

Forest-Dwelling Rabha Community in Alipurduar, West Bengal: An Ethnographic Study

Nabanita Goswamy¹, Joyraj Kalita^{2*}, Sayantani Banerjee³

1,2,3 Research Scholar, Department of Anthropology, Nagaland University, Lumami, Nagaland, India

Abstract: This ethnographic study delves into the subsistence strategies and survival mechanisms of the Forest-Dwelling Rabha community in Alipurduar, West Bengal. It explores their traditional subsistence practices, the impact of modernization on these strategies, and the community's adaptation to changing socio-economic dynamics. Additionally, the study documents indigenous knowledge related to forest resources and management practices, analysing the sustainability of Rabha subsistence strategies and their implications for sustainable living. The study highlights the significance of gender roles in various subsistence activities, shedding light on the division of labour within the community.

Keywords: agriculture, gender roles, ethnography, Rabha, West Bengal.

1. Introduction

The Rabha community is an indigenous tribal group found in the Dooars region of West Bengal, Assam, and Meghalaya. They are well-known for their unique cultural heritage and livelihood practices. In the Alipurduar district of West Bengal, they are mostly confined to the forest areas of Chilapata.

Regarding their origins, plenty of hypothesis and literature exist. According to Kar (2005), the Rabha people most likely came from the eastern sub-Himalayan region, or possibly from the Tibetan area, and then they moved southward, eventually arriving in the northeastern portion of India, near the Brahmaputra Valley. As per Sarkar (2015) Rabha people migrated from Assam to the northern region of Bengal in search of a more suitable habitat for habitation. They travelled westward from Assam until they arrived at the densely forested area of western Dooars in the Buxa forest region, where they eventually established. Due to the deep forest and low population density, they were better able to perform agriculture, hunting, and gathering.

The Rabhas of North Bengal are classified into two types based on socio-cultural-economic status: the forest dwellers Rabha unit and the plain land Rabha unit. The forest-dwelling Rabhas are the second largest forest village dwellers tribal community after Oraon in the Jalpaiguri district.

Their subsistence strategies have traditionally been tied to the forest. Slash and burn agriculture is the main practice among the forest-dwelling Rabhas. However, in recent times, they have been obliged to engage themselves with intensive subsistence types of agriculture.

2. Objectives of the Research

The main objectives of this research are:

- 1. To study the traditional subsistence strategies of the Rabha community in the Alipurduar district of West Bengal.
- 2. To understand the impact of modernization on these strategies and how the community is adapting to these changes.
- 3. To document the indigenous knowledge of the Rabha community related to forest resources and their management.
- 4. To analyse the sustainability of the Rabha community's subsistence strategies and their implications for sustainable living and resource management

Study Area: Garo Basti, Rajabhatkhawa Village

Geographical Coordinates: Located between 26.6160° N latitude and 89.5324° E longitude, with an average elevation of 221 meters (725 feet).

Boundaries: Rajabhatkhawa, a small town, lies just outside the Buxa Tiger Reserve in the Alipurduar district of West Bengal. Situated approximately 15 kilometres from Jayanti, it is renowned for its pristine natural environment and is enveloped by the Buxa Tiger Reserve Forest.

Area: The Rajabhatkhawa village encompasses approximately 11,968.42 hectares, predominantly covered by forests. Numerous rivers originating from the outer Himalayan ranges in Bhutan flow through this region.

Population: Buxa Forest is home to a population of 9,242 individuals, with 4,655 males and 4,587 females. The literacy rate in the Buxa forest village stands at 54.32%, with 60.00% of males and 48.55% of females being literate. The village comprises around 2,072 households, and its postal code is 735227. Rajabhatkhawa predominantly remains a rural area, with 79.38% of its population residing in rural settings.

Flora: The Rabha community observes a rich variety of flora, including species such as Sal Tree (*Shorea robusta*), Teak (*Tectona grandis*), Papaya (*Carica papaya*), Date Palm (*Phoenix dactylifera*), Coconut (*Cocos nucifera*), Bamboo (*Bambusoideae*).

