

## Relationship between socio-economic characteristics and goat rearing beneficiaries with their extent of participation in poverty alleviation programmes

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**Abstract :** For identifying the factors influencing the extent of participation in poverty alleviation programmes the study was conducted among 90 goat rearing beneficiaries in Namakkal and Sivaganga districts. The study revealed that educational status of beneficiaries was important factors influencing the extent of participation. (**Key words :** *Socio-economic characteristics, Extent of participation and Poverty alleviation programmes*).

It is very necessary to secure people's participation in poverty alleviation programmes as it increases the acceptability and utilization of resources and makes the programmes very realistic and effective. In order to secure adequate and effective participation of people, identifying the factors influencing the extent of participation is very important. Keeping this in view the study was taken with the following objective : to identify the factors influencing the extent of participation of goat rearing beneficiaries in poverty alleviation programmes.

### Materials and Methods

The study was conducted among 90 goat rearing beneficiaries in Namakkal and Sivaganga districts. The socio-economic variables developed by Mansingh (1993) was used as important factors for participation namely, educational status, occupational status, family status, farm status, farm power status, communication status, social participation status and material status. For identifying the factors influencing the extent of participation correlation, multiple regression and factors analysis were used.

### Results and Discussion

Correlation analysis was carried out to find out the relationship between socio-economic variables and extent of participation. The results are presented in Table 1.

It is evident from the Table that of the 8 variables considered, 6 variables *viz.*, educational status, farm status, social participation status, communication status, farm power status and material status had significant and positive association with extent of participation by the goat rearing beneficiaries. The other two variables *viz.*, family status and occupational status had non-significant relation with extent of participation.

Multiple regression analysis was carried out to find out those independent variables which explained the variation in the extent of participation and also to assess the extent of influence made by such variables. The results are presented in Table 1.

The 8 variables when considered together the predictability co-efficient ( $R^2$ ) has been 0.27126. This means that all the 8 variables put together, *Ceteris paribus*, would bring 27.12 per cent of variation in extent of participation by beneficiaries from goat rearing group. The individual regression co-efficient expressed that out of 8 variables, educational status alone showed positive and significant contribution on the extent of participation. The result indicates that a unit increase in educational status would result in 1.8770 units increase in the extent of participation. The 'F' value was found to be significant. It is a fact that increase in educational status would expose an individual to more number of information sources and help in the selection of right type of trade and other related activities. Hence, it may be concluded that educational status of the goat rearing beneficiaries is the very import factor influencing the extent of participation.

This is in line with the findings of Swarup and Chand (1989). They found that education had positive and significant association with extent of participation.

### Factors underlying the extent of participation

Factor analysis was carried out in order to determine the number of factors and nature of relationships existing among the group of variables.

Factor analysis has yielded two groups of factors underlying the extent of participation among goat rearing beneficiaries. The factor matrix with the depiction of two factors is presented in Table 2 and variables with factor loading in Table 3.

**Table 1.** Correlation and multiple regression analysis of independent variables with extent of participation in poverty alleviation programmes (Goat rearing). (n=90)

Sl. No.	Variables	'r' value	Regression co-efficient	Standard error	't' value
1.	Educational status	0.2536*	1.8770	0.9122	2.058*
2.	Family status	0.1526 <sup>NS</sup>	-0.6697	0.4943	-1.355 <sup>NS</sup>
3.	Occupational status	0.1865 <sup>NS</sup>	-1.1362	1.2131	-0.937 <sup>NS</sup>
4.	Farm status	0.2937**	0.3603	0.7499	0.480 <sup>NS</sup>
5.	Social participation status	0.3468**	1.6674	1.5037	1.109 <sup>NS</sup>
6.	Communication status	0.2780**	9.4175	6.3708	1.478 <sup>NS</sup>
7.	Farm power status	0.4021**	0.1077	0.0847	1.270 <sup>NS</sup>
8.	Material status	0.3927**	0.0838	0.1557	0.538 <sup>NS</sup>

