



Climate Induced Social Vulnerability Of The Paharia Community In Santhal Pargana, Jharkhand

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Abstract

The State of Jharkhand is bestowed with 32 scheduled tribal communities segregated on the basis of their culture and living habits. Their population in the state as per 2001 census is estimated at 7,087,068 constituting of 26.3 per cent of the total population (26,945,829) of the entire State. The 2011 Census reported a count of 8,645,042 Scheduled tribes of a total population of 32,988,134 showing an emerging population in the state. The Tribes are primarily rural inhabitant consisting of 91.7 per cent of the village population. Among all the other Indian States Jharkhand holds rank 6th in terms of the congregation of the Scheduled tribal communities. Amongst the 32 enlisted tribes Paharia are treated as Scheduled Tribe by the governments of West Bengal, Bihar and Jharkhand. Primarily they represent the Dravidian ethnic lineage who were socially and educationally of highly backward status in the State. This tribe preserves protoastroloid species. They are the original inhabitants of the than Rajmahal Hills, now popularly known as Santhal Pargana Division of Jharkhand.

Key Words: Jharkhand, Protoastroloid, Santhal Pargana, Rajmahal Hills, Pahari, Tribes, Climate Change, Migration, Adaptation, Mitigation.

Introduction

In India, the category of Scheduled Tribes constitute 8% of the population spreading in the States like Jharkhand, West Bengal, Orissa, Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Chhatisgarh and the North eastern states of Mizoram, Meghalaya, Assam, Manipur, Tripura and Arunachal Pradesh. The State of Jharkhand is bestowed with 32 scheduled tribal communities segregated on the basis of their culture and living habits. Their population in the state as per 2001 census is estimated at 7,087,068 constituting of 26.3 per cent of the total population (26,945,829) of the entire State. The 2011 Census reported a count of 8,645,042 scheduled tribes of a total population of 32,988,134 showing an emerging population in the state (Govt. of Jharkhand, 2025). The Tribes are primarily rural inhabitant consisting of 91.7 per cent of the village population. Among all the other Indian States Jharkhand holds rank 6th, in terms of the congregation of the Scheduled tribal communities (UNDP, 2008). Amongst the 32 enlisted tribes Paharia are treated as Scheduled

Tribe by the governments of West Bengal, Bihar and Jharkhand. Primarily they represent the Dravidian ethnic lineage who were socially and educationally of highly backward status in the State. This tribe preserves the protoastrolloid species. They are the original inhabitants of the than Rajmahal Hills, now popularly known as Santhal Pargana Division of Jharkhand. Their communication language is Malto (an ancient Dravidian Language) as well as poorly documented Indo-Aryan Mal Paharia language. They practices jhum or shifting cultivation which involves clearing of the land by burning vegetation for their sustenance (Bose, Saradindu, 1991). They are divided into two sub-groups Mal Pahari and Sauria Paharia (Jha, 2017). Historically the Mal Paharias were brave warriors who maintained their independence and were least affected by the colonial invasion of British and various natural calamities like the Bengal famine. The government efforts to settle the Mal Paharias in the plains as an emerging agriculturalists, failed miserably furthermore they were totally restricted to move the plains by the overwhelming majority population of the Santhali tribes.

The Paharias (both Mal Pahariya and Shauria Pahariya) are restricted in Damin-i-koh, (Skirts of the hills) in Godda, Deoghar, Dumka, Jamtara, Sahibganj and Pakur districts of Santhal Pargana Sub-Division. The primiraly engaged themselves in the agriculture practices and forest produce. Rice is their staple food, locally grown *Kulthi* and *Lar* are the common pulses used in their meals. Most of them are non-vegetarian in their dietary practices. They worship solar deity called Dharmer Gosain, and their priests as called demano. Religiously they are isolationist and are very conservative in their approaches towards the society and the environment.

At present the Paharias are treated as an insignificant minority community in their own origin land. High level of ill-literacy also compelled them to get restricted to their age old livelihood practices, restricted niches in the society with lacks of the basic infrastructure and amenities for their sustenance. This poor condition furthermore plays a pivotal role in their sizable representation in the government service sectors and the local and state level politics at large.

