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Assessment of attitude of frontline demonstrators towards kitchen gardening

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ABSTRACT

With the use of a technology called kitchen gardening, we can produce bacteria-free veggies at home using used utensils, clay flower pots, and empty tins. This exercise not only helps us save money and time, but it also gives the whole family a fun, healthy, and environmentally beneficial hobby. In light of this, the current study was carried out to learn how kitchen gardening affects the beneficiaries' nutritional security. The sample selection for the present study was taken from the Front-Line Demonstration (FLD) given to 150 numbers of female beneficiaries from the last three consecutive years i.e., 2017-18 to 2019-20 at different KVK operational villages. To know its impact on health, an eleven-point attitude scale which was developed by Anand Agricultural University Anand was used based on which data was collected and analyzed. Results showed that 44.00% of respondents had only secondary education, while 46.00% of respondents were in the middle age group. When it came to the size of their land holdings, 38.67% of respondents had between 1 and 2 ha, 37.33% had between 5 and 6 family members and a medium annual income, and the majority fell into the untrained category. Attitude towards kitchen gardening implies that the first rank (WMS=3.69) goes to the attitude that Kitchen Gardening is a constructive approach and hence it converts leisure time into a productive one. The second rank was given to the attitude of the beneficiary that it provides the opportunity to get fresh vegetables in all the seasons with a weighted mean score equal to 3.67. Very least number of respondents agreed with the statement that kitchen gardening is more hypocrisy than reality and hence scored last rank (WMS=2.89) in an eleven-point attitude scale towards kitchen gardening.

1. Introduction

Accomplishing healthful security is a test that reverberates the world over. Pretty much every country on the planet encounters a degree of hunger which presents a danger to financial assets. Around the world, approx. 3.1 million youngsters were impacted by under sustenance and ailing health and were comprehended to be the primary justification for 45% of all the passing among kids under five (Black *et al* 2013). Unhealthiness is the world's most serious medical condition and the single greatest supporter of youngster passing. Food security is one of the key regions that a non-industrial nation ought to address. Nutritional security should be achieved not only through the production of quantity food items but mainly the production of quality

food products (Sharma 2018). For unfortunate families, vegetables and natural products are among the main great hotspots for some minerals and supplements in the family diet plate. For this, the foundation of the kitchen gardens in rustic regions is an innovation that empowers us to develop bacterial-free vegetables at home and gives a decent wellspring of void tins, old utensils and mud vases. Kitchen planting is one of the world's most antiquated food creation rehearses and is drilled all through the world (Laundaver and Brazil, 1985). Kitchen nurseries can assume an essential part in mitigating issues of craving and unhealthiness in emerging nations. Kitchen gardens have proactively been demonstrated to be a significant auxiliary wellspring of food in India and Sri Lanka (Halder & Pati: 2011; Galhena *et al*

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2013). Fruits and vegetables are a predominant components in these kitchen gardens because they are rich in minerals, vitamins and natural antioxidants.

India is the second biggest maker of products of the soil on the planet yet per capita accessibility is around 120 and 270 g/day individually which is below the suggested dietary recompense (RDA).

Foods produced in home gardens or kitchen gardens are fresh and safe with superior quality in a nutrient wise and look-wise. Small-scale food production units can contribute immensely to both food and nutritional security particularly vulnerable segments in the country (Shrawan Singh & Sabina Islam 2018). Vegetables and organic products assume a significant part in dietary expansion because of their rich wellsprings of dietary minerals, everyday admission at an enormous among a huge number of yields and effective accessibility the nation over and most significant effectively open to poor to rich class.

As per ICMR, in light of RDA suggestion and thinking about the supplement prerequisites, and suggested that each individual ought to consume something like 300 gm of vegetables in a day what's more from organic products necessities which is 100 gm/day separately. Since the prerequisites of Iron and folic corrosive are higher for pregnant ladies, they ought to start 100 gm of verdant vegetables every day. The micronutrients present are minerals (like iron and calcium) and nutrients (like L-ascorbic acid, folic corrosive, B complex nutrients and carotenoids) while the macronutrients present are intricate sugar/fiber. They contain bountiful measures of iron, calcium, L-ascorbic acid, folic corrosive, carotenoids (forerunners of vitamin A) and phytochemicals. Green verdant vegetables are rich in dietary microelements while other vegetables also contribute to dietary micro elements as well as health-benefitting phytochemicals such as lycopene, glucosinolates, phenolics, flavonoids, anthocyanin etc. These compounds play a crucial role in scavenging free radicals and help in maintaining good health and protecting from diseases. Fresh harvest from Nutri-kitchen gardens or home gardens ensures better quality and content of such phytochemicals.

The easily availability of Fruits & Vegetables found in home gardens provides households with access to a large variety of nutritious foods thus providing a great opportunity for better nutrition food security and income security too.

