RESEARCH ARTICLE

Impact of community based tank management project on socio-economic status of beneficiary farmers

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ABSTRACT

The Investigation was carried out in the year 2007-08 to assess the impact of community based tank management project on socio-economic status of beneficiary farmers in ten villages of Bidar district. The results of the study revealed that, significant increase in socio-economic status like increase in primary agriculture occupation from 90.66 to 97.34 per cent, business from 14.0 to 26.0 per cent, owning of two houses increased from zero to 10.66 per cent, In case of source of irrigation wells increased from 23.34 to 42.0 per cent. In case of organization participation increased in medium level of participation from 16.0 to 47.34 per cent.

KEY WORDS : Community, Tank management project, Socio-economic status

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INTRODUCTION

Government of Karnataka has developed a community based tank management project in nine districts of Karnataka state with a budget outlay of 780 crore. The World Bank has come out with a pilot project on tank rehabilitation and improving the tank system. Enhancing agriculture productivity and improving water use efficiency is one of the objectives of the project. Hence, UAS Dharwad and Bangalore were given with this responsibility. UAS, Dharwad has taken agriculture development activities like, On-farm demonstrations, Training activities, Promotion of other income generating activities, Samudaya tantrika vedike, and Participatory technology development, in 6 districts namely, Bidar, Raichur, Bagalkot, Haveri Koppal and Bellary. Community based tank management is aimed to demonstrate the viability of a community based approach to tank improvement and management by returning the main responsibility of tank development to village level user groups.

The overall goal of the programme was to reduce poverty and enhancing agriculture productivity and improving water use efficiency in community based tank management project areas of Northern Karnataka through the restoration, improved management and sustainable use of natural resources. The key development objective is to improve the productive potential of selected tanks and their associated natural resource base and strengthen community and institutional arrangements for natural resource management. The prime objective is to increase household income, improve agriculture productivity, improve vegetative cover, increase in horticulture production, increase fodder and fuel availability, enhance quality of life of village communities, reducing soil erosion and runoff to improve water availability and to conserve the moisture status. Hence, the study was conducted to know the impact of community based tank management on socio-economic status of beneficiary farmers.

METHODOLOGY

The study was focused on the community based tank management project in Bidar district. Ten villages were selected namely, Chatnalli, Chatnalli wadi, Vilaspur, Andoor and Malkapur from Bidar Taluka and Belkera, Chinkera,

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Shedol, Sindhankera and Katnalli from Humnabad Taluka were purposively selected with a total number of 150 respondent farmers by following purposive sampling procedure that is by selecting 15 farmers from each village. The data were collected by personal interview method using the structured schedule, and the benchmark data were obtained from the secondary data available at the office of the JSYS. The "Expost-facto" research design was employed in this study and the data were analyzed by using frequency, percentage and standard deviation.

The socio-economic status of farmers was measured by using the scale developed by Trivedi (1963). Annual income was computed by taking into consideration the total gross income generated from agriculture, horticulture and forestry, forage crops, dairy and vermicompost in integrated farming system area by the respondents, for a period of one year.

OBSERVATIONS AND DISCUSSION

Table 1 indicates that in case of primary occupation, there was increase in agriculture occupation from 90.66 per cent before to 97.34 per cent after implementation of Community Based Tank Management Project. Remaining respondents were agricultural labours and it decreased from 9.34 per cent before to 2.66 per cent after implementation of Community Based Tank Management Project.

The percentage of respondents engaged in secondary occupation was high in business which increased from 14.0 per cent before to 26.00 per cent after implementation of Community Based Tank Management Project. The percentage in case of respondents in service remained same (4.0%). Respondents belong to other occupation were increased from 3.34 per cent before to 11.34 per cent after implementation of Community Based Tank Management Project.

From above findings it is clear that, there has been increase in occupation. The reason might be that the Community Based Tank Management Project might have created awareness among the farmers to adopt new practices, which in turn might have created interest on agriculture.