^{*}Corresponding author: joyraj_rs2023@nagalanduniversity.ac.in

Fauna: The residents of Rajabhatkhawa encounter various animals from the reserve forest while collecting branches from fallen trees. These include Elephant, Tiger, Leopard, Deer, and Bison. Additionally, the community domesticates animals like Cow, Goat, Hen, Duck, and Pig.

Hamlet Composition: Besides Garo Basti, other hamlets within the village area include Nepali Basti, Bich Line, Rai Line, and Chitri Line.

3. Methodology

This research employs a mixed-methods approach, combining both qualitative and quantitative research methods, to explore the subsistence strategies of the Rabha community in the Alipurduar district of West Bengal. The first step of the research is a comprehensive review of existing literature on the Rabha community and their subsistence strategies. This includes academic articles, books, reports, and other relevant sources.

Following the literature review, fieldwork is conducted in the Alipurduar district of West Bengal. This involves living with the Rabha community for a period of time to observe their daily lives and subsistence strategies firsthand. During the fieldwork, interviews and surveys are conducted with members of the Rabha community. These provide valuable qualitative and quantitative data about their subsistence strategies, the challenges they face, and how they are adapting to modernization.

After the data collection, the next step is data analysis. The collected data is analyzed to identify patterns and trends, compare the data with the literature review, and draw conclusions about the Rabha community's subsistence strategies. Based on the data collected, detailed case studies of individuals or families within the Rabha community are developed. These case studies provide in-depth insights into their subsistence strategies and how they are adapting to modernization.

Throughout the research process, ethical issues are considered. This includes obtaining informed consent from participants, ensuring their privacy and confidentiality, and respecting their culture and traditions.

4.	Findings	and	Discussion
----	----------	-----	------------

Table 1

Age and sex distribution of the whole population						
Age	Male	%	Female	%	Total	%
0-4	13	4.41%	6	2.03%	19	6.44%
5-9	8	2.71%	2	0.68%	10	3.39%
10-14	15	5.08%	9	3.05%	24	8.14%
15-19	16	5.42%	13	4.40%	29	9.83%
20-24	13	4.40%	14	4.75%	27	9.15%
25-29	6	2.03%	11	3.73%	17	5.76%
30-34	16	5.42%	19	6.44%	35	11.86%
35-39	16	5.42%	15	5.08%	31	10.51%
40-44	9	3.05%	5	1.69%	14	4.75%
45-49	10	3.39%	9	3.05%	19	6.44%
50-54	3	1.01%	6	2.03%	9	3.05%
55-59	9	3.05%	14	4.75%	23	7.80%
60-64	13	4.41%	6	2.03%	19	6.44%
65+	9	3.05%	10	7.19%	19	6.44%
Total	156	52.88%	139	47.12%	295	100%

Analysis: The age and sex distributions for the entire population in our fieldwork in Garo basti, Rajarbhatkhawa, Kalchini, are displayed in this table analysis. There are 156 men and 139 women living in the village overall, with a total population of 295.

There is a significant proportion of individuals under 20 in this distribution. The population is trending downward beyond the age of 20, but this decrease is not smooth because there is a noticeable population density in the age categories of 35–39, 40–44, and 45–49. However, the percentage of children under five also suggests that these individuals possess a higher birth rate. Demographers occasionally use the Child-Woman Ratio (CWR), which is the ratio of the number of children under five to the number of women aged 15 to 49, times 1000, in the absence of any official birth registry data. It is particularly helpful for historical data because it eliminates the need to count births.

For this population, the CWR is computed as follows:

CWR- [The number of children under the age of five X 1000] \div Number of women 15–49 years old.

Thus, the population's CWR is $(19 \times 1000) \div 86 = 220.93$.

Therefore, a CWR of 220.93 does not represent an abnormally high number and instead points to a declining tendency in the birth rate within that group.

The total dependency, or the ratio of children under the age of fifteen and those 65 and older to those between the ages of fifteen and sixty-four, reveals the economic standing of these individuals. As this ratio rises, the productive portion of the population may be burdened more to support the upbringing and pensions (if any) of the economically dependent. As a result, there are numerous indirect effects in addition to direct effects on government spending on programs like social security. In this case, the ratio of 49.68 corresponds to the Third World context, where approximately 50% of the population is optimally dependent on the other 50%.

