

Having your own garden can bring you both happiness and bounty. The simple pleasure of picking and biting into a fresh ripened red tomato.

However, finding a place to build your garden in this concrete jungle called cities can be a little challenging. There are concrete buildings, roads, markets everywhere you see. Does that mean all the plant lovers living in the cities can't build their gardens anymore? Well, what are rooftops for? Just think of your roof garden with all the beautiful flowers, fresh organic veggies, and fruits just a few steps away from you. One can easily transform their rooftop into a terrace garden.

It doesn't matter how big or small your rooftop is, with the right planning and little efforts you can transform your terrace into a garden. It's a myth that building a terrace garden costs a lot. There are multiple ways to go about revamping your terrace, it all depends on the time and money investment you are willing to make.

In this extensive guide, we're going to tell you everything you need to know about building your terrace garden from scratch.

Benefits of Terrace Garden

Before getting into the details of how to go about building a rooftop garden, let's look at a few reasons that will inspire you to get growing your roof garden:

Supply Of Nutritious Greens

What's better than the fresh supply of home-grown veggies and fruits every day from your garden. Organic vegetables and fruits are more nutritious than the ones we buy from food markets and are great for your health.

Imagine the hot soup that you prepare using the fresh vegetables from your garden. Mouthwatering and full of nutrition.

The food that we source from markets and grocery stores are usually grown with the help of chemical fertilizers. This chemical then seeps into your food system and can eventually lead to health hazards. Growing your own food will help you ensure the good quality of food that you consume on the daily basis.

Ace Your Space

Building a terrace garden helps in keeping your home cool, it is great for the people living in tropical areas. All the plants growing on your terrace will create a micro-environment and will lower the temperature of the place. So while you enjoy the wholesome home-grown food you also save up on big bills from ACs.

Reduces Your Carbon Footprint

By building a garden at your home you will help the environment and reduce your carbon footprint. The plants that you grow will improve air quality. Farming done using chemical materials deteriorates the soil quality and pollutes air and water.

Stay Connected With Nature

Having your terrace garden gives you access to nature 24*7. As they say, “Nature is man’s best friend”. It keeps you disconnected from all the stress and chaos of the world. Having your own terrace garden means having access to your peaceful corner at all times.

Helps You Stay Fit

Gardening is always a great exercise, the number of efforts you will put into maintaining your garden will help you stay fit and active. Taking care of your plants, watering them, and other activities will keep you physically active and away from your everyday boring exercising routine.

Basics Of Rooftop Gardening

Once you make up your mind about building your rooftop garden, you’ll have to make a checklist and keep the following things in mind to help you get started.

Prepare A Sketch/Layout Of Your Terrace Garden

Prepare a layout/sketch of the garden

Before you start putting your gardening skills to use, make a rough sketch of your rooftop garden. Plan how you are going to proceed with planting your greens. Whether you’ll be planting them in containers, raised beds, or making use of the vertical space on your terrace.

You can also make a sitting arrangement in the center of your garden to get your daily dose of nature. Here’s how to make the most of your space with Containers, Raised Beds, Trellises, and Vertical Planters.

Equipment Or Tools Required For Rooftop Gardening

These gardening tools will come in handy when you start working on your terrace garden. You can stick to this list of gardening tools and save yourself and your wallet from an overwhelming trip to the gardening store. These five tools will help you get off to a strong start.

Trowel

Hose Pipe Or Watering Can

Shovel

Gardening Rake

Pruning Scissor

Soil Preparation

Healthy soil leads to healthy plants! Soil that is properly nourished and conditioned is the key to growing proper plants. Create your potting mixture by mixing soil with organic compost. The ideal soil for your terrace garden should neither be too compacted nor too light. The soil should have a balanced texture, crumbly soil that can retain the moisture is good for the plants.

Feed your soil with organic compost regularly. The important nutrients can get washed away from your rooftop garden soil with the rains. Therefore, it is necessary to fertilize them for a good yield. Avoid using chemical fertilizers as it will not only seep into your system but it will also harm the good bacteria and microbes in your soil.

Prepare your potting mix by taking equal portions of red sand, organic compost, and coco peat. Mix it well and leave your potting mix to settle a week or two before using it in containers. Ensure that

the texture of your potting mixture is balanced. To keep your soil healthy, you can keep fertilizing it every now and then. This in turn will keep your greens healthy. Here's how to prepare organic fertilizers at home.

Waterproofing

If you are planning to build soil patches and raised beds on your terrace then it's important to start with waterproofing. It will help you to prevent any potential damage to the building. Waterproofing can be easily done and the great thing is that it's only a one-time job.

Waterproofing is an important step in the process of building a terrace garden. It's like laying the foundation of the building before you start constructing. Leakages and roof damage can get difficult to manage for the people living in and around the building.

Waterproofing can be done in various ways, one of the effective ways to waterproof your roof is by the application of polymer coating on the concrete slab. Once the coating is done, you can get started with your terrace garden.

Wind Barriers

If you are located in a place where your plants are exposed to strong winds, then installing some wind barriers can help protect them. Wind barriers can reduce the pressure of the wind and provide shelter for your plants.

Start by figuring out the direction of the wind and build your wind barriers accordingly. Trellises, hedges, fences, or shelterbelts can be effective windbreakers.

Ensure that the wind barrier you install reduces the wind pressure but should allow proper air circulation for your plants. Installing wind barriers doesn't have to be a costly affair, you can build one on your own by using a helping hand. Trellis prove to be the best wind barriers.

Sun/Shade

Veggies to grow in sun & shade

Analyze the hours of the sunlight your balcony receives and the areas that get the maximum amount of sunlight. Pick your plants and place them in the spots that receive ample sunlight.

If your balcony is shady, you can pick out the plants that can thrive in lesser sunlight. Notice the hours of indirect sunlight coming to your balcony and pick your plants accordingly.

All salad greens like arugula, lettuce, spinach, mustard, chard, kale, mizuna, komatsuna can do well in partial shade but all these plants need some amount of sunlight every day to thrive.

