non-Adivasi households that reported income from the source (Nos.)	397	52	34	354	135	54	192	549

¹⁵ Income from Salary/Pension, wherever mentioned, is on monthly basis unless mentioned otherwise



Table 6.2: Average annual income from different sources in Odisha

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension	Remittance	Non-farm	Households Income
Adivasi (Rs.)	23,582	4,401	2,952	17,474	4,783	15,551	15,324	61,263
Adivasi households that reported income from the source (Nos.)	1,344	414	367	*909	496	177	573	1,477
Non-Adivasi (Rs.)	24,148	4,937	3,506	24,045	6,865	18,891	26,100	76,117
Non-Adivasi households that reported income from the source (Nos.)	213	45	41	143	112	22	116	284
PVTG (Rs.)	16,890	1,655	1,462	15,400	1,318	9,053	13,323	36,491
PVTG households that reported income from the source (Nos.)	71	22	38	60	44	19	37	98

Table 6.3: Average annual household income source wise for female-headed households in Jharkhand

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension	Remittance	Non-farm	Households Income
Adivasi (Rs.)	24,535	10,028	7,376	32,777	5,818	16,164	37,802	79,754
Adivasi households that reported income from the source (Nos.)	803	109	113	593	278	187	236	908
Non-Adivasi (Rs.)	17,811	12,272	4,735	41,868	3,045	21,083	43,693	69,353
Non-Adivasi households that reported income from the source (Nos.)	128	18	20	138	56	24	69	201

Table 6.4: Average annual household income source wise for female-headed households in Odisha

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension	Remittance	Non-farm	Households Income
Adivasi (Rs.)	20,659	5,251	2,834	16,824	6,205	19,775	19,007	74,840
Adivasi households that reported income from the source (Nos.)	537	210	145	329	257	101	241	586
Non-Adivasi (Rs.)	17,558	8,014	6,100	22,788	5,901	22,300	21,352	76,210
Non-Adivasi households that reported income from the source (Nos.)	78	24	6	49	63	12	44	110
PVTG (Rs)	14,026	985	1,863	13,165	1,034	9,273	18,150	32,300
PVTG households that reported income from the source (Nos.)	48	13	24	41	29	11	22	66

Box 2

Income streams of a representative household

Tables 6.1, 6.2, 6.3, and 6.4 indicate average incomes from different streams for those households that reported income from those streams. However, not all of surveyed households have each of these income streams. Therefore, to put the matter in perspective, we constructed a “Representative Household” for each income category and for that representative household, we put the income figure by taking averages for that stream.

Now, these proportions tell the real overall significance of different income streams for Adivasi, Non-Adivasi and PVTG households.

Clearly farming accounts for a third of income for a typical Adivasi household followed by wages employment and then salaries/pensions. Forest produce accounts for a negligible proportion of a typical Adivasi household income.





Table 6.5: Representative household income (Rs.) in Jharkhand

Income heads	Adivasi	Non-Adivasi
Farming	23,153	13,878
Animal Husbandry	1,270	1,147
Forest Produce	881	249
Non-farm business	9,178	15,765
Wages	21,486	26,651
Annual Salary/pension	16,037	8,593
Remittances	2,731	2,694
Household income	74,736	68,978

Surveyed Households: Adivasi 2464, Non-Adivasi 559

Table 6.6: Percentage share of income streams for representative household in Jharkhand

Income heads	Adivasi	Non-Adivasi
Farming	31.0	20.1
Animal Husbandry	1.7	1.7
Forest Produce	1.2	0.4
Non-farm business	12.3	22.9
Wages	28.7	38.6
Annual Salary/pension	21.5	12.5
Remittances	3.7	3.9

Surveyed Households: Adivasi 2464, Non-Adivasi 559

Table 6.7: Representative household income (Rs.) in Odisha

Income heads	Adivasi	Non-Adivasi	PVTG
Farming	21,186	17,145	11,992
Animal Husbandry	1,218	741	364
Forest Produce	724	479	556
Non-farm business	5,869	10,092	4,929
Wages	10,617	11,461	9,240
Salary/pension	19,031	30,754	6,960
Remittances	1,840	1,385	1,720
Household income	60,485	72,057	35,761

Surveyed Households: Adivasi 1496, Non-Adivasi 300, PVTG 100



Table 6.8: Percentage share of income streams for representative household in Odisha

Income heads	Adivasi	Non-Adivasi	PVTG
Farming	35.0	23.8	33.5
Animal Husbandry	2.0	1.0	1.0
Forest Produce	1.2	0.7	1.6
Non-farm business	9.7	14.0	13.8
Wages	17.6	15.9	25.8
Salary/pension	31.5	42.7	19.5
Remittances	3.0	1.9	4.8

Surveyed Households: Adivasi 1496, Non-Adivasi 300, PVTG 100

6.3 Crop diversification

Adivasi households diversify their farm activities by growing a large number of crops. This can be seen in Tables 6.9 and 6.10 below.

Table 6.9: Crops grown by Adivasi households in Jharkhand (percentage of the households growing a particular crop for the season*)

Crop	Kharif	Rabi	Summer
Maize	18.4	3.5	2.1
Wheat	0.0	57.6	62.5
Paddy	99.3	0.0	18.8
Phapar	0.0	0.9	0.0
Kodra/Madua	3.9	0.0	0.0
Gangdi	0.4	0.0	2.1
Rajma	0.0	0.9	2.1
Kulthi	0.8	4.3	0.0
Masoor	0.1	2.6	0.0
Arhar	4.1	3.0	0.0
Urad	16.4	3.5	2.1
Mustard	1.3	30.3	8.3
Other oilseeds	3.4	0.9	0.0

Number of Adivasi households that cultivated in Kharif: 2173, Rabi: 231, Summer: 48



Table 6.10: Crops grown by Adivasi households in Odisha (percentage of the households growing a particular crop for the season*)

Crop	Kharif	Rabi	Summer
Maize	16.4	16.7	0.0
Wheat	0.0	1.3	0.0
Paddy	96.9	0.0	48.7
Barley	0.0	0.0	2.6
Siur/Masha/Chalai	1.4	0.0	0.0
Kodra/Madua	16.6	11.5	5.1
Sugarcane	0.2	2.6	2.6
Kulthi	2.9	16.7	2.6
Masoor	0.0	12.8	0.0
Arhar	2.9	1.3	2.6
Urad	0.3	2.6	0.0
Mustard	0.1	14.1	0.0
Linseeds	0.1	3.8	0.0
Other oilseeds	1.0	2.6	5.1

Number of Adivasi households that cultivated in Kharif: 1326, Rabi: 78, Summer: 39

*Any given household may cultivate more than one crop in a season and hence the total will not add up to 100.

Thirteen different crops were reported to be cultivated by the sample households. Despite the undulating and hilly topography, almost every Adivasi household grows paddy in Kharif. Some of them grow short duration broadcast-type paddy on uplands and others grow conventional transplanted paddy. An interesting difference is that over half the Adivasi households in Jharkhand grow wheat in Rabi although the proportion of those having access to irrigation is much smaller. This shows the prevalence of wheat grown on retained moisture, rendered possible due to available moisture after paddy harvesting, and prevalence of low temperature. The proportion of Adivasi households growing wheat in Odisha is much smaller though moisture retention is almost as prevalent as in Jharkhand. The other significant crops grown in the Jharkhand are mustard and urad (black gram) and in Odisha mustard and *madua* or *ragi* (finger millet). The diversity of crops is consistent with the fact that resource constellations permit a range of crops that also cover the risk of crop failure.

6.4 Income from forests



The households reported collecting a variety of forest produce. The forest produce collected is listed in Table 6.11.



Table 6.11: NTFP list

1	Fuelwood
2	Fodder
3	Saal / siali leaves /seeds
4	Mahua flower/seeds
5	Kendu leaves
6	Seasonal fruits
7	Honey
8	Bamboo
9	Tadi
10	Mushrooms
11	Chironji
12	Surteli
13	Timber
14	Food (other than seasonal fruits)

With minor variations, caused by different dialects, the list of forest produce harvested in the two states is quite similar. In quite a few cases, a portion of the produce was consumed by the households, but certain produce, like *kendu* leaves, are collected mainly for the market. While the Forest Department does procure collected forest produce, no formal Minimum Support Price appears to prevail. Also, a substantial part of the produce is sold to local traders.

Table 6.12 gives the correlation between average reported income from forest produce and the household distance from the forest. As is expected, the average household income from NTFP sale declines as the village distance from the forest rises. However, this does not seem to be a linear relation, nor is it as apparent in Odisha. The degree of the statistical reliability of the data is possibly not uniform across all classes as the number of households falling in a distance class may not be large enough. It needs to be noted that forest density is as much, if not more, part of the direct correlation between volume of NTFP collected as is household distance from the forest. At the same

time, the number of produce may change as one transits from dense forests to shrub forests and to denuded wastelands. Even the denuded wastelands provide some economic benefit. We observe that for produce like fuelwood (lopping of branches of trees), prevailing prices in the local market can be a strong influencing factor. Such prices would depend on local demand, which in turn is a function of the intensity of economic activities. Districts with higher industrial or mining activities would have larger migrant populations as well as a greater prevalence of commercial eateries needing cheap fuel sources as compared to districts where such activities are less intense. We believe that this explains substantially higher average income from forests reported in industrially / commercially more active districts such as the Singhbhum, Lohardaga etc.

Table 6.12: Distance of village from the forest and average forest-based annual income in Jharkhand

Distance (km)	Average annual income from NTFP (Rs.)
0	8,772
1	6,190
2	5,257
3	3,445
4	900
5	5,500
6	2,000
7	NA
8	2,167
9	NA
10	2,700



Table 6.13: Distance of village from the forest and average forest-based annual income in Odisha

Distance (km)	Average annual income from NTFP (Rs.)
0	2,288
1	3,039
2	3,731
3	2,130
4	NA
5	3,600
6	700
7	2,450
8	2,500
9	NA
10	500



Table 6.14: District wise average annual income from NTFP

District	Average annual income from NTFP (Rs.)
Ranchi	7,201
Lohardaga	12,833
Gumla	5,571
Latehar	6,513
Saraikela-Kharsawan	12,483
East Singhbhum	11,900
Dumka	3,150
Sahebganj	NA
Pakur	NA
Godda	8,998
Mayurbhanj	2,723
Baleswar	NA
Koraput	2,620
Nabarangapur	2,633
Kandhamal	2,950
Sundargarh	3,547
Gajapati	733
Rayagada	7,000
Keonjhar	2,000

NA means either survey was not conducted in that district or households did not report sale of NTFP in the year of survey.

7. Livelihood outcomes



7.1 Income from different streams

The data collected during the survey for this report, reveals that the average annual income for Adivasi households in Jharkhand is Rs. 75,378 (details in table 7.1). Given the average family size at 5.1, the average annual per capita income comes to Rs. 14,780. The corresponding number for non-Adivasi households is Rs. 14,333. In Odisha, the average annual per capita income is Rs. 13,034, Rs. 17,701 and Rs. 7,447 for Adivasi, Non-Adivasi, and PVTG households, respectively. The data presents overall income poverty of the Adivasi households in both the states. It may be noted that the macroeconomic data suggests that the average per capita income in rural India is almost five times that found in this survey.

A closer look at tables 7.1 and 7.2 lead to the following inferences

- At a gross comparison level, monetised value of NTFP contributes barely 10% of the total income for Adivasis in Jharkhand and 5% for the Adivasis in Odisha. It is possible that non-monetised consumption of food (roots, fruit, leaves, etc.), fodder, fuel and medicine, etc., collected from the forest is a significant component at least for the Adivasis and PVTG.
- Wage income accounts for a 30% to 40% of the household income for the Adivasis and PVTGs.
- The non-forest and non-farm components of income – remittances, pensions etc. – contribute a very significant part of the average annual income.
- Households with women heads appear to be earning larger total income than average Adivasi households in both Jharkhand and in Odisha. But their income from non-farm occupations is smaller than that of the overall Adivasi community. In terms of value, farming and wage incomes appear to contribute more to such households followed by income from Government-sponsored pension sources.



7.1.1: Income variations across districts

The survey was done to assess Adivasi and PVTG household income in Jharkhand and Odisha and compare it with the income of non-Adivasi people. The sampling plan was based on this objective. The number of respondent households in each of the three categories and their spread across districts permitted us to make only indicative figures about income variations of PVTG and Adivasi people across districts. In fact, in Jharkhand, we could not collect data from all the sampled blocks due to movement restrictions in the wake of COVID-19 pandemic. As a result, the PVTG data is not representative of the whole state of Jharkhand and hence we did not provide data for PVTGs in Jharkhand. However, in the following tables on district wise income, the PVTG data has been provided for Jharkhand also. In Jharkhand, the highest average annual income for an Adivasi household occurs in Sahebganj. Adivasi households of Godda, Lohardaga, and Singhbhum districts also have substantially higher income compared to Adivasi households from Gumla, Ranchi, Latehar districts. Similar difference in average annual Adivasi household income is observed in Odisha, wherein Adivasi households in Mayurbhanj district have substantially higher income compared to Adivasi households in other districts (see table 7.2).

While non-sampling error is a possibility, we believe that this difference is due to higher income from non-farm activities, the presence of service sector and wage work (including long-distance migration). The reliability of streamwise incomes for the diverse districts tends to reduce due to insufficient sample sizes. Study of inter-district differences in incomes is suggested to obtain data on income from different streams and relate it to other facets of the districts such as the mining industry, tourism and other sectors.

The study team noted that in Jharkhand, the highest average annual income for an Adivasi household occurs in Sahebganj.



Table 7.1: District wise income: Jharkhand

District	Average household income (Rs.)				Number of households			
	Total	Adivasi	Non-Adivasi	PVTG	Total	Adivasi	Non-Adivasi	PVTG
Ranchi	69,383	67,845	76,594	NA	660	540	120	0
Lohardaga	93,660	95,259	87,719	NA	198	156	42	0
Gumla	60,955	62,419	53,452	NA	585	490	95	0
Latehar	68,992	72,773	55,919	NA	264	204	60	0
Saraikela-Kharsawan	85,163	87,228	76,131	NA	318	259	59	0
East Singhbhum	71,568	72,553	67,341	NA	423	344	79	0
Dumka	69,920	72,573	68,691	48,515	472	358	74	40
Sahebganj	1,22,654	1,34,621	1,05,274	65,743	158	113	30	15
Godda	15,1027	NA	NA	1,51,027	20	0	0	20

Table 7.2: District wise income: Odisha

District	Average household income				Number of households			
	Total	Adivasi	Non-Adivasi	PVTG	Total	Adivasi	Non-Adivasi	PVTG
Mayurbhanj	86,936	90,531	78,411	48,281	500	400	80	20
Koraput	44,456	42,183	59,418	NA	432	372	60	0
Nabarangapur	59,540	58,965	62,884	NA	501	421	80	0
Kandhamal	60,964	48,262	1,07,962	NA	283	223	60	0
Sundargarh	47,975	49,210	64,531	26,478	120	80	20	20
Gajapati	32,927	NA	NA	32,927	20	0	0	20
Rayagada	46,636	NA	NA	46,636	20	0	0	20
Keonjhar	29,145	NA	NA	29,145	20	0	0	20

7.2 Dietary diversity



To understand the dietary diversity of the members in the households we used the Food Consumption Score (FCS), a tool developed by the United Nation’s World Food Programme. A brief description of the tool is provided in Annexure J.

In our study, we came up with the FCS of the female members of each household and the FCS of the rest of the household members separately. In the tables 7.3 and 7.5, ‘household’ means all household members other than the respondent female members. Similarly, in tables 7.4 and 7.6, the FCS of female members of the households means the FCS of those female members who were the respondents of our questionnaire.

Table 7.3: Dietary diversity of the households (%): Jharkhand

	Poor dietary diversity	Borderline dietary diversity	Acceptable dietary diversity
Adivasi	3	43	54
Non-Adivasi	0	23	77

Households reporting – Adivasi 2224, Non-Adivasi 497

Data from Jharkhand shows a wide gap in acceptable dietary diversity in between Adivasi and non-Adivasi ; about 54% of Adivasis and 77% of non-Adivasi people have acceptable dietary intake. The percentage of Adivasi people with borderline dietary diversity is also double the percentage of non-Adivasi people having borderline dietary diversity.





Table 7.4: Dietary diversity of the female member of the households (%) in Jharkhand

	Poor dietary diversity	Borderline dietary diversity	Acceptable dietary diversity
Adivasi	3	43	54
Non-Adivasi	0	24	75

Households reporting – Adivasi 2224, Non-Adivasi 497

The dietary diversity of the female members of the households in Jharkhand has a pattern similar to that of the other members of the household. This implies that women take a variety of food, like other members of the household.

The data from Odisha shows a similar gap between Adivasi and non-Adivasi households. However, the percentage of people with acceptable dietary diversity is higher in both categories, Adivasi and non-Adivasi, as compared to Jharkhand.



Table 7.5: Dietary diversity of the households (%) in Odisha

	Poor dietary diversity	Borderline dietary diversity	Acceptable dietary diversity
Adivasi	4	27	69
Non-Adivasi	1	9	90
PVTG	8	44	48

Households reporting – Adivasi 1155, Non-Adivasi 235, PVTG 84

However, the scores for PVTG households in Odisha show a grim picture as compared to that of Adivasi and non-Adivasi households.

Table 7.6: Dietary diversity of the female member of the households (%) in Odisha

	Poor dietary diversity	Borderline dietary diversity	Acceptable dietary diversity
Adivasi	5	28	67
Non-Adivasi	2	14	84
PVTG	12	39	49

Households reporting – Adivasi 1155, Non-Adivasi 235, PVTG 84

In Odisha, the female household members, in both Adivasi and Non-Adivasi households, have lower dietary diversity as compared to other members. However, in Adivasi households, the difference in the score is less than that in the non-Adivasi households.

7.3 Household Food Security

The FCS gives information about the diversity of diet. It does not indicate access and adequacy of food. For measuring access and adequacy of food at the household level we used the Household Food Insecurity Access Scale (HFIAS) tool. A brief description of the tool is given in Annexure K.

Similar to FCS, we came up with the HFIAS score of the respondent female member of each household and

the HFIAS score of the rest of the household members separately. In the tables 7.7 and 7.9, 'household' refers to all members of a household other than the female members who were the respondent. Similarly, in the tables 7.8 and 7.10, the HFIAS score of the female members of the households refers to female members who were the respondents of our questionnaire.

The score shows that in Jharkhand 25% Adivasi and 19% non-Adivasi people are severely food insecure.



Table 7.7: Food security of the households (%): Jharkhand

	Adivasi	Non-Adivasi
Food Secure	47	54
Mildly Food insecure	14	14
Moderately Food insecure	14	13
Severely food insecure	25	19

Households surveyed – Adivasi 2282, Non-Adivasi 509

The situation is by and large similar for the female members of the Jharkhand households.

Table 7.8: Food security of the female members of the households: Jharkhand (%)

	Adivasi	Non-Adivasi
Food Secure	49	54
Mildly Food insecure	13	14
Moderately Food insecure	14	13
Severely food insecure	24	18

Households surveyed – Adivasi 2282, Non-Adivasi 509

In Odisha food security score is slightly better for Adivasis, with only 12% of Adivasi households severely food insecure. However, 29% of PVTGs and 16% of non-Adivasi households are severely food insecure.



Table 7.9: Food security of the households (%): Odisha

	Adivasi	Non-Adivasi	PVTG
Food Secure	45	49	31
Mildly Food insecure	22	16	20
Moderately Food insecure	22	20	20
Severely food insecure	12	16	29

Households reporting – Adivasi 1213, Non-Adivasi 247, PVTG 86

Table 7.10: Food security of the female member of the households (%) in : Odisha

	Adivasi	Non-Adivasi	PVTG
Food Secure	48	50	36
Mildly Food insecure	20	17	14
Moderately Food insecure	21	17	27
Severely food insecure	11	17	23

Households reporting – Adivasi 1213, Non-Adivasi 247, PVTG 86

The respondent female members of the Adivasis and PVTG households were found to be marginally more food secure.

intended to combine our efforts with that of the ASHA workers and obtain a complete picture of the nutrition status. We could not gather data on BMI (body mass index) or on MUAC (mid-upper arm circumference) for want of adequately trained investigators and due to COVID-19 induced movement restrictions. Nonetheless it is an alarming result and merits deeper investigation.

7.4 Head circumference of children below five years



Head circumference is one of the indicators of the level of malnutrition. The head circumference of a child should be within the 3-97 percentile of the recommended population scores. In Odisha and Jharkhand, the outliers are in a majority (see tables 7.11 and 7.12).

While we do not venture to assert a definitive cause; we believe that collateral data on nutrition status suggests malnutrition as one of the associated factors. It was



Table 7.11: Head circumference of male and female children (age up to 60 months): Jharkhand

	Adivasi	Non-Adivasi
Male children with head circumference in 3-97 percentile (%)	49.6	39.3
The number of male children, aged up to 60 months, assessed	335.0	56.0
Female children with head circumference in 3-97 percentile (%)	46.3	54.1
The number of female children, aged up to 60 months, assessed	313.0	61.0

Table 7.12: Head circumference of male and female children (age up to 60 months): Odisha

	Adivasi	Non-Adivasi	PVTG
Male children with head circumference in 3-97 percentile (%)	52.2	44.8	29.4
The number of male children, aged up to 60 months, assessed	249.0	29.0	17.0
Female children with head circumference in 3-97 percentile (%)	39.9	45.2	40.0
The number of female children, aged up to 60 months, assessed	218.0	31.0	10.0





8.

Women and livelihoods in Adivasi society



This chapter presents data on women’s status in the Adivasi livelihoods scenario in Jharkhand and Odisha.

Based on the qualitative data gathered during this study and inferences drawn, we note that:

- Adivasi women enjoy better status in the Adivasi society than non-Adivasi women in non-Adivasi society.
- In Adivasi communities, women too had a right to choose their life partner. The practice of bride-price is widespread. However, dowry has started to become a social nuisance, particularly when families migrate, live in cities and emulate non-Adivasi people there.
- Women in Adivasi society play a major role and shoulder considerable responsibility in nurturing their family.
- Women undertake more work both on the productive and reproductive fronts than men
- Chhotanagpur Tenancy Act or CNT Act, which is supposed to follow traditional norms, does not give ownership right over land to women.
- This Act and continuous interaction with non-Adivasi society has introduced more gender-based discrimination in Adivasi society.
- Gender-based domestic violence does occur in Adivasi society; most women in the village attribute this to alcoholism.
- As a consequence, upon the death of her husband, and if the woman does not have a male child, she is more likely to be subject to exploitation. Such dispossessed women are often subject to abominable witchcraft allegations and face violence usually motivated by the greed for the land and the property her husband owned

- Acute poverty and unchecked urban influence have created a situation where there is trafficking which adversely affects women in Adivasi communities.

Table 8.1: Mobile phone use among female members of the households (%) in Jharkhand

	Adivasi	Non-Adivasi
Female members of households who have mobile phones	17.1	18.6
Female with smartphone	8.6	8.7

Female members surveyed – Adivasi 6444, Non-Adivasi 1312

Table 8.2: Dietary diversity of female members of households (%) in Jharkhand

	Adivasi	Non-Adivasi
Poor (<=21)	2.7	0.2
Borderline (21.5-35)	42.9	24.3
Acceptable (>35)	54.4	75.5

Households reporting female dietary diversity – Adivasi 2224, Non-Adivasi 497

Table 8.3: Food security among female members (%) in Jharkhand

	Adivasi	Non-Adivasi
Severely food insecure	23.8	18.1
Moderately food insecure	14.2	13.2
Mildly food insecure	13.4	14.3
Food secure	48.7	54.4

Households surveyed for HFIAS – Adivasi 2282, Non-Adivasi 509

Table 8.4: Dietary diversity of female members (%) in Odisha

	Adivasi	Non-Adivasi	PVTG
Poor dietary diversity	5	2	12
Borderline dietary diversity	28	14	39
Acceptable dietary diversity	67	84	49
Total female respondents	1,155	235	84

Table 8.5: Food security among female members (%) in Odisha

	Adivasi	Non-Adivasi	PVTG
Food secure	47.9	50.0	34.8
Mildly food insecure	20.0	17.3	13.5
Moderately food insecure	21.0	16.5	27.0
Severely food insecure	11.1	16.1	24.7

Total number of female members surveyed – Adivasi 1213, Non-Adivasi 247, PVTG 86

Table 8.6: Average annual household income source wise for female-headed households in Jharkhand

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension ¹⁶	Remittance	Non-farm	Households Income
Adivasi (Rs.)	24,535	10,028	7,376	32,777	5,818	16,164	37,802	79,754
Adivasi households that reported income from the source (Nos.)	803	109	113	593	278	187	236	908
Non-Adivasi (Rs.)	17,811	12,272	4,735	41,868	3,045	21,083	43,693	69,353
Non-Adivasi households that reported income from the source (Nos.)	128	18.0	20.0	138	56.0	24.0	69.0	201

¹⁶ Income from salary/pension, wherever mentioned, is on a monthly basis.

Table 8.7: Average annual household income source wise for female-headed households Odisha

	Farming	Animal Husbandry	Forest Produce	Wage	Salary/Pension	Remittance	Non-farm	Households Income
Adivasi (Rs.)	20,659	5,251	2,834	16,824	6,205	19,775	19,007	74,840
Adivasi households that reported income from the source (Nos.)	537	210	145	329	257	101	241	586
Non-Adivasi (Rs.)	17,558	8,014	6,100	22,788	5,901	22,300	21,352	76,210
Non-Adivasi households that reported income from the source (Nos.)	78	24	6	49	63	12	44	110
PVTG (Rs)	14,026	985	1,863	13,165	1,034	9,273	18,150	32,300
PVTG households that reported income from the source (Nos.)	48	13	24	41	29	11	22	66

During the survey, we had asked “who within the households takes a decision” on a variety of matters concerning the households. This data is captured in the Tables 8.8 to 8.12 for Adivasi, PVTG and non-Adivasi villages. The term ‘Dada’ refers to the male respondent (or her husband, if the respondent were a woman); ‘Didi’ refers

to the female respondent (or his wife, if the respondent were a male) and ‘Joint’ refers to the claim of the household that the couple or all the household members decide on it jointly. Other terms are self-explanatory. On most of the topics, the decisions are taken “jointly”. For the Adivasi households in Jharkhand, on most matters, the proportion of women saying they took the decision was marginally higher than the proportion of males taking the decision. A majority of the decisions were claimed to be taken jointly. The same pattern is observed in non-Adivasi homes as well. In Odisha, across all categories, a higher proportion of women (than Jharkhand) claimed to have taken decisions on most matters in all the three categories, but again this statement needs to be moderated by the fact that all such claims were made by less than 20% of the households. The dominant response is that decisions are taken jointly.

In Odisha, across all categories, a higher proportion of women claimed to have taken decisions



Table 8.8: Household decision making among Adivasis (%), Jharkhand

Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
Child Education	9.4	3.0	79.6	3.7	0.5	0.3	0.3	0.9	0.7	1.2	0.1	0.0
Livelihood	8.8	4.2	79.3	3.6	0.4	0.1	0.3	1.1	0.6	1.4	0.2	0.0
Daily Purchase	12.2	3.5	76.5	3.3	0.6	0.2	0.3	1.0	0.7	1.3	0.2	0.0
Asset	8.9	4.4	78.8	3.6	0.6	0.2	0.2	1.1	0.6	1.4	0.1	0.0
Loan	9.4	3.5	79.2	3.4	0.5	0.1	0.3	1.3	0.8	1.3	0.2	0.0
SHG loan	10.7	2.7	79.2	3.2	0.4	0.2	0.5	0.8	0.9	1.2	0.1	0.0
Visit maternal place (Mayaka)	10.2	3.9	79.2	3.0	0.3	0.4	0.4	0.5	0.9	0.9	0.1	0.0
Family Size	6.7	2.2	85.0	2.9	0.4	0.2	0.3	0.5	0.7	0.8	0.1	0.0

Sample size 2086

Table 8.9: Household decision making among Non-Adivasis (%), Jharkhand

Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
Child Education	7.0	4.2	83.5	3.4	0.2	0.0	0.2	0.6	0.2	0.6	0.0	0.0
Livelihood	6.6	5.1	82.7	3.8	0.0	0.0	0.0	0.9	0.2	0.6	0.0	0.0
Daily Purchase	8.3	4.6	82.1	3.5	0.0	0.0	0.0	0.6	0.2	0.6	0.0	0.0
Asset	6.6	4.3	83.4	4.3	0.0	0.0	0.0	0.6	0.2	0.6	0.0	0.0
Loan	7.3	4.5	82.9	3.5	0.2	0.0	0.5	0.2	0.2	0.7	0.0	0.0



Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
SHG loan	7.9	3.7	82.8	3.5	0.0	0.0	0.2	0.7	0.2	0.7	0.0	0.0
Visit maternal place (Mayaka)	6.7	4.0	84.5	2.9	0.2	0.0	0.2	0.6	0.2	0.6	0.0	0.0
Family Size	3.4	3.4	89	2.7	0.2	0.0	0.0	0.7	0.0	0.7	0.0	0.0

Sample Size 481

Table 8.10: Household decision making among PVTG households (%), Odisha

Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
Child Education	21.3	9.3	61.3	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0
Livelihood	17.1	7.9	67.1	0.0	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0
Daily Purchase	20.0	8.8	66.2	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Asset	15.8	10.5	64.5	0.0	0.0	0.0	0.0	0.0	1.3	7.9	0.0	0.0
Loan	18.4	7.9	63.2	1.3	0.0	1.3	0.0	0.0	0.0	7.9	0.0	0.0
SHG loan	20.8	5.2	66.2	0.0	0.0	0.0	0.0	0.0	2.6	5.2	0.0	0.0
Visit maternal place (Mayaka)	21.8	9.0	62.8	0.0	1.3	0.0	0.0	0.0	0.0	5.1	0.0	0.0
Family Size	17.1	11.8	65.8	0.0	0.0	0.0	0.0	0.0	1.3	3.9	0.0	0.0

Sample Size :80

Table 8.11: Household decision making among Adivasis (%), Odisha

Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
Child Education	10.3	3.6	64.8	4.4	0.5	0.3	0.0	0.0	2.9	12.7	0.2	0.0
Livelihood	7.1	7.0	65.3	5.0	0.2	0.2	0.0	0.0	3.5	11.6	0.1	0.0
Daily Purchase	9.8	5.3	65.1	4.3	0.4	0.4	0.0	0.0	6.3	8.3	0.0	0.0
Asset	5.7	6.9	68.0	4.4	0.0	0.1	0.0	0.1	3.2	11.5	0.0	0.0
Loan	8.7	5.7	65.4	4.0	0.3	0.2	0.0	0.0	5.2	9.8	0.1	0.0
SHG loan	13.3	1.8	64.9	3.2	0.1	0.5	0.1	0.0	11.5	4.0	0.0	0.0
Visit maternal place (Mayaka)	8.0	7.8	66.0	3.2	0.3	0.2	0.0	0.0	7.7	6.6	0.1	0.0
Family Size	2.9	2.7	81.5	3.7	0.0	0.2	0.0	0.1	2.4	6.5	0.0	0.0

Sample Size 1117

Table 8.12: Household decision making among Non-Adivasis (%), Odisha

Decisions	Female respondent/ spouse of male respondent	Male respondent /spouse of female respondent	Joint	Adult son	Adult daughter	Daughter- in-law	Young daughter	Young son	Mother/ Mother in law	Father/ Father in law	Brother/ Brother in law	Other
Child Education	9.4	4.5	71.3	3.1	0.0	0.4	0.0	0.0	1.8	9.4	0.0	0.0
Livelihood	7.4	9.1	70	3.0	0.0	0.0	0.0	0.9	2.2	7.4	0.0	0.0
Daily Purchase	7.3	7.3	71.7	3.4	0.0	0.4	0.0	0.9	3.9	5.2	0.0	0.0
Asset	6.5	6.5	75.4	2.6	0.0	0.0	0.0	0.0	1.7	7.3	0.0	0.0
Loan	6.6	5.8	74.8	3.5	0.0	0.0	0.0	0.4	3.1	5.8	0.0	0.0
SHG loan	12	2.2	73.3	3.1	0.0	0.4	0.0	0.0	5.3	3.6	0.0	0.0
Visit maternal place (Mayaka)	9.1	3.9	74.9	3.5	0.0	0.0	0.0	0.4	3.5	4.8	0.0	0.0
Family Size	1.5	2.6	87.2	3.6	0.0	0.0	0.0	0.0	1.5	3.6	0.0	0.0

Sample Size 234



9.

