

## **DETERMINANTS OF SOCIO-ECONOMIC STATUS OF THE AGRICULTURAL WOMEN WORKERS` IN WEST GODAVARI DISTRICT OF ANDHRA PRADESH**

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### **Introduction**

Agriculture constitutes the main source of livelihood and the main area of work for most people in the developing countries like India. It is the mainstay of a majority of Indian population in the unorganized sector particularly of women. About 80 percent of the Indian population depends on agriculture either directly or indirectly for their livelihood. Agriculture is considered as the biggest unorganized sector, where the large number of rural women takes part actively. The role of rural women is crucial in rural India as they participate in wide range of farm activities besides taking care of the home and children, there by performing a dual role that of a home maker and of a pattern in the farming activities outside the home. In most parts of the country, the jobs done traditionally by women are generally those of transplanting, sowing, weeding, harvesting, winnowing and threshing.

In India, agriculture is becoming a female activity. Data compiled from Census 2011 on cultivators and agricultural labourers reflects that about 67.5 percent of total female workers in India depend on agriculture, either as cultivators or agricultural labourers, while 49.8 percent of total male workers do the same. But, Women's role in farming is still inadequately acknowledged and they are not regarded as equal partners in the developmental process. They continue to suffer from pangs of poverty, exploitation and drudgery of life. The conditions of women agriculture labour in rural areas are more deteriorating and they are no better when compared to women in other sectors. They suffer vital disadvantages compare to men in terms of heavy work load, indecent working conditions, lower wages, increased uncertainties and irregularities of employment in spite of legal provisions to protect their rights. Stark evidence of gender inequality can be found in the 'Wage Report in Rural India' published by Labour Bureau, Ministry of Labour, Government of India in October 2021. The report reveals that the prevailing wage differences between male and female workers in the agriculture stood at the grim level.

Women, no matter where they live, have to lead a struggling life, but the struggle is so

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tough when it comes to rural agricultural women. Status of women is generally measured using three indicators - education, employment and intra-household decision-making power. In general, women with higher education tend to have a better position (WHO, 1989). The socio economic status of the agricultural women workers generally depends upon certain social indicators like literacy levels and health status which depends upon the calorie intake of the households. Similarly, the demographic indicator like family size of the household also determines the socio economic status of the selected households. The economic status of the different agriculture women households is generally depends upon their annual income, size of their operational holding, work participation rates of their family members and the extent of consumption expenditure.

West Godavari District in the Coastal Andhra Pradesh is often referred to as the "granary" of Andhra Pradesh with its lush green coconut groves, banana plantation, mango gardens, paddy and sugar cane fields since assured irrigation is available to the cultivators. Agricultural development in the district provides large number of employment opportunities especially for rural women workers. Studies on agricultural women workers in West Godavari district are lacking. Against this background, the present study makes an attempt to examine the factors determining the socio-economic status of the sample women agricultural workers of the West Godavari district in Andhra Pradesh.

#### **OBJECTIVES OF THE STUDY:**

- 1) To study the role of rural women in the development of agriculture sector in India.
- 2) To examine the factors determining the socio-economic status of the selected rural agricultural women households in the study area.

#### **HYPOTHESIS STATEMENT:**

**Ho:** Level of income and rate of work participation are not the most significant factors having positive impact on socio economic status of agricultural women workers.

**H1:** Level of income and rate of work participation are the most significant factors having positive impact on socio economic status of agricultural women workers.

**DATA AND METHODOLOGY:** For the present study, the researcher concentrated only on Rural Agricultural Women Workers. The data for this study are collected from both primary and secondary sources as per the details given below.

**Secondary data sources:** Census data is used for compiling cultivators and agricultural labourers in India. The most important secondary data sources are the Census of Andhra Pradesh published by the Census of India (2011), Series-2. NSSO data is also used to some extent. Hand Book of Statistics, Chief Planning Officer, West Godavari District,

Records and Registers maintained by the DRDA and village panchayats.

