# Participation of farm women in transforming agricultural activities in Peddapalli district of Telangana


## ABSTRACT

The present study was conducted in the Peddapalli district of Telangana, India. The paper had thrown light on the participation levels, some cognitive attributes, and prevailing gender discrimination. The purpose of this study was to analyze the farm women's participation in agriculture which would help further in collating systematic data and the trends across Telangana state. The methodology used was the personal interview method in which a questionnaire was prepared on independent (socioeconomic profile) and dependent variables (knowledge, decision-making, gender discrimination, constraints). The major findings of the study concluded that the majority of the women belonged to the middle-aged group (39.16%) having a medium annual income (45.00%), and participated in agricultural activities like weeding (60.83%), transplanting (59.17%), and harvesting (59.16%). Though they had medium (93.33%) knowledge of agricultural activities, gender discrimination was prevailing in rice and vegetable cultivation practices. Moreover, women were observed taking individual decisions in agriculture activities like seasons of growing (79.10%), and time of manuring (70.83 %).



**Keywords:** women, participation, agriculture, socio-economic.


## I. INTRODUCTION

Agriculture is the primary occupation in India and also serves as a vertical backbone of the country. In India, agriculture is the key industry and a major part of the country's population relies on its livelihood on agriculture. Despite its steady plunge in the contribution of agriculture to the country's GDP, Indian agriculture remained to be the leading industry contributing vastly to its socioeconomic growth. Many interventions and implementations have contributed to the change in time but over years one thing that did not change is the anticipation of women in agriculture. Agriculture has taken large changes with the infusion of science and technology but this latest development did not achieve any capability on the plummeting ignorance of women's labor role in the agriculture industry *(Ghosh and Ghosh, 2014).* The primary need of working women or seeking employment in various agricultural and non-agricultural activities is to meet the needs of the family and to enhance the family income *(Farid et al., 2009).* According to the

*Indian statistics 2021*, 84% of rural women depend on agriculture for their livelihood, of which 33% are cultivators, and 47% are field crop laborers. Especially, their major contribution is recorded in cereal production with 94% (2009). Throughout the world, women are recognized as the primarily responsible people for much of the work within the home including food preparation, cleaning, laundry, and childcare. In addition, work in kitchen gardens or tending small livestock or poultry, turning agricultural products into food on the table, processing, and cooking is often not considered agricultural work. As claimed by *United Nations Human Development Report (2019 statistics),* only 32.8% of women in India formally participate in the labor force. On average, women are just earning 70 percent of men's wages which is leading to gender wage disparity.

From the 1970s, an analysis of women's roles has been started and was described by *Boserup (1970)*. Boserup distinguished three types of agricultural systems in which women's agricultural system was analyzed and described, from where analysis on women has been started. It was claimed that except for land clearing, all the work in agriculture was done by women who supported themselves and their children. In developing countries, agriculture continues to absorb the 2/3$^{rd}$ of the female labor force but fails to give them recognition of employed labor. Female farm laborers still face the oppressive status of being majorly responsible for family and household maintenance. Moreover, their contribution being agricultural labor is concealed under the status of family laborers who works both on the farm as well as in household chores. The multitasking potentiality of females brought significant development in agricultural production, rural production, economic vitality, household, food security, family health, economic security, and welfare. Despite all these, their needs and problems are somewhat ignored by rural development initiatives *(Ghosh and Ghosh, 2014).*

Women had always been supporting systems for the farm men in the field. They not only show efforts in maintaining the households but also have been a constant support system from behind. There is a saying from a farmer '*We have been doing farming for ages. My mother-in-law did it, I am doing it, and my daughter and daughter-in-law will do it. But what we need and will cherish is an identity of our own. An identity of being a woman farmer.'* This showcased the strengths and individuality of women in upbringing their present and future generations and striving for equality *(India Economic Summit 2017).* Women are greatly defined by social structure and

familial ties. Their specific caste systems and arrange marriages determine their economic worth and life. Most families in India are typically patriarchal and patrilocal, in which the husband or elder son makes the major decisions for a family. Indian women's lack of participation in major decisions among men is one of the major disadvantages *(Roy PK, 2017)*. When a female farmer is not empowered to make decisions about their occupation, then equality won't be fulfilled. In India, gender discrimination harms development goals. It is a primary cause of increasing poverty, decreased sustainable development, and poor governance. In general, it hampers the overall development of society.

