



Visakha Government Degree College for Women

Affiliated to A.U. Accredited by NAAC with B grade

Visakhapatnam



COMMUNITY SURVEY PROJECT IMPLEMENTATION OF TERRACE GARDENS IN URBAN AREAS

P RASMITHA

CBZ

Title: To realize and guide urban people about terrace garden and to make terrace garden in every house.

Aim: To make urban areas fill with greenery and makes the urban people to eat organic foods by their own cultivation.

Methods: Community survey and community awareness

Time line: 8 weeks

1 Week: Community survey. This includes door to door to door survey along with the collection of data in the form of questionnaire. Different types of peoples are selected for the collection of the data. A comparative study of making terrace gardens in every home and making them aware of organic planting among the people is the main purpose.

2 Week: Community awareness. Under the programme, and attempt to create the awareness regarding the importance and uses of terrace garden. Different types of plants regarding the area and length of terrace are used separately for this purpose.

Main Project (5 weeks): All the data collected has been compiled in the form of project report this include the analysis of data. Based on this, definite conclusions are drawn regarding the implementation of making terrace garden in urban areas in each and every house. This includes the graphical representation of the data.

Last Week: It includes the presentation of our project work to the internal viva committee at the college level individually.

Tools and Techniques used: Although normal mud, pots, soil, seeds, water etc., are used. In this project the formats listed below are used for collecting data and drawing conclusion.

1. Questionnaire
2. Tabular Columns
3. Flow Chart

VISAKHA GOVERNMENT DEGREE COLLEGE FOR WOMEN

IMPLEMENTATION OF TERRACE GARDENS IN URBAN AREAS

QUESTIONNAIRE

NAME OF THE STUDENT: P RASMITHA

NAME OF THE FACULTY MENTOR: J LAVANYA

VILLAGE/LOCALITY: SIMHACHALAM

- Do you have any ideas about terrace garden?
- Do you have balcony?
- Do you know how to convert balcony into garden?
- Do you know what the best indoor plants are?
- Have you ever saw the terrace garden?
- Have you have any knowledge about seasonal plants?

- Have you know any daily gardening tips to maintain plants?
- Have you know what are the plants works well in pots?
- Have you know which types of plants necessary need moss support?
- Have you known does putting, decorative pebbles in the plants hamper a plants health?
- How often do you recommend fertilizing?
- How often do you replace soils in pots?
- Do you know how to make a terrace for gardening?
- Do you know how to maintain a terrace garden?

- Do you know which soil is best for terrace garden?
- Do you know how to make a good soil mix for a terrace garden?
- Do you know how to make terrace water proof?
- Do you know which type of water proofing is best for the terrace?
- Do you know how to keep terrace garden clean?
- Does there any terrace garden in this area?
- Do you know how to make a gorgeous terrace garden or have you ever saw it?

- Do you know what sorts of containers are able to use in the gardening?
- Do you know what the benefits of terrace garden are?
- Do you know how much time it will take to line up the terrace garden?
- How much time would you expect to maintain a terrace garden every day?
- How much will the terrace garden cost?
- How do you know that plant reads water?
- Do you know that terrace garden helps in earning money?
- Do you know what to do before starting a terrace garden?

- What do you think that this terrace gardening is profitable or loss?
- Do you have any knowledge about organic terrace garden?
- Do you know how to decorate terrace garden?
- Do you know what is the aim of terrace gardening?
- Do you know how many types of terrace gardening are present?
- Do you know what the objects of terrace garden are?
- Do you know what the best solution for raising soil pH levels is?

- What do you think that regular fertilizing good or bad for your gardening?
- What do you think which is the best place to establish the garden? Is it on the ground, raised beds or containers?
- What do you think that which place is best to buy plants?
At the garden centres or super market?
- Do you know what types of weeds are common in lawns?

SNO	DOOR NUMBER OF HOUSES	TERRACE GARDEN		TYPES OF PLANTS			WHETHER THEY HAVE ANY PLACE FOR PREPARING TERRACE GARDEN	
		YES	NO	VEGETABLES	FRUITS	FLOWERS	YES	NO
1	16-182		✓	✓		✓	✓	
2	16-181		✓		✓	✓		✓
3	16-173		✓	✓	✓		✓	
4	16-174	✓			✓	✓	✓	
5	16-175		✓	✓		✓	✓	

Introduction

In gardening, a terrace is an element where a raised flat paved or gravelled section overlooks a prospect. A raised terrace keeps a house dry and provides a transition between the hard materials of the architecture and softer ones of the garden. We have a very long tradition of gardening and landscaping. Our literatures and mythologies are full of references to these. Man always thought of natural landscape as his ideal habitat. Adam originally lived in the Garden of Eden. Most of the world mythologies place that the men of primitive people build their abodes considering themselves as part of landscape.

