



Awareness Programme About Kitchen Garden Among Farmers in Rural Area

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Kitchen gardens are an effective approach to improving household nutrition, food security, and sustainable livelihoods. The present study was conducted in Jamgaon (M) village of Durg district, Chhattisgarh, during 2025–26 to assess farmers' awareness regarding kitchen gardening and to enhance their knowledge through an awareness programme. A total of 70 respondents were selected randomly and interviewed using a structured schedule. The programme included farmer meetings, demonstrations, and distribution of educational pamphlets explaining the importance, layout, crop selection, and management of kitchen gardens. The survey indicated that awareness regarding kitchen gardening was moderate before the programme, while interest in adopting kitchen gardens increased after the awareness activities. Farmers appreciated the benefits of year-round availability of fresh vegetables, reduction in household expenditure, nutritional improvement, and better utilization of backyard space. Lack of quality seed, technical knowledge, irrigation facilities, and proper planning were identified as the major constraints. The study concludes that awareness programmes conducted through NSS can significantly improve farmers' knowledge and promote sustainable kitchen gardening for nutritional security and environmental conservation.

Keywords: Kitchen garden, Awareness programme, Farmers, Nutrition security, NSS, Chhattisgarh

Introduction

Kitchen gardening is one of the simplest and most economical methods of ensuring nutritional security at the household level. It provides continuous access to fresh vegetables and fruits, reduces dependence on markets, improves dietary diversity, and utilizes available land efficiently. In rural areas, kitchen gardens also generate supplementary income and encourage sustainable agricultural practices. Despite these advantages, adoption of kitchen gardens remains limited because of inadequate awareness, lack of technical guidance, poor availability of quality planting materials, and limited extension activities. Educational programmes organized through the National Service Scheme (NSS) provide an effective platform for creating awareness among rural communities. Therefore, the present study was undertaken in Jamgaon (M) village of Durg district to assess farmers' awareness regarding kitchen gardening and to educate them through demonstrations and extension activities.

Materials and Methods

Study Area: The present study was conducted in **Jamgaon (M) village**, Patan Block, Durg district, Chhattisgarh, during the year **2025–26** under the National Service Scheme (NSS).

Jamgaon (M) is a predominantly agricultural village where farming is the principal occupation. The village was purposively selected because of its agricultural potential and the need to promote nutritional security through kitchen gardening. The village has a mixed farming system with rice as the major crop, while vegetables are cultivated on a limited scale for household consumption.

Research Design: A descriptive survey design was adopted to assess the awareness level of farmers regarding kitchen gardening before conducting the awareness programme. The study also evaluated the effectiveness of demonstrations and extension activities in improving farmers' knowledge.

Selection of Respondents: A total of **70 farmers** were selected randomly from different households of Jamgaon (M) village. The selected respondents represented different age groups, educational levels, landholding categories, and occupations to ensure a representative sample of the farming community.

Development of Interview Schedule: A structured interview schedule was prepared based on the objectives of the study. The questionnaire was designed in simple Hindi language to facilitate easy understanding by the respondents. The schedule included questions related to:

- Socio-economic characteristics
- Educational status
- Landholding pattern
- Knowledge of kitchen gardening
- Existing vegetable cultivation practices
- Availability of backyard land
- Interest in establishing a kitchen garden
- Constraints faced in kitchen gardening
- Suggestions for improvement

The interview schedule was pre-tested with a few farmers outside the sample area, and necessary modifications were incorporated before final data collection.

Awareness Programme: An awareness programme on kitchen gardening was organized as part of the NSS special camp. The programme included:

- Farmer meetings
- Group discussions
- Demonstration of kitchen garden layout
- Distribution of educational pamphlets
- Practical guidance on seasonal vegetable cultivation
- Compost preparation using household waste
- Water management practices
- Organic pest management
- Question-and-answer sessions

During the programme, farmers were encouraged to utilize unused backyard spaces for growing seasonal vegetables such as tomato, brinjal, chilli, okra, spinach, coriander, fenugreek, bottle gourd, bitter gourd, ridge gourd, pumpkin, cucumber, radish, and leafy vegetables. The importance of balanced nutrition, environmental protection, recycling of kitchen waste, and household food security was also explained.

Data Collection

Primary data were collected through personal interviews with each respondent. Observations regarding the availability of backyard land, existing vegetable gardens, irrigation facilities, and farmers' participation during demonstrations were also recorded. Secondary information regarding village profile, demographic characteristics, agricultural practices, and literature related to kitchen gardening was collected from published reports, books, journals, Gram Panchayat records, and government publications.