The ratio's calculation is shown below. Total Dependency Ratio (Number of individuals aged 0-14 and 65 and above) X $100 \div$ (Number of individuals aged 15-64)

Total Dependency Ratio, then, is $(72 \times 100) \div 223 = 32.29$.

32.29 is not an excessively high ratio when compared to Third World conditions. This image is the result of a higher death rate and a relatively lower birth rate, as seen by the declining percentage of the elderly population. This is a normal pattern in a Third World country that is deeply impoverished. A clearer picture of dependency in this population will emerge if we divide this into two dependency ratios: one for children and the other for the elderly.

The Child Dependency Ratio measures how dependent children are on economically active adults by dividing the number of persons aged 0–14 by the number of people aged 15–64.

The child dependence ratio is $(53 \times 100) \div 242 = 21.90$. This is calculated by multiplying the number of persons aged 0–14 by 100 and then by the number of people aged 15–64.

Given that the ratio is high—21.90—when compared to the trends of wealthy nations, it is comparable to child dependency ratios in Third World countries.

Distribution of working population according to primary source of income							
Primary source of earnings	Male	%	Female	%	Total	%	
Daily labour	56	18.98%	28	9.49 %	84	28.47 %	
Other	29	9.83%	20	6.77 %	49	16.61 %	
Total	85	28.8%	48	16.26 %	133	45.08 %	

Table 2

		Table 3					
Distribution of working population according to secondary source of income							
Secondary source of earning	Male	%	Female	%	Other	%	
Domestication	8	2.71%	5	1.69%	13	4.40%	
Other occupation	27	9.15%	19	6.44%	46	15.59%	
Total	35	11.86%	24	8.13%	59	19.99%	

		Table 4	
Ι	Distribution of house	cholds according to quantity of	of possession of agricultural land
	Range in Bigha	Numbers of Households	Percentages of Households
	1 - 4	45	73.77
5 - 8		7	11.47
	Above 8	5	8.19
	Nil	2	3.27
	Unknown	2	3.27
	Total	61	100

On the other hand, the Aged Dependency Ratio shows how dependent the economically active population between the ages of 15 and 64 is on those over 64.

(Number of individuals 65 and older X 100) ÷ Number of individuals 15-64

Here, the Aged Dependency Ratio is $(19 \times 100) \div 242 = 7.85$

It has a downward tendency as a result of the population of people 65 and older falling.

With 47.12% of the population being female, the sex ratio of this population is surprisingly balanced. A detailed examination of the demographic chart reveals that the ratio is highly tilted towards women in the age groupings 65 years and above, but it is more tilted towards men in the 5-9 and 10-14 years age groups. The population's general sex ratio is balanced as a result of these counterbalances.

Analysis: The distribution of the population by principal source of income is shown in the above table. The above table indicates that 9.83% and 18.9% of men either worked as day labourers or had other sources of income, respectively. 9.49% and 6.77% of women either worked as day labourers or had other occupations for income, respectively.

Following the computation of the overall male and female proportion, the population's principal source of income can be analysed, yielding a male and female population of 28.8% and 16.26%, respectively. As a result, it shows there is a larger working population of men.

Analysis: The distribution of the population by secondary source of income is shown in the above table. The aforementioned table indicates that, respectively, 2.71% and 9.15% of the male population engaged either in domestication or held another secondary economic activity, respectively. Whereas, 1.69% and 6.44% of the female workforce engaged either in domestication or held another secondary income, respectively.

The male and female populations having secondary source of income are 11.86% and 8.13%, respectively. As a result, it shows that a larger proportion of men than women rely on secondary sources of income for their daily needs.

Analysis: The distribution of households in this table is based on the quantity of agricultural land each household owns. The table is separated into five subgroups in the column labelled 'Range in Bigha', wherein the respondents indicated the quantity of agricultural land they now occupy in Bigha (this local unit of measurement represents a plot of land, where area of one *bigha* is 27,000 square feet.)