Man's fascination for landscaping never decrease. The Egyptians had elaborate gardens with many types of birds. Romans were fond of gardens in their villas. Chinese revelled in garden designs. English, Italian and Japanese made an effect to innovate landscape ideas. And Persians developed a concept of "paradise" - the garden with all landscape elements. In turn, Babylonians built terrace upon terrace of gardens which were designed using the Persian landscape elements. These gardens are not created on constructed terrace but the site actually terraced.

They gave rise to idea that we can have gardens on terraces separated from the ground by concrete slab. **JUSTIFICATION** Terrace gardens are most often found in urban environments. Plants have the ability to reduce the overall heat absorption of the building which then reduces energy consumption. "The primary cause of heat build-up in cities is insolation, the absorption of solar radiation by roads and buildings in the city and the storage of this heat in the building material and its subsequent re-radiation.

Plant surfaces however, as a result of transpiration, do not rise more than 4-5 °C above the ambient and are sometimes cooler. " This then translates into a cooling of the environment between 3.6 and 11.3 degrees Celsius (6.5 and 20.3 °F), depending on the area on earth (in hotter areas, the environmental temperature will cool more). The study was performed by the University of Cardiff. A study at the National Research Council of Canada showed the differences

between Terraces with gardens and Terraces without gardens against temperature. The study shows temperature effects on different layers of each Terrace at different times of the day. Terrace gardens are obviously very beneficial in reducing the effects of temperature against Terraces without gardens. "If widely adopted, Terrace top gardens could reduce the urban heat island, which would decrease smog episodes, problems associated with heat stress and further lower energy consumption." Becoming green is a high priority for urban planners. The environmental and aesthetic benefits to cities are the prime motivation.

It was calculated that the temperature in Tokyo could be lowered by 0.11-0.4 °C if 50% of all available Terrace top space were planted with greenery. This would lead to a savings of approximately 100 million yen. Singapore is very active in green urban development. "Terrace gardens present possibilities for carrying the notions of nature and open space further in tall building development." When surveyed, 80% of Singapore residents voted for more Terrace gardens to be implemented in the city's plans. Recreational reasons, such as leisure and relaxation, beautifying the environment, and greenery and nature, received the most amounts of votes.

Planting Terrace gardens on tops of building is a great way to make city more efficient. The planters on a Terrace garden may be designed for a variety of functions and vary greatly in depth to satisfy aesthetic and recreational purposes. These planters can hold a range of ornamental plants: anything from

trees, shrubs, vines, or an assortment of flowers. As aesthetics and recreation are the priority they may not provide the environmental and energy benefits of a green Terrace. Planting on Terrace tops can make urban living more self-sufficient and make fresh vegetables more accessible to urban people.

NEED OF TERRACE GARDEN Terrace gardens are becoming a common feature in today's urban environment. The phenomenon of landscaping on the terraces and Terrace tops has evolved due to excessive exploitation of the urban land. Bricks, concrete and asphalt have replaced greenery on horizontal as well as vertical planes. Skyscrapers, parking areas and network of roads have acquired a major of urban land. The modern means of transport compels us to create amenities such as bus-stands, railway stations and airports which have pushed away the vegetation and natural green spaces from acres of urban land.

In such congested environment, Terrace tops and terrace of buildings provides a valuable potential source of outdoor space accessible to users of buildings. Behind the idea of terrace gardens and Terrace top landscapes is an urge to bring back greenery, which is pushed away from urban areas. These are necessarily green areas created on the concrete slabs. Their need has increased with designing of high-rise buildings which deprive their occupants of any visual contact with nature. Terrace gardens bring back this missing link between the man and nature, though on moderate scale.

Terrace gardens improve the quality of view from the surrounding higher buildings and can be specifically designed to be viewed from above. In cities around the world, terrace gardens are commonly created at three different levels, which are: i. On Terrace top of a building. ii. Porches, window boxes, portico balconies and such projected levels out of tower block, above the ground level iii. At the podium level, around the base or on Terrace of large basements. Terrace gardens, designed with proper understanding of basic requirements and structural care, are able to create a pleasant natural environment at any level in the building.

Terrace landscape provides the outdoor areas for social interchange that otherwise is almost impossible to obtain in densely developed cities. This, in turn goes a long way in bringing about the much needed psychological and physical relief to stresses and strains of today's urban life. **APPLICABILITY** "In an accessible Terrace garden, space becomes available for localized small-scale urban agriculture, a source of local food production. An urban garden can supplement the diets of the community it feeds with fresh produce and provide a tangible tie to food production.

At Trent University, there is currently a working Terrace garden which provides food to the student cafe and local citizens. Available gardening areas in cities are often seriously lacking, which is likely the key impetus for many Terrace gardens. The garden may be on the Terrace of an autonomous building which takes care of its own water and

waste. Hydroponics and other alternative methods can expand the possibilities of Terrace top gardening by reducing, for example, the need for soil or its tremendous weight. Plantings in containers are used extensively in Terrace top gardens.

