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# Women's Involvement in off-farm activities for Household Food Security; An Empirical Study in Coochbehar District of West Bengal

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ABSTRACT: Farm women play a vital role in both the farm and off-farm sectors and contribute both to agriculture and household food security. But they lack access to resources, face various constraints, and maintain a poor socio-personal and socio-economic status. Thus, a study was conducted during 2019-21, to study the profile of the farm women, their involvement in off-farm activities, and the constraints they face in the Coochbehar district of West Bengal. The study was done in two blocks of the Cooch Behar district of West Bengal. 120 farm women were selected randomly from four villages as respondents. The data were collected by personal interview method with the help of a structured interview schedule. Statistical tools like frequency, percentage, mean, SD, ranking, etc have been used to analyze the data. It has been found that a majority of the farm women were of middle age, Hindu, belong to the general caste and APL categories and have a medium level of education. They were married, belonged to marginal farmers' families with no land of their own, lived in mixed-type houses, cultivated 1-2 crops, had SHG membership, and reared live stocks. They preferred television as a source of information among the different mass media sources. The off-farm activities found in the study area were livestock product selling, tailoring, agricultural wage labour, entrepreneurship, non - agricultural labor, shopkeeping, and some private services. It has been seen that livestock product selling and tailoring were the most preferred activities. Socio-psychological problems and different external factors were found to be the most important constraints, women face, while thinking about or engaging themselves in different off-farm income opportunities. The study recommended raising the socio-personal and socio-economic status of the women. Policies across different sectors like agriculture, credit, labour markets, etc. need to recognise women as equal workers and contributors to household food security as well as the overall household economy by ensuring equal entitlements to resources, services, and returns to labour (wages). Women should be recognised as farmers and given full support (including credit and information) to pursue agricultural enterprises irrespective of their land ownership status.

Keywords: Farm women, food security, Indian women, off farm activities.

## INTRODUCTION

Food is the basic need of human beings and food security in terms of availability and access is the major concern of the society (Anang *et al.*, 2020). Food and nutrition security was defined by the World Food Summit in Rome in 1995 as "When all the people at all the time get physical and economic access to sufficient, safe and nutritious food to fulfill their dietary need and food preferences for an active and healthy life" (FAO, Rome 1995). Food insecurity has become a major issue for developing countries in recent years. Nearly 1 billion people are experiencing food insecurity in the world (Astatike and Gazuma 2019; Anang and Yeboah 2019). Although, India has achieved self-sufficiency in

the production of food sustainability in food production is still a big challenge for our country (Bui and Hoang 2021; Dsouza *et al.*, 2020). According to the International Food Policy Research Institute (2015), a sixth of India's population and a fourth of its children remain undernourished. According to the world bank, despite the sustained economic growth over the last decade, India's poor performance in reducing hunger and malnutrition has been a great concern (Olumakaiye and Ajayi 2006). A vibrant economy and the related market mechanisms couldn't ensure food and nutritional security for all its citizens.

In ancient times people were mainly dependent on farm activities and they rarely choose off-farm activities. Off-farm income includes income from work performed on others' farms and/or work performed on various rural non-farm sectors such as construction, manufacturing, services sector, etc. However, in many developing countries, with the rapid growth in the rural economy, the off-farm sector has contributed an undeniable increasing share in rural employment. A rise in off-farm income can boost both household and individual food security and accessibility (Fikire and Zegeye 2022; Getaneh et al., 2022; Haq et al., 2022). Moreover, constraints like climate change, unpredictable farm income, seasonality in crop production, shortage of hired labor, and hindrances in credit facilities have led the farmers to search for substitute options for income generation from various off-farm activities (Patra et al., 2018). In India the number of rural families involving in off farm activities has been increasing, which can provide a lion's share in their income (Rahman and Mishra 2020) They have also concluded that the families which are engaged both in farming and off farm activities can get better access to food availability. Depending only on cultivation cannot assure availability and accessibility of food in household of rural areas (Obinna and Onu 2017). Women play a vital role in both farm and off-farm sectors and contribute both to agriculture and household food security. But they lack access to resources, face various constraints as well as maintain a poor sociopersonal and socio-economic status (Pooja et al., 2016). A study was thus conducted during 2019-21, to study the profile of the farm women as well as to identify different off-farm activities available to them in the Coochbehar district of West Bengal. The study also analyzed the extent of involvement of farm women in those activities along with the constraints they face while performing various off-farm activities in the study area. Finally, the study generated a few suggestions to overcome those constraints to improve their socio-personal and socio-economic status, and level of participation in different off-farm activities to ensure food security in the study area.

