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A Study on Profile Characteristics of Women and their Effect on Managing the Economy of Families in Rural Areas of Telangana

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Authors' contributions

The work was carried out in collaboration between both authors. Both the authors read and approved the final manuscript.

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ABSTRACT

This paper focused to study the profile characteristics of women and their effect on managing the economy of families in rural areas of Telangana. The study was conducted in Karimnagar, Mancherial and Jagityal districts of Telangana which were selected purposively as there are more number of rural women involving in various agriculture and income generating activities. Further, 2 mandals were selected purposively from each district and 2 villages from each mandal were selected randomly which constitutes a total of 12 villages. An interview schedule was used to collect data from a random sample of 150 respondents through personal interview. The exploratory research design was used for the study. The results of the study revealed that majority of the women belonged to middle age group (58.67%), general caste (39.33%) and were illiterate (34.67%). Most of the respondents were married (79.34%) and chose to have a nuclear family (62.00%) with medium family size of 4 to 6 members (60.67%). Majority of the women chose agriculture as main occupation (78.00%) having small land holdings (40.00%), medium farming experience (61.33%), women having major ownership of the land (39.33%), medium annual income (64.67%), partial control over family income (52.67%), full control over self income (57.33%). Most of the women had membership in one (34.00%) and in two organization (34.00%), medium information seeking behavior (57.34%), medium mass media exposure (58.00%), medium extension

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contact (58.00%), medium economic motivation (80.67%), medium scientific orientation (65.34%), medium risk orientation (57.33%) and medium socio-economic status (66.00%). They had good exposure to mass media and updated themselves with latest information through extension personnel's. Majority of the women are ready to take risk and practice new technology in their fields.

Keywords: Control over income; economic motivation; extension contact; scientific orientation; risk orientation; socio-economic status.

1. INTRODUCTION

India is predominantly an agro based country with about 58 percent of the people living in the rural areas. Among the rural population, women provide more than half of the services in agricultural, family and societal activities. It is a well-known fact that women are the backbone of rural economy. The prosperity and growth of a nation depends on the status and development of women as they constitute about 50 per cent of the human resource of the country.

There has been a progressive increase in the number of women involved in Agriculture, both as cultivators and wage workers. But this contribution made by them is often not adequately recognized. Very little attention was paid to involve farm women directly with development activities and in enabling them to become more effective and productive. Women play a significant role in agriculture and allied fields including crop production, horticulture and live stock production. She also performs several management and decision making roles in farming and home making practices with her male counterpart and sometimes alone [1]. The growth and prosperity of the nation depends on the position and development of its women and this growth is possible only when they are provided with better opportunities of employment, skill development and training.

The fundamental challenges that woman faces are economic empowerment and self-reliance. The economic empowerment helps them to have a better status in the society. The managerial behavior involves how to use their resources like time, money, energy, etc. The part played by women in the management process might differ according to the nature of activity, area and household leadership. The managerial decisions may be taken by male and female members jointly in the families or the man itself but women have been found to be better in credit utilization than men but because of lack of access to assets they are often more vulnerable to poverty than males [2].

According to Mishra [3], a study on participation of rural women in agriculture activities in Morar block, district Gwalior reported that, farm women perform the function of financial management while preparing and following the domestic budget and marketing function. It has been well documented that an increase in women resources or better approach for credit facilities results in increased well being of the family especially children [2]. Therefore, the success and development of a family depends upon how well the family makes its decisions and contribution of women in such decisions as a manager of the family [4]. Even after earning a good income, most of the financial activities of the family are still in the hands of the male. Keeping the above facts in mind, the present study was conducted to find out the profile characteristics of rural women and how they are going to effect the managerial activities of the women of their families.

2. MATERIALS AND METHODS

The state Telangana was chosen as area of the study as it is a newly formed state of the country where rural women have active participation in agriculture and the researcher hailed from this place. The state Telangana is divided into thirty one districts. Out of 31 districts, 3 districts namely Karimnagar, Jagityal and Mancherial were selected purposively as female sex ratio is high in these districts. From each district, 2 mandals were selected purposively and further from each mandal, 2 villages were selected randomly constituting a total of 3 districts, 6 mandals and 12 villages. Thus, a total of 150 respondents were selected randomly from 12 villages (4 villages from each district). Exploratory research design was selected for the study.

