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# Relationship between personal profile and socio-economic status of tribal farmers of Vidarbha region

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**Abstract**
The present research on relationship between personal profile and socio-economic status of tribal farmers of Vidarbha region was conducted in Gadchiroli and Yavatmal districts of Vidarbha region, 280 tribal farmers were selected randomly from 28 villages. The data were collected through personal interview from tribal farmers with the help of pre tested interview schedule. The selected independent variables namely education, occupation, annual income, land holding, source of information, cosmopoliteness, change orientation and benefits derived were found to be positive and high significantly correlated with the socio-economic status of the tribal farmers, while family size and social participation were found to be positive and significantly correlated with the socio-economic status of the tribal farmers. Whereas the variables namely age, family type, farming experience, innovativeness and fatalism did not show any significant association with the socio-economic status of the tribal farmers.

**Keywords:** Personal profile, tribal farmers, socio-economic status, Vidarbha region

## Introduction

India is the home to large number of indigenous people, who are still untouched by the lifestyle of the modern world. With more than 104.28 million constituting 8.63 per cent of the total population, India has the largest population of the tribal people in the world and the government has identified more than 697 tribal communities in the country. Tribal communities live in about 15 per cent of the country's areas, in various ecological and geo climatic conditions ranging from plains, forests, hills and inaccessible areas. So does the Maharashtra state having sizeable number of tribal population, which comprises 10.1% of the total (Census, 2011) [3] population of the state and ranked second for the tribal population in the country. The word "tribal" or Adivasi brings to our mind a picture of men and women with arrows and spears in their hands, feathers in their heads, and speaking an unintelligible language, their lives often combined with myths of savagery and cannibalism by considering these situations our constitution recognized scheduled tribes as the most backward section of population and granted special status to them so it is necessary to assess the socio-economic status of tribal people. The economy of most tribes is based on agriculture produce, collection of minor forest produce from forest and hunting of birds/ wild animals. In Maharashtra, nearly 85 per cent of the tribal population is engaged in agriculture. Socio-economic status defines all fields of social action in Indian society. This is needless to say that a man's position in the socioeconomic status hierarchy determines his behavior in the society. People belonging to higher socioeconomic status are said to be more modernized in their values and behaviors than the people who are in comparatively low ranges of the socio-economic status.

## Objective

To find out relationship between profile of tribal farmers with their socio economic status

## Methodology
### Research Design
An exploratory research design was used for the present study.

## Sampling Procedure
### Locale of the study
The present investigation was carried out in Vidarbha region of Maharashtra, in Vidarbha region there are two divisions i.e. Nagpur division and Amravati division. So from the two division two districts selected purposively having high proportion of tribal people i.e.

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Gadchiroli district selected from Nagpur division and Yavatmal district selected from Amravati division.

**Selection of Tahsil**
On the basis highest population of tribal people from the selected districts it was decided to select two tahsils purposively from each district to carried out the study. Hence from Gadchiroli district two tahsil namely Etapali and Dhanora were selected but instead of Etapali tahsil Aheri tahsil was selected for the study as there are number of problems of naxlite activities in Etapali tahsil so at third place Aheri tahsil having the highest population of tribal people in Gadchiroli district considered for the study.
From Yavatmal district two tahsils were purposively selected i.e. Yavatmal and Kelapur, as these tahsils having the highest population of tribal people.

**Selection of respondents**
In the present study from each selected village, the list of tribal farmers were obtained from the Gramsevak and Talathi and from that list ten tribal farmers who were having minimum one acre of land holding and continuously engaged in farming activities and allied activities were selected randomly by using lottery method of random sampling and the selected tribal farmers were consider as respondents. Thus, for the study total 280 tribal farmers were selected randomly from twenty eight villages of four selected tahsils of two district of Vidarbha.

**Selection of Variables**
The focus of the present investigation was to find out relationship between profiles of tribal farmers with their socio economic status. Thus, the variables of the present study were selected on the basis of review of literature related to tribal farmers and after consultation with the research guide and experts. These variables namely; age, education, family size, family type, occupation, annual income, land holding, farming experience, social participation, source of information, innovativeness, cosmopoliteness, change orientation, fatalism and benefits derived were selected in the study.

**Statistical Tools and Techniques**
Data were collected with the help of pre-tested, well-structured interview schedule. The data were filled in excel and Coefficient of correlation worked out by using Karl Pearson's and Spearman rank order Coefficient of correlation also Multiple linear regression equation is used to find out relative contribution of independent variables to the dependent variables.