Front-line Demonstration and Kitchen gardening

The current review was completed by Krishi Vigyan Kendra, Rajkot - II in the last three continuous years starting around 2017-18, 2018-19 and 2019-20. Fifteen villages were chosen purposively for this study where 150 front line Demonstrations (Fld's) were led during Kharif

seasons in these villages. Among these 150 farm women in every village, a kit was ready in which seasonal vegetable seeds were given as a demonstration kit. The kit contained seeds of vegetables viz. amaranthus, spinach, wibe gourd, Okra, Brinjal, tomato, and cucumber for the Kharif seasons.

The target of these FLDs was to give them information about vegetable creation innovation for a kitchen garden and speedy access to crude vegetables for everyday home utilization and to meet day-to-day fundamental necessities of vegetables at home.

Keeping given the importance of vegetables & their cultivation as a home garden, the present study was designed by Krishi Vigyan Kendra, Rajkot -II to assess the attitude of frontline demonstrations or beneficiaries regarding vegetable cultivation and their liking about growing vegetables.

2. Material and Methods

The current work was completed by Krishi Vigyan Kendra Rajkot II in which table 1 shows the circulation of respondents for the concentrate in which during the residency, five distinct villages were chosen and hence 15 numbers of villages were chosen purposively for this study.

Table 1. Appropriation of respondents according to the village-wise selection in every one of the three years

Sr. No	Year of Experiment	Name of Village	No. of respondents
1.	2017-18	Nani Parabdi	10
2.		Jashapar	10
3.		Dhoraji	10
4.		Bholgamda	10
5.		Patanvav	10
6.	2018-19	Moti parabdi	10
7.		Kolki	10
8.		Jashapar	10
9.		Pipalia	10
10.		Patanvav	10
11.	2019-20	Boria	10
12.		Fareni	10
13.		Raydi	10
14.		Mota Gundala	10
15.		Patanvav	10
	Total	15	150

One hundred and fifty farm women as a total comprising from all 15 villages were supplied seasonal (*Kharif*) vegetable seeds as a kit called kitchen garden kit. The kit comprised seeds of different seasonal vegetables *Viz.* spinach, Amaranthus, Brinjal, tomato, cucumber and fenugreek, okra and sponge gourd.

Since an enormous no. of Front-line demonstration shows were led on kitchen gardening vegetable mini-kits, thusly it was felt important to evaluate the effect of these FLDs on the recipient's information regarding vegetable cultivation and the enjoyment of the development of vegetables. Information was gathered by using the 11-point Attitude scale which was developed by Anand Agricultural University, Anand in which eleven-point statements (+ve and -ve) were recorded on a point scale which was further analyzed with suitable statistical tools.

3. Results and Discussion

3.1 Individual profile of Respondents

The information concerning the financial traits of respondents was analyzed and introduced in Table 2. The information concerning mature of the respondents in table 2 uncovers that 46.00 percent of the respondents were of the middle age group followed by the young age group (36.67%).

Table 2. Socio-economic attributes of the respondents (n=150)

Sr.	Characteristics	Frequency	Percentage
1	Age		
	Young age (Up to 35 years)	55	36.67
	Middle age (36 to 55 years)	69	46.00
	Old age (above 55 years)	26	17.33
	Total	150	100
2	Education		
	Illiterate	12	8.00
	Primary (1 to 7 th std.)	28	18.67
	Secondary (8 to 10 th std.)	66	44.00
	Higher Secondary (11 th to 12 th std.)	36	24.00
	Graduate (above 12 th std.)	8	5.33
	Total	150	100
3	Size of land holding		
	Marginal (up to 1 ha)	34	22.67
	Small farmers (1.01 to 2 ha)	58	38.67
	Medium (2.01 to 4 ha)	42	28.00
	Big farmers (Above 4 ha)	16	10.67
	Total	150	100
4	Family Member		
	Up to 2 members	12	8.00
	3 to 4 member	33	22.00
	5 to 6 member	56	37.33
	above 6 member	49	32.67
	Total	150	100.00
5	Annual Income		
	Up to 20,000	68	45.33
	Between 20,000 to 40000	43	28.67
	Above 40000	39	26.00
	Total	150	100.00

6	Training undergone		
	Untrained	92	61.33
	less trained (below 2.2)	33	22.00
	More trained (above 2.2)	25	16.67
	Total	150	100.00

Approximately nearly half of the respondents (44.00%) had attained a higher secondary level of education while a meager percentage (5.33%) of beneficiaries were having education up to graduation and the discoveries were accounted for by Gita (2010) whose results were in opposite with our outcomes as results here reasoned that the vast majority of the respondents were of more young age group and having a primary level of education. Almost 50% of the respondents (38.67%) were small farmers, though 28.00 percent of the respondents were holding medium size of land holding i.e., 2.01 to 4 hectares of land. Only 10.67 % of the respondents were having land above 4 hectares.

The table further demonstrates that almost half (37.33%) of the respondent's family size is having 5 to 6 family members followed by 32.67% of the total population who were having family members over 6 number of family members. Results on family annual income showed that the majority (45.33%) of the respondents belonged to an income group up to Rs. 20,000 followed by 28.67% whose annual incomes were between 20,000 to 40,000 rupees. While looking at their level of knowledge regarding kitchen gardening shows that more than half (61.33%) of the respondents were untrained followed by less trained (22.00%) of the respondents about kitchen gardening and their different technologies.