R<sup>2</sup> = 0.27126

F=3.76890\*\*

\* - Significant at 5% level

\*\* - Significant at 1% level

NS - Non Significant

**Table 2.** Factor matrix of variables (Extent of participation - Goat rearing) (n=90)

Sl. No.	Variables	Factor I	Factor II	Communalities
	Eigen value	4.73395	1.27451	
	Variables expression	52.6	14.2	
1.	Educational status	0.26556	0.33974	0.18594
2.	Family status	0.76279	-0.23624	0.63765
3.	Occupational status	0.82212	-0.33444	0.78773
4.	Farm status	0.92651	-0.21161	0.90319
5.	Social participation status	0.87153	-0.06792	0.76418
6.	Communication status	0.23588	0.71561	0.56774
7.	Farm power status	0.84107	0.10864	0.71920
8.	Material status	0.90786	0.08008	0.83063

**Table 3.** Variable with factor loading under different factors - Extent participation (Goat rearing) (n=90)

Variables	Factors loadings
<b>Factors I</b>	
Family status	0.76279
Occupational status	0.82212
Farm status	0.92651
Social participation status	0.87153
Farm power status	0.84107
Materials status	0.90786
<b>Factors II</b>	
Communication status	0.71561

It could be seen from the Table 3, there were 6 variables in Factor I and one variable in Factor II. There were 6 variables having significant loadings on Factor I. They were family status (0.76279), occupational status (0.82212), farm status (0.92651), social participation status (0.87153), farm power status (0.84107) and material status (0.90786). The first factor accounted for 52.6 per cent of the total variation. These 6 variables were considered as high loading variables having direct bearing on the extent of participation.

Communication status (0.71561) had significant factor loading on Factor II on the extent of participation. The second factor accounted for 14.2 per cent of the total variation. The first group of factors was named as "Economic factor" and the second factor as "Communication factor".

The study leads to conclusion that we have to concentrate on educational status of beneficiaries for getting better participation in poverty alleviation programmes.

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## Aberrations in monsoons in assured rainfall area of Parabhani I - Meteorologic characterization

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**Abstract :** Rainfall records of 52 years (1944-95) of Parbhani station located in the assured rainfall zone of Maharashtra state were critically examined for establishing the long term averages of monthly rainfall and its temporal variability by deploying appropriate statistical techniques. The deviations in normal time(s) of onset and withdrawal of monsoon, depths of monthly rainfall and their distribution were defined as aberrations. The results revealed that the average monsoon rainfall (monthly total) of 849.96 mm was distributed in the proportion of 18.13, 26.94, 25.28, 21.61 and 7.93 per cent during June to October, respectively. The variabilities in normal rainfall during crucial months of August (67.69 %) and October (119.48 %) were relatively higher than remaining monsoon months. The probabilities of normal onset (25th MW) and withdrawal (39th MW) were 44.23 and 50 per cent, respectively. The corresponding probabilities of aberrations were 55.77 and 50 per cent. The per cent probabilities of aberrations in seasonal (June to October) amount of rainfall was 56.54 per cent, with higher proportion of below normal (39.23) than its above normal (27.31) rainfall during June to October. The per cent probabilities of recuperation of preceeding deficiency in succeeding months decreased with the advancement of time of occurrence of deficiency. (*Key words : Weather parameters, Average, Variability, Onset, Withdrawal, Spells.*)

The condensation and precipitation of atmospheric water vapour are purely physical processes governed by aero-thermo-dynamic properties of surface and upper air layers. The tapestry of the interactions of these properties decides the fate of south-west monsoon over Indian sub-

continent (Gowarikar *et al.*, 1989 and 1991). The qualitative (time of onset and withdrawal of monsoon, its persistence) and quantitative (magnitude, intensity and distribution) properties of south-west monsoon rainfall in Central Maharashtra Plateau Zone highly varied over time and space (Patil *et al.*, 1992). The