Analysis: Association between resources and livelihoods outcomes

In this chapter, we try to understand how asset ownership and access to resources affect the livelihoods outcomes of Adivasi households. It appears logical to assume that Adivasi households with large landholding and good incomes would show better outcomes in terms of education, food security and nutrition status. With the help of a rather formidable data set, we have examined if such is the case indeed in this chapter.

We believe that at least these three features of the Adivasi households are significant influencers on the conditions and outcomes of their livelihoods. The first is landholding. It is important as a source of food, fodder and other necessities. It also defines the status of an Adivasi household in the community. It tends to shape access to other resources such as irrigation. The location of their homes in relation to forests is the second important thing. Those who are deep inside the forests tend to have a greater chance of preserving their lifestyle, have much greater access to non-monetised produce from the forests, but have much less access to resources and amenities (schools, health care, transport, banking) and have more difficult access to markets. The third is family income. Those who have higher income have better nutrition standards and are likely to have access to various amenities.

This chapter first presents the distribution of the Adivasi households by landholding, income, and location and then discusses how these factors affect the livelihoods outcomes.

The analysis of associations of these three anchor parameters with development outcomes is given as tables in Annexure E for land as the anchor, Annexure F for distance from forests as an anchor and Annexure G for income as an anchor. A full set of tables are contained in these Annexes. The following sections repeatedly refer to them. However, only significant and not all the tables in

these Annexes are covered in the text appearing below. Readers are encouraged to explore details provided in the Annexes.

9.1 Landholding, location and income correlation with development



The Adivasi and non-Adivasi households surveyed were classified in different classes as per their landholding. As is to be expected, 95% of Adivasi households in both states are either landless, marginal or small farmers. The proportion of those holding more than 10 acres of land is 0.7%, while those who hold between 5 and 10 acres is 2.4% for Jharkhand and 3.6% in Odisha.

In Odisha, as many as 14% of Adivasi respondents, 28% of non-Adivasi respondents and 47% of the PVTG respondents declared that they were landless. In Jharkhand, these proportions were 12%, 30% for Adivasi and non-Adivasi respondents, respectively. In Odisha, the number of landless households among PVTG is significant; landlessness was also noted among the Adivasis. Virtually all the respondents in all categories and in both the states were either landless or marginal landholders (less than one hectare) or small landholders (less than two hectares). Considering that these lands are in undulating hilly and mountainous terrain and have thin soil layers, the pathos of the situation should be hard-hitting.

In general, farm income appears to rise with landholding. However, in Jharkhand, among the non-Adivasi households, the farm income of small landholders was lower than that of the marginal landholders. We speculate that this is due to two factors: the actual parcels of land held by them could be of inferior quality and that they are unable to till land owing to migration of member/s for work outside the village. This needs to be probed further.

Table 9.1: Association between the size of landholding and income (Rs. per annum) in Jharkhand

	Adivasi	Non-Adivasi
Marginal	70,352	68,423
Small	90,908	63,259
Small-medium	99,536	1,47,871
Medium	1,68,078	78,301
Large	2,79,346	39,919

Table 9.2: Association between the size of landholding and income (Rs. per annum) in Odisha

	Adivasi	Non-Adivasi	PVTG
Marginal	52,357	76,764	34,232
Small	72,708	86,524	59,020
Small-medium	2,46,579	1,64,467	92,995
Medium	64,922	43,780	N.A.
Large	2,24,437	N.A.	N.A.

Table 9.3: Farm income as a percentage of total income for surveyed households in Jharkhand

Landholding	Adivasi	Non-Adivasi
Landless	37.4	32.1
Marginal	65.9	33.5
Small	57.9	67.4
Small, Small-medium, medium and large	59.8	81.5

Table 9.4: Farm income as a percentage of total income for surveyed households in Odisha

Landholding Type	Adivasi	Non-Adivasi	PVTG
Landless	52.9	31.5	30.5
Marginal	51.0	31.9	60.0
Small	72.6	61.9	37.8
Small, Small-medium, medium and large	66.3	84.8	67.2

Source: Primary Survey

9.2 Association between income and household location in relation to forest

We divided the households into five income groups by percentile in the income distribution data. We found that in Jharkhand households close to the forests (less than one kilometre) had uniform income percentiles. Among the households farther from the forests (five kilometre plus), more households were found in the higher income percentile groups. Among the households inside or very close to forests, over 20% belonged to the lowest income group in both the states and about 19% belonged to the highest income group. On the other hand, among the households farthest from the forests (over five kilometres), only 17% in Jharkhand and 14% in Odisha were in the smallest income percentile group, while the proportion of households with the highest income rose to 14.5% in Jharkhand and 22.1% in Odisha. It, therefore, appears that the people living away from forests can possibly access greater economic opportunities and earn higher incomes.

Table 9.5: Income groups and their distance from forests in Jharkhand

S. No	Income group (percentile)	0-1 km	1-2 km	2-5 km	More than 5 km
1	0-20	20.3	21.2	21	16.9
2	20-40	22.3	18.9	17.8	17.1
3	40-60	19.4	22.8	19.6	18.3
4	60-80	18.3	20.5	19.9	21.9
5	80-100	18.5	16.3	21.5	24.5



Table 9.6: Income groups and their distance from forests in Odisha

S. No.	Income group (percentile)	0-1 km	1-2 km	2-5 km	More than 5 km
1	0-20	20.7	18.1	28.0	14.3
2	20-40	18.3	26.5	19.6	19.4
3	40-60	19.7	19.6	18.7	20.2
4	60-80	20.6	14.7	12.1	23.6
5	80-100	19.0	21.1	18.7	22.1

9.3 Influencers of literacy



Reading, writing and numeracy levels were assessed by administering standard tests to the sample respondents in Adivasi as well as non-Adivasi homes. Each of these levels was assessed on a scale of 1-10. The total of three attributes was assessed on a scale of 1-30. For all three attributes, the scores of males in the household / among respondents were substantially higher than the scores of the women, for both Adivasi and non-Adivasi households in Jharkhand as well as Odisha. The scores seem to improve with increase in the size of landholding from small to medium category. However, the number of households surveyed in the medium-large landholding category is rather small for such an inference (see tables in para 13 and 14 in Annexure E).

In the Jharkhand Adivasi sample, the relationship between the distance of households from forests shows a mixed pattern of scores: homes that were close to forests show higher scores for both males and females, the scores drop for intermediate distance and then rise again for households at farther distance. This pattern holds for both the states as well as for Adivasi and Non-Adivasi respondents. We cannot assert a logical reason for this phenomenon within the ambit of this survey. We conclude that this perhaps reflects on the location of schools: villages near forests seem to have better schools but those which are at a medium distance from forests seem to be less effective. (see tables under para 8 in Annexure F)

The sample households were grouped in five categories depending upon percentile incomes. The group categorised in 0-20% income percentile shows the poorest homes while those in 80-100% percentile shows the highest income recorded in the survey. The literacy scores show an almost uniform increase from the lowest to the

highest income group for both Adivasi and non-Adivasi homes and in both the States. (see tables in para 6 of Annexure G)

In summary, male gender, income and landholding positively correlate with literacy scores while the distance of the habitation from forests shows a mixed pattern.

9.4 Influencers of education



The study also assessed how education of the Head of the Household (HoHo) varies with these anchor factors of the landholding, distance from forests and household income. The sample households were grouped in several levels from no schooling of the HoHo to college degree. It needs to be noted that one should not expect a direct association since several intervening variables (age of the HoHo, location, the year from which schools or colleges became reasonably accessible, have a logical role in the educational attainment.)

One striking observation was that the landless households show a significantly higher proportion of the “no schooling” than others. In both Adivasi and non-Adivasi sample households across the two states, the “no schooling” proportion was quite large. The other two noticeable observations were that the “no schooling” proportion in all categories is generally higher in Odisha than in Jharkhand and generally higher among Adivasi households than for non-Adivasi households. In only 12% of the Adivasi households in Jharkhand and 8% in Odisha HoHos were matriculate. These proportions are higher for non-Adivasi households in both the States. “No schooling” appears to drop as landholding rises, the statement needs more careful testing before asserting it. See Tables in para 20 of Annexure F.

Similar observations were made in the case of the influence of income on literacy: in the lowest income percentile group, almost 60% HoHo did not have any schooling. There seems to be an “educational inequality” as about 10-20% respondents, in the highest income bracket of both Adivasi and Non-Adivasi households in both the states, reported HoHo as a matriculate. In the case of the households, Adivasi and non-Adivasi in both the states, with the lowest income percentile between 0-7% households reported HoHo as a matriculate. Odisha showed a greater proportion of households “between primary and matriculation” for all categories than Jharkhand. See tables in para 2 in Annexure G.

In summary, landless and the poorest households among Adivasis and non-Adivasis in both the states have the least educated HoHo.

9.5 Influencers of food security

Observations on the levels of food security for different landholding classes are presented in tables 15 and 16 of Annexure E. In general, food insecurity was higher among landless and marginal landholding Adivasi households: under these categories, between 22-31% households in Jharkhand and around 15% in Odisha reported food insecurity. Surprisingly, a high proportion of medium and large landholders have also reported food insecurity. Two reasons may account for this (a) large landholding does not necessarily translate into remunerative outcomes - an Adivasi household may “own” a whole hillock which produces virtually nothing, and (b) the small sample size renders this data unreliable. Among the non-Adivasis too, a similar pattern was seen: generally improved food security as the size of a household landholding increases and surprising incidence of food insecurity even among medium and large landholding households.

No specific pattern of relationship between location in relation to forest and level of food security emerges from the data (see tables in para 4 of Annexure F).

The level of food insecurity shows no significant pattern by income groups in Adivasi or Non-Adivasi homes in Jharkhand while in Odisha it shows a somewhat declining trend as one move from lower to higher income percentiles.

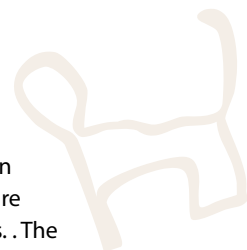
In summary, based on the survey, so far as the food security is concerned, landholding, location (distance from forest) and household incomes are not established as clear and positive influencers. The data was gathered during the pandemic period and we speculate that the recent move of free distribution of grains may have masked food insecurity among the households. Perhaps a more focused investigation can throw up light whether these parameters indeed have a significant influence on food security in the two states.

9.6 Influencers of diet quality

Quality of diet in terms of nutrition shows a uniform improvement as the size of landholding increases. Over 54.7% of Adivasi households of the small-medium landholding category in Jharkhand reported consuming acceptable diet quality compared to 36% in the landless category. The proportion reporting acceptable quality in higher landholding classes is even more, but as the sample sizes were small, we would not assert it. The same pattern repeats in Adivasi households in Odisha where nearly 80% of Adivasi households in the small-medium landholding category reported acceptable diet quality. As a mirror image, the proportion of households reporting poor diet quality falls as landholding increases in Adivasi homes in both the states. Diet quality in non-Adivasi homes is in general better and a similar pattern of more households reporting acceptable diet quality as landholding increases is shown for them as well in both the states (see tables 17 and 18 in Annexure E).

No specific pattern of association is reported between location (distance from forests) and diet quality either for Adivasi or Non-Adivasi households in either of the two states (see tables 6 and 7 in Annexure F).

Diet quality clearly improves as one moves from households in lower-income percentile groups to higher-income percentile groups: it improved from 34% reporting acceptable in the poorest group to 56% reporting acceptable quality in the highest income group among Jharkhand Adivasis and from 48% to 65% in Adivasi groups in Odisha.





In summary, while the size of landholding and income appear to have a stronger influence on diet quality, location in terms of distance from forests does not.

9.7 Influencers of opinions and assessment of government / NGOs



An attempt was made to understand the extent to which respondents felt satisfied with the working/schemes of the government and NGOs in their area. We also enquired if they found life having improved or become more difficult during the year preceding the time of the survey (most of which was affected by the pandemic). More than the two-thirds of the Adivasi, as well as non-Adivasi respondents, felt life had improved during the preceding year. The satisfaction was highest among the marginal and small land holders and tended to drop a little at the two ends (landless on the lower end and medium or large

holders on the other end). See tables in para 4 of Annexure H. The satisfaction level with the government schemes and NGOs was also highest in these two classes, with about 55% expressing satisfaction. In other classes about 40% of households expressed satisfaction.

In Odisha, the distance of the households from the forest did not seem to be associated with the feeling of improvement in life; in Jharkhand a higher proportion of Adivasis close to the forest reported an improvement in life during the previous year. Also, a smaller proportion of the respondents located away from the forests reported less satisfaction with the work of the NGOs or the schemes of their governments. It is not clear if this was due to a higher level of expectation or relatively less effective implementation (see tables in para 1 in Annexure H). There was no discernible difference in the level of reported improvement in life or level of satisfaction with the work of the governments or NGOs among various income classes (see tables in para 2 of Annexure H).

10.

Conclusion

Poverty, misery, marginalisation and deprivation persist among the Adivasis of India in general and those of central India in particular. Their displacement and dispossession by mining, industries and construction of dams, and the curtailment of their rights and access to the forest have caused this to a great extent. Adivasis access to public service, education, landholding, annual income, food security, nutrition status of children covered in this report show their overwhelming deprivation. The report shows that the situation of non-Adivasis from the same geography is a little better, they — the SCs, OBCs, minorities and a few general castes — too lag behind the national averages on most socio-economic criteria.

10.1 Road Connectivity

The report reveals that 74% villages in Jharkhand and 72% in Odisha were connected with all-weather road. Of these, in only 63% of villages in Jharkhand and 80% in Odisha village roads were motorable. This means that only in 47% of villages in Jharkhand and 58% of villages in Odisha the roads were motorable. A survey conducted by Mission Antyodaya, Government of India (GoI), in 2019 found that overall 70% villages in the country were connected by motorable roads.

Almost a similar percentage (69%) of villages at the national level in 2019 were linked to their block headquarters through public transport. This study found that in the Adivasi regions of Jharkhand and Odisha, only 46% and 57% villages, respectively, were linked to their block headquarters through public transport. The picture is slightly better in the case of non-Adivasi villages in Jharkhand and much better in non-Adivasi villages in Odisha.

10.2 Education and literacy

The data on literacy shows that in 53% Adivasi households in Jharkhand and 58.6% in Odisha, head of the household had no school education. In the case of PVTG in Odisha, heads of more than 70% households were without any schooling. Data on female members of the Adivasi households also shows that 43.7% in Jharkhand and 50.3% in Odisha had no school education. A functional literacy test was conducted with the respondents and their spouses, from the sampled households. The test results showed that around 45% male and 63% female from Adivasi households in Jharkhand can't read or write at all. For the non-Adivasi households, the corresponding figures from Jharkhand were 30% and 52%. In Odisha, 55% male and 75% female from Adivasi households can't read or write at all. The corresponding figures for non-Adivasis were 38% and 55%; for PVTGs these are 42% and 73%.

This data cannot be compared with the national-level literacy rate which considers all members of the household of age seven and above. However, even in that case, one may infer that the Adivasi regions in Jharkhand and Odisha are far behind the national mainstream with respect to education. The Census 2011 gives 72.98% overall literacy rate for the country, with female and male literacy rates of 64.63% and 80.9%, respectively.

10.3 Shrinking landholdings

As many as 89% of respondents from Adivasi households in both Jharkhand and Odisha reported landholdings that classify them as marginal farmers or landless. NSS



Year	Average landholding of Adivasis in Jharkhand and Odisha (acre)
1995-96	3.29
2000-01	3.29
2005-06	3.00
2015-16	2.47

data for 2018-19 shows that at the national level 2.6% of agricultural households¹⁷ are landless and 70.4% are marginal (source NSS report No 587 -77/33.1/1). This clearly shows that the land ownership of the Adivasis in the states of Odisha and Jharkhand is quite small.

Adivasi landholding size in Odisha and Jharkhand is shrinking as shown in Annexure M of the report. The fall in the landholding size, inferred from the combination of operated land area and operational landholdings, is given below:

The trend of shrinking land size has been found in this report also – the average landholding was found to be 2.3 acres and 1.9 acres for Adivasi households in Jharkhand and Odisha, respectively.

10.4 Forest dependency



Not only land, Adivasis have also gradually lost their access to the forest as reported in the FGDs and interviews. The Forest Rights Act (FRA), 2006, which ensures rights of the forest-dwelling tribal communities to forest resources are not implemented with the right spirit and necessary rigour, as shared by the interviewees.

Report findings show that in the case of Community Forest Rights (CFR), 7% Adivasi and 3% non-Adivasi villages applied and 1% Adivasi village and 3% non-Adivasi villages received CFR in Jharkhand;

In Odisha, 30% Adivasi, 35% Non-Adivasi and 40% PVTG villages applied for CFR and 6% Adivasi, 10% non-Adivasi and 20% PVTG villages received CFR.

10.5 Per capita income



In Jharkhand, the average annual income of Adivasi households is Rs. 75,378. The corresponding figure for non-Adivasi households is Rs. 70,235. In Odisha, the average annual household income is Rs. 61,263, Rs. 76,117 and Rs. 36,491 for Adivasi, non-Adivasi and PVTG households, respectively.

This, when compared with the NSS report No 587 -77/33.1/1 that shows Rs 122,616 as the average income of agriculture households in India in the year 2018-19, presents a grim economic picture of the entire Adivasi region of Jharkhand and Odisha. In this region, irrespective of whether the household is Adivasi or non-Adivasi, household income is around 60%, or less, of the average household income of agriculture households in rural India.

10.6 Food security



According to UN-India, there are nearly 195 million (19.5 cr.) undernourished people in India, which is around 16% of its population. This report shows that the situation is worse in the Adivasi regions of Jharkhand and Odisha. At least 53% of Adivasi households in Jharkhand and 55% of Adivasi households in Odisha are either mildly or moderately or severely food-insecure.

10.7 Malnutrition among children



A staggering 50% under-five children in the Adivasi households in both the states have head circumference outside the 3-97 percentile indicating that they are malnourished. The percentage is higher for non-Adivasi households.

In spite of the relentless efforts of government and non-government organisations since independence, the Adivasis seem to be lagging in almost all aspects and their economic status remains lower than that of all the other social groups. The 75 years of planned development has not narrowed the gap between Adivasis and others much.

¹⁷ In the NSS 77th round, an agricultural household was defined as one receiving more than Rs. 4000/- per annum from the sale of agriculture produce (e.g., crops, horticultural crops, fodder crops, plantation, animal husbandry, poultry, fishery, piggery, bee-keeping, vermiculture, sericulture, etc.) and having at least one member self-employed in agriculture either in the principal status or in subsidiary status during last 365 days.

Acknowledgement



On behalf of PRADAN, we acknowledge the contribution of all those involved in different ways in the making of this report. A special thanks to:

Amit Kumar (PRADAN), Dibyendu Chaudhuri (PRADAN), Dolagobinda Panda (PRADAN), Kiran Limaye (Vikas Anvesh Foundation), Manas Satpathy (PRADAN), Nirmalya Chowdhury (Vikas Anvesh Foundation), Parijat Ghosh (PRADAN), Prem Shankar (PRADAN), Sanjiv Phansalkar (Vikas Anvesh Foundation) and Sankarsan Behera (PRADAN), for being part of the group that designed the study methodology and tools, coordinated data collection, analysed the data and drafted the report.

Dhananjay Kumar, Sankarshan Behera, Dolagibinda Panda, Hrudayananda Mahapatra, Prem Shankar and Sunil Kumar from PRADAN, for arranging the interviews with the Adivasi resource persons to get their perspectives on the subject.

Binju Abraham (PRADAN), James Herenj (Multimedia Art Association), Gangaram Paikara (Chaupal Gramin Vikas Sodh Sansthan), John Oommen (Christian Hospital), Narendranath D (PRADAN), Ritika Khara (IIT, Delhi), Tamali Kundu (PRADAN), Virginius Xaxa (Institute of Human Development, Delhi), for their guidance in designing this study.

The 45 Field Investigators from different organizations conducted Focus Group Discussions and led the group of enumerators and supervisors in collecting and verifying data.

More than 100 enumerators, who collected household data and supervisors, who collected village-level data

The Researchers/ Investigators

- ✿ Bijay Kumar Behera, Biswaranjan Jena, Debasis Pati, Madan Mohan Mohanty, Nilotpal Sahu, Prabin Kumar Tripathy, Pravat Kumar Sahoo, Sanjay Surya and Santosh Sahu. **from Harsha Trust.**
- ✿ Bedabyas Dhrua and Stuti Choudhury. **from SEWAK.**
- ✿ Nandalal Bakshi and Rupali Dutta. **from TSRDS.**
- ✿ Ashisha Rath, Ashok Jha, Bhubanananda Mohanta, Biswanath Mohanta, Deepak Kumar, Fahad Khan, Golden Kumar, Hrudananda Mohapatra, Jagat Jyoti Barik, Kuni Sundhi, Manish Pandey, Mitali Mohanta, Nilaya Ranjan Nayak, Pramod Rajak, Prem Bhaskar, Rajanikant Pandey, Rakesh, Raju Maity, Sankarsan Behera, Santosh Kumar, Santosh Kumar Sahoo, Sasanka Kumar Sahu, Shankar Kunchappu, Shubhra Prakash Mohanta, Subhashree Priyadarshini, Subrat Heal, Tara Hota, Tarannum Ekram, Vikash Kumar, Vipin Pokhriyal and Vivek Kumar Sinha. **from PRADAN.**



The intellectuals and activists, mostly from the Adivasi community, who were interviewed to get their

perspective on Adivasi livelihoods and set the tone of this report.

S N	Name	Profession/expertise
1	Anil Gudiya	Tribal leader, Gram Sabha Manch
2	Anuj Lugun	Working as Assistant Professor at School of Indian Language, Central University of South Bihar (CUB)
3	Archana Soreng	Member, Youth Advisory Group on Climate Change (established by the Secretary-General, United Nations)
4	Ashish Tigga	Journalist
5	Balabhadra Majhi	Political leader, MLA and former Minister for Tribal Welfare in the Government of Odisha
6	Biju Toppo	Film maker
7	Bitiya Murmu	CEO, Lahanti (CSO)
8	Chakradhar Hembram	Former Zilla Parishad member; State Joint Secretary of Biju Janata Dal(BJD), looking after tribal and minority affairs; former-Wildlife Warden, Department of Forests and Environment, Government of India; Forest & Environment Activist; General Secretary, AISDCA (All India level Adivasi organization)
9	Chami Murmu	Feminist activist and environmentalist
10	Dasari Mantri	Chairperson, Block Panchayat Samiti, Banspal
11	Dayamani Barla	Activist and political leader
12	Dr Nirad Chandra Kanhar	Tribal leader and veterinary doctor
13	Dr. Bipin Jojo	Academician
14	Dr. Sona Jharia Minz	Vice-Chancellor, Sidho Kanhu Murmu University Professor of Mathematics, JNU
15	Dr. Debasis Mardi	General Secretary, Biju Janata Dal, former Chairperson of Special Development Council, Mayurbhanj; Medical doctor
16	Father Nicholas Barla	Human rights activist; has represented India at UN meetings on indigenous issues



S N	Name	Profession/expertise
17	Grace Kujur	Poet; former Director of All India Radio
18	Gunjal Munda	Assistant Professor at the Central University of Jharkhand; social and cultural activist
19	Jacinta Kerketta	Poet
20	Jawra Pahariya	Community leader
21	Jyotsna Sheela Dang	Journalist at Prasar Bharti
22	Kanhai Singh	Tribal leader, Forest rights activist
23	Kariya Munda	Politician and the former Deputy Speaker of the 15th Lok Sabha, former Minister in the Government of India
24	Kiranbala Naik	Former Chairperson of Panchayat Samiti, Patna block (2007-2012), BJP State Executive member
25	Kumudini Banra	Academician
26	Laxmidhar Singh	Secretary, All India Ho Language Action Committee
27	Manik Chand Korwa	Tribal youth leader
28	Meri Marandi	Community leader
29	Mary Bina Surin	Currently Senior Manager Tata Trusts, Bhubaneswar; Ford Foundation Fellow; former Senior Manager, Odisha Tribal Empowerment & Livelihoods Programme (OTELP); former Regional Programme Manager, Heifer International, India;
30	Akay Minz	State Programme Coordinator, National Health Mission, Department of Health, Government of Jharkhand
31	Narayan Murmu	Odisha Administrative Service (retired), former Programme Administrator, Integrated Tribal Development Agency, Kendujhar, Odisha
32	Ranendra Kumar (IAS)	Director, Dr. Ram Dayal Munda Tribal Research Institute, Ranchi; scholar and writer. (fiction and non-fiction)
33	Sebati Singh	Founder Ideal Development Agency (IDA), Kendujhar, Odisha; worked on issues of sexual exploitation of tribal girls in mining area; child rights, and livelihoods.
34	Shiv Sankar Mardi	Ho language teacher; political activist
35	Shiwani Murmu	Community leader
36	Simon Oraon	Environmentalism; Padma Shree awardee,
37	Sukeshi Oram	Former Chairperson TRIFED; Member, National Commission for Women; President of BJP Mahila Morcha, Odisha
38	Sumani Jhodia	Anti-liquor activist, Kashipur block, Rayagada district, Odisha
39	Tulasi Munda	Educationist; Padma Shree awardee
40	Umi Daniel	Aied et Action International



Sankarsan Behera, Santosh Kumar and Sumita Kasana for reviewing the entire report.

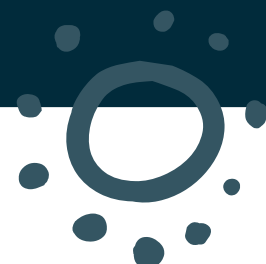
Dibyendu Chaudhuri, Parijat Ghosh, Sankarsan Behera, Souparno Chatterjee, Sudhir Sahni, Sumita Kasana and Tamali Kundu for conceptualising the report layout and design, including its webpage.

Apart from the above, many more people helped us in data collection, logistics and in other areas of the study and report generation. We are grateful to all of them.



11

Annexure A : Perspectives of Adivasi leaders, activists, scholars, social workers and intellectuals



About this section:



This section is based on the interviews with eminent personalities who are well-known in their respective areas of expertise and have particular views about the issues of Adivasis. In most cases, they belong to the Adivasi society and are actively involved in addressing the issues in their own ways. While selecting the interviewees a combination of maximum variation purposive sampling and a snowball or chain sampling (Patton 1990:182-183) was followed. The diversity was captured through an initial set of traits such as age, gender, tribe and professional background, political belief. An underlying hypothesis was that one could expect multiple and often conflicting perceptions, opinions and experiences across these traits.

Altogether 40 respondents were chosen – 20 each from the state of Jharkhand and Odisha; 37 are Adivasis. Among

those, majorities were from three tribes – Santhal with 11 respondents, Oraon - nine respondents, and Munda — eight respondents.

Three interviewees were from the Gond community. Apart from that, there was one interviewee each from Bhuiyan, Ho, Kandha, Pahariya, Paraja and Korwa community. There were 22 male and 18 female respondents.

As far as age is concerned, 18 of the interviewees were middle-aged followed by 14 youth and 8 veterans.

Respondents were from various occupational groups. However, most of them were community leaders or social activists. The names and a small introduction for each of the interviewees is given below:

S N	Name	Profession/expertise
1	Anil Gudiya	Tribal leader, Gram Sabha Manch
2	Anuj Lugun	Working as Assistant Professor at School of Indian Languages, Central University of South Bihar (CUB)
3	Archana Soreng	Member, Youth Advisory Group on Climate Change (established by the Secretary-General, United Nations)
4	Ashish Tigga	Journalist
5	Balabhadra Majhi	Political leader, MLA and former Minister for Tribal Welfare in the Government of Odisha
6	Biju Toppo	Film maker
7	Bitiya Murmu	CEO, Lahanti (CSO)
8	Chakradhar Hembram	Former Zilla Parishad member; State Joint Secretary of Biju Janata Dal(BJD), looking after tribal and minority affairs; former-Wildlife Warden, Department of Forests and Environment, Government of India; Forest & Environment activist; General Secretary, AISDCA (All India level Adivasi organization or would you like to give full form?))