Table 2. Impact of Kitchen gardening Front line demonstration on the knowledge level and attitude of respondent

Sl. No.	Statement	SA	A	DA	SDA	Total	WMS	Rank
1	Kitchen garden provides an opportunity to make a positive environmental impact. (+)	92	28	21	9	150	3.35	V
2	I visualize limited scopes of kitchen gardening. (-)	8	24	41	77	150	3.25	VII
3	Kitchen gardening provides opportunity to get fresh vegetables in all the seasons. (+)	115	24	8	3	150	3.67	II
4	I think kitchen gardening is tedious job. (-)	19	18	34	79	150	3.15	IX
5	I think kitchen gardening helps in saving money. (+)	65	49	22	14	150	3.10	X
6	Kitchen gardening is hypocrisy than reality. (-)	19	34	42	55	150	2.89	XI
7	Kitchen gardening is an ideal medium to give experience of nature to children. (+)	82	53	13	2	150	3.43	VI
8	Kitchen gardening promotes inter-personal conflict among family members. (-)	15	17	41	77	150	3.20	VIII
9	Kitchen garden helps in promoting family fitness. (+)	102	41	5	2	150	3.62	III
10	Kitchen garden promotes greenery near residential areas. (+)	94	37	10	9	150	3.44	IV
11	Kitchen gardening is constructive approach to convert leisure time in to productive one. (+)	110	35	3	2	150	3.69	I
Overall weighted Mean Score		3.34						

The data on knowledge the data regarding liking patterns, knowledge and attitude toward vegetables presented in table 3.2 reveals that the highest weighted mean (WMS=3.69) score goes to the statement that kitchen gardening is a constructive approach to converting leisure time into a productive one and ranked first followed by the statement that kitchen gardening provides an opportunity to get fresh vegetables in all the seasons (WMS=3.67) and thus ranked second among all the eleven-point statements. The third rank (WMS=3.62) goes to the statement that kitchen garden helps in promoting family fitness whose results were in support of the results of Rehmen *et al* 2013 who also resulted in that person can get healthy and nutritious food from the kitchen gardens followed by a statement that kitchen garden promotes greenery near residential areas with WMS=3.44.

The fifth rank (WMS=3.35) was given to the positive statement that the kitchen garden provides an opportunity to make a positive environmental impact. A perusal of the table further shows that the beneficiary's attitude towards the 11-point statement scale shows that fifth rank with a weighted mean score equals 3.43 which shows that kitchen gardening is an ideal medium to give the experience of nature to children in the same way Shaheb *et al* 2014 who had reported that creation of vegetables and natural products at standards furnishes the family with direct admittance to significant supplements.

The further table shows that the seventh rank goes to the negative statement that kitchen gardening had visualizes limited scope with a weighted mean score = 3.25. Eight ranks (WMS=3.20) and ninth rank (WMS=3.15) which was given to the statement recorded by the beneficiaries that kitchen gardening promotes inter-personal conflicts among family members and kitchen gardening looks like a tedious job respectively. The tenth rank with a weighted mean score equals to 3.10 was recorded as the concept of kitchen gardening helps in saving money which was concurrent with the results of Chayal *et at* 2013 who also recorded those vegetables produced in kitchen gardening help save money and proved to be a reasonable livelihood approach for poor people. And the last statement who records a WMS=2.89 was recorded that kitchen gardening is more hypocrisy than reality who was contrary to the result of Khan 2013 who concluded that kitchen gardening is proved to be a purposeful and productive venture.

4. Conclusion

Kitchen gardening gives a decent and creative plan to give products of the soil vegetable which are high in micronutrients and to address food frailty and hunger issues. It will surely assist with giving help to the majority on everyday suggested dietary intake needs of day-to-day

vegetable requirements and establishing a protected and sound climate for the general population. The findings of this study recorded that majority of the respondents were of the middle age group who had accomplished higher secondary levels of education and held small to medium size of land holdings. As far as their level of knowledge regarding kitchen gardening is concerned, it shows that more than half of the respondents were untrained followed by less trained. The results further conclude that the first rank in the eleven-point Attitude scale towards kitchen gardening goes to the statement that the concept of kitchen gardening is a constructive approach that converts leisure time into a productive one followed by the statement that scored the second rank that kitchen gardening provides an opportunity to get fresh vegetables in all the seasons. In the same way, the last tenth rank was scored by the statement that kitchen garden helps save money followed by that kitchen gardening is more hypocrisy than reality. Consequently based on the findings it can be concluded that the frontline demonstration show is successful in expanding in information level of beneficiaries and reception of kitchen gardening practices. The concept of Frontline demonstrations on vegetable gardening hence helps to a great extent to create a belief that vacant land in the housing periphery gave the advantage to use it to the fullest and contribute to fulfilling beneficiary's household needs too.

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