The Paharias are considered one of India's poorest tribes. The Government of India labelled this tribe as a particularly vulnerable tribal group (PVTG) in State of Chhattisgarh and Madhya Pradesh (Nandi et. al., 2018).

Methodology

Social profile of the Paharia community in Barharwa and its adjacent region were analysed through specific interaction with the *gram sabha* members and human specific interviews. A set of questionnaire was designed and aimed to understand the human, financial, social, physical and natural capital base of the tribal communities and specific vulnerabilities. Almost 150 families were survey through a designed questionnaire to analyse the impact of climate uncertainties in the overall wellbeing of their existence and development.

Observation and Discussion

Primarily this tribe depends on the forest and forest produce for their livelihood and sustenance. Some are seriously engaged in the marketing and selling practices of flowers, fruits, and seeds of Mahua tree (*Madhuca longifolia*). Increasing dependence and demand on the products obtained from this tree and lack of scientific knowledge about the storage of these products pose a challenge in its sustainable use as well as the income generation through it. Selling of Semal wood (*Bombax ceiba*) throughout the year is the only option left to them to meet their daily basis demands. Seasonally they were also reported to collet cotton and selling them in local market in a very low margin of profit. Engagements in (MGNREGA) as unskilled volunteer/labor were reported very low. This can be attributed to lack of proper information and linkages with the several district administered office, to avail the same can be one of the responsible factor.

Sl. No.	Respondent age group	Female	Male	Percentage
1	18-27	11	11	18.33
2	28-37	17	22	31.67
3	38-47	12	17	23.33
4	48-57	10	20	23.33
5	58-67	6	10	12.67
6	68-77	4	10	10.67

Table. 1. Active respondent communities under different age groups

The active respondent during the survey was in age between 38yrs to 57, who preferably stay back in their respective communities as compared to the respondent between 18-27yrs. The respondent between 28-37 years falls under the category of tribe who practice seasonal migration for their livelihood and sustenance (Table 1).

These communities majorly do not own their own land and from the ages involved in the shifting agricultural practices which was temporary in nature and of short span of time. This practice has many environmental impacts and has been regarded as one of the unsustainable practice involved in the loss of soil fertility, accelerated deforestation and also massive occurrence of the forest fire. Abolish of this practice had resulted massive intensity of extreme land use practices. Apart from this they are also engaged as agricultural labors, the most vulnerable and neglected workforce of the society (Jha, 2017).

This had also impacted their daily dietary needs leaving them solely depends on the ration provided under the governmental scheme “Aahar Jharkhand”, by Government of Jharkhand. This largely also impacted the health condition of the people especially the growing child, elderly and lactating mothers. Medical assistance and assessment further alerts them in red category of malnutrition which requires immediate dietary interventions with adequate prescription of supplements incorporation. The assistance from the *anganwadi* is also limited and not satisfactory. The provision for double ration and supplementary diet for the severely affected families are also raised by the *gram sabha* representatives but the applications for medical assistance are still under the scanner and status of pending. Most of the families still rely on the local/natural medicines as a source of medical assistance when it is necessary. Acute poverty, deteriorating health condition coupled with climate uncertainties like frequent drought coupled the tribes to migrate from their niches with zero assurance of their future and faith (Radhakrishna, 2009). Each family is under the pressure of debt provided by the local money lenders intensify the miseries of these tribes severely.

In the State of Jharkhand, the Paharias are extremely vulnerable tribes, and are the living example of tribes having co-existence and co-emerged with symbiotic bond between their survival strategy and the sustainable management of ecology. Their coping mechanism beyond their comfort niches is always a matter of challenge amongst them. Majority of finding suggest that the effort to adopt with the climate change, changing land use pattern and practices is very disappointing leading to the very poor scenario on socio-economic adaptation by them (IPCC, 2007).