73.77 percent of households own land in the "1-4" range, 11.47 percent own land in the "5-8" Bigha range, 8.19 percent own land in the "Above 8" Bigha range, 3.27 percent have no land at all, and 3.27 percent of households with land have data that cannot be retrieved and are displayed here as 'Unknown.'

Table 5 Distribution of domestication of animals according to household						
	Domestic animal	Household	Percentage			
	Cow	50	75.76%			
	Goat	25	37.88%			
	Hen	52	78.79%			
	Duck	4	6.06%			
	Pig	35	53.03%			
_	Others	11	16.67%			

Analysis: The distribution of animal domestication by household is shown in the table. There are 66 households in total. Furthermore, it is evident that the majority of the villagers raise chickens. 78.79% of households have domesticated hens in their homes. They domesticate hens because they can use their eggs and meat. They charge between Rs. 250 - 300 for hens. The second-most domesticated animal is a cow. And 75.76% is the percentage. Additionally, cows are incredibly useful for daily living. They sell the milk that cows produce. Moreover, they also use cow dung in different ways. They sell dung and use dung as a fertilizer. Moreover, they use cows for ploughing. Third most domesticated animal is pig. The percentage is 53.03 %. The get meat from the pig. They sell a pig at around Rs. 15000-20000. Then next most domesticated animal is goat. The percentage of goat is 37.88%. They get meat from both pigs and goats, yet pigs make up a larger amount than goats. because goats are less profitable than pigs. Goats are sold

Гab	16	3		

at around Rs. 10,000. The rest 16.67%. domestic animals include dog, cat, sheep, buffalo, and pigeon.

5. Agriculture

The Rabha community predominantly relies on cultivating crops like paddy, potato and mustard for sustenance. For instance, one informant mentioned cultivating paddy on her land. She owns three bighas of land, exclusively dedicating it to paddy cultivation during the monsoon season, with no other crops grown throughout the year. The quality of the paddy harvested varies annually, and labourers known as *hazira* are hired to remove weeds from the fields. This year, they harvested '*Jadu dhan*,' yielding 13-15 maunds of paddy, and sold 4 maunds from the previous year's harvest.

The agricultural processes within the community involve various stages. For land preparation, tractors are commonly used, with some opting for oxen for ploughing if tractors are unavailable. Due to the absence of personal tractors, they lease them at a cost of Rs. 500 per Bigha. Irrigation relies solely on natural monsoon water, eliminating labour costs associated with water supply. Seed and seedling preparation do not require specific tools. While most community members handle this task themselves, some may hire labourers, particularly elderly individuals who may require assistance. Female labourers are often preferred due to their delicate touch, facilitating the seedling process. Seeds are soaked in water until they sprout (gaza), after which they are planted in the prepared paddy fields. Most families save seeds from their own harvest for the next planting season, reducing reliance on market purchases and concerns about seed availability and pricing.

In terms of weeding and other agricultural activities, the informant herself undertakes tasks such as providing manure *(gobor)* to the crops and caring for them. Weeding is typically done by hired labourers who manually remove weeds from the cultivated land, using their hands. It takes 2-3 days for one labourer to complete weeding for 3 bighas of land. Female labourers charge Rs. 300 per day, while male labourers charge Rs. 500 per day for this task. The use of cow dung as fertilizer eliminates the need to purchase fertilizers from the market, thus incurring no additional costs in this regard.

When it comes to reaping and transferring crops for storage, sickle *'kanchi'* is utilized for cutting paddy crops. Some villagers hire labourers for reaping, with 3 to 5 days required to reap 3 bighas of land. The informant hires 4-5 female labourers for this task, each charging Rs. 300 per day. After reaping, the crops are transported to the informant's house in separate parts.

Husking and winnowing, once conducted in village homes, are now performed in rice mills. The harvested paddy is sent to these mills, which charge Rs. 40 for husking per *maund* of Paddy. The produced paddy is stored in a secure and dry wooden structure within the informant's house compound. As for the selling or utilization of crops and crop wastes, the informant primarily cultivates paddy for personal consumption, ensuring food security throughout the year. Crop wastes are repurposed to feed domestic animals.

