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Perception towards recommended nutrition garden practices among farm women

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Abstract

Nutrition gardens are more than just patches of green in rural landscapes; they represent a transformation in the way rural communities perceive agriculture, nutrition, and sustainability. As these gardens evolve from being backyard necessities to economic assets, women's empowerment hubs, and environmental stewardship initiatives, they play a crucial role in improving the lives of rural people. They are not just gardens; they are seeds of change, nurturing healthier, more prosperous rural communities. Rural communities hold a wealth of knowledge passed down through generations, and this traditional wisdom can be harnessed to maximize the potential of nutrition gardens. For the current study, a proportional random selection procedure was used to choose 110 farm women from two villages of Manpur block. The information was gathered using the interview schedule. The findings of the study revealed that, majority of the farm women were belonged to middle age group, most of them are completed high school, having farming occupation and had more than two animals. Majority of the farm women had moderate level of information seeking behaviour, low social participation, with medium scientific orientation and medium level of knowledge. The perception towards recommended Nutri-Garden practices among farm women was found to be favourable perception.

Keywords: Farm women, nutrition garden, perception, rural communities

Introduction

Vegetables constitute an important component of the human diet. They are recognized as health food globally and play an important role in overcoming micronutrient deficiencies and providing good health. They are natural sources of vitamins and minerals, like calcium, phosphorus, iron, carbohydrates and proteins. These nutrients are necessary for growth and build resistance against diseases and one of the methods to get vegetables is by nutrition garden. Nutrition garden is a healthy activity which improves the nutritional status of the family as vegetables produced in the garden are consumed by household members. Nutrition garden can be described as a mixed cropping system that encompasses vegetables, fruits, plantation crops, spices, herbs, ornamental, medicinal plants as well as livestock that can serve as a supplementary source of food and income (Halyal and Tamgale 2021) [3]. The protein-energy malnutrition is a major problem due to the limited availability of sources, and other socioeconomic conditions. The plant protein sources can be used as a remedial tool for eradication of nutrient deficiency (Guleria *et al.*, 2017) [1]. Despite of sufficient food grain production at national level, malnutrition is still a public health concern in our country. India is also one of the leading nations in vegetable production but the problem of malnutrition especially the micronutrient deficiencies are very common among the rural households. The underlying cause may be the unawareness, illiteracy, inadequate availability of vegetables and fruits and low purchasing power of the households (Singh *et al.*, 2018) [6].

The turning point in technology dissemination promptly from agriculture institutes or research stations to farmers' fields started through Krishi Vigyan Kendra (KVK) and an integral part of the National Agricultural Research System (Sarkar *et al.*, 2022) [5]. Krishi Vigyan Kendra is an innovative science based institution which conducts On Farm Testing for technology assessment and refinement and undertakes vocational training of farmers, farm women and rural youths and conduct Front-line demonstrations to promptly demonstrate the latest agricultural technologies to the farmers as well as the extension workers. (Rana *et al.*, 2018) [4]. One significant aspect of the changing perception towards nutrition gardens is their role in empowering rural women. In many societies, women are the primary caretakers of these gardens. As women take charge of cultivation, they gain valuable skills and knowledge about agriculture and plant care.

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Women come together to exchange ideas, share resources, and collectively work towards improving their families' and communities' well-being. National Rural Livelihoods mission (NRLM) is one such government initiative to uplift the rural women by making them self-reliant and helps them in earning their livelihoods (Goswami *et al*, 2021) ^[2].

Methodology

In the present study descriptive research design was used and the study was carried out purposively in Umaria district of Madhya Pradesh during 2022-23. The district comprises of three blocks namely Manpur, Pali, and Karkeli, out of which Manpur block was selected based on purposive random sampling. From the selected block two villages were selected

viz., Sarswahi and Barbaspur on the basis of highest number of farm women trained by KVK Umaria. A total of 110 respondents were selected through the proportionate sampling method. The primary data was collected with the help of an interview schedule, which was prepared based on the objectives of the study. The statistical analysis was done by using percentage, frequency, correlation coefficient and multiple regression analysis to assess the perception towards recommended nutrition garden practices among farm women.

Results and Discussion

Perception towards recommended Nutrition Garden practices

Table 1: Distribution of respondents on the basis of their perception towards recommended nutrition-garden practices

S. No.	Category	Frequency	Percentage
1	Less favourable	18	16.36
2	Favourable	79	71.82
3	More favourable	13	11.82
	Total	110	100.00

According to the data presented in the table 1, 71.82 percent of the respondents had a favourable perception of recommended nutrition garden practices that were advised for farm women, whereas 16.36 percent had a less favourable perception. While there are fewer respondents, 11.82 percent of them have a more favourable perception of recommended nutrition-garden practices that are advised for use by respondents.