For those who live in small apartments with little space, square foot gardening, or (when even less space is available) living walls (vertical gardening) can be a solution. These use much less space than traditional gardening (square foot gardening uses 20% of the space of conventional rows; ten times more produce can be generated from vertical gardens). These also encourage environmentally responsible practices, eliminating tilling, reducing or eliminating pesticides, and weeding, and encouraging the recycling of wastes through composting.

The regions where these incentives will most likely be found are areas where failing storm water management infrastructure is in place, urban heat island effect has significantly increased the local air temperature, or areas where environmental contaminants in the storm water runoff is of great concern . An example of such an incentive is a one-year property tax credit is available in New York City, since 2009, for property owners who green at least 50% of their Terrace area. AIM the difference you feel when you go from an asphalt parking lot to a tree-shaded park on a hot summer day.

It is also the difference in temperature between a city and the rural area that surrounds it. Dark surfaces absorb and radiate heat, raising temperatures as much as 6 to 10 degrees Fahrenheit. The result is more than uncomfortable. It has consequences for our environment, our check books and our health. If your Terrace top is a dark color, you are paying too much for your air conditioning. These dark surfaces absorb heat, and so it takes more energy to cool the building's interior.

Not only must your air conditioner work harder to keep your building cool, but power plants, one source of air pollution, must work overtime to keep up with the increased demand for energy. The result is higher prices and degraded air quality. The key to reducing the Urban Heat Island Effect is to reduce the total area of dark, heat-absorbing surfaces such as Terrace and pavement. Dark Terraces can be made cooler by coating them with reflective materials, similar to the way light clothes are more comfortable than dark clothes on a hot day.

Many light-coloured roofing materials cost about the same as dark-coloured Roofing materials. Solar panels are another solution. They help shade a Terrace in addition to generating clean, renewable energy. The use of vegetation on a Terrace is an excellent option. Plants reflect heat, provide shade, and help cool the surrounding air through evapotranspiration. A Terrace garden cuts the energy use within the building,

especially for cooling. The insulation a garden provides helps conserve both heating and cooling energy.

Terrace top gardens absorb rainfall and reduce urban runoff that otherwise would collect pollutants and empty into sewers. A Terrace garden filters and moderates the temperature of any water that is released to the sewer. In addition, plants actually filter the air. Plants improve air quality by using excess carbon dioxide to produce oxygen. On a neighbourhood or regional level, temperatures are lowered and air pollution is reduced when the overall area of dark surfaces is reduced and the area of reflective and shaded surfaces is increased.

The layers of a Terrace garden protect the constructed Terrace from damage and can extend both the warranty and the useful life of the Terrace. A Terrace garden can add usable leisure space to a property that is attractive not just to people, but to wildlife such as birds and butterflies. In fact, limited land resources, expensive sources of energy, and ancient sewer systems overwhelmed by storm water runoff have all contributed to the success of the green terrace gardening in urban areas of all over the world. Tokyo is the first city to mandate building vegetation must constitute 20 percent of all new construction.

OBJECTIVE Terrace gardens are used to: •Reduce heating (by adding mass and thermal resistance value) A 2005 study by Brad Bass of the University of Toronto showed that green Terraces can also reduce heat loss and energy consumption in

winter conditions. •Reduce cooling (by evaporative cooling) loads on a building by fifty to ninety percent, especially if it is glassed in so as to act as a terrarium and passive solar heat reservoir - a concentration of green Terraces in an urban area can even reduce the city's average temperatures during the summer •Reduce storm water runoff Natural Habitat Creation •Filter pollutants and carbon dioxide out of the air which helps lower disease rates such as asthma Filter pollutants and heavy metals out of rainwater • Help to insulate a building for sound; the soil helps to block lower frequencies and the plants block higher frequencies • If installed correctly many living Terraces can contribute to LEED points Increase agricultural space.

With green Terraces, water is stored by the substrate and then taken up by the plants from where it is returned to the atmosphere through transpiration and evaporation. Green Terraces not only retain rainwater, but also moderate the temperature of the water and act as natural filters for any of the water that happens to run off. Many green Terraces are in many green Terraces are installed to comply with local regulations and government fees, often regarding storm water runoff management. In areas with combined sewer-storm water systems, heavy storms can overload the wastewater system and cause it to flood, dumping raw sewage into the local waterways. Green Terraces decrease the total amount of runoff and slow the rate of runoff from the Terrace.

It has been found that they can retain up to 75% of rainwater, gradually releasing it back into the atmosphere via condensation and transpiration, while retaining pollutants in their soil. Often, phosphorus and nitrogen are in this category of environmentally harmful substances even though they are stimulating to the growth of plant life and agriculture. When these substances are added to a system, it can create mass biological activity since they are considered limiting factors of plant growth and by adding more of them to a system, it allows for more plant growth.

