

Sources of Information and Perception of Farmers towards Soil Testing Techniques

Shalini Khajuria¹, Vishal Raina^{2*} and Bharat Bhushan¹

¹Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, India

²Junior Agriculture Extension Officer, Department. of Agriculture Jammu, India

*Corresponding author: vishextn@gmail.com

ABSTRACT

Understanding what farmer needs to know and from whom they receive information during the course of cultivation is essential to ensuring quality production. Sources of farm information are the tool of communication web that holds a society together and it is a collection of small and relatively isolated agricultural communities. The information hungry farmers are approaching very many sources and channels for getting information on farm innovation. The success of an extension approach will depend on how it enhances the information flow along the agriculture value chain, and whether this is done sustainably and effectively. The right doses of chemical fertilizers application by the farmers in crops are very much essential to achieve maximum production and to earn maximum profit. Soil testing techniques helps the farmer's for reasonable application of chemical fertilizers. The farmers will be able to know how much nutrients are already available in the soil and how much additional fertilizer nutrient will be arranged for a particular crop. The lion's share of farmers had information about soil testing techniques. Majority of respondents were using the information gained from the personnel of State Department of Agriculture and the scientists working in Krishi Vigyan Kendra in the study area. Majority of farmers agreed with the statement "Soil testing is basic step for quality crop production". The efforts should be made by State Department of Agriculture and KVK to encourage the farmers in acceptance of soil testing process by organizing training programmes and campaigns especially on soil testing techniques.

Keywords: Information sources, soil testing techniques, perception

Sources of farm information are very essential tools for the transfer of information about agriculture sector and it plays a very significant role in agricultural development and dissemination of latest agricultural technologies among the farmers. Information is a critical input for Agricultural Development which can be efficiently converted in to economically rewarding opportunities. The framework centers on farmers' needs for information consider the type of information needed in various contexts, which can also include links to postharvest and consumer demands. At each link, information is exchanged and shared by a number of actors, including input suppliers, cooperatives, traders, processors, nongovernmental organizations (NGOs), and government extension services. The success of an extension approach will depend on how it enhances the information flow along the agriculture value chain, and whether this is done sustainably and effectively.

The research studies revealed that most of the farmers are using continuously larger quantities of chemical fertilizers to increase production without knowing the fertility status of the soils of their fields (Srivastava and Pandey, 1999). Soil testing is a valuable tool as it determines the inputs required for efficient and economic production. A proper soil test will help ensure the application of enough fertilizer to meet the requirements of the crop while taking advantage of the nutrients already present in the soil. After testing the soil, farmers can know the exact amount of nutrients to be applied for a particular crop.

Therefore, soil testing will definitely be helpful to the farmers in achieving maximum production and in earning max profit. So it is essential to create recognition among farmers about right use of chemical fertilizers. Keeping in view the usefulness of soil testing towards excellent production of

crop and paramount net profit of cultivator, this investigation was carried out in the district of Doda of Jammu and Kashmir with the pursuing objectives:

- i. To find out the sources of information of farmers toward soil testing techniques.
- ii. To analyze the farmers' perception towards soil testing method.

METHODOLOGY

The study was purposively conducted in Assar community block of Doda district Jammu and Kashmir in 2011-2012. Ten villages from the block were selected purposively. From each selected village fifteen farmers randomly selected from each village who have availed soil-testing technique formed the sample. Thus, total numbers of farmers from eight villages were 150. The data was collected by personal interview method with the pre-tested schedule designed for the purpose.

The information of farmers about soil testing technique was studied in terms of their positive and negative response percentages. The sources of information utilized by the respondents were studied in terms of their frequency of contact and credibility towards ten different sources of information. Mean scores and ranking method were employed to understand the preference of soil testing towards the information source. The farmers' perception according towards soil testing techniques was categorized into the schedule consisted of ten statements about soil testing techniques. The scoring of each statement was done on an index with three-point continuum (agree, undecided and disagreed) based on the degree their perception regarding soil

testing techniques and response of the respondent were calculated on the basis of percentages.

RESULTS AND DISCUSSION

The pattern of information and communication exchange among farmers constitutes an integral part of their farming system (Ramirez, 1997). The data in Table 1 indicated the information of the respondents about soils testing techniques. Majority of the farmers (74.60 per cent) had information about soil testing techniques. Only (25.40%) respondents had no information of soil testing techniques. The information about soil testing techniques had been found satisfactory.

