https://doi.org/10.56572/gjoee.2024.37.1.0017 Gujarat Journal of Extension Education Vol. 37 : Issue 1 : June 24

IMPACT OF KRUSHI VIGYAN KENDRA ON KNOWLEDGE LEVEL OF POTATO GROWERS ABOUT POTATO PRODUCTION TECHNOLOGY

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ABSTRACT

Agriculture is the most pivotal sector of Indian economy in the current phase of development. There is need for transfer of improved agricultural technology from research station to the farmer's field. The ICAR mooted the idea of establishing KVK for imparting vocational training to the farmers and field level extension functionaries. The present study was conceived with measuring the impact of KVK in terms of knowledge of farmers about potato production technology in Deesa KVK of Banaskantha district of Gujarat State. For research study, from seven talukas of KVK, Banaskantha-I (Deesa) four taluka and total twelve villages from each selected talukas was purposively selected on the basis of maximum numbers of activities carried out by KVK, Deesa. From each selected villages 10 beneficiary and 10 non beneficiary potato growers were selected randomly. Thus, 120 beneficiary and 120 non beneficiary potato growers were selected for the study. Ex-post facto research design was used for this study. Results of the investigating showed that nearly three-fifths (57.50%) of the beneficiary farmers had medium level of knowledge followed by 25.00 per cent with high and 17.50 per cent with low level of knowledge about potato production technology. Whereas, half (50.00%) of the non beneficiary farmers had medium level of knowledge, whereas remaining 31.67 per cent and 18.33 per cent of non beneficiary farmers had low and high level of knowledge about potato production technology, respectively.

Keywords: *impact, knowledge, potato production technology*

INTRODUCTION

Agriculture is the most pivotal sector of Indian economy in the current phase of development. Therefore, the transformation of traditional agriculture to modern agriculture is a challenge to fulfill the requirements of over increasing population. The low productivity of agriculture has generally been attributed to traditional methods of farming in adequacy of resources and lack of required technical know-how. It has also been recognized that if, progress has to be achieved in agriculture production the farmers have to adopt improved methods of farming. There is need for transfer of improved agricultural technology from research station to the farmer's field. Appropriate training to the farmers is very crucial to increase agricultural production with a view to get benefit. To assist these huge masses, innovative programme related to transfer of technology were launched in our country. Indian Council of Agricultural Research (ICAR) mooted the idea of establishing Krushi Vigyan Kendra (Farm Science Centre) as innovative institutions for imparting vocational training to the farmers and field level extension functionaries. KVK in the country is the primary links for the farmers to know about the agricultural technologies being generated. They act as the training centers for the transfer of technology with an aim to reduce the time lag between technology generation and their transfer. The impact of the important trainings may be judged in terms of knowledge and adoption of technology by the farmers. In line to the performance of KVKs, on doubt, a significant contribution must have been made by the trainings in direction enhancement of knowledge, skill and attitude of the trainees and also must have enhanced the farm productivity as ultimate results. Therefore, it is necessary to examine the impact of Krushi Vigyan Kendra on level of knowledge, adoption and attitude towards various activities of Krushi Vigyan Kendra. With this task in view a study entitled, "Impact of Krushi Vigyan Kendra, Banaskantha-I on potato production technology" was conducted with following specific objectives.

OBJECTIVE

To study the impact of Krushi Vigyan Kendra on knowledge level of potato growers about potato production technology

MATHODOLOGY

The present study was undertaken in KVK at Deesa of Banaskantha district. Gujarat state has 33 districts, out of

which Banaskantha district was selected for this study as Krishi Vigyan Kendra, Banaskantha-I (Deesa) is situated in this district. Banaskantha-I (Deesa), was first KVK in Gujarat state is established in 22nd February, 1976 in the 5th five years plan of the ICAR. This KVK was under Sardarkrushinagar Dantiwada Agricultural University Jurisdiction. The study was confirmed to Ex-Post Facto research design. The multistage sampling technique was used for select a representative sample of respondents for present investigation. Out of 14 talukas of Banaskantha District Deesa, Dantiwada, Vadgam and Palanpur taluka was purposively selected on the basis of maximum numbers of activities carried out by Krushi Vigyan Kendra, Banaskantha-I (Deesa). From each selected talukas three villages were selected purposively on the basis of maximum numbers of beneficiary and more number of activities carried out by Krushi Vigyan Kendra, Banaskantha-I (Deesa). Thus, total twelve villages were selected. From this list, ten beneficiary potato growers from each village were selected randomly for the study. Thus, 120 beneficiary potato growers were selected for the study. To know the impact of KVK, the same numbers of non beneficiary potato growers were selected randomly from same villages. Thus, altogether 120 beneficiary and 120 non beneficiary potato growers were selected for the study. Thus, total 240 potato growers were selected. The data were collected by personal contact method with the help of structured interview schedule and collected data were coded, classified, tabulated and analyzed in light of objective and in order to make the findings meaningful for drawing meaningful interpretation.

RESULTS AND DISCUSSION

In the present study knowledge refers to know-how about different potato production technology possessed by the farmers. Adequate knowledge is essential to farmers for the success and profitable cultivation. It was therefore thought necessary to obtain information from the farmers about the knowledge they possessed about potato production technology. The data regarding level of knowledge are given in Table 1.