**The relationship between profile and the socio-economic status of tribal farmers**
**1. Correlation between profile and the socio-economic status of tribal farmers**
The correlation used to study the strength of relationship between selected independent variables and dependent variable. The personal profile characteristics of the respondent tribal farmer considered as independent variable, while socio-economic status was considered as dependent variable. Karl Pearson's correlation coefficient and Spearman rank order correlation coefficient (r) were worked out to find the degree of relationship between each independent variable and dependent variable. The findings to this aspect are presented

in Table 1.
It was observed from Table 1 that, among the selected independent variables namely; education, occupation, annual income, land holding, source of information, cosmopoliteness, change orientation and benefits derived were found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability, therefore the null hypothesis were rejected for these variables, and variables namely family size and social participation were found to be positive and significantly correlated with the socio-economic status of the tribal farmers at 0.05 level of probability, therefore the null hypothesis were also rejected for these variables. While the variables namely, age, family type, farming experience, innovativeness and fatalism did not show any significant association with the socio-economic status of the tribal farmers, therefore the null hypothesis was accepted for these variables.

**Table 1:** Correlation coefficients of profile of the tribal farmers with their socio- economic status

| SI. No. | Independent variable | Variable code | Correlation coefficients ('r') values |
|---|---|---|---|
| 1 | Age | $X_1$ | $0.005^{NS}$ |
| 2 | Education | $X_2$ | $0.244^{**}$ |
| 3 | Family size | $X_3$ | $0.127^{*}$ |
| 4 | Family type | $X_4$ | $0.069^{NS}$ |
| 5 | Occupation | $X_5$ | $0.350^{**}$ |
| 6 | Annual income | $X_6$ | $0.615^{**}$ |
| 7 | Land holding | $X_7$ | $0.384^{**}$ |
| 8 | Farming experience | $X_8$ | $0.009^{NS}$ |
| 9 | Social participation | $X_9$ | $0.133^{*}$ |
| 10 | Source of information | $X_{10}$ | $0.272^{**}$ |
| 11 | Innovativeness | $X_{11}$ | $0.054^{NS}$ |
| 12 | Cosmopoliteness | $X_{12}$ | $0.390^{**}$ |
| 13 | Change orientation | $X_{13}$ | $0.197^{**}$ |
| 14 | Fatalism | $X_{14}$ | $0.041^{NS}$ |
| 15 | Benefits derived | $X_{15}$ | $0.230^{**}$ |

\*\*Significant at 0.01 level of probability * Significant at 0.05 level of probability
NS Non significant
$X_1$ - $X_8$ Karl Pearson's coefficient of correlation $X_9$ - $X_{15}$ Spearman's correlation

**1. Age and Socio-economic status of tribal farmers**
It was observed from Table 1, the correlation coefficient of age with socio- economic status of tribal farmers (r = $0.005^{NS}$) was found to be non significant.
It means that there was no statistical significant relationship between age and socio-economic status of tribal farmers. In other word it can be said that age does not influence the socio-economic status of tribal farmers. The non significant relation because of the most tribal farmers followed farming as a tradition coming from their elders, they does not consider farming as an enterprise to make profit. The findings of the study are in conformity with the results obtained by Bhedu (2011) [2], Sonali Raut (2013) [7] and Prachi Bawane (2018) [6].

**2. Education and socio-economic status of tribal farmers**
From Table 1, it was found that, the correlation coefficient of education with socio- economic status of tribal farmers (r = $0.244^{**}$) was found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.
From the above result it could be said that, as the educational level of tribal farmers increases their socio-economic status

increased significantly. Education widens the horizons of knowledge of the respondent. An educated person could better understand their situations than the less educated person. Also education help in the changing economic condition as it open new occupational activities. Hence a significant relationship might have been observed.

The findings of the study are in conformity with the results obtained by Pawar (2013) [5], Sonali Raut (2013) [7], Vaishali Pagar (2013) [8], Arti Soni et.al (2016) [1] and Prachi Bawane (2018) [6].

## 3. Family size and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of family size with socio- economic status of tribal farmers (r = 0.127*) found to be positive and significantly correlated with the socio-economic status of the tribal farmers at 0.05 level of probability.

From the above result it could be said that family size helps to increase socio-economic status of tribal farmers. May be due to the tribal farmers had four to six members in their respective family so it was possible to give attention on each family members need, it also helps in proper utilization of income and it also does not put any pressure on the family resources that will help in the socio-economic development of the tribal farmers. Hence a significant relationship might have been observed.

