

## Socio-Economic Change as Result of Watershed Development Programme

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### ABSTRACT

*The study was carried out in Vyara taluka of Tapi district. All the three watersheds of Vyara taluka were selected purposively. Watershed management implies the wise use of soil and water resources within a given geographical area so as to enable sustainable production and to minimize floods. Ex-post-facto research design was used for the present study. The data were collected with the help of structural schedule by personal interview method. The dependent and independent variables were measured by using suitable scale. The data thus collected were coded, classified, tabulated and analysed in order to make the findings meaning. The statistical measure i.e. paired 't' test was used. Socio-economic change occurred due to implementation of watershed programme was admirable. It has brought significant change in all the aspects (dependent variables) in the study. The watershed development programme, thus, played an important role in accelerating agricultural productivity and effecting a positive change in life standard of the tribals in watershed area of Vyara taluka of Tapi district.*

**Keywords:** Constraints, Respondent, Rural development

### INTRODUCTION

Agriculture is the backbone of India as major population is engaged in agriculture or allied agricultural activities. Economy of Gujarat State is largely dependent on natural resources like soil, water and their proper management practices. The ultimate objective of the watershed development programme is to develop the natural resource base, sustain agricultural productivity, improve the standard of living of million of poor farmers and landless labourers and endeavor for restoration of ecological balance. The impacts of watershed development programme are reflected in terms of generating more income from agriculture by soil and water conservation practices, which ultimately are improving the overall economic condition of the farmers. Hence, there is an absolute need to know how far the impact of watershed development programme is occurred among the farmers of watershed area. Keeping this in view, the present study was carried out with specific of to know the "Socio-economic change as result of watershed development programme."

### METHODOLOGY

The study was carried out in Vyara taluka of Tapi district. All the three watersheds covering three villages of

Vyara taluka were selected purposively. A list of beneficiaries farmers were obtained from Sub-Divisional Office (Soil Conservation), GLDC, Vyara. Respondents were selected randomly from each village. Thus, out of 367 beneficiaries' farmers, 82 farmers from all three villages were included in the study. Ex-post-facto research design was used for the present study. The data were collected with the help of structural schedule by personal interview method. The dependent and independent variables were measured by using suitable scale. The data thus collected were coded, classified, tabulated and analyzed in order to make the findings meaning. The statistical measure i.e. paired 't' test was used.

### RESULTS AND DISCUSSION

The socio-economic changes that occur to an individual or to a social system as a result of adoption or rejection of an innovation. An attempt has been made to know resultant changes in terms of 14 aspects, viz., area under field crops, area under irrigation, use of improved varieties, crop production, use of farm machinery and agricultural implements, area under fruit tree cultivation, area under forest tree cultivation, annual income from agriculture, annual income from livestock, housing condition, household possession, food habit, clothing pattern and, savings and

expenditure which were considered as impact of watershed development programme. The data in this regard are presented in Table 1.

**Table 1: Aspectwise change occurred as a result of watershed development programme**

Sr. No.	Aspect	Mean score		Mean difference	't' value
		Before project	After project		
1	Area under field crops	1.6163	2.36.7	0.7444	15.7110*
2	Area under irrigation	0.3399	0.8623	0.5224	15.0343*
3	Use of improved varieties	1.5000	3.1829	1.6829	15.5542*
4	Crop production	0.9882	1.7706	0.7824	4.3797*
5	Use of farm machinery and implements	7.8537	16.7439	8.8902	5.2262*
6	Area under fruit tree cultivation	1.4390	9.000	7.5610	7.1248*
7	Area under forest tree cultivation	2.7195	15.5610	12.8415	3.6703*
8	Annual income from agriculture	32.6097	38.1463	5.5366	5.9795*
9	Annual income from livestock	10.7780	12.7987	2.0207	8.1268*
10	Housing condition	1.6585	5.1585	3.5000	16.8521*
11	Household possession	8.5488	23.6464	15.0976	12.6887*
12	Food habit	0.2927	2.0122	1.7195	8.9613*
13	Clothing pattern	0.5609	2.6463	2.0854	16.3235*
14	Savings and expenditure	0.2927	2.0122	1.7195	8.9613*

The data presented in Table 1 reveal that the mean difference found in all the aspects was statistically highly significant at 0.01 level of probability. It can be inferred that all the aspects were significantly increased or improved after the implementation of the programme. The probable reason for increase in area under field crops might be that the farmers have brought their wasteland under the cultivation. Increase in area under irrigation might be that the respondents have use the technique of water conservation and utilized this water for crop plantation. Increase in use of improved varieties might be its easy availability and high economic returns. Increase in crop production might be due to the adoption of crop production technology. The probable reason for positive change in use of farm machinery and implements might that the farmers have increased their purchasing capacity by raising the income through achieving more production. Increase in area under fruit tree cultivation might be that the farmers have been diverted to minimize the risk by planting the fruit crops on the border of the field as well as on the sloppy land where field crops are not grown properly. The probable reason for increase in area under forest tree cultivation might be that the farmers have been diverted to minimize the risk by planting the forest tree on the border of the field as well as on the sloppy land where field crops are not grown properly. Increase in annual income from agriculture might be due

to more crop production. Increase in annual income from livestock might be due that the farmers have expanded their herd size of milch animals after implementation of watershed development programme. Increase in housing condition might be due to that farmers have increased their annual income from agriculture and livestock. Increase in household possession might be due that the farmers have increased their purchasing capacity by raising the income through achieving more production. The probable reason for increase in food habit might be due to that farmers have use different varieties of food preparation in festivals. Increase in clothing pattern might be due that the farmers have increased their annual income from agriculture and livestock. The probable reason for increase in savings and expenditure might be due to that the farmers have increased their purchasing capacity by raising the income through achieving more production.

**CONCLUSION**

Impact occurred due to implementation of watershed programme was admirable. It has brought significant change in all the aspects (dependent variables) in the study. The watershed development programme, thus, played an important role in accelerating agricultural productivity and effecting a positive change in life standard of the tribals in watershed area of Vyara taluka of Surat district.