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SOCIO-ECONOMIC IMPACT OF KRISHI VIGNAN KENDRA ON THE FARMERS IN DAKSHINA KANNADA DISTRICT, KARNATAKA

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Abstract

Krishi Vigyan Kendra or Farm Science Centre is a noble concept developed by Indian Council of Agricultural Research (ICAR) which is a solid base of transfer of technology from research laboratory to farmer's field with respect to Agriculture, Horticulture and allied subjects. It emphasized on the Research on Agriculture and allied subject since 1960 to generate new technology for increasing crop production in different Agro climatic zones of the country. Since then, Farm science centre has been at the forefront of economic development for farm workers. The centre's purpose is to assess the different local and international technologies on offer, and promote any that have sustainable advantages. This study aimed at assessing the socio economic status of farmers after coming in contact with KVK in Dakshina Kannda district, India. The study also looks at the awareness of farmers about the various programmes and services of KVK to boost up the production.

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Keywords:
Farmers;
Krishi Vignan Kendra;
Agriculure;
Innovations;
Impact.

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1. Introduction

Krishi Vigyan Kendra (Farm Science Centre), an innovative and science based institution established to impart vocational training to the farmers and field level extension workers. KVK is now established in every district to cater to the needs of farmers being more location specific as well as resource-oriented. The field based activities are farmer centric and participatory keeping in mind the principle of sustainability. The training programs were designed to impart the latest knowledge to the farmers through work experience by applying the principles of 'Teaching by Doing' and 'Learning by Doing'. The prime goal of KVK is to impart training as per needs and requirements in agriculture and allied enterprises to all farmers, farm women and farm youths including school drop-outs in the rural area. The study aimed at assessing the socio economic status of farmers before and after coming in contact with KVK in Dakshina Kannda district, India.

A farmer or an agriculturer is a person engaged in agriculture activities, raising living organisms for food or raw materials. The term usually applies to people who do some combination of raising field crops, vineyards, poultry or other livestock. A farmer might own the farmed land or might work as a laborer on land owned by others, but in advanced economies, a farmer is usually a farm owner, while employees of the farm are known as farm workers, or farmhands. However, in the not so distant past, a farmer was a person who promotes or improves the growth of a plant, crop, etc. by labor and attention, land or crops or raises animals as livestock or fish.

1.1 Literature Review

Impact of employment generating technologies to empower rural women through KVK India is committed to a steady improvement in the socio-economic conditions and status of women to bring them into the mainstream of national development. Technology is the key to development, to raise income, productivity and living standards of the rural poor. Training on employment generating technologies included three major areas of trust namely cultivation of mushroom, preservation of fruits and vegetables and preparation of products at home. Facilitating marketing arrangements and the frequent visit of the personnel from KVK will help these women to take up the employment generating technologies at a higher percentage level. All women unanimously raised their opinion that the transfer of technology training opened up new vistas in their life and

made them to come out of their village premises removing the cultural, social and economical barriers. Apart from the skill training they learnt importance of values and goal orientation, decision making pattern, resource allocation methods, the needs for keeping clean interior, exterior and adopting balanced menu in their diet. Thus, the training imparted at KVK paved way for their developing personality traits which in turn result in empowerment. (Santhi, P. Sathyavathy Muthu, 2005)

The study results so arrived because of the fact that the vocational training, front line demonstrations and on-farm testing, conducted by the scientists of KrishiVigyan Kendra, motivated the farmers to adopt improved technologies. (Singhal and Vatta, 2017)

Sharma (2002) concluded that the farmers of adopted villages adopting more practices of improved technologies as compared to the farmers of non-adopted villages. Chauhan (2012) stated that the adoption level of the tribal farmers was amplified after imparting training and conducting frontline demonstrations by KrishiVigyan Kendra.

