



Knowledge and Decision-Making Patterns of Farm Women in Peddapalli District, Telangana, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The present study was conducted in the Peddapalli district of Telangana, India. The paper mainly focuses on the respondent's (farm women) knowledge analysis and decision-making patterns in their profession (agriculture). The purpose of choosing this region is that it is more familiar to the researcher and further interest was shown to know the activity participation of women in the study area. The methodology included was the personal interview method in which a questionnaire was prepared on dependent variables (knowledge and decision-making). The results revealed that the majority of them had a medium level of knowledge (93.33 percent) on agricultural activities, and the majority of them are actively taking decisions in agriculture activities like seasons of growing (79.17 percent), time of manuring (70.83 percent), and use of pesticides (74.17 percent) respectively.

Keywords: Farm women; knowledge; decision-making patterns.

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1. INTRODUCTION

Women are the major source of labor in the agricultural sector and their economic importance influences the performance of the whole economy. Women's role in agriculture did emerge slowly but their performance is mostly recorded as helping hands. First, women operate smaller farms than men do, second; [1] these farms produce lower yields than those operated by men, this is because women are having fewer or limited access to fewer inputs and resources, ranging from fertilizers and tools to extension and credit. In farming communities, women are the main custodians of knowledge on crop varieties. Still, there is underperformance due to the priority given less to women in decision-making. [2] Though women have better knowledge they are given less priority due to the gender gap prevailing in decision-making patterns and participation levels in agriculture.

Understanding the [3] decision patterns and participation is very complex. Decision patterns of women are majorly group discussions or at least family as a whole. Fortunately, women are involved in almost all of the agriculture activities from pre-sowing to post-harvesting but still, they have a negligible role in taking decisions in all these activities. Due to this, the majority of the women in India are treated as dependent women on men. But the due fact is that they are not given enough importance in the decision-making process at the farm or the home. In most cases, women tend to deny [4] taking decisions or participating in the decision-making process. It is been said that women work for one-fourth of the activities but their role in decisions is not even one-third of their participation.

This study focuses on the prevailing problems in the Peddapalli district of Telangana. Thus, the research taking place acknowledges women's participation in agriculture in this district, their problems faced during their life, and their

involvement in developing their agricultural employment and income. This district is chosen due to the familiarity of the locale and there has been no known research done in this district on women's participation in agriculture.

2. METHODOLOGY

The purpose of choosing this region is that it is more familiar to the researcher and further interest is shown to know the knowledge levels and decision-making patterns in agriculture by women in the study area. The study was conducted in the Ramagundam Mandal and Ramagiri Mandal of Peddapalli district, Telangana. Considering the objectives, two Mandals were purposively selected to calculate the participation levels of women in the peddapalli district. The maximum and minimum populated Mandals are Ramagundam and Ramagiri respectively. The selection of villages is done by the random selection method. Therefore, the data and status of women are taken according to the individual respondent information. After selecting the villages, a list of all the families in respect of the presence of agriculture and dairy activities was taken from the Agriculture Block office present in the Mandal office. From this list, 120 respondents are chosen randomly from both the Mandals with four villages each. The two variables are analyzed as per the following method.

2.1 Knowledge

To measure the knowledge levels of the farm women in the selected villages, a questionnaire is developed from which the frequency of knowledge levels of women. Therefore, some of the questions relating to crops are asked and depending on the answers they give, the right answers are scored "one" and the wrong answers are scored "two". The questionnaire prepared was:

Agriculture knowledge test

S. No	Questions
1.	Name one Kharif crop
2.	Name one Rabi crop
3.	Name one High yielding crop of Rice
4.	Name two vegetables for kitchen gardening
5.	Name one insect pest of paddy
6.	Name one insect of Cotton
7.	Name one disease of Chilli
8.	Name one disease of paddy

S. No	Questions
9.	Name an insecticide
10.	Name one Fungicide
11.	Name one disease of Pomegranate
12.	After how many days, Paddy seedlings are transplanted
13.	Which Manure/fertilizer is applied during land preparation?
14.	What is used as a top dressing in Rice?
15.	What is used as a top dressing in Rice?
16.	Which micronutrient is applied in the soils of this zone?
17.	Name one disease of cow
18.	Which is better propagated: through seed/cutting?
19.	Name one Variety of chili which is most productive.
20.	Name the nutrient which is most deficient in the soil in this region.

To find out the level of knowledge, the overall score for each respondent is calculated and respondents are categorized into three groups. Based on the overall score, each respondent is scored as follows:

- i. Low level of knowledge
- ii. Medium level of knowledge
- iii. High level of knowledge.

The frequency and percentage of respondents in each category i.e. low, medium, and high are calculated.

2.2 Decision-making Pattern

The Decision-making pattern is calculated on the list of considering all the family members like father, mother, brother, sister, self, and husband. [5] Scores are given to each of them through which the proportion of women's participation in decision-making is calculated by taking out the [6] frequencies and percentages of each of them.

3. RESULT AND DISCUSSION

3.1 Knowledge Analysis of Farm Women

In this context, respondents were asked several questions about various crops [7]. To know their knowledge level of agriculture, a proper questionnaire was prepared and arranged according to their ease.