The above findings may be due to majority of the respondent

belonged to favorable perception toward nutrition garden through the awareness and training programme conducted by KVK personnel. This may be because nutrition-garden is affordable and it does not need a huge area to grow fruits and vegetables. People can use backyard area of home and even terrace. Through nutrition-garden the family can get fresh and chemical free fruits & vegetables. The continued practice of gardening itself shows that they have favourable perception towards nutrition-garden.

Table 2: Perception of farm women towards Nutri-Garden

S. No.	Statements	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
1	Vegetables from nutrition garden are fresh and healthy	109 (99.10%)	01 (0.90%)	-	-	-
2	Family members gets to eat more vegetable and fruits through nutrition garden	33 (30.00%)	23 (20.90%)	35 (31.82%)	19 (17.28%)	-
3	Nutrition garden helps to eradicate malnutrition through the consumption of fresh and nutritious vegetables	9 (8.17%)	20 (18.18%)	38 (34.53%)	33 (30.00%)	10 (9.10%)
4	Nutrition garden helps in effective space utilization near home	3 (2.72%)	32 (29.10%)	40 (36.37%)	35 (31.81%)	-
5	It helps family to get fruits and vegetables throughout the year	28 (25.45%)	49 (44.55%)	33 (30.00%)	-	-
6	Help to save expenditure on purchase of vegetables	21 (19.10%)	63 (57.27%)	21 (19.10%)	5 (4.53%)	-
7	Nutrition garden helps to grow vegetables as per the need of family members	18 (16.37%)	34 (30.90%)	58 (52.73%)	-	-
8	It facilitates to grow organic vegetables and fruits	61 (55.45%)	38 (34.55%)	11 (10.00%)	-	-
9	Nutrition garden helps to utilize free time of family members	12 (10.90%)	24 (21.82%)	63 (57.28%)	11 (10.00%)	-
10	Kitchen waste can be used as compost for the use of	27 (24.55%)	54 (49.10%)	28 (25.45%)	1 (0.90%)	-
11	Nutrition garden helps to create clean environment and conserve environment	32 (29.10%)	49 (44.54%)	27 (24.55)	2 (1.81%)	-
12	Nutrition garden increases physical activity and exercise	18 (16.37%)	55 (50.00%)	37 (33.63%)	-	-
13	Watering of plants every day is a difficult task in kitchen garden*	-	-	26 (23.63%)	73 (66.37%)	11 (10.00%)
14	More people are required in maintenance of kitchen garden*	-	-	23 (20.90%)	87 (79.10%)	-
15	Vegetable cultivation in the kitchen garden is very costly*	-	11 (10.00%)	28 (25.45%)	50 (45.45%)	21 (19.10%)

*indicates negative statements

Nutrition Garden is a popular initiative aimed at promoting home gardening for the cultivation of fresh and nutritious vegetables and fruits. In this survey analysis, we explore the perceptions of individuals who have experience with Nutrition Garden. The survey assessed various aspects of Nutrition Garden, including its impact on health, sustainability, and practicality. An overwhelming (99.10%) of respondents strongly agreed that vegetables from nutrition garden are fresh and healthy, giving this aspect a mean score

of 4.99. (50.90%) agreed or strongly agreed that family members consume more vegetables and fruits through nutrition garden, with a mean score of 3.63. While only (26.27%) agreed or strongly agreed that nutrition garden helps eradicate malnutrition, the mean score for this statement was 2.86. Respondents showed mixed opinions on nutrition garden's effectiveness in space utilization, with a mean score of 3.02. Nutrition garden's ability to provide year-round access to fruits and vegetables was positively perceived by

(70.00%) of respondents, resulting in a mean score of 3.95. A majority (76.37%) of respondents agreed that nutrition garden helps save on the expenditure of purchasing vegetables, with a mean score of 3.90. (83.10%) agreed or strongly agreed that nutrition garden allows them to grow vegetables as per the family's needs, earning a mean score of 3.63. (89.00%) agreed or strongly agreed that nutrition garden facilitates the growth of organic vegetables and fruits, with a mean score of 4.47. While only (57.28%) agreed that nutrition garden helps utilize free time, the mean score for this statement was 3.33. A majority (73.65%) of respondents agreed or strongly agreed that kitchen waste can be used as compost for nutrition garden, resulting in a mean score of 3.97. Nutrition garden's positive impact on the environment was acknowledged by (73.64%) of respondents, with a mean score of 4.00. (66.37%) of respondents believed that nutrition gardening increases physical activity and exercise, resulting in a mean score of 3.82.

