



## Impact of income generating activities on rural livelihoods of KAWAD project beneficiaries

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### ABSTRACT

The present study was conducted during 2007-08 in Bellary and Bijapur districts of Karnataka state with 120 beneficiaries of KAWAD project as the sample to analyze the impact of income generating activities on rural livelihoods of Karnataka Watershed Development (KAWAD) project beneficiaries. The study revealed that, the change in overall capital acquisition index was 51.27 per cent before to 78.89 per cent after undertaking income generating activities and t-value calculated was 6.13, which was significant at 1 per cent level. There was non-significant relationship found between independent variables and overall asset improvements among beneficiaries.

Biradar, B.N., Manjunath, L. and Yadav, V.S. (2011). Impact of income generating activities on rural livelihoods of KAWAD project beneficiaries. *Agric.Update*, 6(3&4): 182-184.

### INTRODUCTION

'India lives in its villages' - this axiom is as true today as it was when the country became independent 64 years ago. Over 67 per cent of the population lives in rural areas. Agriculture and related activities in rural India contribute to 20 per cent of the Gross Domestic Product (GDP), and is responsible for the employment of over 60 per cent of the workforce. Hence, when one talks of socio-economic progress in India, what is mostly relevant is how the lives of the rural people have changed.

Many projects have undertaken livelihood development programmes for rural people however, there are hardly empirical evidences on the impact of programmes on capital improvement. DFID assisted KAWAD was one such project that has undertaken livelihood development programmes in North Karnataka. Hence, the present study was conducted with the following specific objectives: To study the impact of income generating activities on rural livelihoods of KAWAD project beneficiaries and to ascertain association between personal, socio-economic and psychological characteristics and sustainable rural livelihoods of KAWAD project beneficiaries.

### METHODOLOGY

The present study was conducted in Bijapur and Bellary districts of Karnataka during the year 2007-08. Bijapur and Bellary districts were purposively selected for the study where maximum number of households are benefited by the KAWAD project. KAWAD project was implemented in Indi and Kudligi Taluks of Bijapur and Bellary districts, respectively. So, in Indi Taluk, four villages and in Kundligi Taluk five villages were selected. These villages were selected purposively based on the criteria of maximum number of beneficiaries undertaken income generating activities. From the selected villages, the list of beneficiaries undertaken income generating activities was prepared by contacting Village Level Federations (VLFs). Income generating activities such as, cow rearing, buffalo rearing, sheep rearing, goat rearing and kirani shop were purposively selected, because most of the beneficiaries have undertaken these activities in the study area. Among the beneficiaries, 120 respondents were randomly selected. Thus, the total sample size was 120.

### OBSERVATION AND ANALYSIS

The results obtained from the present investigation are presented below:

#### Key words :

KAWAD project,  
Income  
generating  
activities,  
Livelihood

#### Received:

Jul., 2011;

#### Revised:

Sep., 2011;

#### Accepted :

Oct., 2011

### Impact of income generating activities on livelihoods of KAWAD project beneficiaries:

The information in Table 1 reflects the impact of income generating activities on livelihoods of beneficiaries in terms of capital acquisition. Change in overall capital acquisition index was 51.27 per cent before to 78.89 per cent after undertaking income generating activities and t-value calculated was 6.13, which was significant at 1 per cent level. The overall livelihood status was high after undertaking income generating activities by most of the beneficiaries which is reflected by improvement in human capital, physical capital, social capital, financial, capital and food security. The results are in line with the study conducted by Dolli (2006), which revealed the impact of Natural Resource Management was positive and significant on livelihood of participating families in two watershed projects studied. The significant impact was also seen with respect to human, physical, natural, social, financial capital and also food security of the participating farmers both in case of SHG and non-SHG members.

**Table 1 : Impact of income generating activities on capital acquisition in respondents (n=120)**

Capitals	Index (%)		't' value
	Before	After	
Human capital	52.76	87.94	16.58**
Physical capital	41.57	70.00	12.45**
Social capital	46.15	76.52	13.58**
Financial capital	41.07	71.91	15.71**
Food security	74.82	88.06	7.77**
Overall	51.27	78.89	6.13**

\*\* indicates significance of value at  $p=0.01$

The change in human capital index was 52.76 per cent before to 87.94 per cent after undertaking income generating activities and t-value calculated was 16.58, which was significant at 1 per cent level. This includes education and employment opportunities to the family members. Due to intensive KAWAD project livelihood development programmes, there was enough employment and income generation was seen. The present study reveals that, on an average 119 man days of additional employment was generated due to various IGAs. Here increased employment means increased income which enabled the respondents to send their children to school both within the village and outside. The results are in conformity with the study conducted by Reddy (2001) who had undertaken a study on watershed development and livelihood security and found that improvements in the household income and employment were statistically

significant in all the sample villages with the total livelihoods assets and human capital indicators have improved significantly where as social capital has not changed significantly due to watershed intervention.

The change in physical capital index was 41.57 per cent before to 70.00 per cent after undertaking income generating activities and t-value calculated was 12.45, which was significant at 1 per cent level. It includes improvements in farm energy in the form of number of bullocks and tractor or other farm machineries, construction or renovation of dwelling house and improvement in entertainment materials such as radio, TV etc. The probable reason for overall improvement in physical capital might be due to increase in income level of beneficiaries by various income generating activities.