### MATERIAL AND METHODS

The study was done in Cooch Behar district of West Bengal. The state and district were selected purposively due to the convenience of the researcher. Coochbehar I and Coochbehar II blocks were also selected purposively. Total of four villages namely Chandmari, Pathpisu & Maheshbathan, and Gopalpur were selected from Coochbehar Block I and Coochbehar Block II respectively, through simple random sampling without replacement method. 120 respondents were taken from these four villages through a simple random sampling method. The socio-personal and socio-economic profile of the farm women and opportunities for different offfarm activities in the study area were studied with the help of available secondary information sources and primary sources in the study area.

The data was collected from February 2021 to April 2021. Data collection was done through a personal interview method with the help of a structured schedule meant for the study. The primary data was collected through personal interviews of the respondents individually in the field, at home, or at their workplace. The information was then recorded on the interview schedule. The data thus collected were then tabulated and scientifically analyzed based on the objectives of the study with the help of SPSS software. The conclusion and recommendations were made based on the results. Statistical tools like frequency, percentage, mean, SD, ranking, etc were used.

## **RESULTS AND DISCUSSION**

Variable	Category	Frequency	Percent (%)
	Young(18-35yrs)	49	40.8
Variable	Middle Age(>35-55yrs)	69	57.5
-	Old Age(>55yrs)	2	1.7
	Unmarried	1	0.8
Marital Status	Widow	8	6.7
	Married	111	92.5
	Divorcee	0	0
	Illiterate	2	1.7
	Read and write	13	10.8
	Primary	20	16.7
Level of Education	Middle	53	44.2
	Intermediate	31	25.8
	Graduate and above	1	0.8
	General	65	54.2
	SC	46	38.3
Caste system	ST	0	0.0
	OBC	9	7.5
	Minority	0	0.0
	Hindu	106	88.3
	Muslim	14	11.7
Religion	Christian	0	0
-	Others	0	0
	Total	120	100.0
Family type	Nuclear	106	88.3

Table 1: Descriptive analysis of the Socio- personal and Socio -economic profile of the respondents n=120.

	Joint	14	11.7
Family Catagory	Marginal	111	92.5
Family Category	Small	8	6.7
(Type of the Farmer)	Semi medium	1	0.8
Economic Beneficiary	BPL	15	12.5
Status	APL	105	87.5
	1-2 crops	82	68.3
No. of Crops grown	3-4 crops	35	29.2
	5-6 crops	3	2.5
	Kuccha	43	35.8
House type	Mixed	57	47.5
	Pucca	20	16.7
Land holding	With No land	109	90.8
(No. of Farm women)	With ownership of land (<2.5 acre)	11	9.2
	No membership	5	4.2
Social Participation	Membership in one organization	110	91.7
Status	Membership in more than 1 organization	5	4.2
	Office bearer of any organization	0	0
SHC Momborship	No	4	3.3
SHG Membership	Yes	116	96.7
Possession of Livestock	No	47	39.2
in numbers	Yes	73	60.83

It has been found that the majority of the farm women in the study area i.e. 57.5 percent were of middle age group and 92.5 percent were married. 44.2 percent of the selected farm women had an education of up to class eight. 54.2 percent of the respondents were from general caste and 88.3 percent were Hindu and have a nuclear family. The majority of the farm women (87.5 percent) of the sample, belong to APL (above poverty line) category. It has also been found that 68.3 percent of the farm women were cultivating only 1-2 crops in their land holdings. 47.5 percent of farm women belong to the marginal type farm family and had mixed-type houses. 90.8 percent of farm women were found to possess no land in their name. The majority of the respondents i.e. 91.7 percent had a membership in only one organization. It has been found that almost everyone i.e. 96.7 percent of respondents have got SHG membership but none were found to be the office bearer. 60.83 percent of farm women are found to possess some kind of livestock. They mainly had cows and goats among big animals. Otherwise, almost everyone had a few hens and ducks at their home.

The data shows that the farm women of the study area maintain poor socio-personal and socio- economic status. They are not sufficiently educated neither they possess ownership of land but they are equally participating both on-farm as well as in off-farm activities. They lack leadership and thus none of them were found to be the office bearer of any kind of organization.

