

## **Economic Contribution of KVK Activities in Ujjain District of Madhya Pradesh**

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### **ABSTRACT**

Agriculture is very important and contributing greatly to the national development. Agricultural development is intimately related with the application of new science and new technology. The study was conducted in Ujjain district of Madhya Pradesh. The Krishi Vigyan Kendra, Ujjain was established in the year 2004-05. The study reflects successful diffusion of knowledge and technique for better farm production introduced by KVK in all the three villages. The level of adoption is high. A number of reasons are responsible for it. In economic sense this experiment has led to high farm production resulting thereby improvement in annual income. This has encouraged saving and discouraged indebtedness.

Modern agriculture has become highly efficient and has contributed greatly to national economic growth. It is necessary to study the relationship between the increase in production and the factors entering into such production (Malasi 1975). Agricultural development is intimately related with the application of new science and new technology in farming. Therefore, increase in agricultural production and the economics and benefits are directly dependent on the extent technology use refers to adoption of all the practices including seed, fertilizers, plant protection practices, mechanization and other inputs including the ever changing knowledge system in respect of important crops grown by the farmers. In this context the extension education approach of Indian Council of Agriculture Research (ICAR) through Krishi Vigyan Kendra KVK, where in farming families are being taught through modern technology step by step through learning by doing with scientists of KVK is playing significant role.

The ICAR has evolved KVK as an innovating institution for transfer of technology on agriculture and allied enterprises, KVKs use about four specific strategies, Demonstration, Vocational training, In- service training and On farm Testing (OFT) (Prasad, 1990).

Under the demonstration strategy it organized front line demonstration in various crops to generate production data and feedback information. The aim of

front line demonstration in general is to raise production, conduct field day, farmer's interaction and exhibition at demonstration site. Under the vocational training it organizes need-based training courses in agriculture and allied activities for men farmers, farm women and rural youths. Courses are based on the information received through family and village survey.

KVK in India emerged as a distinct organization and its advantage was greeted with great expectation especially on technology transfer front to set a pace of growth of farm productivity and thereby ensuring regeneration of entire farming community.

Keeping this in view the study was conducted on following objective, "to find out the impact of agricultural modernization in economic development, in terms of annual income, saving, indebtedness, physical quality of life."

### **METHODOLOGY**

The study was conducted in Ujjain district of Madhya Pradesh. The Krishi Vigyan Kendra, Ujjain was in the year 2004-05. According to status report of KVK (2007-08 to 2011-12), the maximum transfer of technology (TOT) programmes were organized in adopted villages of Ghatiya blocks. Although KVK surveyed and contacted 10-15 villages of Ghatiya block, only three villages i.e. Salakhedi, Pipliyahama and Borekhabhalla could successfully achieve the target, which was designed by

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KVK. The list of the heads of households was prepared from the three sampled villages by using census techniques under which an exhaustive list consisting of the names of all the heads of the households was prepared. Total numbers of households were listed and according applying equal appearing interval technique selected every third households for study. The sample consisted of 60 households from Salakhedi and 110 from Pipliyahama and 80 households from Borekhedabhalla. Total 250 households were selected for study. In most of the cases they were male and head of the households. The data for this study have been obtained with the help of different instructions like interview schedule, observations, group interview and discussion with KVK functionaries.

## RESULTS AND DISCUSSION

In order to increase land productivity and motivate farmers to follow and obtain new technology to increase farm production and also to produce cash crop, improved seed, fertilizer, new technical instrument, irrigation and water harvesting, processing, storage machine, marketing of farm produce etc. are introduced. How and to what extent villagers perceived this intervention? Majority of the respondents said that it advised villagers to use good quality seed and fertilizer. Many of them (80%) reported that they also learned the new techniques relating to harvesting, processing and marketing. So far as diffusion of technical knowledge related to seed treatment, and nursery management is concerned 97 percent villagers from Salakhedi, 85 per cent from Pipliyahama and 65 per

cent from Borekhedabhalla came to know about such techniques.

Majority of the respondents are of the opinion that advise of KVK was transformed into action at the field level by farmers. To what extent farmers have gained in material forms out of this intervention is another story but just on the basis of concentration of suggestion by most of them it can be said that the programme was by and large successful. But the degree of acceptance of suggestion differs from item to item in the three villages in the use of improved seed, fertilizer and to some extent modern agricultural implements. Only in few cases like marketing there is insignificant change in behaviour of the respondents.

### Income

The table 1 revealed that 79.6 per cent respondents were getting improved income with use of new techniques. New and improved techniques like use of improved seed, proper use of fertilizer and use of insecticide for plant protection have emerged as an important source of earning from cultivation similar finding has quoted by (Sangramsingh 1993). About 10.4 per cent respondents have not experienced improvement in their income; they argued that some time conditions of crop failure or less production due to abnormal and unfavorable weather. It was also said that the traditional cultivation could not be changed even if it wished to. Total 11.2 per cent respondents were not replied, they had not decided because their land on share bases.