Change in number of houses:

It could be observed from the Table that, 100 per cent respondents were owned one house before implementation of the project. However, there was an increase from 'zero' per cent to 10.66 per cent of respondents owned two houses after implementation of Community Based Tank Management Project. The probable reason may be due to increased level of income after implementation of Community Based Tank Management Project might have motivated them to construct more number of houses.

Change in type of house owned:

The data presented in Table indicates the number of respondents who owned two concrete houses augmented to 7, rising in 4.66 per cent before to after implementation of the project. This increase was also observed in case of respondents owning mixed tiled with concrete house as it increased from 8.66 per cent before to 16.00 per cent after implementation of Community Based Tank Management Project. In case of tiled roof house, the increase in per cent of respondents was from 44.0 before to 56.0 per cent after implementation of Community Based Tank Management Project. In case of roofed house, there was decrease from 37.34 to 22.00 per cent after implementation of Community Based Tank Management Project. This decrease was more predominant in case of respondent own hut as it decreased from 8.66 per cent before to 1.34 per cent after implementation of Community Based Tank Management Project.

The findings in this study indicated that, majority of respondents after implementation of Community Based Tank Management Project could be able to improve their house structure. The possible reason for this level of change may be due to the fact that, there was increase in income level after implementation of Community Based Tank Management Project. So, this might have motivated them to change their present housing structure.

Increase in land holding:

It is clear from Table that, there was a slight increase in the percentage of farmers belonging to medium farmers' category from 33.34 per cent before to 40.67 per cent after and large farmers from 19.34 per cent before to 20.66 per cent after. In case of small farmers, there was decrease from 36.66 per cent before to 30.67 per cent after. There was decrease in the percentage of marginal farmers from 10.66 per cent before to 8.0 per cent after implementation of Community Based Tank Management Project.

In rural areas majority of the people still perceive that, expanding agriculture by purchasing land would be the best option as compared to investing on non-land based activities. Also they could be able to get high income through Community Based Tank Management Project activities, which might have made them to go for buying additional piece of land.

Change in irrigation source:

Data presented in the Table regarding source of

| Sr. | Variables | Classification | | fore | | ter | | erence |
|-----|----------------------------------|-------------------------|-----------|------------|-----------|------------|-----------|------------|
| No. | | | Frequency | Percentage | Frequency | Percentage | Frequency | Percentage |
| 1. | Occupation | | 101 | 00.44 | | | 10 | |
| | a) Primary | 1. Agriculture | 136 | 90.66 | 146 | 97.34 | 10 | 6.66 |
| | | 2. Agril. labour | 14 | 9.34 | 4 | 2.66 | 10 | 6.66 |
| | b) Secondary | 1. Business | 21 | 14.00 | 39 | 26.00 | 18 | 12.00 |
| | | 2. Service | 6 | 4.00 | 6 | 4.00 | 0 | 0 |
| | | 3. Other occupation | 5 | 3.34 | 17 | 11.34 | 12 | 8.00 |
| 2. | Number of house owned | 1. One house | 150 | 100.00 | 150 | 100.00 | - | - |
| | | 2. Two houses | 0 | 0 | 16 | 10.60 | 10 | 10.66 |
| 3. | Type of house | 1. Hut | 13 | 8.66 | 2 | 1.34 | 6 | 4.00 |
| | | 2. Roof | 56 | 37.34 | 33 | 22.00 | 23 | 15.34 |
| | | 3. Tiled roof | 66 | 44.00 | 84 | 56.00 | 18 | 12.00 |
| | | 4. Mixed tiled concrete | 13 | 8.66 | 24 | 16.00 | 10 | 7.34 |
| | | 5. Concrete | 2 | 1.34 | 7 | 4.66 | 5 | 3.34 |
| 4. | Land holding | 1. Marginal farmers | 16 | 10.66 | 12 | 8.00 | 4 | 2.66 |
| | | 2. Small farmers | 55 | 36.66 | 46 | 30.67 | 9 | 6.00 |
| | | 3. Medium farmers | 50 | 33.34 | 61 | 40.67 | 11 | 7.30 |
| | | 4. Large farmers | 29 | 19.34 | 31 | 20.66 | 2 | 1.30 |
| 5. | Source of irrigation | 1. Well | 35 | 23.34 | 63 | 42.00 | 28 | 18.66 |
| | C C | 2. Borewell | 18 | 12.00 | 29 | 19.34 | 11 | 7.34 |
| | | 3. Tank | - | - | 6 | 4.00 | 6 | 4.00 |
| 6. | Farm power | | | | | | | |
| | a) Bollocks | 1. One pair | 38 | 25.34 | 62 | 41.34 | 24 | 16.00 |
| | , | 2. Two pairs | - | - | 8 | 5.34 | 8 | 5.34 |
| | b) Power tiller | 1 | | | 2 | 1.34 | 2 | 1.34 |
| | c) Tractor | | 2 | 1.34 | 2 | 1.34 | - | - |
| | d) Sprayer | | 45 | 30.00 | 62 | 41.34 | 17 | 11.34 |
| | f) Duster | | 9 | 6.000 | 17 | 11.34 | 8 | 5.34 |
| 7. | Material possession | | | | | | | |
| | a) Bullock cart | 1. One cart | 24 | 16.00 | 42 | 28.00 | 18 | 12.00 |
| | , | 2. Two carts | - | - | - | - | - | _ |
| | b) Radio | | 34 | 22.66 | 72 | 48.0 | 38 | 25.34 |
| | c) Television | | 19 | 12.66 | 38 | 25.34 | 19 | 12.66 |
| | d) Furniture | 1-2 furniture | 74 | 49.34 | 52 | 34.66 | 22 | 14.66 |
| | , | 3-4 furniture | 17 | 11.34 | 46 | 30.66 | 29 | 19.34 |
| | | 5-6 furniture | 5 | 3.34 | 15 | 10.00 | 10 | 6.66 |
| | e. Improved agril. implements | 1. 1-2 | 35 | 23.34 | 54 | 36.00 | 19 | 12.66 |
| | mpremento | 2. 3-4 | 13 | 8.66 | 20 | 13.34 | 7 | 4.67 |
| | | 3. 5-6 | 3 | 2.0 | 5 | 3.34 | 2 | 1.34 |
| | f. Vehicles for | 1. Bicycle | 32 | 21.34 | 74 | 49.34 | 42 | 28.0 |
| | transport | 2 M-41'l | 1 | 4.0 | 15 | 10.0 | 11 | 7 22 |
| 0 | | 2. Motor bike | 6 | 4.0 | 15 | 10.0 | 11 | 7.33 |
| 8. | Organization | Low | 96 | 64.00 | 33 | 22.0 | 63 | 42.00 |
| | participation | | 2.4 | 16.00 | 71 | 47.24 | 47 | 21.24 |
| | | Medium | 24 | 16.00 | 71 | 47.34 | 47 | 31.34 |
| | | High | 30 | 20.00 | 46 | 30.66 | 16 | 10.66 |

COMMUNITY BASED TANK MANAGEMENT PROJECT'S IMPACT ON BENEFICIARIES

Table 1: Impact of community based tank management project on socio-economic status of beneficiary farmers (n=150)

irrigation for cultivation of crops indicates that, there was increase in number of wells from 23.34 per cent before to 42.0 per cent after implementation of the project. Similarly, in case of bore well it increased from 12.0 per cent before to 19.34 per cent after implementation of Community Based Tank Management Project.

The reason might be due to more number of soils and water conservation activities this must have increased the ground water table and also the farmers can use the water throughout the year and as a result the farm ponds, wells and bore wells, might have been increased.