Socio economic characteristics of rural women include age, education, farming experience, ownership of land, family income, occupation, control over family and self income, extension contact, economic motivation, risk orientation, scientific orientation, etc..

2.1 Data Collection

The data was collected by the investigator herself. On the basis of random sampling, 150 rural women from 12 villages were personally interviewed with the help of specially designed interview schedule in the local language (Telugu). Frequency, percentage, mean and standard deviation were employed for statistical analysis. A total score earned by adding score of all selected profile aspects was calculated for individual respondents. Then the respondents were classified into 3 different categories i.e. low, medium and high socio economic status on the basis of mean and standard deviation.

3. RESULTS AND DISCUSSION

The profile characteristics of rural women was analyzed and presented below:

3.1 Age

It was operationalized as the chronological age of the respondent completed in years at the time of the study. The data from the Table 1 revealed that majority of the women belonged to middle age group of 31 to 53 years (58.67 percent), followed by young age group of up to 30 years (22.00 percent) indicating that middle aged women had active participation in agriculture. The average age of the women respondents was 41 years. This could be because younger generations were not interested in agriculture due to increased costs and decreased benefits from this venture and movement to urban areas to find diverse jobs/ careers. Similar findings were reported by Balkrushna [5] having majority (57.14 percent) of the respondents under middle age group.

3.2 Castes Caste

It refers to the social status and hereditary characters of respondent in the village. It is observed from the Table 1 that majority of the women belonged to general caste (39.33 percent), followed by OBC and schedule caste (24.00 percent and 24.00 percent, respectively). This indicates that there was a diverse composition in the society. Similar findings were reported by Anju [2] and Bhairve [6].

3.3 Education

Education brings desirable changes in human behavior such as knowledge, attitude and skills.

It is evident from the Table 1 that majority of the women are illiterate (34.67 percent) followed by middle school from 5 to 7 class (16.67 percent). This indicates that most of the women did not show enthusiasm towards education and also there are no higher educational institutions in the villages to pursue higher studies. Similar findings were reported by Shankar rao [7].

3.4 Marital Status

It is one's situation with regard to whether one is single, married, separated or divorced, widowed. The data from the Table 1 revealed that most of them were married (79.34 percent) followed by widow (14.66 percent).

3.5 Family Type

It is the condition which tells whether a family wants to leave together or separately. It is evident from Table 1 that majority of the respondents had nuclear family (62.00 percent), followed by joint family (38.00 percent). The probable reason could be that they want to lead an independent life or move to cities to get better job opportunities and provide good educational facilities to their children. Similar findings were reported by Singh [8] in which 64.00 percent of the respondent's preferred to have nuclear family.

3.6 Family Size

It refers to the total number of members in the family of the respondent. The data from the Table 1 revealed that majority of the women had medium family size of 4 to 6 members (60.67 percent) followed by small family size of 1 to 3 members (32.67 percent). This indicates that people have knowledge towards family planning and preferred to have 1 or 2 children so that they can provide good accommodation and education.

3.7 Land Holding of the Family

It refers to the number of hectares or acres of land that a farmer possessed. The distribution of farmer respondents on the basis of their size of land holding is depicted through Table 2. It is evident from data that majority of the women had small landholding of 2.51 to 5.00 acres followed by marginal landholding of less than 2.5 acres (32.67)percent). The reason may fragmentation of land among the family members. The results were in line with Shrichandan [9] and Singh [8].

