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## Assessment of socio-economic status of maize growers families

**Lokesh Ahirwar and MA Khan**

### Abstract

Socio-economic status refers to the position of an individual and his family occupies with reference to the prevailing social standard. With better socio-economic status other resources farmers are able to increase the productivity of their cropping system. The socio-economic status is determined by various social and economic variables, viz. caste, occupation, education, social participation, and size of land holding, type of house, farm power, material possession, and family. Thammi *et al.* (2006) [16] found that the medium socio-economic status was prevailing among the selected farmers. The majority (50.00%) were in the high socio-economic category because farmers had more urban contact and engaged in commercially viable crop enterprises such as floriculture and horticulture. Rice-Maize systems currently occupy approx. 3.5 million hectares in Asia. The highest acreage is in India followed by Nepal. Rice, wheat, and maize are the major crops of India. Rice-based cropping systems, with wheat or maize as a secondary crop, are predominant in India. Rice and maize are the two principal cereals crop of Chhattisgarh state. The present study was examined the assessment of socio-economic status of maize growers families of Durg district of Chhattisgarh state. Data was collected from rice-maize grower families that were selected randomly from each selected 12 villages to make a sample size of 120 rice-maize farm families, with the help of a pre-tested interview schedule. The finding reveals that a higher percentage (36.66%) of the respondents falls under the upper-middle class. About 26.16 percent of the respondents belong to the middle class, followed by 26.64 percent were found in the upper class, only 5 percent were under lower class and 2.54 percent of them belonged to lower-middle-class status. This clearly indicates that the socio-economic statuses of most of the respondents are towards the upper side which is not representative to the state average. This may be because of selected respondents were having assured irrigation, practicing double cropping and having a big size of land holding. These attributes influenced the socio-economic status towards the higher side for most of the farm families.

**Keywords:** Socio-economic status and rice-maize cropping system

### Introduction

Rice, maize, and wheat are major cereals contributing to food security and income in South Asia. These crops are grown either as a monoculture or in rotations in tropical and sub-tropical environments of South Asia. In the irrigated and favorable rainfed lowland areas, rice-rice (R-R), rice-wheat (R-W), and rice-maize (R-M) are the predominant cropping systems. Socio-economic status refers to the position of an individual and his family occupies with reference to the prevailing social standard. With better socio-economic status other resources farmers are able to increase the productivity of their cropping system. Thammi *et al.* (2006) [16] found that the medium socio-economic status was prevailing among the selected farmers. The majority (50.00%) were in the high socio-economic category because farmers had more urban contact and engaged in commercially viable crop enterprises such as floriculture and horticulture. Rice-maize systems, however, are less extensive as compared to R-W or R-R if the total area under these cereal systems is considered.

Rice-maize systems are practiced mostly in the south (Andhra Pradesh, Tamil Nadu, and Karnataka) and in the northeast (Bihar and West Bengal) parts of India with acreage of more than 0.5 Mha Andhra Pradesh has the highest acreage under rice-maize system in South India where this system is rapidly increasing under resource-conserving technologies, mostly zero tillage (Jat *et al.*, 2009) [18]. The maize crop is cultivated in Chhattisgarh in 1.51 lakh ha area and its productivity is 1.2 tonnes per ha which is very low compared to national productivity (1.6 tonnes per ha) (Dhruw 2008) [4].

### Materials and Methods

The present study was undertaken in Durg district of Chhattisgarh state during 2016-17 in all three blocks namely Patan, Dhamdha and Durg. From each selected block four villages on the basis of area under rice-maize cropping system were considered for this study. The rice-maize

cropping system adopted 10 farmers from each selected block were selected as respondents from all 12 villages, thus a total of 120 farmers (10 X 12 = 120) were selected for data collection. The data were collected by a personal interview with the help of well prepared, structured and pretested interview schedule. Data were analyzed using frequency distribution, percentages, and correlation coefficient.