SCOPE In fact, limited land resources expensive sources of energy, and ancient sewer systems overwhelmed by storm water runoff have all contributed to the success of the terrace gardens in urban areas. Over 800 green roofs can be found in Germany alone, a leader in building codes and incentives for green roof installation. In Asia, Japan has become a centre for green roof technology. Its capital, Tokyo, is the first city to mandate building vegetation must constitute 20 percent of all new construction.

Green roofs have been installed across America in steadily increasing numbers over the past decade, and research is being conducted in North American universities on the impact of green roofs on the environment, economy, and energy resources. Some major corporations, like Ford Motor Co. , The Gap, and H. J. Heinz Co. , have recently installed green roofs, and the approved design for the new World Trade Centre includes a rooftop garden. **LIMITATIONS** the

main disadvantage of green roofs is that the initial costs of installing terrace garden can be double that of a normal terrace. The additional mass of the soil substrate and retained water places a large strain on the structural support of a build. This makes it unlikely for intensive green roofs to become widely implemented due to a lack of buildings that are able to support such a large amount of added weight as well as the added cost of reinforcing buildings to be able to support such weight. Some types of green roofs do have more demanding structural standards especially in seismic regions of the world.

Some existing buildings cannot be retrofitted with certain kinds of green roof because of the weight load of the substrate and vegetation exceeds permitted static loading. Depending on what kind of green roof it is, the maintenance costs could be higher, but some types of green roof have little or no ongoing cost. Some kinds of green roofs also place higher demands on the waterproofing system of the structure, both because water is retained on the roof and due to the possibility of roots penetrating the waterproof membrane.

Another detractor is that the wildlife they attract may include pest insects which could easily infiltrate a residential building through open windows. Due to these cause mainly finance required at initial setup of terrace garden it is difficult to develop terrace gardens but terrace gardens are the demand of modern urban areas and people have to fulfil it. **METHODOLOGY** It is possible to raise vegetables all through

the year even in the middle of the city. All it takes is a terrace and a little bit of effort.

If someone wants to make tomato chutney for breakfast, Mohandas walks to his terrace garden and handpicks the tomatoes himself. Sakthivel gets his family's daily dose of greens from his garden; Shankara Baham gets his medicines from the herbal garden on his terrace. Residents of Ashram Avenue in Mugalivakkam, Mohandas and friends have dedicated their free time to "making their terraces green." Of the 80 houses in the area, eight have terraces that are covered with luscious vegetable patches. Each of the gardens supports one family – the owners rarely buy vegetables from outside. The idea is to make ourselves self-sufficient using the limited space available". A terrace garden can be created in any shape, design and any raised location. Places like a multi storied building, hotels, restaurants or institutes are the places one can follow terrace gardening. Converting your barren space into a lush green patch will de-stress an individual and also provide a healthy environment. Create a desired layout for your terrace garden and carefully plan the number of shrubs, small trees, lawn and others.

Always remember that you do not go in for a plant with a tap root system as the roots of these plants tend to grow beyond the roof and is a threat to your building. Make sure the roof or the selected place is strong enough to support the weight of the soil and gravel. The terrace and the soil should have the required drainage system so as to avoid the garden being

turned into a damp soggy area. One has to construct sufficient drainage chambers around their terrace garden. Small drainage pipes leading to the main drainage pipe should be maintained in your terrace garden.

Always remember that if the water is not drained properly, it will cause great damage to your building. Make sure that there is no leakage in your terrace garden in order to avoid soggy walls. One should select light weighted manure like the mixture of the garden earth, manure and soil remains. Once you're ready with all the above required steps, you can start laying brickbats according to your planned layout. Spread a layer of completely formed bricks on your terrace. The bricks have to be totally burnt in order to facilitate the drainage of water.

Also one can make use of ridged sheets in order to maintain an effective drainage system. The sheets should be placed carefully in order to lead the pipes to the drainage system. In order to avoid the manure and the earth from depositing in between the brick spaces, one has to spread the wire mesh (HDPE net) on the bricks. One can paint and make the terrace area colourful and make it look realistic by adding a swing. Plants like creepers, flowering plants and vegetables can be grown in your terrace garden. Once you have finished planting the saplings, water the plants regularly and provide the required amount of manure. FLOW CHART Flow chart Picture composed in corel draw.

Terrace Gardening

Advantages; Disadvantages

Advantages and Disadvantages of terrace gardening

What is a terrace garden? The terrace garden is also called a roof garden, it is a garden in which vegetables, flowers, and fruits are developed on terraces, balconies or roofs of buildings. The kitchen garden, a normal in every Indian household, has now shifted to the roof due to constraints of space and is known as a terrace garden. Increasing pressure on land and escalating costs have added to its growing popularity.

The advantages of terrace gardening are given below

Some of the benefits to health, aesthetics and the environment include: Reduce the indoor temperature by 6 to 8°C and can reduce air conditioning cost Reduce overall heat absorption of buildings and insulate the building against heat & cold The convenience of safe, pesticide-free, healthy green and fresh fruits or vegetables Conducive to a regular of physical exercise, clean air and being close to nature Terrace garden increases the amount of oxygen in the air It reduces sound pollution Perform as a habitat for city-weary birds Fresh and organic produce: Having a terrace or roof garden gives you direct access to fresh vegetables and fruits. Nothing tastes improved than food cooked with vegetables plucked straight off the plant, or fruits are eaten in their freshest form.

