

the diseased plant and the involvement of these enzymes in the fruit rot a papaya was described. The pectic enzymes were not detected in healthy plant. This observation was in accordance with the finding of the present study.

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Factors influencing the extent of participation of milch animal rearing beneficiaries in poverty alleviation programmes

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Abstract : The study was conducted to know the factors influencing the extent of participation among 90 milch animal rearing beneficiaries in poverty alleviation programmes. The study revealed that social participation and farm power status were the important factors influencing the extent of participation. (*Key words :* Extent of participation, Milch animal rearing, Poverty alleviation programmes)

It has been long argued that people's participation is essential for the success of poverty alleviation programmes. Identifying the factors influencing the extent of participation will be useful in changing the existing conditions, procedures and other requisites so as to make them convenient for the participation by the beneficiaries. Kareem and Jaramaiah (1998) reported that the characteristics like education and occupation and significant influence in extent of participation of IRDP, milch animal rearing is important and leading trade. Keeping this in view the study was undertaken with the following objective.

To identify the factors influencing the extent of participation in poverty alleviation programmes.

Materials and Methods

The study was conducted among 90 milch

animal 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 factor analysis were used.

Results and Discussion

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

It could be understood from the Table that out of 8 variables, 6 variables, viz., family status,

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

Sl. No.	Variables	"r" value	Regression co-efficient	Standard error	"t" value
1.	Educational status	0.1307 ^{NS}	-0.1294	0.8149	-0.159 ^{NS}
2.	Family status	0.4147**	0.3150	0.5020	0.628 ^{NS}
3.	Occupational status	0.3647**	0.9549	1.0162	0.940 ^{NS}
4.	Farm status	0.5307**	-0.4295	0.5700	-0.753 ^{NS}
5.	Social participation status	0.6026**	3.6973	1.0179	3.632**
6.	Communication status	-0.1424 ^{NS}	-6.3395	5.0136	-0.1264 ^{NS}
7.	Farm power status	0.6286**	0.2697	0.0845	3.190**
8.	Material status	0.4836**	-0.0682	0.1108	-0.616 ^{NS}

R² = 0.49987

F=10.1196**

* - Significant at 5% level

** - Significant at 1% level

NS - Non Significant

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

Sl. No.	Variables	Factor I	Factor II	Communalities
	Eigen value	4.3902	1.3807	
	Variable expression	48.8	15.3	
1.	Educational status	0.23562	-0.58336	0.39583
2.	Family status	0.67796	0.24593	0.52011
3.	Occupational status	0.72673	0.43596	0.71821
4.	Farm status	0.88706	-0.00372	0.78688
5.	Social participation status	0.74506	-0.11663	0.56872
6.	Communication status	-0.05436	0.85808	0.73925
7.	Farm power status	0.87503	-0.09184	0.77412
8.	Material status	0.84202	-0.00006	0.70899

Table 3. Variables with factor loading under different factors - Extent of participation (Milch animal rearing) (n=90)

Variables	Factor loadings
Factor I	
Family status	0.67796
Occupational status	0.72673
Farm status	0.88706
Social participation status	0.74506
Farm power status	0.87503
Material status	0.84202
Factor II	
Educational status	-0.58336
Communication status	0.85808

occupations status, farm status, social participation status, farm power status and material status had significant and positive association with extent of participation by the milch animal rearing beneficiaries. The other two variables *viz.*, educational status and communication status had non-significant relation with extent of participation.

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

All the 8 variables when considered together the predictability co-efficient (R^2) has been 0.4998. This means that all the 8 variables put together, *Ceteris paribus*, would bring 49.98 per cent of variation in extent of participation by the milch animal rearing beneficiaries. The individual regression co-efficient expressed that out of 8 variables, social participation and farm power status showed positive and significant influence on extent of participation. The results indicate that an unit increase in social participation and farm power status would result in 3.6973 and 0.2967 units increase in extent of participation respectively. The 'F' value was found to be significant. Hence, it may be concluded that social participation and farm power status of the milch animal rearing beneficiaries are the very important factors influencing the extent of participation.

When the beneficiaries have high level of social participation they will participate more in poverty alleviation programmes and also if the beneficiaries have high farm power status including livestock position their participation will be more in poverty alleviation programmes. Hence, the positive influence by the above two variables.

This finding derives support from the finding of Jansirani (1991) who found that social participation had positive and significant association with extent of participation.

Factors underlying the extent of participation

In the present study factor analysis was used 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 milch animal rearing beneficiaries. The factor matrix with the depiction of two factors is presented in Table 2 and variables with factor loading in Table 3.

From the Table 2, it could be observed that there were six variables in Factor I and two variables in Factor II.

There were six variables having significant loadings on Factor I. They were family status (0.67796), occupational status (0.72673), farm status (0.88706), social participation status (0.74506), farm power status (0.87503) and material status (0.84202). This first factor accounted for 48.8 per cent of the total variation. These six variables were considered as high loading variables. These characters have direct bearing on the extent of participation. As most of the variables in the first group relates to economic aspects, they were termed "Economic factor".

Educational status (-0.58336) and communication status (0.85808) had significant factor loading on Factor II on extent of participation. The second Factor accounted for 15.3 per cent of the total variation. The second group of factors was named as "Personal factor".

It may be concluded from the study that social participation and farm power status were the important factors influencing the extent of participation among milch animal rearing beneficiaries.

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