Many systematic studies identified the trends of working female labor in agriculture. Empirical studies were also conducted and explained their participation. Considering the importance of women in agriculture, livestock, and household activities, this study focuses on the socioeconomic profiles of agricultural women in the Peddapalli district of Telangana. Therefore, a systematic study was conducted to address the participation levels, decision-making patterns, knowledge, gender discrimination, and constraints faced by farm women in transforming agricultural activities in this region.

## II. PURPOSE AND OBJECTIVES

Investigating women's roles, particularly in agriculture, is growing on a large scale, but very few studies on women's participation in agriculture and allied activities have been carried out in Telangana state. Keeping in view the dearth of information, this study was initiated to fill these gaps. The purpose of this study was to analyze the farm women's participation in agriculture, which will further help in collating systematic data and trends across Telangana. This study adds information to depict the active involvement and constraints faced by farm women in Telangana.

In light of the above context, the present study, "Participation of farm women in transforming agricultural activities in Peddapalli district of Telangana" was undertaken with the following specific objectives:

1. To study the socio-economic and personal profile of the respondents.
2. To study the extent of knowledge of women in agriculture production.
3. To study the decision-making patterns of rural women in agriculture.

4. To study the gender discrimination happening, if any, in different areas of participation in agriculture activities.
5. To identify the constraints being faced by the women in their participation in agriculture in this study area.

The study highlights the major role of women in various agricultural activities by addressing their social, economic, and personal issues concerning their agriculture profession. In addition, the study also focuses on the gender inequalities and the problems faced during their participation, hindering their potential in proper harnessing and the resultant improvement in farm income and productivity.

## III. RESEARCH METHODOLOGY

### a. Research Design

A quantitative approach involving a survey was adopted to gather information in the form of data from 120 agricultural female workers in the Peddapalli district of Telangana state in India. Quantitative research is used to quantify the variables by generating data that can be transformed into usable statistics. The approach was used to quantify the socioeconomic profiles, participation levels, and decision-making patterns, analyze constraints, and gather solutions concerning various agricultural and allied activities of the respondents. The study also analyzed relationships between independent variables and dependent variables and examined whether gender discrimination was involved in the participation levels of women in agriculture. Information was gathered through personal contact and informal interaction.

### b. Study Area

Telangana is purposively selected which is the southern state of India. In this state, the Peddapalli district was purposively selected as it was more familiar to the researcher who observed that most of the rural women in agricultural families are with a low economy and poor livelihoods. Therefore, the present research was conducted to know the insights of this problem in this region.

Peddapalli district consists of 14 mandals, from which the maximum populated Ramagundam Mandal and minimum populated Ramagiri Mandal were selected and four villages were

randomly selected from each of the Mandals, making the total number of villages as eight. Further, from each village, 15 female respondents were randomly selected, making the total sample size to 120.

**c. Data Collection**

The present study employed a semi-structured interview schedule involving a questionnaire and scaling patterns to gather and analyze data. This study was based on both primary and secondary data. Following the objectives of the study, various variables were selected to address the respondent's socio-economic profile, levels of participation, decision-making process, knowledge level, and constraints faced by the women.

**d. Data Analysis**

Descriptive statistics were used to generate the conclusions and describe the variables of the study. The socioeconomic profiles of farm women were distinguished as independent variables. These included age, caste, marital status, family type, family size, education, occupation, annual income, landholding, material possessions, extension agent contact, mass media exposure, and mobility. Furthermore, dependent variables such as knowledge, decision-making patterns, and constraints faced by the women in their occupation were measured using nominal scales, whereas gender discrimination was tested using the chi-square test to analyze the discrimination occurring between males and females participation in agricultural and allied activities. The most common descriptive statistical measures like mean, frequency, percentage, and standard deviation were used to analyze the data collected. Pearson's correlation coefficient was used to analyze the relationship between independent variables and dependent variables.