Mass Media Sources	Regular (in percent)	Occasionally (in percent)	Never (in percent)	Remarks	
News Paper	15.0	21.7	63.3		
Farm Magazines	1.7	17.5	80.8	Loost mucformed/ Hand	
Radio	3.3	10.0	86.7	Least preferred/ Used	
Television	65.0	10.0	25.0	Most preferred	
Internet	10.0	13.3	76.7		

Table 2: Distribution of respondents according to their mass media preferences.

It has been found that most of the respondents preferred television among mass media sources. They found television as the best source of entertainment as well as relevant information regarding both agriculture and offfarm income .65 percent of the respondents had agreed to watch television regularly over other sources like newspapers, farm magazines, radio, and the internet, the reason might be their medium education level. Farm magazines and Radio were the least popular or preferred mass media sources among the farm women of the selected area.

Table 3: Identified off farm activities in the stud	y area and involvement of farm women in those activities.
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Sr. No.	Identified off farm activities	Percentage of involvement (%)	Ranking
1.	Livestock product selling	29.17	Ι
2.	Tailoring (Independent service)	25.83	II
3.	Agricultural wage labour	7.50	III
4.	Entrepreneur	4.17	IV
5.	Non-agricultural labour	1.67	V
6.	Shopkeeper (Independent service)	0.83	VI
7.	Private service	0.83	VII
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Engaging in off-farm activities can become a substitute for securing the food availability of rural women in households during extremes. It includes income from work performed on other farms and/or work performed on other rural non-farm sectors such as construction, manufacturing, the services sector, etc. (Hennessy and O'Brien 2006). The table shows the opportunity for different off-farm activities in the study area as well as the percentage of farm women involved in it for offfarm income. There were mainly seven activities found to be available in the selected areas with which farm women can engage themselves for getting an income or earnings. The seven such activities were livestock product selling, tailoring, agricultural wage labor, entrepreneurship, non - agricultural labor, shopkeeping, and some private services. It has been seen that livestock product selling and tailoring were the most preferred activities by the farm women of the study area among the available seven activities. It might be due to the reason that both activities can be done sitting at home. Livestock product selling has recorded 29.17 percent involvement of farm women and scored Ist rank among all other available activities whereas tailoring could involve 25.83 percent of the selected farm women and scored IInd rank. Private services and shopkeeping have witnessed the least involvement of farm women. It might be because our rural society is patriarchal and the fact that it might require capital investment, ownership of a unit as well as staying out of the house for the maximum of the time.

Table 4: Analysis of constraint farm women	face while	performing	off farm activities.

Constraints	Percentage	Ranking
Socio psychological	83%	Ι
Personal problem	58%	IV
Domestic hindrances	63%	III
Other external factors	72%	II

The table reveals different constraints farm women are facing every day. It has been found that Sociopsychological problems and some other external factors were the most important constraints, women face while thinking or engaging themselves in different off-farm income opportunities. Hence, Socio-psychological constraints ranked 1st, and other external factors ranked II among the four major constraints. The other two constraints considered as important are Domestic hindrances and Personal problems, ranked IIIrd and IVth respectively. Different factors considered under Socio-psychological constraints include secondary decision-making, being women, unavoidable social conditions, and the patriarchal nature of the society. In the case of external factors, different constraints like working under unfavorable conditions, poor communication, lack of infrastructure, and poor access to credit were considered. Problems like technical knowledge, poor economic conditions, small children, and old parents at home were taken into consideration under Domestic hindrances. Whereas some other problems like old age, lack of time, health issues, and illiteracy were asked while understanding personal problems. The findings are the same as that of many other researchers like Hafeez and Ahmed (2002), who indicated the similar type of constraints, women are facing in another part of the country too while undertaking off-farm activities. Okelo (1992) also reported constraints faced by women like less access to land, reduced exposure to new technology, lack of access to credit, male-dominated society, and lack of educational opportunities.

