

RESEARCH NOTE

Role of Women in Agriculture

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INTRODUCTION

Women in all rural regions perform a variety of roles. Many of these roles are of great economic significance. They also produce non-agricultural goods and services.

In rural Gujarat, women constitute almost half of the total working force, but the women are neither trained nor receive the information that would equip them to do their task better. Little is known about the role of women, the training they have received and information flowing to them in different zones of the state. The extent of exposure of farm women to modern agriculture is yet to be ascertained.

It was, therefore, regarded necessary to undertake detailed field survey to know the role of women in agriculture with following objectives :

- (1) To study the division of labour in different farming operations in main crops of the district.
- (2) To assess the extent of awareness of farm women about the use of improved seeds, fertilizer, pesticides and knowledge in the extension system.

METHODOLOGY

The present study was conducted on the data collected from a sample respondent of 210 from three strata. Viz.,

- (1) Dry farming area (covering Santalpur, Radhanpur, Vav and Tharad blocks).
- (2) Irrigated area (covering Kankrej, Deodar, Dhanera, Deesa, Palanpur and Vadgam blocks).
- (3) Tribal area (covering Danta taluka and Amirgadh pocket of Palanpur blocks).

The whole district is divided on the basis of irrigation facilities available, cropping system, socio-cultural pattern of the people and type and topography of the soil. From each strata, 70 respondents were selected for the study. From each village, 35 farm families representing small, marginal and large farm size group were selected by random sampling method. Thus, a total of 210 farm families constitute a sample by stratified purposive random sampling technique. Data on the major 9 crops of the area Viz., Castor, Bajara, Maize, Mustard, Wheat, Cumin, Blackgram and Chickpea crops were collected from the respondents selected for the study through personal interview with the help of schedule specially prepared for the purpose. Division of labour in farm operations and awareness about the use of inputs and extension system are the major area of an enquiry and hence estimation strategy for the same is described in forthcoming pages.

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RESULTS AND DISCUSSION

Division of Labour in Farming Operations :

Castor, Bajara, Jowar, Mustard and Cumin are the important crops grown in dry area. In the operation of these crops, highest percentage (90.00) of respondents were engaged in harvesting followed by storage practices (87.10), and hand weeding (81.40). They worked with man in operations like fertilizer application (61.43) and sowing (45.51). The analysis of data further indicated that about 34.00, 30.00, 22.90 and 20.00 per cent respondent women were less participated in the farm operation Viz., marketing of the produce, land preparation, irrigation and plant protection measures, respectively.

In irrigated area, Castor, Bajara, Mustard, Wheat and Cumin are the main crops grown by the farmers. Data presented in Table 1, revealed that sample comprised of rural women with highest engagement in the harvesting operation (91.40 per cent) of their crops followed by storage practices (87.10) and hand weeding (84.30). The analysis of data further indicated that they worked with man in operations like fertilizer application (65.71), sowing (54.28) and plant protection measures (47.14). It was observed that 30.00, 25.74 and 24.28 per cent farm women were less participated in the farm operation like irrigation work, marketing of the produce and land preparation, respectively.

Similarly in tribal area, more than 60 per cent farm women were found engaged in all important farm operation of the maize, blackgram, wheat, mustard and chickpea crops, which is commonly grown

by the farmers of tribal area. The data further indicated that they were also found less participated in marketing of produce (41.42) and plant protection measure operations (38.57 per cent).

Awareness about the use of Inputs and Extension System :

Adoption of high yielding and improved varieties of seeds, fertilizers and pesticides inputs are very essential for increasing their yield. An attempt was made in this study to assess the extent of awareness of farm respondents about the use of high yielding variety seeds, fertilizer and pesticides in their fields.

It can be observed from Table 2 that, about 35 per cent of total respondent were aware of the use of high yielding varieties of the seeds. About 36 per cent of respondents in dry area and 50 per cent in irrigated area were aware of the use of hybrid seeds, whereas in tribal area, only 20.00 per cent of women using high yielding varieties of seeds in their fields. Comparatively, higher percentage of women respondents belonging to other caste families have knowledge about the use of high yielding varieties of seeds than SC and ST respondents.