It brings one closer to nature: Nature is always has been man's best friend. Terrace gardens bring a piece of nature to the house.

Helps in reducing pollution: Terrace garden plants increase oxygen production in the air. Having a garden means increasing the flow of oxygen and thus reducing pollution. The plants capture airborne pollutants & filter toxic gases. They potentially control the quantity of carbon-di-oxide and other pollutants constantly released into the air. Your children breathe in the fresh air your garden brings in, which in turn helps them to increase a stronger immunity system.

Improvement to the environment: Our home prior to the terrace garden was extremely warm in the summer time. We have reduced the amount of light or heat being reflected off the roof. In addition, the garden plants are reducing the carbon monoxide from the environment. How does terrace farming impact the environment? Graduated terrace steps are normally used to farm on hilly or mountainous terrain. Terraced fields decrease both soil erosion and surface runoff, and can be used to support growing crops that require irrigation, such as rice.

Helps in rainwater harvesting: Terrace gardens retain rainwater & thus help in moderate the temperature. They also arrest the flow of storm water, therefore decreasing the pressure on sewer systems when the flow is forceful.

Keeps the temperature cooler: The regular dew and evaporation cycle keeps the surface of the roof cool and thus

provides a cool environment inside the house. Another fact that maintains the heat in check is that the light that is absorbed by all the vegetation on the terrace garden would otherwise be converted into heat energy in the absence of the plants. Aesthetic benefit: Create your house visually appealing to the existence of a terrace garden. It beats any pricey & modern uplift that you can do to your house. Prevents soil erosion & makes more efficient use of water: Just like the rice terraces throughout Asia, garden terracing can solve the trouble of soil erosion and water runoff. For instance, if you have a graded lawn that slopes to the street which regularly sends dirt & water into the gutter system, a terrace will naturally retain that water on flat planes instead. That way, you can use your hill & save the drainage system from flooding.

This is a good thing because some municipalities are writing legislature taking away government liability for flood damage to homes caused by sewage backups. The newer homes that are built on green spaces, the additional sewage backups will become a regular thing. Where can one start a terrace garden? Terrace gardens can be created on almost all types of buildings like residential flats, individual houses, commercial hubs, godowns, and factories.

Creates natural steps & a flat space for gardening: If you have a sloped lawn, you know how difficult it can be to apply it for play or gardening. With the addition of some earth or compost, a terrace can include quite a few extra square feet for those purposes. The possibilities are continuous.

The greatest advantage of terrace gardening is that you relax in the lap of nature when you want. Apart from health & environment, it has an aesthetic benefit too. It can make your home cooler by 6- 8°C. Thus a big saving in air conditioning cost. You can also get fresh, clean air right at your home and enjoy the healthy and organically grown green & fresh vegetables grown on your terrace. Disadvantages of Terrace gardening: One major disadvantage of terrace gardening is rainwater saturation of the ground. This happens when terracing retains too much water, which is absorbed into the ground or soil. The problem with ground saturation is that it can lead to water overflow through periods of heavy rains. This can end up source more damaging runoff than in untraced areas. Additionally, if not accurately maintained, terraces can lead to greater soil erosion, often downslope from the terracing, than in non-terraced areas.

[Benefits of Having Terrace Garden at home](#)

Terrace garden is a combination of planting several types of vegetation in limited spaces such as rooftop or green wall which usually has paved surface for ease of watering plants. Furthermore, different varieties of plants can be planted at limited space. A terrace garden is a combination of different plants that are healthy and capable to grow in limited spaces. It's suitable for those who do not have enough space to plant vegetables on the ground. Furthermore, it does not need much soil as the vegetation will be growing with very little soil at all. One of the benefits of a terrace garden at

home is that you don't have to bend over as much because your plants are at a higher level. This can be helpful for anyone who has back problems or wants less strain on their body when they tend to their garden. It also means that if you want something out of reach, it's not going to be an issue!

Some people argue that the idea of planting vegetables on limited spaces is wasteful because they can't generate more yield than what they planted. However, it doesn't assume that you do not plant anything at all especially if you use this method, rather than using traditional method which consumes large amount of land and water source. In addition, there may be possibilities that some plants can't grow well due to various environmental factors. Therefore, home terrace garden is a solution to such problems.

Some of the benefits of having terrace garden at home instead of traditional gardening are:

1. Easy maintenance

Maintenance can be done by oneself, depending on its design and size. Each plant's requirements such as watering and pruning. No need to hire professional gardener anymore. It is cheaper since one does not have to pay someone else to do it; thus, saving money.