## IV. RESULT AND DISCUSSION

The study aimed to demonstrate women's participation in various activities in their daily lives, in addition to their occupations. Socioeconomic profiles were analyzed along with the other attributes necessary for their livelihood. Many of the results obtained were analyzed and compared with the other secondary data references.

**a. The socio-economic and personal profile of the respondents.**

Personal characteristics like age, caste, religion, marital status, family type, family size, educational qualifications, annual income, and type of land holding of the respondents have been addressed to bring out the relationship between their participation and development in agriculture.

From the collected data, it was found that the majority of the respondents (39.16%) were from the middle-aged group, followed by the old-aged group (36.67 percent), and the least was from the young age group (24.17 percent) among the selected farm women. The probable reason for this distribution might be that most of the middle-aged groups are more enthusiastic and were doing this from a young age, whereas most of the young farmers were engaged in activities other than agriculture. Similar results were drawn in other areas of the state *(Naresh Kumar et al. 2019)* and other allied activities like livestock and husbandry *(Gopi et al. 2017).*

Caste systems and religion are significant social systems in India. These play a major role in affecting people's options like marriage, employment, education, mobility, and participation, among others. To study their effects, data was collected. Therefore, it was observed that almost half of the respondents belonged to the scheduled caste (45.84 percent), and the other one-fifth belong to other backward classes (20.83 percent) and scheduled tribes (20.00 percent) who were involved in agriculture practices. Most of the respondents were Hindu (95%) and few were Muslim (5%).

The nuclear family type (76.67%) was dominant, and most of the families were of medium family size (63.33%). This indicates that the joint family system is slowly declining, and most family planning is initiated in rural areas *(Sathyanarayan, K et al. 2010).* Farm women were found to be mostly literate (77.5%), with contrasting results obtained by *Naresh Kumar et al. (2019)* in comparison to other parts of the state; this could be due to the presence of cities nearby the study area.

In terms of livelihood, the majority (45.00%) of the respondents had a medium-level annual income; this might be due to the level of experience the middle-aged group of people possesses. These findings are consistent with those of Prasad Babu (2014) and closely resemble those of Mohan et al. (2020). Farm women were mostly (54.17%) found to be small farmers, followed by semi-medium farmers (23.33%). It is due to the fact that most of the women lack access to credit and cannot purchase land. Similar results were noticed in *J.V. D. Prasad (2017).*

According to the findings, the majority of farm women's families owned agricultural implements such as khurpi, sickle, and spade (100%), followed by sprayers (49.16%), cultivators (18.33%), rotavators and chaff cutters (15.00%), disc plows (6.66%), threshers (4.16%), combine machines (2.50%), and seed drills (1.66%). For communication, women used mobile phones, televisions with DTH connectivity (100%), newspapers (76.67%), radio (8.33%), and internet facilities (7.50%).

The findings also revealed that the female farmers are mostly engaged in combined activities like farming, household, and animal husbandry (44.17%); this might be because of the overall household burden imposed on them and due to the dominance of the patriarchal society. Further, fertilizer/seed stores were contacted more due to their nearby access and the helpful nature of the vendors, whereas family relations were contacted for any other information and queries. Therefore, Table 1 represented a summarized overall profile of farm women with respect to the questionnaire.