**Primary data source:** After identifying the key aspects related to socio-economic status of rural agricultural women workers and the relative position of the West Godavari district in terms of share of rural agricultural women employment, a primary survey has been conducted to find out the household level determinants of socio-economic status of agricultural women workers. The researcher has adopted multiple random sampling techniques.

West Godavari district consists of four revenue divisions namely Eluru, Narsapuram, Kovvur and JangareddyGudem. The researcher purposively selected one mandal from each revenue division where there is more number of women agricultural workers. Thus four mandals namely Akividu from Narsapuram division, Pedapadu from Eluru division, Koyyalagudem from JangareddyGudem division and Attili from Kovvur division were selected for the study. After selecting the mandals, two villages from each mandal were randomly selected for the field survey. Thus eight villages namely Ajjamuru and Chinakapavaram from Akividumandal, Kothuru and Koniki villages from Pedapadumandal, Kommara and Gummampudi from Attilimandal and Vedentapuram and Chopparamannagudem from Koyyalagudemmandal were selected for the survey. 10 per cent of the rural non-farm workers from each village are selected as sample. Total sample respondents from the 8 villages are 400. The data were collected by personally interviewing the selected respondents from the villages with the help of a structured schedule. The schedule was prepared after consultation and discussion with experts. It contains all the objectives and dimensions of the study. The field study has covered only female respondents without any discrimination of age, caste and religion.

### **Research Tools**

In analyzing the data apart from tabular analysis with averages and percentages, different statistical techniques are used at appropriate places. Multiple Regression Analysis is used to identify the factors determining the relative socio economic status of the selected agriculture women workers from the selected eight villages in West Godavari District.

### **FACTORS DETERMINING THE SOCIO-ECONOMIC STATUS OF RURAL AGRICULTURAL WOMEN WORKERS - EXPLANATION OF VARIABLES AND THEORETICAL FRAME WORK OF REGRESSION ANALYSIS**

To analyse the factors influencing the changes in socio-economic status of sample agricultural women workers and to attribute a weight to these factors, we have used multiple regression analysis. In this model the dependent variable i.e. Socio-Economic Status (SES)

is expressed in terms of whether the respondent households attain either high SES or low SES. The selected agricultural women workers with relatively low and poor levels of social and economic indicators are given a value '0' and the selected agricultural women workers with relatively higher levels of social and economic indicators are given a value '1' in the study of explaining the factors behind such cases. To assess the relative socio-economic status of the selected rural women, six important socio demographic and economic variable are taken in to the model. Among them, three variables are socio demographic variables. The social variables are literacy levels of the households and the health status of the households. The demographic variable is family size of the households

Similarly, in order to measure the economic status of the households, the work participation rates of the family members of the households, the average annual income of the household and the extent of consumption expenditure made by the household are taken in to account.

A list of explanatory variables used in the regression model along with some description notes is given in the table.

**Table-1**  
**Description of explanatory variables**

Variable	Variable notation	Description of the variable
Y	Dependent variable (Socio-Economic Status)	<b>Socio-Economic Status (SES)</b> is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic access to resources and social position in relation to others. When analysing a family's SES, the household income, earners' education, and occupation are examined. Expressed in terms whether the respondent households attain either high SES (1) or low SES (0).
X <sub>1</sub>	Family Size	Number of persons in the household
X <sub>2</sub>	Literacy level	Literacy levels as binary (illiterate-1, otherwise-0)
X <sub>3</sub>	Work participation	Number of working days per annum
X <sub>4</sub>	Health status	Health status is measured in terms of the calorie intake as binary (calorie intake below normal-0, otherwise -1)
X <sub>5</sub>	Income	Household income per annum in rupees
X <sub>6</sub>	Consumption expenditure	Consumption expenditure per annum in rupees. (on the intoxicants, ceremonies and functions)

**Family Size (X<sub>1</sub>):** The demographic variable family size is an important factor influencing the socio-economic status of agricultural women workers in rural areas. The family size is expected to have inverse relationship with the socio economic status of the agricultural

women workers households. As the size of family increases, most of the income is spent on consumption and medical expenses. Children cannot be provided with proper education and food. It will become more difficult even to acquire the basic necessities of life for the family. It will lead to low socio economic status of the households. Hence, the sign of the coefficient of level of family size is expected to be negative.

