

# PARTICIPATION OF WOMEN IN AGRICULTURE IN RANGIA AND KAMALPUR BLOCK OF KAMRUP DISTRICT OF ASSAM- AN ECONOMIC ANALYSIS

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## ABSTRACT

Women play a significant role in agriculture and allied operations. Besides looking after the family and performing all sorts of household activities, women are actively busy from dawn to dusk in various agricultural operations. A few studies have been made on this regard in India as well as in the state basically in Assam. In order to carry out the study, a district of Assam, named Kamrup is selected as the sample district because of the availability of female agricultural labourer. Keeping in view these facts, the present study has been designed to explore the extent of female participation in agriculture and their contribution to total household income.

**Keywords:** Agricultural Operations, Female Agricultural Labourers, Total Household Income

## 1. INTRODUCTION

Agriculture is the vertical backbone of our country and most of the people of India earn its livelihood from agriculture. In the field of Indian agriculture, women are actively involved, and they have played and continue to play a vital and significant role. They are actively involved in agriculture and allied field including crop production, livestock production, plantation, animal husbandry, lagging, fishery, food security, horticulture, sericulture etc. In the agricultural sector women

are the crucial labourers. Besides carry out traditional work and raising children, women are expected to maintain the homestead, assist in agriculture and other allied activities. In truth, women play a vital role in agricultural development from preparing the land, selecting seeds, transplanting the seedlings, applying manure or fertilizer, weeding, and then harvesting, winnowing and threshing, marketing and processing. Predominantly in Assam, women are of vital importance to rural economy and the agricultural sector. Their role and contribution are different in all the district of Assam. Kamrup District is one of the agricultural developed one, falls in the lower Brahmaputra Valley zone. This district is situated between 25.46° and 26.49° North Latitude and 90.48° and 91.50° East Longitude. Considering the engagement of women in agricultural activities and in the decision-making process as a study on participation of women is carried out in Kamrup district with the objectives of exploring the involvement of women in different agricultural activities and examining the contribution of female workers to total household income.

## **2. METHODOLOGY**

For the purpose of this study, Kamrup District of Assam is selected and from this district, two community developments block i.e., Rangia and Kamalpur are selected purposively. From each of the blocks, three villages are selected randomly. Again, 20 households are selected from each village. It means total 120 numbers of ultimate sample respondents are selected from the 6 selected villages. On the basis of the size of land holding, the selected samples are further stratified into three groups- small (< 2 bigha), medium (2-4 bigha) and large (> 4 bigha). Tabular analysis is done to analyse the data. The data and information are collected from both primary and secondary sources. The primary data for the study are collected with a structured questionnaire and through personal interview with the respondents. Secondary data are collected from various central and state govt. publications, census of India report, books, journals, websites etc.

## **3. RESULTS AND DISCUSSION**

### **3.1. INVOLVEMENT OF WOMEN IN DIFFERENT FARM ACTIVITIES ACCORDING TO AGE**

The involvement of women according to age has been presented in [Table 1](#). The tables revealed that out of 72 numbers of farm women under the age group of below 18 years, 29.17 percent women are engaged in agricultural sector, 13.89 percent engaged in poultry sector. No farm women under this age group are engaged in fishery, sericulture, handloom and as wage paid labourers. In all other age groups, farm women are engaged in all the agricultural farm activities. Under the age group of 18-30 years, highest percentage (69.70%) of farm women are engaged in agriculture sector followed by poultry (50.76%) and handloom sector (62.88%). Only 34.09 and 14.39 percent farm women are engaged in fishery and sericulture. Similar trend is observed in other age groups also. It is observed from the table that highest percentage of farm women are engaged in agriculture sector (75.70%) followed by poultry (71.03%), fishery (56.07%) and handloom (66.36%) under the age group of 30-60 years. It is observed that only a few farm women are engaged in different farm activities under the age group of above 60 years.

**Table 1**

<b>Table 1 No. of Farm Women Involved in Different Farm Activities According to Age</b>							
<b>Age groups</b>	<b>Agriculture</b>	<b>Poultry</b>	<b>Fishery</b>	<b>Sericulture</b>	<b>Hand loom</b>	<b>Wage paid laborer</b>	<b>Total no. of farm women</b>
Below 18 years	21 (29.17)	10 (13.89)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	72 (100.00)
18-30 years	92 (69.70)	67 (50.76)	45 (34.09)	19 (14.39)	83 (62.88)	23 (17.42)	132 (100.00)
30-60 years	81 (75.70)	76 (71.03)	60 (56.07)	22 (20.56)	71 (66.36)	44 (41.12)	107 (100.00)
Above 60 years	10 (16.38)	5 (7.69)	0 (0.00)	2 (3.08)	0 (0.00)	0 (0.00)	65 (100.00)
Total	204 (54.26)	158 (42.02)	105 (27.93)	43 (11.44)	154 (40.96)	67 (17.82)	376 (100.00)

\* Figures in the brackets indicate percentage to the total

### 3.2. THE ACTIVITIES WHICH ARE PERFORMED BY THE FARM WOMEN IN THE ACTIVITIES OF CROP CULTIVATION

The different activities of crop cultivation, where the farm women are involved is explained in the following Table 2. From the following table it has been seen that except manuring, irrigation and preparation for market, farm women are involved in all other activities of crop cultivation. It is observed from the table that on an average, 11.92 percent of farm women are involved in the preparation of soil against the 34.24 percent men. In case of uprooting and weeding, more farm women are engaged 22.17 and 20.81 percent respectively than men (14.63 and 14.02 percent). Some of the activities like transplanting, harvesting, and threshing are performed by more men (25.79%) than women (20.51%). In storing, more farm women (17.80%) are involved than men (5.58%).