The position of the respondents in the society is termed as socio-economic status, which is determined by various social and economic variables, viz. caste, occupation, education, social participation, and size of land holding, type of house, farm power, material possession, and family.

Socio-economic status of the respondents was measured by using scale developed by Parikh and Trivedi (1964) with slight modifications. After filling the information blank, and scoring the individual items, the total score is summed up. With the help of the key provided in the manual, the score is interpreted in terms of the class.

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Categories	Score
Upper class (Above 43)	1
Upper middle class (33 to 42)	2
Middle class (24-32)	3
Lower middle class (13-23)	4
Below lower class (Below13)	5

## Result and Discussion

Caste as an endogamous and hereditary subdivision of an ethnic unit occupying a position of superior rank or social esteem in comparison to other such divisions (Kroobar, 1948)<sup>[6]</sup>. The data regarding caste of the respondents presented in Table 4.2 indicates that majority (75%) of the respondents belonged Other Backward Class, followed by 17.50 percent of the respondents belonged to Scheduled Caste followed by 5 percent of the respondents belonged to Scheduled Tribe and 2.5 percent of them were belonged to Other Caste.

**Table 1:** Distribution of respondents according to their caste

Sl. No.	Caste	Frequency	Percentage
1.	Scheduled Caste	21	17.50
2.	Scheduled Tribes	06	5.00
3.	Other Backward Class	90	75.00
4.	Other Caste (OC)	03	2.50

It can be concluded from the data the study area is dominated by Other backward class.

**Table 4:** Distribution of respondents according to their annual family income

Sl. No.	Annual income	Frequency	Percentage
1.	Up to Rs. 1.0 Lakh	13	10.83
2.	1.0 to 1.5 Lakh	31	25.83
3.	1.51 to 2.0 Lakh	39	32.50
4.	2.01 to 4.0 Lakh	29	24.17
5.	More than 4.0 Lakh	08	06.67

As regards to annual income, the higher percentage of the respondents (32.50%) had their annual family income in the range of Rs. 1.51 to 2.0 Lakh followed by 25.83 percent of respondents had their annual family income in the range between Rs. 1.0 to 1.5 Lakh while,

Education refers to the formal schooling of an individual from school to a university degree. A number of classes completed by the respondents were considered as his educational score. The findings regarding the education of the respondents are compiled in Table 2 shows that the majority of the respondents (10.84%) were illiterate and 27.5 percent of respondents were literate only up to the primary school level. About 21 percent of them had a middle school level of education, and 25.83 percent were high school passed. Among the selected respondents, only 9.16 percent had Graduation and only 5 percent of them possessed Post Graduate degree.

**Table 2:** Distribution of respondents according to their education level

Sl. No.	Education	Frequency	Percentage
1.	Illiterate	13	10.84
2.	Primary school	33	27.50
3.	Middle school	26	21.67
4.	High school	31	25.83
5.	Under Graduate	11	9.16
6.	Post Graduate and above	06	5.00

The findings revealed that most of the respondents in the study area had a primary level of education. Raghuvanshi (2005) and Shori (2011) also noted similar findings.

The data regarding the type of family is compiled in Table 3. The findings indicate that in the study area both single and joint families found but the majority (60.83%) of the respondents belonged to the nuclear family, whereas 39.17 percent belonged to a joint family.

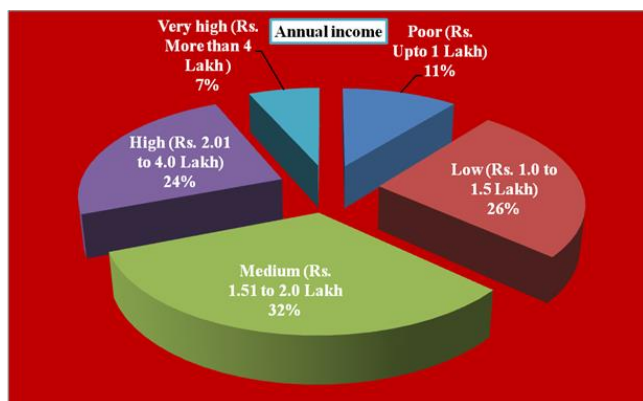
**Table 3:** Distribution of respondents according to their family type

Sl. No.	Family type	Frequency	Percentage
1.	Nuclear family	73	60.83
2.	Joint family	47	39.17

The findings revealed that most of the respondents in the study area belonged to the nuclear family.