## 4. Family type and Socio-economic status of tribal farmers

From Table 1, it was observed that, the correlation coefficient of family type with socio-economic status of tribal farmers (r = 0.069NS) was found to be non-significant.

It means that there was no statistical significant relationship between family type and socio-economic status of tribal farmers. In other word it can be said that family type does not influence the socio-economic status of tribal farmers.

## 5. Occupation and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of occupation with socio- economic status of tribal farmers (r = 0.350**) found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

From the above result it could be said that occupation of the tribal farmer had significant influence on their socio-economic status. As the tribal farmers mainly depend upon agriculture and forest activities as a primary source of income and through these activities they generate sufficient income to fulfill their needs. Hence a significant relationship might have been observed.

The findings of the study are in conformity with the results obtained by Pawar (2013) [5] and Arti Soni et.al (2016) [1]

## 6. Annual income and Socio-economic status of tribal farmers

From the data presented in Table 1, revealed that, the correlation coefficient of annual income with socio- economic status of tribal farmers (r = 0.615**) found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

The above finding leads to conclude that, annual income of the tribal farmer plays a key role in molding their socio-economic status. The tribal farmers with higher economic status usually hold influential position in the tribal areas and are looked as a respected personality in the tribal areas. Also

annual income significantly affect their educational status, material possession, their social participation and farming activities and hence a significant relationship might have been observed.

The findings of the study are in conformity with the results obtained by Bhedu (2011) [2], Patel et.al (2012) [4], Pawar (2013) [5] and Arti Soni et.al (2016) [1].

## 7. Land holding and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of land holding with socio- economic status of tribal farmers (r = 0.384**) found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

From the above result it could be said that land holding of the tribal farmer had significant influence on their socio-economic status. Bigger the land holding more the area under cultivation and that will lead to higher income and special status. The bigger land owners considered as a resourceful persons in the tribal areas, as they know about new agricultural practices, varieties and afford to use costly inputs on their farms. As a result their socio-economic status was changed.

The similar findings also founded by Bhedu (2011) [2], Patel et.al (2012) [4], Pawar (2013) [5], Sonali Raut (2013) [7] and Arti Soni et.al (2016) [1]

## 8. Farming experience and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of farming experience with socio- economic status of tribal farmers (r = 0.009 NS) was non-significant.

It means that there was no statistical significant relationship between farming experience and socio-economic status of tribal farmers. In other word it can be said that farming experience does not influence the socio-economic status of tribal farmers.

The findings of the study are in conformity with the results obtained by Sonali Raut (2013) [7] and Vaishali Pagar (2013) [8].

## 9. Social participation and Socio-economic status of tribal farmers

From Table 1, It was observed that, the correlation coefficient of social participation with socio- economic status of tribal farmers (r = 0.133*) found to be positive and significantly correlated with the socio-economic status of the tribal farmers at 0.05 level of probability. More the social participation more the socio-economic status of tribal farmers.

## 10. Source of information and socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of source of information with socio- economic status of tribal farmers (r = 0.272**) found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

It can be concluded from above findings that, the socio-economic status of tribal farmers had increased remarkably with increased in their source of information. As the higher the number of information sources increases the knowledge of the tribal farmers. Through the information sources tribal farmers know about new agricultural practices, new varieties,

and various schemes available for them. This proved helpful in getting more returns from their farm and these activities leads to increase their socio-economic status.

The findings of the study are in conformity with the results obtained by Bhedu (2011) [2] and Sonali Raut (2013) [7].

## 11. Innovativeness and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of innovativeness with socio- economic status of tribal farmers (r = 0.054$^{NS}$) was non-significant.

It means that there was no statistical significant relationship between innovativeness and socio-economic status of tribal farmers. In other word it can be said that innovativeness does not influence the socio-economic status of tribal farmers.

## 12. Cosmopoliteness and Socio-economic status of tribal farmers

From Table 1, it was observed that, the correlation coefficient of cosmopolitness with socio- economic status of tribal farmers (r = 0.390$^{**}$) found to be positive and highly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

It can be concluded from above findings that, the cosmopolitness of tribal farmers had significant influence on their socio-economic status. The information available at the village or the outside village might have helped tribal farmers to improve their farming activities. The different method such as trainings, exhibitions and contact with extension personalities provide the knowledge to the tribal farmers about the current happenings in agriculture. This proved helpful in getting more returns from their farm and leads to change in their socio-economic status.