Table 1: Distribution of the potato growers according to their knowledge level about potato production technology

(n = 240)

Sr. No.	Knowledge Score	Beneficiary farmers (n-120)				Non beneficiary farmers (n-120)		
		Frequency	Per cent	Score	Frequency	Per cent		
1	**Low**	(<17.36)		20	16.67	(<14.06)	38	31.67
2	**Medium**	(≥17.36 to <23.95)		68	56.66	(≥14.06 to < 20.31)	60	50.00
3	**High**	(≥ 23.95)		32	26.67	(≥ 20.31)	22	18.33
Mean		20.65				17.19		
S.D.		3.29				3.12		
'Z' value		Calculated value : 5.287**						

The data presented in Table 1 portray that nearly three-fifths (57.50%) of the beneficiary farmers had medium level of knowledge about potato production technology followed by 25.00per cent with high and 17.50 per cent with low level of knowledge about potato production technology. Whereas, half (50.00%) of the non beneficiary farmers had medium level of knowledge, whereas remaining 31.67 per cent and 18.33 per cent of non beneficiary farmers had low and high level of knowledge about potato production technology, respectively.

As evident from Table 1, 'Z' value (5.287**) was found to be highly significant, which indicate that beneficiary potato growers had significantly higher knowledge regarding potato production technology than on beneficiary potato growers, the significant difference in knowledge provide sufficient ground to reject the null hypothesis (H_{01}).

The probable reason for having highly significant difference may be that beneficiary potato growers had better participation in the organization training and demonstrations on recommended potato production technology and the participants were provided with necessary guidance and technical knowledge concerning potato production technology. In depth training was also provided to participating beneficiary potato growers covering full package of practices. This finding is in the line with the findings of Dhayal and Mehta (2018), Kakkad (2019), Chaudhari (2020), Chaudhary *et al.* (2020) and Vaishali (2020).

Practice-wise knowledge level of the potato growers about potato production technology

The information regarding practice-wise knowledge level of the potato growers about potato production technology is furnished in Table 2.

Table 2.: Practices-wise knowledge of the potato growers about potato production technology

(n = 240)

Sr. No.	Name of practices	Maxi. score obtained score	Beneficiary farmers (n = 120)			Non beneficiary farmers (n = 120)		
			Per Cent	Obtained score	Rank	Per cent	Obtained score	Rank
1	**Preparation of land**	240	226	94.16	I	185	77.08	I
2	**Improved varieties**	360	327	90.83	II	287	71.38	III
3	**Seed rate**	120	94	78.33	VI	70	58.33	VII
4	**Seed treatment**	240	162	67.50	VIII	136	56.66	VIII
5	**Planting time and method**	240	213	88.75	III	176	73.33	II
6	**Spacing**	120	103	85.83	IV	78	65.00	IV
7	**Earthing-up**	120	52	43.13	XIII	45	37.50	XIV
8	**Nutrient management**	480	280	58.33	X	240	50.00	X
9	**Irrigation management**	480	318	66.25	IX	263	54.79	IX
10	**Crop rotation**	120	50	41.66	XIV	48	40.00	XIII
11	**Weed management**	240	136	56.66	XI	112	46.66	XI
12	**Plant protection measures**	480	244	50.83	XII	204	42.50	XII
13	**Harvesting**	120	100	83.33	V	75	62.50	V
14	**Post-harvest management**	240	174	72.50	VII	144	60.00	VI

In case of beneficiary farmers, practices-wise knowledge level of the potato growers about potato production technology in descending order was: (I) preparation of land (94.16%), (II) improved varieties (90.83%), (III) planting time and method (88.75%), (IV) spacing (85.83%), (V) harvesting (83.33%), (VI) seed rate (78.33%), (VII) post-harvest management (72.50%), (VIII) seed treatment (67.50%), (IX) irrigation management (66.25%), (X) nutrient management (58.33%), (XI) weed management (56.66%), (XII) plant protection measures (50.83%), (XIII) earthing-up (43.13%) and (XIV) crop rotation (41.66%).

In case of non beneficiary farmers, practices-wise knowledge level of the potato growers about potato production technology in descending order was: (I) preparation of land (77.08%), (II) planting time and method (73.33%), (III) improved varieties (71.38%), (IV) spacing (65.00%), (V) harvesting (62.50%), (VI) post-harvest management (62.00%), (VII) seed rate (58.33%), (VIII) seed treatment (56.66%), (IX) irrigation management (54.79%), (X) nutrient management (50.00%), (XI) weed management (46.66%), (XII) plant protection measures (42.50%), (XIII) earthing-up (40.00%) and (XIV) crop rotation (37.50%).

CONCLUSION

The analysis of data indicate that great majority (82.50%) of beneficiary farmers had medium to high and (81.67%) non beneficiary farmers had low to medium level of knowledge about potato production technology. It means this may be perhaps due to positive impact of KVK activities. Beneficiaries farmers have favourable attitude towards various activities carried out by KVK, having close contact with KVK scientists, extension agencies and were using a greater number of sources of information, higher mass media exposure and active involvement in various extension activities of beneficiary farmers. Hence, beneficiaries possessed with more knowledge than then non beneficiaries farmers about potato production technology. They were more innovative than non beneficiaries farmers.

CONFLICT OF INTEREST

The authors of the paper declare no conflict of interest

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Received : Dececember 2023 : Accepted : March 2024