S N	Name	Profession/expertise
9	Chami Murmu	Feminist activist and environmentalist
10	Dasari Mantri	Chairperson, Block Panchayat Samiti, Banspal
11	Dayamani Barla	Activist and political leader
12	Dr Nirad Chandra Kanhar	Tribal leader and veterinary doctor
13	Dr. Bipin Jojo	Academician
14	Dr. Sona Jharia Minz	Vice-Chancellor, Sidho Kanhu Murmu University Professor of Mathematics, JNU
15	Dr. Debasis Mardi	General Secretary, Biju Janata Dal, former Chairperson of Special Development Council, Mayurbhanj; Medical doctor
16	Father Nicholas Barla	Human rights activist; has represented India at UN meetings on indigenous issues
17	Grace Kujur	Poet; former Director of All India Radio
18	Gunjal Munda	Assistant Professor at the Central University of Jharkhand; social and cultural activist
19	Jacinta Kerketta	Poet
20	Jawra Pahariya	Community leader
21	Jyotsna Sheela Dang	Journalist at Prasar Bharti
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25	Kumudini Banra	Academician
26	Laxmidhar Singh	Secretary, All India Ho Language Action Committee
27	Manik Chand Korwa	Tribal youth leader
28	Meri Marandi	Community leader
29	Mary Bina Surin	Currently Senior Manager Tata Trusts, Bhubaneswar; Ford Foundation Fellow; former Senior Manager, Odisha Tribal Empowerment & Livelihoods Programme (OTELP); former Regional Programme Manager, Heifer International, India
30	Akay Minz	State Programme Coordinator, National Health Mission, Department of Health, Government of Jharkhand
31	Narayan Murmu	Odisha Administrative Service (retired); former Programme Administrator, Integrated Tribal Development Agency, Kendujhar, Odisha
32	Ranendra Kumar (IAS)	Director, Dr. Ram Dayal Munda Tribal Research Institute, Ranchi; scholar and writer (fiction and non-fiction)
33	Sebati Singh	Founder Ideal Development Agency (IDA), Kendujhar, Odisha; worked on issues of sexual exploitation of tribal girls in mining areas; child rights, and livelihoods.
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35	Shiwani Murmu	Community leader
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37	Sukeshi Oram	Former Chairperson TRIFED; Member, National Commission for Women; President of BJP Mahila Morcha, Odisha
38	Sumani Jhodia	Anti-liquor activist, Kshipur block, Rayagada district, Odisha
39	Tulasi Munda	Educationist; Padma Shree awardee
40	Umi Daniel	Aied et Action International

In Jharkhand, interviews were conducted face to face in Ranchi, Dumka, Simdega, Gumla, LITIPARA and Palamu. The interviews in Odisha could not be conducted face to face due to the second wave of the Coronavirus pandemic. In the online interviews, respondents were from Keonjhar, Mayurbhanj, Sundargarh, Phulbani and Mumbai.

With each respondent, an hour to hour-and-half long interview was undertaken. With the prior consent of the interviewees, the interviews were recorded. Subsequently, these interviews were translated and transcribed and subjected to content analysis. The transcriptions were further clustered under various analytical categories that emerged from the interviews and an overall trend, the similarities and differences within these categories were then analysed.

Are Adivasis different from non-Adivasis?

Adivasis are different from non-Adivasis in terms of their worldview. The worldview includes their perspectives about their life and ecosystem. It also includes the basic principles that structure their social relationships within the family, with their neighbourhood, own community, other communities, governance systems, gender relations or coping strategies.

Though various respondents shared various things, two aspects were mentioned by all: (1) non-hierarchical and mutual or symbiotic relationship among themselves and with all other elements and creatures in nature and (2) togetherness and sense of community.

Both these aspects are reflected in their language, dance, songs, paintings, livelihood practices and other aspects of their life. Akay Minz said, "Folklores and folksongs of

the Adivasi have taught them to love their water, forest and land; not to destroy those." Adivasi religious rituals basically connect them to nature and give them the reason to celebrate together. Anuj Lugun said, "The relation of Adivasis with the jungle is to live together. It is not about supremacy or about control." Archana Soreng said, "Every [Adivasi group] in Orissa, irrespective of language, culture and tradition, identify themselves as Adivasis. One thing that acts as a binding factor across all the communities here is the land and forest."

Human values like mutual support, collaboration and cooperation are the integral parts of their society. Not only in villages, one can see these in towns, universities, offices. Adivasis are more comfortable in groups, working in groups, helping each other. Biju Topno said, "If one wants to build a house, the entire village would help in building the house. If one wants to lay a thatch, everyone would come together to lay it. Everyone would together get wood and bamboo from the forests and then will make the house. The same happens during the transplantation. However, this is changing gradually."

This mutual help can be observed also in the form of offering food, clothes, shelters to the needy people in the community. On the contrary, the non-Adivasi have hierarchical worldview, where human beings are supreme and all other elements of nature are manipulated to serve the human species who among themselves are competitive and individualistic.

Most respondents added that Adivasis have their distinct communal identity and they prioritise communal wellbeing over individual progress. They are, in general, honest and trustworthy; they do not engage in the act of stealing, robbery and fraud.

Adivasis are reluctant to assert or come forward to claim benefits. For example, in a mixed population village,



electricity, drinking water, etc. will reach the Adivasi hamlet at last. They are less aggressive and persuasive. One of the respondents shared his observation that in the Indian Hockey team there were several Adivasis, but most of them were defenders; strikers were generally non-Adivasi. These attitudes are most of the time interpreted as laziness and foolishness by the non-Adivasi, said one of the interviewees.

A few of the interviewees, while differentiating Adivasis from non-Adivasis also talked about rituals such as 'bride price', which is given by a groom's family to the bride's family during the marriage. This is unlike dowry system in the non-Adivasi society, in which bride's family has to give dowry to groom's family in order to get their daughter married in that family. Some of them also mentioned 'bride price' as a progressive practice.

While talking about how both Adivasis and Dalits have been marginalised by the caste society, Sonajhariya Minz said, "Both Dalit and Adivasis were subjected to deprivation whereas Dalits were oppressed and Adivasis were marginalized. Adivasi went into isolation and stayed in isolation and suffered deprivation and marginalization. Dalits lived on the fringes of the villages and were oppressed by high caste, given inhuman treatment."

Are the two worldviews of Adivasis and non-Adivasis gradually coming closer? Well, most respondents do not think so! The majority of the respondents opined that Adivasi culture was changing because of domination of the non-Adivasi worldview which is accepted by the society at large as superior. This domination has been accelerated through the process of development and modernisation (we have talked about this later in the chapter). One of the respondents mourned that these two worldviews should have tried to understand each other and learn from each other, instead of one killing the other. The domination by the non-Adivasi has been traced back to the time of *Mourya* empire (320 BCE) by one respondent. Kautilya's Arthashastra has mentioned the small states of Tribes called *Gana-sangha* ruled by Tribal assemblies and it also suggests how to deal with those sanghas, through various injunctions and manipulating the noble leaders.

However, some respondents hold another view which claims that Adivasis and non-Adivasis have been learning from each other for a long time, and it is difficult to say who has influenced whom. One of the respondents, Karia Munda said, "There was one more distinction that Adivasis worship nature and their lives are dependent on nature. In many cases, Hindus also worship nature, but make them

into idols of different names, like Varun, Agni. There are some differences and similarities in prayers and rituals but it is difficult to say who had influenced whom."

The extent of change in culture, beliefs and values varies from tribe to tribe. One person said that the tribes like Gond and Bahtudi have assimilated with the mainstream society (non-Adivasi) whereas a few tribes are still rooted in their old traditions. Gond and Bathudi tribes practice idol worship and follow Hindu deities, whereas most of the other tribes practise both animism and totemism.

Gunjal Munda said that mixing with non-Adivasis, even if wanted, would not be so easy. He recalls, "In my school, no one said that some of us were different because we were Adivasi, but it was visible automatically. The Adivasi children would sit on one side and the others on the other, this was the case in the playgrounds too". Mary Surin attributed this to language, "There is a communication gap between Adivasis and non-Adivasi - the major challenge is the language". According to her Adivasi dialects and languages are hardly understood by non-Adivasi and this creates distinction from early childhood.

Are all Adivasi groups similar?

There are 32 different Adivasi groups in Jharkhand and 62 in Odisha. Some are called major tribes because they are large in numbers; such as Santhal, Oraon, Munda, Kandh, Kharwar, Gond, etc. The major groups are mostly dependent on settled agriculture and forest gatherings for their livelihoods. Whereas the smaller groups are artisans; some of the smaller groups practise shifting cultivation. One respondent mentioned that a middle class among Adivasis has gradually emerged in the cities. These comprise academicians and government officers including people working as officers/managers in public sector banks.

Some respondents see the heterogeneity in the following aspects:

- Adivasis in central India are divided into two major language families – Dravidian (e.g. Gond, Kurukh) and Austroasiatic (e.g. Santhal, Munda).
- Rituals, songs, dress, dance vary among these Adivasi groups.
- Adivasis are divided into three categories according to their religious beliefs. A section of the population follows the older traditions, another section is Christian and a third section is tilted towards

Hinduism. "The literacy percentage is higher among the Christians because when people got converted, they were given the opportunity in modern education. Others, on the other hand, were introduced to modern Education much after the independence of India," said Karia Munda. Others too shared similar views.

- There is some discrimination even within an Adivasi group in terms of which clan was the first one to come to a particular village. Those who came later have lower social status in that village as compared to the ones who came first.

However, the common thing that makes them one group is that they live in harmony with nature. The collective ethos that all the Adivasi groups uphold through their collective actions in agriculture or collecting forest produce, dancing and singing together, etc., is another common trait among Adivasis. Non-hierarchy has also been mentioned as a common value among various Adivasi groups.

However, Karia Munda says, "We have several different *samajs* (society) like Oraon, Munda or Santhal *Samaj*. This category of Tribe or Adivasi is made from the administrative point of view." Bitiya Murmu also said similar things - "Intermingling was not encouraged earlier due to territoriality of tribes. So, eating together or inter-marriages were discouraged". Within some tribes, there are issues of untouchability, as mentioned by some respondents. Mundas are considered untouchables by Bhuiyans in Odisha. Bhuiyan tribe does not eat food served by the Munda community. If someone from the Bhuiyan community visits any Munda house they would change their clothes before entering back to their own house. Similarly, the Gond tribe would avoid feasting together with the Juanga tribe.

Though all said that Adivasi was not a homogeneous category, many of them said that as far as political issues were concerned, Adivasis, especially in Jharkhand, remained united, by and large. These political issues are related to access and control over forests, land rights, resistance against land acquisition, demanding separate Adivasi columns, etc. In all these incidents they tried to portray one identity as Adivasi. "Jharkhand movement happened because we could go beyond the factional identity and connect to the larger identity as Adivasis," said Biju Toppo.

There are differences between men and women within the household, though women in Adivasi society enjoy more freedom compared to non-Adivasi women in non-

Adivasi society, according to the respondents. This aspect is discussed in chapter on Women in Livelihoods.

Throughout the report we have used the term Adivasi, tribe and ST interchangeably to denote all the people who belong to different Adivasi groups.

Does the new generation hold this worldview?

Interviewees mostly said that the new generation does not fully own this worldview. Exposure to the cities, modern technology and mainstream education are seen as the drivers of this change.

The younger generation of Adivasis, in most cases, do not speak in the Adivasi language, which is the carrier of the Adivasi worldview. Gunjal Munda said, "There is a perceived prestige associated with non-Adivasi languages. Therefore, speaking Adivasi languages does not seem to be prestigious". Nowadays almost every family has smartphones which are playing a major role in shaping young minds. Hindi or English is the medium through which contents are conveyed on the phone. So, the inferiority complex related to the Adivasi language is penetrating. Further, the Adivasi languages are not getting a space in formal education or in offices. People are ought to switch over to non-Adivasi languages and with that, the basic values are also eroding.

The modern education system promotes individualism and competition which is another reason for the erosion of the Adivasi value system. It is also a reason for reduced interest in learning their own language. The texts and the teaching involve mostly non-Adivasi language. Even if anyone is interested in learning the language, there will hardly be any scope. Apart from Santhali, no other Adivasi language comes under the scheduled languages of India.

However, another section of interviewees shared that the Adivasis needed to change and adopt a few things from the mainstream (non-Adivasis). One of them says that Adivasis have to be educated through the formal education system otherwise in a changing world they will face more deprivation. Kiranbala Nayak said, "Adivasi should adopt the entrepreneurial mindset of non-Adivasis. Adivasis must strive to assimilate with mainstream society to keep up with the larger development process. But this assimilation process must not be forced upon the Adivasis; instead, it should be voluntary."





The transition is leaving the Adivasis in between – from a situation where they used to depend fully on nature for their daily life to a situation in which they are dependent on mainstream materials, knowledge and systems. But, the mainstream cannot afford to provide all that is needed by the Adivasis. Mary Surin said, “they [Adivasi] are being advised to take modern medicines when they lack hospital facility, connectivity to reach the hospitals and inability to pay for the medicine. At the same time, they are not fully dependent on their traditional system of medicine, which they have started to doubt being so much influenced by the external world.”

Declining access to forest

All respondents shared that due to various historical reasons Adivasi villages were set up in and around forests and therefore forest is the lifeline of Adivasi communities. Their agriculture is thus shaped by the presence of forest in the upper catchment. A variety of food come from the forest and at the same time the fertility of the farmland and conservation of water also is greatly facilitated by the existence and quality of the forest. A good forest always meant good agriculture. Therefore, Adivasis always wanted their forests to be diverse and protected. The way Adivasis gather forest produce ensures perpetual forest rejuvenation. They collect the *Kandhmool* (tubers), but leave the root system intact so it grows again. They collect dried branches; not the green ones. Adivasis also collect construction material from the forest, but its quantity is regulated by their village panchayats.

Adivasis have a spiritual connection with the forest. A part of the forest is considered a sacred abode of God/Goddess.

The interviewees clearly mentioned that the Adivasis are the preservers and protectors of forests. Two of them also said that at times the illegal felling of trees takes place with the help of some Adivasi villagers. Though these Adivasi villagers get a very small amount of money in return, because of their involvement in this matter the administration and forest department, many a time, blame the Adivasis for felling.

Nevertheless, almost all said that forests are conserved by Adivasi people and not by the forest department. The forest department is governed by ‘consumerist’ perspectives. The trees which provide food, fodder, fuel, medicine and many other things essential for Adivasis to sustain their lives are cut by the forest department through a system called *Koop Katai*. These are then replaced with trees of commercial (timber) value. The new trees which

are being planted in the forests are not indigenous to these regions and may destroy the ecological balance. Due to the depletion of natural flora, animals such as elephants enter the residential areas in search of food. Sumani Jodhia regrets, “The composition of the forest has been changed a lot. Earlier we used to get forest products like honey, bamboo, sal seeds etc but nowadays we are not getting all these from forests. Earlier we used to get medicinal plants for fighting Malaria but it’s not available these days. We used the bark of trees to treat malaria. Earlier there were sambar deer, barking deer, spotted deer, peacock etc in our forests. After the intervention of industry, the rapid destruction of forests, mining has caused the extinction of indigenous natural flora and fauna.”

Under the administration of forest department, villagers have lost their full access and right to the forest. Though the Forest Right Act, 2005, gives access rights to the Adivasis, the same are not implemented on the ground.

Some interviewees further said that the Individual Forest Right (IFR) is creating further divisions in Adivasi society. It is promoting individualism and weakens the collective ethos. Jyotsna Sheela Dyang narrated a story – “The community-based forest rights have not been provided in large scale, particularly in the Adivasi areas of Jharkhand. There was a programme for celebrating the completion of one year tenure of the Jharkhand government, in which I was the emcee. When I was announcing the names for vanpatta, I saw that many individuals came to receive it on stage. It was awarded by the state government to individuals and not to the entire villages or communities. After a month of this programme, I went to talk to the Adivasi people who received individual *vanpatta*. To my surprise, I saw that individual *vanpatta* received by one or two families were kept as a secret from the rest of the village. These schemes by the government are damaging the integrity, unity and community-based feelings in the Adivasi people. It can even be seen that individuals who are receiving *vanpatta* are aligned to a particular political party.”

There are provisions for Community Forest Rights (CFR); the administration shows huge reluctance to give CFR. Adivasis who do shifting cultivation in jungle believe that lands belong to their community. Once a family is given Individual Forest Rights (IFR), it’s expected by the administration that this family will do farming there only. But, as a traditional practice, farmers shift to other plots for greater productivity and crop rotation. IFR restricts this. Many villages applied for community forest rights and *patta* and even if those were sanctioned, in reality, those were only rights for conservation. Villagers did not



have any right of using and rejuvenate the forest as per their needs. All the interviewees said that if acts were implemented in their true spirit, it would transform the lives of Adivasis. Moreover, if forest land is acquired for other development purposes, the cultivators won't get any compensation. In the case of CFR, such issues won't arise.

Disappearing traditional knowledge and skills

Because of their close connection and dependence on nature, Adivasi people possess intricate knowledge about its conservation. This knowledge and skill has helped them in hunting animals and gathering food, fodder, fuel, medicine from the forest. Their knowledge of the farm-forest ecosystem has helped them to maintain soil fertility in their farmland by channelling humus-rich rainwater from the forest to the farmlands and using forest produce for crop protection.

They have a deep knowledge of natural cycles and seasons and their agricultural practices are guided by those. They are conscious of regenerating flora and fauna. The custom of *shikar* (hunting) is prohibited during the breeding season; their practices of harvesting forest produce help regeneration; the custom of shifting cultivation rejuvenates soil. Part of this knowledge has been transformed into Adivasi art, literature or folk tales, said one of the respondents.

However, loss of access to forests and more dependence on chemical-based agriculture has made this knowledge redundant, opined many interviewees. This knowledge is oral and transferred through songs, folklores, etc. As the young generation progressively forgets the Adivasi language, this knowledge is also on the verge of extinction. Moreover, in the modern education system, there is no place for traditional knowledge.

Modern farming practices make Adivasis more vulnerable

Adivasi agriculture is changing its character. Earlier Adivasis used to cultivate as per their consumption needs. Both agriculture and forest used to play a vital role in Adivasi livelihoods. With declining access to the forest, agriculture has got affected to a great extent. Further, as animal herd size is shrinking in Adivasi areas, cow dung is becoming scarce to be used as manure.

In this situation, a small section of interviewees said that the Adivasi farmers have learnt chemical and modern technology-based agriculture in order to increase production and income from their farmlands. They need access to capital, knowledge and advanced technology in order to reap the benefit of chemical-based agriculture. Merry Surin said, "Adivasi way of doing agriculture is the traditional way they have been doing agriculture. But, with time the technology has come in. If they are introduced to technologies that reduce their hassle, they will adopt them. Modern agriculture has brought benefits to them. The only change which has been negative with the change in technology or the modern mode of agriculture is the use of pesticides."

However, the majority of the interviewees do not think this is a solution. According to them, chemical-based modern agriculture will destroy the soulful relationship with land and soil. Through modern agriculture, promoted by extension workers of Govt. and NGOs, one or two crops are replacing a wide range of locally suitable nutritious crops. Many varieties of local paddy, millets are rare or totally extinct now. This is making Adivasis more vulnerable in an agro-climatic zone where rainfall is too erratic. However, this section of respondents also critiqued the Government's effort to convert Adivasis as organic producers and take their products to cities for urban people's consumption. They think that rather than teaching Adivasis about organic farming, Government and NGOs should learn sustainable farming from the Adivasis.

Another group of interviewees expressed that a middle path needs to be taken. Farm mechanization and irrigation systems are needed for Adivasi areas, but, the use of pesticides and fertilizers are of deep concern to the same group of respondents. Two interviewees mentioned the System for Rice Intensification (SRI) introduced by NGOs as a boon to the Adivasis.

Some mourn about the loss of pleasure they used to derive from agriculture. In the monsoon season, they used to enjoy the beauty of rain, ploughing and singing together while working on the fields. Presently, machines have replaced community-based farming. "The joy one felt with each raindrop is put aside by new technologies," says Manikchand Korwa.

Individual land ownership has also been identified as one of the reasons for declining community-based farming practices. In the late 19th century and early 20th century, during the land settlement, individual ownership was externally imposed by surveyors who didn't have any idea



about tribal conventions of community ownership of land by the clans.. Since then, commented one interviewee, the sense of community ownership of land is fading away.

The household targeted government schemes are also seen as responsible for the decline of community-based farming. Such approach has benefited only a few, and has created the tension in the village. The *Pancha* system through which Adivasi villagers used to work in each other's fields to share labour has now become defunct as some villagers have many tools and they can manage without any assistance from other villagers, explained Bipin Jojo.

'Development' projects made things worse for Adivasis

The development efforts in terms of mining, dam construction or even modern agriculture have been seen by most of the interviewees as processes responsible for making Adivasis more vulnerable. Due to massive mining works in parts of the Central Indian Plateau, land quality is getting deteriorated. The flora and fauna of the place are also getting damaged because of mining. The Adivasis had no option but to work as labourers in mines or migrate to cities in search of unskilled jobs. Huge forests were also destroyed for mining. This has also impacted Adivasi livelihoods.

In fact, many said that the modern development paradigm had affected the Adivasi society. The collective ethos is decreasing as a result of the individual-centric approach of Government programmes and schemes. The traditional social justice system of Adivasi society has been replaced by modern systems such as gram sabha, police and court; but those did not take into consideration the Adivasi values and Adivasis still cannot consider these as their own.

Adivasi villages have been highly regarded for their cleanliness. Recently, toilets were constructed in Adivasi villages under Swachh Bharat Aviyon (SBA) in such a way that there was no proper sewerage system. This made their village unclean, says one of the Interviewees.

Further, dowry system has started creeping in Adivasi society due to its exposure to other non-Adivasi communities in towns, use of smartphones, internet and TV. Earlier, living together (*dhuku*) was an accepted custom; but now marriage is more accepted and those customs are looked down upon.

Development has been described by Bipin Jojo as a clash of the two worldviews. The world view of modernity is considered superior to the Adivasi worldview. This notion leaves no room for exchanging views and learning from each other. Dayamani Barla said that the old concept of a village as a unit is getting diluted by the formation of smaller groups like SHG within the village. Bitiya Murmu said, "Leaving our values behind and moving forward in the name of development will be dangerous for our society." Sonajhariya Minz said, "I would like to say that perhaps the health condition of those who have tried to preserve the Adivasi food habits is better from those who were deprived of this kind of food habit."

However, a few interviewees, such as Meri Marandi and Shiwani Murmu also said that the modern development system brought some good changes as well, such as awareness about alcoholism and reducing the Mahajan Pratha. Some held views that the development process should continue. Kiranbala Nayak said, "I will say that we are nature admirers, tribes are nature admirers, we have distinct culture and tradition. Still, Adivasi community should learn from mainstream society to acquaint itself with the other society as Adivasis cannot stay in forests forever; worship nature forever; or draw the sustenance from forest produce alone forever. She opined the need for an arrangement to assimilate Adivasi with mainstream society. Government interventions should reach every marginalized Adivasi population. We, as the Adivasi community, cannot be a part of development if we would not mix with them."

Forced Migration

Adivasi people mostly depend on forest, agriculture and allied activities for livelihoods. However, this cannot give them food and income for the entire year. Generally, Adivasi youth migrate to big cities in search of jobs and exposure to the outer world. This migration starts at the age of 14 to 16, without acquiring any skill. Most of them start their career as unskilled labour and remain so until they reach their 40s when they stop migrating. Anuj Luun sees this as a larger capitalist process for producing cheap labour. He said, "We need cheap labour who will be in our control and work. So, the Adivasis and their lands were considered not the best for doing agriculture. This is a big discourse if we want to go deep into it."

Narayan Murmu asys, "Actually whoever has studied till 9-10th standard are not engaged in agricultural activity and instead migrate as wage labourers. From my area

alone, boys who fail matric, move to Surat, Bangalore, some become security guards. They need some money to sustain agriculture as well. They move out seasonally, come back and spend the money earned on agricultural operations. This is not true that they have already forgotten agricultural operations. As far as vegetable cultivation is concerned, irrigation facility does not exist in our areas. Without irrigation, vegetable cultivation is not done properly. Even if we do, Adivasi areas do not have marketing, cold storage and transport facilities.”

While describing the process of industrialisation in Adivasi area, Sumani Jodhia said, “The establishment of industry created employment opportunities for educated people. People are coming from Bhubaneswar, Jajpur, Delhi for jobs whereas our indigenous people are still unemployed. At the same time, the establishment of industry and mining sites has destroyed our forest. Where would we make the forest again? The bauxite mining and all are going on for a while polluting the river – which is a major source of water for us.”

A similar view was expressed by Bipin Jojo, “The Adivasi youth from the industrial fringe areas are neither illiterate nor properly educated. So, neither do they want to go back to their parental occupation like agriculture nor can they get a job in the industry or office. As they do not even have the required technical training or skills to get some industry or some government/private job. Given the kind of materialistic aspiration they now have, they find it best to go to either Mumbai or Karnataka, Tamil Nadu, Kerala, Maharashtra, Goa or Delhi.”

Umi Daniel said, “Government has not provided adequate options to them. The government said you go and join skill development training. At the skill development centres, young people are taken away from the regular schooling and higher education and pushed into the cheap labour.” However, Tulasi Munda thinks that skill-building is necessary along with school education. She said, “Every work today is done with machinery. Suppose there is a construction of a pond, 100 people used to earn a livelihood from that, but now one machine does the work for one pond. Earlier, several people were engaged in road works, but now even that is done by machines. So, after being educated too, many Adivasi people need training and because of lack of training, they won’t get work. It is the days of machines.”

A large number of Adivasis migrate every year from Odisha, Jharkhand, Bihar, West Bengal, etc. One interviewee mentioned a recent study done by the Ministry of Adivasi Affairs, in four states - Jharkhand,

Madhya Pradesh, Chattisgarh and Orissa, which shows that in Odisha, out of every 10 Adivasi households, from nine households at least one member migrates. There are incidents of trafficking both from Jharkhand and Odisha.

Akay Minz said, “A lot of problems come with migration. From a village in Raidih block of Gumla district of Jharkhand, boys used to go to Gujarat for work in the diamond cutting centres in Surat and girls to Mumbai. One doctor at CHC was tracking these people and asked them to get tested before going and upon returning to the village. He tracked them for two years. When they left everyone was fine; but when they returned five of them were HIV positive: three men and two girls. Also, people who migrated for road construction and mining in Uttrakhand, developed lung-related problems.”

Unfair market

Markets used to be and still are a place for socialisation and cultural exchange for Adivasis. Many marriage relations used to initiate from the marketplace. The market also used to be a place for the exchange of news. Most respondents said that the Market was gradually becoming alien to the Adivasis. Anuj Lugun said, “Formal markets have ruined the traditional haat which was a cultural exchange place aside from commerce.”

Fr. Nicolas Barla said, “post-1990 most of the transactions started happening through money - fully replacing the traditional barter system. Adivasis are still not adept at negotiating the price of their products and selling them at a price that the customer and traders (usually Non-Adivasis) offer. These markets are now controlled by middlemen and non-Adivasi traders. These unfair markets are the grounds of exploitation of Adivasis.”

Education

Teaching in a language other than the mother tongue is identified as a major hinderance in the education of Adivasi children. Adivasi children find it very challenging to study with medium of languages other than their own. Government schools have failed so far in Adivasi areas, language has remained the main barrier for the children to learn. Bipin Jojo said, “I am for local language or mother tongue to be used at primary level, whether it is Kui, Mundari or Santhali or Sundargarhi or Sambalpur. I think that helps in comprehension. And gradually you can bring in other languages. But for comprehending the concept,





it is better to teach a child in his or her mother tongue.” This is visible in the missionary schools where teachers are recruited from local areas, they speak in Adivasi languages, unlike the government teachers. Jyotsna Sheela Dyang said, “The teachers in the government schools mainly belong to the non-Adivasi areas. Whereas the teachers in the missionary schools are locals. They connect very well with children. Education creates awareness about the conservative rules and the superstitions within the society; even it creates political awareness.

The school and college curricula also don't have any relation to Adivasi life and culture. Hence it does not resonate with Adivasi students. Almost 70% of school dropouts among Adivasis are from class 1st to class 10th. Adivasi culture and values should be part of school curricula, said many respondents.

Mid-day meal schemes function irregularly due to frequent outages of stocks. Teachers remain absent or they do not teach and do some other works. Schools remain shut.

According to one respondent, through the government skill-building programme, a pool of cheap labour is getting created among the Adivasis. He gave examples of the private security agencies or the garment factories where these skilled Adivasi people are getting employed with low remuneration and unhygienic working condition. However, the majority said that Adivasis have to be imparted technical skills so that they keep pace with the technological advances and grab opportunities. Otherwise, they will be further deprived in a technology-driven world.

Women's position in Adivasi society

Although women are better placed in the Adivasi community as compared to the women in non-Adivasi communities, the Adivasi societies in Central India are patriarchal. The manifestation of patriarchy is different in Adivasi society; however, it is getting more and more influenced by mainstream societies.

While expressing how Adivasi women are in a better position, respondents gave several examples. Adivasi languages do not segregate based on gender. Adivasi society has no taboo accepting girls who had eloped or were raped, unlike the non-Adivasi societies. Adivasi men have no issue marrying girls who are more educated than them. Adivasi women do not have to observe *Purdah*.

The mobility of Adivasi women in the market and other places is not restricted. In the case of marriage, the girl's consent is necessary. Widow remarriage in Adivasi society is a socially accepted practice. Ranendra Kumar said, “In patriarchal society, motherhood is glorified but women are demeaned. In Adivasi society, the female body is not highlighted rather their brains and hearts are given importance. This is also the philosophy of feminism.”

Women participate in livelihood activities, and in most cases do most of the household work. But, there are some other restrictions on Adivasi women — like, they are barred from undertaking roof thatching, ploughing, holding an arrow, etc.

Women do not have ownership rights on ancestral land. They have either a right to manage the land and its produce or the right to get a share of the produce of the land in certain circumstances. Most of the interviewees think that women should have land rights. Women do not participate in the traditional governance system, in general. Witch-hunting is another practice that is still rampant in Adivasi villages.

Some interviewees also consider women's huge workload as a manifestation of gendered discrimination. Akay Minz said, “In Adivasi communities, women have so much freedom. The women can be bread earners of the household; but isn't that an exploitation? She is a bread earner, she is a homemaker, she also tends to children, so it has gone from positivity to negativity.” Shivani Marandi said, “Women from non-Adivasi groups do not have to opt for job or work because the men in the household look after the financial matters. Whereas, Adivasi women are forced to go outside to seek work. Our men drink alcohol and remain at home. So, this is a good thing about non-Adivasi people.”

Women generally do not own land. And some respondents said that this practice is for saving lands from going out of the clan's ownership. Most respondents think that women need to have land rights and ownership to become financially independent. The Chhotanagpur Tenancy Act and Santhal Pargana Tenancy Act recognise traditional inheritance laws of Adivasi. As these traditional laws are not written, the oral interpretation given by male patriarchs in the village is followed depriving the women. Women also do not participate in the traditional local governance system.

Some interviewees identified Self Help Group (SHG) as a key factor towards women empowerment in the Adivasi areas. Women are now sitting in village meetings. They

can comfortably talk to the bankers and police without any fear. With the help from SHGs, Adivasi people are getting loans. Meri Marandi said, "If I were not a part of a women self-help group, I would not have received this kind of education. Earlier, women would stay shy in their own groups. Now, with the introduction of Mahila Mandal, people are now generating change in the society. So, this has been a huge boost to our community now. Also, people are now more aware of their land rights and protest to save their rights. I am sure that more and more changes will happen like it is happening presently." Chami Murmu said, "Earlier only men used to make decisions about the rituals and everything, but today women are also sitting in the groups and discussing relevant issues. They are given recognition for their suggestions. Women are also elected in different developmental committees."

However, an interviewee said that women are getting further depoliticised because of the state-sponsored Self Help Group (SHG) programme. Women now do not want to participate in any discussion related to displacement, rights violations, etc.