Knowledge and use of fertilizer is more widespread among farm women in irrigated area than dry and tribal areas. About 60 per cent of the total respondents reported awareness about the use of fertilizers in their fields. It can be observed from the data given in Table 2 that the highest percentage of respondents (81.42) women in irrigated area were applying fertilizer in their field followed by dry (52.85) and tribla (45.70) area. About one fourth of the sample respondents have reported to

Table 1. Division of labour in different farming operations.

Area	No. of respondents	Land preparation	Sowing	Fertilizer application	Hand weeding	Irrigated work	Plan protection measures	Harvesting	Storage practices	Marketing of the produce
1	2	3	4	5	6	7	8	9	10	11
Dry Farming	70	21 (30.0)	32 (45.7)	43 (61.4)	57 (81.4)	16 (22.9)	14 (20.0)	63 (90.0)	61 (87.1)	24 (34.0)
Irrigated farming	70	17 (24.39)	38 (54.3)	46 (65.7)	59 (84.3)	21 (50.0)	33 (47.1)	64 (91.4)	61 (87.1)	18 (25.7)
Tribal	70	48 (68.0)	52 (74.3)	47 (67.1)	53 (75.7)	43 (61.4)	27 (38.6)	62 (88.6)	57 (81.4)	29 (41.4)
Total	210	86 (40.95)	122 (58.11)	136 (64.76)	169 (80.5)	80 (38.9)	74 (35.23)	189 (90.0)	179 (85.2)	71 (33.8)

Figures in parentheses indicate percentages.

Table 2. Awareness about the use of input and extension system.

Area	Caste	No. of respondent	Use of Hy.seed	Use of fertilizer	Use of pesticides
1	2	3	4	5	6
Dry Farming	S.C.	22	7(31.8)	8(36.4)	5(22.7)
	Other	48	18(37.5)	29(60.41)	12(25.0)
	Total	70	25(35.7)	37(52.85)	17(24.3)
Irrigated farming	S.C.	11	4(36.4)	5(45.5)	2(27.31)
	Other	59	31(52.5)	52(88.1)	23(38.98)
	Total	70	35(50.0)	57(81.4)	26(37.1)
Tribal	S.T.	63	9(14.3)	29(40.)	6(9.52)
	Other	7	5(17.4)	3(42.9)	3(42.85)
	Total	70	14(20.0)	32(45.7)	9(12.85)
	Grand Total	210	74(35.2)	126(60.0)	52(24.76)

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Figures in Parentheses indicating percentages.

have knowledge about the use of pesticides in their crops against different pest and diseases. Comparatively higher percentage of women respondents (37.14) belonging to irrigated area and other caste families have reported about the use of pesticides than dry and tribal areas as well as SC and ST farm women respondents.

CONCLUSION

The study highlighted the significant role of farm women in agricultural activities in different agro-climatic zones and their level of knowledge on modern farming technology. It was observed from the survey that the other caste farm women of irrigated area as well as of dry area have better knowledge about use of high yielding variety seeds, fertilizers and pesticides as compared to farm women belongs to SC women. In dry farming and irrigated area, women do important farming operations like harvesting, storage practices and

hand weeding. The tribal were found mostly engaged in all the farm operations.

The research data indicated that, they have very little knowledge about the scientific storage, dose of fertiliser, name of improved variety seeds and name of the pesticides with recommended dose.

IMPLICATIONS

As the tribal women do almost all agricultural operations, intensive training needs to be imparted to them. They are to be motivated for the use of high yielding and improved seeds, fertilizer and pesticides through demonstration which lead to more productivity. In case of other caste women they possessed comparatively higher knowledge regarding improved seeds, fertilizer and pesticides use than SC and ST women. Hence, need base training should be imparted for them to improve their knowledge in these operations.