**Literacy Level (X2):** The literacy level is the most important social factor that influences the socio-economic status of agricultural women workers. We expect that low level of literacy or level of illiteracy of the agricultural women workers is inversely related to socio-economic status. The illiterate women generally engage in low earning activities as they are unskilled and untrained labour. Hence, the sign of the coefficient of level of illiteracy is expected to be negative.

**Work Participation Rate (X3):** The extent of work participation rates of the family members of the households is expected to have a positive and direct relationship with the socio economic status of the selected households. More number of working days increases the level of income of the households which in turn increases the economic status of the agricultural women workers. Hence, the sign of the coefficient of level of work participation rate is expected to be positive.

**Health Status (X4):** The health and nutritional levels of the households is also expected to have positive association with the socio economic status of the households. Intake of nutritional food with required calories enables a person to be healthier and in turn enables him to participate in various socio, economic and income earning activities. This will have a positive impact on their socio-economic status. Hence, the sign of the coefficient of health status is expected to be positive.

**Income (X5):** Income is considered to the most important factor that influences the socio economic status of the individuals. People with high levels of income will have access to various material and health care resources and lead healthy life style. Households with large income are better placed in the society in terms of socio-economic status. So we expect a positive and direct relationship between the income levels and socio economic status of the selected households. Hence, the sign of the coefficient of income is expected to be positive.

**Consumption Expenditure (X6):** The proportion of consumption expenditure made by the households on the intoxicants, ceremonies and functions is having inverse relationship with the socio economic status of the selected agricultural women workers households. The low per capita income position of the households along with higher expenditure on

intoxicants and ceremonies adversely affects their socio economic status. It is observed that those households having larger expenditure on these items especially in the lowest expenditure classes have not even the basic requirements. Hence, the sign of the coefficient of consumption expenditure is expected to be negative.

The multiple regression model to be estimated for identifying the factors determining the Socio-Economic Status of sample agricultural women workers can be specified as follows.

$$Y=a+b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b_6X_6+\mu$$

Where a is the intercept and b1, b2, b3, b4, b5, b6 are the regression coefficients to be estimated and μ is the error term.

Primary data is collected from eight villages of West Godavari District on 400 randomly selected agricultural women workers using a structured questionnaire. The Multiple Linear Regression Model as specified above is estimated for the entire sample

Factors determining the Socio-Economic status of the selected agricultural women workers from the study area - Regression Results for the total sample.

**Table-2**  
**Regression Results for total sample**

Variable	Coefficients	Standard Error	t-ratio	p-value
Intercept	1.006415	0.09909	10.15626	0.000***
X <sub>1</sub>	-0.12489	0.013039	-9.57832	0.000***
X <sub>2</sub>	-0.2159	0.03296	-6.54840	0.000***
X <sub>3</sub>	0.00346	0.00045	7.63285	0.000***
X <sub>4</sub>	0.05024	0.03167	1.58635	0.103*
X <sub>5</sub>	4.38457	1.62547	2.70856	0.007**
X <sub>6</sub>	-3.15743	4.15825	-7.51495	0.000***
No of observations			400	
R-Squared			0.717	
Adjusted R-squared			0.703	
F value			118.228	
Significance F(p-value(F))			0.000***	

\*Indicates significance at 10 % level; \*\*Indicates significance at 5% level; \*\*\* Indicates significance at 1% level.

Regression results for the total sample are given in table-2. The table shows that the value of R-square is around 0.71 which indicates that about 71 per cent of the variations in the socio economic status of selected agricultural women workers is explained by the

independent variables considered in the study.