Terrace Vegetable Gardening - Veggies To Grow In Your Rooftop Garden
Veggies To Grow In Your Rooftop Garden

You can grow anything and everything in your rooftop garden. From veggies, herbs, shrubs, microgreens to flowers - you name it. If you are a beginner, then you can start with growing veggies like spinach, coriander, radish, etc. These vegetables can be grown in any season and with minimal efforts.

Things like hours of sunlight, watering, soil PH level, and temperature requirements are a few important factors that you need to consider before picking your seeds to sow on your rooftop garden.

Place your plants at a spot where they will receive ample sunlight and are safe from all the predators.

Start growing your own seasonal vegetables on your rooftop with the help of this vegetable growing season calendar in India. You can also start your gardening expedition by choosing the perfect greens for every season from our wide range of Seed Kits Collection.

Care & Maintenance

Watering

Watering your rooftop garden plants is pretty similar to watering plants in your regular garden. The only difference is that you need a proper drainage system on your rooftop garden for the excess water to flow out. You can water your plants with the help of a watering can or a hose.

Watering your plants in the morning is a great way to keep them hydrated and support the photosynthesis process. The soil in rooftop gardens is shallow and gets dried up quickly. Therefore, watering your plants every day will keep your plants hydrated and healthy.

Bugs & Pests

No matter how good care you take care of your plants, pests will find their way back to feast on your plants. You can use natural pesticides to keep your plants safe and all the bugs at bay. It is very simple to prepare natural pesticides by preparing a mixture of soap water, neem oil, and baking soda.

Spray this magical mixture often on your plants and watch them grow without unwanted bugs flying around them.

Birds & UV Rays

Bugs are not the only ones that can harm your plants. Even birds and harmful sun rays can harm your plants. Keep your plants safe by covering them with a wire mesh or a green net.

Mulching

Mulching your plants is a great way to keep them healthy and hydrated. The mulch will help you keep all the pests away from your plants and retain the moisture for longer periods. You can use hay, shredded wood, or fruit peels as mulch.

Heat Proofing Terrace Garden

Sometimes even sun-loving plants can't bear excessive heat and need a little extra care during the hottest months of the year, especially in the northern parts of India. Taking measures like watering your plants regularly, providing shade using nets, sufficient nutrient supply can help your plants in surviving the harsh summer heat.

Here are a few tips that will help you to heat-proof your vegetable rooftop gardens.

Pro-Tips For Building Terrace Gardens

These tips will prove to be useful when you think of building your terrace gardens and manage all the downfalls that you might face.

Cost-effective Terrace Gardening

Building a terrace garden from scratch can be a little heavy on your wallet but if you apply these smart tips your wallet will thank you:

Reuse and repurpose old furniture of your house and turn them into containers for your plants. Old cartons, cardboard boxes, paint boxes, food containers, tables, anything can turn into a container. You don't have to buy separate containers for growing your plants. Instead, you can decorate the free stuff lying around in your house and use them. This will not only save you money but will also cut down on your waste generation.

If you're planning to go big with your terrace gardening then buy seeds in bulk to reduce the cost. Bulk buying is always a smarter way to cut the cost. If you're looking out to purchase seeds in bulk for your terrace garden, visit [AllThatGrows](#) and get access to GMO-free heirloom vegetable seeds. Use organic remains like banana peels, coffee grounds, fruit peels, or tea compost to give your plants the nutritional boost instead of using chemical fertilizers. This will not only save the bucks but will also make your food chemical-free.

Prevent Damage To The Building

As we stated before, you need to prepare your rooftop before you start to plant anything to prevent any potential damage. Preparing your rooftop can be a costly affair, you might also need help from an expert.

The roots of the plants can harm the structure of the building. Therefore, preparing the roof before planting any greens is a crucial part.

Here's a guide that will help you with all the information you need to prepare your rooftop for terrace gardening.

Drainage System

Having a proper drainage system before building a terrace garden is important. Without a drainage system, the excess water will collect in places and damage your roof. Most of the rooftops have water drainage systems installed while it's built.

Get The Terrace Garden To Yield More Crop

To get the most out of your rooftop garden, start small. Grow plants that fit into small places like herbs, vegetables like chilies, or microgreens. This way you'll be able to grow a variety of vegetables in a little space.

Grow low-maintenance plants that require little efforts like cherry tomatoes, spinach, chilies, or fenugreek to enjoy good yield. Planting short-season crops will also help you make the most of your space and get the most out of your plants.

Terrace Gardening Investment

It only takes a one-time investment to build a terrace garden. Then, it's just about maintaining the garden. You will need to invest in waterproofing, equipment, containers, seeds, etc. Once you're set to plant, you'll need no penny. You'll get a constant supply of greens and an abundance of satisfaction.

FAQ's about Rooftop Gardening

Should the terrace slab be 100% waterproof?

Waterproofing your terrace is important as you're going to cover your terrace with soil and heavy pots. This may create dampness in the structure of the building. Getting help from a professional is how you can tackle the situation.

If you are planning to do it yourself, use a drainage mat thick tarpaulin sheet as a waterproofing agent. A terrace that is free from leakages will ensure a long-term benefit. Once your terrace is ready, you can even cover it with a beautiful lawn.

How should I prepare the layout of my terrace garden?

Preparing a layout/sketch will help you figure out the type of plants, space utilization, and investment requirements. Use the space efficiently, start by marking the areas that are dedicated to plants - big or small.

Make a note of the areas receiving the maximum/minimum amount of sunlight. Cover the areas with too much sunlight with shelters. You can also make a seating arrangement to enjoy nature!

What type of soil and fertilizer to use in my terrace garden?

You can prepare a potting mixture by adding equal amounts of normal soil, vermicompost, and sand. One important thing to note is that after rains, all the important nutrients may wash away from the soil. Replenish your soil every month to keep your plants healthy.

Now that you're all set with your guide on how to grow a terrace garden, start building one! You will not only be rewarded with tranquility and fresh air but you will also get a regular supply of organic greens every single day. Get your high-quality heirloom seeds from AllThatGrows today!

For people who are enthusiastic about gardening, but do not have a backyard/ other space to grow plants, Rooftop gardening is the best idea.