Natural and diverse ecosystem has always plays a significant role in shaping the socio-cultural diversity of the tribes. At one hand they largely depend on these resources for their sustenance while in other hand they are also responsible for its sustainable utilization and conservation of these resources. Under the faces of the rapid climate uncertainties and the policy reforms coupled with the land use practices, major impact was seen on the social and cultural spectrum of these tribes (Chakrabarti, 2015). Concurrent drought, massive heat wave and prolonged and scattered rainfall impacted the diversity of these fragile ecosystem resulting in the impact on their forest based livelihood and sustenance (Ghosh-Jerath et al., 2021). Changes in the traditional practices and lack of any skill based assistance had left no choice but to depend on the Government (both central and

state) based employment generation schemes (like engagement in MGNREGA, IAY and PMGSY etc. (Pankaj, 2008).

Concurrent drought (Algur, 2021) and scarcity of the potable water leads to their dependability of them to use any or whatever available water source leading to the risk of more waterborne diseases. Loss of access to the basic necessity and livelihood option these people are forced to both seasonal and permanent migration leaving behind its age old practices and resources (Nayak, S 2024).

Declining forest resources and malnutrition makes these tribes more vulnerable to many kinds of climate induced disease like heat stroke, various forms of burns and dryness. Diarrhea, cholera, seasonal fever and typhoid fever are high in incidence leading to high level of morbidity as well as mortality. Lack of long term study and regular medical interventions on climate induced illness and diseases makes the situation more severe and sometime irreversible losses with respect to life and its quality of sustenance (Ghosh-Jerath et al., 2021).

18.67% of seasonal migration was observed in the case between 18-27 years which can be attributed for the purpose of livelihood or educational purposes while 2.67 is reported of permanent migration between the age group of 27-37 yrs. Who are assumed to be engaged in the labor, house help activity allied work/services in the adjacent states (Table. 2).

Climate change based migration (permanent) force to uproot the tribes from their traditional knowledge and know how (Keshri & Bhagat, 2010 and Bandyopadhyay, G. S. 2019). Forced relocation poses challenge them to left their knowledge and wisdom and amalgamate with the new environment and changes. The displacement often leads to the dissemination and percolation of a mixed pattern of knowledge and customs. Thus a massive loss of traditional knowledge and practices and prioritization of new practices are more prevalent amongst these specific tribes has been observed. Thus preservation of the traditional knowledge and practices are under high press of loss or indulge with the new western practices. Proper adaptation to this change and threat scenario along with valid documentation and dissemination should be prioritizing at all stakeholder level like academic, planning and execution etc.

Around 50% of the male respondent agreed that erratic rainfall and concurrent drought is one of the responsible reasons for the reduced agricultural productivity as well as their engagement at the various steps and the process of the agricultural activity. More than 50% agreed that this climate induced uncertainty or we can say climate change has created a social stress amongst the community which ultimately forces them to migrate for work and their sustenance. Around 56% were in view that there should be positive engagement in the agricultural training while 59% believes that re-introduction of their traditional practices can help to adapt and mitigate the climate uncertainties. Around 46% and 49% in age group of 38-77 yrs. agreed that there has massive relocation and loss of their ancestral land and traditional practices. While approximately 56% of 18-37 yrs. male respondent and almost 53% of the women respondent between the 18-37 yrs of age, have witnessed decline in income and more dependency on wage laboring practices for the income generation (Table 3).

Forced relocation due to the Government led initiative often led to the violation of the tribal rights. Their relocation let them in the fate of new challenges in the new environment and often led them to be treated as in the minority, fragmented and marginalized group in the society. This also impact their moral and socio-economic stability and overall performance indices. Gradually the challenges to cope and adapt in such situation led to the compounded impact in the overall wellbeing of this tribal community.

Sl. No.	Respondent age group (in Years)	Climate induced seasonal Migration (in Numbers)		Climate induced permanent Migration (in Numbers)		% of seasonal migration	% of permanent migration
		Female	Male	Female	Male		
1	18-27	4	22	1	1	18.67	1.33
2	28-37	3	8	2	2	8.33	2.67
3	38-47	9	12	1	1	17.00	1.33
4	48-57	7	9	0	0	13.00	0.00
5	58-67	7	12	0	0	15.00	0.00
6	68-77	2	3	0	0	4.00	0.00

Table. 2. Climate induced (seasonal and permanent Migration).