The overall significance of the regression model is validated by the value of F statistic. The table shows the value of F as 118.228 at 1 per cent level of significance. Hence, we deduce that the regression model is a good fit. The regression coefficients give the change in socio economic status for a one unit change in the predictor. The co-efficient of family size is negatively related with socio-economic status at 1 per cent level. It indicates that if a household's family size increased by one unit, it may reduce the socio economic status by 0.124 units. Low level of literacy or level of illiteracy is negatively related with socio economic status at 1 per cent level of significance i.e. if the illiteracy of the respondent households increased by one unit, it may decrease the socio economic status by 0.215 units. Co-efficient of work participation rate is positively related with socio economic status at 1 per cent level of significance. It indicates that if the work participation rate of the sample respondents increased by one unit, it may increase socio economic status by 0.003 units. Co-efficient of health status is statistically significant at 10 per cent level and it reveals that if the calorie intake of the respondents increased by one unit, it may increase the socio economic status by 0.05 units. The co-efficient of household income is statistically significant at 5 per cent level and it reveals that if income of the household increased by one unit, it may increase socio economic status by 4.384 units. The co-efficient of consumption expenditure is negatively related to socio economic status at 1 per cent level of significance. It indicates that if the consumption expenditure of the sample households on the intoxicants, ceremonies and functions increased by one unit, it may reduce the socio economic status by 3.157 units.

From this discussion, it can be concluded that out of the six selected variables that influence the change in the socio economic status of the households, the annual income of the households, the extent of work participation rates of the family members of the households and health status are having a positive and direct relationship with the socio economic status of the selected households. However, the family size, illiteracy and the proportion of consumption expenditure made by the households on the intoxicants and ceremonies and functions is having inverse relationship with the socio economic status of the selected households.

It is evident from the regression result for the total sample that level of income and rate of work participation are the most significant factors having positive impact on socio economic status of agricultural women workers. Thus study got evidence in favour of proposed alternative hypothesis and it is accepted.

## **SUMMARY AND CONCLUSIONS**

There is an improvement in the socio-economic status of the selected agriculture women worker households in the selected mandals of West Godavari district during the recent past. However the improvement in the socio-economic status of rural women is characterized as marginal. The rural areas of West Godavari district are under the process of transformation to achieve higher levels socio-economic status of the rural women. The improvement in the indicators of socio-economic status is significantly found among the sample agricultural women workers selected from the semi urban natured villages of the district where as it is very limited among the sample women workers living in the relatively interior villages of the district.

The regression results for the total sample reveal that on an average 72 per cent of the variations in the socio economic status of the agricultural women workers in the study area could be explained by the independent variables like Family size, Level of literacy, Work participation, Health status, Household income and Consumption expenditure. Of these explanatory variables, two economic variables i.e. work participation rate and household income are highly significant with positive impact on socio economic status of the agricultural women workers in the study area. The other economic variable i.e. consumption expenditure is highly significant with negative impact on the socio economic status. Out of two social variables low level of literacy is highly significant with negative impact on the socio economic status of the agricultural women workers in the study area. The other social variable health status is significant with positive impact on the dependent variable i.e. health status. The demographic variable family size is highly significant with positive impact on the socio economic status of the agricultural women workers in the study area.

## **POLICY SUGGESTIONS**

Based on the major findings of this study, towards further promotion of socio-economic status of the selected rural agricultural women workers in the study area the following suggestions are made.

1. In view of various problems faced by rural women, improvement in their socio-economic status is essential not only to improve their quality of life styles but also improving their families and villages. In this regard, there is need to bring about some attitudinal and institutional changes to remove the prejudices against women and to remove the general feeling that women are good just for house and unskilled work. The exploitative traditional hierarchical relations have to be replaced by empowered local institutions.
2. To promote the socio-economic status of the rural women, conscious efforts are



needed for training of female work force in the rural areas in alternative skills. Creation of support institutions are needed to cater the needs of skill improvement and capacity building among them.

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