To talk about my experience, I have been a plant person always. A couple of years ago, I started Rooftop gardening in small pots. I started with basic and easy growing plants like Tulsi (a variety of Basil), Tomato.

But, I failed in my first attempt, very badly. Almost all my plants couldn't survive. The reason, later I found out was, the heat. I live in Hyderabad, India where the average temperature is 30 degrees and in summers, it may peak upto 42 degrees. So first lesson learnt is

Placement of plants is critical factor.

According to the temperature of your place, place them in

Direct sun

Semi shade (like in the partial shade of a tree)

Full shade

I grow them in poly-grow bags. In simpler words, pot like bags used for growing.

I bought these grow bags, potting soil, some packets of seeds, neem oil and cake along with a spray bottle from the Horticulture Department of Telangana state. The government of Telangana introduced this subsidized gardening requirements to encourage people to grow their own veggies, even in urban areas. I found about this in the daily newspaper.

Do know if your state government also has something similar. It was very affordable. It costed me around Rs.2000 for afore mentioned things. The soil quantity was around 2 bags (size of Rice bag each).

You can also grow in unused plastic containers and water bottles, pots half broken, useless tyres, and many more things. This is your arena. You can put all your creativity to turn any container into a grow bag.

To give an example, my father turned old, unused air cooler into a big rectangle pot.

It was something like this. The sides were removable. The top part was cut off and sides were removed. (I don't have picture of it now. Will try to update it)

One more important factor is patience. It takes a good amount of patience to get a good yield.

If you are starting for the first time, I suggest you to start with these plants

Methi (Fenugreek) - probably the easiest to grow.

Tomato - don't discard the seeds when you cut tomatoes. Just put them in a pot of soil. You'll thank yourself later.

Coriander - placement of pot is a bit important. Blind rule is

Full sun → you get more flowers and dhanias seeds, less leaves.

In shade → more leaves, almost no/ less dhanias seeds.

Ridgegourd , pumpkin , bittergourd and other

Okra (Bhindi)

Chrysanthemum

Tulsi

Ajwain seeds plant

Money plant - can be grown both in soil and water

It is so much joy to see your plants grow. It's easy :)

Start with easy plants, it's ok if your plants didn't survive in initial trials. Keep learning where and how things have gone wrong.

Happy gardening from my garden to yours :p

Converting a terrace into a garden can be a rewarding project that allows you to create a green oasis in an otherwise unused space. Here are some steps to help you get started:

Assess the space: Begin by evaluating the available area on your terrace. Consider factors such as sunlight exposure, wind patterns, and the weight-bearing capacity of the terrace. Take measurements and note any obstacles or limitations that may impact your garden design.

Plan your garden layout: Decide on the layout and design of your terrace garden. Consider the type of plants you want to grow, whether you prefer raised beds, containers, vertical gardening structures, or a combination of these. Plan for walkways, seating areas, and any additional features you desire.

Prepare the terrace: Before starting the garden, ensure that the terrace is clean and in good condition. Remove any debris, repair any damages, and clean the surface thoroughly. If needed, consult a professional to check the structural integrity and load-bearing capacity of the terrace to ensure it can support the weight of your garden.

Install proper drainage: Good drainage is essential for a terrace garden. Ensure that there are proper drainage outlets or channels to prevent water accumulation on the terrace. You may need to install drainage systems or create slopes to direct excess water away from the garden area.

Choose suitable containers or raised beds: Select containers or raised beds based on your available space, aesthetic preferences, and plant requirements. Ensure that the containers have drainage holes to allow excess water to escape. Use lightweight containers if weight is a concern for your terrace.

Select appropriate plants: Consider the sunlight exposure on your terrace when choosing plants.

Determine if your terrace receives full sun, partial shade, or full shade and select plants accordingly. Opt for plants that thrive in containers and have shallow root systems. Choose a mix of flowers, herbs, vegetables, or even small trees, depending on your preferences and the available space.

Provide proper soil and nutrition: Use a well-draining potting mix suitable for container gardening. Ensure that it provides adequate nutrients and moisture retention capabilities. Consider adding organic matter or compost to enrich the soil and promote healthy plant growth.

Watering and maintenance: Establish a watering routine that suits the needs of your plants. Ensure proper irrigation by using watering cans, hoses, or drip irrigation systems. Regularly monitor your plants for signs of pests, diseases, or nutrient deficiencies. Prune, fertilize, and provide appropriate support as needed to maintain the health and appearance of your garden.

Enhance the ambiance: Add decorative elements such as trellises, garden lights, seating arrangements, and colorful accents to create an inviting and relaxing atmosphere in your terrace garden.

Remember to regularly monitor and adapt your garden based on the changing needs of your plants and the environment. Enjoy the process of transforming your terrace into a beautiful and thriving garden space!

Many people dream of having a huge backyard that could be a generously sized garden, which isn't a real possibility for some urban residents.

Real estate owners are becoming creative with regards to outdoor spaces. They are searching for unused rooftops, which make lots of fresh breeze and sunshine. If you dream of getting your homegrown salads and bright blossoms, then you might want to begin budgeting for your own sky-high garden space.

As the urban dwellers reside in a restricted distance, the roof garden is a delight for them. These let one enlarge the length and possess an artful turf. You may have started taking into consideration the price tag. Don't be afraid! It is possible to build a roof garden for low cost. Read to learn how:

1. Understanding the regional regulations

Before you commit to making a roof garden, find the local rules. Maybe it is illegal in the area, or you may need a permit for this. Mainly, there might be rules and regulations of the homeowner's association. Clear all these before you invest your time and effort and cash.

2. Look at the Structural Reinforcement

Perhaps you've discovered nightmare-inducing stories which have scared away you out of building a rooftop garden—roofs falling under the burden of soil, water damage brought by planting, etc.

To avoid such kind of issues, you must hire a Roofing Contractors to explain the relevant details about your specific roof. If you are leasing, ensure your landlord consents to the project! A specialist will explain to you just how to mitigate problems (as an instance, by moving the positioning of one's intended garden) and certainly will assess your roof may adapt the level of support and also waterproof-ness required to get a rooftop garden. This one-time expense pays back plenty of money.