Table 1. Distribution of respondents based on their age, caste, education, marital status, family type and family size (n=150)

Variables	Categories	Frequency	Percentage
Age	Young (Up to 30 years)	33	22.00
	Middle (31 to 53 years)	88	58.67
	Old (54 years and above)	29	19.33
Caste	General	59	39.33
	Other backward classes	36	24.00
	Schedule caste	36	24.00
	Schedule tribe	19	12.67
Education	Illiterate	52	34.67
	Can read/ can write	01	00.66
	Can read and write	03	02.00
	Primary school (1 to 4 class)	19	12.67
	Middle school (5 to 7 class)	25	16.67
	Higher secondary	21	14.00
	Intermediate	11	07.33
	Degree	12	08.00
	Above degree	06	04.00
Marital status	Married	119	79.34
	Separated	09	06.00
	Widow	22	14.66
Family type	Nuclear family	93	62.00
, ,,	Joint family	57	38.00
Family	Small (1to 3)	49	32.67
size	Medium (4 to 6)	91	60.67
	Large (7 to 9)	10	06.66

3.8 Farming Experience

It refers to the number of years an individual is involved in agricultural activities. The data from the Table 2 depicts that majority of the women had medium farming experience of 6.5 to 34 years (61.33 percent) which is followed by high farming experience of more than 34 years (18.00 percent). The average farming experience of the respondents was 20 years. This indicates agriculture was the major occupation of the women since ages. The obtained results were in accordance with Shankar rao [7].

3.9 Ownership of the Land

It refers to the state or act of possession of the land. The data from the Table 2 indicates that women had higher ownership of the land (39.33 percent) followed by men (32.00 percent).

3.10 Occupation of the Women

The occupational pattern reveals the source of livelihoods of the women. The data presented in Table 2 revealed that, majority of the

respondents took agriculture as the main occupation (78.00 percent) followed by job (12.67 percent). Agriculture and agriculture based subsidiary occupations were the major sources of livelihood for the women in rural areas. They possessed land for cultivation of crops. The above findings were similar to the Pattanaik [10].

3.11 Annual Income of the Family

The data from the Table 2 indicates that majority of the women had medium annual income of Rupees 1,60,000 to 5,60,000 (64.67 percent) followed by high annual income of above Rupees 5,60,000 (18.00 percent). The average income of the family is Rs. 3,60,000. The findings are in line with Shilpa [11].

3.12 Control Over Family Income

The Table 2 clearly indicates that majority of the women had partial control over family income (52.67 percent) followed by full control over family income (32.67 percent).

Table 2. Distribution of respondents based on Land holding of the family, Farming experience, Ownership of the land,, Occupation of the women, Annual income, Control over family income (n=150)

Variables	Categories	Frequency	Percentage
Land holding of	No land	16	10.67
the family	Marginal (< 2.5 acres)	49	32.67
	Small (2.51 -5 acres)	60	40.00
	Medium (5.01 – 10 acres)	22	14.67
	Large (10.01- 25.00 acres)	03	01.99
Farming	No experience	26	17.34
experience	Low(less than 6.5 years)	05	03.33
-	Medium (6.5 to 34.00 years)	92	61.33
	High (more than 34.00 years)	27	18.00
Ownership of the	Men	48	32.00
land	Women	59	39.33
	Both	27	18.00
	No land	16	10.67
Occupation of	Agriculture	117	78.00
the women	Caste occupation	0	00.00
	Agricultural labour	10	06.67
	Dairy	0	00.00
	Poultry	0	00.00
	Pig rearing	0	00.00
	Sheep rearing	02	01.33
	Business	02	01.33
	Job	19	12.67
Annual income	Low (up to Rs.1,60,000)	26	17.33
of the family	Medium (Rs.1,60,000 to Rs.5,60,000)	97	64.67
-	High (above Rs.5,60,000)	27	18.00
Control over	Full control	49	32.67
family income	Partial control	79	52.67
•	No control	22	14.66

3.13 Control Over Self Income

The Table 3 clearly indicates that majority of the women had full control over self income (57.33 percent) followed by partial control over self income (28.67 percent).

3.14 Income Generating Activities

The data regarding distribution of respondents on the basis of income generating activities is given in Table 3. It clearly indicates that majority of the respondents had not taken up any activity besides their main occupation (52.67 percent), followed by activities related to tobacco (35.35 percent).