Agriculture was found as the main source of income of most of the respondents, but it is always very difficult to assess the average annual family income of each individual, as they are not maintaining such records. The attempt was made to collect the annual family income of the respondents through discussion and interpretation from different angles. The distribution of respondents according to their annual income is presented in Table 4 and Fig 1.

24.17 percent of the respondents reported their annual family income in the range between Rs. 2.01 to 4.0 Lakh and only 6.67 percent of respondents had annual family income above Rs. 4 Lakh.



**Fig 1:** Distribution of respondents according to their annual family income

Social participation refers to the degree of involvement of the respondent in formal and informal organizations, simply as a member or an office-bearer. Social participation of the respondent can be calculated on the basis of the nature of participation and the number of organizations he/she participates in. The findings regarding the social participation of respondents are presented in Table 5. The data reveals that the majority (67.50%) of the respondents had a membership of more than one organization in any social and political organization, followed by 27.50 percent of respondents were found to have membership in one organization and 4.17 percent respondents reported that they had no membership in any organization. Further, it was found that only 0.83 percent of the respondents were office-bearer in one or more organizations.

**Table 5:** Distribution of respondents according to their social participation

Sl. No	Category	Frequency	Percentage
1.	No membership	05	4.17
2.	Member of one organization	33	27.50
3.	Member of more than one organizations	81	67.50
4.	An office-bearer of organizations	01	0.83

The findings reflected that respondents had very high participation in social organizations.

Occupation is the main source of earning for their livelihood and fulfills necessary requirements. It is an assumption that those who are having more than one occupation in addition to agriculture were more capable to adopt more farming practices and got more productivity and income from existing cropping systems.

The data related to the occupation of the respondent's families are presented in Table 6. The findings show that all the respondents were engaged in agriculture and among the majority (93.33%) of the respondents had agriculture as their main occupation and the remaining 6.67 percent of them were practicing agriculture as a subsidiary occupation. Animal husbandry was found as the second most popular occupation amongst the respondents (55.83%), but all of them were practicing it as a subsidiary occupation. Labour, service, and business were found as the main occupation of 3.33 percent, 2.50 percent and 2.50 percent of the respondents, respectively. It is cleared that animal husbandry was their main occupation. Labour (19.17%), business (13.33%) and services (1.67%) and were also practiced by the respondents as a subsidiary occupation. The findings clearly stated that majority of the respondents depends for their livelihood on agriculture

followed by animal husbandry maybe because of the selection of only farmers as respondent for this study.

**Table 6:** Distribution of respondents according to their family occupation

Sl. No.	Source	Occupation					
		Main		Subsidiary		Total	
		F	%	F	%	F	%
1.	Agriculture	112	93.33	08	6.67	120	100
2.	Labour	04	3.33	23	19.17	27	22.50
3.	Service	03	2.50	02	01.67	05	4.17
4.	Animal Husbandry	0	0	67	55.83	67	55.83
5.	Business (shopkeepers etc.)	03	2.50	16	13.33	19	15.83

F = frequency, (%) = percentage

These findings are in line with the findings of Patange *et al.* (2001) [9] who found that the majority (70.62%) of the respondents had farming as a main occupation and animal husbandry as their subsidiary occupation.