3. Choose the Plants Wisely

The research will direct you toward the ideal plant collection to the rooftop garden. Consider the total amount of sun your rooftop receives (tomatoes, as an instance, want lots of sunshine every single day) and the thickness of one's planters (root veggies such as carrots and radishes need a great deal of deep soil to cultivate). Breeze and humidity may play a part in your success with certain plant types. Broadly, herbs, peas, beans, kale, spinach, and lettuces tend to do the job well in many rooftop gardens.

Purchasing the dry spell and warmth tolerant plants makes a rooftop glasshouse more cost-effective. Being less delicate, such plants have better odds of survival. Plant fancy bushes and stay away from enormous trees. They put much burden on the rooftop and furthermore leave little space for improvement.

4. Try Using Domestic Plants

Indoor plants are better in numerous ways. These are incredible for the newbie gardeners as they are anything but difficult to keep up. They can grow pleasantly and remain for long. In this way, you will have fewer substitutions. The local blossoms sprout synchronizing with the nearby conditions and are smarter to withstand climatic changes.

5. Create Your Own Steppingstones Path

If you have more space, then you can create a way at that point which makes the garden more sensational. These should be possible effectively. You can get a vast range of colorful stones or pebbles from the market. Get some of them and create your pattern and design. This will make a pleasant steppingstone in the rooftop garden.

6. Build Your Planter

A DIY planter can spare you much expense. There are a few alternatives to do this. You can utilize nearly anything for this from kiddie pools to old tubs. Making planter by using wood. Wooden beds can likewise make an amusing flower bed in your rooftop garden. Slice it into a few sections to make the planter all the more appealing.

7. Consider Creating A Caged Garden

Repurposing a birdcage additionally makes a beautiful garden feel. Get an old birdcage from the flea market and paint it. Fill the base with soil and pot a few plants. This will be a decent expansion to the rooftop garden. You may likewise hang a few cages for getting a feel for a hanging garden.

To keep your plants from toppling over in the breeze, introduce a few windbreaks. A trellis is a decent choice, as it separates the breeze while as yet giving it a chance to go through. Deciding a solid windbreak won't get you far—the speedy wind will presumably knock or break it over in a flash.

8. Quality and Quantity of Soil

Soil is the crucial element of your rooftop garden. Soil needs to strike the ideal equalization of penetrability and water maintenance. Size of soil grain, pH level, supplements, and thickness are a couple of different elements to consider. Search for soil that is explicitly intended to be utilized for green rooftops: Green rooftop soil is lightweight, putting very less weight on the rooftop structure.

The amount of soil that you will need will rely upon the size of your rooftop garden. You regularly need at least 8 to 10 inches of depth, and the length and width will be set on to some extent by the space accessible to you. Note that the careful expense of the Soil will fluctuate from area to area.

Conclusion

A rooftop garden can reduce rooftop maintenance cost. It likewise conveys a spot to relax. The above thoughts are practical and can be actualized effectively. Attempt these in your urban home. You will get a lovely rooftop garden that will be your pride and the neighbors' jealousy.

How to Create a Rooftop Garden

Rooftop gardens are a beautiful and environmentally-friendly addition to urban homes. If you live in an apartment or a house with no yard, rooftop gardens can let you cultivate ornamental trees and grasses, flowers, and even edible plants. Contact a structural engineer and map out your garden before you begin planting. Choose the right plants and decorations to make the most of what space you have.

Prepping Your Roof

Evaluate your roof's loading capacity

The loading capacity is how much weight your roof structure can support. This will include your plants, plant containers, furniture, equipment, visitors, and weather loads like snow. Contact a structural engineer to discuss your roof garden and how much your roof can handle.

A structural engineer can also advise you in preliminary designs for your garden and how to work around possible obstructions (like chimneys). Business search sites like Yelp or Angie's List can help you find a local engineer.

Make sure the engineer you contact is licensed (a legal requirement in many countries, particularly the United States).

Check with your city's building codes

Review your municipality's building codes before beginning construction to make sure rooftop gardens are allowed in your area. Your area might have restrictions on your garden's height, how you use your roof space, and whether certain decorations are too distracting.

If you are renting your house, contact your landlord to get permission before constructing your rooftop garden.

If you live in a building that is part of a historical neighborhood, you will need to contact the district leaders to find out if there are any additional regulations.

Monitor your building's sun exposure

Depending on the plant, your garden will need as much as 6 to 8 hours of sunlight a day. Note sunlight patterns over a period of 1 or 2 weeks to make sure your roof's sunlight isn't obscured by other buildings.

Try monitoring the sun in the morning, midday, and evening so you have an accurate sense of how exposure changed throughout the day.

Plan for wind exposure

Wind is usually stronger on the rooftop than on ground level, especially if your building is several stories high. Too much wind can greatly damage or even kill plants. Structural windbreakers (like trellises) may be necessary if you notice strong winds on your roof.

You can monitor wind exposure with a weather vane, with a anemometer, or by standing on the roof and experiencing the weather for yourself.

Because wind can dry out soil, your plants will need frequent watering.

Map out your roof garden's design on graph paper.

Using graph or blueprint paper, make a rough sketch of your garden and plot out where you want to put plants and furniture. This will keep your rooftop organized as you begin building your garden. If you change your mind about something, you can always go back and redesign it.

To keep the sketch to scale, decide beforehand how much space each square on the graphing paper will represent (e.g. 1 foot or meter). Approximate the overall size of your roof or measure it yourself, then base the drawing on your measurement.

Buying Plants

Look for drought and heat-tolerant plants

The potentially intense wind and sunlight will make stronger plants a better candidate for rooftop gardens. Seedlings with these qualities will be more likely to survive the first year. Add shade or windbreakers if you plan to add more fragile plants

Ornamental grasses, honeysuckles, and magnolias all do well in hot, sunny weather.

Make sure you regularly water your plants, even those that are drought-resistant.

Image titled Create a Rooftop Garden Step 7

Buy plants native to your area

Plants originating from your state or climate will attract native fauna, like birds and butterflies.