Results

Socio-economic Characteristics of Respondents

The respondents belonged to different educational and landholding categories. Most of the respondents were engaged in agriculture as their primary occupation. The survey revealed that the majority of farmers possessed marginal and small landholdings, indicating the importance of low-cost technologies such as kitchen gardening for improving household nutrition. Educational status varied considerably among respondents, ranging from illiterate farmers to graduates and postgraduates. The presence of a considerable proportion of less educated farmers highlighted the need for practical demonstrations and visual extension methods rather than only printed technical literature.

Existing Knowledge Regarding Kitchen Gardening

The baseline survey showed that awareness regarding scientific kitchen gardening was relatively low. Although many respondents cultivated vegetables occasionally, only a limited number were familiar with the concept of a planned kitchen garden, crop rotation, compost preparation, and year-round vegetable production.

Many respondents were unaware of:

- Proper utilization of backyard land
- Seasonal vegetable planning
- Organic nutrient management
- Water-saving irrigation methods
- Integrated pest management

This finding indicates the need for regular extension programmes to improve farmers' knowledge.

Impact of Awareness Programme

The awareness programme generated significant interest among farmers. Demonstrations, practical discussions, and pamphlet distribution helped participants understand the importance of kitchen gardening for household nutrition and food security.

After the programme, farmers reported better understanding of:

- Selection of suitable vegetable crops
- Proper spacing and planting methods
- Compost preparation
- Recycling kitchen waste
- Balanced family nutrition
- Importance of organic vegetable production

Several farmers expressed willingness to establish kitchen gardens using available backyard land.

Constraints Identified

The major constraints reported by respondents included:

- Lack of quality vegetable seeds
- Limited irrigation facilities
- Insufficient technical knowledge
- Poor soil fertility
- Pest and disease infestation
- Lack of fencing against animals
- Labour shortage
- Limited awareness regarding scientific management

Farmers suggested that regular training programmes, quality seed distribution, and technical guidance from agricultural institutions would encourage wider adoption of kitchen gardening.

Discussion

The present study demonstrated that awareness programmes conducted under the National Service Scheme effectively enhanced farmers' knowledge regarding kitchen gardening. Before the intervention, most respondents were unfamiliar with scientific methods of vegetable

production despite possessing sufficient backyard space. Similar findings have been reported by Algert *et al.* (2016), who observed that home gardening increases vegetable consumption and improves household food security. Likewise, Awasthi *et al.* (2016) emphasized that kitchen gardens are particularly beneficial for rural households with limited income.

The educational demonstrations proved more effective than conventional lectures because farmers could directly observe the layout, planting methods, and compost preparation techniques. Practical exposure improved their confidence in adopting kitchen gardening. These findings are consistent with Chawla *et al.* (2016), who reported that training programmes significantly increased awareness and adoption of kitchen gardening among rural communities. The study also highlighted several barriers to adoption, particularly the lack of quality planting material, irrigation facilities, and technical guidance. Addressing these constraints through extension services, Krishi Vigyan Kendras (KVKs), agricultural universities, and government departments can substantially improve adoption rates. Kitchen gardening not only contributes to nutritional security but also supports sustainable agriculture through recycling of household waste, reduced dependence on chemical fertilizers, and efficient utilization of available land. It can play a significant role in improving the livelihoods of rural households while reducing expenditure on vegetables.

Overall, the study confirms that community-based awareness programmes are an effective extension strategy for promoting kitchen gardening among farmers. Continuous follow-up, training, and institutional support are essential to sustain the adoption of kitchen gardens and maximize their long-term benefits for rural communities.

Table: Yield and Economic Evaluation of Kitchen Garden planted in 250 m² Area

S.N.	Crop	Yield/Bed (5 X 4m)	Economic Evaluation			
			Gross Cost	Gross return	Net return	B:C Ratio
1	Chillies	8.50	473.00	960.00	487.00	1:2.02
2	Carrot	19.00	420.00	864.00	444.00	1:2.05
3	Beetroot	20.50	370.00	1029.00	659.00	1:2.78
4	Amaranthus	17.00	339.00	648.00	309.00	1:2.91
5	Radish	25.60	441.00	1166.00	725.00	1:2.64
6	Coriander leaves	23.90	255.00	924.00	669.00	1:2.62
7	Cauliflower	52.00	442.00	941.00	499.00	1:2.13
8	Cabbage	56.00	422.00	820.00	398.00	1:2.93
9	Brinjal	59.00	342.00	712.00	370.00	1:2.08
10	Tomato	32.70	473.00	1009.00	536.00	1:2.13
11	Spinach	31.45	336.00	663.00	327.00	1:19

Conclusion

Kitchen gardening represents a sustainable strategy for improving nutritional security and household income in rural areas. The awareness programme conducted through NSS successfully enhanced farmers' knowledge regarding scientific kitchen gardening. Adoption of kitchen gardens can contribute to improved health, better utilization of available land, reduced expenditure on vegetables, and environmental sustainability. Regular training, technical support, and timely supply of quality planting materials are recommended to further increase adoption.

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