Regarding the division of labour in agricultural activities, both males and females are hired equally, except for the seedling process where female labour is preferred due to their thin fingertips which facilitate the task. However, in households where paddy is cultivated on their own grounds, both males and females work together equally in the cultivation process.

Religious activities are intertwined with agriculture, where the first crop of the season is collected by the landowner and dedicated to Jesus Christ. This tradition stems from encounters with wild elephants that often venture out of the forest in search of food, sometimes resulting in crop damage and losses. Despite such challenges, the community continues to grow paddy every year, with the belief that offering the first cultivated paddy to the local church will bless them throughout the year, ensuring a sufficient yield annually.

In terms of cost-profit calculation, the paddy cultivated is primarily for personal consumption, sustaining the household for the next year. An investment of approximately Rs. 10,000 is made, yielding paddy for the subsequent year's consumption.

6. Animal Domestication

The Rabha community heavily relies on animal domestication for subsistence, encompassing animals such as cows, pigs, oxen, and poultry. Cows are utilized for ploughing fields and milk production, with cow dung serving as a valuable fertilizer for agricultural purposes, negating the need for additional composite from the market. In terms of major domestic animals, one informant mentioned owning cows, hens, ducks, and pigs, emphasizing a lack of plans to sell any of them.

In the context of buying, rearing, and selling, the informant has purchased cows previously but does not intend to sell any. The use of cow dung as fertilizer is underscored as essential for paddy cultivation, with positive results driving its continued use over chemical fertilizers.

In terms of labour and costs, the informant personally tends to the domestic animals without hiring labourers, thereby eliminating associated expenses. Animals are fed agricultural by-products such as straw stack leftover. This practice minimizes additional costs for animal care.

Regarding buying and selling prices, the informant bought a pig for two thousand rupees and plans to sell it for ten thousand rupees. Hens were sold for approximately Rs. 250-300 each, while cows, bought for ten thousand rupees, are not intended for sale. The milk from cows serves as an additional benefit, with no intention to sell it.

Projected annual income from domestication amounts to around Rs. 8000, with one pig and 4-5 hens sold each year. Any potential impact from disease on hen sales is mentioned, though generally, healthy hens contribute to profits.

Division of labour in animal care sees both the informant and her husband equally involved, without age or gender discrimination, with both taking care of the animals without the need for additional labour assistance.

7. Daily Labour

Daily labour in the village encompasses various tasks such as cutting, gathering, harvesting, and building making, with my informant often hiring labourers for agricultural activities. Labour is typically available throughout the year, with increased demand during the monsoon season for agricultural work and wood gathering from the forest. Skill is a crucial criterion for daily labour, with females often preferred for delicate tasks like the seedling process due to their soft and thin fingertips, while males are favoured for tasks requiring physical strength, such as building construction.

Regarding wages, males typically earn Rs. 400 to 500 per day, while females earn Rs. 300. Gender disparity is notable in wage rates, with economically weaker families tending to hire female labour due to their lower rates, while financially stronger households opt for male labour. Payments are usually made in cash, with labourers receiving their wages promptly upon completion of their work. In agricultural endeavours, payment is immediate, whereas for building or house construction labour, wages are typically paid weekly, contingent on a full week's work. My informant and most villagers prefer cash payments for labour services.

8. Gathering

In the Rabha community, many members gather woods from forest areas as a means of subsistence, primarily for use as fuel in cooking, eliminating the need for gas ovens. This practice is widespread among households in the village, with the gathered wood also utilized for special occasions. Additionally, community members collect various plants from the forest for medicinal purposes, particularly for treating allergies, coughs, pneumonia, and other ailments.

Fuel procurement involves venturing into the forest to collect wood throughout the year, excluding the monsoon season when gathering becomes impractical. Some individuals also work as daily wage earners (hazira) under contractors, earning approximately 200 to 300 rupees per day. Seasonal patterns in gathering indicate that the largest quantities of wood are collected during the winter months when demand for fuel is higher. Despite the challenges posed by the monsoon season, efforts are made to gather wood consistently throughout the year.