**Table 1. Socio-economic profile characteristics of farm women**

| **Attributes** | **Category** | | **Total** | **N = 120** |
|---|---|---|---|---|
| | | | **Frequency** | **Percentage** |
| Age | Young age (below 34) | | 29 | 24.17 |
| | Middle age (35-57) | | 47 | 39.16 |
| | Old age (above 58) | | 44 | 36.67 |
| Caste | General caste | | 16 | 13.33 |
| | Other Backward castes | | 25 | 20.83 |
| | Scheduled caste | | 55 | 45.84 |
| | Scheduled tribe | | 24 | 20.00 |
| Religion | Hindu | | 114 | 95.00 |
| | Muslim | | 06 | 05.00 |
| Marital Status | Married | | 120 | 100.00 |
| | Unmarried | | 00 | 00.00 |
| Family type | Nuclear/Single Family | | 92 | 76.67 |
| | Joint family | | 28 | 23.33 |
| Family size | Small Family (below 5) | | 26 | 21.67 |
| | Medium family (6-10) | | 76 | 63.33 |
| | A large family (above 11) | | 18 | 15.00 |
| Educational Qualifications | A. | Illiterate | 27 | 22.50 |
| | B. | Literate | 93 | 77.50 |
| | | i. Primary school | 11 | 09.16 |

| | | | | |
|---|---|---|---|---|
| | | ii. High school | 29 | 24.18 |
| | | iii. Intermediate | 32 | 26.66 |
| | | iv. Graduate & Postgraduate | 21 | 17.50 |
| Annual Income | Low Income (below 0.79) | | 44 | 36.67 |
| | Medium income (0.8-4.1) | | 54 | 45.00 |
| | High income (above 4.2) | | 22 | 18.33 |
| Landholding type | Marginal farmers (below 1) | | 21 | 17.50 |
| | Small farmers (1.1-2 hectares) | | 65 | 54.17 |
| | Semi-medium farmers (2.1-4 hectares) | | 28 | 23.33 |
| | Medium (4.1 – 10 hectare) | | 06 | 05.00 |
| Nature of the house | Pacca house | | 75 | 62.50 |
| | Mixed type | | 45 | 37.50 |
| Occupation | Farming only | | 42 | 35.00 |
| | Farming + Animal Husbandry | | 53 | 44.17 |
| | Farming + services | | 15 | 12.50 |
| Material Possessions | | | | |
| Farm Power | Electric motor | | 41 | 34.17 |
| | Pumping set/ engine | | 21 | 17.50 |
| | Power tiller | | 36 | 30.00 |
| | Tractor | | 22 | 18.33 |
| Agricultural Implements | Cultivator | | 22 | 18.33 |
| | Seed drill | | 02 | 01.66 |
| | Thresher | | 05 | 04.16 |
| | Rotavator | | 18 | 15.00 |
| | Chaff cutter | | 18 | 15.00 |
| | Disc Plough | | 08 | 06.66 |
| | Combine machine | | 03 | 02.50 |
| | Sprayer | | 59 | 49.16 |
| | Spade | | 120 | 100.00 |
| | Sickle | | 120 | 100.00 |
| | Khurpi | | 120 | 100.00 |

| | | | |
|---|---|---|---|
| Transport facilities | Car | 03 | 03.60 |
| | Tractor Trolley | 22 | 18.33 |
| | Bike/scooter | 120 | 100.00 |
| | Cycle | 44 | 36.66 |
| | Auto | 06 | 05.00 |
| | Hand Trolley | 02 | 02.40 |
| Communication Media possessions | Radio | 10 | 08.33 |
| | Television | 120 | 100.00 |
| | DTH | 120 | 100.00 |
| | Mobile Phone | 120 | 100.00 |
| | Newspaper | 92 | 76.67 |
| | Internet connection | 09 | 07.50 |
| | **Total** | **120** | **100.00** |

**b. Participation of farm women in various agriculture and allied activities.**

Women are most committed to their profession and show a high level of participation in agricultural activity despite the social, economic, and various constraints they face in their lives *Damisa et al. (2007)*. Proper analysis was made, and the levels were estimated by distinguishing between male and female participation for further gender discrimination analysis. They are calculated as a percentage of daily hourly activity. Figure 1 presents the participation of rural women in agricultural activities. The results revealed that the major work of women was transplanting (59.10%) in rice fields, harvesting (59.16%) in vegetable production, and weeding (60.83%) in cotton fields. Apart from this, women were recorded as having active participation in dairy activities like milking (55.83 percent), cleaning cattle (53.33%), and food preparation (95.00%). Similar results were observed in the reference article *(Roy PK et al. 2017)* in which the participation of women was mainly in various income-generating activities.