## CONCLUSIONS

Food security is the basic right of human beings and women play a vital role in securing its accessibility and availability. Women are performing various responsibilities and roles in the food system of our society. They are not only playing the role of a mother and a housewife but also of a farmer, laborer, and an entrepreneur. Hence, it is required that the sociopersonal and socio-economic status of the women should be raised and their education level must be improved. This would be a dependable achievement that will positively ensure food security not only in the short term but also in the long run. Hence, there is a need to start short-term intervention strategies for women who strive for household food security by working on farms and off farms, under unfavorable and underprivileged conditions. Off-farm activities should be diversified and rural farm women should be made aware of its advantages for livelihood. Policies across different sectors like agriculture, credit, labor markets, etc. need to recognize women as equal workers and contributors to agriculture and household food security as well as the overall household economy by ensuring equal entitlements to resources, services, and returns to labor (wages). Women should be recognized as farmers and given full support (including credit and information) by society to pursue agricultural enterprises irrespective of their land-ownership status. The terms and conditions of women's engagement in the nonfarm sector should be relaxed and encouraged through improved access to resources, market, information, transportation, etc.

## **FUTURE SCOPE**

The similar study can be conducted in larger geographical area with more variables to test the validity and consistency of the present study in order to be generalized. Areas of motivational training for change in perception of the people towards women economic empowerment and confidence building can be researched out.

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Conflict of Interest. None.

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### REFERENCES

- Anang, B. T. and Yeboah, R. W. (2019). Determinants of offfarm income among smallholder rice farmers in Northern Ghana: Application of a double-hurdle model. Advances in Agriculture.
- Anang, B. T., Nkrumah-Ennin, K. and Nyaaba, J. A. (2020). Does Off-Farm Work Improve Farm Income? Empirical Evidence from Tolon District in Northern Ghana. Advances in Agriculture.
- Astatike, A. A. and Gazuma, G. E. (2019). The Impact of Offfarm Activities on Rural Household Income in Wolaita Zone, Southern Ethiopia. *Journal of World Economic Research*, 8(1), 8-16.
- Bui, L. K. and Hoang, H. (2021). Non-farm employment, food poverty and vulnerability in rural Vietnam. Environment, Development and Sustainability, 23(5), 7326-7357.
- Dsouza, A., Mishra, A. K. and Sonoda, T. (2020). Impact of casual and permanent off-farm activities on food security: the case of India. *The Role of Smallholder Farms in Food and Nutrition Security*, 211-230.
- FAO (1995). Report of Technical Workshop on Women in Agriculture and Rural Development. FAO, Rome.
- Fikire, A. H., and Zegeye, M. B. (2022). Determinants of rural household food security status in North Shewa Zone, Amhara Region, Ethiopia. *The Scientific World Journal*, 2022.
- Getaneh, Y., Alemu, A., Ganewo, Z. and Haile, A. (2022). Food security status and determinants in North-Eastern rift valley of Ethiopia. *Journal of Agriculture and Food Research*, 8, 100290.
- Hafeez, A. and Ahmad, E. (2002). Factors determining the labour force participation decision of educated married

women in a district of Punjab. *Pakistan Economic and Social Review*, 40(1), 75–88.

- Haq, S. U., Shahbaz, P., Abbas, A., Batool, Z., Alotaibi, B. A. and Traore, A. (2022). Tackling Food and Nutrition Insecurity among Rural Inhabitants: Role of Household-Level Strategies with a Focus on Value Addition, Diversification and Female Participation. Land, 11(2), 254.
- Hennessy, T., and O'Brien, M. (2006). The contribution of off-farm income to the viability of farming in Ireland. Rural Economy and Development Programme, Teagasc Working Papers, (0613).
- Obinna, L. O. and Onu, S. E. (2017). Contributions of rural women entrepreneurs in non-farm and off-farm enterprises of households poverty reduction in Abia state. *Journal of Agricultural Extension*, 21(3), 143-151.
- Okelo, M. E. (1992). The Women's Viewpoint.
- Olumakaiye, M. F. and Ajayi, A. O. (2006). Women's empowerment for household food security: The place of education. *Journal of Human Ecology*, *19*(1), 51-55.
- Patra, M., Samal, P. and Kumar Panda, A. (2018). Constraints and opportunities for women in agriculture in India. *Journal of Pharma-cognosy and Phytochemistry*, 7(5), 2092-2096.
- Pooja, K., Arunima, K. and Meera, S. (2016). Analysis of constraints faced by farm women in agriculture-A study in Samastipur district of Bihar. International Journal of Science, 4522-4526.
- Rahman, A. and Mishra, S. (2020). Does non-farm income affect food security? Evidence from India. *The Journal of Development Studies*, 56(6), 1190-1209.

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