



Present Status of the Vegetable Production Technology in Kullu Valley of Himachal Pradesh

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ABSTRACT

This study was conducted in Kullu district of Himachal Pradesh to know the status of adoption of the vegetable production technology by the vegetable producers and to find out the constraints faced by them in the adoption of improved vegetable production technology. From the comprehensive list of farmers of 20 villages, 30 farmers (Small, Medium and Large) from each village were selected randomly. Thus, 600 farmers were included in this study. The majority of the vegetable producers fell under the partial adoption category like the use of fungicides/insecticides (57.50%), application of fertilizers (50.00%), preparation of soil (48.33%), seed rates (47.33%) and harvesting of crops (34.83%). Most of the vegetable growers (72.17%) belonged to low level of adoption of vegetable production technology. However, 23.67 per cent vegetable growers had a medium level of adoption. A mere (4.17%) vegetable growers fall under high adoption level group. Regarding constraints majority (92.50%) of vegetable growers expressed the constraints of non-availability of labours as required followed by the high cost of seed (87.50%), high cost of fertilizers (85.00%) and lack of knowledge about vegetable production technology (78.33%).

Keywords: Adoption, constraints, Vegetable producers, vegetable production technology

ARTICLE INFO

Received on	: 05.05.2014
Revised received on	: 14.06.2014
Accepted on	: 05.07.2014
Published online	: 07.09.2014

INTRODUCTION

Vegetables are the most important human diet for better health, because they possess high nutritive value and are rich sources of carbohydrates, proteins, vitamins and minerals. Vegetables are a good source of dietary protein, especially pod bearing vegetables like pea, beans including faba bean (Singh *et al.*, 2010). The selection of the research area in the Kullu Valley of Himachal Pradesh was due to the very good conditions for temperate vegetable production of the same. Hence the area was suitable for both that the vegetable production and their breeding for most of the temperate types of vegetables. The summer being mild was suitable for many sub-tropical important vegetables. Still in this area the vegetable production is low, because the rate of adoption of improved vegetable production technology is not fully adopted by the farmers in their own field (Suman, 2008). Even if they produce, the marketing problems are faced by them. Therefore, this research programme is aimed to find out the adoption

behavior of the farmers about the vegetable production technology.

MATERIALS AND METHODS

The present study was conducted in Kullu district of Himachal Pradesh in India. Out of 12 districts of Himachal Pradesh, Kullu district was selected purposely. Participatory rural appraisal (PRA), a widely adopted methodology to prioritize list of researchable issue, has been conducted to identify the important cause of such low productivity. PRA techniques revealed several factor responsible for vegetable productivity related to inputs and their efficient management (Singh *et al.*, 2010). It covers five Community Development Blocks (Manali, Kullu, Banjar, Ani and Nirmand); two blocks were selected for this study. Out of these two blocks, ten villages were selected randomly in each block with the help of random number table, so the total villages for study were 20. From the comprehensive list of farmers of 20 villages, 30 farmers (Small, Medium and Large) from each village were selected randomly. Thus, 600 farmers were included in this study.

RESULTS AND DISCUSSION

Practice wise adoption of vegetable production technology

Data presented in table 1 revealed that half of the vegetable producers were under fully adoption category like sowing time (59.00%), selection of soil (52.17%), and application of FYM (52.00%). Few vegetable producers fell under the category fully adoption like use of herbicides (2.33%) and Marketing of products (5.67%). None of the vegetable producers under practices i.e. use of fungicides / insecticides and grading of crops (0%). Majority of the vegetable producers were fall under the partial adoption category like use of fungicides/ insecticides (57.50%), application of fertilizers (50.00%), preparation of soil (48.33%), seed rates (47.33%) and harvesting of crops (34.83%). Few farmers under partial adoption category like grading of crops (24.17%) and none of the vegetable producers under partial adoption category like use of herbicides (0%). Some of the practices were not adopted by the vegetable producers under no adoption category like use of herbicides (100.00%), grading of the product (75.83%), marketing of the product (66.33%), recommended dose of fertilizers (58.50%), water management (57.33%) and harvesting of crop (54.00%). Few vegetable producers adopted some of the practices under no adoption category like selection of soil, sowing time and preparation of soil etc.

