



Women Participation in Agriculture: Evidence from the Aspirational District of Dhalai, Northeast India

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Abstract – The tribal women are one of the most significant contributors to the state's total agricultural production. For the people of Dhalai district, it is the primary occupation, as well as for other similar districts in Tripura, where agriculture is the main source of subsistence. Tribal women handle all kinds of agricultural activities, ranging from preparation of the land for planting, sowing or transplanting, intercultural, harvesting and post-harvesting activities, animal husbandry, and home gardens. Despite their great contribution to the region's net output and rural economy, tribal women are underrepresented in agricultural production due to several gender-specific factors, including ownership, credit, extension, technology, and participation in decision-making processes. This study aims to assess the socio-economic status of tribal women involved in agricultural activities with a focus on their participation in the process, access to credit and resources, and problems encountered while performing them. The article will adopt a descriptive and analytical study design to address the hypothesis, primarily based on primary data collected from personal interviews/household survey and secondary data gathered from various government reports, census data, and published literature. It is hypothesized that such factors as education levels, access to credit, training, and other institutional support play a significant role in determining the extent of women's involvement, productivity levels, and overall socio-economic development. In addition, the research aims to generate sufficient quantitative and qualitative evidence to bridge the existing gap between gender and agriculture, offering policymakers the opportunity to intervene and influence several areas of tribal women's livelihood, essential for achieving the Sustainable Development Goals.

Keywords - Tribal Women; Agricultural Participation; Rural Area, Tripura.

I. INTRODUCTION

Agriculture is the backbone of the rural economy in India and provides livelihood opportunities to millions of people. Agriculture provides directly or indirectly much of the income of the rural population. Women play an important role in agricultural development. They are engaged in almost all the stages of agricultural activities like land preparation, sowing, transplanting, weeding, irrigation, harvesting, processing, storage and marketing of agricultural produce. Women's work is often invisible and undervalued, even if they do a lot of the work. One of the most important sections of agricultural labour in India is formed by tribal women. Tribal communities live mostly in rural, hilly and forest areas where agriculture is the main source of livelihood. Apart from household chores, women in these communities are engaged in agricultural activities. They are important actors in food production, livestock keeping, harvesting of forest products and conservation of indigenous agricultural knowledge. Their role is not only vital for the economic well-being of their families but also for the sustainable development of tribal societies.

Tribal women hold an important place in the field of study in the context of agriculture as they have to face various social, economic and cultural challenges. They work long hours in the agricultural fields but have limited access to land ownership, agricultural credit, modern technology, training facilities and decision-making processes. In many

cases, their contributions are considered family labour, and they do not receive proper wages or recognition for their work. So, women in tribals are economically insecure and socially marginalised while they are actively engaged in agriculture. The Indian tribal women have always had a dual role. On the one hand, they are involved in agricultural activities to supplement the family income and, on the other hand, they are engaged in household chores such as cooking, child care, fetching water, collecting fuelwood and caring for the elderly family members. The double burden increases their workload and limits their opportunities for education, skill development and participation in community leadership. But tribal women are still resilient, hardworking and dutiful to agricultural production and family welfare. Tribal agriculture is characterised by small land holdings, dependence on the rainfall, traditional methods of farming and poor access to resources. These agricultural systems are built upon the labour of tribal women. They have valuable indigenous knowledge on crop cultivation, seed saving, soil management, medicinal plants and biodiversity conservation.

They possess traditional knowledge and experience, passed down through generations, that play an important role in sustainable agricultural practices. They possess traditional knowledge and experience, passed down through generations, that play an important role in sustainable agricultural practices. The government of India has launched various schemes and programs for the socio-

economic development of rural tribal women. These include Self-help group (SHGs), National Rural Livelihood Mission (NRLM), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), agricultural extension programs and women empowerment programs. These programs aim to increase women's participation in economic activities and to improve their income, access to resources and role in decision making. But the fact is that is that the advantages that tribal women get vary from region to region, depending upon the local conditions and the levels of awareness. In recent years, the importance of women in agriculture has been more widely recognised. In recent years, there has been an increasing emphasis by researchers, policy makers and development agencies on empowering women farmers and improving their access to productive resources. Enable tribal women farmers and improve their access to productive resources. The empowerment of tribal women can play an important role in poverty reduction, food security, gender equality and rural development. When women are able to get an education, training, land rights and financial resources, they are better able to improve agricultural productivity and family welfare. The social, cultural, and economic status of tribal women in agriculture is influenced by a number of factors such as level of education, income, land possession, access to technology, social customs, cultural traditions and government support. Though some tribal women have been helped by development programs and better opportunities, many of them still face problems of poverty, illiteracy, poor healthcare, gender discrimination and lack of institutional support. Thus, it is essential to understand their present situation so that effective policies and programs can be designed to cater to their specific needs and problems. The present study is an attempt to study the status of tribal women in agriculture and to understand their socio-economic condition, participation in agriculture, challenges and contribution to rural development. The study tries to bring out the vital role of tribal women in agricultural activities and to find out the factors affecting their livelihood and empowerment. The study findings may help the policy makers, researchers and development practitioners to develop strategies for the betterment of living conditions and agricultural opportunities of tribal women.