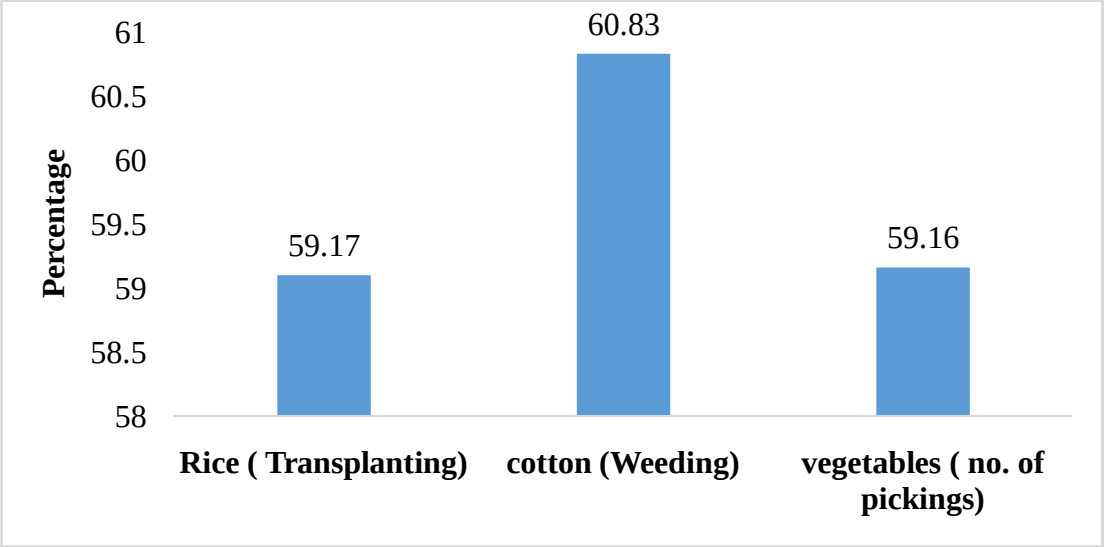


**Figure 1. Major participation of women in agriculture activities**

**c. The extent of knowledge of women in agriculture production.**

Knowledge was playing a great role in the performance levels of the respondents; the literate women were more active and fast-moving than the illiterate. The level of knowledge was also affected by age; younger people had less knowledge than older people. As shown in Table 2, the maximum (93.33%) number of respondents had a medium level of knowledge, the least (6.67%) had higher level respondents and none had a low level of knowledge. The same results were obtained in several parts of the state *(Rajashekar B. 2017).*

**Table 2. Analysis of knowledge level of agricultural women**

| 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** |

**f- Frequency, %- Percentage.**

**d. Decision-making patterns of women farmers in agriculture.**

The contribution of farm women to various activities in their lives was investigated in terms of their percentage involvement in decision-making. The involvement of individual family

members is considered and observed in all levels of activities, mainly agriculture, economics, and family matters *(Sarma. J, 2012).* In the majority of the records, it is noted that women take decisions depending on their spouses or other family members. The farm women were asked to indicate subjectively who was taking decisions for several activities on a 7- point continuum involving father, mother, brother, sister, herself, and husband. From Table 3, it can be seen that most of the individual decisions were taken in agriculture activities like seasons of growing (79.10%), and time of manuring (70.83 %), whereas major decisions in family and economic matters were given to women in activities like taking care of children (85.00 percent), education of children (82.50%), household materials (81.66 %), and buying jewellery (74.10%).

