

## INTRODUCING AND EVALUATING TERRACE GARDEN FOR ORGANIC CULTIVATION OF GREENS

\*K. MANIMOZHI \*\* D. POONGODI

\* Associate Professor, Department of Resource Management, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore - 43.

\*\* M.Sc. Scholar, Department of Resource Management, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore - 43.

### ABSTRACT

The research entitled "Introducing and Evaluating Terrace Garden for Organic Cultivation of Greens" was undertaken with the main objective of increasing the use of organic foods and minimizing cost of procuring greens through imparting training to homemakers. To conduct the research, Madukkarai town in Coimbatore city was selected. To impart knowledge on organic cultivation of greens a training curriculum was formulated. Training was given for a period of three days, two days for theoretical explanation and one day for demonstration. The impact of the training programme was evaluated in terms of knowledge gained, attitudes developed by the homemakers and amount saved by the selected households. The end results revealed that, before training programme 80 per cent of the households spent Rs. 200 and above for getting greens. After the training programme the homemakers expressed that, since they are cultivating the greens in their terrace, maximum amount spent for producing greens is only Rs.51-100 per week. The result shows the fruitful result of reducing the cost of Rs. 100 per week by the selected households. The homemakers emphasized that it is safety and more satisfied for eating what they are produced. Ninety three per cent of the homemakers expressed that it is easily available to use. Eighty five per cent of the homemakers stressed it helps to prevent pollution.

### Introduction

The world is moving today towards organic farming and trying to shed the chemical as much as possible with the view to prevent pollution of air, food and water. Organic farming refers to the agricultural systems used to produce food and fiber. Organic farming systems do not use toxic chemical pesticides or fertilizers. Instead, they are based on the development of biological diversity and the maintenance and replenishment of soil fertility. Organic foods are minimally processed to maintain the integrity of the food without artificial ingredients, preservatives, or irradiation (Callesen, 2011).

As people are becoming more aware of eating healthy food, there is a growing interest in organic fruits and vegetables. There are many health benefits of eating organic fruits and vegetables and many people believe that they taste a lot better than conventional produce. Organic produce also contain more nutrients and minerals than conventional produce. The level of pesticides used in production of organic food is lower than that of conventional fruits and vegetables (Chauhan, 2011).

It reduces the distance the organic food has to travel

before reaching the mouth of an urbanite. And part of urban and household organic waste is converted to wealth; prevents contaminated vegetables and fruits getting into human systems, provides fresh vegetables and fruits, keeps members of the house hold everyday engaged for few hours productive (Schmidle and Labiza, 2010).

The terrace garden is very helpful to get the mind refreshed one the body exercised. Terrace vegetable gardening will give not only freshness of mind, exercise to body but also fresh and luscious vegetables. Further it will also save the hard earned money (William, 2011).

Hence, realizing the importance of organic cultivation that are environmentally sound, profitable, production and maintain the social fabric of the urbanite, this Research study was undertaken with the following objectives.

- To collect information on availability of space for terrace garden for organic cultivation of greens.
- Frame a training curriculum to impart education on terrace garden for organic cultivation of greens.
- To educate and motivate women on terrace

garden for organic cultivation of greens.

To evaluate the impact of training programme in terms of knowledge gained, attitudes developed, organoleptic qualities and economic benefit of cultivated greens.

### Methodology

#### a) Selection of Sample

For this Research, Madukkarai was selected, it is situated in Coimbatore City. Out of 378 households, 100 individual household were selected for household survey. From 100, 20 households were selected for the Training programme based on the availability of space for gardening, easy approachability, co-operation and co-ordination of the homemakers.

#### b) Conduct of the Training Programme

Three days training programme was organized, out of three days, two days were taken for giving factual information and one for field demonstration. The tools used for the training programme were special lectures, participatory discussion and demonstration.

#### c) Evaluating the Impact of the Training Programme

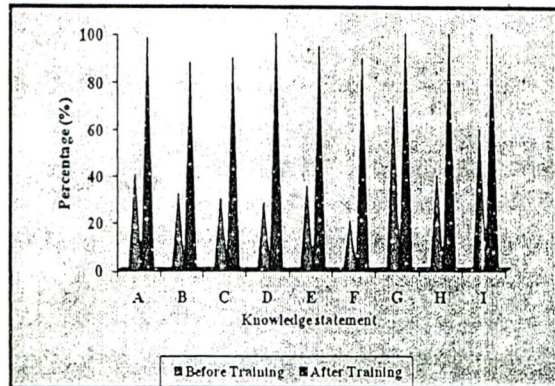
The impact of the training programme was evaluated interm of knowledge gained, attitude developed, organoleptic quality and economic impact of the selected households.

### Major Findings:

#### a) Knowledge Gained by the Selected Homemakers

Figure I exhibits the percentage of knowledge gained by the selected home makers through the training programme.