According to Behera et al. (2014) KVK playing a vital role in disseminating the improved crop production technology and helps in increasing the crop yield. The technology transferred is also profitable and acceptable to the farming community. Kharatmol (2006) was also reported that majority of the trained respondents (45.00%) had high level of adoption followed by medium (40.00%) and low level of adoption (15.00%)

1.2 Problem Statement

A lot of technologies were generated through constant efforts of the scientists in KVK to boost up the production. But the technologies so generated in the research field are not transferred through extension agencies of different state Government. It is observed that a lot of technologies could not reach the farmers due to high cost of adoption and lack of interest of extension agencies. Hence the transfer of technology was not complete and effective. The study is an effort to understand the gap in their services and approaches which will input in bringing about positive changes in the partnership of KVK and farmers.

1.3 Scope of the Study

The study findings will be helpful in bringing about awareness among the farmers about all the modern innovative technologies and other programs of KVK during the study process. The study findings and suggestions will be useful for KVK-DK to bridge the gap between the Institution, Extension agencies and the farmers. This process will strengthen the bond between KVK and the farmers, which will promote effective and mutual partnership and participation.

2. Research Method

2.1 Sampling

The study will be conducted in Dakshina Kannada District which includes 5 Taluks namely Mangalore, Puttur, Sullia, Bantwal and Belthangady. The universe of the study is farmers and members of KVK in villages. The sample frame will be built on the KVK data got through the agricultural department. Simple Random Sampling will be used to select 200 respondents from the whole district. The purpose of the study is to understand the impact of KVK on farmers and to spread the awareness of KVK programs in the district.

2.2 Objectives of the study:

- To assess the socio economic status of farmers after coming into contact with KVK.
- To understand the level of awareness with regard to KVK activities in agriculture sector among the farmers.
- To assess the impact of KVK and its programmes on farmers in bringing about positive change in them.

2.3 Methodology

The study was a descriptive in design to best suit the very objectives of the study. The study assessed the status of farm workers interms of the benefits of KVK services and functions. Accordingly the study has also collated suggestions and recommendations based on the response from the beneficiary farmers so that KVK can include those in their future action plans and programmes.

2.4 Tool and Data Collection:

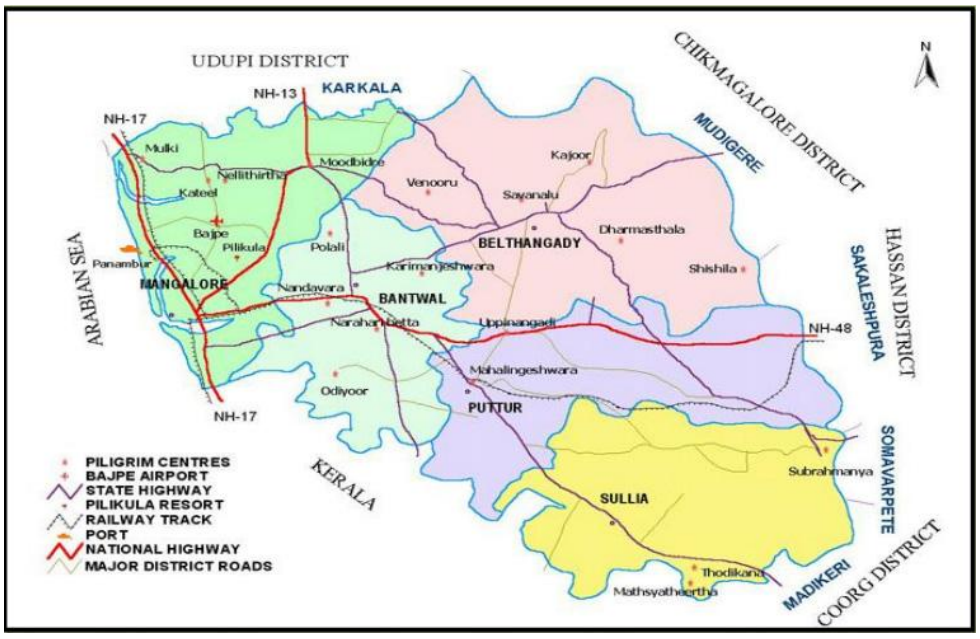
For the present study data has been collected from both the primary and secondary sources. The Primary source of data collection will be through Questionnaire the Queries will include: Profile of the respondents, Farming Problems- marketing, storing, labour, finance, etc., Awareness on KVK, Impact of KVK and Improvement of Programs. The Investigator has consolidated data prevailing in the centre and also interacted and discussed with the scientists to understand their functioning.