They will also adapt more easily to your garden than non-native plants. If harsh winds or heat hits, your plants will be much more likely to survive. Decorate the garden with bird- or butterfly feeders to attract more animals.

Ask your local nursery which plants are native to your area for your options.

Choose ornamental trees and shrubs

Large plants will weigh down your roof and leave less room for other decor. Small, ornamental trees and shrubs do well in rooftop gardens when protected with windbreakers and placed in stable containers. Add 2 to 4 trees or shrubs at most to conserve space.

Trim your trees' roots every few years to keep them at a manageable size.

Examples of ornamental trees and shrubs include: Dogwood, Japanese Lilac Tree, Crabapple, Star Magnolia, and Jack Dwarf Flowering Pear.

Shy away from large-leaf plants

Plants with large, supple leaves tend to get shredded by the high winds on rooftop gardens. They are also more likely to suffer winter-burn during the colder seasons. Smaller-leaved plants or pines thrive particularly well on rooftops.

Building the Garden

Connect a hose that leads up to your rooftop

Unless you receive enough rainfall for a storage system, using a hose to water your garden will be most space-effective. Check for a faucet or water line on the roof, and attach your hose.

If you can find neither, use a watering can.

The most reliable watering method involves setting up an automatic irrigation system.

Add containers for your plants

Refer to your garden map as you decide where to place containers. The ideal pots will be lightweight and deep enough to accommodate your plants' roots. Choose wooden or plastic containers over heavier materials, like terracotta.

Place your seeds or seedlings in the containers

Depending on your preference, you can raise your plants from seeds or transplant young plants from nurseries. Seedlings are usually stronger and pest-resistant, while seeds are much cheaper.

Seedlings will fare better than seeds in cooler or windier climates.

If desired, you can also start the seeds inside and transplant them later as seedlings.

Install a trellis

Windbreakers will keep your plants from drying out or getting damaged in harsh weather. Trellises are the most common option for rooftop gardens because they have holes, as solid windbreaks will knock over easily. Build or buy a trellis, and place it where it will block the wind's direction.

Decorate your trellis with crawling ivy, sweet peas, climbing roses, or morning glory.

Decorating Your Garden

Add lightweight furniture

After you've placed all of your plants, refer to your garden map again as you bring in furniture.

Choose lightweight furniture to avoid putting too much pressure on your roof. Foldable furniture, like lounge chairs, are especially lightweight and good for conserving space.

To prevent the furniture from blowing away in heavy winds, secure it to immovable objects or store it when you're not using it.

Make use of open spaces

Every inch of space in your rooftop garden needs to have a purpose. Instead of crowding the ground, decorate with height when possible. Utilizing vertical space will make your garden feel roomier, so plant climbing vines or hang flower containers on an adjacent wall if possible. Focusing too much on horizontal spaces will make your garden seem cramped.

Pick a focal point

Focal points are centerpieces that tie your garden together. Choosing a centerpiece will make your garden feel balanced and harmonious. A good focal point might be a larger plant (like a tree), an outdoor sofa, or a statue.

To make your focal point stand out, avoid decorating with more than 1 or 2 larger plants/decorations. Too many focal points will distract from each other and seem overwhelming. Pick a trait (like 1 or several colors) to tie the decorations and focal point together so they don't clash.

Choose multi-functional decorations

Because you have a limited amount of space, make sure everything you add can serve many purposes. Look for chairs that can lay out into loveseats or expandable coffee tables. Find benches that can be used as storage for your foldable furniture. If a decoration does not have several purposes, consider whether the space it's taking up is worthwhile.

Common Questions on Rooftop Gardening

Can I use oil tins for vegetables plants?

Yes, but wash them properly before you use them.

Where can I get seeds in my area?

Any garden-supply store can help you. Also, there are several mail-order seed companies you can access online or by printed catalog.

Which seeds are best for planting?

All seasonal flowers, almost all perennial flowers, almost all vegetables and fruits and all succulents can be grown nowadays on rooftop gardens, provided adequate support and weight bearing capacity is in place. Apart from some very big trees which attain great heights, everything can be tried. Do bear in the mind the weight of the soil required.

Tips

Choose plants with shallow roots that will thrive well in smaller containers.[18]
Use sturdy decorations or plant containers that will fare well when exposed to the elements.
During the hottest summer months, your plants may need to be watered daily.

Warnings

Avoid high-maintenance or delicate plants if your roof is especially windy.
Don't overstock your roof with more than it can carry.

We are living in a concrete age where we are hardly in touch with nature. We like ourselves surrounded by buildings, shopping malls, offices, etc. but hardly take time out to spend time in natural surroundings. If you can't go outside, then the best option is to get nature inside in different forms. You could get back in touch with nature by having your own terrace garden. Well, it would fulfill two purposes- You can experience the therapeutic effect of nature on your terrace & you can grow your vegetables.

Having a small garden with organic vegetables can be beneficial. Vegetables from your garden are higher in nutrients than the ones you get from the store. You can eat clean vegetables and imagine the amount of money you could save. Here are terrace vegetable garden ideas which are easy to implement.

How To Grow a Kitchen Garden On Terrace?

Perplexed about how to start? I had mixed feelings as well. Initially, I had a lot of questions like- will I be able to take care of them? What kind of soil do I use? What vegetables to grow? How to place them? It sounded very overwhelming but when I started, it was a piece of cake. Currently, I have 6 vegetables growing happily in my terrace garden with a few other plants, and beautiful décor.

So this is how you get started with your terrace vegetable garden:

Gather all the material you will need:

So, collect everything you think you may need like pots, vegetable seeds, right kind of soil for all the vegetables you have decided to start with, natural manure, gardening tools, and cow dung if you have decided to keep it organic.

Plan A Layout For Your Terrace Vegetable Garden

Start by planning a layout on a piece of paper to decide how would you place your pots. This needs to be done very carefully, keeping the drainage system mind. Terrace gardens usually have space constraints and if they do not have a proper drainage system, the growth of vegetables might be affected. You also need to check of shaded and sunny areas and design the layout accordingly.

