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Gender empowerment in agriculture: Profile characteristics of farm women and men in Telangana state

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Abstract

The present study was conducted in Nizamabad, Siddipet and Vikarabad districts of Telangana state to study the Gender Empowerment in Agriculture: Profile Characteristics of Farm Women and men. A total of 180 respondents (90 farm women and 90 farm men) were randomly selected for the study. Ex-post-facto research design was used for the present study. It was found that among farm women majority of the farm women fell under middle age category (43.33%), had primary school education (32.22%), with medium family size (52.22%), landless (64.45%) and marginal landholding (30.00%) medium farming experience (41.11%), medium extension agency contact (45.56%), low organizational participation (46.67%), medium information seeking behavior (52.22%), participated once in trainings (54.40%), low marketing behavior (41.11%), medium level of drudgery (52.22%), low farm machinery usage (48.89%) and medium risk taking ability (53.33%) . Majority of the farm men fell under middle age category (46.67%), had middle school education (28.89%), with medium family size (52.22%), small landholding (40.00%), medium farming experience (42.22%) medium extension agency contact (46.67%), medium organizational participation (56.67%), high information seeking behavior (45.56%), participated twice in trainings (56.67%), high marketing behavior (56.67%), low level of drudgery (57.78%), medium farm machinery usage (51.11%) and high risk taking ability (57.78%).

Keywords: Empowerment, farm women, farm men and profile characteristics

1. Introduction

India is an agrarian economy, with agricultural and allied sector activities employing approximately (54.6%) of the total workforce (Census 2011). According to the Agriculture Census 2015-16, female operational holders operated approximately (11.72%) of the total operated area in the country. Even with such high participation rates, women own only possess (12.80%) of operational holdings.

The ratio of women to men working in agriculture has increased over time and has contributed more to GDP per capita (Pingali *et al.* 2019) [6]. Empowerment in agriculture is generally defined as one's ability to make decisions on matters related to agriculture as well as one's access to the material and social resources needed to carry out those decisions (Alkire *et al.*, 2013) [1]. The empowerment of women in agriculture is crucial for achieving sustainable agricultural development and improving rural livelihoods. When women are empowered in agriculture, they have better access to resources, information, and decision-making power. This leads to improved agricultural practices, adoption of modern technologies, and enhanced knowledge of farming techniques as a result, agricultural productivity increases. Experts say that if the gender gap is reduced in access to productive resources and opportunities and if women are provided these basic services, then agriculture productivity could grow by (20-25%) to meet food security and may reduce hunger (Srivastava and Srivastava, 2017) [12].

2. Materials and Methods

The study was carried out in the year 2023 in Telangana state. Ex-post facto research design was adopted for the study.

From each zone, one district was selected based on the highest number of cultivators as per the Telangana Statistical Abstract Data 2022. Accordingly, Nizamabad from Northern Telangana zone, Siddipet from Central Telangana zone and Vikarabad from Southern Telangana zone were selected. One mandal was selected randomly from each district, three villages were selected randomly from each mandal, thus constituting nine villages for the study. Ten farm women and men from the same family both working in the agriculture were selected randomly from each village, thus constituting 90 farm women and 90 farm men for the study. Data was collected from the respondents using pre-tested interview schedule by personal interview method by the researcher. The collected data were coded and tabulated for statistical analysis by using statistical tools such as frequency and percentage.

3. Results and Discussion

3.1 Age: From the Table 1 it was found that most (43.33%) of farm women belonged to middle age, followed by old (34.45%) and young age (22.22%). Among farm men most (46.67%) of them belonged to middle age group, followed by old (37.78%) and young age (15.55%). Hence from the results, it could be concluded that majority of farm women and men belonged to middle age group. The above findings were in consonance with the findings of Vishwanath *et al.* (2021) ^[16] and Dominic *et al.* (2023) ^[3]

3.2 Education

It could be observed from Table 1 that, most (32.22%) of farm women had primary school level education, followed by middle school education (26.67%), high school education (18.89%), illiterate (14.44%), intermediate (5.56%) and graduation and above (2.22%). Among farm men most (28.89%) of them had middle school education followed by high school (23.33%), primary school (21.11%), intermediate (13.33%), illiterates (10.00%) and graduation and above (3.33%). The probable reasons for the results might be due to the availability of only primary school level education in the study area and because of poor economic conditions they started farming at young age. The above findings were in consonance with the findings of Shah *et al.* (2019) ^[9].

3.3 Family size

It could be observed from Table 1 that the majority (52.22%) of the respondents belonged to medium size of family followed by small (33.33%) and large (14.45%). The probable reasons for these results can be attributed to the increasing cost of living, individuals opting for medium and small family size to enjoy a higher standard of living and to lead a more satisfying life. Both farm women and men were selected from the same family for this study. The above findings were in consonance with the findings of Sharmin *et al.* (2016) ^[10].