Overall adoption level

It was indicated from the table 2 that the most of the vegetable growers (72.17%) belonged to low level of adoption of vegetable production technology. However, 23.67 per cent vegetable growers had medium level of

adoption. A mere (4.17%) vegetable growers fall under high adoption level group.

Table 2: Distribution of vegetable growers according to their level of adoption (N = 600)

Sr. No.	Category	Frequency	Per cent
1.	Low level adoption	433	72.17
2.	Medium level adoption	142	23.67
3.	High level adoption	25	4.17

Constraints Faced by the Farmers in Adoption of Vegetable Production Technology

It was shown in table 3 that majority (92.50%) of vegetable growers expressed the constraints of non-availability of labours at the time of requirement followed by high cost of vegetables seed (87.50%), high cost of fertilizers (85.00%) and lack of knowledge about vegetable production technology (78.33%). Some of the vegetable producers expressed medium type of constraints i.e. Non-availability of Farm Yard Manure (71.33%), High cost of pesticides (68.17%), Lack of irrigation water (65.67%) and Lack of money to purchase of costly seed (64.67%). The vegetable growers had faced fewer constraints as lack of training as per requirement (56.67%) and lack of extension services (62.50%).

CONCLUSION

From the comprehensive list of farmers of 20 villages, 30 farmers (Small, Medium and Large) from each village were selected randomly. Thus, 600 farmers were included in this study. Majority of the vegetable producers were fall under the partial adoption category like use of fungicides / insecticides (57.50%), application

Table 1: Distribution of vegetable growers according to practice wise adoption (N = 600)

Sr No.	Recommended Practices	Fully adoption		Partial adoption		No adoption	
		Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
1.	Selection of soil	313	52.17	287	47.83	00	00.00
2.	Preparation of soil	260	43.33	290	48.33	50	8.33
3.	Application of FYM	312	52.00	208	34.67	80	13.33
4.	Seed rates	215	35.83	284	47.33	101	16.87
5.	Sowing time	354	59.00	204	34.00	42	7.00
6.	Application of Fertilizers	202	33.67	300	50.00	98	16.33
7.	Recommended dose of Fertilizers	51	8.50	198	33.00	351	58.50
8.	Water management	62	10.33	194	32.33	344	57.33
9.	Use of fungicides/insecticides	14	2.33	345	57.50	241	40.17
10.	Use of herbicides	00	00.00	00	00.00	600	100.00
11.	Harvesting of crops	67	11.17	209	34.83	324	54.00
12.	Grading of crops	00	00.00	145	24.17	455	75.83
13.	Marketing of products	34	5.67	168	28.00	398	66.33

Table 3: Constraints faced by farmers in adoption of vegetable production technology (N = 600)

Sr. No.	Constraints	Frequency	Per cent
1.	Non-availability of labours at the time of requirement	555	92.50
2.	High cost of vegetables seed	525	87.50
3.	High cost of fertilizers	510	85.00
4.	Lack of knowledge about vegetable production technology	470	78.33
5.	Non-availability of Farm Yard Manure	428	71.33
6.	High cost of pesticides	409	68.17
7.	Lack of irrigation water	394	65.67
8.	Lack of money to purchase of costly seed	388	64.67
9.	Lack of extension services	375	62.50
10.	Lack of training as per requirement	340	56.67

of fertilizers (50.00%), preparation of soil (48.33%), seed rates (47.33%) and harvesting of crops (34.83%). Most of the vegetable growers (72.17%) belonged to low level of adoption of vegetable production technology. However, 23.67 per cent vegetable growers had medium level of adoption. A mere (4.17%) vegetable growers fall under high adoption level group. Regarding constraints majority (92.50%) of vegetable growers expressed the constraints of non-availability of labours as required followed by high cost of seed (87.50%), high cost of fertilizers (85.00%) and lack of knowledge about vegetable production technology (78.33%). The vegetable growers had faced fewer constraints as lack of training as per requirement and lack of extension services.

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