### Percentage of knowledge gained by the Homemakers



- A Need for greens
- B Nutrition content in greens
- C Problems due to accumulation of waste
- D Problem due to synthetic insecticides
- E Method of preparing organic fertilizer
- F Benefits of utilizing terrace for gardening
- G Advantages of consuming organic foods
- H Advantages of cultivating organic greens in the terrace
- I Need for environment safety and maintenance

**Figure I**

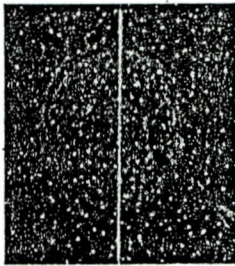
It is clear that, there was significant gain knowledge among the recipients of training on terrace garden for organic cultivation of greens. The significant result obtained might be attributed to the responsibility exhibited by the homemakers who playing the leadership role assigned to them.

#### a) Attitudes Developed by the Homemakers

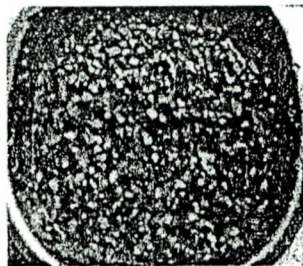
The attitude score has increased from a minimum score of 1 to maximum score of 90 after attending the training programme. The attitude scores of the homemakers was increased and also had shown significant 't' values which implies the fact that the attitudes of the homemakers on terrace garden for organic cultivation of greens has been changed after attending the training programme.

**b) Organoleptic Qualities**

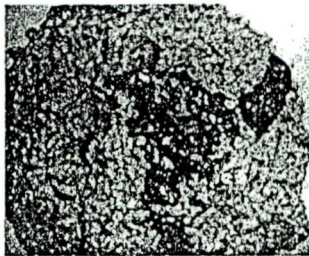
Organoleptic qualities such as taste, flavor, texture and general appearance were assessed by the homemakers and head of the families using score card. The head of the families and homemakers are highly satisfied and expressed after long period we are consuming the tasty and good flavored preparation. They also expressed the appearance of items prepared was good.



*Coriander chutney*



*Fenugreek kootu*



*Vallarai thuvaiyal*

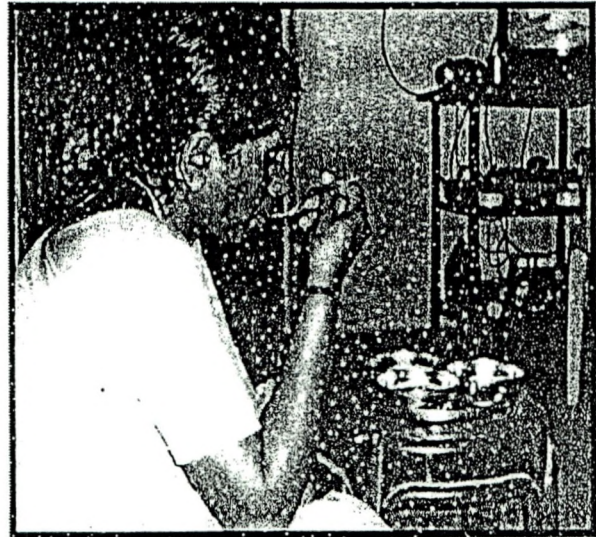


*Ponanganni poriyal*



*Mint chutney*

*Food Prepared From The Cultivated Greens*



*Sensory Evaluation of Food Prepared From The Cultivated Greens*

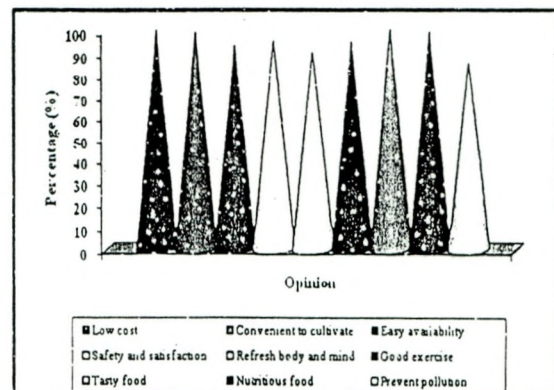
**a) Economic Impact of Cultivated Greens by the Selected Households**

Before the training programme 80 per cent of the households spent Rs. 200/- and above for consuming greens. After the training the homemakers expressed that, since they are cultivating the greens in their terrace, maximum amount spent for producing greens is only Rs. 51-100/ week. The result revealed that automatic savings of Rs. 100-150/household/week through terrace organic vegetable gardening.

**b) Opinion Regarding the Adoption of Terrace Garden for Organic Cultivation of Greens**

The opinion regarding the adoption of terrace garden for organic cultivation of greens was assessed and presented in Figure - II.

**Opinion Regarding the Adoption of Terrace Garden for Organic Cultivation of Greens**



**Figure II**

Cent per cent homemakers opinioned that it is low cost and good taste. Ninety nine per cent and 95 per cent of the homemakers expressed that it is nutritious and safety respectively. Ninety three per cent of the homemakers expressed that it is easily available and 85 per cent of the homemakers stressed it helps to prevent pollution.

**Conclusion**

Terrace garden can function as the small private farming unit, to produce raw foods elements, useful in daily life. Terrace garden is a boon for every urbanite. It is necessary for both an individual city dweller as well as gross quality life, nationwide. In short, terrace garden is maximum meaningful use of minimum available space, though small, productivity and pretty, easy to maintain compared to large gardens, an economical way of balancing green space with uncontrolled growth of cement structure in urban areas.

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