**Table 3. Analysis of decision-making patterns of rural women in agriculture.**

| **Agricultural 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) |
| **Family matters** | **Father** | **Mother** | **Brother** | **Sister** | **Self** | **Husband** |
| Education of Children | 02 (01.67) | 01 (0.83) | 0.00 | 0.00 | **99 (82.50)** | 18 (15.00) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Taking Care of Children | 03 (02.50) | 05 (4.17) | 0.00 | 0.00 | **102 (85.00)** | 10 (8.33) |
| Buying of Foods | 07 (05.83) | 02 (1.67) | 0.00 | 0.00 | 59 (49.17) | 52 (43.33) |
| Buying of Clothes | 05 (04.17) | 04 (03.33) | 0.00 | 0.00 | 58 (48.33) | 53 (44.17) |
| Marriage of Children | 05 (04.17) | 08 (06.67) | 0.00 | 0.00 | 66 (55.00) | 41 (34.17) |
| Ceremonial Aspects | 19(15.83) | 35 (29.17) | 0.00 | 0.00 | 56 (46.67) | 10 (08.33) |
| Invitation Outside the Home | 34(28.33) | 07 (05.83) | 04 (03.33) | 0.00 | 39 (32.50) | 36 (30.00) |
| Interaction with Neighbors | 8(06.67) | 04 (03.33) | 02 (01.67) | 0.00 | 89 (74.17) | 17 (14.17) |
| **Economic aspects** | **Father** | **Mother** | **Brother** | **Sister** | **Self** | **Husband** |
| About Savings | 0.00 | 0.00 | 0.00 | 0.00 | 67 (55.83) | 53 (44.17) |
| Selling, Buying of Holdings | 09 (07.50) | 02 (01.67) | 0.00 | 0.00 | 59 (49.17) | 50 (41.67) |
| Domestic Animals | 07 (05.83) | 06 (05.00) | 0.00 | 0.00 | 49 (40.83) | 58 (48.33) |
| Buying of Raw Materials at Agriculture Work | 04 (03.33) | 01 (00.83) | 0.00 | 0.00 | 44 (36.67) | 49 (40.83) |
| Buying Farm Machinery | 09 (07.50) | 02 (01.67) | 0.00 | 0.00 | 21 (17.50) | 88 (73.33) |
| Food and Household Materials | 07 (05.83) | 06 (05.00) | 0.00 | 0.00 | **98 (81.67)** | 09 (07.50) |
| Luxurious Materials | 01 (00.83) | 05 (04.17) | 0.00 | 0.00 | 66 (55.00) | 48 (40.00) |
| Other Necessary Materials | 02 (01.67) | 0.00 | 0.00 | 0.00 | 55 (45.83) | 63 (52.50) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Selling of Food Grains | 04 (03.33) | 01 (00.83) | 0.00 | 0.00 | 33 (27.50) | 82 (68.33) |
| Vegetables | 07 (05.83) | 05 (04.17) | 0.00 | 0.00 | 56 (46.67) | 52 (43.33) |
| Selling of Agri. Products | 03 (02.50) | 01 (00.83) | 0.00 | 0.00 | 45 (37.50) | 49 (40.83) |
| Selling Poultry Products | 05 (04.13) | 05 (04.13) | 0.00 | 0.00 | 56 (46.67) | 54 (45.00) |
| Selling of Domestic Products | 04 (03.33) | 03 (02.50) | 0.00 | 0.00 | 29 (24.17) | 84 (70.00) |
| Regarding Borrowing money | 09 (07.50) | 05 (04.17) | 0.00 | 0.00 | 55 (45.83) | 51 (42.50) |
| Return of Borrowed Money | 01 (00.83) | 02 (01.67) | 0.00 | 0.00 | 46 (38.33) | 71 (59.17) |
| Buying of jewelry | 02 (01.67) | 12 (10.00) | 0.00 | 02 (1.67) | **89 (74.17)** | 17 (14.17) |
| Selling of Jewelry | 06 (05.00) | 05 (04.17) | 0.00 | 0.00 | 16 (13.33) | 93 (77.50) |

