



Constraints in Adoption of Improved Techniques of Kitchen Gardening

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ABSTRACT

Kitchen garden plays an important role for rural families to provide diversified vegetables in their daily diet. Most of the families having kitchen garden of different sizes are interested to improve the practice. But farmers and farm women are facing different constraints while adopting the improved techniques. Therefore present study was undertaken with the objective to study the constraints in adoption of improved techniques of kitchen gardening faced by the villagers. Study was conducted in Palem and Sanki Reddy Palli villages of Kothakota mandal and Mallaipalli and Thatipamula villages of Pebbair mandal of Mahaboobnagar District, Andhra Pradesh. Four villages were selected from these mandals. The number of families with kitchen garden was decided for villages by proportionate sampling method. The families of each village were selected by Simple Random Techniques. In this way 25 families from each village were selected consisting total sample of 100 respondents (one for each family). The data were collected from each respondent through personal interview method with the help of structured schedule. It was observed that input constraint was most important constraint as it was ranked in 1st position. This was followed by technical constraints, socio-cultural constraints and post-harvest constraints which were accorded 2nd, 3rd and 4th ranks in rank order by the respondents.

Key words : Adoption, Constraints, Kitchen gardening.

The quantity of vegetable produced per capita in India is much lower than what is recommended by the dieticians. In India per capita availability is around 135 g against the minimum requirement of about 300 g for a balanced diet. Even this low level of average supply does not fully reflect the consumption pattern of the rural household and those below the poverty line where per capita vegetable consumption is very low, even lower than 40 g per day. It is now well conceived that by simply adding greens and other vegetables to the available food grains the diet of the average Indians can substantially be upgraded. To make this recommendation realistic, adoption of kitchen garden is the best option which can supply required vegetables in daily diet to the rural families. In spite of the above fact, still kitchen gardening is not a very successful venture in most of the families. The predominant reasons for the poor adoption may be due to lack of technical know-how, lack of awareness and knowledge regarding factors such as seed, water, protection measures, storage, processing and so on. Considering the significance of constraints, it was felt necessary to find out the major barricades which hinder the adoption of

recommended kitchen gardening in the study area. Therefore, present study was undertaken with the objective of studying constraints in adoption of kitchen gardening faced by the villagers.

MATERIAL AND METHODS

The present study was conducted in Kothakota and Pebbair mandals of Mahaboobnagar District of Andhra Pradesh state. From these mandals, Palem and Sanki Reddy palli (Kothakota Mandal), Mallaipalli and Thatipamula villages (Pebbair Mandal) were selected, where most of the families are having kitchen garden of different sizes and are interested to improve the practice. The number of families with kitchen garden was decided for villages by proportionate sampling method. The families of each village were selected by Simple Random Techniques. In this way 25 families from each village were selected. Thus, the total study sample consisted of 100 respondents (one for each family) from all the 4 selected villages of Kothakota and Pebbair mandals. The data were collected from each respondent through personal interview method with the help of structured schedule. The constraints as perceived by

respondents were scored on the basis of magnitude of the problem as per Meena and Sisodia (2004). The respondents were recorded and converted into mean percent score and constraints were ranked accordingly as per Warde *et al.* (1991).

RESULTS AND DISCUSSION

In the present investigation, an attempt had been made to categorize the major constraints into suitable topics viz. input, technical, socio-cultural, post harvest and general constraints faced by the farmers in kitchen gardening. Unavailability of quality seeds and planting materials of vegetables and fruits (80.23%) was the most important problem faced by the farmers as it ranked on 1st position (Table 1). Similar result was found by Kanbid, and Sharma (1994). Water scarcity (76.50%) was the 2nd important constraint realized with high intensity by the growers as water sources present in the residential areas only for drinking purpose which was not sufficient for gardening.

It was observed that, residential areas of the villages present very compactly, leaving less or no farming areas, leading to unavailability of suitable land (72.12%) for kitchen garden and it ranked 3rd. Other constraints viz. scarcity of organic manures (65.90%) and scarcity of specific pesticides in the market (50.54%) were ranked on 4th and 5th position respectively. The data in Table 1 revealed the views of farmers about extent of awareness of technical knowhow of improved methods of kitchen gardening. The major constraint faced by the farmers in this category was lack of knowledge about improved varieties, seed rate and sowing time (80.00%) and it was supported by Sisodia, and Rathore (2004). Inadequate knowledge about the selection of nutritious fruits and vegetables (75.35%) ranked 2nd as farmers mostly relied upon cucurbitaceous vegetables. The other constraints viz. lack of knowledge of pest and disease identification and management (64.40%), critical stage of irrigation (54.85%) and lack of knowledge of fertilizers and manures recommendation (54.10%) were ranked on 3rd, 4th and 5th position respectively. On the other hand, the constraints viz. lack of knowledge for seed multiplication (53.61%) and lack of knowledge about seed treatment (48.25%) which ranked 6th and 7th were minor

technological constraints as perceived by the farmers. The data presented in Table 1 indicated that fear of theft of the farm produce (71.53%) realized as most important socio-cultural constraint followed by farmers tendency of non using practice until other farmers in the social system to use the same (65.45%). So these two causes ranked 1st and 2nd, respectively. Continuous use of traditional package of practice (61.56%) and non use of improved technology was another factor that set back kitchen gardening and it ranked 3rd. Two common trends were observed in the study areas, first one was drifting of rural youth to urban areas in search of work (54.25%) and another one was decreasing involvement or interest of women of middle class family towards cultivation (50.50%). These two factors were perceived as constraints with least magnitude by the respondents and ranked at 4th and 5th position, respectively.