3.15 Social Participation

The voluntary participation of the farmer either individually or in group as a member or office bearer in social organizations. It is apparent from

the result of the Table 3 that equal percentage of the women had social participation in one and two organizations (34.00 percent and 34.00 percent, respectively). It indicates that majority of the respondents had participation in at least one organization. Higher percentages of the women had membership in Self Help Groups and Dairy cooperative societies. The study showed similarity with Vishwakarma [12].

3.16 Information Seeking Behavior

It is operationally defined as the information sources consulted by respondents for seeking technical information and guidance about agricultural activities. The findings regarding information seeking behavior of the women respondents has been presented in Table 3. It is clear from the data that maximum number of the respondents had medium information seeking behavior (57.34 percent) followed by low information seeking (23.34 percent). The women

respondents in the study area had good contact progressive farmers. with the extension KVK staff, and subject matter personnel. specialists. They mostly obtained information progressive farmers regarding varieties, stubble burning techniques, time and method of sowing whereas they contacted extension personnel and KVK staff regarding recent technologies and practices in agriculture. The findings of the report were in line with Shankar rao [7] and Singh [8].

3.17 Mass Media Exposure

It refers to the extent of exposure of an individual to mass media instruments like radio, television, internet, social networks etc. It is apparent from the Table 3 that majority of the women had medium exposure to mass media (58.00 percent), followed by low mass media exposure

(29.33 percent). It might be due to the fact that good extension contact and better information sources like mobile phones, Television, Radio, You tube, Agriculture channels has resulted in more exposure to mass media.

3.18 Extension Contact

It refers to the contacts made by the respondents with the extension agencies or extension workers whether locally or outside the village. It is evident from the data that majority of the women had medium extension contact (58.00 percent) followed by high extension contact (18.67 percent). The probable reason might be increased experience and participation in various extension programs which resulted in medium level of extension agency contact. The results are in close conformity with findings of Singh [8].

Table 3. Distribution of respondents based on control over self income, Income generating activities, Social participation, Information seeking behavior, Mass media exposure, Extension contact (n=150)

Variables	Categories	Frequency	Percentage
Control over self income	Full control	86	57.33
	Partial control	43	28.67
	No control	21	14.00
Income generating	Activities related to tobacco	53	35.35
	Selling of vegetables	05	03.33
activities	Grocery shop	04	02.66
	Catering service	06	04.00
	Tailoring	01	00.66
	Tiffin center	02	01.33
	No activity taken up	79	52.67
Social participation	No participation	41	27.34
	Membership in one organization	51	34.00
	Membership in two organizations	51	34.00
	Membership in more than two	07	04.66
	Organizations		
Information	No involvement (0)	10	06.66
seeking behavior	Low (less than 2.01)	35	23.34
	Medium (2.01 to 4.11)	86	57.34
	High (more than 4.11)	19	12.66
Mass media	Low (up to 1.02)	44	29.33
exposure	Medium (1.02 to 5.06)	87	58.00
	High (above 5.06)	19	12.67
Extension	No extension contact (0)	16	10.66
contact	Low (up to 1.01)	19	12.67
	Medium (1.01 to 3.71)	87	58.00
	High (above 3.71)	28	18.67

3.19 Economic Motivation

Economic motivation level of farmers is an important criterion to adopt a technology. It is operationally defined as the occupational success in terms of profit maximization and relative value respondent places on economic ends in investing potential resources to adopt recommended agricultural practices. It is evident from the Table 4 that maximum number of women had medium economic motivation (80.67 percent) followed by low economic motivation (14.00 percent). The respondents in the study area had a greater desire to increase their farming efficiency by reducing the cost of inputs and maximizing profits. Farmers with a higher level of extension communication were motivated towards higher yields and profits from the resources available. Only a few farmers were satisfied with whatever they had. This might be the probable reason behind result. The results were in line with Nisha [13].