**Frequency is shown and the percentage is in parentheses.**

**e. Gender discrimination prevailing in different areas of participation.**

Discrimination based on gender in most workplaces is commonly seen in India. Women are mostly engaged in agriculture, either as paid or unpaid workers, but employee wages are seen to be lower than those of their male counterparts. Thus, to conduct more in-depth research, this paper attempted to observe if there was any discrimination occurring in the participation and decision-making patterns of farm women. According to Table 4, it was found that discrimination was happening in the participation of women in agricultural activities like the cultivation of rice and vegetables with chi-square values are 6.53 (significant at a 5% level of significance), and 7.12 (significant at a 1% level of significance), but no such discrimination was observed in dairy and household activities. Along with this, women were also facing discrimination in decision-making patterns, mainly in agricultural activities, and economic matters, with chi-square values of 4.89 (significance at the 5% level) and 0.008 (significance at the 5% level). Similar

conclusions were noticed in *Jena R, 2017* article, which stated that most women are only confined to transplanting, uprooting, harvesting, preparing the seedbed, vegetable cultivation, and watering in fields.

**Table 4. Gender discrimination prevailing in different areas of participation.**

| S. No | Sub-areas | $X^2$-Value |
|---|---|---|
| **I.** | **Participation of farm women** | |
| A. | Agriculture | |
| i. | Rice | 6.53* |
| ii. | Cotton | 2.87 |
| iii. | Vegetables | 7.12** |
| B. | Dairy activities | 1.65 |
| C. | Household activities | 3.09 |
| **II.** | **Decision-making patterns of farm women** | |
| 1. | Agricultural Activities | 4.89* |
| 2. | Family Matters | 5.21 |
| 3. | Economic matters | 0.008* |

***Significance at 5% level, **Significance at 1% level.**

**f. The extent of association (correlation) between Independent and dependent variables**

The overall development of women is mainly influenced by the patterns of their lives. In addition to actual production, several socioeconomic attributes and physical assets are taken into account when determining the relationships between their productivity and living because they play a significant role in improving their livelihood. Pearson's correlation coefficient was used to examine the various associations between behavioral attributes and economic levels. Table 5 represents that caste, religion, and material possessions were influencing their participation and knowledge levels, but in decision making, the size of the landholding was also noticed and external personnel contact was observed in affecting their knowledge levels.

**Table 5. Analysis of association (correlation) between Independent and dependent variables.**

| S. No | Variables | Pearson's Correlation Coefficient Value (r) |
|---|---|---|
| **A.** | **Participation and Socioeconomic Variables** | |
| 1. | Caste | 0.0253** |
| 2. | Religion | 0.247** |
| 3. | Material Possession | 0.751** |
| **B.** | **Decision-making and Socioeconomic Variables** | |
| 1. | Caste | 0.421** |
| 2. | Religion | 0.463** |
| 3. | Type of Land Holding | 0.246** |
| **C.** | **Knowledge and Socioeconomic Variables** | |
| 1. | Caste | 0.462** |
| 2. | Religion | 0.427** |
| 3. | Type of Land Holding | 0.336** |
| 4. | Material Possession | 0.189* |
| 5. | Extension Personnel Contact | 0.181* |

**** Significant at 0.01 level (2-tailed), *Significant at 0.05 level (2-tailed).**

**g. To identify the constraints being faced by the women in their participation in agriculture in this study area.**

Women play a crucial role in agriculture and allied activities but have faced ignorance for ages. *(Ghosh and Ghosh, 2017)*. In general, women face problems in obtaining access to land, water, education, credit, agricultural implements, and new practices *(Patra et al. 2018)*. Based on the prevailing problems, a questionnaire was prepared to address all common issues that women face in their profession, and these constraints are ranked according to the mean scores obtained. Thus, the results indicated that the majority of women lack alternate employment opportunities, credit facilities, and the freedom to make decisions about their profession. Considering the constraints, it can be suggested that recognizing their hard work and providing good access to extension services, information, and land would be beneficial. Moreover, developing access to financial

services can contribute to women overcoming their issues and help in poverty reduction *(Patra et al. 2018)*. On a broader level, the government should take several steps toward developing equality programs and providing opportunities for people to advance in their careers.