Immediate effort integrate in the larger canvas of the society, participation in traditional, religious, educational, recreational, decision making practices should be promoted. Holding a better position in any countable setups will led them to live a life with dignity and grace. A practice of their language and tradition is required to be accepted to promote their cultural heritage from generation to the generations to come.

Participation at policy level formulation can led them to better cope and mitigate the change scenarios. Promotion of sustainable practices and prioritizing their vulnerabilities will ensure better management of the available resources. This will not only leads to the food security but will give more option to strategize coping mechanism. Provision for water conservation, diversified livelihood option more engagement in forest product cultivation, climate resilient crop cultivation and participation at stakeholder planning and execution can make them more climate resilient and climate smart communities in coming time.

Parameters (Changes witnessed in last 10-15 years)	Respondent (Male)									Respondent (Female)										
	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage		
Reduced Agricultural Productivity and Food Insecurity																				
1	Erratic rainfall and droughts	18-37	34	22.67	38-57	25	16.67	58-77	10	6.67	18-37	33	22.00	38-57	41	27.33	58-77	7	4.67	
2	Food and nutrition insecurity	18-37	41	27.33	38-57	39	26.00	58-77	8	5.33	18-37	34	22.67	38-57	20	13.33	58-77	8	5.33	
Health Issues and Discomfort																				
3	Increased temperatures and disease	18-37	20	13.33	38-57	35	23.33	58-77	10	6.67	18-37	30	20.00	38-57	30	20.00	58-77	25	16.67	
4	Social stress	18-37	31	20.67	38-57	45	30.00	58-77	19	12.67	18-37	15	10.00	38-57	21	14.00	58-77	19	12.67	
Displacement and Cultural Erosion																				
5	Relocation	18-37	19	12.67	38-57	31	20.67	58-77	40	26.67	18-37	20	13.33	38-57	20	13.33	58-77	20	13.33	

Parameters (Changes witnessed in last 10-15 years)		Respondent (Male)									Respondent (Female)								
		Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage
	and loss of ancestral lands																		
6	Loss of traditional practices	18-37	16	10.67	38-57	35	23.33	58-77	39	26.00	18-37	15	10.00	38-57	29	19.33	58-77	16	10.67
Economic Impacts																			
7	Reduced income and cost of living	18-37	40	26.67	38-57	20	13.33	58-77	10	6.67	18-37	45	30.00	38-57	25	16.67	58-77	10	6.67
8	Dependence on wage labor	18-37	45	30.00	38-57	22	14.67	58-77	8	5.33	18-37	35	23.33	38-57	25	16.67	58-77	15	10.00
Mental Health Impacts																			
9	Climate	18-37	38	25.33	38-57	17	11.33	58-77	5	3.33	18-37	20	13.33	38-57	60	40.00	58-77	10	6.67

Parameters (Changes witnessed in last 10-15 years)		Respondent (Male)									Respondent (Female)								
		Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage
	e-induced stress	37			57			77			37			57			77		
10	Need for psychosocial support	18-37	40	26.67	38-57	15	10.00	58-77	3	2.00	18-37	27	18.00	38-57	56	37.33	58-77	9	6.00
Need for Adaptation and Mitigation																			
11	Embracing traditional practices	18-37	39	26.00	38-57	50	33.33	58-77	12	8.00	18-37	30	20.00	38-57	15	10.00	58-77	3	2.00
12	Participating in agricultural training	18-37	61	40.67	38-57	24	16.00	58-77	10	6.67	18-37	39	26.00	38-57	15	10.00	58-77	2	1.33

Parameters (Changes witnessed in last 10-15 years)		Respondent (Male)									Respondent (Female)								
		Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage	Interval	Frequency	Percentage
1	Strengthening community resilience	18-37	50	33.33	38-57	25	16.67	58-77	8	5.33	18-37	40	26.67	38-57	20	13.33	58-77	7	4.67

Table 3. Climate induced Changes witnessed in last 10-15 years

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