Research Note :

TRAINING NEEDS OF FARMERS IN BASMATI RICE PRODUCTION PRACTICES IN HARYANA – AGRICULTURAL SCIENTISTS PERCEPTION ANALYSIS

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Basmati rice is an important crop of Haryana, Punjab and Western Uttar Pradesh. Although its production is less, but it generates high income, earning normally three times higher price than non-basmati rice in the international as well as domestic market. Basmati rice due to its unique quality and fragrance is exported to United Arab Emirates, Soudi Arabia, United Kingodom, United States of America, Canada and so many other countries. During triennia ending 2000-01, share of basmati and non-basmati rice in total exports was 8 per cent and 7 per cent, respectively. After the implementation of WTO agreement, the agricultural exports have undergone significant changes in its content and composition, particularly after 1994-95. In a study conducted by National Council of Applied Economic Research, it has been observed that the free trade is likely to benefit India immensely since it is competitive in wheat, rice, cotton and sorghum. Besides, the recent spurt in agricultural exports and their diversification from traditional commodities like coffee, tea and spices into areas like marine products, cashew, kernel, oilseeds, rice, fruits and processed food, confirm that the agricultural sector enjoys a great comparatrive advantage (Gulati and Sharma, 1999). In Haryana, Taraori basmati and basmati 370 are the important traditional basmati types, which quality for export among the hundred of indigenous types avaialble in India. Basmati occupies 30-40 per cent of rice in Haryana state. Moreover, about 80 per cent area of basmati rice is covered in Karnal, Kurukshetra, Kaithal and Panipat districts of Haryana. According to package of practices CCSHAU, Hisar average yield of basmati rice is 10.5 quintal per acre, whereas trend of productivity clearly shows that farmers were harvesting 7.2 quintals per acre, hence available information suggests that the productivity can be increased further, provided its cultivation is done by adopting recommended package of practices, along with quantitative & qualitative improvement in the basmati rice, it will facilitate in getting more foreign exchange in the coming WTO period since India has become an important part of the International market by signing WTO agreement.

It is well established fact that people's needs are the basis for developing meaningful training programmes. So, in order to tap the full potential by any programe more meaningfully, it is imperative on the part of organizers to identify the training needs of the farmers. It is in this context that a study was planned to identify the training needs of farmers in Basmati Rice production practices in Haryana.

METHODOLOGY :

The study was carried out purposively in Basmati growing districts i.e. Karnal, Kurukshetra, Kaithal and Panipat of Haryana

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State during the year 2000-2001. The data was gathered from 60 Scientists of CCS HAU, Hisar, who were serving at Regional Research Stations, Krishi Vigyan Kendras situated in the aforesaid districts.

In order to ascertain the training needs of basmati rice growers, 13 main areas were identified for the purpose after discussing with scientists/extension workers and few innovative farmers of the study area. A three-point rating scale i.e. most essential, essential, not essential with the score of 3, 2 and 1, respectively was used to assess the training needs of the farmers in the areas of basmati rice production practices. The respondents were interviewed to indicate any one of the three alternative responses against each item of the areas, depending upon their perception about level of training needs of farmers. First of all total obtained training need score of a particular item was calculated considering the responses expressed by all the respondents. Then the mean score of a particular item was worked-out by dividing the total obtained score of that particular item with a total number of respondents (60). Finally based on the mean score of the rank order of preference for training in a particular area was found by following the class intervals of the scores assigned to the three point of the rating scale at illustrated of the scores assigned to the three point of the rating scale at illustrated below: 2.25 – 3.00 = Most essential, 1.50 – 2.24 = essential, 0.75 – 1.49 = not essential.

RESULTS AND DISCUSSION :

Table 1. reveals the ranking of different areas in which the basmati rice growers need training. Here plant protection practices have

Table 1. Training Needs of Farmers in Basmati Rice Production Practices-Agricultural Scientists Perception Analysis.

Sl. No.	Area of Basmati Rice prod. Practices	Level of training			Total obtained score	Mean score	Rank value	Category preference
		Most essential	Essential	Not essential				
	A. Agronomic							
1.	Optimum Plant Population	30	22	08	142	2.37	IV	I
2.	Recommended number of seedling per hill.	33	11	16	137	2.27	V	I
3.	Optimum time of transplanting	16	32	12	124	2.07	VIII	II
4.	Proper and timely application of fertilizer	08	20	32	94	1.57	X	II
5.	Foliage pruning of excessive vegetative growth	01	19	40	81	1.35	XII	III
6.	Application of higher doses of nitrogenous fertilizer	16	11	33	103	1.72	IX	II
7.	Importance of application of zinc fertilizer	12	19	29	93	1.56	XI	II
	B. Plant protection							
8.	Awareness about incidence of blast disease	32	24	04	148	2.47	II	I
9.	Awareness about incidence of stem borer	41	11	08	153	2.55	I	I
10.	Chemical seed treatment	08	48	04	124	2.07	VII	II
11.	Diagnosis of pest and disease problem	34	15	11	145	2.42	III	I
12.	Application of insecticides and pesticides at right time	27	21	12	135	2.25	VI	I
13.	Application of insecticides and pesticides with recommended dozes	15	32	13	122	2.03	VIII	II

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got top priority as compared to agronomic practices. Basmati rice growers suffer a great loss every year on account of attack of insect-pests and diseases in their crop. Probably this might be the reason that agricultural scientists perceived plant protection to be the most important area, where farmers needed training.

A-Agronomic practices

This component has been viewed with regard to its seven sub-areas. Among the seven agronomic practices of basmati rice "Optimum plant population" was the most essential and ranked number one for the inclusion in the list of training needs of basmati rice cultivation. Recommended number of seedlings, optimum time of transplanting, application of higher doses of nitrogenous fertilizer, proper and timely application of fertilizers, importance of application of zinc fertilizer followed by foliage pruning of excessive vegetative growth in the descending order of priority on the basis of mean score and rank value. Optimum plant population ranked first in the training need of farmers as perceived by the agricultural scientists. This might be due to the reason that the rice transplantation is done manually by the hired labourers, and it is beyond the control of farmers. the recommended seedling per sq. mtr. is 35 to 40, whereas the usual practice is 18-22 seedling per sq. mtr.

B-Plant protection practices

Table-1 reflected out that awareness about incidence of blast disease and their control, awareness about incidence of stem borer and their control, diagnoses of pest and disease problem and application of insecticide and pesticide at right time were categorized priority areas of training needs of basmati rice cultivation as perceived by scientists. It is interesting to not that plant protection practices have got priority to that of agronomic practices. This might be due to the reason that every year basmati rice grower suffered a great loss on account of severe infestation of insect pest and diseases in particular and also in the study area short training programme for basmati cultivation is being organized wherein such important practices had not been fully discussed because such practices demand sufficient time. Hence it suggests that a separate training programme should be organized for plant protection practices of basmati rice cultivation for extension agencies to make an extensive efforts which may dilute the technical knowledge.

CONCLUSION :

The findings of the study pointed out that the training needs related to plant protection practices are of much concerned as compared to agronomic practices. Among the agronomic practices the maintenance of optimum ranked first and so far as plant protection practices are concerned, awareness about incidence of blast disease, stem borer and their control, diagnosis of pest and disease problem, application of insecticide and pesticides at right time were ranked first as perceived by agricultural scientists. Probably this might be the reason that farmers need to learn and apply about plant protection practices of their crops timely and effectively as the economics of

Basmati rice largely depends upon timely remedial of insect, pest and diseases. Therefore, it is very necessary on the part of training organizers to reorient the training programme for Basmati rice growers attention on the above mentioned aspects.

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