3.20 Scientific Orientation

Scientific orientation is operationalized as the degree to which individuals are oriented to the use of scientific methods in decision making. It is revealed from the Table 4 that a good number of women had medium scientific orientation (65.34 percent) followed by low scientific orientation (30.00 percent). This could be because the respondents had good extension contact and mass media exposure, which helps them to try

new technologies on the field. This could be clearly seen from the above findings. The findings were in accordance with Srividhya rani [14].

3.21 Risk Orientation

Risk orientation is the women's willingness to take risk in agricultural activities. The data from the Table 4 depicts that women in the research area had medium risk orientation (57.33 percent) followed by low risk orientation (26.67 percent). An individual's risk tolerance depends on personal, social, economic and the psychological state. An individual with a good education, more experience. social participation. participation in extension activities such as trainings, meetings, demonstrations field tour, etc. showed medium to high risk orientation. Another reason could be the confidence of the respondents about activities that ensure good performance, productivity and income. This could be reason for medium risk orientation by the respondents. The current findings stand in line with those of Srividhya rani [14].

3.22 Socio Economic Status

It is revealed from the Table 4 that on overall maximum number of the women had medium socio economic status (66.00 percent) followed by low socio economic status (17.33 percent). The findings were in line with Shilpa [11].

Table 4. Distribution of respondents based on Economic motivation, Scientific orientation, Risk orientation, Overall socio economic status (n=150)

Variables	Categories	Frequency	Percentage
Economic motivation	Low (up to 20.36)	21	14.00
	Medium (20.36 to 23)	121	80.67
	High (above 23)	08	05.33
Scientific	Low (less than18.83)	45	30.00
orientation	Medium (18.83 to 22.31)	98	65.34
	High (more than 22.31)	07	04.66
Risk orientation	Low (less than 15.03)	40	26.67
	Medium (15.03 to 21.77)	86	57.33
	High (more than 21.77)	24	16.00
Overall socio	Low (less than 32.47)	26	17.33
economic status	Medium (33.47 to 43.55)	99	66.00
	High (more than 43.55)	25	16.67

Table 5. Relationship of profile characteristics of rural women and their effect on managing the economy of families

SI. No	Independent variables	Correlation	
1	Age	-0.322*	
2	Caste	0.129**	
3	Education	0.241*	
4	Marital status	0.234NS	
5	Family type	0.108**	
6	Family size	-0.164NS	
7	Land holding of the family	0.047NS	
8	Farming experience	-0.311*	
9	Ownership of land	0.081**	
10	Occupation	-0.219*	
11	Family income	0.153**	
12	Control over family income	0.016NS	
13	Control over self income	0.003**	
14	Income generating activities	0.089**	
15	Social participation	0.258*	
16	Information seeking behavior	0.101NS	
17	Media exposure	0.195*	
18	Extension contact	0.042NS	
19	Economic motivation	0.092*	
20	Scientific orientation	0.125*	
21	Risk orientation	0.149*	

NS non significant, *significant at 0.05 level, ** significant at 0.01 level

3.23 Relationship of Profile Characteristics of Rural Women and their Effect on Managing the Economy of Families

The study reported that rural women profile characteristics viz. age, farming experience, occupation had negative and significant relationship at 1 percent level of significance. Caste, family type, ownership of land, family income, control over self income, income generating activities had positive and significant relationship at 5 percent level of significance. Education, social participation, media exposure, economic motivation, scientific orientation, risk orientation, decision making had positive and significant relationship at 1 percent level of significance. Marital status, land holding of the family, control over family income, information seeking behavior, extension contact has positive and non significant relationship. Family size has negative and non significant relationship.

4. CONCLUSION

From the observations of socioeconomic profile of women respondents, it is concluded that majority of the respondents were middle aged having good farming experience and took

agriculture as a main occupation for earning. Among those, most of them were married with a nuclear family and had a medium family size of 4 to 6 members. Women had higher ownership of the land with small landholdings. A good number of women had medium annual income with partial control over family income and full control over self income. Majority of the women had membership in one and two organizations, medium information seeking behavior, medium mass media exposure, medium extension contact, medium economic motivation, medium scientific orientation and medium risk orientation. On overall, the study revealed that majority of the women had medium socio economic status.