The change in social capital index was 46.15 per cent before to 76.52 per cent after undertaking income generating activities and t-value calculated was 13.58, which was significant at 1 per cent level. This includes social interaction, respect at home and outside and also leadership opportunities. One of the key interventions contributed was development of social infrastructure through formation of self-help groups and village level federations. Due to membership in self-help groups and village level federations, the interaction among the members improved and it was also due to exposure of trainings conducted by KAWAD project. Hence, the improvement in the social capital acquisition was more visible irrespective of their different livelihood activities. Earlier Sherin (1999) in a study on dynamics of self-help group formation – a case study in Thrissur district of Kerala state found that, 82.69 per cent of the functional SHG respondents had expressed empowerment in terms of authority in planning, decision making, implementation and evaluation of the SHGs programmes, while only 55.17 per cent of the respondents of the non-functional SHGs claimed that had been empowered, which support the findings of the present study

The change in financial capital index was 41.07 per cent before to 71.91 per cent after undertaking income generating activities and t-value calculated was 15.71, which was significant at 1 per cent level. Financial capital was more increased compared to other capitals of the beneficiaries and the probable reasons might be due to more savings, because money was borrowed from SHGs at low interest rate for investing in income generating activities. Some of the major benefits realized by the beneficiaries were saving habit, easy access to loan, loan at low interest rate, bank contacts etc. The study conducted by ETC, India (Anonymous., 2004) has also revealed that

**Table 2 : Relationship of independent variables with various dimensions of capital improvement (n=120)**

Independent variables	Human capital	Physical capital	Social capital	Financial capital	Food security	Overall
Age	0.124 <sup>NS</sup>	0.117 <sup>NS</sup>	0.014 <sup>NS</sup>	0.027 <sup>NS</sup>	-0.006 <sup>NS</sup>	-0.097 <sup>NS</sup>
Education	0.100 <sup>NS</sup>	-0.137 <sup>NS</sup>	0.034 <sup>NS</sup>	0.014 <sup>NS</sup>	-0.041 <sup>NS</sup>	-0.122 <sup>NS</sup>
Land holding	0.096 <sup>NS</sup>	-0.049 <sup>NS</sup>	0.001 <sup>NS</sup>	0.034 <sup>NS</sup>	-0.008 <sup>NS</sup>	-0.036 <sup>NS</sup>
Annual income	0.162*	-0.058 <sup>NS</sup>	-0.004 <sup>NS</sup>	0.003 <sup>NS</sup>	0.023 <sup>NS</sup>	-0.041 <sup>NS</sup>
Family size	0.093 <sup>NS</sup>	-0.086 <sup>NS</sup>	0.032 <sup>NS</sup>	0.035 <sup>NS</sup>	0.040 <sup>NS</sup>	-0.057 <sup>NS</sup>
Source of information	0.157*	-0.039 <sup>NS</sup>	0.153*	0.134 <sup>NS</sup>	0.042 <sup>NS</sup>	0.042 <sup>NS</sup>
Urban contact	-0.051 <sup>NS</sup>	0.049 <sup>NS</sup>	-0.140 <sup>NS</sup>	-0.029 <sup>NS</sup>	-0.122 <sup>NS</sup>	-0.031 <sup>NS</sup>
Achievement motivation	-0.085 <sup>NS</sup>	0.132 <sup>NS</sup>	0.057 <sup>NS</sup>	0.011 <sup>NS</sup>	0.037 <sup>NS</sup>	0.074 <sup>NS</sup>
Economic motivation	-0.005 <sup>NS</sup>	0.004 <sup>NS</sup>	0.003 <sup>NS</sup>	0.155*	-0.122 <sup>NS</sup>	-0.064 <sup>NS</sup>
Risk bearing ability	-0.012 <sup>NS</sup>	0.087 <sup>NS</sup>	-0.049 <sup>NS</sup>	0.003 <sup>NS</sup>	-0.030 <sup>NS</sup>	-0.018 <sup>NS</sup>

\* and \*\* indicates significance of value at p=0.05 and p=0.01, respectively, NS: Non-significant

income generation programme launched through SHGs in all the watersheds have been able to make good impact on the income levels of the landless and the marginal farmers.

The change in food security index was 74.82 per cent before to 88.06 per cent after undertaking income generating activities and t-value calculated was 7.77, which was significant at 1 per cent level. Food security refers to the availability of the sufficient food for family consumption either self produced or purchased. It means sufficient production of food grains or improved purchasing power. Increased purchasing power depends upon the employment opportunities and increased income, where there was significant increase in the employment opportunities and income sources, the financial status and the food security ought to improve.

**Relationship of independent variables with capital improvement in beneficiaries:**

The data presented in Table 2 represent the relationship of independent variables with capital creation in KAWAD beneficiaries involved in various income generating activities. It is observed from the table that, there was non-significant relationship between independent variables and overall asset improvements among beneficiaries.

As indicated by correlation coefficient values, annual income has shown significant relationship at 5 per cent level of probability with human capital. The finding is in agreement with those of Dollli (2006) who had also observed similar result in study on sustainability of natural resources management in watershed development project that there was significant relationship between annual income and improvement of human capital. Whereas, source of information of the respondents had significant

relationship at 5 per cent level of probability with social capital and human capital. Economic motivation of respondents was shown significant relationship at 5 per cent level of probability with financial capital. Further, other variables such as age, education, land holding, family size, urban contact and risk bearing ability had not shown significant relationship with acquisition of any of the assets studied. In the present study, certain variables have shown positive significant relationship with improvement of various dimensions of capitals, so the extension agencies should aim at manipulating these variables to their advantage for promoting income generating activities in rural areas.

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