Variables Persuade Socio-Techno-Economic Change in ITDP

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ABSTRACT

The advantage of democracy must reach to all sectors of a society. A large number of development projects are in operation but tribal farmers of the state could not reach to the expected level of socio-techno-economic change. With a view to analyzing this, present study was undertaken in Integrated Tribal Development Project area of Dahod district of Gujarat State. The study was conducted with a sample of 200 randomly selected tribal peasants from 20 villages of 4 talukas of Dahod district. The results of the study reveal that majority of the respondents had medium level of socio-techno-economic change. All the independent variables selected for the study were positively significantly related with level of socio-techno-economic change except level of aspiration. Among them age, urban pull and migration habit had negative but significant relationship with it. The multiple regression analysis indicated that out of 23 independent variables only eight independent variables i.e. age, education, occupation, farm power, urban pull, mass media exposure, non-fatalism and Knowledge regarding improved practices of maize cultivation together affected the change in dependent variable significantly to the extent of 75.20 per cent. The variable mass media exposure alone contributed to 59.75 per cent of total variation in socio-techno-economic change. Mass media exposure contributed significantly to the prediction of the extent of socio-techno-economic change It is therefore, recommended that community television sets, radio sets and local news paper should made available in all villages, regular free film and video show should be arranged, printed literature about improved technology should be distributed to the educated peasants. The study also revealed that economic variables like number of occupations in which tribal farmers involved, farm power contributed significantly to the prediction of socio-techno-economic change. It is, therefore, implies that some subsidiary occupations like poultry, bee keeping, rope making, sericulture etc. should be created by the Government and Non-Government organizations. Efforts should be also made to supply inputs to tribal peasants. This may help in contributing better socio-techno-economic change in tribal farmers of ITDP area of the district.

Keywords: *ITDP, Socio-techno-economic change*

INTRODUCTION

Consequence is defined by the Rogers (1983) as the change that occurs to an individual or to a social system as a result of adoption or rejection of an innovation. The assessment of benefit in monetary and social values; has been termed as socio-techno-economic change. Barnadas (1969) reported that changes occurred in the life of most of the villages. The aspects were food habits, clothing pattern, farming life, material possession, change in agricultural practices, education for girls and change in yield levels of crops. In spite of considerable progress, the progress is not yet to the desired level of satisfaction because it differs from one region to another. The advantage of democracy must reach to all sectors of a society. A large number of development projects are in operation but tribal farmers of the state could not reach to the expected level of modernization. With a view to know the extent of socio-techno-economic change transpire to the tribal farmers in Integrated Tribal Development Project area, this study was undertaken with the following objectives.

OBJECTIVES

1 To know the extent of socio-techno-economic change transpire to the tribal farmers.

2 To know the relationships between the characteristics and socio-techno-economic change score by the tribal

farmers.

3   To know the predicting ability of different characteristics to explain variation on socio-techno-economic change score by the tribal farmers.

METHODOLOGY

The study was conducted with a sample of 200 randomly selected tribal peasants from 20 villages of 4 talukas of Dahod district, considering those tribal peasants who adopted maize as a major crop with animal husbandry.

The socio-techno-economic change was measured with the help of procedure adopted by Chauhan (1994) with some modification in terms of nine aspects viz., (1) change in modern technology base farm machinery or farm implements (2) change in household items (3) change in saving and investment (4) change in food habit (5) change in clothing pattern (6) change in housing condition (7) change in social status (8) change in social relationship and (9) Change in self sufficiency. The score of each aspect was added to measure the socio-techno-economic change in the peasants.

The data were collected with help of structured schedule by personal interview method. Parson's coefficient of correlation was computed to find out the relationship between characteristics and socio-techno-economic change score by tribal farmers. The multiple regression analysis was done to the combine effect of all independent variables in explaining the variation in the socio-techno-economic change score of the tribal farmers.

FINDINGS

Extent of socio-techno-economic change

The data in Table 1 indicate that slightly more than three-fifth (61.50 per cent) of the respondents had medium level of socio-techno-economic change, followed by 22.50 per cent with low level of socio-techno-economic change. Whereas, 16.00 per cent of the respondents were found to have high level of socio-techno-economic change.