2. Importance of the Study

The present study is significant as tribal women play an important role in agricultural activities and rural development. Their contribution to farming and to household livelihoods is substantial but often unrecognized and undervalued. It is important to know the position of women in tribal agriculture to recognize their contribution and to identify the problems faced by them in their day to day life. The present study is an attempt to understand the socio-economic condition of the tribal women engaged in agriculture. It provides information about their education, income, occupation, land ownership, family background and access to

2. Objective of the Study

- To analysis socio-economic condition of Tribal women in Agriculture.
- To identify the challenge face by Tribal women in agriculture.

II. METHODOLOGY

1. Selection of the study area

The present study was carried out in selected tribal villages of Dura Chowmuhani R.D block of Dhalai District of Tripura. The villages were selected because a large number of Tribal women are actively involved in agricultural activities. Tripura is one of the important states of Northeast India, where a large percentage of the population is of tribal origin. Agriculture is the main occupation of a large number of tribal households. Women play an important role in the different operations of agriculture. The selected villages were chosen because agriculture is still the major source of livelihood and tribal women are actively involved in farming activities.

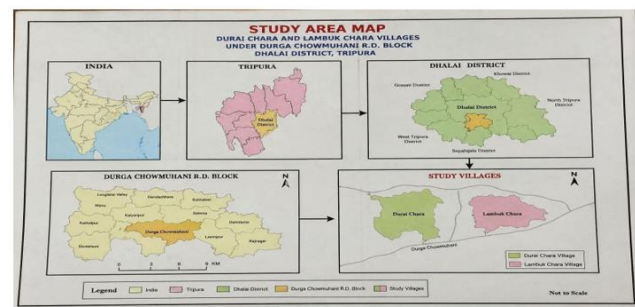


Figure. Study area of Durga Chowmuhani R.D Block

Sampling Method

The present study was conducted in Dhalai District of Tripura. A multistage sampling technique was adopted for the selection of respondents. In the first stage, Durga Chowmuhani Rural Development (R.D.) Block was selected purposively because of the significant involvement of tribal women in agricultural activities. In the second stage, selected villages from the block, namely Duraichara and Kamalpur, were chosen for the study. Finally, respondents were selected through simple random sampling & using a structured interview schedule

Sample Size of the Study

A total of 100 tribal women respondents were selected from the study area. The respondents were actively engaged in various agricultural activities such as sowing, transplanting, weeding, harvesting, livestock rearing and other farm-related works.

The respondents were selected from different age groups, educational backgrounds, and income levels to obtain comprehensive information regarding their socio-economic condition, agricultural participation, and challenges faced in agriculture.



Sources of Data Collection

The present study is based on both primary and secondary sources data collection. Primary data were collected from tribal women by using a structured interview schedule and personal interaction. The interview schedule had questions related to age, education, marital status, occupation, income, land ownership, agricultural participation, decision-making role and challenges faced in agriculture. Personal observation was also used during the field survey as a method to understand the actual involvement of tribal women in agricultural activities.

Secondary data were collected from various published and unpublished sources such as books, journals, research articles, census reports, government publications, reports of different departments, dissertations and relevant websites. These sources helped the researcher to understand the larger picture of tribal women and agriculture and also provided valuable background information valuable background information for the study.

Data Analysis

After the data was collected, all the responses were screened, classified and arranged according to the objectives of the study. The data collected were tabulated and analysed with the help of simple statistical tools. The data were presented simply and understandably using percentages, frequency distribution, tables, bar diagrams and pie charts. The socio-economic characteristics of the respondents and their agricultural participation were analysed by the percentage method. The analysed data helped to understand the status of tribal women in agriculture and identify the major issues affecting their participation and development.