Most of the interviewees said that violence against women is less in Adivasi society as compared to mainstream society. Dowry related violence is almost absent among Adivasis. However, witch hunting – an extreme form of violence against women exists in Adivasi society. Many interviewees said that witch-hunting happens with those women who have got ancestral property.

Conclusion

Since independence, government and non-government organisations have been working towards the well-being of Adivasis. On the other hand, dispossession and displacement have continued to be major issues facing Adivasis. Mainstream development programmes have failed to recognize the socio-cultural distinctiveness of this group and have followed the 'one shoe fits all' approach. Manik Chand Korwa said, "Development should meet the needs and perceptions of the Adivasi people. Progressive acts such as PESA or FRA needs to be implemented in the right spirit. Adivasis' dependence on forests for livelihoods can be further strengthened by regulating prices of non-timber forest produce. At the same time, quality education can provide more opportunities for the younger generation and help them get remunerative and dignified employment in the cities."

In designing developmental interventions, the questions raised by Dayamani Barla are quite insightful – "What kind of developments and investments shall we do? Is it to save the water bodies? Are we going to conserve our water bodies? Or to save our traditional and agricultural systems, shall we invest? Or shall we invest to save our language and culture? How are we going to save the language and culture of this region when we are unable to save our land and rivers?"





Annexure

B : Salient points made in Focus Group Discussion



Issues relating to Adivasi identity and homogeneity



The youth shared that though their interaction with the external (largely non-Adivasi) world has increased, they were cognizant and proud about their distinct Adivasi identity. They were also of the opinion that mainstream culture is yet to influence the Adivasi culture. In this regard, they were of the opinion that low education and hence low exposure was in some sense acting as a safeguard in this regard. The youth focused on three cultural traits: religious festivals, music and attire. With respect to festivals, they shared that while festivals like *Poush Parav* and *Kali Puja* were celebrated by both non-Adivasi and Adivasi communities, there were festivals like *Sarhul* and *Bandana* which are exclusive to Adivasi community. According to the group while they do participate in different festivals, their attachment and enjoyment were most for festivals like *Sarhul*. The use of traditional musical instruments like *Dhamsa* was still a compulsory part of the marriage rituals, and most of the youth are familiar with such instruments. With regard to attire, the women pointed out that though there was mixing of styles, but the traditional way of wearing a saree still continues. The traditional style of painting on house walls was vibrant. Other dimensions of culture they discussed were the music, the various musical instruments and the dance forms of the different Adivasi communities.

But some members also accepted that changes are taking place in the society – albeit at a slow rate. The general interest in attending one's festivals was waning among youth. Some Adivasi youth are exploring fusion between tradition and modernity. One participant remarked, "we are transforming and modernising our traditional dance performances like the *Pata*, *Bhuwang* and *Jawa dance*". The participants shared that the aspirations for clothes

with the modern design was increasing among the youth, and was constrained mainly by low purchasing power. Overall, the participants were of the opinion that while change had slowly set in, they were proud of their distinct Adivasi culture and they would try to adhere to it in all circumstances. Educated Adivasi youth are becoming aware that some undesirable practices such as child marriage must be given up, even though they are as per the Adivasi customs.

While the youth proudly shared the various distinct traits of their culture, they also agree that society is changing. One such aspect that was talked about was the dress. According to one respondent, "clothes we wear today, like jeans, pants, were not worn by the elders. Traditionally the attire included *panchi*, *padhar*, dhoti which are slowly eroding and new fashionable clothes are replacing them. The new generation is getting attracted towards fashionable clothes and our traditional clothes are being mocked somewhere." The group was unanimous that now popular DJ-music-in-marriage practice does not belong to the Adivasi culture.

Another youth group proudly articulated three distinguishing attributes in the Adivasi society that are still prevalent: intimate relationship with nature, gender equality as far as marriage is concerned and the intra-community dispute resolution mechanism. As was shared by one respondent, "we have various festivals across seasons and each of the festivals is in some way linked with nature." Another respondent added, "irrespective of the work in which people of our community are engaged in, at the end everyone will be back to their village and will engage in activities that are directly linked with '*jal*, *Jangal* and *Jameen*'. The youth pointed that in a marriage in Adivasi society, both the boy and the girl can exercise their agency as long as they are not marrying within their clan. Also, there is no prevalence of dowry system in

Adivasi marriages. With respect to the dispute resolution mechanism, one participant shared, “you will not find a single case in this village that has reached the police station. Historically the people in the village sort out the dispute internally with the help of the traditionally evolved dispute resolution mechanisms without involving an external party or police officials. These traditions are still strong among Adivasi villages.”

The importance of locally brewed alcohol as part of the Adivasi culture and its menace in society also came up in one of the discussions with some groups. According to one of the participants, “boys come into the influence of alcohol consumption early in their life and that often also results in detachment from the study.” The participants agreed that though the locally brewed liquor is part of their culture, particularly in the Oraon and Munda tribes where liquor is part of the celebration in most of the rituals and festivals, the problem of alcoholism is a big menace within the society. The young participants were of the view that selling locally brewed liquor was important, and perhaps the only livelihood for the sellers, often women, and unless an alternative livelihood provision is made for these women, its sale should not be stopped.

Two additional traits of Adivasi culture came up in this discussion. First, that the Adivasi society essentially is laid back, happy with what it has and does not breed a competitive mentality. As one participant remarked, “in our Adivasi culture there is no competition among us, getting-ahead-of-others mentality is not part of our culture – rather we prefer to live a communitarian life.” Second, the participants drew attention to the *sarna* religion which they followed. According to the participants in *sarna* religious practices idol worship made way to worship of nature, and worship in closed temples made way to worship in an open place in nature.

Issues related to relationship with the forests



Four distinct observations came out of these discussions: (i) the Adivasi population, wherever forests are available, continues to depend on the forest for multiple uses, but that dependence is reducing as the general state of the forest and its produce-bearing capacity is reducing, (ii) there is a gendered relationship between the forest and

Adivasis – it is the women who move into the forest to collect fuelwood, dry leaves and multiple forest produce. It is they who face the related drudgery associated with the collection and the angst of negotiating with the forest department’s officials, (iii) in some parts there is an understanding that forest conservation is important to create a micro-climate that brings in rain and is favourable for agriculture and (iv) as of now, very limited value addition of forest produce was reported in the group discussions, rather the participants complained about low prices that the produce fetch in the nearby market. The degree of awareness about the Forest Rights Act, the proportion of Adivasi people who had applied for individual rights, the frequency with which community rights were claimed and the proportion of people granted FRA all varied across the places surveyed. In general, CFR was seldom granted.



Migration income



Discussions with different communities revealed that migration is an important source of family income for an overwhelming majority of Adivasi households. Nearly all the households need to send their male members for labour work. While some of them work on farms nearby or in nearby towns, many of them migrate to different states and far off places. The discussion revealed that most people migrate into low paying jobs with high insecurity and high drudgery. When they are employed in nearby farms, the wage rate paid is on the lower side but there is security, both physical and security of the wage actually being paid. When they migrate far, they usually earn a higher wage rate but they can often be cheated out of their wage or they could experience a situation where the nature and rigour of work are not what they bargained for. Those with better skills tend to migrate to distant places and seem to also be more satisfied, but those who migrate to brick kilns or quarries are exploited. Migration to outside states has suddenly become a less favoured option due to the terrible shock of the lockdowns following the COVID-19 pandemic. Since the regions in which they lived had high poverty and low employment opportunity, they had to go outside their state. Migration appears to be increasingly circular: men migrate post-Kharif to earn by wage work in distant places, come back once or twice during the year and bring some money towards the end of the next summer, and the money saved is invested in Kharif agriculture.



Non-farm livelihoods



Agriculture neither provides enough income nor work through the year. The Adivasi households, therefore, face the question of livelihood to meet their needs. Their choices are restricted by poor education and training. Unskilled as most of them are, they can only do work of unskilled labour whether in rural settings or even after migration to distant places. The scope for rural work comes through MGNREGA. Adivasi youth in particular are wary of working under this scheme and seek “better quality” work. Many have learnt some skills on the job, particularly in the construction line. Many have acquired skills as masons or painters, etc. This does give them some occupational mobility and extra income. However, a large number of people are stuck in unskilled labour work - at times in very oppressive conditions. The phenomenon of Adivasi people working in quasi-bondage in stone quarries or in brick kilns is not uncommon and is often heard in the case of Adivasi people from Odisha. While both men and women have the aspiration for taking activities such as driving, plumbing, tailoring etc, skill-building centres are not within easy reach. If farming and work in rural areas have the prospect of low income and arduous work, working after skill-building also entails the travails of staying away from home. However, there was a strong and repeated demand made in the group —discussions about skill building for youth, both men and women.

Development paradigm, government schemes and governance



The groups did express themselves in an articulate matter about issues of drinking water, sanitation and health. Discussion with women threw up a mixed picture. While the general trend points towards some improvement in the sanitation, open defecation continues to be prevalent in many villages where the group discussion took place. The reasons that came up in the group discussions were faulty construction of toilets, lack of complementary water infrastructure and local (village level or panchayat level) mismanagement and elite capture. In a few places, the problem was seen with construction quality: leaky roofs, very shallow pits, crumbling frame etc. However, wherever the toilets are functional, the same have greatly improved the life of the womenfolk in the village. Women do feel very happy about the effort of the State.

While the sanitation situation has improved, the problem with water supply persists, particularly in summer.

Borewells run dry, ponds get depleted and women have to walk long distances, often up and down hills, to fetch water. In most places where the Government has made efforts to install borewells, tube-wells or “Jalminar”, women reported a reduction in drudgery. However, it was very common to hear that many of these structures went defunct in summer as groundwater levels deplete, and then women have to walk to the next village or further to fetch their daily water. Well-functioning sanitation and drinking water schemes were reported in just a few villages. As far as the status of the development schemes and the last mile development is concerned, Jharkhand gives a mixed picture. In some locations, lack of Anganwadi centres and irregular service of last-mile workers have constrained the access of various development programmes. In other locations, the access of the centres and workers have kept the schemes from getting implemented to the desired effect. In Odisha, in most of the locations studied, the last mile workers were functioning to the desired effect. However, the lockdown has affected the delivery of various nutrition and vaccination-related schemes – more so the nutrition schemes – whether mid-day meals scheme or the take-home ration (THR) scheme. The implementation of PESA is of a variable quality indicated by the sad state of the gram sabha, aam sabha and palli sabha. These meetings are mostly irregular, perfunctory, generally non-participatory, dictated by the mukhiya, ward member or the sarpanch and with very limited inclusion in decision-making as far as gender is concerned. Having progressive legislation without a serious administrative will at the field level has resulted in this situation. In some locations, Anganwadi Sevika or Sahayika were missing and nutritious food was not being given to eligible children. The lockdowns and the fear of COVID seem to have caused a major breakdown in this system wherever human interface was warranted. Pension schemes and the Kissan Samman Yojana disbursements are received due to the direct cash transfer mechanism. In the case of the surveyed areas of Odisha, the picture was better on these counts.

Issues regarding the status of women

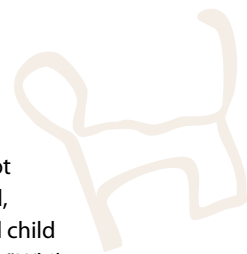


In a discussion with a youth group in Dumka, participants shared that in Adivasi society men and women enjoy equal opportunities and space in the family. The societal

structure did not promote any inequality in terms of access and opportunity to food and education between boy and girl child in a family. But then one respondent said that as per societal norms, the women are allowed to participate only in two festivals – Baha and Sohrai. Another respondent was of the opinion that exercise of this discretion depends on the individual or the guardian. During the marriage, the boy and girl can exercise their agency and there is no practice of dowry. With respect to inheritance rights, one participant mentioned that “as per cultural norms we do not give ownership of land and place to our sisters (post-marriage) but we invite sisters during the festivals and other occasions”. Another (women) participant shared, “we do not go to “Baraat”- there only men are allowed to go.” On being asked if girl child should

be allowed to inherit property rights, one participant remarked, “even if I want it, it will not happen.”. Another (male) participant mentioned, “there is no point in giving the property to a girl child as they get married and settled somewhere else.” While the sample might not be generalisable, the above remarks indicate that Adivasi society might be as gendered as non-Adivasi society.

The SHGs are women managed institutions in the village. The data obtained in the group discussion is not enough to draw definitive inference about their effectiveness, but we found that in various locations they were functional. The lockdown and social distancing in some places have affected the regular meetings and interactions among these groups.





Annexure

C : The State of Adivasi Livelihoods: Seeing Through The Socio-Economic Caste Census-2011



1. Scheduled Tribe Households

In India, as per Socio-Economic Caste Census (SECC 2011), the ST households comprise some 11% of the total rural households. In the eastern region, comprising the states of Bihar, Jharkhand, West Bengal and Odisha, around 10.5% of the rural households are ST households. In Jharkhand, ST households comprise around 30% of the total rural households. There is a high inter-district variation in Jharkhand - while ST households are up to 75% in Khunti district, it is only 1% in Koderma. In Odisha, on average, the ST households comprise a quarter of the total rural households. There is a high inter-district variation (SD:20). Sundargarh has the maximum proportion of ST households (64%) followed by Malkangiri. There are two contiguous geographical regions where one sees a high proportion of rural ST households: (i) Sundargarh, Kendujhar and Mayurbhanj and (ii) Kandhamal, Nabarangpur, Koraput and Malkangiri. Based on the SECC 2011 data, one can infer that among various states in the country, the states of Jharkhand and Odisha have a high ST population.

households and rural ST households reported manual casual labour as a source of income. In Jharkhand close to half of the rural households and rural ST households are engaged in manual casual labour. In Odisha, around 58-59% of the rural households reported manual casual labour as the source of income. Among the rural ST households in Odisha, 67-68% households depend on casual labour ($p < .01$).

At the national level, around 30% of the rural households and 38% of rural ST households report cultivation as a source of income. The dependence on cultivation as a source of income is still higher in Jharkhand. Around 32% of rural households and some 39% of rural ST households in the state reported cultivation as a source of income. In Odisha, on average, some 25% of all rural households and 24% of all rural ST households reported cultivation as a source of income. The inter-district range of variation was high: 68% among rural ST households (and 64% in rural households) in Malkangiri while only 4% in Cuttack. The median rural households and rural ST households who reported cultivation as a source of income were 24% and 23%, respectively.

2.1 Livelihoods Engagement: casual labour, agriculture and domestic work

The SECC collects information on the income sources of rural households. It gives information about the various activities that the people depend on for their livelihoods. In Jharkhand and Odisha, agriculture and manual casual labour are two dominant sources of income among rural households – particularly among the ST households. At the national level, more than half of the rural

Beyond manual casual labour and cultivation, part-time or full-time domestic service¹ is the third major source of livelihoods among the rural households – and to a lesser extent – rural ST households. At the national level, some 2.5% of rural households and 2% of rural ST households were engaged in part-time or full-time domestic service. The dependence was higher in Jharkhand, where 4% of rural households and 3% of rural ST households are engaged in this activity. In Odisha, around 3% of the rural households and 2% of the rural ST households are reportedly engaged in domestic service, either part-time or full time, for their livelihood ($p < .01$).

¹ The SECC website (<https://secc.gov.in/>), does not clearly define “domestic service”.

The correlation analysis (Table 2) shows that in Odisha as the percentage of ST households to the total households increases, the dependence on cultivation as an income source increases and dependence on domestic service/ non-agricultural own account enterprises and other sources decreases. While the dependence on casual manual labour is high, that does not necessarily increase with the increase in the ST population. Whereas in Jharkhand as the percentage of ST household in overall rural household increases, the dependence on cultivation as an income source also increases while the dependence on manual casual labour as an income source decreases.

2.2 Livelihood engagement: Non-farm Sector



With respect to the nonfarm sector, the SECC 2011 enumerated two indicators: (i) registered non-agricultural enterprises and (ii) non-agricultural own account enterprises.

It was found that around 2.7% of rural households and 2% of rural ST households in the country had registered non-agricultural enterprises. The number of rural households and rural ST households having a registered non-agricultural enterprise was lower in the eastern region: 2% and 1.3% respectively. In Jharkhand, the figures hovered around 1.8% and 2.3%, respectively, with a high inter-district variation. In Odisha, around 2% of rural households and 1% of rural ST households had a non-agriculture enterprise that was registered with the government.

With respect to non-agricultural own account enterprise, around 2% of the rural households and 0.6 % rural ST households at the national level reported it as a source of income. The dependence on non-agricultural own account enterprises as a source of income is lower in Jharkhand. Around 1% of rural households and 0.6 % of rural ST households reported this as a source of their income². In Odisha, 1.4% of rural households and 0.5% of rural ST households reported having non-agricultural own account enterprises.

Overall, whether it was registered non-agricultural enterprises or non-agricultural own account enterprise as a source of income, the dependence on it was low among the rural ST households as compared to the overall rural households. The trend holds true at the national and at state level.

2.3 Other livelihoods activities



SECC also has information on the prevalence of foraging, rag picking, begging, charity and alm collection as a source of income. Around 0.6% of rural households at the national level and 0.5% of rural ST households are engaged in this basket of activities. The dependence on these set of activities is slightly higher, around 0.7%, among the rural ST households in Jharkhand. In Odisha, around 0.8% of rural households and 0.6% of rural ST households were engaged in foraging/rag picking/begging/charity or alms collection as their source of income.

Any activity from which a household draws their income that is beyond the above group of activities is classified under "other" income sources. Around 8% of ST households at the national level and 8% of ST households in Jharkhand depend on "other" income sources. In Odisha, around 11-12% of rural households and 5-6% of rural ST households reported income from "other" sources ($p < .01$).

In Odisha, the correlational analysis results in the following findings: (i) as percentages of ST households in total households increases so does their dependence on cultivation as an income source ($r = .56, p < .00$); (ii) while we don't know what constitutes domestic service, but as percentage of ST households increases, their dependence on this as a source of income reduces ($r = -.72, p < .000$); (iii) an increase in the percentage of ST households is strongly associated with a decrease in dependence on foraging/rag-picking/begging/charity or alms collection as an income source; (iv) weak but significant negative association ($r = -.39, p < .05$) between the percentage of ST households and dependence on non-agricultural own account enterprise as a source of income and (v) a negative association ($r = -.57, p < .00$) between the proportion of ST households and dependence on "others" as income source (SEC did not define what comprised "others").

In Jharkhand as the percentage of ST households in overall rural households increases, the dependence on cultivation as an income source increases ($r = .74, p < .000$), while the dependence on manual casual labour as an income source decreases ($r = -.78, p < .000$). Though there is a positive association between the proportion of ST households in

² The SECC website (<https://secc.gov.in/>), does not clearly define "domestic service".



rural households and dependence on part-time or full-time domestic service but the association is not statistically significant ($r=.4$, $p=.05$). Quite contrary to Odisha, we see a positive association, though weak, between the percentage of ST households in overall rural households and the dependence of households on foraging/rag picking as a source of income ($r=.48$, $p<.05$).

So, among the ST households in Jharkhand and Odisha, cultivation and manual casual labour are the two most important sources of livelihoods – both coming under informal unorganised with its share of multiple risks and vulnerabilities.

3. Income Slab

The SECC 2011 also enumerated the number of households on the basis of the income slab of the highest-earning member of the household. Here three income slabs were used: <5000, 5000-10000 and >10000. These metrics become a fair measure of economic prosperity (or economic vulnerability) of the rural households.

At the national level, around 75% of the rural households reported that the highest-earning member in the family earns less than Rs 5000 per month. Among the ST households, this proportion is 87%. Thus, prosperity was comparatively lower among the rural ST households. The state of economic prosperity is worse in the eastern rural region with around 79% of all households and 90% of the ST households reporting less than Rs 5000 per month income for the highest earning family member. In Jharkhand, the figures hovered around 78% and 84%, respectively³. A mirror image is observed as one moves up the income slab. At the national level, some 8% of the rural households and 4.5% of rural ST households reported that the highest-earning member in the household earned more than Rs 10,000 per month. In the eastern region, 6% of all rural households and 3% the rural ST households reported more than Rs 10,000 earning per month. The situation is slightly better in Jharkhand as 7% of total rural households and 5% of rural ST households reported the same, respectively⁴.

In Odisha, in around 90% of all rural households and 95% of rural ST household ($p<.01$), the monthly income of the highest-earning member of the household was less than 5000. The figures were worse than the national and

regional level figures for both the groups. Only in 5% of the rural households and 2% of the rural ST households ($p<.01$), the monthly income of the highest-earning member of the household was more than Rs10,000. Overall, for all the income slabs, the situation of a rural household in Odisha was worse off compared to the national and regional figures.

In Odisha, correlational analysis (Table 2) shows that as the proportion of ST households increases so does the proportion of households whose highest-earning households earn less than Rs 5000 per month. Predictably, an increase in the percentage of ST households is strongly associated with a decrease in the proportion of household where the highest-earning members earn more than Rs 10000 per month ($r=-.52$, $p<.00$). We see a similar trend in Jharkhand, but contrary to Odisha, here the associations are not strong and significant.

The SECC 2011 data also indicates that the rural ST households are economically more vulnerable as compared to overall rural households which also includes other social categories. The vulnerability is manifested at the national level, at the regional level and at the state level. However, the state of vulnerability appears to be slightly lower in Jharkhand and higher in Odisha when compared with the eastern region figures. It seems that the ST population in Jharkhand is perhaps slightly better positioned, economically, and the ST population in Odisha is much worse off, as compared to the ST population at the regional and national level.

4. Footprint in the salaried job market

Socio Economic Caste Census (SECC, 2011) records the number of rural households in the salaried job market. The data mirrors the interface of the rural households with the formal organised sector. Formal salaried jobs have some advantages: formalisation of the workforce, increased certainty of monthly cash inflows and livelihood assurance, and increased prosperity.

According to SECC 2011, around 5% of the rural households are in government salaried jobs and some 4% in the private-sector salaried jobs. Among Scheduled Tribes, only 4% of the rural ST households reported having

³ $p<..01$

⁴ $p<..05$

a member in government sector salaried job and only 1.5% reported a member in private-sector salaried job. Tribal footprint in the salaried job sector is still lighter in the eastern region. Here, around 4% of the rural households have government sector jobs, and 2% had the private-sector jobs. Among Scheduled Tribes, only 3% households had a member in a government job and less than 2% had a job in the private sector. In Jharkhand, around 4.5% of all rural households had government jobs while 2% had jobs in the private sector. Among rural ST households in Jharkhand, around 4% had a member in government job and little more than 1% had a member in private sector job.

In Odisha, around 4% of the rural households and around 3% of the rural ST households ($p < .01$) had a member in salaried government job. The inter-district variation is quite high among the rural ST households. Apart from Sundargarh and Jharsuguda – the mining belt in the state – in most other districts with significant ST households, their proportion in a salaried government job was much lower than the state average – leave alone the national and regional averages. The trend is similar for the private sector jobs. Around 1.8% (median 1.2%) of rural households and 0.5% (median 0.3%) of rural ST households in Odisha had a member in salaried jobs in the private sector ($p < .01$). Like in the case of government jobs, here also the inter-district variation is high. Apart from Kendujhar, Sudargarh and Jharsuguda, other ST dominated districts show a relatively lighter footprint in private sector jobs as compared to the state average. The state average - particularly among the rural ST households – of participation in private-sector job sector is low compared to the national and regional averages.

Overall footprint in salaried job market does not exceed 5%. More households reported having a government job as compared to private-sector jobs. At the national level, the gap in participation between government and private sector jobs is higher among the ST households as compared to the overall rural households. The situation in Jharkhand largely follows the national and regional trends. In the case of Odisha, the participation of both the rural households and rural ST households in government and private sector jobs is much lower.

Around 5% of rural households in the country had a member who is/was⁵ a government employee. The proportion reduces to 4% for rural ST households. In the eastern region, 4% of the rural household and 2.8% of

the rural ST household had a member who is/was a government employee. In Jharkhand, the proportions hover around 4% for both the groups. This shows that with respect to a government job, in Jharkhand there is hardly any difference between ST households and other rural households. However high inter-district variation is witnessed within both groups. In Odisha, around 4% of rural households and 3% of rural ST households have a member as a government employee. Scheduled Tribe households in Odisha are worse off compared to the situation at the national level.

In Odisha, the correlation analysis (table 2) shows a strong negative association between the proportion of ST households with the proportion of households with salaried jobs in the government and private sector. So, one can infer that the Odisha ST household footprint in the salaried job market goes down with an increase in the proportion of ST households. We see a similar trend in Jharkhand also, but the associations are not statistically significant.

All these imply that the livelihoods portfolio in rural India, and more so among the rural ST households, indicates a high dependence on the informal and unorganised sector for livelihoods. This finding also corroborates with the income source findings where an overwhelming majority of respondents reported manual casual labour, cultivation, and non-agricultural self-enterprises as their source of income. If one brings in the income slab component on top of these, we also see the low level of income realised at the household level. The ST households at the national level are more likely to be engaged in manual casual labour and agriculture, more likely to have lower-income and more likely to have a lower footprint in the salaried job market. However, in Jharkhand, the difference between the ST households and overall rural households are not that stark as seen at the national and regional level. In Odisha, not only the ST households were worse off when compared with the overall rural households, but on various parameters, the situation of both these groups was worse off when compared with the national and regional situation.

5. Landholding

The land is the most important mode of production and the bedrock (natural capital base) of rural agrarian livelihoods. In rural areas (and in gentrified urban areas), land is the basis of identity. Land alienation, land

⁵ Our interpretation, SECC does not make it clear whether is or was. It just mentions households with a government employee.



acquisition and land disputes/conflicts have for a long (and continue to) affected India's hinterland.

According to the SECC 2011, only 44% of rural households in India have land. So, more than half of the rural households are landless. The number of landowning rural households in the eastern region is down to 38%, where landlessness among the rural households is as high as 62%. Landlessness was found to be a relatively lesser problem in Jharkhand. On average around 63% of rural households had land. However, there was wide inter-district variation. In the West Singhbhum, only 28% of households had land (landlessness goes up to 72%); in Khunti, the number hovered around 80%. Relatively speaking (with respect to the national level situation), landlessness was not a major problem in Odisha. Around 46% of rural households in Odisha had land – this was higher than the national (44%) and regional figures (38%, $p < .01$).

At the national level, around 50% of the rural households are landless and their income source was manual casual labour. The proportion goes down to 40% for the ST households. In the eastern region, however, around 55% of rural households and 40% of rural ST households are landless and derived a major part of their income from manual casual labour. The situation of landlessness and dependence on manual casual labour is lower in Jharkhand as 26% of rural households and 18% of rural ST households reported landlessness and dependence on manual casual labour.⁶ However, the inter-district variation is very high – for example, in Koderma the prevalence of this indicator among ST households went up to 57%. In Odisha, around 45% of the rural household and 52% of rural ST households were landless households who derived a major part of their income from manual labour. The situation of ST households was not only worse off the remaining rural households in Odisha, but also worse off the rural ST households at the national (40%) and regional (40%) levels.

6. Irrigation

If land is the most important mode of production, ownership of water resources or irrigation infrastructure is the most important complementary asset. Around 40% of agriculture land in the country remains unirrigated and only 37% of land has assured two-season irrigation. In the eastern region, around 40% of the land remains

unirrigated while another 40% has assured two-season irrigation. However, the situation is worse off in Jharkhand – around 58% of land remains unirrigated and only 23% has assured two-season irrigation. The situation in Odisha is still worse. Around 70% of land in Odisha, as compared to 41% ($p < .01$) in India and 40% ($p < .01$) in the eastern region, remains unirrigated. The inter-district variation is high, with the median unirrigated land in Odisha at around 74%. So, close to three-fourth of the land in the state is rainfed. Only 16% of the land in Odisha has assured irrigation in contrast to 37% ($p < .01$) and 40% ($p < .01$) at the national and regional level respectively. Around 14% of land in Odisha has some irrigation coverage,⁷ which is again lower than the national (23%) and regional (20%) estimates.

Lack of control over water resources characterises the landholding pattern of the rural ST households. Around 30% of the rural households in India and 56% of rural households in Jharkhand own unirrigated land. Around 43% of the rural ST households in India and 64% of rural ST households in Jharkhand own unirrigated land. As far as ownership of unirrigated land is concerned, the ST households are worse off overall rural households. However, the gap between the two groups is lower in Jharkhand (8%) as compared to the national level (13%).

As far as ownership of irrigation equipment at the national level is concerned, it hovers around 10% among rural households and around 5% in ST households. In Jharkhand, the ownership of irrigation equipment hovers around 6% among rural households and around 5% among rural ST households. Around 23% of the landed households (which itself is a small number) in the country own irrigation equipment. The regional and Jharkhand ownership pattern is worse off in the national level. Only 11% of rural households in the eastern region and 10% of rural households in Jharkhand own irrigation equipment. Hence the gap in Jharkhand is narrower as compared to the national level gap. With respect to access to irrigation, it may appear that ST households in Jharkhand are not way behind the overall rural households, but the fact is that the overall status of irrigation is much poorer in Jharkhand – irrespective of the social category. Just around 4% of rural landed households in Odisha own irrigation equipment (including diesel/kerosene/electric pumpset, sprinkler/drip irrigation system, etc.) compared to 23% aggregate rural household at the national and 11% rural household at the regional level.

⁶ $p < .01$.

⁷ Under the head "other irrigated land" though SECC does not define what is meant by that nomenclature.

Around 4% of the rural households and 2% of rural ST households at national level owned irrigated landholding of 2.5 acres with at least one irrigation equipment. The figures go down in the eastern region where 1.2% rural households and 0.4% rural ST households owned irrigated land of 2.5 acres or more. In Jharkhand, the figures hovered around 1% for both rural households and rural ST households. In Odisha, around 0.2% of rural households and 0.1% of rural ST households owned 2.5 acres or more irrigated land with at least one irrigation equipment – much worse than the national and regional level irrigation capacities.

As irrigation coverage increases, its ownership reduces. Only 3% of all rural households and 1.3% of rural ST households owned irrigated landholding of 5 acres or more. The phenomenon is acute in the eastern region: only 1% of all rural households and 0.6% of rural ST households have irrigated landholding of 5 acres or more. In Jharkhand, the coverage hovered around 1% for both overall rural households and rural ST households. Only 2% of all rural households and 1% of rural ST households in the country owned irrigated landholding of 7.5 acres or more. The coverage was less than 1% both in the eastern region and Jharkhand state. In Odisha, around 0.2% of rural households and 0.1% of rural ST households owned 7.5 acres or more irrigated land with at least one irrigation equipment – far worse compared to the national and regional averages.

One observation that is uniform with respect to landholding at the national and regional levels is low ownership of irrigated land among the Adivasi households. In Jharkhand, there is no difference in ownership between Adivasi and overall rural households – but the overall ownership of the irrigated land itself is abysmally low in the state. In Odisha, though the base is abysmally low, within that the ownership among ST households is lower still.