**Table 2**

<b>Table 2 Activities Which Are Performed by Farm Women in the Crop Cultivation</b>								
<b>Activities of crop cultivation</b>	<b>Small</b>		<b>Medium</b>		<b>Large</b>		<b>Total</b>	
	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>
Preparation of Soil	52 (13.06)	106 (26.63)	20 (9.66)	110 (53.14)	7 (12.07)	11 (18.97)	79 (11.92)	227 (34.24)
Sowing	49 (12.31)	66 (16.58)	45 (21.74)	57 (27.54)	8 (13.79)	4 (6.90)	102 (15.38)	127 (19.16)
Uprooting	74 (18.59)	43 (10.80)	61 (29.47)	50 (24.15)	12 (20.69)	4 (6.90)	147 (22.17)	97 (14.63)
Transplanting	87 (21.86)	101 (25.38)	43 (20.77)	59 (28.50)	6 (10.34)	11 (18.97)	136 (20.51)	171 (25.79)
Weeding	69	41	58	49	11	3	138	93

	(17.34)	(10.30)	(28.01)	(23.67)	(18.97)	(5.17)	(20.81)	(14.02)
Manuring	0 (0.00)	88 (22.11)	0 (0.00)	65 (31.40)	0 (0.00)	2 (3.45)	0 (0.00)	155 (23.38)
Irrigation	0 (0.00)	89 (22.36)	0 (0.00)	45 (21.74)	0 (0.00)	3 (5.17)	0 (0.00)	137 (20.66)
Harvesting	87 (21.86)	101 (25.38)	43 (20.77)	59 (28.50)	6 (10.34)	11 (18.97)	136 (20.51)	171 (25.79)
Storing	59 (14.82)	20 (5.03)	49 (23.67)	16 (7.73)	10 (17.24)	1 (1.72)	118 (17.80)	37 (5.58)
Threshing	87 (21.86)	101 (25.38)	43 (20.77)	59 (28.50)	6 (10.34)	11 (18.97)	136 (20.51)	171 (25.79)
Preparing for Market	0 (0.00)	91 (22.86)	0 (0.00)	70 (33.82)	0 (0.00)	7 (12.07)	0 (0.00)	168 (25.34)
Total no. of farm women+men	398 (100.00)		207 (100.00)		58 (100.00)		663 (100.00)	

\* Figure in the parentheses indicate percentage to the total.

### 3.3. IN THE FARM DECISION MAKING ACTIVITIES, THE EXTENT OF INVOLVEMENT OF FARM WOMEN

Women play a very significant and crucial role in agriculture, and they also involve as decision maker regarding various agricultural activities [Chayal, K. \(2013\)](#). The extent of farm women in farming decision making activities is explained in [Table 3](#) Out of 120 respondents of our study, 35.83 percent farm women are engaged in the decision-making activities whereas 60.00 percent farm women are involved in the process of decision-making process in poultry sector, 21.67 percent are in fishery and 81.67 percent in handloom sector. In case of sericulture, all decisions are taken by the farm women only (40.83 percent).

**Table 3**

Table 3 Extent of Involvement of Women in Farming Decision Making Activities								
Sector	Small		Medium		Large		Total	
	Female	Male	Female	Male	Female	Male	Female	Male
Agriculture	22 (30.56)	34 (47.22)	17 (43.59)	27 (69.23)	4 (44.44)	6 (66.67)	43 (35.83)	67 (55.83)
Poultry	29 (40.28)	19 (26.39)	27 (69.23)	17 (43.59)	5 (55.56)	3 (33.33)	72 (60.00)	48 (40.00)
Fishery	10 (13.89)	18 (25.00)	14 (35.90)	22 (56.41)	2 (22.22)	4 (44.44)	26 (21.67)	44 (36.67)
Sericulture	20 (27.78)	0 (0.00)	23 (58.97)	0 (0.00)	6 (66.67)	0 (0.00)	49 (40.83)	0 (0.00)
Handloom	52 (72.22)	11 (15.28)	38 (97.44)	9 (23.08)	8 (88.89)	1 (11.11)	98 (81.67)	21 (17.50)
Total no. of farm families	72 (100.00)		39 (100.00)		9 (100.00)		120 (100.00)	

\*Figure in the parentheses indicates percentage to the total.

### 3.4. CONTRIBUTION OF FARM WOMEN TO TOTAL HOUSEHOLD INCOME

Cultivation is the major source of income for most of the rural household. The female workers' contribution in family income is very significant [Baliyan and Kumar \(2014\)](#). The total farm household income refers to income from both agriculture and other allied sector (poultry, fishery, sericulture, and handloom). The following table 3.4 shows an estimate of the total household income from agriculture and allied activities and the share of farm women to total income.

**Table 4**

Table 4 Contribution of Farm Women to Total Household Income			
Farm Size	Per household income (Rs.)	Farm women's share in income (Rs.)	Percentage share of farm women in income
Small (< 2 bigha)	38520	19832	51.48
Medium (2-4 bigha)	67632	17577	25.99
Large (> 4 bigha)	90952	18745	20.61

Source Survey

Female workers contribute significantly in household income on all farm sizes and their earnings are crucial for the small and landless households. [Tuteja \(2000\)](#). From the [Table 4](#), it is seen that the contribution of farm women in all farm size is significant, but their proportionate contribution to total household income diminishes as the farm size increases.

### 4. CONCLUDING REMARK

From sunrise to sunset, females are busy in various household works, but still, they play an important role in household farming practices. From our study, we have seen that women are involved in various agricultural and allied activities and their earnings to total household income is very crucial. This has not only helped them to become self-sufficient but has also contributed significantly to the state economy. So, if we want to improve the economic condition of our country, we have to involve an increasing number of women in the farming sector of our country.

### CONFLICT OF INTERESTS

None.

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