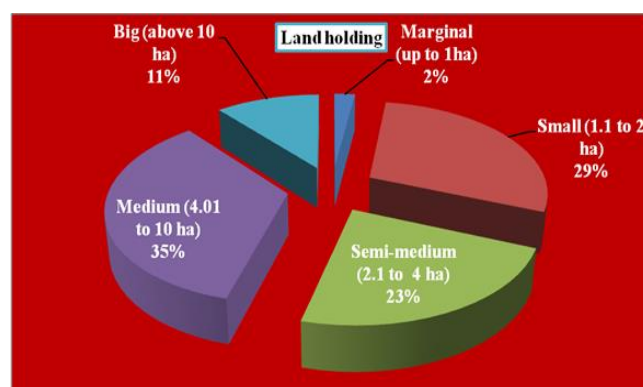
Land holding of the respondent's family was considered as an important factor influence to the cropping system, system productivity, annual income, and socio-economic status According to the Indian Agricultural Statistics Research Institute, New Delhi (Census Report 2010-11). The number of standard acres/hectares of land owned and cultivated by each respondent family was considered in the determination of their size of land holding. The economic and social position of respondents in society largely depends upon the size and fertility of the land in his/her possession.

The distribution of respondents according to their land holdings are presented in Table 7 and Fig 2. The data regarding land holdings indicates that 32.5 percent of the selected farmers had 1.1 to 2 ha of land (small land holding), followed by 26.67 percent of the respondents had 4.01 to 10 ha of land holding (medium land holding), 25.83 percent had 2.1 to 4 ha of land (semi-medium land holding), 2.50 percent had up to 1 ha of land (marginal land holding) and 12.5 percent had 10.01 and above (big land holding).

**Table 7:** Distribution of respondents according to their land holding

Sl. No.	Land holding	Frequency	Percentage
1.	Marginal (up to 1 ha)	03	2.50
2.	Small (1.1 to 2 ha)	39	32.50
3.	Semi-medium (2.1 to 4.0 ha)	31	25.83
4.	Medium (4.01 to 10.0 ha)	32	26.67
5.	Big (above 10 ha)	15	12.5

On the basis of findings it can be concluded that most of the respondents were small farmers may be due to frequent distribution of land ownership from parents to their children.



**Fig 2:** Distribution of respondents according to their land holding

Socio-economic status refers to the position of an individual and his family occupies with reference to the prevailing social standards. With better socio-economic status other resources farmers are able to increase the productivity of their cropping system.

**Table 8:** Distribution of respondents according to their socio-economic status

Sl. No.	Social Class	Frequency	Percentage
1.	Upper Class (Above 43 score)	32	26.64
2.	Upper Middle Class (33-42 score)	44	36.66
3.	Middle Class (24- 32 score)	35	29.16
4.	Lower Middle Class (12-23 score)	03	02.54
5.	Lower Class (Below 13 score)	06	05.00

The data regarding the socio-economic status of respondents are compiled in Table 8. The finding reveals that a higher percentage (36.66%) of the respondents falls under the upper-middle class. About 26.16 percent of the respondents belong to a middle class, followed by 26.64 percent were found in the upper class, only 5 percent were under lower class and 2.54 percent of them belonged to lower-middle-class status.

### Conclusion

This study reveals that the study area is dominated by other backward classes. The findings revealed that most of the respondents in the study area had a primary level of education. The findings revealed that most of the respondents in the study area belonged to the nuclear family. The findings reflected that respondents had very high participation in social organizations. These findings are in line with the findings of Patange *et al.* (2001)<sup>[9]</sup> who found that the majority (70.62%) of the respondents had farming as a main occupation and animal husbandry as their subsidiary occupation. The findings reflected that respondents had very high participation in social organizations. On the basis of findings, it can be concluded that most of the respondents were small farmers may be due to the frequency distribution of land ownership from parents to their children. The findings clearly indicate that the socio-economic statuses of most of the respondents are towards the upper side which is not representative to the state average. This may be because of selected respondents were having assured irrigation, practicing double cropping and having a big size of land holding. These attributes influenced the socio-economic status towards the higher side for most of the farm families.

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