7. Deprivation and Exclusion Criteria



The SECC 2011 measured the state of rural households on a cluster of parameters clubbed under two broad categories – the deprivation criteria and the exclusion criteria. In this section, we examine the status of rural households (and rural ST households) in the country, rural households (and rural ST households) in the eastern region and the rural households (and rural ST households)

with respect to some of the indicators that defined these criteria. A comparative analysis between rural households and ST rural households also provides insights on the relative status of the ST households with respect to physical capital, human capital and financial capital, which along with the resource condition results in certain livelihood outcomes highlighted above.

7.1 Housing



Whereas around 20% of all rural households in the country reported having only one room with a *kutcha* wall and a *kutcha* roof, the corresponding figure for the ST households was 30%. In the eastern region, around 28% of rural households and 30% of ST rural households lived in *kutcha* houses. The difference between the rural households and the ST rural households reduces at the regional level – albeit over a lower base. With respect to housing, the comparative situation of ST households in Jharkhand was somewhat better. Around 21% of rural households and 22% of rural ST households in the state lived in *kutcha* houses. The housing situation among the ST households in Jharkhand appears to be superior when compared with the national level and regional level situation. However, the state average does mask the high inter-district variation. Some of the districts, like Pakur (40%), reported poor status with respect to the housing of ST households as compared to the national and regional averages. However, in Odisha, around 33% of rural households and 38% of rural ST households reported that they had only one-room *kutcha* house. These numbers are much higher than the national and regional averages, which indicates that with respect to housing, the situation in rural Odisha is worse off and the rural ST households are in the worst position.

When it comes to living in spacious *pucca* houses, the findings were stark for the rural ST households. Around 18% of the rural households and 6% of rural ST households lived in houses with three or more rooms with *pucca* walls and *pucca* roofs. The situation worsened in the eastern region where some 11% of rural households and 4% rural ST households had access to more than three rooms with *pucca* roofs and walls. In Jharkhand, the respective figures are 11% for rural households and 6% for rural ST households.⁸ In Odisha, around 9% of rural households and 3% of rural ST households lived in a house with three or more rooms with *pucca* walls and roof. Again, the housing situation in Odisha is worse off the national and regional averages.

⁸ p<.01.



7.2 Mobile Phones and Refrigerators



With respect to the ownership of mobile phones, the SECC 2011 found that while 68% of the rural households owned mobile phones, among rural ST households only 41% had mobile phones. In Jharkhand, 64% of the rural households and 52% of the rural ST households owned mobile phones. So, in terms of the ownership of mobile phone, Jharkhand was in a better position compared to the national average. The SECC 2011 national data on household ownership of refrigerators – an indicator of prosperity and also an indicator of access to a complimentary infrastructure – shows that while 11% of rural households in the country owned refrigerators, among rural ST households only 3% owned a refrigerator. In the eastern region only 4.3% of rural households and 2% of rural ST households owned a refrigerator. In Jharkhand, the situation was slightly better – 5% rural households and 3% rural ST households owned a fridge.⁹ In Odisha, around 5% of rural households and 1.5% of rural ST households owned refrigerators. Thus, the ownership pattern among the ST households in Odisha was way below the national and regional averages.

7.3 Human Capital



The human capital defines the capability of a household to pursue (or not be able to pursue) certain livelihoods activities, which then determines the various outcomes that the household might (might not) enjoy. In this regard, the SECC 2011 looked into four extreme indicators: (i) absence of any adult member between age 16-59, (ii) adult male member in the age group 16-59 among female-headed households, (iii) having a divyang member and no able-bodied adult member and (iv) no literate adult member in the household.

Around 6% of rural households and 5% of rural ST households at the national level reported no adult member between age 16 and 59. In the eastern region, the respective figures for the indicator are 4% for rural households and 4% of rural ST households. Against the regional average, the situation was slightly better in Jharkhand with only 4% rural households and 3% rural ST households without adult member between 16-59 years old. However, the inter-district variation is high. Some districts like Garhwa recorded the high proportion of such households (7%) way above the national and regional averages. In Odisha, around 6% of rural households

and 5.5% of rural ST households have no adult member between 16 to 59 years. Hence, for this indicator, the situation in Odisha is grimmer compared to the region and country as a whole.

Around 6% of rural households and rural ST households were female-headed with no adult male members within the 16-to-59-year age group. The situation was more or less similar in the eastern region with around 5% of rural households and 7% of rural ST households being female-headed with no adult member in the 16-59 age bracket. In Jharkhand, the indicator outcome was slightly better: both rural households and ST rural households had 5% female-headed households each without an adult member aged between 16-59 years. In Odisha, around 7% of rural female-headed households and 7% of rural ST female-headed households had no adult member aged between 16 -59 years. Again, the figures are grimmer for Odisha compared to the national and regional figures. This indicates increased vulnerability among the female-headed households in Odisha.

With respect to a still more extreme indicator – having a *divyang* household member but no able-bodied adult member – the situation was more or less the same among rural households (0.7%) and rural ST households (0.6%) at the national level. The situation was marginally better in the eastern region as 0.5% rural households and 0.6% rural ST households in this category. In Jharkhand the category included 0.5% of rural households and 0.4% of rural ST households. However, the state has high inter-district variation with some districts performing worse than the national and regional averages. In Odisha, around 0.7% of female-headed rural households and 0.6% of rural ST households ($p < .01$) had a disabled family member and no able-bodied adult member. The figures were similar to the national average but worse than the regional average.

At the national level, roughly 40% of the overall rural households and 53% of rural ST households had no literate adult above 25 years. The situation is more or less the same in the eastern region where 39% of rural households and 52% of rural ST households reported no literate adult in the family. In Jharkhand, the figures were 41% and 50% for rural households and rural ST households¹⁰. Like above, high inter-district variation was observed with respect to this indicator. In Odisha, around 36% of rural households and 52% of rural ST households ($p < .01$) had no literate adult above 25 years. The figures show a dismal state of literacy among rural households in general and among rural ST households in particular.

⁹ $p < .05$.

¹⁰ $p < .01$.

7.4 Physical Capital and Financial Capital



Ownership of physical capital like transport facility/fishing boats, agriculture equipment and access to cheap credit facilities to overcome the working capital requirements are critical for prosperous livelihoods. According to SECC 2011, around 21% of rural households owned assets like motorised transport/ fishing boats and 4 % of rural households owned mechanised agriculture implements. The corresponding figures for rural ST households are lower: some 10% owned motorised productive assets and 2% owned mechanised productive assets.

The ownership pattern is worse off in the eastern region, where only 11% of rural households and 7% of rural ST households owned motorized productive assets and roughly 2% of rural households and 1% of rural ST households owned mechanised productive assets. The situation of ownership of productive assets in Jharkhand was worse than the national situation at the overall level but slightly better among rural ST households. Around 18% of the rural households and 13% of the rural ST households in Jharkhand owned motorised assets¹¹ and 2% of rural households and 1.5% of rural ST households in Jharkhand owned mechanised assets.

In Odisha, 9% of rural households and 4% of rural ST households ($p < .01$) owned motorised transport/fishing boats – both the figures much lower than the national and regional averages. On similar lines, only 1% of rural households and 0.5% of rural ST households ($p < .01$) in Odisha owned mechanised three/four-wheeler or agricultural implements – a situation worse than the national and regional figures. Hence, as far as ownership of essential physical capital is concerned, the situation in rural Odisha is worse than what is observed at the national and regional level – and the condition of the ST households in the state is worst.

Around 4% of rural households and 2% of rural ST households in the country had Kissan Credit Card with a credit limit of Rs 50,000 and above. The coverage was found to be lower in the eastern region where only 2% of rural households and 1% of rural ST households had KCC with a credit limit of Rs 50000 and above. In Jharkhand, the number of rural households and rural ST households with KCC was around 2% each. So, while the situation is dismal,

¹¹ $p < .05$.

but relatively speaking the rural ST households in Jharkhand are not worse off in comparison with the rural households in general. In Odisha, average of 1.5% of all rural households and 0.7% of rural ST households had a KCC card with a credit limit of Rs 50,000 and above but with a high inter-district variation. The penetration of KCC in rural Odisha is lower than regional and country average.

8. Scheduled Tribe Households in Jharkhand and Odisha: Similar yet Different



Based on the SECC 2011 data it can be argued that the states of Jharkhand and Odisha are similar, yet different. In terms of demographics, the two states have above national average (11%) of Scheduled Tribe population, but within the states the percentage of ST households in the total rural households is not statistically significant. The mean proportion of ST households is around 26% in Odisha and 32% in Jharkhand. Both the states show high inter-district variation—more so in Odisha, where certain districts have greater concentration of ST households. The median proportion of ST households is around 22% in Odisha and 31% in Jharkhand. That's where the similarity ends. The ST households in the two states fare quite differently for various development parameters – whether measured in terms of livelihoods outcome (income), resource condition (land) or the general state of physical, human and financial capital, which together with the resource condition influence livelihood outcome.

8.1 Income, Housing and Accessories



Let's start with livelihoods outcome – a measure that SECC computed by gathering household income-wise data on the highest-earning member under three slabs: less than Rs 5000 per month, between Rs 5000-10,000 per month, more than Rs 10000 per month. In Jharkhand, 84% of ST households reported having a member earning less than Rs 5000 per month, while in Odisha the figure went up to 95% ($p < .000$). As expected, one sees a mirror image at the highest income slab. Around 5.4% of ST households in Jharkhand had a member who earned more than Rs 10000 per month, while the corresponding figure for Odisha was 2% ($p < .000$). Hence on an average, the ST households in Odisha earned less than their counterparts in Jharkhand.



The status of housing among the ST households also varied across the two states. While 23% of the ST households in Jharkhand had only one room with *kucha* walls and roof, in Odisha this category accounted for 38% ST households ($p < .000$). At the other end of the spectrum, around 6% of ST households in Jharkhand and only 3% in Odisha ($p < .05$) lived in a three-room *pucca* house. Around 3% of ST households in Jharkhand and only 2% in Odisha ($p < .000$) owned a refrigerator.

8.2 Source of Income

The dependence on different sources of income also varied among the ST households in the two states. While only 24% of ST households in Odisha were engaged in agriculture for income, the same went up to 39% in Jharkhand ($p < .000$). The practice of manual casual labour was higher in Odisha (67%) as compared to Jharkhand 49% ($p < .000$). While 2% of ST households in Odisha were into domestic service, in Jharkhand the figure hovered around 3% ($p < .00$). Around 6% of ST households in Odisha and 8% of ST households in Jharkhand reported "others" as a source of income. Only 0.5% of ST households in Odisha and 0.6% of ST households in Jharkhand reported non-agricultural own account enterprise as the source of income. While manual casual labour dominated the livelihood-scape in both the states, the dependence was much higher in Odisha.

8.3 Interface with the Formal and Government Sector

In terms of the overlap with the formal sector, as measured by SECC through the prevalence of salaried jobs among households, the ST households have a limited footprint in both the states. However, the footprint is slightly better in Jharkhand as compared to Odisha. While 4% of ST households in Jharkhand reported salaried jobs in government, the proportion was 3% in Odisha ($p < .00$). Similarly, 1.3% of ST households reported private-sector salaried jobs while the proportion came down to 0.5% in Odisha ($p < .05$). On similar lines, the overlap with the government as part of their livelihood activities was low among ST households in both Jharkhand and Odisha. While around 4% of ST households in Jharkhand had a member as a government employee, the same in Odisha was around 3% ($p < .05$). Only 2% of ST households in Jharkhand and 1% of ST households in Odisha ($p < .000$)

had non-agricultural enterprises registered with the government. Again, though the assessment base is small, between Jharkhand and Odisha, the former was doing slightly better.

8.4 Resource Condition: Land and Water

While 64% of households in Jharkhand had land (hence 36% were landless), corresponding figure for Odisha was 46% ($p < .000$). Not only was landlessness higher in Odisha, relative to Jharkhand fewer rural households had the means for irrigation. While 58% of the land in Jharkhand was unirrigated (rain-fed only), as much as 69% ($p < .000$) in Odisha was rain dependent. As a corollary to this, while 23% of the land in Jharkhand had assured two-season irrigation, in Odisha only around 16% ($p < .00$) land had assured two-season irrigation. Though SECC does not define what is meant by "other irrigated land" but even on this parameter, Jharkhand was found to be better positioned compared to Odisha (20% and 14% respectively). Ownership of irrigated land and irrigation equipment was abysmally low in both Jharkhand and Odisha. But even then, the ownership level was higher in Jharkhand.

While 1% of ST households in Jharkhand owned 2.5 acres or more irrigated land with at least one irrigation equipment, the corresponding figure for Odisha was 0.1% ($p < .000$). Similarly, while 0.6% of ST households in Jharkhand owned more than 7.5 acres of irrigated land with at least one irrigation equipment, the corresponding figure for Odisha was only 0.1% ($p < .000$). So, with respect to landholding and irrigation access, Scheduled Tribes in Jharkhand are better positioned than those in Odisha. Further, while only 19% of ST households¹² in Jharkhand derived a major part of their income from manual casual labour, in Odisha, it was high of 51% ($p < .000$).

8.5 Physical Capital and Financial Capital

The ownership of motorized and mechanized assets is generally low among the ST households in both the states, but still, there is a difference between them. In Jharkhand, around 13% of ST households owned motorized assets, but in Odisha, the ownership was a mere 4% ($p < .000$).

¹² SECC does not provide information on what proportion of ST households are landless.

Similarly, the ownership of mechanised assets was 1.5% among ST households in Jharkhand but only 0.5% in Odisha ($p < .000$). KCC is an important financial capital as it ameliorates the working capital crisis for agriculturists. The ST household access of KCC with a credit limit of Rs 50,000 and above is very low among in both Jharkhand and Odisha. However, while 2% of the ST population in Jharkhand have KCC, the corresponding figure in Odisha is 1% ($p < .000$). With respect to access to these capital/assets again Jharkhand was doing better than Odisha.

8.6 Human Capital

The human capital possessed by a household indicates its "ability" to convert (or improve) the available resource condition (natural or physical or financial capital) and translate it into improved livelihoods outcome. There is a difference in some of the parameters in the two states that one can correlate with human capital. While around 3% of the ST households in Jharkhand had no adult between ages of 16 and 59; in Odisha, such households were 5% ($p < .000$). Even within the female-headed households, some 5% in Jharkhand and 7% in Odisha ($p < .000$) had no adult male member. In around 50% of ST households in Jharkhand and 52% in Odisha, there was no literate adult member aged above 25 years.

In Odisha, as per the correlation analysis (Table 2), as the percentage of ST households to rural households

increases, there is an increase in (i) the proportion of female-headed households with no adult male member between age 16 to 59 and (ii) the proportion of households without a literate adult above 25 years. The same findings were for Jharkhand: as the proportion of ST households to total rural households increased, the proportion of female-headed households with no adult male member, aged 16 and 59 years, increased.

9. Conclusion

The study shows that low level of ownership and access to critical physical and financial capital, low literacy among adult members of the households (and hence low human capital) coupled with high landlessness, overwhelming dependence on manual casual labour for sustenance, poor access to irrigation, and very low footprint in the formal salaried job market are the predominant reasons of the vicious cycle of poverty that entraps a large part of rural households in general and rural ST households in particular. While the overall situation of rural ST households in Jharkhand was mostly worse than rural households in the state, the difference between ST households and rural households is not as stark as seen between these two groups at the national and regional levels. The state of Odisha was the worst of the lot on most of the above parameters – the rural households did worse, and the ST households were worst of the lot.

Table 1: Development profile of rural ST Households in Jharkhand and Odisha

Indicators	Jharkhand (Values in percentage)	Odisha (Values in percentage)	P-value
ST households in total rural household	32.0	26.0	NS
ST households with monthly income of highest earning household member < 5000	84.0	95.0	***
ST households with monthly income of highest earning household member 5000 – 10000	11.0	3.0	***
ST households with monthly income of highest earning household member > 10000	5.0	2.0	***
ST households with agriculture as the only source of income	39.0	24.0	***
ST households with manual casual labour as income source	49.0	67.0	***
ST households with part-time or full-time domestic service as source of income	3.0	2.0	**
ST households with foraging or rag picking as source of income	0.5	0.2	NS
ST households with non-agricultural Own Account Enterprise as income source	0.6	0.5	NS



Indicators	Jharkhand (Values in percentage)	Odisha (Values in percentage)	P-value
ST households with Begging/Charity/ Alms collection as source of income	0.2	0.4	NS
ST households with other income source	7.8	6.0	**
ST households with salaried jobs in Govt	4.0	3.0	**
ST households with salaried jobs in private sector	1.3	0.5	**
ST households owning motorized two/three/four wheelers/fishing boats	13.0	4.0	***
ST households owning mechanized three/four-wheeler agricultural equipment	1.5	0.5	***
ST households having kisan credit card with the credit limit of Rs.50,000 and above	1.6	1.0	***
ST households with any member as government employee	4.0	3.0	**
ST households with non-agricultural enterprises registered with government	1.8	1.0	***
ST households with any member earning more than Rs. 10,000 p.m	5.4	2.0	***
ST households with three or more rooms with pucca walls and pucca roof	5.6	3.0	**
ST households owning refrigerator	3.1	2.0	***
ST households owning 2.5 acres or more irrigated land with at least one irrigation equipment	1.0	0.1	***
ST household owning 5 acres or more land irrigated for two or more crop seasons	1.1	0.2	***
ST households owning 7.5 acres or more land with at least one irrigation equipment	0.6	0.1	***
ST households with kucha walls and kucha roof_	22.0	38.0	***
ST households with no adult member between age 16 to 59	3.0	5.0	***
ST female-headed households with no adult male member between age 16 to 59	5.0	7.0	***
Deprived ST households with deprivation criteria: a disabled member or no able bodied adult member	0.4	1.0	***
ST households with no literate adult above 25 years	50.0	52.0	NS
ST landless households deriving major part of their income from manual casual labour	19.0	51.0	***
Household with land	64.0	46.0	***
Unirrigated land	58.0	69.0	***
Land with assured two-season irrigation	23.0	16.0	***
Other irrigated land	20.0	14.0	**
Landowning households who also own mechanized three/four wheeler agricultural equipment	3.5	2.0	***
Landowning households owning irrigation equipment (including diesel/kerosene/electric pumpset, sprinkler/drip irrigation system, etc.)	10.0	4.0	***
Households with Kisan Credit Card with credit limit of Rs 50,000 or above	4.0	3.0	NS

*** p<.01, ** p<.05, NS: Not Statistically Significant

Table 2: Correlation between development indicators and the percentage of ST households in the overall rural households

Indicators (taken as percentage value)	Correlation Coefficient (Odisha)	p-value (Odisha)	Correlation Coefficient (Jharkhand)	p-value (Jharkhand)
Households with income source as cultivation	0.56	**	0.75	***
Households with income source as manual casual labour	-0.18	NS	-0.78	***
Households with income source as part-time or full-time domestic service	-0.72	***	0.40	NS
Households with income source as foraging/ rag picking	-0.66	***	0.48	**
Households with income source as non-agricultural own account enterprise	-0.39	**	-0.11	NS
Households with income source as begging/charity/ alms collection	-0.73	***	-0.32	NS
Households with income source as others	-0.57	***	-0.41	NS
Households with monthly income of highest earning household member < 5000	0.65	***	0.08	NS
Households with monthly income of highest earning household member 5000 - 10000	-0.68	***	0.03	NS
Households with monthly income of highest earning household member > 10000	-0.52	***	-0.23	NS
Households with salaried jobs in Govt	-0.52	***	-0.40	NS
Households with salaried jobs in Public Sector	-0.14	NS		
Households with salaried jobs in Private Sector	-0.49	**	-0.14	NS
Households owning motorized two/three/four wheelers/ fishing boats	-0.42	**	0.03	NS
Households owning mechanized three/four wheeler agricultural equipment	-0.28	NS	0.13	NS
Households having kisan credit card with the credit limit of Rs.50,000 and above	-0.24	NS	0.18	NS
Households with any member as government employee	-0.52	***	-0.40	NS
Households with non-agricultural enterprises registered with government	-0.56	***	-0.13	NS
Households with any member earning more than Rs. 10,000 p.m	-0.52	***	-0.23	NS
Households with three or more rooms with pucca walls and pucca roof	-0.36	NS	-0.56	***
Households owning refrigerator	-0.5	**	-0.25	NS



Indicators (taken as percentage value)	Correlation Coefficient (Odisha)	p-value (Odisha)	Correlation Coefficient (Jharkhand)	p-value (Jharkhand)
Households owning 2.5 acres or more irrigated land with at least one irrigation equipment	-0.41	**	-0.22	NS
Household owning 5 acres or more land irrigated for two or more crop seasons	-0.47	**	0.11	NS
Households owning 7.5 acres or more land with at least one irrigation equipment	-0.14	NS	-0.20	NS
Households with <i>kucha</i> walls and <i>kucha</i> roof	-0.39	**	-0.25	NS
Households with no adult member between age 16 to 59	0.29	NS	0.16	NS
Female headed households with no adult male member between age 16 to 59 years	0.58	***	0.73	***
Households with disabled member or no able-bodied adult member	-0.34	NS	-0.09	NS
Households with no literate adult above 25 years	0.74	***	-0.22	NS
Landless households deriving major part of their income from manual casual labour	-0.33	NS	-0.20	NS

*** p<.01, ** p<.05, NS: Not Statistically Significant

Annexure

D : Village level data



Jharkhand

Table 3: Village access and communication, Jharkhand

Indicator	Adivasi	Non-Adivasi
Average Distance from block headquarters (km)	13	11
Percentage of village having all-weather road to block headquarters	74	90
Percentage of villages with pucca connecting road at the time of survey	63	93
Percentage of villages connected to block headquarters via public transport	46	60
Percentage of villages with all-weather intra-village road	66	83
Percentage of villages with motorable intra-village road	62	97
Percentage of villages with electricity connection in all hamlets	92	93
Percentage of villages with mobile network availability	73	93
Total number of villages	120	30

Table 4: Village school and college access, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with primary school	87	87
Average distance of the nearest primary school (km) when it is not in village	3	1
Percentage of villages with secondary school	10	20
Average distance of the nearest secondary school (km) when it is not in village	6	5
Percentage of villages with higher secondary school	3	7
Average distance of the nearest higher secondary school (km) when it is not in village	11	8
Percentage of villages with a college	3	7
Average distance of the nearest college (km) when it is not in village	18	14
Total number of villages	120	30



Table 5: Villages in close proximity of mines, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with mines nearby	10	13
Percentage of villages with contaminated waterbodies due to the presence of mines	17	25
Total number of villages	120	30

Table 6: Village toilet-use and sanitation, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with growing trend in toilet use-	43	47
Percentage of villages with drainage system	14	47
Percentage of villages with closed drainage system	88	93
Total number of villages	120	30

Table 7: Village with water source, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with tank/pond/reservoir	52	43
Villages with public drinking water sources	96	97
Villages with private drinking water sources	22	37
Total number of villages	120	30

Table 8: Village proximity to forest and CFR access, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with forest nearby	80.0	57.0
Average distance of forest from village when not nearby	2.8	2.1
Percentage of villages that have applied for CFR	7.0	3.0
Percentage of villages that have received CFR	1.0	3.0
Total number of villages	120.0	30.0

Table 9: Village household welfare outreach, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages with ICDS/Anganwadi centre	84.0	80.0
Percentage of villages that receive routine child vaccination at ICDS/Anganwadi -	93.0	93.0
Percentage of villages with ASHA didi	89.0	93.0
Percentage of villages where ASHA didi has essential medicine kit	86.0	97.0
Percentage of villages that received medicine from ASHA didi	97.0	93.0
Average village distance from PHC – km	5.0	4.8
Average village distance from CHC – km	8.5	7.9
Average distance from nearest pharmacy shop – km	6.8	5.1
Percentage of village households associated with NGO	51.0	60.0
Percentage of villages with PDS shop	58.0	67.0
Percentage of villages with functional THR programme	55.0	57.0
Percentage of villages with functional mid-day meal scheme	50.0	53.0
Total number of villages	120.0	30.0

Table 10: Crop damage due to animal attack, Jharkhand

Indicator	Adivasi	Non-Adivasi
Percentage of villages that reported incidence of crop damage due to animal attack in last 12 months	30	23
Percentage of villages that encountered animal attack in the past 12 months	56	29
Total number of villages	120	30

Odisha

Table 11: Village access and communication, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Average village distance from block headquarters (km)	14	8	20
Percentage of village having all-weather road to block headquarters	72	75	80
Percentage of villages with motorable connecting road at the time of survey (percentage)	80	100	80
Percentage of villages connected to block headquarters via public transport	57	80	60
Percentage of villages with all-weather intra-village road	70	90	80
Percentage of villages with motorable intra-village road at the time of survey	66	85	80



Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages with electricity connection in all hamlets	86	95	100
Percentage of villages with mobile network availability	74	85	40
Total number of villages	93	20	5

Table 12: Village school and college access, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages with primary school	78	100	100
Average distance of the nearest primary school (km) when it is not in village	2		
Percentage of villages with secondary school	5	25	40
Average distance of the nearest secondary school (km) when it is not in village	5	5	4
Percentage of villages with higher secondary school	11	20	40
Average distance of the nearest higher secondary school (km) when it is not in village	8	7	8
Percentage of villages with a college	2	5	20
Average distance of the nearest college (km) when it is not in village	13	11	18
Total number of villages	93	20	5

Table 13: Village in close proximity of mines, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages located close to mines	3	0	0
Percentage of villages with mines nearby where waterbodies got contaminated due to presence of mines	33		
Total number of villages	93	20	5

Table 14: Village toilet use and sanitation, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages with growing trend of toilet use	40	80	20
Percentage of villages with drainage system	40	30	60
Percentage of villages with closed drainage system	86	100	67
Total number of villages	93	20	5

Table 15: Village water source, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages with tank/pond/reservoir	44	60	0
Percentage of villages with public drinking water sources	96	100	100
Percentage of villages with private drinking water sources	14	25	0
Total number of villages	93	20	5

Table 16: Village proximity to forest and CFR access, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages in close proximity of forest	88.0	75.0	100.0
Average distance of forest when nearby	1.7	8.9	0.0
Percentage of villages that have applied for CFR	30.0	35.0	40.0
Percentage of villages that have received CFR	6.0	10.0	20.0
Total number of villages	93.0	20.0	5.0

Table 17: Village household welfare outreach

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of villages with ICDS/Anganwadi	89.0	90.0	100.0
Percentage of villages where ICDS/Anganwadi provide monthly vaccination	97.0	100.0	100.0
Percentage of villages where ASHA didi is a village resident	82.0	90.0	60.0
Percentage of villages where ASHA didi has essential medicine kit	90.0	95.0	80.0
Percentage of villages where households have received medicine from ASHA didi	98.0	89.0	100.0
Average village distance from PHC – km	8.6	6.2	8.0
Average village distance from CHC – km	10.7	6.8	23.2
Average village distance from the nearest pharmacy shop – km	7.4	6.0	8.4
Percentage of villages where households are associated with an NGO	34.0	50.0	100.0
Percentage of villages with PDS shop	31.0	45.0	40.0
Percentage of villages with functional THR programme	48.0	50.0	20.0
Percentage of villages with functional Mid-day meal scheme	48.0	50.0	60.0
Total number of villages	93.0	20.0	5.0

Table 18: Crop damage due to animal attack, Odisha

Indicator	Adivasi	Non-Adivasi	PVTG
Percentage of village that have reported incidence of crop damage due to animal attack in the last 12 months-	51	25	60
Percentage of villages that have reported increase in incidence of animal attack incidence in last 12 months	72	60	100
Total number of villages	93	20	5

Annexure

E : Survey findings based on land size



Landholding classification

Table 19: Definitions of landholding classification

Landless	No owned land
Marginal	Owned land up to 2.47 acres
Small	Owned land more than 2.47 acres and up to 4.94 acres
Small-medium	Owned land more than 4.94 acres and up to 9.88 acres
Medium	Owned land more than 9.88 acres and up to 24.70 acres
Large	Owned land more than 24.7 acres

Table 20.2: Household land ownership, Odisha

Land size	Adivasi (%)	Non-Adivasi (%)	PVTG
Landless	14.5	28.3	47.0
Marginal	69.7	58.3	47.0
Small	11.5	9.0	4.0
Small-medium	3.6	3.7	2.0
Medium	0.5	0.7	0.0
Large	0.2	0.0	0.0
Households surveyed	1,496.0	300.0	100.0

Table 20.1: Household land ownership, Jharkhand

Land size	Adivasi (%)	Non-Adivasi (%)
Landless	11.7	30.2
Marginal	77.1	64.8
Small	7.8	3.9
Small-medium	2.4	0.5
Medium	0.6	0.4
Large	0.5	0.2
Households surveyed	2,464.0	559.0

Table 21.1: Landownership among female headed households, Jharkhand

Land size	Adivasi (%)	Non-Adivasi (%)
Landless	12.5	35.0
Marginal	76.2	60.7
Small	8.2	3.4
Small-medium	2.0	0.5
Medium	0.3	0.5
Large	0.8	0.0
Households	911.0	206.0

Table 21.2: Landownership among female headed households, Odisha

Land size	Adivasi	Non-Adivasi	PVTG
Landless	14.9	34.5	50.7
Marginal	72.1	55.5	43.3
Small	9.9	8.4	3.0
Small-medium	2.3	0.8	3.0
Medium	0.3	0.8	0.0
Large	0.3	0.0	0.0
Households	596.0	119.0	67.0

Table 22.1: Average Landholding, Jharkhand

	Adivasi	Non-Adivasi
Average landholding	2.3	1.4
Average landholding for female headed households	2.6	1.1
Average landholding for all season irrigation	4.2	2.7
Median	1.0	1.0

Table 22.2: Average landholding, Odisha

	Adivasi	Non-Adivasi	PVTG
Average landholding	1.9	1.7	1.2
Average landholding for female headed households	1.8	1.3	1.2
Average landholding for all season irrigation	1.7	1.9	1.5
Median	1.0	1.0	1.0

Table 23.1: Association between irrigation and farm income, Jharkhand

	Adivasi	Non-Adivasi
Percentage of households with irrigation access for kharif crops	61.8	62.6
Kharif season —Average household irrigated landholding (acres)	2.6	1.6
Average landholding (acres)	2.3	1.4
Average income for those with kharif irrigation (Rs)	76,306.0	67,236.0
Average income for those with no kharif irrigation (Rs.)	72,561.0	71,221.0
Average income for those with no irrigation in any season (Rs)	71,486.0	74,120.0
Average income for those without land (Rs.)	79,263.0	73,914.0
Households with land	2,176.0	390.0



Table 23.2: Association between irrigation and farm income, Odisha

	Adivasi	Non-Adivasi	PVTG
Percentage of households having kharif irrigation	47.3	45.6	71.7
Average land size for those with kharif irrigation (acres)	1.9	1.4	1.4
Average land size (acres)	1.9	1.7	1.2
Average income for those with kharif irrigation	51,090.0	83,669.0	40,440.0
Average income for those with no kharif irrigation	75,243.0	81,274.0	32,949.0
Average income for those with no irrigation in any season	74,842.0	77,834.0	25,671.0
Average income for those without land	45,274.0	57,341.0	34,336.0
Households with land	1,279.0	215.0	53.0

Table 24.1: Irrigation access across landholding classes, Jharkhand

Landholding	Adivasi (%)	Non-Adivasi (%)
Marginal	61.7	62.4
Small	64.4	63.6
Small-medium	58.6	33.3
Medium	46.7	100.0
Large	76.9	100.0

Table 25.1: Association between landholding and farm income, Jharkhand

Landholding	Adivasi (%)	Non-Adivasi (%)
Marginal	70,352	68,423
Small	90,908	63,259
Small-medium	99,536	1,47,871
Medium	1,68,078	78,301
Large	2,79,346	39,919

Table 24.2: Irrigation access across landholding classes Odisha

Landholding	Adivasi (%)	Non-Adivasi (%)	PVTG
Marginal	50.0	48.6	68.1
Small	33.7	33.3	100.0
Small-medium	42.6	36.4	100.0
Medium	12.5	0.0	N.A.
Large	66.7	N.A.	N.A.