**Table: 1: Increased incomes due to adoption KVK techniques**

Sl.No.	Income N-60	Salakhedi N-110	Pipliyahama N-80	Borekhedabhalla N-250	Total	Percentage
1.	Increased	51	85	63	199	79.6
2.	Decreased	01	00	01	02	0.8
3.	No change	04	05	12	21	10.4
4.	Not reply	04	20	04	28	11.2
	<b>Total</b>	<b>60</b>	<b>110</b>	<b>80</b>	<b>80</b>	<b>100.00</b>

### Saving and Indebtedness

The study clearly showed that before adoption of KVK induced technology 46 per cent respondents were under debts. Their number was highest in Piliyahamai, middle in Borekheda and lowest in Salakhedi. Majority of them (110) had taken loan from formal sources like local branch of the State Bank of India, Ujjain, Cooperative Society, Pipliyahama, and Central bank of Dabladut. They are the nearest sources of the Bank facilities. The amount of loan different from Rs. 25000 to Rs. 50000. But during the post KVK introduction

phase also the number of loaners did not decrease rather it increased from 115 in the post introduction phase. Hence, there was no change in the situation of indebtedness'. In the study also observed that finance is not only needed for the production activity but the farmers are mostly indebted due to their social need like marriage and death feast. It was also found that finance is required for purchase of seeds, fertilizers, insecticides and for payment of wages. The major cause of the indebtedness was due to bad crop, which was the result of abnormal weather as it rained continuously till the end of January

in the year of 2009-10 (hailstrom). Another main cause of indebtedness was the low productivity of soybean in the year 1999. In the same period gram caterpillar attack was seen in gram. Still other reasons were also observed that, agriculture is subject to the law of diminishing returns and in the absence of application of modern inputs, the production is diminished. As few of the cultivators are in poverty and as they get low income from the tiny plots, which are hardly sufficient to meet their necessities, they are not in a position to keep aside funds for depreciation of agricultural tools, equipments, cattle etc. Higher rates of interest also a main reason for indebtedness.

In the past around 100 respondents had saving.

The amount of saving also different from Rs. 15000 to more than Rs. 25000. They saved their money in both formal and informal institutions. The table 2 revealed that the importance and functioning of formal institutions like bank and cooperative body increased from 27 to 30, 14 to 67, and 16 to 26 in Salakhedi, Pipliyahama and Borekhedabhalla villages respectively. Also in the past the maximum amount of saving was only up to Rs.2000 or even less, and that was only with 27 villagers, but now 40 respondents have even more than Rs.30000 as saving; also in the past informal sources were opted by 42 respondents but now 51 respondents have opted informal sources. Most of them are from Salakhedi and Borekhedabhalla.

**Table 2 Comparison of respondents according to their money kept pre and post inter KVK intervention.**

Sl.No.	Money kept	Salakhedi		Piliyahama		Borekhedabhalla		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	Formal Institution	27	30	14	67	16	26	57	123
2.	Informal Institution	14	18	04	06	24	27	42	51
3.	Not applicable	19	12	91	37	37	27	147	76

It is inferred from the table that both the formal and informal institutions are increasing as far as deposits are concerned. Increasing in saving of formal institution is a good sign; as well as increasing in saving of improved informal institution is not good sign of economic development. The main reasons of this events due to inter relationship is leading in two villages like Salakhedi and Borekhedabhalla, Rajput caste dominant in Piliyahama. All of the farmers are related and maintain their relationship in faithful manner. Majority of respondents savings have opted formal source in Piliyahama and Borekhedabhalla and also saving at Nationalized Bank at Ujjain.

### Intervention point

The rising agricultural production in sampled villages since inception of KVK transfer of technology under TOT programme is a well – recognized fact, while some of the traditional practices like use of ungraded old seed, not using insecticide and improper use of fertilizers have tended to disappear gradually over the selected areas, some new and improved techniques like use of improved seed, proper use of fertilizers and use of insecticide for plant protection have emerged as an important source of earning from cultivation. Mangat and Gill (1999) concluded that the training in the above-cited subsidiary occupations have helped to create self-employment and employment for others along with the consequent enhancement in their incomes.

### CONCLUSION

The study clearly reflects successful diffusion of knowledge and technique for better farm production introduced by KVK in all the three villages. The level of adoption is high. A number of reasons are responsible for it. In economic sense this experiment has led to high farm production resulting thereby improvement in annual income. This has encouraged saving and discouraged indebtedness.

### REFERENCES

- Prasad,C (1990) Krishi Vigyan Kendra- A landmark for vocation training and first line technology transfer: *Mah. Jour. Extn. Edu.*(9);229-235.
- Malasis, L. (1975) Agriculture and development process; tentative guidelines for teaching; *Paris UNESCO Press.*
- Sangramsingh, S.P.; Kanungo,A.P. and Mohaptra,B.P.(1993) Impact of KVK on socio-economic and infrastructure utilization of farmers: *Orissa- Journal of Agricultural Research* (1&2):31-38.
- Mangat,Ramandeep and Gill, L.S. (1990) Krishi Vigyan Kendra : Creating self employment and Generating Income in Punjab. *KURUKSHETRA:* 47 (4).