The data in Table 1 indicated the post harvest constraints faced by the farmers having kitchen garden. Difficulties in selling for small amount of surplus produce (68.58%) were ranked as most important problem in this category. Lack of storage facility for surplus produce (64.25%) was realized to be the next important problem and ranked in 2nd position as there are lack of improved storage facilities at household level for subsequent use of the fruits and vegetables. Unavailability of market at village level to sell the surplus produce (58.65%) was ranked in 3rd position followed by difficulties in getting money immediately after selling the produce (55.00%). Lack of knowledge about preservation and processing techniques of surplus produce (45.26%) was considered as less intensity and ranked as 5th and least important problem by the farmers. The data presented in the Table 1 indicated that high monkey menace (71.56%) in the kitchen garden was ranked 1st position by the farmers in general category as it was difficult to take any measures against the destruction. Improper protection measures against grazing of cattle and goat (62.54%) ranked 2nd in this category which also cause a major destruction of the garden. The other important constraint considered by the farmers was kitchen gardening gets less priority than other farm activities (51.12%) which ranked on 3rd position. Frequent inundation

Table 1. Constraints in Adoption of Improved Techniques.

S.No	Particulars	MPS	Rank
A Input constraints			
1	Unavailability of quality planting materials of fruits and HYVs seeds of vegetables	80.23	1
2	Lack of irrigation facility due to scarcity of water	76.50	2
3	Unavailability of suitable land for kitchen garden near residential area	72.12	3
4	Organic manures are not available as cow dung is used for fuel	65.90	4
5	Specific pesticides and herbicides are not timely available in the local market	50.54	5
	Overall	69.05	
B Technical constraints			
1	Lack of knowledge about improved varieties, seed rate and sowing time	80.00	1
2	Lack of knowledge about the selection of nutritious vegetables and fruits	75.35	2
3	Lack of knowledge about the major pest and disease identification and their management	64.40	3
4	Lack of knowledge about critical stage of irrigation	54.85	4
5	Lack of knowledge about recommended fertilizer and manure application	54.10	5
6	Lack of knowledge for seed multiplication	53.61	6
7	Lack of knowledge about seed treatment	48.25	7
	Overall	61.50	
C Socio-cultural constraints			
1	Fear of theft of the farm produce	71.53	1
2	Farmers tendency of non practice until other farmers in the social system to use the same	65.45	2
3	Continuous adoption of traditional package of practices	61.56	3
4	Drifting of rural youth to urban areas in search of work	54.25	4
5	Lack of involvement of household women in cultivation practices	50.50	5
	Overall	60.65	
D Post harvest constraints			
1	Difficulties in selling for small amount of surplus produce	68.58	1
2	Lack of storage facility for surplus produce	64.25	2
3	Unavailability of market at village level	58.65	3
4	Difficulties in getting money immediately after selling	55.00	4
5	Lack of knowledge about preservation and processing techniques of surplus produce	45.26	5
	Overall	58.34	
E General constraints			
1	High monkey menace	71.56	1
2	Improper protection measures against grazing of cattle and goat	62.54	2
3	Kitchen garden gets less priority than other farm activities	51.12	3
4	Frequent inundation of kitchen garden during rainy season	42.90	4
	Overall	57.03	

Table 2. Major constraints faced by farmers / farm women in adoption of kitchen garden.

S.No	Particulars	MPS	Rank
1	Timely availability of required inputs	69.05	I
2	Technical constraints	61.50	II
3	Socio-cultural constraints	60.65	III
4	Post harvest constraints	58.34	IV
5	General constraints	57.03	V
MPS: Mean Percent Score			

of water in kitchen garden (42.90%) during rainy season was perceived as minor constraint by the respondent and depicted on last position of the rank.

Category-wise constraints as perceived:

In order to find out the relationship between the ranks accorded by groups of respondents to different category of constraints, rank order correlation was calculated (Table2). It is clear that the major category of constraint i.e. input constraint (69.05%) was the top ranked as perceived by the farmers having kitchen garden. Other major category of constraints as perceived by the farmers in kitchen gardening like technical constraints (61.50%), socio-cultural constraints (60.65%) and post harvest constraints (58.34%) were accorded 2nd, 3rd and 4th ranks in rank order by the respondents, whereas the general constraints (57.03%) were perceived least important.

CONCLUSION

It was observed that, input constraint was most important constraint as it was ranked in 1st position. This was followed by technical constraints, socio-cultural constraints and post harvest constraints which were accorded 2nd, 3rd and 4th ranks in rank order by the respondents. On the other hand, general constraint ranked at 5th with less intensity by the respondents. While analyzing overall

constraints as perceived by the farmers, it was found that lack of quality seeds, scarcity of irrigation water, lack of knowledge about improved package of practices, theft of the farm produce, high monkey menace, grazing by cattle, poor storage facility, poor market facility and drifting of rural youth from village were the major constraints causing serious concern to the growers of kitchen garden.

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