3.4 Land holding

The result shown in Table 1 revealed that majority (64.45%) of farm women were landless followed by marginal land holding (30.00%), small land holding (4.44%), semi-medium land holding (1.11%) and none of them had medium and large land holding. Among farm men most (40.00%) of them had small landholding followed by marginal (24.44%), semi-medium (18.89%), medium (13.34%) and large land holding (3.33%). The probable reasons for this might be due to inheritance patterns in favor of men, lack of education and awareness among women about ownership rights. The probable reason for small and marginal landholdings among

the respondents can likely be attributed to the division of family land among siblings, leading to the fragmentation of land holdings within the family. The findings were similar to the findings of Vinayak (2017) ^[14].

3.5 Farming experience

It could be observed from the Table 1 that, most (41.11%) of farm women had medium farming experience followed by low (33.33%) and high (25.56%). Similarly, among farm men most (42.22%) of them had medium farming experience followed by high (33.33%) and low (24.45%). The probable reason for this might be that the majority of the respondents belonged to middle age group and also there was less awareness among the respondents about the education which made them to start farming at young age. The findings were similar to the findings of Vikram Singh and Ramchandra (2019) ^[13].

3.6 Extension agency contact

It could be indicated from the Table 1 that most (45.56%) of the farm women had medium level of extension agency contact, followed by low (31.11%) and high (23.33%). Similarly, among farm men most (46.67%) of them had medium level of extension agency contact, followed by high (32.22%) and low (21.11%). The probable reasons for the above trend might be because the respondents have been assured that extension contacts are for their own benefit and also the probable reason for the above trend of farm women might be because they have no time due to their heavy workload in farm and household activities. The findings are similar with findings of Chandravadia *et al.* (2018) ^[2].

3.7 Organizational participation

It was found from the Table 1 that most (46.67%) of farm women had low level of organizational participation followed by medium (37.78%) and high (15.55%). In case of farm men majority (56.67%) had medium level of organizational participation followed by high (23.33%) and low (20.00%). The probable reasons for farm women's low level of organizational participation might be time constraint due to farm and household responsibilities, lack of information about organizational benefits and gender-related role expectations. The probable reason for medium level of organizational participation of farm men might be because they might not be aware of the benefits and opportunities associated with organizational participation. The findings are similar with findings of Shilparani (2016) ^[11].

3.8 Information seeking behavior

It was observed from the Table 1 that majority (52.22%) of women had medium level of information seeking behavior followed by low (27.78%) and high (20.00%). Among farm men most (45.56%) of them had high level of information seeking behavior followed by medium (42.22%) and low (12.22%). Most of the farm men had high level of information seeking behavior, the probable reason might be because majority of the farm men had middle school education, medium level of extension agency contact. On the other hand, majority of women had medium level of information seeking behavior the probable reason might be due to their dependency on informal sources of information. The increased dependency of farm women on informal sources could be attributed to the proximity of their husband, family members, and neighbors. This result is in accordance with the results of Priyanka and Ghadei (2022) ^[7].

3.9 Participation in trainings

The result shown in Table 1 indicated that majority (54.40%) of farm women had participated in trainings once followed by no participation in trainings (25.60%), twice (20.00%) and none of them participated thrice and above in trainings. Among farm men, the majority (56.67%) had participated in trainings twice followed by thrice and above (24.45%), once (16.66%) and no participation in trainings (2.22%). The probable reason for these results might be because of lack of trainings specific to farm women, location, and duration of training programmes as most of the trainings took place at district headquarters and KVKs, which were often far from their communities. Additionally, household responsibilities and time constraints were limitations for farm women in participating in trainings. Majority of farm men participated in trainings twice or more, and the probable reason for this might be because agriculture officials provided timely information about trainings and motivated them.

3.10 Marketing behavior

It could be observed from the Table 1 that most (41.11%) of farm women had low level of marketing behavior followed by medium (31.11%) and high (27.78%). Among farm men majority (56.67%) had high level of marketing behavior followed by medium (31.11%) and low (12.22%). The probable reason might be due to lack of proper knowledge regarding the marketing, primary school education and less cooperation from family. The above findings were in deviation with the findings of Vineetha *et al.* (2019) [15].

3.11 Drudgery perception

It could be observed from Table 1 that, the majority (52.22%) of farm women perceived a medium level of drudgery, followed by high (28.89%) and low (18.89%). Among farm men, the majority (57.78%) perceived a low level of drudgery, followed by medium (25.56%) and high (16.66%). The probable reasons for these results are that land preparation activities, which include operations like levelling, clod breaking, ploughing, and transplanting, were perceived as the most difficult by farm women. This perception might be due to the lack of suitable drudgery-reducing tools and

equipment, a workload that is repetitive, insufficient rest, and health problems. The farm men perceived low level of drudgery, the reason might be due to availability of drudgery-reducing tools and equipment suitable for them. The above findings were in consonance with the findings of Malek (2019) [4].