Table 1: Information of farmers about soil testing techniques

Sl. No.	Response	No. of Respondents	Percentage
1	Positive	112	74.60
2	Negative	38	25.40

The data in Table 2 indicated that majority of respondents (30 and 24.00%) were using the information from the Extension functionaries of Agriculture Department and Subject matter specialists/scientists working in Krishi Vigyan Kendra in the study area. Ten per cent respondents shared their information with progressive farmers of the area. Eight per cent respondents collect information from radio. Six per cent respondents collected information from Agricultural magazines and extension literature and more than five per cent on Kissan Mela/Kissan Gosthi for information about soil testing techniques. Four per cent respondents

Table 2: Distribution of respondents according to utilization of source of information

Sl. No.	Source of Information	Frequency	Percentage	Ranking
1	Agricultural magazines and Extension Literature	9	6.00	VI
2	Progressive Farmers	15	10.00	III
3	KVK Subject Matter Specialists/ Scientists	38	25.40	II
4	Extension functionaries of Agriculture Department	45	30.00	I
5	Agricultural Input Supply Sectors	4	2.67	IX
6	Radio	12	8.00	IV
7	Television	3	2.00	X
8	Neighbour/Relatives	6	4.00	VIII
9	No Information	10	6.60	V
10	Kissan Gosthis / Kissan Mela	8	5.33	VII

Table 3: Distribution of respondents according to their perception towards soil testing techniques

Sl. No.	Statements	Response of 150 respondents					
		Agree	%age	Undecided	%age	Disagreed	%age
1	Satisfying behaviour of soil testing staff	52	34.67	14	9.33	84	56.00
2	Reliable soil testing results	54	36.00	10	6.67	86	57.33
3	More crops grown in one year after soil testing	43	28.67	16	10.66	91	60.67
4	Soil testing is basic step for quality crop production	119	79.33	6	4.00	25	16.67
5	Timely delivery of results	32	21.33	28	18.67	90	60.00
6	Prolonged soil testing process	90	60.00	16	10.66	44	29.34
7	Vanishing of time and money in the process	25	16.67	9	6.00	116	77.33
8	Reduces the cost of cultivation after soil testing	110	73.33	12	8.00	28	18.67
9	Unsatisfactorily results	42	28.00	24	16.00	84	56.00
10	Method of taking soil sample is complex process	30	20.00	18	12.00	102	68.00

collected information from neighbour/relatives while two per cent respondents gained information through television. About seven per cent farmers had no information of soil testing techniques.

The results in Table 3 indicated that the majority of respondents were in disagreement with the statements and mostly adaptors possessed unfavourable perception towards soil testing techniques but it could also be pointed that sometimes they had showed positive perception because most of adaptors (77 %) did not agree with the statement that " Vanishing of time and money in the process".

When the respondents were asked about "Reliable soil testing results" only 36 per cent adopters agreed with the statement whereas 57.33 per cent adopters disagreed with it. Sixty per cent adopters said that, "Prolonged soil testing process". This means the soil testing agencies are not working properly in the area and the farmers did not show much faith on the results of soil testing and they felt that it is very long process. It was also observed that majority of farmers agreed (79.33%) with the statement "Soil testing is basic step for quality crop production". It means the farmers' perception was generally conventional.

CONCLUSION

The information sources should provide update information, educate and motivate the community to accept new ideas and technologies so as to enhance their living conditions. The study revealed that the soil testing techniques was well known to the farmers and they also knew its importance. But the perception of farmers towards soil testing techniques

was inconvenient. The attempts should be made by Agriculture Department and KVK to encourage the farmers in adoption of soil testing techniques by organizing training programmes and campaigns especially on soil testing process. Mobile soil testing laboratories should be encouraged at each block level and to visit the villages sometime to test the soil samples at their doorsteps in the villages itself before the onset of crop season. By doing this, the reliability of results of soil samples could be increased among the farmers widely in future for better cultivation. The adoption of the soil testing techniques would promotes fertilizers consumption efficiency and also avoid losses of chemical fertilizers, which ultimately increased in net economic benefits to farmers.

REFERENCES

- Adams, R.M., Farris, P.J. and Menkhaus, D.J. 1983. Response Functions and the Value of Soil Test Information: The Case of Sugar Beets. *North Central Journal of Agricultural Economics* 5(2): 77-82.
- Ajayi, M.T. 2002. Source of information of improved technologies adopted by farmers: a study of Akinyele local government area of Oyo State, Nigeria. *Journal of Extension Systems*, 18(2).
- Fakoya, E.O, Agbonlahor, M.U. and Dipeolu, A.O. 2007. Perception of Women Farmers Towards Sustainable Land Management Practices in South-Western Nigeria. *World Journal of Agricultural Sciences* 3(4): 536-542.
- Pagaria, P. 2011. Knowledge and attitude of small and marginal farmers towards soil testing. *Journal of Advances in Developmental Research*, 2(2): 171-173.