Preparing The Soil

Do not use normal garden soil for the vegetables. Instead, use a good quality potting mix which is properly nourished. Prefer organic mixture of soil instead of chemically treated soil as chemically treated soil kills beneficial bacteria and reduces the nourishment of the vegetable.

Choose The Planting Containers

You could use almost anything as a planter from wooden crates to plastic bottles. But, you could explore options like metal planters, recycled plastic planters, fiber planters or even grow bags.

Choosing The Vegetables

Since it is your first time, you can start with just one or two vegetable. Make sure to pick good quality vegetable seeds, so the vegetables are grown healthy and happy. Best Vegetables for your terrace garden would be- Tomato, carrots, onions, potato, radish, beetroot, capsicum, & chilies.

Start Planting Your Vegetables In Pots

Get ready to get dirty, and simply start planting the vegetable seeds in the pot with the right kind of soil. It is the best part of making your terrace vegetable garden. Your terrace garden will help you reconnect with nature and release your stress. It is a clinically proven way of anxiety management.

Don't Let Your Plants Remain Thirsty

Take care of your veggies just like you take care of a child. Watering them is the key factor, so make sure you water them regularly as and when required. Make sure you don't overwater your plants as that causes damage and decay the plant roots. Also, make sure to manure your plant before a heavy rainfall.

Plant Hygiene- Pesticides

No matter what you do, pests are going to find a way out to your beautiful terrace garden. You can use pesticides to keep them away, but make sure to use natural pesticides. It is easy to prepare pesticide at home and you can try that also. You need to make a mixture of baking soda, cooking oil, and water for this purpose and then you need to spray it on the plants to avoid fungal infections. Also, use other pesticides like Neem oil for aphids nightmare.

Protect Your Plants From UV Rays & Birds

Pests are not the only threat to your plant. Once it starts bearing vegetables, birds and UV rays could harm them. You could cover your plants with a wire mesh or green garden net to protect your plants.

Decorate Your Terrace Garden

It's time to accessories your garden. You could use pebbles, decorative pots, install small railings. You could also place small statues, lanterns, & colorful pictures which complement the décor. For a more soothing effect, install fairy lights or bokeh effect lights.

Oh, and make sure to keep chairs and a small table in your garden, so you could sit and relax while enjoying the beautiful view of your hard work. It would be your perfect tea time spot!

I want to make a rooftop garden. What is the best option in India to waterproof my roof so that water seepages cannot damage the concrete roof?

On top of roof provide a 15 cm rich concrete mix slab with water proofing admixture and ensure that the concrete is properly compacted. After curing for 28 days the soil can be loaded on this new slab and it will be water resistant.

What are the ideal vegetable crops for growing in a rooftop garden?

Rooftop gardens can be a fantastic way to grow vegetables in urban areas where space is limited. When selecting vegetable crops for a rooftop garden, it's important to consider factors such as

sunlight, wind exposure, temperature, and the weight-bearing capacity of the rooftop. Here are some ideal vegetable crops that can thrive in a rooftop garden:

Leafy greens: Leafy greens like lettuce, spinach, kale, and Swiss chard are excellent choices for rooftop gardens. They are relatively easy to grow, require minimal space, and can tolerate partial shade. You can harvest the outer leaves as needed, allowing the plants to continue growing.

Tomatoes: Tomatoes are a popular choice for rooftop gardens because they thrive in sunny and warm conditions. Choose compact or determinate varieties that are suitable for container gardening. Provide support such as cages or stakes to help the plants grow upright.

Peppers: Both bell peppers and chili peppers can be successfully grown on rooftops. They require full sun and warm temperatures to thrive. Choose compact or dwarf varieties to accommodate smaller containers. Peppers can add a pop of color and flavor to your garden.

Herbs: Herbs like basil, parsley, mint, and thyme are well-suited for rooftop gardens. They are compact, grow well in containers, and can tolerate varying light conditions. Herbs are not only delicious additions to your meals but also attract beneficial insects to your garden.

Radishes: Radishes are quick-growing vegetables that can be harvested within a few weeks. They are perfect for small spaces and can be grown in shallow containers. Radishes prefer cool temperatures, making them suitable for early spring or fall rooftop gardens.

Microgreens: Microgreens are young, tender greens that are harvested when they are only a few inches tall. They are packed with nutrients and can be grown in small trays or containers. Popular microgreens include broccoli, kale, arugula, and radish. They provide a quick harvest and are perfect for rooftop gardens.

Beans: Compact varieties of bush beans, such as dwarf or French beans, can be grown in containers or vertical structures. They require a sunny location and regular watering. Beans are a great choice for adding vertical interest and producing a bountiful harvest.

Cucumbers: Cucumbers can be grown vertically in containers or supported by trellises or cages. Choose compact or bush cucumber varieties that don't sprawl excessively. Ensure they receive ample sunlight, consistent watering, and good air circulation.

Carrots: Carrots can be grown in deep containers or raised beds with loose, well-draining soil. Choose shorter varieties or those specifically bred for container gardening. Carrots prefer cooler temperatures and consistent moisture for optimal growth.

Strawberries: Although not a vegetable, strawberries are a popular fruit to grow in rooftop gardens. They can be grown in hanging baskets, containers, or vertical planters. Strawberries require full sun and regular watering. Enjoy the delicious fruits while adding beauty to your garden.

rooftop gardens tend to have unique conditions, such as increased heat and wind exposure. It's crucial to monitor soil moisture, provide adequate support for climbing plants, and protect the garden from strong winds if necessary. Consider the specific requirements of each vegetable crop and adapt your rooftop garden accordingly. Happy rooftop gardening!

What vegetables can you grow on a roof?

Tomatoes: Compact varieties of tomatoes, such as cherry or patio tomatoes, are well-suited for rooftop gardens. They can be grown in containers and provide a bountiful harvest throughout the growing season.

Peppers: Bell peppers, chili peppers, and mini sweet peppers can thrive in containers and add color and flavor to your rooftop garden.

Lettuce and Leafy Greens: Lettuce, spinach, kale, arugula, and other leafy greens are excellent choices for rooftop gardens due to their shallow root systems and fast growth. They can be grown in containers or vertical planters.

Radishes: Radishes are quick-growing root vegetables that can be grown in small spaces and harvested within a few weeks.