Variables like caste, family type, ownership of land, family income, control over self income, income generating activities, education, social participation. media exposure, economic motivation, scientific orientation, risk orientation, land holding of the family, control over family income, information seeking behavior, extension contact showed positive relationship with managing the economy of the farm families. Variables like age, farming experience, family and occupation showed negative relationship with managing the economy of the farm families.

5. LIMITATIONS OF THE STUDY

Though, all possible efforts were made to make the study objective precise, certain limitations still existed. The present study, being part of the Master's programme, had the normal limitations of time, funds, cooperation by the respondents and other facilities commonly faced by a research student. These limitations led to the purposive selection of only three districts as the locale of the study. Generalizations made based on the findings of the study may not be directly applicable to other areas and need to be substantiated with other studies.

SUGGESTIONS FOR FUTURE LINE OF WORK

The present study was conducted at only three districts of the state. it should be done on larger scales to make generalizations. Constraints faced by the women during management of economic activities and suggestions for effective management should be studied.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Sreenivasulu M, Rao PP. Managerial role of farm women. Karnataka Journal of Agricultural Sciences. 2005;18(4):1026-1030.
- Anju. Women empowerment through microfinance in Bikaner of Rajasthan. M.Sc. (Home Science) Thesis submitted to Swami Keshwanand Rajasthan Agriculture University, Bikaner, Rajasthan; 2018.
- Mishra P. A study on participation of rural women in agriculture activities in Morar block district Gwalior. M.Sc. (Ag.) Thesis submitted to Rajmata Vijayaraje Scindia Krishi Vishwa Vidhyalaya, Gwalior, Madhya Pradesh; 2013.

- 4. Saikia P. Decision making pattern of farm women in different farm and non farm activities. Asian Journal of Agricultural Extension, Economics and Sociology. 2021;39(12):13-18.
- Balkrushna RM. Role of women in economic management of farm families. M.Sc. (Ag.) Thesis submitted to Dr. Panjabrao Deshmukh Krishi Vidhyapeeth, Akola, Maharashtra; 2009.
- Bhairve V. A study on women's participation and decision-making pattern in agriculture activities in Sehore district of Madhya Pradesh. MSc. (Ag.) Thesis submitted to Jawaharlal Nehru Krishi Vishwa Vidhyalaya, Jabalpur, Madhya Pradesh: 2013.
- 7. Shankarrao WD. Decision making behaviour of farm women about agriculture. MSc. (Ag.) Thesis submitted to College of agriculture, Kolhapur, Mahatma vidhyapeeth, phule krishi Maharastra; 2018.
- 8. Singh Y. Effect of Self-help groups in economic empowerment of rural women in Himachal Pradesh. 2013;1:54-61.
- Shrichandan K. A study on the empowerment of farm women in Khordha district .of Odisha. M.Sc. (Ag.) Thesis submitted to Orissa University of Agriculture and Technology, Bhubaneswar, Odisha; 2016.
- Pattanaik S. Participation of farm women in economic development of family- a micro level study. M.Sc. (Ag.) Thesis submitted to Orissa University of Agriculture and Technology, Bhubaneswar, Orissa; 2009.
- Shilpa BR. Involvement of women in economic management of family farm. M.Sc.(Agri.) Thesis (unpub.), Dr. PDKV, Akola: 2008.
- Vishwakarma J. A study on participation of farm women in agricultural and allied activities in Varanasi district of Uttar Pradesh. M.Sc.(Ag.) Thesis submitted to Institute of Agricultural Science, Banaras Hindu Universitys, Uttar Pradesh; 2018.
- 13. Nisha N. Woman labour in agriculture an economic analysis. M.Sc. (Ag.) Thesis submitted to University of Agricultural Science, Dharwad, Karnataka; 2008.
- 14. Srividhya Rani N. Managerial role of farm women in Chittoor district of Andhra

Pradesh. M.Sc. (Ag.) Thesis submitted to University, Hyderabad, Telangana; Acharya N.G. Ranga Agricultural 2014.

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