Table 1 :   Distribution of respondents according to their socio-techno-economic change   n=200

Sr. No.	Level of socio-techno-economic change	Number	Per cent
1	Low (< 12.09 score)	45	22.50
2	Medium (between 12.10 to	123	61.50
3	31.31 score)	32	16.00
	High (> 31.31 score)		

Mean = 21.70   SD = 9.61

Relationship of independent variables with socio-techno-economic change

Table 2: Relationship between independent variables and socio-techno-economic Change   n=200

Sr. No.	Independent Variables	Correlation Coefficient (r value)
1	Age	- 0.1991*
2	Education	0.4801**
3	Occupation	0.3564**
4	Size of land holding	0.4169**
5	Farm power	0.4005**
6	Migration habit	- 0.4311**
7	Organizational participation	0.4557**
8	Urban pull	- 0.4854**
9	Level of achievement	0.1972*
10	Mass media exposure	0.7734**
11	Change agency contact	0.6970**
12	Level of aspiration	0.0700^{NS}
13	Role taking empathy	0.6291**
14	Non-fatalism	0.7182**
15	Economic motivation	0.5584**
16	Cosmopoliteness	0.6450**
17	Risk orientation	0.6812**
18	Scientific orientation	0.4838**
19	Knowledge regarding improved practices of maize cultivation	0.7439**
20	Knowledge regarding improved animal husbandry practices	0.7088**
21	Adoption of improved practices of maize cultivation	0.6968**
22	Adoption of improved animal husbandry practices	0.6190**
23	Overall modernization	0.7116**

** Significant at 0.01 level of probability

* Significant at 0.05 level of probability

 NS= Non Significant

The result depicted in Table 2 revealed that out of twenty three independent variables, nineteen variables namely, education, occupation, size of land holding, farm power, organizational participation, level of achievement, mass media exposure, change agency contact, role taking empathy, non-fatalism, economic motivation, cosmopoliteness, risk orientation, scientific orientation, knowledge regarding improved practices of maize cultivation, knowledge regarding improved animal husbandry practices, adoption of improved practices of maize cultivation, adoption of improved animal

husbandry practices and level of overall modernization were found to be positively and significantly related with the socio-techno-economic change of the tribal farmers.

With regard to independent variables namely, age, urban pull and migration habit were found significantly but negatively correlated with the socio-techno-economic change of the tribal farmers. Whereas, only one independent vari-ables namely, level of aspiration was found non-significant with socio-techno-economic change of tribal farmers.

Variable Predicting Socio-Techno-Economic Change

Table 3: Multiple regression analysis of socio-techno-economic change score of the tribal farmers

n = 200

Sr. No.	Independent variable	Partial regression coefficient (byi.j)	Standard error of regression coefficient (SE of byi.j)	't' value	Standard partial regression coefficient (b'yi.j)	Rank
1	Adoption of improved animal husbandry practices	0.2566	0.1393	1.841[NS]	0.1013	VIII
2	Age	0.0871	0.0444	1.963*	0.0884	IX
3	Education	- 1.1322	0.5167	2.191*	- 0.1149	VII
4	Occupation	3.7128	1.1352	3.271**	0.1302	V
5	Farm power	0.8840	0.2461	3.610**	0.1484	IV
6	Urban pull	- 3.9870	1.3578	2.936**	- 0.1275	VI
7	Mass media exposure	0.8417	0.1588	5.302**	0.3859	I
8	Non-fatalism	0.8615	0.3886	2.217*	0.1505	III
9	Knowledge regarding improved practices of maize cultivation	0.4736	0.1249	3.793**	0.2524	II

Constant : -5.5999   Multiple R = 0.8672 $R^2 = 0.7520$

*   Significant at 0.05 level of probability ** Significant at 0.01 level of probability

It is clear from the Table-3 that out of 23 independent variables only eight independent variables i.e. age, education, occupation, farm power, urban pull, mass media exposure, non-fatalism and Knowledge regarding improved practices of maize cultivation together affected the change in dependent variable significantly to the extent of 75.20 per cent.

The variable mass media exposure alone contributed to 59.75 per cent of total variation in socio-techno-economic change. As per the ranks of standard partial regression coefficient, the independent variable mass media exposure is most important variables followed by knowledge regarding improved animal husbandry practices, non-fatalism, farm power, occupation, urban pull, education, adoption of improved animal husbandry practices and age.

IMPLICATION

Mass media exposure contributed significantly to the prediction of the extent of socio-techno-economic change It is therefore, recommended that community television sets, radio sets and local news paper should made available in all villages, regular free film and video show should be arranged, printed literature about improved technology should be distributed to the educated peasants. The study also revealed that economic variables like number of occupations in which tribal farmers involved, farm power contributed significantly to the prediction of socio-techno-economic change. It is, therefore, implies that some subsidiary occupations like poultry, bee keeping, rope making, sericulture etc. should be created by the Government and Non-Government organizations. Efforts should be also made to supply inputs to tribal peasants. This may help in contributing better socio-techno-economic change in tribal farmers of ITDP area of the district.