Cucumbers: Compact or bush varieties of cucumbers can be grown in containers or hanging baskets, utilizing vertical space effectively.

Herbs: Culinary herbs like basil, parsley, mint, thyme, and oregano are perfect for rooftop gardens. They are easy to grow in containers and add flavor to your dishes.

Beans: Bush beans or dwarf varieties of pole beans can be grown in containers or vertical gardens, offering a good yield in a small space.

Carrots: Choose short and round carrot varieties that are suitable for container gardening and have shallow roots.

Microgreens: Microgreens are young, edible greens that are harvested at an early stage. They are ideal for rooftop gardens as they grow quickly and don't require much space.

Scallions: Scallions or green onions can be grown in small pots or containers and add a delicious onion flavor to your dishes.

How can I grow spinach in a small rooftop garden?

Growing spinach in a small rooftop garden is easy, and it can be a great way to enjoy fresh, homegrown greens. Here are a few tips for growing spinach in a small rooftop garden:

Choose a suitable location: Spinach grows best in sunny or partially sunny locations, and it prefers well-draining soil with a pH between 6.0 and 6.8. Be sure to select a location that receives at least 4-6 hours of sunlight per day and has access to water.

Prepare the soil: Before planting, loosen the soil and mix in a well-balanced fertilizer. Spinach prefers soil that is rich in organic matter, so consider adding compost or well-rotted manure to the soil to improve its fertility.

Plant the seeds: Spinach seeds can be sown directly in the ground or started indoors in seed trays and then transplanted. If starting seeds indoors, sow the seeds in a seed tray filled with seed compost and place the tray in a warm, sunny location. Once the seedlings are large enough, transplant them into the garden bed or containers.

Water regularly: Spinach plants require regular watering to thrive. Water the plants deeply, but be sure not to overwater, as this can cause the plants to become waterlogged.

Harvest the leaves: Spinach plants can be harvested when the leaves are young and tender, typically when they are about 4-6 inches long. To harvest, cut the leaves from the plant with a sharp knife, leaving a few leaves at the base to allow the plant to regrow.

By following these tips, you can successfully grow spinach in a small rooftop garden and enjoy fresh, homegrown greens.

How can we grow potatoes in a rooftop garden?

Potatoes need as much sunlight as possible. You can raise them in buckets on a roof top if there is nothing shading the roof top. Holes in buckets for drainage. However, how hot does it get on your rooftop? Hot enough to cook them? Loose mulch/dirt in buckets. Potatoes need room to grow and get real big compared to seed potatoes.

How can we grow potatoes in a rooftop garden?

There are plenty of options for growing potatoes in such a location! Being in an urban environment has certain limitations, but that doesn't mean you can't enjoy the sweet rewards of growing your own produce.

You can plant them in anything from a few old tires, filled one at a time with potting soil and seed potatoes (wait until each one has a good bit of growth showing before you stack the next one on top of it) or an old plastic barrel filled a bag of potting soil at a time. Or if there is a place - a farm/feed store, a farm, or even a vendor at a Saturday market - you can get a bale of hay, you can even use

one of them to plant and grow some spuds, with no dirt just good watering. They are fun, nutritious, and a good reason to be outside in the sunshine.

How do I grow terrace garden?

Here are some general steps for growing a terrace garden:

Choose a location: Pick a spot on your terrace that gets plenty of sunlight and has good drainage.

Prepare the soil: Make sure the soil is loose and well-draining. You can amend it with compost or other organic matter to improve fertility.

Plan your layout: Decide what you want to grow and where to put each plant. Consider the mature size of each plant and how much space it will need.

Choose the right plants: Select plants that are suitable for your climate and the amount of sunlight your terrace receives.

Add containers: Use pots, planters, or raised beds to hold your plants. Make sure they have drainage holes to prevent water from pooling.

Water and fertilize: Keep your plants well-watered, but be careful not to over-water. Fertilize your plants regularly with a balanced fertilizer.

Maintain your garden: Regularly check for pests and diseases and take action to control them. Keep the weeds under control and remove any dead or damaged plants.

Enjoy your terrace garden: Take time to sit and enjoy the fruits of your labor, and make sure to take care of your plants.

A buzzword that one will hear at least once or twice every day in Bangladesh is "development". And with development comes an even greater push for urbanisation, which brings with it certain consequences for the environment.

So, as more high-rise buildings take over our cities, it should be a primary concern for us to ensure that these buildings have elements of greenery. With our rising population, our horizontal real estate continues to shrink, and the only option left is to look at establishing green and eco-friendly facilities from a vertical perspective.

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While mass-scale, global change is something Bangladesh cannot do alone, and individual consumer-level behavioural change having little to no effect, there are only a few options left on the table. One such option, with respect to our rapid urbanisation, is the use of rooftop garden.

The availability of such a facility in one's building has more than one environmental benefit. It benefits residents by supplying a fresh supply of oxygen and also helps by providing a hobby that is accessible at one's fingertips.

Nadira Ahmed, 42, works in the corporate sector, and her advice for people looking to get into the practice of rooftop gardening is to start small.

"I enjoy working in my garden. It helps reduce mental stress that comes with city life. Whatever I grow in my garden, I distribute to my neighbours. As a result of rooftop gardening, there is little dust and more fresh supply of oxygen," added Nadira.

In the last couple of years, the initiative of rooftop gardening has increased primarily through individual effort in large cities and urban areas. Joining the efforts, many real estate companies have slowly begun to incorporate such facilities within their newer buildings.

However, there are no systematic arrangements or policies in place to better facilitate such structures on a large scale. For instance, there are no easily accessible government resources on how individuals can start to create their own rooftop garden. In India, for example, the Brihanmumbai Municipal Corporation (BMC) recently proposed a policy that will make it mandatory for all buildings to have space for a rooftop garden. This policy has been proposed, and plans to be rolled out in the near future. This is the type of initiative governments all over the world should be looking to replicate.