Table 25.2: Association between landholding and farm income, Odisha

Landholding	Adivasi (%)	Non-Adivasi (%)	PVTG
Marginal	52,357	76,764	34,232
Small	72,708	86,524	59,020
Small-medium	2,46,579	1,64,467	92,995
Medium	64,922	43,780	N.A.
Large	2,24,437	N.A.	N.A.

(Values indicate percentage of the households with access to irrigation)

Table 26.1: Relationship between landholding and farm income as a percentage of total income, Jharkhand

Landholding	Adivasi	Non-Adivasi
Landless*	37.4	32.1
Marginal	65.9	33.5
Small	57.9	67.4
Small-medium, medium and large	59.8	81.5

Table 26.2: Relationship between landholding and farm income as a percentage of total income, Odisha

Land size	Adivasi	Non-Adivasi	PVTG
Landless*	52.9	31.5	30.5
Marginal	51.0	31.9	60.0
Small	72.6	61.9	37.8
Small-medium, medium and large†	66.3	84.8	67.2

Table 27.1: Association between landholding and farm income (values in INR), Jharkhand

Land size	Adivasi	Non-Adivasi
Landless*	21,976	21,150
Marginal	21,329	17,319
Small	42,342	37,143
Small, Small-medium, medium and large†	91,141	73,906

Table 27.2: Association between landholding and farm income (values in INR), Odisha

Land size	Adivasi	Non-Adivasi	PVTG
Landless*	15,069	14,832	12,235
Marginal	18,831	15,587	16,619
Small	47,331	38,127	22,407
Small, Small-medium, medium and large†	49,867	1,23,585	60,695

* Landless farmers may earn from leased in lands or share cropping

† This grouping has all land groups other than Marginal, Small and Landless. Its average landholding is 2 Ha. Only a small number of households fall under this group (Small-medium, medium and large).

Table 28.1: Association between Adivasi household landholding and HH income percentiles, Jharkhand

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	20.5	18.7	17.3	20.9	22.7	0.0
20-40	21.6	20.7	20.9	19.2	17.7	0.0
40-60	9.9	16.8	16.8	25.1	31.4	0.0
60-80	8.6	15.5	13.8	25.9	36.2	0.0
80-100	0.0	20.0	26.7	20.0	33.3	0.0

Table 28.2: Association between Adivasi household landholding and HH income percentiles, Odisha

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	36.0	20.7	17.2	11.8	14.3	0.0
20-40	19.4	22.2	21.6	19.2	17.7	0.0
40-60	8.7	9.3	17.4	32.0	32.6	0.0
60-80	7.4	11.1	7.4	29.6	44.4	0.0
80-100	42.9	0.0	14.3	14.3	28.6	0.0



Table 29.1: Association between non-Adivasi household landholding and HH income percentiles, Jharkhand

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	13.1	20.0	21.2	24.4	21.2	0.0
20-40	22.4	19.9	19.7	18.6	19.4	0.0
40-60	27.3	22.7	18.2	18.2	13.6	0.0
60-80	0.0	33.3	0.0	0.0	66.7	0.0
80-100	0.0	50.0	0.0	0.0	50.0	0.0

Table 29.2: Association between non-Adivasi household landholding and HH income percentiles, Odisha

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	39.4	7	15.5	19.7	18.3	0.0
20-40	14.9	27.6	22.4	19.5	15.5	0.0
40-60	11.1	14.8	11.1	29.6	33.3	0.0
60-80	0.0	0.0	18.2	9.1	72.7	0.0
80-100	0.0	0.0	100.0	0.0	0.0	0.0

Table 30.1: Association of Adivasi household landholding with per-capita income percentiles, Jharkhand

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	18.7	15.8	17.3	21.6	26.6	0.0
20-40	21.4	20.6	20.1	20.0	17.9	0.0
40-60	13.1	19.4	23.0	19.4	25.1	0.0
60-80	12.1	15.5	25.9	15.5	31.0	0.0
80-100	0.0	40.0	13.3	6.7	40.0	0.0

Table 30.2: Association of Adivasi household landholding with per-capita income percentiles, Odisha

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	33.0	21.7	17.2	14.3	13.8	0.0
20-40	20.1	20.3	21.3	20.2	18.0	0.0
40-60	8.7	15.7	17.4	25.0	33.1	0.0
60-80	1.9	20.4	18.5	22.2	37.0	0.0
80-100	42.9	0.0	0.0	14.3	42.9	0.0

Table 31.1: Association of non-Adivasi HH landholding with per capita income percentiles, Jharkhand

Income Group (percentile)	Landless (%)	Marginal (%)	Small (%)	Small-Medium (%)	Medium (%)	Large (%)
0-20	13.1	21.2	21.2	20.0	24.4	0.0
20-40	22.7	19.1	18.6	21.1	18.6	0.0
40-60	31.8	18.2	31.8	9.1	9.1	0.0
60-80	0.0	33.3	0.0	0.0	66.7	0.0
80-100	0.0	50.0	50.0	0.0	0.0	0.0

Table 31.2: Association of non-Adivasi HH landholding with per capita income percentiles, Odisha

Income group (percentile)	Landless (in %)	Marginal (in %)	Small (in %)	small-medium (in %)	Medium (in %)	Large (in %)
0-20	35.2	12.7	12.7	22.5	16.9	0.0
20-40	16.7	25.9	20.7	21.3	15.5	0.0
40-60	11.1	11.1	25.9	11.1	40.7	0.0
60-80	0.0	0.0	27.3	9.1	63.6	0.0
80-100	0.0	0.0	100.0	0.0	0.0	0.0

Table 32.1: Gender segregated income percentiles for Adivasis, Jharkhand

Income Group (percentile)	Female Headed Households (in %)	Male Headed Households (in %)
0-20	17.3	18.7
20-40	21.1	19.5
40-60	19.8	20.9
60-80	18.9	22.1
80-100	22.8	18.8

Table 32.2: Gender segregated income groups for Adivasis, Odisha

Income group (percentile)	Female headed households (in %)	Male headed households (in %)
0-20	19.6	19.9
20-40	18.3	20.7
40-60	20.0	20.1
60-80	20.0	19.7
80-100	22.2	19.6



Table 33.1: Gender segregated income groups among non-Adivasis, Jharkhand

Income group (percentile)	Female headed households (in %)	Male headed households (in %)
0-20	22.4	16.5
20-40	17.9	20.5
40-60	17.9	21.2
60-80	20.9	20.2
80-100	20.9	21.5

Table 33.2: Gender segregated income groups among non-Adivasis, Odisha

Income group (percentile)	Female headed households (in %)	Male headed households (in %)
0-20	22.7	16.4
20-40	17.3	23.3
40-60	17.3	21.2
60-80	22.7	18.5
80-100	20.0	20.5

Table 34.1: Adivasi HH Head wise Income group, Jharkhand

Income group (percentile)	Female-headed households (in %)	Male headed households (in %)
0-20	16.6	19.5
20-40	20.0	20.2
40-60	19.2	21.7
60-80	21.8	20.0
80-100	22.4	18.7

Table 34.2: Adivasi female-headed and male-headed HH Income group Odisha

Income group (percentile)	Female-headed households (in %)	Male headed households (in %)
0-20	18.9	20.9
20-40	21.2	19.0
40-60	18.1	21.8
60-80	18.6	19.9
80-100	23.2	18.4

Table 35.1: Non-Adivasi female-headed and male-headed HH Income Jharkhand

Income group (percentile)	Female-headed households (in %)	Male headed households (in %)
0-20	21.4	17.5
20-40	18.4	19.9
40-60	19.9	19.9
60-80	18.9	21.2
80-100	21.4	21.5

Table 35.2: Non-Adivasi female-headed and male-headed HH Income, Odisha

Income group (percentile)	Female-headed households (in %)	Male headed households (in %)
0-20	20.0	17.8
20-40	19.1	21.9
40-60	13.6	24.0
60-80	25.5	17.1
80-100	21.8	19.2

Table 36.1: Association between Adivasi HH landholding and literacy scores (Individual literacy indicator is scored out of 10, total scored out of 30), Jharkhand

Land Size class	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
Landless	2.3	2.8	2.3	7.2	3.2	4	3.1	9.8
Marginal	2.6	3.0	2.6	7.9	3.6	4.4	3.7	11.4
Small	3.7	3.7	2.9	9.7	5.8	6.6	5.0	16.4
Small-medium	4.3	4.2	3.2	10.4	6.1	7.0	6.3	18.0
Medium	3.5	5.2	3.6	11.5	8.2	8.4	6.2	22.9
Large	2.7	2.5	1.7	6.8	9.8	10	7.0	26.8

Table 36.2: Association between Adivasi HH landholding and literacy scores (Individual literacy indicator is scored out of 10, total scored out of 30), Odisha

Land size class	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
Landless	1.8	1.6	1.6	4.7	1.8	2.0	1.5	5.1
Marginal	1.9	2.1	1.6	5.3	3.2	3.6	2.5	9.1
Small	2.2	2.5	2.2	6.5	4.9	5.1	3.8	13.5
Small-medium	1.9	2.3	2.2	6.2	4.4	4.9	3.4	12.5
Medium	0.8	2.0	1.2	4.0	5.0	4.4	2.0	11.4
Large	3.3	3.3	3.3	10	5.0	5.0	4.0	14.0



Table 37.1: Association between non-Adivasi HH landholding and literacy scores, Jharkhand

Land size class	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
Landless	3.4	4.3	3.5	10.8	4.6	6.1	5.3	15.2
Marginal	3.5	4.2	3.5	10.9	5.5	6.7	5.9	17.7
Small	3.7	4.3	4.3	12.3	6.0	7.2	6.2	18.2
Small-medium	5.0	10.0	8.0	23.0	7.5	10.0	9.0	26.5
Medium	0.0	0.0	0.5	0.5	9.2	6.0	2.0	17.2
Large								

Table 37.2: Association between non-Adivasi HH landholding and literacy scores, Odisha

Land size class	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
Landless	2.6	3.1	2.4	7.6	3.2	4.5	4.2	11.2
Marginal	3.3	3.7	2.9	9.3	4.7	5.3	3.9	13.7
Small	5.6	6.2	5.3	17.0	6.1	7.5	5.8	19.4
Small-medium	6.2	7.2	7.1	20.6	7.4	7.8	7.6	22.8
Medium	3.8	4.0	3.5	11.2	1.2	5.0	2.0	8.2
Large								

Table 38.1: Association between Adivasi HH landholding and food security, Jharkhand

Land Size class	Food Secure (in %)	Mildly Food insecure (in %)	Moderately Food insecure (in %)	Severely food insecure (in %)
Landless	42.2	12.8	14.0	31.0
Marginal	47.4	13.4	14.2	25.1
Small	49.4	15.5	12.6	22.4
Small-medium	51.0	21.6	19.6	7.8
Medium	21.4	21.4	7.1	50.0
Large	45.5	9.1	9.1	36.4

Table 38.2: Association between Adivasi HH landholding and food security, Odisha

Land Size class	Food Secure (in %)	Mildly Food insecure (in %)	Moderately Food insecure (in %)	Severely food insecure (in %)
Landless	39.9	17.3	26.2	16.7
Marginal	42.0	24.0	21.8	12.1
Small	63.6	13.6	15.9	6.8
Small-medium	66.7	21.4	11.9	0.0
Medium	80.0	0.0	20.0	0.0
Large	0.0	0.0	66.7	33.3

2. Table 39.1: Association between non-Adivasi HH landholding and food security, Jharkhand

Land Size class	Food Secure (in %)	Mildly Food insecure (in %)	Moderately Food insecure (in %)	Severely food insecure (in %)
Landless	49.4	16.2	12.3	22.1
Marginal	55.5	13.6	12.8	18.1
Small	70.6	0.0	17.6	11.8
Small-medium	50.0	50.0	0.0	0.0
Medium	50.0	0.0	50.0	0.0
Large				

Table 39.2: Association between non-Adivasi HH landholding and food security, Odisha

Land Size class	Food Secure (in %)	Mildly Food insecure (in %)	Moderately Food insecure (in %)	Severely food insecure (in %)
Landless	27.7	21.5	26.2	24.6
Marginal	52.6	14.1	19.9	13.5
Small	59.1	27.3	9.1	4.5
Small-medium	100.0	0.0	0.0	0.0
Medium	0.0	50.0	0.0	50.0
Large				



Table 40.1: Association of Adivasi HH diet quality and landholding, Jharkhand

Land Size class	Poor ¹³ (<=21)	Borderline (21-35)	Acceptable (>35)	Total
Landless	7.9	55.6	36.5	252.0
Marginal	3.6	54.8	41.6	1,701.0
Small	1.2	45.1	53.8	173.0
Small-medium	0.0	45.3	54.7	53.0
Medium	0.0	35.7	64.3	14.0
Large	0.0	30.8	69.2	13.0

Table 40.2: Association of Adivasi HH diet quality and landholding, Odisha

Land Size class	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
Landless	11.6	42.6	45.8	155.0
Marginal	6.7	34.3	59.0	832.0
Small	4.7	22.5	72.9	129.0
Small-medium	0.0	15.4	84.6	39.0
Medium	0.0	20.0	80.0	5.0
Large	0.0	100.0	0.0	3.0

Table 41.1: Association of HH landholding and diet quality among non-Adivasis, Jharkhand

Land Size class	Poor ¹⁴ (<=21)	Borderline (21-35)	Acceptable (>35)	Total
Landless	0.7	28.3	71.1	152.0
Marginal	0.6	32.4	67.0	324.0
Small	0.0	38.9	61.1	18.0
Small-medium	0.0	0.0	100.0	2.0
Medium	0.0	50.0	50.0	2.0
Large				0.0

¹³ Check Annexure J for the Diet quality categories

¹⁴ See Annexure:J for the categories

Table 41.2: Association of HH landholding and diet quality among non-Adivasis, Odisha

Land Size class	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
Landless	1.6	42.9	55.6	63.0
Marginal	4.1	20.7	75.2	145.0
Small	0.0	9.5	90.5	21.0
Small-medium	0.0	0.0	100.0	9.0
Medium	0.0	0.0	100.0	2.0
Large				0.0

Table 42.1: Relationship between Adivasi HH landholding and education of the head of household, Jharkhand

Education attainment	Landless	Marginal	Small	Small-medium	Medium	Large
No school education	62.6	53.7	40.1	30.6	50.0	46.2
less than primary	1.9	4.3	3.6	2.0	0.0	15.4
Primary	7.5	8.8	5.4	6.1	0.0	15.4
less than matriculation and more than primary	15.1	17.8	26.3	32.7	20.0	7.7
Matriculation	6.8	7.6	12.6	18.4	10.0	15.4
more than matriculation and less than HSC	2.3	2.5	3.6	0.0	10.0	0.0
HSC	2.3	3.4	4.8	6.1	0.0	0.0
attended college but did not complete	0.4	0.7	1.2	0.0	0.0	0.0
college graduate and incomplete post-graduation	1.1	0.7	2.4	4.1	10.0	0.0
Postgraduate	0.0	0.2	0.0	0.0	0.0	0.0
more than post-graduation	0.0	0.4	0.0	0.0	0.0	0.0
professional diploma	0.0	0.0	0.0	0.0	0.0	0.0
Total	265.0	1,656.0	167.0	49.0	10.0	130.0



Table 42.2: Relationship between Adivasi HH landholding and education of the head of household, Odisha

Education attainment	Landless	Marginal	Small	Small-medium	Medium	Large
No school education	68.1	58.8	56.1	26.0	25.0	100.0
less than primary	5.3	6.3	7.9	18.0	25.0	0.0
Primary	6.8	8.6	6.7	14.0	25.0	0.0
less than matriculation and more than primary	12.1	15.1	15.9	30.0	0.0	0.0
Matriculation	3.4	6.0	8.5	6.0	25.0	0.0
more than matriculation and less than HSC	1.9	1.9	2.4	0.0	0.0	0.0
HSC	1.0	2.0	2.4	2.0	0.0	0.0
attended college but did not complete	0.0	0.2	0.0	4.0	0.0	0.0
college graduate and incomplete post-graduation	1.4	0.2	0.0	0.0	0.0	0.0
Postgraduate	0.0	0.4	0.0	0.0	0.0	0.0
more than post-graduation	0.0	0.2	0.0	0.0	0.0	0.0
professional diploma	0.0	0.1	0.0	0.0	0.0	0.0
Total	207.0	945.0	164.0	50.0	8.0	2.0

Table 43.1: Relationship between non-Adivasi HH landholding and education of the head of household, Jharkhand

Education attainment	Landless	Marginal	Small	Small-medium	Medium	Large
No school education	40.5	40.9	26.3	0.0	50.0	100.0
less than primary	3.1	3.1	5.3	33.3	0.0	0.0
Primary	8.0	7.2	5.3	0.0	0.0	0.0
less than matriculation and more than primary	28.2	18.1	36.8	33.3	0.0	0.0
Matriculation	13.5	15.6	15.8	0.0	0.0	0.0
more than matriculation and less than HSC	0.0	3.4	0.0	0.0	0.0	0.0
HSC	3.7	5.6	0.0	0.0	0.0	0.0
attended college but did not complete	0.6	0.6	5.3	33.3	0.0	0.0
college graduate and incomplete post-graduation	1.8	2.8	5.3	0.0	50.0	0.0
Postgraduate	0.6	1.6	0.0	0.0	0.0	0.0
more than post-graduation	0.0	0.9	0.0	0.0	0.0	0.0
professional diploma	0.0	0.0	0.0	0.0	0.0	0.0
Total	163.0	320.0	19.0	3.0	2.0	1.0

Table 43.2: Relationship between non-Adivasi HH landholding and education of the head of household, Odisha

Education attainment	Landless	Marginal	Small	Small-medium	Medium	Large
No school education	52.6	42.6	15.4	9.1	0.0	
less than primary	5.1	7.1	3.8	0.0	0.0	
Primary	6.4	9.0	3.8	0.0	0.0	
less than matriculation and more than primary	24.4	24.5	53.8	18.2	50.0	
Matriculation	1.3	6.5	7.7	45.5	50.0	
more than matriculation and less than HSC	2.6	3.9	11.5	9.1	0.0	
HSC	1.3	1.9	3.8	9.1	0.0	
attended college but did not complete	1.3	1.3	0.0	0.0	0.0	
college graduate and incomplete post-graduation	1.3	0.6	0.0	0.0	0.0	
Postgraduate	3.8	2.6	0.0	9.1	0.0	
more than post-graduation	0.0	0.0	0.0	0.0	0.0	
professional diploma	0.0	0.0	0.0	0.0	0.0	
Total	78.0	155.0	26.0	11.0	2.0	0.0

Table 44.1: Association between landholding and head circumference of children among Adivasis, Jharkhand

Children with head circumference not between 3-97 percentiles	Landless	Marginal	Small	Small-medium	Medium	Large
Male %	54.5	48.4	45.5	50.0	66.7	100
Total Male children	44.0	246.0	33.0	6.0	3.0	3.0
Female %	38.3	48.0	48.1	25.0	100.0	50.0
Total Female children	47.0	227.0	27.0	8.0	2.0	2.0



Table 44.2: Association between landholding and head circumference of children among Adivasis, Odisha

Children with head circumference not between 3-97 percentiles	Landless	Marginal	Small	Small-medium	Medium	Large
Male %	64.7	48.6	54.5	80.0		
Total Male children	34.0	177.0	33.0	5.0	0.0	0.0
Female %	72.0	33.1	44.0	50.0	100.0	100.0
Total Female children	25.0	160.0	25.0	6.0	1.0	1.0

Table 45.1: Relationship between landholding and Head circumference of children among non-Adivasis, Jharkhand

Children with head circumference not between 3-97 percentiles	Landless	Marginal	Small	Small-medium	Medium	Large
Male %	33.3	44.4	0.0			
Total Male children	18.0	36.0	2.0	0.0	0.0	0.0
Female %	47.8	59.5			0.0	
Total Female children	23.0	37.0	0.0	0.0	1.0	0.0

Table 45.2: Relationship between landholding and Head circumference of children among non-Adivasis, Odisha

Children with head circumference not between 3-97 percentiles	Landless	Marginal	Small	Small-medium	Medium	Large
Male %	40	55	0	0		
Total Male children	5	20	1	3	0	0
Female %	60	35		100		
Total Female children	10	20	0	1	0	0

Table 46.1: Adivasi HH landholding types and relative distance form forests, Jharkhand

Forest Access	Landless	Marginal	Small	Small-medium	Medium	Large
Average distance (Km)	6.7	3.8	2.9	1.0	5.5	4.1
Depends on forest for livelihood (%)	38.9	55.8	48.7	60.3	53.3	61.5
Households	288.0	1,899.0	191.0	58.0	15.0	13.0

Table 46.2: Adivasi HH landholding types and relative distance form forests, Odisha

Forest Access	Landless	Marginal	Small	Small-medium	Medium	Large
Average distance (Km)	2.4	3.5	4.7	6.3	6.1	1.0
Depends on forest for livelihood (%)	81.6	76.2	64.0	63.0	50.0	100.0
Households	217.0	1,042.0	172.0	54.0	8.0	3.0

Table 47.1: Non-Adivasi HH landholding types and relative distance from forest, Jharkhand

Forest Access	Landless	Marginal	Small	Small-medium	Medium	Large
Average distance (Km)	0.4	1.8	3.0	14.7	0.5	1.0
Depends on forest for livelihood (%)	14.8	33.1	54.5	0.0	50.0	100.0
Households	169.0	362.0	22.0	3.0	2.0	1.0

Table 47.2: Non-Adivasi HH landholding types and relative distance from forest, Odisha

Forest Access	Landless	Marginal	Small	Small-medium	Medium	Large
Average distance (Km)	2.4	3.7	6.5	11.3	4.0	
Depends on forest for livelihood (%)	63.5	70.3	33.3	27.3	50.0	
Households	85.0	175.0	27.0	11.0	2.0	0



Annexure

F. Forest Distance Based Results



Table 48.1: Income groups and distance from forests, Jharkhand

Sl. No	Income group (percentile)	0-1 km	1-2 km	2-5 km	More than 5 km
1	0-20	20.3	21.2	21.0	16.9
2	20-40	22.3	18.9	17.8	17.1
3	40-60	19.4	22.8	19.6	18.3
4	60-80	18.3	20.5	19.9	21.9
5	80-100	18.5	16.3	21.5	24.5

Table 48.2: Income groups and distance from forests, Odisha

Sl No.	Income group	0-1 km	1-2 km	2-5 km	More than 5 km
1	0-20	20.7	18.1	28.0	14.3
2	20-40	18.3	26.5	19.6	19.4
3	40-60	19.7	19.6	18.7	20.2
4	60-80	20.6	14.7	12.1	23.6
5	80-100	19.0	21.1	18.7	22.1

Table 49.1: Non-Adivasi household food security status and distance from forest, Jharkhand

Forest distance	Food Secure ¹	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-1 km	56.6	9.7	13.3	20.4
1-2 km	54.9	9.8	11.0	24.4
2-5 km	51.1	19.3	11.4	18.2
More than 5 km	45.6	22.4	16.0	16.0

¹ See Annexure:K for categories

Table 49.2: Non-Adivasi household food security status and distance from forest, Odisha

Forest distance	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-1 km	39.1	21.8	29.1	10.0
1-2 km	37.5	14.6	8.3	39.6
2-5 km	34.9	18.6	30.2	16.3
More than 5 km	86.8	7.5	1.9	3.8

Table 50.1: Adivasi household food security status and distance from forest, Jharkhand

Forest distance	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-1 km	44.4	14.6	13.3	27.7
1-2 km	52.1	8.5	17.5	21.9
2-5 km	49.4	19.5	12.5	18.5
More than 5 km	45.8	11.0	13.8	29.4

Table 50.2: Adivasi household food security status and from forest, Odisha

Forest distance	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-1 km	44.2	22.2	21.6	12.0
1-2 km	43.6	17.9	13.6	25.0
2-5 km	33.9	23.7	23.7	18.6
More than 5 km	51.0	21.8	25.5	1.6

Table 51.1: Effect of HH distance from forest on diet quality among non-Adivasis, Jharkhand

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	1.6	31.4	67.0	191.0
1-2 km	0.0	27.7	72.3	83.0
2-5 km	0.0	33.3	66.7	84.0
More than 5 km	0.0	32.2	67.8	121.0

Table 51.2: Effect of HH distance from forest on diet quality among non-Adivasis Odisha

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	3.8	28.3	67.9	106.0
1-2 km	6.8	22.7	70.5	44.0
2-5 km	0.0	25.0	75.0	40.0
More than 5 km	0.0	18.0	82.0	50.0



Table 52.1: Effect of HH distance from forest on diet quality among Adivasis, Jharkhand

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	3.6	52.8	43.6	987.0
1-2 km	4.4	59.3	36.3	383.0
2-5 km	3.1	55.2	41.7	384.0
More than 5 km	4.3	49.9	45.9	447.0

Table 52.2: Effect of HH distance from forest on diet quality among Adivasis, Odisha

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	8.1	34.0	57.9	744.0
1-2 km	4.7	32.6	62.8	129.0
2-5 km	8.3	33.3	58.3	60.0
More than 5 km	3.9	32.6	63.5	230.0

Table 53.1: Non-Adivasi women's diet quality and HH distance from forests, Jharkhand

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	1.0	36.1	62.8	191.0
1-2 km	1.2	28.9	69.9	83.0
2-5 km	0.0	34.5	65.5	84.0
More than 5 km	0.0	33.9	66.1	121.0

Table 53.2: Non-Adivasi women's diet quality and HH distance from forests, Odisha

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	6.6	27.4	66.0	106.0
1-2 km	4.5	34.1	61.4	44.0
2-5 km	2.5	27.5	70.0	40.0
More than 5 km	6.0	20.0	74.0	50.0

Table 54.1: Adivasi women's diet quality and HH distance from forests, Jharkhand

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	3.4	51.7	44.9	987.0
1-2 km	4.7	59.3	36.0	383.0
2-5 km	3.1	54.2	42.7	384.0
More than 5 km	4.3	50.3	45.4	447.0


Table 54.2: Adivasi women's diet quality and HH distance from forests, Odisha

Forest distance	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-1 km	9.0	34.8	56.2	744.0
1-2 km	4.7	37.2	58.1	129.0
2-5 km	8.3	36.7	55.0	60.0
More than 5 km	6.5	32.2	61.3	230.0

Table 55.1: Impact of distance form forests on literacy levels, non-Adivasi homes, Jharkhand

Forest distance	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-1 km	3.0	4.2	3.6	10.4	5.1	6.6	5.6	16.7
1-2 km	2.9	3.4	2.2	8.4	3.7	4.5	4.4	12.1
2-5 km	4.1	5.0	4.5	13.1	6.4	7.4	6.8	20.3
More than 5 km	3.7	3.9	3.4	10.7	5.5	6.8	5.6	17.3

Table 55.2: Impact of distance form forests on literacy levels, non-Adivasi homes, Odisha

Forest distance	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-1 km	4.1	4.3	3.0	10.8	5.1	5.2	3.7	13.6
1-2 km	2.0	2.4	1.8	6.0	2.1	3.9	2.6	8.3
2-5 km	4.5	5.2	4.7	14	5.5	7.0	6.7	19.2
More than 5 km	2.8	3.5	3.4	9.1	4.9	5.8	4.5	15.0

Table 56.1: Impact of distance form forests on literacy levels, Adivasi homes, Jharkhand

Forest distance	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-1 km	2.6	3.2	2.6	8.1	3.4	4.3	3.5	10.8
1-2 km	2.4	3.0	2.4	7.7	4.1	4.7	3.7	12.3
2-5 km	3.0	3.3	2.7	8.8	5.0	5.7	5.0	15.3
More than 5 km	2.6	2.9	2.5	7.7	3.8	4.5	3.9	11.8

Table 56.2: Impact of distance form forests on literacy levels, Adivasi homes, Odisha

Forest distance	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-1 km	1.8	2	1.6	5.1	2.9	3.3	2.4	8.4
1-2 km	1.4	1.4	1.2	3.7	3.3	3.3	2.1	8.4
2-5 km	2.8	2.7	2.0	7.0	3.2	2.8	1.8	7.7
More than 5 km	2.5	2.7	2.5	7.2	5.0	5.5	3.9	14.2



Annexure

G. Income Groups



Table 57.1: Distance from forests and Adivasi HH income, Jharkhand

Forest Access	0-20	20-40	40-60	60-80	80-100
Average distance (Km)	3.8	3.6	3.6	4.2	5.0
Depends on forest for livelihood (%)	55.6	55.9	55.6	52.0	49.6
Households	489.0	488.0	489.0	487.0	490.0

Table 57.2: Distance from forests and Adivasi HH income, Odisha

Forest Access	0-20	20-40	40-60	60-80	80-100
Average distance (Km)	3.1	3.4	3.8	4.0	3.8
Depends on forest for livelihood (%)	84.1	73.6	73.9	74.9	68.9
Households	296.0	295.0	295.0	295.0	296.0

Table 58.1: Distance from forests and non-Adivasi HH income, Jharkhand

Forest Access	0-20	20-40	40-60	60-80	80-100
Average distance (Km)	3.1	5.0	4.6	3.2	-5.1
Depends on forest for livelihood (%)	55.6	33.0	21.1	20.0	15.5
Households	108.0	112.0	109.0	110.0	110.0

Table 58.2: Distance from forests and non-Adivasi HH income, Odisha

Forest Access	0-20	20-40	40-60	60-80	80-100
Average distance (Km)	2.8	2.9	5.0	4.5	4.4
Depends on forest for livelihood (%)	73.7	71.9	66.1	54.4	50.9
Households	57.0	57.0	56.0	57.0	57.0