Focus Group Discussions were conducted in all Taluks with a help of a checklist which was prepared based on the questions in the Interview Schedule. This process has helped the Investigator to collate qualitative information along with quantitative information which was collected through Interview Schedule.

Data processing and Analysing was done through SPSS.

Figure 1

District Map



3. Results and Analysis

The below tabular presentation and interpretations provides the study outcomes and findings.

Table No. 1

Primary occupation of the Respondents

Primary Occupation	Frequency	Percent
NR	1	0.5
Agriculture	152	76.0
Horticulture	16	8.0
Animal Husbandry	5	2.5
Aquaculture	1	0.5
Integrated Farming	7	3.5
Others	18	9.0
Total	200	100.0

The above table represents the Primary Occupation of the respondents in the study.

A large majority (76%) of the respondents primary occupation was agriculture, while nine percent of them had other profession as their occupation like professionals; labourers etc. Eight percent of them were in the cultivation of Horticultural crops like Banana, Coconut and other plants in the category, while a mere 3.5 percent of them used integrated farming in their lands and 2.5 percent people having animal husbandry in their homes. Only 0.5 percent had aquaculture like cultivating Crabs, Fish, Prawns as their main occupation and the same percent did not respond to the query.

Table No. 2

Total family Land

Total Family Land (in Acres)	Frequency	Percent
Less than 1 Acre	38	19.0
1-10 Acres	135	67.5
11-20 Acres	13	6.5
21-30 Acres	4	2.0
Above 30 Acres	10	5.0
Total	200	100.0

The above table highlights the total family land in acres by respondents. A majority (67.5%) of the respondent's possessed land from 1-10 acres, while 19 percent of them possessed land less than an acre. A small (6.5%) of them possessed land from 11-20 acre, a mere 5 percent and 2 percent possessed land above 30 acres and from 21-30 acres respectively.

Table No. 3

Type of Farmers

Type of Farmer	Frequency	Percent
NR	7	3.5
Landless Labourer	8	4.0
Marginal farmer	26	13.0
Cultivating Owners	148	74.0
Any other	11	5.5
Total	200	100.0

The above table depicts the type of farmer respondents in the study. A large majority (74%) of respondents are cultivating owners, while 13 percent are marginal farmers. A mere (5.5%) belonged to the category of any other farmers. A similar percent of four percent and 3.5 percent are landless labourers and did not respond to the query respectively.

Table No. 4

Agricultural Income of Family

Agricultural Income	Frequency	Percent
NR	6	3.0
Below 10000	11	5.5
Rs.10001 - Rs. 50000	41	20.5
Rs. 50001 - Rs. 1,00,000	46	23.0
Rs. 1,00,001 - Rs. 500000	58	29.0
Rs. 3,00,001 - Rs. 5,00,000	17	8.5
Rs. 5,00,001 - Rs. 7,00,000	6	3.0
Rs. 7,00,001 - Rs. 9,00,000	3	1.5
Rs. 9,00,001 - 11,00,000	2	1.0
Above Rs. 11,00,001	10	5.0
Total	200	100.0

The above table illustrates the agricultural income the family obtains from their produce.

