

RESEARCH ARTICLE :

Constraints as perceived by the respondents in adoption of recommended kitchen gardening techniques in district Amritsar, Punjab

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SUMMARY : Vegetables help to combat malnutrition and diversify diets. Kitchen gardening may prove to be a boon for rural people to meet their daily requirements of vegetables and fruits. Most of the farm families having kitchen garden are interested to improve the practice of growing vegetables for their own use but they are facing various constraints. The present study was conducted with the objective to study the perceived constraints in adoption of kitchen gardening by the rural masses. Four villages were selected from different blocks of district Amritsar. Twenty five (25) farm families who were already practicing kitchen gardening were randomly selected from each village, consisting the total sample of 100 respondents (one from each family). The data were collected from each respondent through personal interview method with the help of structured schedule. The constraints as perceived by respondents scored on the basis of magnitude of the problem. The study highlighted that input constraint was most serious constraint followed by general constraints, technical constraints, socio-cultural constraints and post-harvest constraints. Non - availability of quality planting material and seeds of HYVs of vegetables, lack of knowledge about improved varieties, seed rate and, sowing time, seed treatment, major pests and diseases, continuous use of traditional practices for growing vegetables and lack of interest among rural youth towards farming were considered the major constraints in successful adoption of kitchen gardening.

KEY WORDS :

Kitchen garden,
Constraints,
Adoption

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BACKGROUND AND OBJECTIVES

The per capita consumption of vegetables in India is much lower than what is recommended by the dieticians. It is only 135g against the minimum requirement of about 300 g for a balance diet. However, with increase in population of our country and

improvement of dietary habits, the consumption of vegetables has been increasing day by day. People have realized the importance of vegetables in diet as vegetables are nutritive foods and rich source of vitamins, minerals, carbohydrates etc. The dietary requirement of vegetable can be easily

fulfilled through the concept of kitchen gardening in rural as well as in urban and peri urban areas. Although urban people are quite aware about the benefits of kitchen gardening still there are few takers of this concept. The predominant reasons for the poor adoption amongst the rural people may be due to lack of technical know-how, lack of awareness and knowledge regarding vital inputs like seed, water and FYM, plant protection measures, storage and processing etc. Keeping this in mind the importance of the above mentioned constraints, an effort was made to find out the major bottlenecks in adoption of kitchen gardening by the people.

RESOURCES AND METHODS

The present study was conducted under the operational area of Krishi Vigyan Kendra, Amritsar, Punjab. For this purpose, four villages namely Nag Khurd (Block Majitha), Jahangir (Block Verka), Daleke (Block Atari) and Makowal (Block Ajnala) were selected where most of the families having kitchen gardens of various sizes are interested to improve practice. These villages were purposely selected by KVK because in these villages majority of farm families were practising kitchen gardening. From these four villages, 25 farming families from each village were selected randomly. Thus, the total study sample size consisted of 100 respondents (one from each family). The primary data were collected from each respondent through personal interview method with the help of structured questionnaire/schedule. The major constraints were categorized into suitable sub-heads *viz.*, input, technical, socio-cultural, post-harvest and general constraints. The constraints as perceived by respondents were scored on the basis of magnitude of the problem as per Meena and Sisodia (2004). The scores of respondents were recorded and converted into mean per cent score and constraints were ranked as per Warde *et al.* (1991).

OBSERVATIONS AND ANALYSIS

The data presented in Table 1 revealed that non-availability of quality seeds and planting material (77.30%) of HYVs of vegetable was very serious constraint as perceived by the farmers and was ranked on 1st position. (Table 1). Similar result was reported by Kanbid and Sharma (1994).

It was observed that residential areas of villages have less farming areas for kitchen garden and it was

ranked 2nd. The lesser availability of quality FYM is one of the major constraints (67.50%) as majority of the farmers have no proper know how about the preparation of quality FYM in pits. This constraint has been given 3rd rank. Lesser availability of bio pesticides and bio fertilizers is 4th ranked constraint.

Regarding technical constraints, lack of knowledge about improved varieties, seed rate and sowing time (72.40%) was the major obstacle in adoption of kitchen gardening successfully. The major reason behind this is the farmer's dependence on unscrupulous seed dealers and they generally purchase varieties at the behest of those dealers. The poor performance of such varieties discourages the farmers. The other constraints *viz.*, lack of knowledge regarding selection of nutritious vegetables (69%), lack of knowledge about seed treatment (68.70%), lack of knowledge regarding major insect-pests, diseases and their management (67.25%), lack of knowledge about recommended fertilizers and manures (64.70%) and lack of knowledge regarding critical stage of irrigation (61.26%) were ranked at 2nd, 3rd, 4th, 5th and 6th position, respectively.