III. RESULTS AND DISCUSSION

Table: 1. Age distribution of Respondents

Sl.no	Age group	No. of Respondents	Percentage	The largest proportion of respondents 42% were in the age group 41-50 years, followed by 31% in the age group 31-40 years, which is clear. The respondents that are above 50 years old are 15% of the total sample. The finding indicates that most of the respondents are middle aged women and are actively involved in agricultural activities.
1	27-30	12	12%	
2	31-40	31	31%	
3	41-50	42	42%	
4	Above 50	15	15%	
5	Total	100	100%	

Table: 2. Marital Status of the Respondent

Sl. No	Marital status	No. of respondent	Percentage
1.	Unmarried	0	0%
2.	Married	87	87%
3.	Widow	12	12%
4.	Divorce	1	1%
	Total	100	100%

The above table indicates the marital status of the respondents. Out of 100 respondent. 87 respondents are married, which is the largest proportion of the sample. There are 12 respondents of widow and only 1 respondent of divorce. Unmarried respondents were not found in the study area. The results reveal that majority of the tribal women engaged in agriculture are married and actively in agricultural and household responsibilities.

Table 3: Education Background of the respondents

Sl.no	Education level	No. of respondent	percentage
1	Illiterate	24	24%
2	Primary	28	28%
3	High school	31	31%
4	Higher Secondary	16	16%
5	Graduate	1	1%
	Total	100	100%

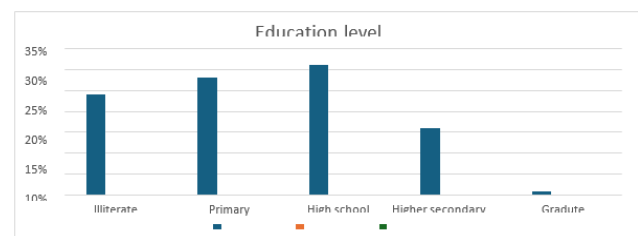


Figure 2: Education levels of respondents

The educational level of the respondents included in the study is presented in the table above. The total number of respondents was 100. Among these 100 respondents, 32% respondents had completed high school education which is the highest percentage among all the educational categories. 28% respondents had completed primary education and 24% respondents were illiterate. Also, 16% respondents have completed higher secondary and only 1% respondent is a graduate. As shown in the table, the majority of the respondents 31% are high school graduates, followed by primary education 28% and illiterate respondents 24%. Only a small proportion reached higher secondary 16% and graduate level education 1% indicating that higher education is still limited among the respondents.

Table 4: Types of Families of the Respondents

Sl.no	Family type	No. of respondent	percentage	The above table shows the type of family of respondents. Out of total 100 respondents, 63% respondents belong to nuclear family and 37% respondents belong to joint family. The data indicates that most of the respondents in the study area are nuclear families.
1	Joint	37	37%	
2	Nuclear	63	63%	
	Total	100	100%	



Table 5: Occupation of the respondents

Sl no	Occupation	No of respondent	Percentage	The table shows that most of the respondents 72% are farmers followed by agricultural laborers 17% and daily wage workers 11%. This implies that agriculture is the major occupation and the major source of livelihood for the respondents in the study areas. The dominant occupation of the respondents is farming with 72% respondents out of the total respondents.
1	Farmer	72	72%	
2	Agricultural labourer	17	17%	
3	Daily wage worker	11	11%	
	Total	100	100%	

Table 6: Monthly income of the respondent

Sl. no	Monthly family income	No. of respondents	Percentage	As shown in the table, majority of the respondents 45% have a monthly family income of 6000-10000. Around 31% get pay between 4000-5000 a month and 20% get over 15000 a month. Of the respondents, only 4 per cent belong to the below 3000 per month income group. It is, therefore, obvious that most of the tribal women respondents are from low to middle income groups
1	Below 3000	4	4%	
2	4000-5000	31	31%	
3	6000-10000	45	45%	
4	Above 15,000	20	20%	
	Total	100	100%	

Table 7: Decision-making pattern related to farming activities among the respondents

Sl	Decision making	No. of respondents	Percentage	42 per cent of the respondents take farming-related decisions together with their family members, indicating the importance of family involvement in agricultural decision-making, according to data. Nearly one third, 36 per cent of respondents, took farming decisions independently, highlighting a high level of independence among tribal women. 17 per cent said most of the decisions on farming are being made by their husbands, and 5 per cent said others.
1	Self	36	36%	
2	Husband	17	17%	
3	Family jointly	42	42%	
4	Others	5	5%	
5	Total	100	100%	

Table 8: Source of financial support for agricultural activities among the respondents

Slno	Financial support	No. of respondents	Percentage	Highest percentage of respondents 38% uses other financial support. The second important support was a self-help group which accounted for 27% respondent. The 20% financial aid through bank loans indicates moderate access to formal banking
1	Bank	20	20%	

2	SHG	27	27%	services. At the same time, 15% of respondents borrow from money lenders.
3	Money lender	15	15%	
4	Other	38	38%	
	Total	100	100%	