## V. CONCLUSION

Women have been engaged in household and agricultural work for centuries, but they continue to face a difficult grind in their employment and economy. Recognition of women's work plays an important role in the development of a country. This study focused on the main aspects of women that trigger their participation levels in agriculture and shed light on several ideologies to aid policymakers and researchers in designing better strategies and filling gaps in the regions that are not addressed. The major findings of the study concluded that the majority of the women belonged to the middle-aged group with a medium annual income and participate in agricultural activities like weeding, transplanting, harvesting, and seed treatment. Though they have good knowledge of agricultural activities, gender discrimination is prevailing. Caste, religion, and material possessions had shown a greater impact on their level of occupational participation. Along with all of these, several constraints were noted and remarked on for further clarification. Therefore, the study is expected to contribute to the scarcity of literature and help the government address the issues faced by farm women.

## VI. 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 given by the selected respondents.



## REFERENCES

Sathyanarayan, K., Jagadeeswary, V., Murthy, V. C., Ruban, S. W., & Sudha, G. (2010). Socio-economic status of livestock farmers of Narasapura Village-A Benchmark analysis. *Veterinary World*, *3*(5), 215.

Patra, M., Samal, P., & Panda, A. K. (2018). Constraints and opportunities for women in agriculture in India. *Journal of Pharmacognosy and Phytochemistry*, 7(5), 2092-2096.

Jena, R. (2017). Issues and concerns of Gender Discrimination in Irrigated Agriculture: An Analysis. *Orissa Economic Journal*, 237.

Brown, P. R., Afroz, S., Chialue, L., Chiranjeevi, T., El, S., Grünbühel, C. M. & Williams, L. J. (2019). Constraints to the capacity of smallholder farming households to adapt to climate change in South and Southeast Asia. *Climate and Development*, *11*(5), 383-400.

Damisa, R. Samndi and M. Yohana (2007). "Women Participation in Agricultural Production- A probit Analysis" *Journal of Applied Sciences*. 7(3): 412-416.

Roy, PK. Haque, S. Jannat, A. Ali, M. Khan, and MS. 2017. Contribution of women to household income and decision making in some selected areas of Mymensingh in Bangladesh. Progressive Agriculture, 28 (2): 120-129.

Sarma J. Payeng, S. (2012). Women Dairy Farmers and Decision-Making Pattern in Sonitpur District of Assam. *Indian Journal of Hill Farming*, 25(1): 58-62.

Rajashekar, B. Sudharani, V. Parveen, S. K. and Shivacharan, G. (2017). Knowledge of farmers about integrated weed management (IWM) practices in major crops. *Int. j. farm sc.* 7(1): 33-36.

Prasad, J. V. D. (2017). A Study on the Profile of Organic Cotton Farmers in Telangana. *Int. j. adv. res. dev.* 2(5), 85-89.

Mohan. M, S. Balazzii Naiik, M. Rajkumar, RVT. Bhavyamanjari, BV. Suresh, M M. and Vijay, K. P. (2020). Socio-economic profile of fish farmers of Nizamabad District, Telangana. J. entomol. zool. stud. 8(5): 1727-1732.

Kumar, B. N., Sreenivasulu, M., Preethi, M., & Sagar, G. C. V. (2019). Profile Characteristic of Rice Drum Seeder Technology Farmers in Khammam District of Telangana State, India. *Int. J. Curr. Microbiol. App. Sci*, *8*(3), 1180-1184.

Gopi, R. Narmatha, N. Sakthivel, K. M. Uma, V. and Jothilakshmi, M. (2017). Socio-economic characteristics and its relationship with information seeking pattern of dairy farmers in Tamilnadu, India. *J Dairy Foods Home Sci.* 36(1): 16-20.

Chappa, H. Sundaram, S. M. Sivakumar, T. and Venkataramanan, R. (2018). Socio-economic status, Husbandry practices followed and constraints faced by Madras red sheep farmers in their field flocks in Kanchipuram district. *Indian j. vet. anim. sci.* 47(4), 1400.

Ghosh, M., & Ghosh, A. (2014). Analysis of women participation in Indian agriculture. *IOSR J. Human. Soc. Sci*, 19(5), 1-6.

**********