The data presented in Table 1 further indicated that the continuous use of traditional practices for growing vegetables was the most serious socio-cultural constraint (70.35%) that set back kitchen gardening and it ranked 1st. Lack of interest among rural youth are lured by the charm of urbanization. The reason might be maximum number of opportunities of employment in urban areas. Other important constraints are farmer's tendency of not adopting kitchen gardening until other farmers in the social system use the same (64.40%), fear of theft of the farm produce (61%) and another one was decreasing interest of women of middle class family towards vegetable kitchen gardening (55.14%). These three constraints were ranked at 3rd, 4th and 5th position, respectively.

The data further revealed that the difficulties in selling small surplus produce (65.55%) were ranked as the most important problem in this category. Lack of storage facilities for surplus produce (61.20%) and lack of marketing at village level (60.26%) were ranked at 2nd and 3rd position, respectively. Lack of knowledge about preservation and processing techniques (46.50%) was considered of less intensity and ranked as 4th and the least important problem faced by the farmers.

Among the general constraints, the farmers give

lesser priority to kitchen gardening than other farm activities (73.4%) and frequent inundation of kitchen gardens during rainy season due to high water table were the two serious constraints ranked 1st and 2nd, respectively. These findings were in conformity with those of Kanbid and Sharma (1994) and Sethy *et al.* (2010).

Category-wise constraints as perceived by the farmers:

In order to find out the relationship between ranks accorded by groups of respondents to different categories of constraints, rank order correlation was calculated (Table 2). It was found that category of input constraints

Table 1 : Constraints in adoption of improved kitchen gardening techniques

Sr. No.	Particulars	MPS	Rank
Input constraints			
1.	Non-availability of quality seeds and planting material of HYVs of vegetables	77.30	1
2.	Non-availability of suitable land for kitchen garden near residential area	68.16	2
3.	Lesser availability of quality FYM	67.50	3
4.	Lesser availability of Biofertilizers and bio pesticides in the market	65.00	4
	Overall	69.49	
Technical constraints			
1.	Lack of knowledge about improved varieties, seed rate and sowing time	72.40	1
2.	Lack of knowledge about the selection of nutritious vegetables	69.00	2
3.	Lack of knowledge about seed treatment	68.70	3
4.	Lack of knowledge about the major pest and disease identification and their management	67.25	4
5.	Lack of knowledge about recommended fertilizer and manure application	64.70	5
6.	Lesser knowledge regarding critical stage of irrigation	61.26	6
	Overall	67.21	
Socio-cultural constraints			
1.	Continuous adoption of traditional practices for growing vegetables	70.35	1
2.	Lack of interest among rural youth	68.20	2
3.	Farmers tendency of non practice until other farmers in the locality opt for kitchen gardening	64.40	3
4.	Fear of theft of the farm produce	61.00	4
5.	Lack of involvement of household women in kitchen gardening	55.14	5
	Overall	63.82	
Post harvest constraints			
1.	Problems in selling for small surplus produce	65.55	1
2.	Lack of storage facility for surplus produce	61.20	2
3.	Lack of marketing at village level	60.26	3
4.	Lack of knowledge regarding preservation and processing of surplus produce	46.50	4
	Overall	58.38	
General constraints			
1.	Lesser priority to kitchen gardening than other farm activities	73.40	1
2.	Frequent inundation of kitchen garden during rainy season	64.50	2
	Overall	68.95	

Table 2 : Rank order correlation of constraints in adoption of kitchen gardening

Sr. No.	Particulars	MPS	Rank
1.	Input constraints	69.49	I
2.	General constraints	68.95	II
3.	Technical constraints	67.21	III
4.	Socio-cultural constraints	63.82	IV
5.	Post-harvest constraints	58.38	V

(69.49%) was the top ranked category as perceived by the farmers engaged in kitchen gardening. This was followed by categories of general constraints (68.95%), technical constraints (67.21%), socio-cultural constraints (63.82%) and postharvest constraints (58.38%), respectively. Similar results were quoted by Sharma *et al.* (2011) and Biswas and Jamir (2015).

Conclusion :

It was observed that input constraint was the most important constraint as it was ranked in 1st position which was followed by general constraints, technical constraints, socio-cultural constraints and post harvest constraints in adoption of kitchen gardening. While analyzing overall constraints as perceived by the farmers, it was found that lack of quality seeds and planting material of HYV's of vegetables, lack of knowledge about improved varieties, seed rate, sowing time, lesser priority to kitchen gardening than other farm activities, continuous use of traditional practices for growing vegetables, drifting of rural youths from villages and theft of farm produce were the major constraints causing serious concern to the growers of kitchen garden.

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