## 13. Change orientation and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of change orientation with socio- economic status of tribal farmers (r = 0.197$^{**}$) found to be positive and high significantly correlated with the socio-economic status of the tribal farmers at 0.01 level of probability.

It can be concluded from above findings that, the change orientation of tribal farmers had significant influence on their socio-economic status. Tribal farmers seek changes in their farming methods and want to adopt modern farming methods that will lead to increase in their income. Also they want changes in their educational status, use of modern amenities, changes in their living condition. These activities help tribal farmers to change their socio-economic status.

## 14. Fatalism and Socio-economic status of tribal farmers

From Table 1, it was observed that, the correlation coefficient of fatalism with socio-economic status of tribal farmers (r=0.041$^{NS}$) was non-significant.

It means that there was no statistical significant relationship between fatalism and socio-economic status of tribal farmers. In other word it can be said that fatalism does not influence the socio-economic status of tribal farmers.

## 15. Benefits derived and Socio-economic status of tribal farmers

It was observed from Table 1, the correlation coefficient of benefits derived with socio- economic status of tribal farmers (r = 0.230$^{**}$) found to be positive and high significantly

correlated with the Socio-economic status of the tribal farmers at 0.01 level of probability.

It can be concluded from above findings that, benefits derived by tribal farmers had substantial influence on their socio-economic status. Different benefits availed by tribal farmers helped them to improve their educational status, changing their housing condition, material possession, and livestock possession. Agricultural subsidies help tribal farmers to use modern agricultural equipments and help tribal farmers to increase their income from farm and leads tribal farmers to change in their socio-economic status.

## 2. Multiple regression analysis between profiles of the tribal farmers with their socio-economic status

Correlation can only indicate the existence or non-existence of relationship between variables. Multiple regression analysis was carried out to know the contribution of the selected independent variable in the dependent variable. On the basis of values of correlation coefficient (r) and relevance of variable i.e. nominal and ordinal, we had applied step down regression and depend upon the coefficient of determination ($R^2$) value regression analysis presented below in Table 29.

**Table 2:** Multiple regression analysis between profile of the tribal farmers with their socio-economic status n= 280

| SI. No. | Independent variable | Regression coefficient | Standard error | 't' value |
|---------|---------------------|------------------------|----------------|-----------|
| 1 | Education | 0.021$^{*}$ | 0.009 | 2.371 |
| 2 | Family size | 0.074$^{**}$ | 0.024 | 3.023 |
| 3 | Annual income | 1.270$^{**}$ | 1.360 | 9.321 |
| 4 | Land holding | 0.051$^{NS}$ | 0.039 | 1.317 |
| 5 | Social participation | 0.081$^{**}$ | 0.017 | 4.669 |
| 6 | Cosmopoliteness | 0.042$^{**}$ | 0.015 | 2.800 |
| 7 | Benefits derived | 0.031$^{NS}$ | 0.048 | 0.644 |

$R^2$ = 0.5132
**Significant at 0.01 level of probability * Significant at 0.05 level of probability
NS Non significant

It was observed from Table 2 that, the 't' test of significance indicates that the regression coefficient ($^{\beta}$- Value) were found to be significant for education, family size, annual income, social participation, and cosmopoliteness. The regression coefficients of these variables were 0.021, 0.074, 1.270, 0.081, and 0.042, respectively. Which indicates that SES of tribal farmers increased by 0.021, 0.074, 1.270, 0.081, and 0.042 units if one unit increase could be brought in education, family size, annual income, social participation, and cosmopoliteness respectively.

The calculated coefficient of determination ($R^2$) value of the independent variables was 0.5132, which means that these variables had contributed to the tune of 51.32 per cent of variation in the socio-economic status of tribal farmers. The unexplained variation may be due to the factors not included in the study.

## Conclusion

In the relational analysis of the present study the variables namely education, occupation, annual income, land holding, source of information, cosmopoliteness, change orientation and benefits derived were found to be positive and high significantly correlated with the socio-economic status of the tribal farmers, while family size and social participation were found to be positive and significantly correlated with the socio-economic status of the tribal farmers. Whereas the

variables namely age, family type, farming experience, innovativeness and fatalism did not show any significant association with the socio-economic status of the tribal farmers.

So the education, occupation, annual income, land holding. Their source of information, contact with outside world and benefits derived through various government schemes were play significant role in socio-economic status of tribal farmers.

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