**Table 59.1: Impact of HH income on education in Adivasi households, Jharkhand**

household head education	0-20	20-40	40-60	60-80	80-100
No school education	56.8	57.4	52.5	51.0	49.2
less than primary	3.1	5.6	3.4	4.7	3.0
Primary	9.0	7.2	8.0	7.6	10.0
less than matriculation and more than primary	18.6	16.9	20.3	18.4	17.5
Matriculation	6.7	5.6	7.8	10.6	10.3
more than matriculation and less than HSC	2.1	2.3	3.4	1.8	2.7
HSC	1.8	3.5	3.2	3.6	3.9
attended college but did not complete	0.8	0.2	0.5	0.9	0.9
college graduate and incomplete post-graduation	1.0	1.4	0.5	0.2	2.1
Postgraduate	0.0	0.0	0.5	0.0	0.2
more than post-graduation	0.0	0.0	0.0	1.1	0.2
professional diploma	0.0	0.0	0.0	0.0	0.0
Total	387.0	432.0	438.0	445.0	439.0

Table 59.2: Impact of HH income on education in Adivasi households, Odisha

household head education	0-20	20-40	40-60	60-80	80-100
No school education	57.1	39.6	38.0	42.3	26.9
less than primary	6.1	7.5	14.0	1.9	1.9
Primary	10.2	9.4	6.0	11.5	1.9
less than matriculation and more than primary	18.4	32.1	22.0	28.8	28.8
Matriculation	0.0	5.7	8.0	3.8	17.3
more than matriculation and less than HSC	2.0	1.9	8.0	3.8	7.7
HSC	4.1	0.0	0.0	3.8	3.8
attended college but did not complete	2.0	0.0	2.0	0.0	1.9
college graduate and incomplete post-graduation	0.0	0.0	0.0	0.0	3.8
Postgraduate	0.0	3.8	2.0	3.8	5.8
more than post-graduation	0.0	0.0	0.0	0.0	0.0
professional diploma	0.0	0.0	0.0	0.0	0.0
Total	49.0	53.0	50.0	52.0	52.0



Table 60.1: Impact of HH income on education in non-Adivasi households, Jharkhand

household head education	0-20	20-40	40-60	60-80	80-100
No school education	46.8	43.3	38.4	37.3	36.8
less than primary	2.1	2.1	5.1	2.9	4.7
Primary	8.5	3.1	12.1	8.8	3.8
less than matriculation and more than primary	23.4	23.7	23.2	20.6	18.9
Matriculation	10.6	15.5	8.1	18.6	19.8
more than matriculation and less than HSC	2.1	3.1	2.0	2.9	0.9
HSC	3.2	4.1	3.0	6.9	5.7
attended college but did not complete	0.0	1.0	1.0	1.0	1.9
college graduate and incomplete post-graduation	3.2	2.1	6.1	1.0	1.9
Postgraduate	0.0	0.0	0.0	0.0	5.7
more than post-graduation	0.0	2.1	1.0	0.0	0.0
professional diploma	0.0	0.0	0.0	0.0	0.0
Total	94.0	97.0	99.0	102.0	106.0

Table 60.2: Impact of HH income on education in non-Adivasi households, Odisha

household head education	0-20	20-40	40-60	60-80	80-100
No school education	57.1	39.6	38.0	42.3	26.9
less than primary	6.1	7.5	14.0	1.9	1.9
Primary	10.2	9.4	6.0	11.5	1.9
less than matriculation and more than primary	18.4	32.1	22.0	28.8	28.8
Matriculation	0.0	5.7	8.0	3.8	17.3
more than matriculation and less than HSC	2.0	1.9	8.0	3.8	7.7
HSC	4.1	0.0	0.0	3.8	3.8
attended college but did not complete	2.0	0.0	2.0	0.0	1.9
college graduate and incomplete post-graduation	0.0	0.0	0.0	0.0	3.8
Postgraduate	0.0	3.8	2.0	3.8	5.8
more than post-graduation	0.0	0.0	0.0	0.0	0.0
professional diploma	0.0	0.0	0.0	0.0	0.0
Total	49.0	53.0	50.0	52.0	52.0


Table 61.1: Head circumference of children by income class, Adivasi households, Jharkhand

Children with head circumference not between 3-97 percentiles	0-20	20-40	40-60	60-80	80-100
Male %	50.0	51.5	43.2	50.8	52.2
Total Male children	60.0	68.0	74.0	63.0	69.0
Female %	51.9	45.8	55.8	45.2	32.3
Total Female children	52.0	59.0	77.0	62.0	62.0

Table 61.2: Head circumference of children by income class, Adivasi households, Odisha

Children with head circumference not between 3-97 percentiles	0-20	20-40	40-60	60-80	80-100
Male %	51.0	62.2	52.5	51.8	46.5
Total Male children	49.0	37.0	61.0	56.0	43.0
Female %	54.5	44.1	35.6	28.3	36.4
Total Female children	44.0	34.0	45.0	46.0	44.0

Table 62.1: Head circumference of children by income class, non-Adivasi households, Jharkhand

Children with head circumference not between 3-97 percentiles	0-20	20-40	40-60	60-80	80-100
Male %	33.3	0.0	50.0	78.6	18.2
Total Male children	12.0	8.0	10.0	14.0	11.0
Female %	69.2	57.1	69.2	50.0	20.0
Total Female children	13.0	7.0	13.0	16.0	10.0

Table 62.2: Head circumference of children by income class, non-Adivasi households, Odisha

Children with head circumference not between 3-97 percentiles	0-20	20-40	40-60	60-80	80-100
Male %	66.7	60.0	50.0	42.9	33.3
Total Male children	3.0	5.0	4.0	7.0	9.0
Female %	25.0	20.0	57.1	37.5	83.3
Total Female children	4.0	5.0	7.0	8.0	6.0

Table 63.1: Diet quality by income class Adivasi households, Jharkhand

Income group	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-20	5.2	60.8	34	421.0
20-40	6.0	59.1	34.9	435.0
40-60	3.4	50.8	45.8	437.0
60-80	2.4	54.9	42.7	452.0
80-100	1.1	43.1	55.7	445.0



Table 63.2: Diet quality by income class Adivasi households, Odisha

Income group	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-20	12.2	39.5	48.3	205.0
20-40	10.3	32.2	57.5	214.0
40-60	4.1	35.4	60.5	243.0
60-80	4.4	31.0	64.5	248.0
80-100	4.1	31.3	64.6	243.0

Table 64.1: Diet quality by income class, non-Adivasi households, Jharkhand

Income group	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-20	3.0	46.5	50.5	101.0
20-40	0.0	35.4	64.6	99.0
40-60	0.0	25.8	74.2	93.0
60-80	0.0	25.5	74.5	98.0
80-100	0.0	22.4	77.6	98.0

Table 64.2: Diet quality by income class, non-Adivasi household, Odisha

Income group	Poor (<=21)	Borderline (21-35)	Acceptable (>35)	Total
0-20	0.0	40.9	59.1	44.0
20-40	2.2	26.1	71.7	46.0
40-60	0.0	20.0	80.0	45.0
60-80	12.0	14.0	74.0	50.0
80-100	0.0	14.0	86.0	43.0

Table 65.1: Food security by income class, Adivasi households, Jharkhand

Income group	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-20	45.5	11.4	19.5	23.6
20-40	47.2	14.7	15.6	22.5
40-60	44.9	16.1	13.2	25.9
60-80	46.0	14.6	11.5	27.9
80-100	50.4	11.4	10.7	27.5

Table 65.2: Food security by income class, Adivasi households, Odisha

Income group	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-20	43.4	19.2	21.9	15.5
20-40	44.1	21.4	21.4	13.1
40-60	40.8	22.0	26.0	11.2
60-80	44.7	23.3	21.7	10.3
80-100	50.4	23.0	17.9	8.7


Table 66.1: Food security by income class, non-Adivasi households, Jharkhand

Income group	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-20	55.3	19.4	13.6	11.7
20-40	42.9	14.3	17.1	25.7
40-60	53.8	15.1	8.6	22.6
60-80	57.8	11.8	9.8	20.6
80-100	58.0	11.0	16.0	15.0

Table 66.2: Food security by income class, non-Adivasi households, Odisha

Income group	Food Secure	Mildly Food insecure	Moderately Food insecure	Severely food insecure
0-20	34.7	18.4	18.4	28.6
20-40	45.8	8.3	27.1	18.8
40-60	59.2	10.2	20.4	10.2
60-80	42.0	24.0	22.0	12.0
80-100	67.4	21.7	6.5	4.3

Table 67.1: Variation in literacy levels by income class, Adivasi households, Jharkhand

Income group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.1	2.5	1.9	6.3	3.2	3.9	2.9	9.6
20-40	2.1	2.4	2.0	6.3	3.8	4.3	3.8	11.5
40-60	2.4	2.6	2.3	7.1	3.9	4.1	3.3	10.9
60-80	2.9	3.6	2.9	9.0	3.6	4.7	4.2	12.3
80-100	3.8	4.4	3.8	11.5	4.6	5.9	4.9	14.9

Table 67.2: Variation in literacy levels by income class, Adivasi households, Odisha

Income group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	1.3	1.3	1.3	3.7	2.3	2.6	1.8	6.7
20-40	1.6	1.7	1.3	4.4	3.1	3.5	2.3	8.7
40-60	1.6	1.7	1.6	4.7	3.2	3.6	2.7	9.4
60-80	1.9	2.3	1.8	5.6	3.8	4.3	3.0	10.7
80-100	3.1	3.1	2.7	8.2	4.1	4.4	3.3	11.3



Table 68.1: Variation in literacy levels by income class, non-Adivasi households, Jharkhand

Income group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.5	3.3	2.4	7.8	4.0	5.4	4.4	13.1
20-40	3.3	3.8	3.4	10.4	5.1	5.4	5.1	15.5
40-60	3.8	4.4	3.8	11.7	5.2	6.5	5.9	17.0
60-80	3.5	4.7	3.7	11.4	5.3	7.4	6.6	18.9
80-100	4.3	5.0	4.2	13.1	6.6	8.0	6.5	20.3

Table 68.2: Variation in literacy levels by income class, non-Adivasi households, Odisha

Income group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.2	2.5	1.7	6.0	3.3	4.6	3.5	11.0
20-40	2.7	3.6	3.1	8.5	3.6	5.0	3.7	11.6
40-60	2.8	2.9	2.3	7.6	4.2	4.9	3.3	12.5
60-80	4.1	4.6	3.7	12.0	5.0	5.1	4.3	14.4
80-100	6.0	6.7	5.6	18	7.7	8.6	7.2	23.3

Table 69.1: Literacy variation by per capita income, Adivasi households, Jharkhand

pci group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.0	2.4	1.9	6.0	3.2	4.0	2.9	9.7
20-40	2.4	2.6	2.0	6.8	3.8	4.1	3.4	11.0
40-60	2.6	3.1	2.5	7.8	4.3	4.8	4.1	12.8
60-80	2.7	3.3	2.9	8.6	3.6	4.6	4.1	12.1
80-100	3.6	4.1	3.6	10.9	4.1	5.4	4.5	13.7

Table 69.2: Literacy variation by per capita income, Adivasi households, Odisha

pci group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	1.4	1.5	1.3	4.1	2.8	3.2	1.9	7.8
20-40	1.5	1.7	1.3	4.3	3.2	3.6	2.5	9.2
40-60	1.6	1.7	1.6	4.6	3.0	3.4	2.4	8.6
60-80	1.9	2.3	1.9	5.6	3.4	3.8	3.0	9.8
80-100	3.1	3.0	2.6	8.1	4.3	4.6	3.5	12.1

Table 70.1: Literacy variation by per capita income, non-Adivasi households, Jharkhand

pci group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.6	3.7	2.6	8.5	4.2	5.7	5.0	14.1
20-40	3.3	3.4	3.1	9.7	6.0	6.3	5.2	17.4
40-60	3.1	4.3	3.6	10.6	3.8	5.2	5.1	13.5
60-80	3.6	4.4	3.5	11.3	6.1	8.0	6.5	19.9
80-100	4.5	5.2	4.6	13.9	5.9	7.3	6.7	19.7

Table 70.2: Literacy variation by per capita income, non-Adivasi households, Odisha

pci group	Female reading	Female writing	Female numeracy	Female total	Male reading	Male writing	Male numeracy	Male total
0-20	2.7	2.9	2.3	7.3	3.2	4.4	3.2	10.3
20-40	2.3	3.4	2.5	7.5	3.8	5.5	4.2	12.9
40-60	2.6	2.9	2.6	7.9	4.3	4.4	3.4	12.1
60-80	3.8	3.8	2.9	9.9	5.4	5.9	4.1	15.5
80-100	6.5	7.1	5.9	19.5	7.0	7.9	7.0	21.6



Annexure

H. Feedback on government and non-government agencies



Table 71.1: Adivasi household distance from forests and life improvement satisfaction, Jharkhand

Forest distance	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-1 km	55.9	60.1	78.3
1-2 km	55.9	57.6	83.2
2-5 km	54.3	54.3	81.3
More than 5 km	43.0	41.6	73.5

Table 71.2: Adivasi household distance from forests and life improvement satisfaction, Odisha

Forest distance	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-1 km	58.5	53.1	80.7
1-2 km	65.2	64.2	86.8
2-5 km	46.7	52.3	88.8
More than 5 km	57.0	52.3	77.5

Table 72.1: Non-Adivasi household distance from forests and life improvement satisfaction, Jharkhand

Forest distance	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-1 km	60.0	59.5	80.5
1-2 km	63.0	64.1	75.0
2-5 km	57.1	54.1	85.7
More than 5 km	48.1	48.9	80.5

Table 72.2: Non-Adivasi household distance from forests and life improvement satisfaction, Odisha

Forest distance	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-1 km	42.5	40.3	78.4
1-2 km	71.9	66.7	91.2
2-5 km	61.1	53.7	74.1
More than 5 km	69.1	56.4	85.5

Table 73.1: Adivasi household income and life improvement satisfaction, Jharkhand

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	42.9	45.2	70.8
20-40	53.3	53.3	78.9
40-60	57.9	60.9	81.4
60-80	58.5	61.8	80.7
80-100	53.5	53.9	81.4

Table 73.2: Adivasi household income and life improvement satisfaction, Odisha

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	57.4	51.7	80.1
20-40	58.6	57.3	81.7
40-60	60.7	55.9	83.4
60-80	59.3	55.3	80.7
80-100	56.1	53.0	82.1

Table 74.1: Non-Adivasi household income and life improvement satisfaction, Jharkhand

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	53.7	47.2	70.4
20-40	58.9	66.1	80.4
40-60	56.0	54.1	85.3
60-80	55.5	56.4	82.7
80-100	58.2	54.5	81.8



Table 74.2: Non-Adivasi household income and life improvement satisfaction, Odisha

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	61.4	54.4	84.2
20-40	57.9	49.1	82.5
40-60	51.8	55.4	71.4
60-80	56.1	43.9	86.0
80-100	59.6	56.1	84.2

Table 75.1: Variation in the life improvement/development opinions of Adivasi household based on the income class, Jharkhand

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	44.6	47.0	71.8
20-40	54.1	54.9	79.1
40-60	57.7	60.9	83.6
60-80	59.6	60.9	80.7
80-100	50.1	51.3	77.9

Table 75.2: Variation in the life improvement/development opinions of Adivasi household based on the income class, Odisha

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	61.5	56.4	82.4
20-40	61.6	57.1	82.7
40-60	56.4	57.1	82.1
60-80	56.6	46.8	79.0
80-100	56.1	55.7	81.8

Table 76.1: Variation in the life improvement/development opinions of non-Adivasi household based on the income class, Jharkhand

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	53.6	50.0	70.0
20-40	58.2	59.1	82.7
40-60	58.7	58.7	84.4
60-80	56.4	58.2	83.6
80-100	55.5	52.7	80.0

Table 76.2: Variation in the life improvement/development opinions of non-Adivasi household based on the income class, Odisha

Income percentile	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
0-20	68.4	61.4	87.7
20-40	59.6	52.6	77.2
40-60	46.4	48.2	75.0
60-80	50.9	45.6	86.0
80-100	61.4	50.9	82.5

Table 77.1: Variation in the life improvement/development opinions of Adivasi household based on the size of landholding, Jharkhand

Land size class	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
Landless	38.9	40.6	62.8
Marginal	55.2	57.6	80.4
Small	58.1	54.5	84.8
Small-medium	43.1	48.3	84.5
Medium	33.3	33.3	93.3
Large	38.5	30.8	53.8

Table 77.2: Variation in the life improvement/development opinions of Adivasi household based on the size of landholding, Odisha

Land size class	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
Landless	53.5	44.7	72.4
Marginal	58.2	54.2	83.7
Small	61.0	62.8	80.8
Small-medium	68.5	70.4	75.9
Medium	62.5	62.5	100.0
Large	100.0	33.3	100.0



Table 78.1: Variation in the life improvement/development opinions of non-Adivasi household based on the size of landholding, Jharkhand

Land size class	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
Landless	53.6	50.0	70.0
Marginal	58.2	59.1	82.7
Small	58.7	58.7	84.4
Small-medium	56.4	58.2	83.6
Medium	55.5	52.7	80.0
Large			

Table 78.2: Variation in the life improvement/development opinions of non-Adivasi household based on the size of landholding, Odisha

Land Size class	Satisfied with the government effort	Satisfied with non-governmental agencies efforts	Life has improved in last year
Landless	68.4	61.4	87.7
Marginal	59.6	52.6	77.2
Small	46.4	48.2	75.0
Small-medium	50.9	45.6	86.0
Medium	61.4	50.9	82.5
Large			

Annexure

I. Important Government schemes and programmes for Adivasis in Jharkhand and Odisha

Jharkhand:

Pre- Matric Scholarship to ST and SC students
Merit cum Means Scholarship for Professional & Technical Courses:
Residential schools for SC, ST, OBC students
Cycle distribution to SC, ST, OBC students
Scheme of Coaching & Allied for Scheduled Tribes/Caste
Medical Aid schemes for SC, ST, OBC
PAHARIYA HEALTH SCHEME
Safe and Adequate Drinking Water Facility
Kalyan Hospitals especially for the STs
Birsa Awas Yojana for PVTG
Shaheed Gram Vikas Yojana in the villages of tribal martyrs who had fought in the Indian War of Independence against the Britishers
Kalyan Gurukul skill development programme
Kaushal Colleges for skill development
Jharkhand Tribal Empowerment and Livelihoods Project (JTELP)
Initiatives Under the Vandhan Yojana of TRIFED :
Targeting the Hardcore Poor Project

Odisha:

State programmes and schemes

Scholarship and Stipend for ST
Pre-matric Scholarship and Stipend for ST students
Scheme for providing quality education for ST/SC students in partnership with Urban Educational Institution (ANWESHA)
Financial Assistance to ST Students for pursuing studies in National Institutes
Payment of Ex-gratia to the Next of kins of SC & ST students
Exemption of Tuition Fees in Sainik School for SC ST students

Multilingual Education for Tribal Language
Odisha Girl Incentive Programme (OGIP) for Pre-Matric Scholarship to ST Day-Scholars.
Extra-Curricular Activities in ST & SC Dev. Deptt. Schools
Operationalization of Urban Hostel Complex (AKANKSHYA) for SC/ST students
Construction, Completion and Repair of Educational Institutions under SC ST department
Construction of ST girls Hostels
Preservation and Promotion of Tribal Culture & Craft Information, Education & Communication
Odisha Particularly Vulnerable Tribal Group Empowerment and Livelihood Improvement Programme (OPELIP)
Orissa Tribal Empowerment and Livelihoods Programme (OTELP PLUS)

Central programmes and schemes

Post Matric Scholarship for ST students
Pre-Matric Scholarship for ST students
Up-gradation of merit of ST students through extra coaching
National Fellowship for Higher Education of ST Students
National Overseas Scholarship for ST-
Development of Particularly Vulnerable Tribal Groups in the State
Grants under Article 275(I) of the Constitution of India for construction of infrastructure and model schools in TSP area
Tribal Development Projects implemented with Special Central Assistance
Scheme for Development of De-notified Nomadic Tribes
Institutional Support for Development and Marketing of Tribal Products / Produce (TRIFED etc.)
Minimum Support price for Minor Forest Produce (MSP for MFP)
Protection / Enforcement of PCR Act, 1989
Support to Tribal Research Institute



Annexure

J. FCS to measure Dietary Diversity



(United Nations World Food Programme, Food (United Nations World Food Programme, *Food Consumption Score Nutritional Quality Assessment Guideline (FCS-N)*. VAM assessment team, WFP HQ, July 2015)

Food Consumption Score (FCS) is a composite score based on dietary diversity, food frequency, and relative nutritional importance of different food groups. It has been developed by United Nations World Food Programme and published in 2015.

According to the FCS construction guideline, we have collected information on the list of food items and food groups that are generally consumed in the Adivasi regions of Jharkhand and Odisha. The interviewees were asked about the frequency of consumption (in days) of those food items over a recall period of the past 7 days.

Food items were grouped into 8 standard food groups. Each food group was assigned a weight based on its nutrient content. We followed the justification provided by the WFP.

Table 79: Nutrition weightage of food items

Food group	Weight	Justification
Cereals and tubers	2	Energy dense, protein content lower and poorer quality (PER less) than legumes, micro-nutrients (bound by phytates).
Pulses	3	Energy dense, high amounts of protein but of lower quality (PER less) than meats, micronutrients (inhibited by phytates), low fat.
Vegetables	1	Low energy, low protein, no fat, micro-nutrients
Fruits	1	Low energy, low protein, no fat, micro-nutrients
Meat and Fish	4	Highest quality protein, easily absorbable micronutrients (no phytates), energy dense, fat. Even when consumed in small quantities, improvements to the quality of diet are large.
Milk	4	Highest quality protein, micro-nutrients, vitamin A, energy. However, milk could be consumed only in very small amounts and should then be treated as condiment and therefore reclassification in such cases is needed.
Sugar	0.5	Empty calories. Usually consumed in small quantities.
Oil	0.5	Energy dense but usually no other micronutrients. Usually consumed in small quantities
Condiment	0	



The consumption frequency of each food group is multiplied by the assigned weight and then summed up to get the Food Consumption Score (FCS).

Based on the scores, food consumption profiles of each of the households are drawn as below:

Table 80: Food consumption profile

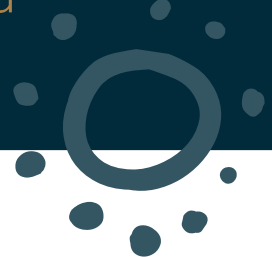
FCS	Profiles
0 – 21 (0 – 28)	Poor food consumption
21.5 – 35 (28.5 – 42)	Borderline food consumption
>35 (>42)	Acceptable food consumption

FCS figures within the bracket are for households that consume sugar and oil on a daily basis.



Annexure

K. HFIAS to measure household level Food security



(Coates, Jennifer, Anne Swindale and Paula Bilinsky. *Household Food Insecurity Access Scale (HFIAS) for Measurement of Household Food Access: Indicator Guide (v. 2)*. Washington, D.C.: Food and Nutrition Technical Assistance Project, Academy for Educational Development, July 2006.)

In this tool food security has been defined as a state in which “all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life”.

Each of the questions in this tool is asked with a recall period of 30 days. The respondent is first asked an occurrence question – that is, whether the condition in the question happened at all in the past 30 days (yes or no).

There are nine Occurrence Questions in the tool which are as follows:

1. Did you worry that your household would not have enough food?
2. Were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?
3. Did you or any household member eat a limited variety of foods due to a lack of resources?
4. Did you or any household member eat food that you preferred not to eat because of a lack of resources to obtain other types of food?
5. Did you or any household member eat a smaller meal than you felt you needed because there was not enough food?
6. Did you or any other household member eat fewer meals in a day because there was not enough food?
7. Was there ever no food at all in your household because there were no resources to get more?
8. Did you or any household member go to sleep at night hungry because there was not enough food?

9. Did you or any household member go a whole day without eating anything because there was not enough food?

If the respondent answers “yes” to an occurrence question, a frequency-of-occurrence question is asked to determine whether the condition happened rarely (once or twice), sometimes (three to ten times) or often (more than ten times) in the past 30 days. For ‘rarely’ occurrence the corresponding score is 1, for ‘sometimes’ occurrence the score is 2 and for ‘often’ it is 3. If the respondent answers “no” to an occurrence question, the corresponding score is 0.

Like the other tools, we piloted this tool too after translating the questions into local language to make sure that the respondents understand the questions properly.

To get the total HFIAS score for each household the score for each frequency-of-occurrence question is summed. The maximum score for a household can be 27 if the household’s response to all nine frequency-of-occurrence questions is “often”. The minimum score is 0 when the household responds “no” to all occurrence questions. The higher the score, the more food insecurity (access) the household experienced. The lower the score, the less food insecurity (access) a household experienced.

Households are categorized into four levels of food insecurity (access): food secure, mildly insecure, moderately insecure and severely food insecure. A food-secure household experiences none of the food insecurity (access) conditions, or just experiences worry, but rarely. A mildly food-insecure (access) household worries about not having enough food sometimes or often, and/or is unable to eat preferred foods, and/or eats a monotonous diet or less-preferred foods, but only rarely. But it does not cut back on quantity nor experience any of the three most severe conditions (going a whole day without

eating, going to bed hungry, or running out of food). A moderately food insecure household sacrifices quality more frequently, by eating a monotonous diet or less-preferred foods sometimes or often, and/or has started to cut back on quantity by reducing the size of meals or the number of meals, rarely or sometimes. But it does not experience any of the three most severe conditions. A severely food insecure household has graduated to cutting

back on meal size or the number of meals often, and/or experiences any of the three most severe conditions (going a whole day without eating, going to bed hungry, or running out of food), even as infrequently as rarely. In other words, any household that experiences one of these three conditions even once in the last 30 days is considered severely food insecure.





Annexure

L. Instruments used during the study



Four instruments were used during the study. The first was a detailed Schedule used for the survey of households. The second was the Schedule to serve as the guide for conducting Focus Group Discussions with respondents from villages in which household surveys were done. The

third is the sheet that gathered village level information. The final one was the sheet that served to navigate the interview with chosen leaders and workers in the Adivasi communities in the two states. All these instruments are given in this Appendix.

Development Status of Adivasis of Central Indian Plateau

Schedule for Household Survey

Informing the person/household interviewed for the objective of the survey and consent

Table 81: Consent and date and location of the survey

Date:			
State:	District:	Block:	Village:
Household number			
Name of surveyor:			
Consent Read Out:	Signature:	Thumb impression:	

Basic information

Table 82: Household information roster

Sr/ HH ID	Name	Relation to household head	Gender	Age	Marital status	Highest formal Education till date of survey	Primary activity engaged in last 365 days (code)	Do they have a mobile phone? (1- Yes, 0- No)	If yes, is it a smartphone? (1- Yes, 0- No)	Is person a divyang? (1- Yes, 0- No)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Codes for relationship with household head

1- self, 2 – husband, 3 – wife, 4 – mother, 5 – father, 6 – son, 7 – daughter, 8 – daughter in law, 9 – son in law, 10- grandfather, 11 – grandmother, 12- granddaughter, 13 – grandson, 14 – uncle, 15 – aunt, 99 – other

Gender code

1- Female, 2 – Male, 3 – Other

Codes for marital status

1- never married, 2- currently married, 3- divorced, 4 – separated, 5- widowed, 9- other

Code for formal Education

0 – No school education, 1- less than primary, 2 – primary (class 4), 3- less than matriculation but more than primary, 4 – class 10 or matriculation, 5 – more than matriculation but less than HSC, 6 – HSC, 7 – attended collage but did not finish, 8 – college graduate and above but not post-graduate, 9 – postgraduate, 10- more than post-graduation, 11- professional diploma after 10th or 12th

Codes for primary activity/occupation

1- Agricultural Labor, 2-Non-agricultural labor, 3-Retired, 4-Government Job, 5-Private Job (formal as well as informal), 6-not working, 7- Livestock, 8- Agricultural enterprise, 9 – Non-agricultural enterprise, 10- Cultivation, 11-house wife, 12 – Student, 13-Other specify



Food security (HFIAS questionnaire)² – to be answered by female member of the household

Table 83: Food security of the household

			Code (for household)
1	In the past four weeks, did you worry that your household would not have enough food?	0 = No (skip to Q2) 1=Yes	
1.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
2	In the past four weeks (one month), were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	0 = No (skip to Q3) 1=Yes	
2.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
3	In the past four weeks (one month), did you or any household member have to eat a limited variety of foods due to a lack of resources?	0 = No (skip to Q4) 1=Yes	
3.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
4	In the past four weeks (one month), did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	0 = No (skip to Q5) 1=Yes	

² Questions in this section are adopted from Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide VERSION 3 (2007) by USAID

			Code (for household)
4.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
5	In the past four weeks (one month), did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	0 = No (skip to Q6) 1=Yes	
5.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
6	In the past four weeks (one month), did you or any other household member have to eat fewer meals in a day because there was not enough food?	0 = No (skip to Q7) 1=Yes	
6.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
7	In the past four weeks (one month), was there ever no food to eat of any kind in your household because of lack of resources to get food?	0 = No (skip to Q8) 1=Yes	
7.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
8	In the past four weeks (one month), did you or any household member go to sleep at night hungry because there was not enough food?	0 = No (skip to Q9) 1=Yes	



			Code (for household)
8.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
9	In the past four weeks (one month), did you or any household member go a whole day and night without eating anything because there was not enough food?	0 = No (End of questionnaire) 1=Yes	
9.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	

Table 84: Food security of the female member of the household

			Code (for female member of the household)
1	In the past four weeks (one month), did you worry that your household would not have enough food?	0 = No (skip to Q2) 1=Yes	
1.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
2	In the past four weeks (one month), were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	0 = No (skip to Q3) 1=Yes	
2.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	

			Code (for female member of the household)
3	In the past four weeks (one month), did you or any household member have to eat a limited variety of foods due to a lack of resources?	0 = No (skip to Q4) 1=Yes	
3.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
4	In the past four weeks (one month), did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	0 = No (skip to Q5) 1=Yes	
4.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
5	In the past four weeks (one month), did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	0 = No (skip to Q6) 1=Yes	
5.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
6	In the past four weeks (one month), did you or any other household member have to eat fewer meals in a day because there was not enough food?	0 = No (skip to Q7) 1=Yes	



			Code (for female member of the household)
6.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
7	In the past four weeks (one month), was there ever no food to eat of any kind in your household because of lack of resources to get food?	0 = No (skip to Q8) 1=Yes	
7.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
8	In the past four weeks (one month), did you or any household member go to sleep at night hungry because there was not enough food?	0 = No (skip to Q9) 1=Yes	
8.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	
9	In the past four weeks (one month), did you or any household member go a whole day and night without eating anything because there was not enough food?	0 = No (End of questionnaire) 1=Yes	
9.a	How often did this happen?	1 = Rarely (once or twice in the past four weeks) 2 = Sometimes (three to ten times in the past four weeks (one month)) 3 = Often (more than ten times in the past four weeks (one month))	

Dietary diversity³:- (to be answered by female member of the household)

³ Questions in this section are adopted from 'Guidelines for measuring household and individual dietary diversity' by Gina Kennedy, Terri Ballard and MarieClaude Dop, Nutrition and Consumer Protection Division, Food and Agriculture Organization of the United Nations (<http://www.fao.org/3/a-i1983e.pdf>)

Table 85: Diversity of Diet of the household

Srl.	Food Group	No. of days in last 7 days (week) when consumption took place	Source (for household) 1- own production, 2- purchased, 3- borrowed, 4-bartered, exchanged for labour, 5- gift from friends and relatives, 6- food aid from government, 7- other
1	Cereals and Tubers		
2	Pulses		
3	Vegetables		
4	Fruits		
5	Meat, egg and Fish		
6	Milk, curd		
7	Sugar		
8	Oil, butter		
9	Condiments		
10	Fortified foods		

Table 86: Dietary diversity of the female member of the household

Srl.	Food Group	No. of days in last 7 days (week) when consumption took place	Source (for household) 1- own production, 2- purchased, 3- borrowed, 4-bartered, exchanged for labour, 5- gift from friends and relatives, 6- food aid from government, 7- other
1	Cereals and Tubers		
2	Pulses		
3	Vegetables		
4	Fruits		
5	Meat, egg and Fish		
6	Milk, curd		
7	Sugar		
8	Oil, butter		
9	Condiments		
10	Fortified foods		



Health and Sickness

Table 87: Age and head circumference for children below 5 years

Srl (from household roster, for children below age 5)	Age (Year and month)	Head circumference (in cm)

Table 88: Details of sickness of household members

Srl. (same as from household Roster table 2)	Number of days in last four weeks (month) when person was sick	Reason for sickness (Code)	Type of treatment received (Codes)	Expenditure on treatment (₹)	Did you have to borrow money for the treatment? 1- Yes, 2- No	Use of any welfare scheme like Ayushman Bharat (Yes/No)

(When there are more than 10 household members, insert extra print of the pages of questionnaire containing Table 79)

Codes

1-Diarrhea/dysentery/other stomach related disease, 2—Malaria, 3- Other fever, 4- Measles5-TB, 6- Asthma, 7-Jaundice, 8- Diabetes, 9-Cancer, 10-Heart diseases 11- Covid-19, 12-Blood pressure 13 – Others specify.