Despite the overall positive perceptions, some challenges were noted i.e, (66.37%) of respondents found watering plants every day in a nutrition garden to be challenging. (79.10%) of respondents believed that more people are required for the maintenance of a kitchen garden and (45.45%) of respondents disagreed with the statement that vegetable cultivation in the nutrition garden is very costly.

The survey highlights the generally positive perceptions of Nutrition Garden among respondents. It appears to be a viable solution for promoting healthy eating habits, sustainability, and cost savings. However, challenges related to daily maintenance and resource requirements should be considered. These findings demonstrate the potential of nutrition garden as a valuable initiative for promoting healthier lifestyles and environmental conservation.

Table 3: Relationship between independent variables and perception towards recommended nutrition garden practices

S. No.	Independent variables	(‘r’ value)
1	Age	0.212*
2	Education	0.292*
3	Occupation	0.153*
4	Livestock possession	0.112*
5	Land holding	0.080*
6	Information seeking behavior	0.335*
7	Social participation	0.199*
8	Scientific orientation	0.163*
9	Knowledge about recommended nutrition garden practices	0.223*

*Significant at 0.05 level of probability

This study explores the association between various independent variables and farm women's perception of recommended nutrition garden practices. The 'r' values, indicating the strength and direction of these relationships, are summarized below:

Farm women's age (0.212*) positively correlates with their perception of recommended nutrition garden practices, suggesting that older individuals tend to have a more positive perception. Education (0.292*) exhibits a strong positive correlation with perception, indicating that higher levels of education are linked to a more favorable view of these practices. Occupation (0.153*), especially in farming, is positively associated with perception, implying that those primarily engaged in farming tend to have a more positive perception. Livestock Possession (0.112*) the presence of livestock in households is weakly but positively correlated

with perception, indicating that farm women with livestock are more likely to view nutrition garden practices favorably. Land holding (0.080*) exhibits a weak positive correlation with perception, suggesting that higher land holding are associated with a slightly more positive perception. Information Seeking Behavior (0.335*) strongly and positively correlates with perception, indicating that farm women actively seeking information tend to have a highly positive view of recommended nutrition garden practices. Social Participation (0.199*) positively correlates with perception, implying that engagement in social activities is linked to a more positive perception of these practices. Scientific Orientation (0.163*) is positively correlated with perception, suggesting that individuals with a more scientific mindset tend to have a more positive perception. Knowledge about recommended nutrition garden practices (0.223*) positively correlates with perception, indicating that increased knowledge is associated with a more positive view. Collectively, these findings highlight the critical roles of education, information-seeking behavior, and knowledge in shaping a positive perception of recommended nutrition garden practices among farm women.

The findings of the present study through null hypothesis stated that age, education, occupation, livestock possession, annual income, information seeking behaviour, social participation, scientific orientation and knowledge had positive and significant correlation with perception towards recommended nutrition garden practices among farm women. As farm women grow older, they tend to have a more favorable perception of recommended nutrition garden practices. This may be attributed to their accumulated experience and knowledge in managing both household and farming tasks over time. Education plays a significant role in shaping perceptions. Farm women with higher levels of education are more likely to have a positive perception of nutrition garden practices. Education likely enhances their understanding of the benefits of these practices. Farming being the primary occupation of these women makes them more inclined to adopt nutrition garden practices. They are directly involved in agricultural activities and are more open to adopting techniques that improve crop nutritional value. The presence of livestock in households not only provides manure for crops but also a source of milk. This makes it easier and more effective for respondents to build favorable perception towards nutrition garden practices that may involve using animal products for improving soil quality and nutrition. While not explicitly mentioned, it can be inferred that farm women with higher land holdings might have more area to cultivate recommended nutrition garden practices, which could contribute to their positive perception. Farm women categorized as having moderate information-seeking behavior are more likely to have a favorable perception of nutrition garden practices. Seeking information likely contributes to their awareness and understanding of these practices. Although not explicitly mentioned, social participation may provide opportunities for farm women to exchange knowledge and experiences related to nutrition garden practices, positively influencing their perception. Scientific orientation may indicate an inclination towards evidence-based practices. Farm women with a scientific orientation may be more open to adopting nutrition garden practices supported by scientific research. As farm women gain more knowledge about recommended nutrition garden practices, their perception towards these practices becomes

more positive. This suggests that awareness and training programs conducted by organizations like KVK play a

significant role in shaping perception.