The division of labour in wood gathering is inclusive, with individuals over the age of 15 permitted to participate regardless of gender or caste. As for selling wood, it is typically bundled and sold at a price of Rs. 1500 per pile. This practice allows community members to save money that would otherwise be spent on purchasing cooking fuel, thus contributing to associated savings and financial stability.

9. Conclusion

The Rabha community in Garo Basti has a multifaceted demographic and socio-economic profile. The Child-Woman Ratio (CWR) of 220.93, although not excessively high, indicates a decreasing birth rate, which could have significant consequences for the demographic dynamics in the long run. Nevertheless, the general sex ratio remains equitable, with a significant preponderance of females in the old population and a majority of males in younger age cohorts.

Gender-based differences are evident in the economic activities of the community, as 11.86% of males and 8.13% of women depend on secondary sources of income. This highlights the necessity for focused measures aimed at improving economic prospects for women, thereby decreasing their susceptibility and promoting the diversity of household income. To address the gender gap in economic prospects, it is necessary to implement skill development programs and improve access to secondary income sources for women. This will ultimately enhance the overall economic stability of households.

Furthermore, the distribution of land ownership indicates that most households possess small parcels of property. Nevertheless, the existence of landless households, albeit at a modest rate of 3.27%, highlights the imperative for implementing policies that offer land or alternate means of sustenance to these people. These could encompass opportunities to utilise community assets, financial assistance for farming, or financial services tailored for small businesses.

Agricultural operations are closely connected to cultural customs, with religious rites being regarded as a means of safeguarding crops and guaranteeing a bountiful harvest. The significance of this spiritual bond with the land underscores the need to uphold customary rituals while also tackling ecological issues, such as the destruction of crops by feral elephants. In order to mitigate human-animal conflict and mitigate crop damage, it is imperative to establish early warning systems and community-based monitoring to monitor wildlife movements. In addition, offering monetary remuneration and assistance for alternative techniques to preserve crops, such as the use of electric fencing or planting deterrents, can effectively ensure the safety of crops while also protecting the habitats of wildlife.

The gender wage inequality is a significant concern, as women receive lower compensation than males for comparable tasks. Eliminating gender-based discrepancies in pay can be achieved by implementing equitable wage policies and conducting awareness camps.

Conclusively, the Forest-Dwelling Rabha community in Alipurduar, West Bengal, demonstrates a robust yet susceptible socio-economic framework influenced by changes in population, inequalities between genders, and a profound cultural attachment to the land. Sustainable development can be achieved by implementing specific policies that address difficulties such as boosting women's economic possibilities, aiding landless families, ensuring wage parity, preserving cultural practices, and avoiding human-animal conflict. These endeavours will not only enhance the community's ability to sustain themselves and survive, but also guarantee the peaceful cohabitation of the Rabha people with their natural surroundings.

Conflicts of Interest: The authors declare no conflict of interest.

References

- [1] Basumatary, P. (2010). *The Rabha tribe of Northeast India Bengal and Bangladesh*. Mittal Publication.
- [2] Bhattacharya, S. (2015). Tradition and transition among the plain land Rabhas: An anthropological observation. ACME Intellects International

Journal of Research in Management, Social Science, and Technology, 10(10).

- [3] Hakacham, U. R. (2010). Rabha samaj Aryu sanskriti. N. L. Publications.
- [4] Kar, R.K. (2005): The Tribe of North-East India: An Overview. Gyan Publishing house, New Delhi.
 [5] M. Lib, P. B. R. (2012). The Public of the Statement of the Sta
- [5] Mandal, B., & Roy, M. (2013). The Rabha and their social movement (1925-1950): A case study of North Bengal. *IOSR Journal of Humanities* and Social Science, 10(3), 5-8.
- [6] Narzary, D. (2014). An approach to traditional culture of Rabha. International Journal of Humanities and Social Science.
- [7] Pal, S. K. (2015). Fractured ethnic space of Rabha Tribe of North Bengal. *Social Trends Journal*, 2(1), 2348-6538.
- [8] Roy, M. (2016). A historical outline of the Rabhas of North Bengal. *Imperial Journal of Interdisciplinary Research*, 2(7).
- [9] Sarkar, S. (2015). Jungle Rabha masks and masked dance. Gyan Publishing House, Kolkata.