3.12 Farm machinery usage

It could be observed from the Table 1 that, most (48.89%) of farm women had low utilization of farm machinery, followed by medium (31.11%) and high (20.00%). Among farm men, the majority (51.11%) had medium utilization of machinery, followed by high (35.56%) and low (13.33%). The probable reason might be majority of the farm women never used agricultural machinery, and a few used it occasionally, as most of the agricultural machinery was designed with ergonomic features of men and lack of training on how to safely operate machinery for farm women. Majority of farm men had medium level of machinery utilization. The probable reasons for the results might be the availability of machinery locally, as well as government subsidy programs and encouragement from the officials to use machinery, even if they didn't own some of the machinery, they often hired it from Custom Hiring Centers or borrowed it from their neighbors. The above findings were in consonance with the findings of Patil (2020) [5].

3.13 Risk taking ability

It could be observed from the Table 1 that, majority (53.33%) of farm women had medium risk-taking ability followed by low (36.67%) and high (10.00%). Among farm men majority (57.78%) of them had high risk-taking ability followed by medium (31.11%) and low (11.11%). The probable reasons for medium risk-taking ability of farm women might be due to low knowledge regarding improved practices, primary school education, and certain psychological factors like fear of failure makes them more risk averse. Most farm men had high risk-taking ability the probable reasons might be because they have medium farming experience and tend to calculate the pros and cons before taking an activity. The above findings were in consonance with the findings of Sampreetha *et al.* (2022) [8].

Table 1: Distribution of farm women and farm men based on their profile characteristics. N=180

S. No.	Characteristics	Farm women (n=90)		Farm men (n=90)	
		Frequency	Percentage	Frequency	Percentage
1	Age (Years)				
	Young age (Up to 35 years)	20	22.22	14	15.55
	Middle age (35-50)	39	43.33	42	46.67
	Old age (Above 50)	31	34.45	34	37.78
2	Education				
	Illiterate	13	14.44	9	10.00
	Primary school (1 to 5 standard)	29	32.22	19	21.11
	Middle school (6 to 8 standard)	24	26.67	26	28.89
	High school (9 and 10 standard)	17	18.89	21	23.33
	Intermediate	5	5.56	12	13.34
	Graduation and above	2	2.22	3	3.33
3	Family size				
	3-5	30	33.33	30	33.33
	5-7	47	52.22	47	52.22
	7-9	13	14.45	13	14.45
4	Land holding				
	Marginal	27	30.00	22	24.44
	Small	4	4.44	36	40.00
	Semi-medium	1	1.11	17	18.89
	Medium	0	0.00	12	13.34
	Large	0	0.00	3	3.33
	*Landless	58	64.45	0	0.00

5	Farming experience				
	Low	30	33.33	22	24.45
	Medium	37	41.11	38	42.22
	High	23	25.56	30	33.33
6	Extension agency contact				
	Low	28	31.11	19	21.11
	Medium	41	45.56	42	46.67
	High	21	23.33	29	32.22
7	Organizational participation				
	Low	42	46.67	21	23.33
	Medium	34	37.78	51	56.67
	High	14	15.55	18	20.00
8	Information seeking behavior				
	Low	25	27.78	11	12.22
	Medium	47	52.22	38	42.22
	High	18	20.00	41	45.56
9	Participation in trainings				
	No participation in training	23	25.60	2	2.22
	Participated once	49	54.40	15	16.66
	Participated twice	18	20.00	51	56.67
	Participated thrice and above	0	0.00	22	24.45
10	Marketing behavior				
	Low	37	41.11	11	12.22
	Medium	28	31.11	28	31.11
	High	25	27.78	51	56.67
11	Drudgery perception				
	Low	17	18.89	52	57.78
	Medium	47	52.22	23	25.56
	High	26	28.89	15	16.66
12	Farm machinery usage				
	Low	44	48.89	12	13.33
	Medium	28	31.11	46	51.11
	High	18	20.00	32	35.56
13	Risk taking ability				
	Low	33	36.67	10	11.11
	Medium	48	53.33	28	31.11
	High	9	10.00	52	57.78

4. Conclusion

The study concluded that a significant proportion of the respondents fell under the medium category for most profile characteristics. But in the organizational participation, marketing behavior and farm machinery usage majority of the farm women fell under low category and also majority of the farm women had participated in trainings only once. Hence it is suggested to intensify the efforts to promote women led organizations like FPOs, conduct the trainings specific for farm women and develop gender friendly technologies considering the ergonomic features of farm women.

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