Consultation codes

1-Governmenthospital, 2-Private hospital, 3- Ayurvedic doctor 4-ASHA, 5-ANM, 6-Use traditional herbs 7- Jholachhaap doctor(informal medical practitioner), 8- Buy medicine from chemist himself/herself, 9- Did not consult anyone and did not use any medicine, 10- Other specify

Was there any death in the household during last 12 months (year)? 0 – No, 1- Yes



Functional Literacy

Reading paragraph

लोहारदगा जिला का सितारामपूर गाँव मे 20 दीदी लोगों ने एक महिला समिति बनाए। सभी दीदी ने प्रति सप्ताह 10 रुपये जमा कर के कुल 1 लाख रुपये के आस पास बचत कर लिए। करीब करीब सभी दीदी को बैंक से लोन (कर्ज) मिला। इस कर्ज से सभी दीदी ने आजीविका के लिए कुछ न कुछ काम चालू किया।

Table 89: Writing response

	Word (to be said aloud, slowly and clearly by interviewer)	Response
1	Market	
2	Prime Minister	
3	Mahua	
4	सरना	
5	Family	

Numeracy test

1. 10 + 15 =
2. 45 - 23 =
3. 85 - 39 =
4. 13 X 26 =
5. 98 ÷ 7 =

Table 90: Details of literacy of an adult male and adult female member of the household

Srl.(from Household Roster)	Correctly read words (only from underlined in the paragraph for reading)	Correctly written words	Correctly solved sums

Access to land, water, and forest

Table 91: Land holding and irrigation

	Own Land Decimal (100 decimal= 1 acre)	Leased/ rented/ mortgage Land in Decimal	Leased/ rented/ mortgage Land out Decimal	Share Cropping in Decimal	Share Cropping out Decimal
Total Land					
Cultivable area as on kharif season in last 365 days					



	Own Land Decimal (100 decimal= 1 acre)	Leased/ rented/ mortgage Land in Decimal	Leased/ rented/ mortgage Land out Decimal	Share Cropping in Decimal	Share Cropping out Decimal
Cultivable area as on Rabi season in last 365 days					
Cultivable area as on Summer season in last 365 days					
Is irrigation facility available all three seasons? 1-Yes, 2-No					
If no, in which season irrigation not available? 1. Kharif 2. Rabi 3. Summer					
If yes, For How much land is irrigation available in Kharif 1. All the land 2. Most of the land 3. Half of the land 4. Less than half 5. None					
Source of Irrigation in kharif (mark all that applies) 1. Well 2. Pond 3. River or Stream 4. Canal 5. Tube-well / Bore-well 6. Other specify					
If yes, For How much land is irrigation available in Summer 1. All the land 2. Most of the land 3. Half of the land 4. Less than half 5. None					
Source of Irrigation in Summer (mark all that applies) 1. Well 2. Pond 3. River or Stream 4. Canal 5. Tube-well / Bore-well 6. Other specify...					

	Own Land Decimal (100 decimal= 1 acre)	Leased/ rented/ mortgage Land in Decimal	Leased/ rented/ mortgage Land out Decimal	Share Cropping in Decimal	Share Cropping out Decimal
If yes, For How much land is irrigation available in Rabi 1. All the land 2. Most of the land 3. Half of the land 4. Less than half 5. None					
Source of Irrigation in Rabi (mark all that applies) 1. Well 2. Pond 3. River or Stream 4. Canal 5. Tube-well / Bore-well 6. Other specify...					

Crop codes (for Table 83, Table 84, and Table 85)

Cereals

1. Maize
2. Wheat
3. paddy
4. barley
5. siur/marsha/chalai
6. phoolan
7. opla
8. phapra
9. kodra/madua
10. Gangdi
11. Sugar cane
12. Other, specify

Pulses

13. Rajma
14. Mash
15. Kulth
16. Soyabean
17. Masoor
18. Arhar
19. Urad
20. Other, specify _____

Vegetables

21. Potatoes
22. Peas

23. Beans
24. Cabbage
25. Tomatoes
26. Garlic
27. Katcha aloo
28. Chillies
29. Onion
30. Cow pea
31. Bengal gram
32. Green gram
33. Katchoo
34. Kanda
35. Cauliflowers
36. Lady fingers
37. Cucumber
38. Garlic, coriander, ginger.
39. Bitter gourd
40. Other gourd
41. Brinjal
42. Other, specify _____

Oil seed

43. Oil seeds
44. Mustard
45. Linseeds
46. Other seeds, specify _____



Table 92: Kharif farming details

		Cereals/Pulses/Oil seed				Vegetable			
		Crop 1	Crop 2	Crop 3	Crop 4	Veg 1	Veg 2	Veg 3	Veg 4
1	Name of Crop								
2	Crop Code								
3	Area cultivated under this crop (Bigha)								
4	Total Production quintal								
5	What did you do to the crop? 1-Only consume 2-Only sell 3-Both								
6	If code 2&3, What quantity did your HH sell? (in quintal)								
7	Total (Gross) income from sell (in ₹)								
8	Cost of cultivation (in ₹)								
9	Net income (Total income from sell – cost of cultivation) in ₹								
10	Kharif net income (in ₹)								

Table 93: Rabi farming details

		Cereals/Pulses/Oil seed				Vegetable			
		Crop 1	Crop 2	Crop 3	Crop 4	Veg 1	Veg 2	Veg 3	Veg 4
11	Name of Crop								
12	Crop Code								
13	Area cultivated under this crop (Bigha)								
14	Total Production quintal								
15	What did you do to the crop? 1-Only consume 2-Only sell 3-Both								
16	If code 2&3, What quantity did your HH sell? (in quintal)								
17	Total (Gross) income from sell (in ₹)								
18	Cost of cultivation (in ₹)								
19	Net income (Total income from sell – cost of cultivation) in ₹								
20	Rabi Net income (in ₹)								

Table 94: Summer farming details

		Cereals/Pulses/Oil seed				Vegetable			
		Crop 1	Crop 2	Crop 3	Crop 4	Veg 1	Veg 2	Veg 3	Veg 4
21	Name of Crop								
22	Crop Code								
23	Area cultivated under this crop (Bigha)								
24	Total Production quintal								
25	What did you do to the crop? 1-Only consume 2-Only sell 3-Both								
26	If code 2&3, What quantity did your HH sell? (in quintal)								
27	Total (Gross) income from sell (in ₹)								
28	Cost of cultivation (in ₹)								
29	Net income (Total income from sell – cost of cultivation) in ₹								
30	Summer net income (in ₹)								

Table 95: Crops outside Kharif, Rabi and Summer seasons

	Crop Name	Code	Do you use it only for self-consumption?	Number of times sold produce in the market in last 12 months	Amount from last sell (₹)	Cost for last cycle (₹)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Code

1- Mango, 2 – Lemon, 3 – Papaya, 4 – Litchi, 5 – Guava, 6 – Jackfruit, 7 – Pomegranate, 8 – Sugarcane, 9 – Flowers, 10 – Others

1. Net income from farming (Kharif net income + Rabi net income + Summer net income + other crop net income) in ₹ - _____



Table 96: Livestock/Animal husbandry details

	Buffaloes	Cows	Goats	Poultry birds	Pigs	Fish	Other2
No. of Adult Female							
No. of Adult Male							
No. of Kids/Young							
Did you sell animals/animal produce? (1 -Yes, 0 – No_							
Total income from sell (in ₹)							
Cost of rearing (in ₹)							
Net income from animal husbandry (in ₹)							

2. How far is the forest from the village? _____ km
3. Do you depend on the forest to eke your livelihoods? Yes/No
4. If yes, please provide the details in Table 88.

Table 97: Forest produce details

Forest Produce	For Sale/ household consumption/ Both	If sold, sale amount in Rs. (last year)	How satisfied are you with the sale price (1= Pleased 2=Mostly Satisfied 3=Mostly dissatisfied 4= Unhappy)	If for sale, whom do you sell? Local market/Forest Department/ Private contractor/Local Moneylender/ Some community organization/ Private Company/Others (Specify)	If sale, do you produce any value- added product or sell it as it is? Value addition takes place/ Sell as it is	Has there been any change in the collection over last five years? Increased/ Decreased/ No change
Fuelwood						
Fodder						
Saal / siali leaves / seeds						
Mahua flower/seeds						
Kendu leaves						
Seasonal fruits						
Honey						
Bamboo						
Tadi						
Mushrooms						
Chironji						
Surteli						
Timber						
Food (except seasonal fruits)						
Total income (in ₹)						

5. Have you heard about Forest Rights Act? Yes/No
6. Do you have any land for which you have applied for IFR? Yes/No
7. If Yes, have you received a IFR for that land? Yes/No
8. How many gram sabha took place in the last year?
9. If any, did you attend?
10. If attended, did you raise any issue/demand/claim?
11. What is the source of drinking water for your household?

Table 98: Drinking water source details

Source of drinking water	Yes/No	Do you get sufficient water from this source in summer? (1 -Yes, 0 – No)	Do you get sufficient water from this source in monsoon? (1 -Yes, 0 – No)	Do you get sufficient water from this source in winter? (1 -Yes, 0 – No)	According to you, is this a clean and safe source of drinking water? (Yes/ No)	Time to fetch water (in minutes and when source of drinking water is outside the premise)
Tap (inside premise)						
Handpump (inside premise)						
Dug well (inside premise)						
Public Stand-post						
Public Handpump						
Public Dug well						
Pond						
River						
Spring						
Tanker						

12. What sanitation facility do you have in your household? toilet/ under construction / No facility

Access to right and entitlements



Table 99: Details of awareness and access to rights and entitlements

Srl.	Scheme name	Do you know about the scheme? 0- No, 1- Yes	If yes, anyone from the household is eligible for the scheme? 0 – No, 1- Yes	If yes, have you applied for the scheme?	If yes, have you received the benefit? 0- No, 1- Yes	In case the benefit is monetary, what is the amount received?	In case the benefit was in kind, what was the received benefit?	Are you satisfied with this scheme? (only if household is eligible for the scheme) Yes -1, No – 0
1	RTE							
2	Ujjwala							
3	Swach Bharat							
4	Ayushman Bharat							
5	PM Awas xYojana							
6	PM Kisan							
7	Janani Suraksha Yojana							

What is PDS card type of the household?

1- White, 2- Orange, 3- Antyoday, 4- No PDS card

Table 100: Information about PDS use

Srl.	Item name	Quantity obtained in last 30 days (month)	Expenditure
1	Rice		
2	Wheat		
3	Pulses		
4	Sugar		
5	Oil		
6	Kerosene		
7			

Migration

- Has this member left the village for work even for a day during last one year? _____, 1-Yes, 2-No,
- if No then go to Next Section

Table 101: Migration details

ID from HH roster	Month(s) in which migrated (it can be more than one) Months	How many days he / she spend out of village # Days	What is his/her main occupation as a migrant? Occupation Code	Total earning amount in this migration instance Rs	How much money did he/she send to the household? Rs	Name of the state/ location where migrated Drop down State

Occupation code for migration

1. daily wage laborer
2. labor intensive work with monthly wages (factory, cottage industry)
3. small trader (e.g. fruit or vegetable cart, eatables)
4. employed as service providers (excluding maid servants – e.g. barber, laundry, beauty parlor, waiter)
5. entrepreneur in service provision ((excluding maid servants – e.g. barber, laundry)
6. maid servants or household servant
7. salaried employee with outdoor work (sales executives, commission agents, CSO, security)
8. salaried employee with desk-based job in government owned establishment
9. salaried employee with desk-based job in private sector establishment

Non-farm activities
Table 102: Non-farm activities details

	Non-farm activity 1	Non-farm activity 2	Non-farm activity 3
Nature of activity			
For how long one or more members of the household were involved in the activity in last 365 days?			
Total receipts (in ₹)			
Cost of operation (in ₹)			



Wage, salary, and pension earnings

Table 103: Wage earning

HH roster ID	Number of days in last 365 days when member was engaged in the wage-earning activity	Nature of activity	Total wage earnings in last 365 days (in ₹)

Table 104: Earning from salary and pension

HH roster ID	Salary or pension received in last month (in ₹)

Income sources details

Table 105: Income source details

		Last 365 days (in ₹)
1	Farming (from section VII – 1)	
2	Animal husbandry (from Table 87)	
3	Collections (NTFP sales + capture fishery) (from Table 88)	
4	Non-farm activities (from Table 93)	
5	Wages (from Table 94)	
6	Remittances (from Table 92)	
7	Transfer payments from government welfare schemes (from Table 90)	
8	Total income (adding 1 to 7)	

Credit

Table 106: Credit details

SN	Source of credit	Credit taken in last one year (Yes/No)	Number of times loan taken in last one year	Highest amount in the last year (Rs)	Annual Rate of Interest (%)	Reason for credit (Health/ Business/ Education/House Repair/Others (Specify))	Any outstanding loans (Yes/ No)	Amount outstanding (in ₹)
1	Bank (Private Commercial)							
2	Bank (Public Commercial)							
3	Bank (Regional Rural)							
4	Bank (Cooperative)							
5	MFI							
6	SHG							
7	Friends and Relatives							
8	Moneylender							

Table 107: Decision making within household (to be answered by female member of the household)

Decision	Codes:- Who makes the final decision?
	1= Didi 2- Dada 3=Joint 4=Adult son 5=Adult daughter 6=Daughter-in-law 7=Young daughter 8=Young son 9=Mother/Mother in law 10= Father/Father in law 11=Brother/ Brother in law 12=Other specify 99=not applicable
1	Children’s education
2	Livelihood investments (crop choices, etc)
3	Daily household purchases
4	Asset purchase or sale
5	Taking loans
6	Use of SHG loans
7	(asked only if married) respondent visiting natal family
8	(asked only if married) family size



Report card or perception ratings

1. Are you satisfied with the efforts of Government to develop life and livelihoods of Adivasi (Adivasi) communities? 1- Yes, 0- No
2. Are you satisfied with the efforts of non-governmental agencies in developing life and livelihoods of Adivasi (Adivasi) communities? 1- Yes, 0- No
3. On the following scale, how much do you think your life has improved during the last year?

1- great improvement, 2- somewhat improved, 3- no improvement, 4- somewhat worsened, 5 – greatly worsened

Schedule for Focused Group Discussion at the village/ Adivasi hamlet level

Sampling Strategy: In each sample block one village is to be randomly chosen and a Focus Group Discussion will take place in that village. Altogether if there are 54 blocks to be sampled in the study, 54 FGDs will take place. Of these in 27 villages (i.e. 27 FGDs) the focus group will be a group of (a total of eight to ten) women residents of the village and in 27 villages (i.e. 27 FGDs) the focus group will be a group of (eight to ten) young men and women (age group between 18-40 years) from the village.

Method: A semi-structured schedule is to be administered as part of the FGD conducted with women in the chosen village. A similar semi-structured schedule is to be administered to a group of young people in the chosen village.

Common Set of Questions:

1. Village:
2. Block:
3. District:
4. State:
5. Number of hamlets in the village:
6. Number of Adivasi hamlets:
7. Number of households in the Adivasi hamlet/village:

Set of Questions to be administered during FGD with women residents in the village

1. a. How have the sanitation situation changed over time in the village (Prompts: are there more sanitary facility now? Do people use them? Do women in the FGD use them? If yes, When? Is there still a prevalence of open defecation?

- b. In case sanitation facility has changed, how has that affected the life of the people in general and women in particular in the village?
2. a. How have the drinking water situation changed over time in the village? (Prompts: How has the nature of source [well/springs/tap/handpump etc.] changed over time? Is the dependence seasonal? Are there household level tap connections? Have water resources become more scarce/abundant? Why?)

b. How have the change in the drinking water situation affected the life of the people in general and women in particular in the village? [Prompts: Are women primarily responsible in collecting water? With depletion/abundance in water resources what kind of challenges/ benefits do women face? Similarly, with changes in the extraction mechanisms/some specific sources, how and why have life of women got affected?]
3. a. How are government programs like ICDS, Anganwadi, MDM and THR working in the village?

b. How have they affected the life of the people in general and women in particular in the village?
4. a. How has the dependence on the forest for timber/NTFP/food items/fuelwood changed over the years? [Prompts: People depend on forest for what items? Has availability of such items increased/decreased in recent times? Why? Do women go into the forest for the collection? How has their relationship with the Forest Department changed?]
5. How has involvement of women in the agriculture changed over the years? (Prompts: Women's involvement in various agriculture activities? Women's involvement in marketing activities? Women's involvement in post-harvest activities?)
6. Perception of the participants about the functioning of the Gram Sabha and Gram Panchayat? (Prompts: Do you meet in Gram Sabha in your village? How frequently? What is the level of participation? How things are decided? Which agenda are discussed? Do women participate?)

Set of Questions to be administered during FGD in mixed group with residents in the village

1. In case you sell forest produce in the market, where do you sell it? Do you receive satisfactory price? Has price realisation changed in recent years?
2. What is the state of Forest Rights Act in terms of receipt of CFR and IFR? (Prompts: Do people know about FRA? Do they know about CFR? Have they received CFR? If they have received CFR, does that

- have resulted in the village taking up any value-addition or processing of forest produce or getting better price on the forest produce?]
- How have the human-animal conflict evolved over the years? [Prompts: Have they increased/ decreased? How have they affected the agriculture practice in the village? How do the villagers cope with the situation?]
 - How has agriculture practice evolved? (Prompts: Are there crop changes? Use of traditional versus hybrid or High yielding seeds? Use of pesticide and fertilizers in agriculture have increased? Irrigation coverage – what is the status? Has it improved over years? Single season agriculture or multi-season agriculture? Are there any constraints for practicing multi-season agriculture? Any instances of contract farming?)
 - Perception of the participants about the recent farm bills? (Prompts: Do they know about the farm bills? What do they think about those bills – do they see that they will benefit/harmed from them? Why?)
 - Perception of the participants about the PESA? (Prompts: Do they know about the PESA? Do they think that PESA is implemented with letter and spirit?)
 - Presence of industry/mine in the nearby areas and its effect on life and livelihoods in the village? (Do people from the village work in those sites? Who – male/female? What kind of work? How important in terms of money inflow in the village? Does such industry/mine pollute or deplete the water/forest

resources in and around the village? Do they know about District Mineral Fund and how it is used?]

Set of Questions to be administered during FGD with youth in the village

- What are youths from this village doing, by and large (e.g. Study, working in village, working outside, etc.)? What issues are they facing in whatever they are doing?
- Perception of the group about engagement in livelihoods activities like agriculture/animal husbandry versus migrating to urban areas? Do they see themselves having skills to work in urban areas? What kind of skill building/education opportunity/ training do they feel is currently lacking and that they would need in future?
- Do you think Adivasi society and culture are different from the rest? What are the Adivasi cultural and social practices that you cherish? Are there any non- adivasi practices that you feel are worth absorbing in Adivasi culture?

Village Information Sheet

Sampling Strategy: In each sampled village/hamlet the field investigator has to sit with five or six key informants/ residents of the village and fill up the Village Information Sheet. This has to be done in parallel with the household survey.

Method: A close-ended village level questionnaire to be filled up through a joint discussion with five or six residents in the village.

Table 108: Village/Adivasi Hamlet Demographics

Village:	Block:	District:	State:
Number of hamlets in the village:		Number of Adivasi hamlets:	
Number of households in the Adivasi hamlet/village:			

Table 109: Access to natural resources

Are there any common/ public waterbodies (River, tank, Pond, reservoir, etc.) in and around the village? Yes/No	If yes, Distance from the nearest water body: _____kms/Inside village boundary
Who is the owner of the waterbody? Panchayat/Irrigation/Forest/Others (Specify)	Do villagers/people in the hamlet use the waterbody? Yes/No
If Yes, what purpose?	How old is the waterbody?
Has there been any changes in the size/ depth of the waterbody recent times? Yes/No	If Yes, What?
No. of waterbodies	Has there been any changes in the use that the villagers drew from the waterbody? Yes/No
If yes, What?	Currently who manages the waterbody?



Drinking water source in the village/hamlet:	Source	Individual Tap connection	Public Handpump	Public Standpost	Public Dug well	Public sanitary well	Private Handpump
	Nos						
Change in the dependence on different drinking water sources in last 5 years:	Source	Individual Tap connection	Public Handpump	Public Standpost	Public Dug well	Public sanitary well	Private Handpump
	Increased/Decreased/Constant						
Are there mines nearby? (Yes/No)			Are waterbodies being contaminated due to presence of mines? (Yes/No)				
What proportion of households have toilets? _____					Has there been any change in the trend of having toilets in the village in recent years? Increased/Decreased/No change		
Is there any drainage system in the village? Yes/No				If Yes, what is the system like? Open/Closed/ Not applicable.			
Is there any forest nearby? Yes/No				If yes, how far? _____kms			
Do people from the village/hamlet depend on the forest for the following? Yes/No				Has there been any change in availability in last one decade? Availability has increased/Decreased/Remain same			
Fuelwood				Fuelwood			
Fodder				Fodder			
Timber				Timber			
Food items				Food items			
Medicine				Medicine			
Number of households in the village have applied for IFR? ____/N.A.				Number of households have received IFR? ____/N.A.			
Has the village applied for any CFR? Yes/No/N.A.				Has the village received any CFR? Yes/No/N.A.			
What proportion of/how many households are landless?							
Approximately number of households in the village/hamlet having irrigation pump sets?							
Approximately, how many households in the village/hamlet engage in summer and rabi agriculture?		Season Number	Winter (Rabi)	Summer	Both		
Approximately, how many households in the village/hamlet engage in animal husbandry		Dairy	Poultry	Goatery	Sheep	Fishery	Piggery
In the last 12 months, were there any incidences of crop-damage due to animal attack (like Elephant / Monkey/Wild boar)? Yes/No				If yes, has there been an increase of such incidents? Yes/No			
Has contract farming started in your village?							
Do people in the village leave their cattle for free grazing post Kharif cultivation? Yes/ No			If yes, does such practice constrain rabi/summer cultivation? Yes/No		If yes, has the village/ hamlet collectively taken any action to stop free grazing (paashubaandi)? Yes/No		

Table 110: Access to state's development services/agencies

Do you have primary school in the hamlet/village? Yes/No	If No, what is the distance of nearest primary school? ___ kms	Do you have secondary school in the village? Yes/No	If No, what is the distance of nearest secondary school? ___ kms
Do you have a higher secondary school in the village? Yes/no	If No, what is the distance of nearest higher secondary school? ___ kms	Do you have a college in the village? Yes/No	If No, what is the distance of nearest college? ___ kms
% of households having a member who has passed class X:	% of households having a member who has passed class XII:	% of households having a college drop-out member:	% of households having a graduate member:
ICDS/Anganwadi Centre in the hamlet/village: Yes/No			
Does monthly vaccination programme take place at the ICDS/Anganwadi centre? (Yes/No)			
Is there any ASHA didi in the hamlet/Village? Yes/No	Does ASHA didi have essential medicine kit with her? Yes/No	If yes, has anyone from hamlet received medicine from this kit? Yes/No	
Distance from PHC? _____ kms	Distance from CHC? _____kms	Nearest pharmacy shop from the village: _____kms/ Inside village	Are households from the hamlet/village associated with any NGO (Sanstha)? Yes/No
PDS shop inside village/hamlet premises: Yes/No			
THR program functional in village: Yes/No			
Mid-day Meal program functional in the village? Yes/No			

Table 111: Access to communication

Distance of the village from the block HQ? ___kms	Does the village have a all-weather road that connect it with block HQ? Yes/No	How do you rate the condition of the road? Very Good/Good/Satisfactory/Bad/Very Bad (To be filled by interviewer)	Is there a public transport connecting village to block HQ?
Is there a all-weather road connecting various parts of the village? Yes/No	How do you rate the condition of the intra-village road? Very Good/Good/Satisfactory/Bad/Very Bad (to be filled by interviewer)		
Do all Adivasi helmets have the electricity connection? (Yes/No)	By and large, is there a mobile network connectivity in the village? (Yes/No)		



Perceptions and Perspective of Adivasi Leaders

Semi-structured Interview Schedule:

1. Do you think Adivasi society and culture are different from the rest?
2. If so, in what ways do you think these societies are different.
3. What are the Adivasi cultural and social practices that you cherish?
4. Are there any non-Adivasi practices that you feel are worth absorbing in Adivasi culture?
5. How have the inter-Adivasi relationships (how one tribe looks at another tribe) evolved?
6. Is there a larger “shared Adivasi identity”?
7. Are traditionally held values prevalent in the Adivasi society are changing now a days? If yes, how?
8. What are the factors that are resulting in such a change?
9. Do you see any change in the gender relationships in Adivasi society? If yes, why and how?
10. How is this change affecting the relationship with household (men and women, young members and old members)?
11. How is this change affecting the relationship between households (in terms of a shared collective identity to more individualistic)?
12. The traditional symbiotic relationship with nature (say forest) – has that undergone any changes?
13. Do you see a change in the way that the Adivasi people associate with forest – from seeing forest as site for conservation, protection (sacred grooves) and subsistence to seeing forest as an avenue for revenue generation?
14. Have you observed any differences in the way agriculture is practiced in Adivasi villages with those practiced by Non-Adivasi communities?
15. How have those traditional agriculture practices changed/evolved over (recent) times?
16. Did traditional agricultural practices provide any kind of safety nets for the Adivasi people to live through the tough times?
17. What has been your general experience on how the Adivasi society coped with recent challenges of lockdown and unlock?
18. Could the experience be different, let say, if such a challenging time came, say, three decades back?
19. To what extent the **traditional systems** in the Adivasi society had a built-in component to avoid extreme kind of deprivation resulting in starvation or death?
20. Can you give specific instances of such systems?
21. How have the relationship with the market (as an arena where monetary transaction takes place against sale of goods or service) evolved/changed within Adivasi society?
22. Do they face onslaught from the modern monetary-transactional system?

Annexure

M. Shrinking landholding among Adivasis

We have noted that wage work, non-farm activities, and remittances and pensions are major sources of incomes of Adivasi households. It is instructive to examine why the share of farm income in the income portfolio of the average Adivasi household is low. The Tables below shows how the average operational land holding for Adivasi homes is falling. The fall can be inferred from the combination of operated land area and a steadily

rising number of operational landholdings. Thus, the size of landholding is falling continuously. The number of landholdings of medium and large landholders has been falling continuously and the number of landholdings of small and marginal farmers has been rising continuously for Adivasi communities in both Jharkhand and Odisha. In this respect, the Adivasi follow the overall national pattern.

Table 112: Change in landholding and operated area across land classes among Adivasi farmers in Odisha and Jharkhand

Year	Number of Agricultural holdings (million)	Total Operated agricultural area (m.ha.)	Agriculture holdings operated by marginal and small farmers (in %)	Agriculture holdings operated by medium and large farmers (in %)	Total Agriculture area operated by small and marginal farmers (in %)	Total area operated by medium and large farmers (in %)
1995-96	1.2	1.6	79.9	4.7	48.9	21.3
2000-01	1.2	1.6	82.0	4.1	52.9	19.0
2005-06	1.4	1.7	84.4	3.2	58.0	15.2
2010-11	1.4	1.1	90.2	1.5	56.8	12.6
2015-16	1.5	1.5	91.0	1.3	72.9	7.0
CAGR 20 YEARS	1.1	-0.3	0.6	-6.3	2.0	-5.4
CAGR 1996-2006	1.8	0.7	0.5	-3.9	1.7	-3.3
CAGR 2006-2016	0.4	-1.3	0.8	-8.7	2.3	-7.4
CAGR 2010-11 TO 2015—16	0.5	6.4	0.2	-3.9	5.1	-11.0
2010-11	1.0	1.4	78.6	8.2	35.0	40.2
2015-16	1.0	1.4	79.3	7.9	34.7	40.3
CAGR 2010-11 TO 2015-16	0.2	-0.6	0.2	-0.7	-0.2	0.0



Table 113: Agriculture Intensification among Adivasi community

Cropping Pattern for ST community ('000 ha)	Irrigated Area 2010-11	Irrigated Area 2015-16	Unirrigated area 2010-11	Unirrigated area 2015-16	Total area 2010-11	Total area 2015-16
Gross cropped Area	3,960	4,906	14,195	13,198	18,154	18104
Net Area Sown	3,471	4,275	11,299	10,543	14,770	14818
Cropping Intensity (In %)	114	115	126	125	123	122
Cropping Pattern for ALL community ('000 ha)	Irrigated Area 2010-11	Irrigated Area 2015-16	Unirrigated area 2010-11	Unirrigated area 2015-16	Total area 2010-11	Total area 2015-16
Gross cropped Area	87,768	95,579	1,05,992	96,178	193759	191756
Net Area Sown	64,567	68,234	76,711	71,802	141279	140036
Cropping Intensity (In %)	136	140	138	134	137	137

Source: Gol 2020

Published by: PRADAN



Supported by: The Ford Foundation