The data presented in Table revealed that, the percentage increase in the number of bullocks by the respondents having one pair increased from 25.34 per cent before to 41.34 per cent after implementation of Community Based Tank Management Project. It was evident that two pairs of bullock owned by the 5.34 per cent respondents after implementation of Community Based Tank Management Project. The respondents having power tiller was increased from zero to 1.34 per cent after implementation of community based tank management project. The respondents owned sprayer increased by 30.0 per cent before to 41.34 per cent after implementation of the project and same in case of dusters increased from 6.00 per cent before to 11.34 per cent after implementation of community based tank management project. The respondents owned tractors (1.34%) remained as same before and after implementation of Community Based Tank Management Project.

The reason for this kind of increase in possession of farm power may be due to high subsidy facility and also due to increased in income might have motivated them to go for more number of improved implements.

Change in material possession:

It could be noted from Table that, the respondents having radio increased from 22.66 per cent before to 48.00 per cent after implementation of Community Based Tank Management Project. In case of television owned respondents increased from 12.66 per cent before to 25.34 per cent after implementation of Community Based Tank Management Project. Similar tendency was observed with respect to the per cent of beneficiaries owning one cart increased from 16.0 per cent before to 28.0 per cent after implementation of Community Based Tank Management Project. Percentage of respondents possessing 5 to 6 furniture increased from 3.34 per cent before to 10.0 per cent after implementation of Community Based Tank Management Project. Respondents owning 3 to 4 furniture increased from 11.34 per cent before to 30.66 per cent after the implementation of Community Based Tank Management Project. With respect to 1 to 2 furniture has been decreased from 49.34 per cent before to 34.66 per cent after implementation of the project. Percentage of respondents possessing motor bike increased from 4.0 per cent before to 10.0 per cent after implementation of Community Based Tank Management Project. Respondents possessing bicycle increased from 21.34 per cent before to 49.34 per cent after implementation of the project. Owning of other improved agricultural implements, in case of 5 to 6 implements it was increased from 2.0 per cent before to 3.34 per cent after Community Based Tank Management Project. In case of 3 to 4 improved agricultural implements it increased from 8.66 per cent before to 13.34 per cent after implementation of Community Based Tank Management Project. In case of 1 to 2 improved agricultural implements, there was increase from 23.34 to 36.0 per cent after implementation of Community Based Tank Management Project.

Radio and television are the major entertainment means for rural people. Similarly owning bicycle and motor bike would facilitate moment within the village and to the fields. Due to increase in land productivity, income level might have increased their purchasing power.

Change in organization participation:

It could be observed from Table that, the respondents having high organizational participation level was increased from 20.0 per cent before to 30.66 per cent after implementation of Community Based Tank Management Project. In case of medium level of organizational participation category of farmers increased from 16.0 per cent before to 47.34 per cent after implementation of the project and respondents having low level of organizational participation decreased by 64.0 per cent before to 22.0 per cent after implementation of Community Based Tank Management Project. The possible reason for this kind of results may be due to the awareness created by the Community Based Tank Management Project about the importance of social institutions and also majority of the respondents were educated, having more land, income and medium innovativeness, all these characteristics might have contributed for this kind of result. The results of the present findings are generally in agreement with the results of Chandra Charan (2005), Chandregowda and Jayaramaiah (1990) and Shantamani (2007).

LITERATURE CITED

Chandra Charan, V. (2005). Profile of sujala watershed project beneficiary farmers in Dharwad district. M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Dharwad, Karnataka (India).

- Chandregowda, M.J. and Jayaramaiah, K.M. (1990). Impact of watershed development programme on socio-economic status, land productivity and income of small and marginal farmers. *Indian J.Extn. Edu.*, **15**(3&4): 44-47.
- Shantamani, G (2007). A critical analysis of MYRADA (NGO) programme in Gulbarga district. M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Dharwad, Karnataka (India).
- Trivedi, G. (1963). Measurement and analysis of socio-economic status of rural families. Ph. D. Thesis, Indian Agricultural Research Institute, New Delhi, India.