Nearly more than one-fourth (29%) of the respondents stated that their family income from agriculture is between Rs. 1,00,001 - Rs. 500000, while a similar percent of 23 percent and 20.5 percent of them said that their family income from agriculture was between Rs. 50001 - Rs. 1,00,000 and Rs.10001 - Rs. 50000 respectively. 8.5 percent of the respondents stated that their income from agriculture is between Rs. 3,00,001 - Rs. 5,00,000 and 5.5 percent and 5 percent of them stated that they had family income below Rs. 10,000 and above Rs. 11,00,001 respectively. Nearly, three percent of the respondents had their income between Rs. 5,00,001 - Rs. 7,00,000 and did not respond respectively. A mere of 1.5 percent and one percent of the respondents had their income between Rs. 7,00,001 - Rs. 9,00,000 and Rs. 9,00,001 - 11,00,000 respectively.

Table No. 5

Training Programmes organised by KVK

Awareness on Training Programmes organised by KVK	Frequency	Percent
NR	6	3.0
Yes	151	75.5
No	43	21.5
Total	200	100.0

The above table represents Knowledge on KVK respondents. A majority (75.5%) respondents said that they had awareness on training programmes organised by KVK, while 21.5 percent said that they were not aware about training programmes from KVK and a mere three percent did not respond to the query.

Table No. 6

Sources of knowledge on KVK

Sources of knowledge on KVK	NA	Yes	No	Total
Neighbour	5 (2.5%)	22 (11.0%)	173 (86.5%)	200 (100.0%)
Friend	5 (2.5%)	44 (22.0%)	151 (75.5%)	200 (100.0%)
Family Member	5 (2.5%)	12 (6.0%)	183 (91.5%)	200 (100.0%)
SHG	5 (2.5%)	29 (14.5%)	166 (83.0%)	200 (100.0%)
Grama Panchayat	5 (2.5%)	23 (11.5%)	172 (86.0%)	200 (100.0%)

The above table illustrates the various sources from which the respondents got information about KVK. A less than one-fourth (22%) of the respondents stated that they got information about KVK from their friends, while 14.5 percent of them stated that they got information about KVK from Self Help Groups. A similar percent (11.5% and 11%) of them stated that they got information about KVK from Grama Panchayat and neighbours respectively and a mere six percent of the respondents stated that they got information about KVK from a family member.

Table No. 7

Awareness on various Training Programmes organised by KVK

Training Programme organised by KVK	**NA**	**Yes**	**No**	**Total**
Soil Testing Programme	30 (15.0%)	87 (43.5%)	83 (41.5%)	200 (100%)
Value Added Products Programme	30 (15.0%)	57 (28.5%)	113 (56.5%)	200 (100%)
Animal Husbandry Programme	30 (15.0%)	77 (38.5%)	93 (46.5%)	200 (100%)
Ornamental Fishing Programme	30 (15.0%)	54 (27.0%)	116 (58.0%)	200 (100%)
Paddy Cultivation	30 (15.0%)	56 (28.0%)	114 (57.0%)	200 (100%)
Horticulture	30 (15.0%)	50 (25.0%)	120 (60.0%)	200 (100%)
Floriculture	30 (15.0%)	17 (8.5%)	153 (76.5%)	200 (100%)
Vermi Compost	30 (15.0%)	54 (27.0%)	116 (58.0%)	200 (100%)
Kitchen gardening	30 (15.0%)	22 (11.0%)	148 (74.0%)	200(100%)

The above table highlights of various training programmes organised by KVK. A relative majority (43.5%) of the respondents stated that they were aware of the Soil Testing Programme

conducted by KVK, while 38.5 percent of the respondents stated that they were aware of the animal husbandry programmes organised by KVK. A similar percent (28.5% and 28%) of them stated that they were aware of the Value Added Products Programmes and Paddy cultivation respectively, while 27 percent of them were aware of the programmes like ornamental fishing and vermi-compost. One-fourth (25%) of the respondents were aware of the horticultural programme organised by KVK. A small percent (11% and 8.5%) of them stated that they were aware of the floriculture and kitchen gardening organised by KVK.