2. Can produce food

By planting vegetable seeds and strawberry plants, one can harvest vegetables and fruits periodically at home? Thus, helping the environment by reducing hazardous chemical residue. This chemical usually comes from overusing commercial fertilizers or pesticides in traditional farming; therefore, this minimizes health risks.

3. Economical

It is economical because one does not have to buy plant or seeds from the market anymore. The more one saves money, the more he/she can invest in something else. Furthermore, it reduces expenses for hiring a gardener since no need to hire someone else to do the job that you can easily do yourself.

4. Aesthetics

Aside from being able to produce your own vegetables and fruits, having a terrace garden makes your home green and adds aesthetic value on its surroundings especially if one has colourful flowers planted in it; thus making it look beautiful than usual which also includes fewer maintenance cost due to less repair and replacement in case of damage or destruction compared to traditional gardening.

5. Saves time

Terrace gardening saves time since no need to go out to buy plants from the market, nor spend time searching for plants

which you longed for such as rare plants and flowers; thus allowing you to focus on other things such as work or studies rather than planting and watering activities. It is beneficial since it allows one to save more time that he/she can use in buying groceries, commuting, doing household chores and even spending quality time with family and friends.

6. Waste reduction

Due to less space occupied by traditional gardening which takes up almost half of the land area in houses compared using terrace garden. The land area used by traditional gardening is now freed for other uses such as parking spaces or even growing crops. Also using terrace garden ideas you can reduce wastage of water since plant requirements are limited to certain areas. Instead of spreading them throughout the whole soil surface in traditional gardening which wastes time during watering activities due to distance, time and effort required.

7. Better air quality

Growing plants or trees that helps to purify the air by converting carbon dioxide into oxygen which is good for everyone. People who suffer from lung disease need fresh air. Where there are many vehicles running alongside busy roads that emit harmful gases to the environment. Hence, home terrace garden helps to reduce exhaust emission from vehicles and at the same time makes our surrounding greener and healthier.

8. Resale value

One of the factors in considering a place to live in is its resale value which makes it more expensive compared to other areas. Since everyone wants to live in a house with green environment and how accessible it is whether by land, air or sea making it convenient for one's lifestyle. Thus, terrace garden at home adds up to what you paid when you bought the house from the market. Even before you purchase it because people who are looking for a certain type of house would consider what lies within that area such as planting and gardening or landscaping activities done. Also, this is one of the reasons why some houses have their own gardens installed due to increasing the resale value of the house.

9. Fire hazards reduction

Traditional gardens and planted trees & plants can easily catch fire during hot seasons. Especially when they are not maintained well enough due to lack of water or adding fertilizers and pesticides. Whereas, home terrace garden is safer compared to the latter as all the requirements needed for plants such as water is limited. It can be controlled unlike in traditional gardening. It is either too wet or dry that cause's easy combustion of plants especially those with leaves. They hold a lot of water that evaporates quickly turning it into steam. This causes an explosion within the plant materials making them easily combustible.

10. Aesthetic

Terrace garden designs attract people's attention since it looks green and fresh. It adds up to the surrounding decorum giving it a wonderful view of freshness and colour. Also, they attract bees which help in pollination of plants resulting to more seeds germinating.

Roof Terrace Garden Ideas for your home.

A garden is a great way to have an outdoor space for relaxation and entertainment. Some people are intimidated by the prospect of gardening because they don't know how to start, but with these terrace garden ideas, you can transform your yard into a beautiful, relaxing place.

If you're looking for [Balcony Garden](#) or Terrace Garden ideas and how they work, read on!

1. Analyse Your Space

One of the best ways to get started with Balcony Garden or Terrace Garden ideas is by analysing your space. Look at what you have and how it can be used in new and creative ways. This will help you avoid wasting materials that you would otherwise consider unusable. You can even use some supplies that are just taking up space. For example, you can use an old dresser as a garden planter box to make the most out of your yard & storage space!

2. Add a small fountain to your garden.

Fountains are a great way to add a rustic touch that can be enjoyed by all. The trick with these Balcony Garden or Terrace Garden design ideas is to not go overboard. Just because you have the space doesn't mean that you need to fill every inch of it with something. Instead of trying to be too fancy, just stick with a simple fountain and see what you can do with the space around it. You might be surprised at how beautiful it can be!

3. Get creative with your planting design by adding different shapes, colors, and textures to make it look more interesting.

This is another thing which you want to do with your Balcony Garden or Terrace Garden design. You can add a lot of different shapes and textures to make your garden look more interesting. For example, you can use different types of plants with different shapes and textures to highlight different areas. This is very easy to do with succulents.

4. Add a small wooden bench to give your garden an old-fashioned feel.

Putting Wooden Benches can be a great idea for Balcony Garden or Terrace Garden to add an old-fashioned flair to your patio. You can place them in your flower bed or alongside the fountain to give your garden a more mature look and even use them in areas where you want to relax or

read. You might be surprised at how much of a difference it makes.

