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Popular Article

Roof top Kitchen Garden *Basket of fresh vegetables for urbanites*

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Vegetables are the irreplaceable part of human diet which serves as a source of essential nutrients, vitamins and flavors. Indian Council of Medical Research (ICMR) recommends per capita intake of 350g of vegetables daily, while in the present situation from the production statistics 400g of vegetables is available per capita daily. But due to the post-harvest losses, during transportation, warehousing and in market only 200g of vegetables is available per capita daily at the consumer end. Beyond this shortage in quantity the available stock is not fresh, not free from pesticide residues and low in nutrient quality.

So, it is very important to grow our own, fresh, pesticide free, nutrient rich vegetables for our home needs if not full at least a part of it. In this regard kitchen garden plays an important role in production of household vegetables. Due to shortage of land in the urban areas rooftop kitchen garden is emerging as one of innovative garden types where it is fulfilling the requirements of vegetables partially or fully depending on the family size.

Kitchen garden: It is a simple type of garden where the backyard of the home was efficiently utilized to grow the vegetables and few ornamental and medicinal plants to meet the family requirement.

Roof-top Garden: It is a special type of garden executed on the terraces or roof tops of the residential buildings especially in urban areas after following certain scientific factors without harming the architectural and civil properties of the building. In this type of garden, the plants will be grown after



water proofing and providing drainage facilities for excess water. Usually dwarf and ornamental plants will be grown for aesthetic purpose.

Roof-top Kitchen Garden: it is a scientific integration of kitchen garden and roof-top garden where short duration vegetables occupy maximum garden space, where few dwarf growing perennial fruits and vegetables and few ornamental, medicinal and aromatic plants can be integrated based on their utility and priority.

Execution of Roof-top Kitchen Garden

Select the appropriate type of planting method based on the time and resources available to maintain the garden.

a) **Pot culture / potted plants:** in this method the crops will be grown in pots, grow bags, poly bags or any other reusable plastic bags and containers from domestic use. The garden can be maintained with some basic gardening ideas which doesn't demand technical expertise.



b) **Soil bedding method:** in this method water proofing and drainage should be provided irreplaceably before the execution of garden followed by a layer of gravel on which 15 – 30 cm planting mix comprising soil, manure and coir pith will be filled. On this soil bed the crops can be grown similar to on field cultivation.



This method requires high maintenance and technical expertise.



Basic inputs for Roof-top gardening:

- Space for gardening
- Sufficient water supply
- Planting mix/ soil
- Seeds / planting material
- Pots, grow bags



- Basic tools (trowel, hand rake, rose can, garden sprayer)

Tips for happy gardening

- Plan and execute the garden in the minimal resources out of which most of them are reused or recycled.
- Get the planting mix, seeds from the authorised dealers only.
- Avoid purchasing of compost and other inputs each time, generate it through recycling from your own garden.
- Turn the biodegradable waste from your kitchen and household chores into compost using a small composting bin in your garden.
- Avoid repeated sowing of same crop in the same pot or place, instead go for crop rotation.
- Regularly monitor the plants for soil moisture and their health.
- Avoid chemical inputs for nutrient and pest management, instead go for organic means such as plant extracts, botanicals.
- Spend the leisure time in garden activities which helps you to reduce the mental stress.

Crops choice

Select the early bearing and high yielding crops. In small duration crops like leafy vegetables varieties of crops can be opted for kitchen garden. Avoid the crops which require intensive care and susceptible for pest and diseases. Better to choose local cultivars which are tolerant to biotic and abiotic stresses, bearing period is more, nutritive quality is good.

Few crops that can be easily grown are: Leafy vegetables (amaranth, palak, methi), tomato, chilli, bhendi, cluster bean, bush bean, carrot, radish, beet root, knol khol, cabbage and cauliflower. If the space is sufficient to include a small nethouse or polyhouse in the garden the exotic vegetables like celery, parsley, lettuce, savoy cabbage, kale, rhubarb and fruits like strawberries can be grown.

Integration of other crops

Based on the choice or requirement of the family the following plants can be integrated in the garden along with vegetables.

Dwarf growing, grafted and potted fruit plants can be included. Example cherries, guava, lime, dwarf mangoes etc.

Herbaceous fruit plants like papaya, banana can be grown in bigger containers or urns.



The potted and dwarf perennial vegetables like drumstick and curry leaf can be grown.

Apart from fruits and vegetables few ornamental crops can be included whose blooms add beauty to the garden and attracts bees and butterflies, thus creating mobility in the garden. Flowering plants will also provide the essential flowers for traditional requirement.

Few medicinal plants which are essential in house hold medicine can be added in the garden. These plants include thulasi, American basil, sage, bringaraja, aloe vera etc.

To add pleasant natural fragrance in the garden few aromatic crops can be included, where dhavana, potted jasmynes, geranium, aromatic grasses, lavender may serve the purpose.

Benefits of Roof-top kitchen garden

- Provides the fresh, pesticide free fruits and vegetables to meet the requirement of a family partially or completely.
- Reduces the waste generation in the home because of reusing and recycling of waste.
- Purifies the air, reduces the air and noise pollution in residential premises.
- Creates a peaceful and green environment in the home.
- Garden therapy: Spending leisure time in garden activities helps to reduce mental stress, adds to physical and mental health.
- It is an eco-friendly or Go Green initiative.



Happy Gardening.....