Table No 8

Type of Help Received

Type of Help Received	NA	Yes	No	Total
Workshop/ Training	10 (5%)	101 (50.5%)	89 (44.5%)	200 (100%)
Demonstration	10 (5%)	87 (43.5%)	103 (51.5%)	200 (100%)
Field Visit	10 (5%)	100 (50%)	90 (45%)	200 (100%)

The above table represents the type of help/support received from KVK by respondents. A majority (50.5%) of the respondents said that they get help from workshop/training received by the KVK, while 43.5 percent of them stated that they got help from the demonstration given by the KVK and 50 percent stated that they got help by the field visits done by the KVK.

Table No. 9

Impact of KVK on the Farmers

Impact on farmers	**NA/NR**	**Yes**	**No**	**Total**
Better livelihood	10 (5%)	54 (27%)	136 (68%)	200 (100%)
Knowledge	10 (5%)	139 (69.5%)	51 (25.5%)	200 (100%)
Awareness	10 (5%)	86 (43%)	104 (52 %)	200 (100%)
Self-confidence	10 (5%)	67 (33.5%)	123 (61.5%)	200 (100%)

The above table represents the ways in which the Krishi Vignan Kendra (KVK) has benefitted the farmers and his family. A majority (69.5%) of the respondents said that they had better Knowledge with regard to agriculture, while 43 percent of them were benefitted through awareness on various aspects of farming, innovative technologies, etc. 33.5 percent of them stated that through KVK, they increased the self-confidence to use the techniques suggested by them and it gained confidence to sell the product at reasonable price and 27 percent stated it increased their livelihood by adopting innovative farming strategies which yielded them a good productivity and profit vice versa..

Table No. 10

Impact of Programmes on the Income

Impact of Programmes on the Income	**Frequency**	**Percent**
NA/NR	19	9.5
Yes	114	57.0
No	67	33.5
Total	200	100.0

The above table represents whether there was an impact of the programmes conducted on the income of the farmers and their family. A majority (57%) of the respondents stated that there was a positive impact of the programmes conducted on the family income, while 33.5 percent respondents said that there was no impact of the programmes conducted on the family income of the farmers and a mere 9.5 percent did not respond to the query.

Table No. 11

Economic Indicators

Economic Indicators	**NA/NR**	**Yes**	**No**	**Total**
Home Appliances	80 (40%)	18 (9%)	102 (51%)	200 (100%)
Built house/Renovation	80 (40%)	28 (14%)	92 (46%)	200 (100%)
Vehicle	80 (40%)	35 (17.5%)	85 (42.5%)	200 (100%)

New Pump Set	80 (40%)	19 (9.5%)	101 (50.5%)	200 (100%)
Electrification	80 (40%)	7 (3.5%)	113 (56.5%)	200 (100%)
New Well/ Borewell	80 (40%)	11 (5.5%)	109 (54.5%)	200 (100%)

The above table represents the Economic indicators of the impact on the farmers and their families. Nearly less than quarter (17.5%) of the respondents stated that they benefited by purchasing a vehicle, while 14 percent of the respondents stated that they benefited and it helped them in building a house/ renovation of house. A similar percent (9.5% and 9%) of them stated that it helped them to purchase new pump set and home appliances respectively, 5.5 percent of them stated that it helped them to build a new well/borewell and a mere 3.5 percent of them had electrified their house through the income got.

4. Conclusion

The section Results and Analyses clearly discussed on the impact of Krishi Vignan Kendra on their Socio-Economic status. KVKs as institutes of inducing behavioural change are being managed by both government and non-government organizations. Literally, KVKs have to serve as repository of scientific knowledge that is useful to the entire district, which is its jurisdiction. In India, agricultural extension and extension education are interchangeably used with the same connotation “Extending Information” as a means of educating people to solve their problems. As a result, agricultural extension in India is more of “Informative Extension” than “Emancipatory Extension”. To achieve greater impact, KVKs should mobilise and utilise the network of Gram Panchayats and local organisations including CBOs/NGO’s to reach out entire community of farmers. The future study is planning to gather farmers’opinion and suggestions with regard to the functioning of KVKs which would be a participatory and a democratic inclusiveness of the farmers to achieve integrated and sustainable development.

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