5. Create a vertical garden using old wine bottles or any other materials you have lying around.

Vertical gardens are a great way to have an area for flowers without taking up too much space. You can create these Balcony Garden or Terrace Garden designs very easily and cheaply. You don't need to do much, just add a few wine bottles and fill them with dirt and plant some flowers in the top. This is a great idea for people who live in an apartment or condo and don't have a lot of yard space.

6. Hang some string lights around your garden to create a romantic setting.

String lights are the perfect way to add an elegant touch to your rooftop terrace garden. They're inexpensive and easy to install. They come in a variety of different colors which you can use to coordinate with the flowers or theme that you have in your garden.

7. Include an herb garden for cooking purposes.

Putting Herbs can be a perfect idea for Balcony Garden or Terrace Garden because they take up very little space. If you have an outdoor kitchen, this is a great addition to it. You can also use them for cooking, which makes them a very functional garden design idea.

Conclusion

Terrace garden helps people live healthy lives due to clean air that is free from pollution caused by cars and other vehicles. It also encourages planting trees around buildings especially those huge ones used as offices or homes. Having home terrace gardens are beneficial since it reduces wastage of water which will later cause shortage during dry seasons.

USES OF TERRACE GARDENING

Why it is important to know the benefits of terrace gardening?

Most of us are in high zeal to start our own gardening and we take a step forward and start a garden setup without knowing the basics and wind-up in after sometime.

To successfully create a terrace garden and continue till harvest certain basic things has to be known (Link) and knowing uses/benefits of terrace gardening will inspire you to keep the zeal till end!!

Okay, now let me get into the actual topic “uses/benefits of terrace gardening”

Terrace Gardens are source of highly nutritious food

We all know vegetables and fruits do breathe.

But did you know veggies and fruits respire even after harvest? You heard right!! Yes, they breathe even after harvest that's the reason they start to ripen and rot gradually.

In the process of respiration, the veggies and fruits break down the nutrients and thus the nutritional value lowers hour by hour.

I guess now you know why it is important to consume fresh food!!

More the food is fresh, more the nutrients you gain.

So, terrace garden is best option to eat fresh food hurry!!

Free from All Kind of Chemicals

No doubt, you can be sure of your own grown food.

With this fast urbanization it is highly impossible to supply fresh and chemical free food (Pesticides, chemicals for artificially ripening and post-harvest chemicals for various reasons).

So, it is always a best idea to have terrace gardening to keep your family healthy!!

You Enjoy the Taste of Vegetables and Fruits

We all know the naturally grown food tastes better and when we grow it in our own garden then it will taste much better!!

You will agree with me after your first harvest for sure...

Along with taste it is more nutritious, fresh and flavourful

Family Time

Everything is on fingertip in this digital world, people live in same house yet feel disconnected as everyone are busy in the virtual world!!

Gardening is the great way of bringing family together and spends quality time...

Stress buster to you, fun for kids, love and peace for elders...

Waste Management

With terrace garden, composting unit is must in various aspects.

The waste generated from your kitchen can be used as compost which in turn goes back to your plants.

This process of conserving food waste also put less pressure on the municipality waste disposal system. Most time waste

from cities is just dumped in the outskirts of the city, which pollutes the soil, air and water. When you recycle your waste back into your garden not only you have made waste useful, you have also done your bit towards the environment.

Impact on Mental Health

Nature is having a super power to calm our minds!!

Gardening is the best therapy for stress...

In this modern and busy life find a way to de-stress yourself...

Yup, its right time to start your own garden.

Contribution to Bio-diversity

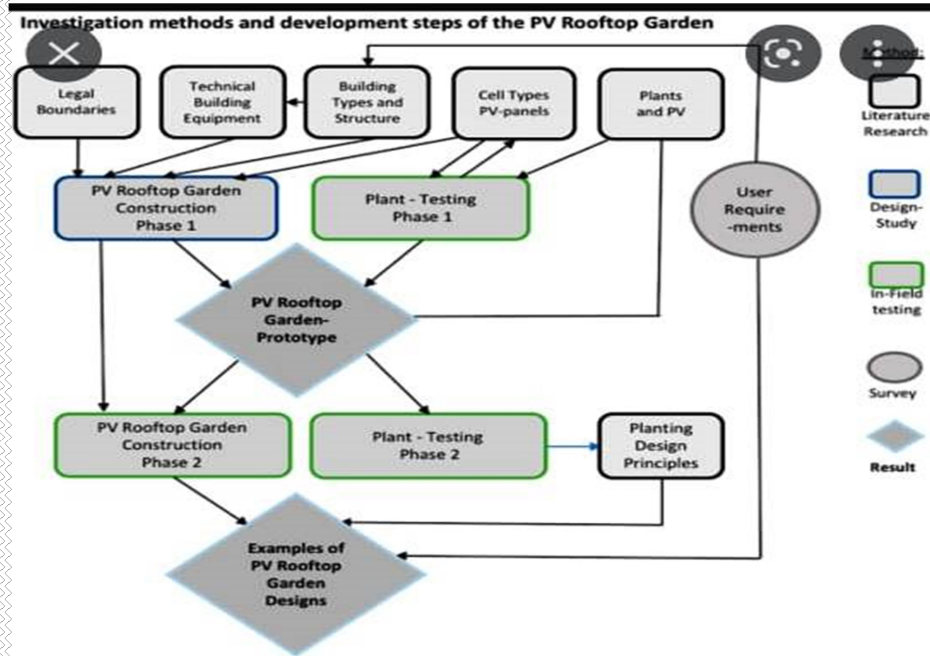
Benefits are not limited to you and your family but with terrace gardening you also start contributing to Mother Earth in many ways like cutting down carbon dioxide levels, chemical free cultivation