Table 9: Ownership of agricultural land among the respondents

Sl. no	Ownership of agricultural	No. of respondent	Percentage	The data reveals that the majority of the respondents 75% has agricultural land, whereas 25% of the respondents do not have any agricultural land. This shows that most of the tribal women who entered agriculture have their own resources of land, which can add to the agricultural production and household income.
1	Yes	75	75%	
2	No	25	25%	
	Total	100	100%	

Table 10: Type of agricultural land ownership among the respondents

Sl.no	Agricultural land ownership	No. of respondents	Percentage	The data shows that most of the respondents 50% own family-owned agricultural land, which is the most common type of landholding. Approximately 35% of the respondents own land jointly with others individually. This implies that family and joint ownership are more common among the respondents.
1	Individual	15	15%	
2	Jointly	35	35%	
3	Family	50	50%	
	Total	100	100%	

Table 11: Main challenges faced by Tribal women in agriculture

Sl. no	Challenges faced in agriculture	No. of respondent	Percentage	The results indicate that financial problems are the most significant challenge for respondents with 46% of them reporting on it. The second most important problem is the water shortage, which is a concern for 36% of the respondents. 12% of the respondents cite the climate-related issues, and only 6% reported that the lack of agricultural tools is a major challenge.
1	Financial problem	46	46%	
2	Water shortage	36	36%	
3	Lack of tools	6	6%	
4	Climate issue	12	12%	
	Total	100	100%	

Table 12: The major problems faced by respondents in selling crops

Sl.no	Problems in selling the crop	No. of respondents	Percentage	The biggest problem for respondents when it comes to selling their crop, according to the data, is low price 43% reported this as an issue. Next are transportation problems 37% that impede access to markets. A small percentage 5% recorded that the unavailability of market facilities
1	Low price	43	43%	
2	Transport	37	37%	



3	Lack of market	5	5%	was a major problem, and none of the respondents recorded middlemen as a major problem.
4	Middlemen	0	0%	
	Total	100	85%	

Table 13: Awareness of government schemes

Sl. no	Government schemes	No. of respondent	Percentage	66% of the respondents said that they were not aware of any government schemes, while 29% said that they were aware of government schemes. Besides, 5% of the respondents were not sure about their awareness of government schemes. This finding indicates a significant gap in the dissemination of information and needs better awareness
1	Yes	29	29%	
2	No	66	66%	
3	Not sure	5	5%	
	Total	100	100%	

Major Findings

Socio-Economic Profile of Respondent

- The majority of respondents (42%) belonged to the age group of 41–50 years, indicating that middle-aged women are actively involved in agriculture.
- Most respondents (87%) were married, showing that married women play a significant role in agricultural activities and household management
- A large proportion of respondents (31%) had completed high school education, while 24% were illiterate, indicating a moderate level of literacy.
- Agriculture was the principal occupation of most respondents, with 72% working as farmers.
- Most respondents (45%) had a monthly family income between ₹6,000–₹10,000.

Participation of Tribal Women in Agriculture

- Most respondents spent 4–6 hours daily (58%) on agricultural activities, highlighting their significant contribution to farming.
- A large majority (75%) had access to agricultural land, either individually or through family ownership.
- Family ownership of agricultural land (50%) was the most common pattern of landholding.
- Decision-making related to farming was mainly done jointly with family members (42%), while 36% of women took decisions independently
- Financial Support and Agricultural Challenges
- The main sources of financial support were other informal sources (38%), Self-Help Groups (27%), banks (20%), and money lenders (15%).
- Problems Faced by Tribal Women in Agriculture
- Most respondents reported that agriculture is a difficult occupation, with 75% describing agricultural work as very difficult.
- Awareness of government schemes was relatively low, indicating the need for better information dissemination and outreach programs.

IV. CONCLUSION

The study, “Status of Tribal Women in Agriculture: A Special Reference to Dhalai District, Tripura,” highlights the vital contribution of tribal women to agricultural production and rural livelihoods. They actively participate in almost every stage of farming while simultaneously managing household responsibilities, resulting in a significant double workload. Despite their crucial role, tribal women continue to face several socio-economic challenges, including limited access to institutional credit, low awareness of government schemes, inadequate training opportunities, poor market access, and heavy domestic responsibilities. These constraints reduce their productivity and limit their participation in decision-making processes. The study concludes that strengthening access to education, agricultural training, financial services, government support, and market facilities is essential for improving the socio-economic status of tribal women. Recognizing women as farmers in their own right and enhancing their participation in agricultural decision-making will not only empower tribal women but also promote sustainable agriculture and inclusive rural development in Tripura.

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