The majority of the respondents answered correctly about the basic knowledge and common crops grown in their areas [8]. They have answered 100 percent correct about Kharif crop, Rabi crop, high yielding variety of crop, then about 97.50 percent about the vegetables, and so on Table 2 shows that a maximum number of respondents were having a medium level of knowledge (93.33 percent), the least were having higher level respondents (6.67

percent) and none were having a low level of knowledge.

In comparison to other manuscripts, the knowledge levels of women in this region had an equal match with Rajashekar, et.al [9] paper "Knowledge of farmers about integrated weed management (IWM) practices in major crops". This shows a clear picture that most of the women who participate in rice, cotton, and other major crops might have good knowledge of the crops they grow.

3.2 Study on Decision-Making Pattern of Family Members in Agriculture

Based on the decision-making pattern, respondents were asked [10] several questions about each of the activities including cultural practices of crops. The results were drawn according to the answers given by the respondents and each column was made involving the [11] father, mother, brother, sister, herself, and husband subjectively. Decision patterns in various agricultural activities were taken into consideration like crops to grow, seasons of growing, use of the variety, time of sowing, time of manuring, type of fertilizer and manuring, use of pesticides, harvesting, and marketing, etc.

Table 3 reveals that respondents have taken decisions in agriculture activities like seasons of growing (79.17 percent), time of manuring (70.83 percent), and use of pesticides (74.17 percent) respectively.

In conclusion, the results had a slight match with Kumari Anuradha Ranjan's [12] paper "Role of farm women in agriculture and their involvement in decision making - A study in Deoria district of Uttar Pradesh" which had shown the results that women had good power on taking decisions in agriculture operations.

Table 1. Knowledge analysis of the respondents

n = 120			
S. No	Questions Raised On	f	%
1.	Kharif Crop	120	100
2.	Rabi Crop	120	100
3.	High Yielding a variety of Rice	120	100
4.	2 Vegetables for Kitchen Garden [13]	117	97.50
5.	1 Insect of Paddy	115	95.80
6.	1 insect of Cotton	116	96.67
7.	1 Insect of Chili	117	97.50
8.	1 Disease of Paddy	116	96.67
9.	Insecticide	116	96.67
10.	Fungicide	116	96.67
11.	Disease of Pomegranate	81	67.50
12.	Paddy Seedling Transplanted Time	117	97.50
13.	Manure in Land Preparation	115	95.83
14.	Top Dressing in Rice	115	95.83
15.	Any Micronutrient	96	80.00
16.	1 Disease of Cow	118	98.33
17.	Seed/Cutting Procedure	109	90.83
18.	1 Productive Chili	117	97.50
19.	Most Deficient Nutrient	86	71.67
20.	Efficient Cattle Breed	102	85.00

f = frequency, % = percentage

Table 2. Distribution of respondents according to the level of knowledge in agricultural production

n = 120			
S. No	Category	f	%
1.	Low Level (below 19.00)	00	0.00
2.	Medium level (19.1 -23.75)	112	93.33
3.	High level (above 23.76)	08	06.67
Total		120	100.00

Mean = 21.43, SD = 2.32. f = frequency, % = percentage

Table 3. Decision-making pattern of family in agriculture activities [14]

Activities	Father	Mother	Brother	Sister	Self	Husband
Crops to Grow	14 (11.67)	01 (00.83)	24 (20.00)	0.00	49 (40.83)	32 (26.67)
Seasons of Growing	02 (01.67)	04 (03.33)	0.00	0.00	95 (79.17)	19 (15.83)
Use of Variety	01 (00.83)	0.00	0.00	0.00	59 (49.17)	60 (50.00)
Time of Sowing	09 (07.50)	02 (01.67)	01 (00.83)	0.00	31 (25.83)	77 (64.17)
Time of Manuring	05 (04.17)	02 (01.67)	0.00	0.00	85 (70.83)	28 (23.33)
Type of Fertilizer and Manuring	03 (02.50)	03 (02.50)	0.00	0.00	45 (37.50)	69 (57.50)
Use of Pesticides	04 (03.33)	02 (01.67)	0.00	0.00	89 (74.17)	25 (20.83)
Harvesting	03 (02.50)	04 (03.33)	0.00	0.00	39 (32.50)	70 (58.30)
Marketing	19 (15.83)	06 (05.00)	04 (03.33)	0.00	56 (46.67)	35 (29.17)

Percentage is in the parenthesis

4. SUMMARY AND CONCLUSION

1. The majority of the respondents answered correctly about the common crops grown in

their areas. They have answered all the questions correctly about the Kharif crop, Rabi crop, and high yielding a variety of crops.

2. A maximum number of respondents were having a medium level of knowledge, the least were having higher level respondents and none were having a low level of knowledge.
3. The majority of the decisions in agriculture activities like seasons of growing, time of manuring, and use of pesticides were taken by women respectively.

5. LIMITATIONS

The findings of this study are purely based on the information provided by the rural women present in the selected areas. Therefore, the objectivity of the response has been limited depending on the answers provided by the randomly selected respondents.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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