Table 4: Multiple regression analysis of independent variables with the perception towards recommended nutrition garden practices

Model summary				
Model	R	R square	Adjusted R Square	Standard Error of estimate
Predictors (age, education, occupation, livestock possession, land holding, information seeking behaviour, social participation, scientific orientation and knowledge about recommended nutrition garden practices.)	.484 ^a	0.234	0.166	3.201

The data in the Table 4 revealed that coefficient of determination (R^2) of the independent variables was 0.484. This indicates that 48.40 percent of total variation was explained by the selected independent variables such as age, education, occupation, livestock possession, land holding, information seeking behaviour, social participation, scientific orientation and knowledge about recommended nutrition garden practices on the dependent variable i.e., perception towards recommended nutrition garden practices. While, standard error was 3.201 which might be due to unexplained variation caused by the other factors which were not included in the study.

Table 5: Analysis of Variance

Model	Sum of squares	df	Mean square	F	Significance F
Regression	314.616	9	34.957	3.411	.001 ^b
Residual	1024.702	100	10.247		
Total	1339.318	109			

The data in the ANOVA i.e., F-stat value (3.411) indicates the significance for the entire regression analysis at $\alpha=0.005$. This means that in multiple regression analysis relationship between independent and dependent variable was significant. This suggests that farm women who exhibit certain occupation, information-seeking behaviour and possess scientific orientation are more likely to made favorable perception towards these practices. The training conducted by KVK on nutrition gardens provided farm women with valuable information and equipped them with scientific methods to cultivate essential vegetables for better health. This training played a crucial role in shaping their favorable perception towards recommended nutrition garden practices. The "highly significant" relationship indicates that the observed relationship between these predictors and the dependent variable is unlikely to have occurred by random chance alone.

Conclusion

It can be concluded from the study that the farm women had favourable perception towards recommended Nutrition garden practices among farm women. Middle age of farm women had favourable perception towards nutrition garden practices because they give preference to agriculture and household activities. Perception is positively correlated with education which means that those farm women who were high educated had more favourable perception towards recommended nutrition garden practices as compared to less educated farm women. Out of nine predictors occupation, information seeking behaviour and scientific orientation shows highly significant relationship with dependent variable. Their occupation as farming has consistently influenced their positive attitude and willingness to embrace and comprehend the concept of nutrition gardens. The training sessions conducted by Krishi Vigyan Kendra on nutrition gardens

provided women with valuable information and imparted scientific techniques for cultivating a variety of essential vegetables to promote good health. As a result, these training sessions significantly contributed to fostering a positive perception among farm women towards the recommended nutrition gardens practices. Government and non-governmental organizations can support rural gardeners with resources such as land, water, and seeds. Collaborative efforts in the form of community gardens can amplify the benefits of nutrition gardening by pooling resources and knowledge.

References

- Guleria P, Kumar V, Guleria S. Genetic Engineering: A Possible Strategy for Protein-Energy Malnutrition Regulation. *Molecular Biotechnology*. 2017;59(11-12):499-517.
- Goswami P, Rajan P, Jaiswal DK. Effectiveness of Deendayal Antyodaya Yojna- National Rural Livelihoods Mission on Empowerment of Women in Sagar District of Madhya Pradesh. *Indian Journal of Extension Education*. 2021;57(2):162-165.
- Halyal P, Tamgale G. Opinion about Kitchen Garden and Nutritional Knowledge of Vegetables in the Diet among the Gardeners in Dharwad District of Karnataka. *Int. J Curr. Microbiol. App. Sci*. 2021;10(02):2260-2268.
- Rana KK, Rajan P, Singh SRK. Assessing Impact of Krishi Vigyan Kendra on Employment Generation of Rural Youth. *International Journal of Current Microbiology and Applied Sciences*. 2018;6:2822-2826.
- Sarkar R, Rajan P, Bisht K, Singh SRK. Perception of Tribal Farmers toward Training and Services provided by Krishi Vigyan Kendra, Kanker (Chhattisgarh). *Indian Journal of Extension Education*. 2022;57(3):73-77.
- Singh V, Yadav KS, Tripathi AK. Kitchen Gardening: A Promising Approach Towards Improving Nutritional Security In Rural Households, *International Journal of Microbiology Research*. 2018;10(5):1216-1219.