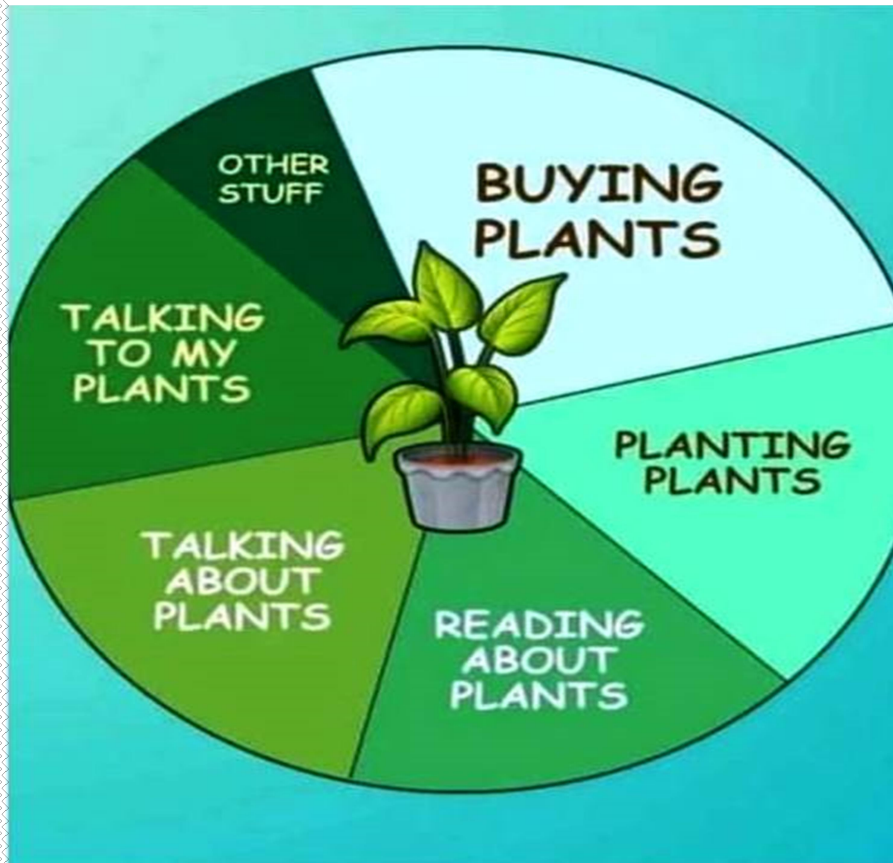
Helps keeping your home cool

Global warming, Global warming, Global warming!! Hot topic all over the globe.

And if you are living in urban then definitely you might be feeling the rise in temperature year by year due to various factors...

Terrace gardening plays a crucial role in keeping your home cool!!





Project Implementation: The project was started in a small harbour area by a community survey to find out that how many terrace gardens are there in a locality and how much knowledge that the people in locality have about terrace garden. After doing the survey we came to know that the people in locality have every poor knowledge about terrace garden. There by, I started creating awareness in all of them by conducting community awareness programme.

After creating that, meanwhile I had started distributing plants to them. After that I had conducted many campaign programmes. There by, I had come to know the problems of

them and I started giving guidance to them to how to get rid from those problems.

After doing all these I had prepared my project report which had took some more time in doing that. At last, finally I had prepared the report.

Discussions and Conclusions:

After this community survey, the following conclusions are drawn

- That the most number of people in urban areas does not have any ideas about terrace gardening.
- By doing different types of campaigns we had created somewhat knowledges to them about terrace gardening.
- By conducting the survey we came to know that there is less or no number of terrace gardening and meanwhile, we can also know the problems of the soil in the area.
- After keeping awareness problem many people came to know the importance, benefits and uses of terrace garden.
- So from this we can say that terrace garden is the best thing which helps us to be healthier by eating our own cultivated healthy food. And there by it also helps us economically.

So from this we can conclude that this community survey project created awareness among all the people in urban area and there started planting. This helps them to create sort greenery among their living areas. By starting with

short greenery we can make almost all the urban areas totally green.

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**THIS IS
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