However, relying solely on the government cannot be the right approach towards protecting the environment. If we truly care about the consequences of climate change, then we must step forward and do our part, as insignificant as it might seem in the bigger picture. Additionally, the market itself needs to establish a demand and supply for rooftop gardens, otherwise we cannot ensure that such measures become sustainable in the long run.

Afsana Rahman, 45, from Monipuripara in Dhaka, initiated the idea of a rooftop garden in her own building, back in 2015. In the primary setup phase, she struggled heavily, due to her lack of knowledge and experience with gardening.

"In the first two years, most of my plants did not survive due to wrong selection of seeds and plants. It took me two years to understand the proper ways of gardening and choosing the right plants and fruits to grow. Nowadays, people are learning gardening techniques through Facebook and TV reports, but a more useful set of guidelines can ensure that fewer people struggle in the initial phase," said Afsana.

Experts say that rooftop gardens need continuous efforts. Occasional or even seasonal attempts at gardening will rarely be successful.

Arifur Rahman, 35, a tenant who lives in a garret, in the Mohammadpur area of Dhaka, shared his experience with rooftop gardening.

"When I sought permission from my house owner to do rooftop gardening, he dismissed the idea. He was concerned that such a garden would harm the roof's condition. Thankfully, I was able to convince him, and was able to make a small but beautiful rooftop garden with around 50 plants, including a mixture of fruits and vegetables. But when there was a rising fear of dengue fever in the city, I had to shut down the garden as the building owner was afraid of mosquitoes breeding in the pots," he added.

City planners have a crucial role to play here, as they need to be the ones setting the standards on how to make our cities green and eco-friendly.

In Dhaka, the two City Corporations have announced that they will issue a tax rebate for those building rooftop gardens. The government has also been rewarding the best rooftop gardeners. Simultaneously, the agricultural department has also taken up a programme to further facilitate rooftop gardens in our cities and villages. However, these efforts need to be channelled together in a more structural and systematic way to see proper success.

Rahat Raja is an agriculturalist and agro-journalist, and has reported on many rooftop gardens. He says, "The government can work on creating a series of campaigns through different mediums, to inspire more people to come forward and take the initiative to start rooftop gardens."

As the world continues on its trajectory, Bangladesh faces unforeseen levels of environmental threats. While we cannot change how the world operates, we can take small, incremental steps such as rooftop gardening to at least be able to tell our future generations that if nothing else, we tried.

The way food becomes necessary during hunger, implementing the idea of rooftop gardening has become a similar kind of important to repair the lung of Dhaka city. The rooftop garden is a garden on the roof of a building. It is an eco-friendly plan that offers the opportunity to get close to nature and harvest fruits and vegetables with our own hands. It is a must doing initiative which would be the best use for the top space of a rapidly growing city like Dhaka.

Dhaka, the capital city of Bangladesh and a city of at least 10 million people made it one of the most densely populated countries in the world which suffered unrecoverable damage to the green areas of the city. Having the most polluted air, the residents of this city are forced to live in a dusty, polluted, toxic, and poisonous environment. The rapid growth of Bangladesh's capital has destroyed crucial ecosystems, caused rising temperatures, and quickly lost its green. There is only one way to bring back its green, good air and repair its lung is "rooftop gardening".

Recently, the city has been ranked second in the US Air Quality Index of the world's worst cities for air pollution. To fight back from such a damaged and polluted environment, the rooftop garden movement can be a good way considering the growing popularity of the city as experts say that, apart from the obvious aesthetics, can improve air quality, provide fresh food, and lower ambient temperature. Large-scale implementation of roof gardens in Dhaka will reduce the urban heat island effect, carbon dioxide and increase oxygen content in the atmosphere. Green practices will also create new opportunities for food security and security, nutrition, employment, and city planning. In addition to decorative benefits, roof coverings have temperature control, hydrological benefits, architectural enhancements, wildlife habitats or corridors, recreational opportunities, and even ecological benefits on a large scale.

While Dhaka has lost its total biodiversity, It is the rooftop gardeners who can create new types of biodiversity in urban nature. Various types of birds, bees, and insects can be evacuated. At the same time, some enthusiastic gardeners breed pigeons and koels side by side in the garden. It provides them with both fresh and safe vegetables and meat. What's more, it contributes to the health of the family and saves a lot of food.

Apart from all such benefits, since high demand for roof gardens has been created, new professions and working sources are being created as well, such as caring for plants, growing plants, preparing fertilizers, and creating flowerpots with profitable designs. New start-up companies could also be created soon along with its increase in popularity who would provide professional services to maintain a private garden for maximum productivity to support the city dwellers.

During the day, the air quality of Dhaka is deteriorating day by day. Toxic industrial gas CO₂ from vehicles makes the air dangerous and toxic to breathe. It's like a slow poison that the city dwellers are breathing. It is "rooftop Gardening" which would help the city to regain its fresh environment. Apart from environmental benefits, this program would beautify the city and will help its dwellers economically and psychologically as well. So, without a dot of doubt, Rooftop gardening would be the best use of top space in Dhaka.

Terrace farming, aka building level steps on sloping ground, is a technique that has been used since ancient times by farmers around the world to grow crops and gardens.

Think the Hanging Gardens of Babylon or the beautiful terraced rice paddies of Asia.

Terraces are one of the greatest tools for landscapers in steep and hilly countries. If your property tilts as much or more as it runs level, you might want to consider terrace gardening in your yard.

As part of good backyard conservation practice terraces can play a role in xeriscaping and water conservation.

Not only do they allow you to reclaim space from the hillside to plant vegetables or flowers and shrubs — terraces can be very decorative — they're also a great hedge against water runoff and soil erosion.

They can also create warmer, sunnier micro-climates for growing light-and-heat-loving plants and vegetables. Now — in the dead of winter — is the perfect time of year to start visualizing your hillside alive with tomatoes, trailing vines, and stands of beautiful blossoms.

In this article, you'll learn exactly what terrace farming is, why you'd want to consider trying it, and exactly what resources to use to get started.

What is Terrace Farming?

Terrace farming is the practice of creating flat regions out of a hilly or mountainous landscape in order to cultivate crops. It's a technique that's been used in many places around the world from Asian rice paddies to the Andes Mountains of South America.

This method has enabled farming in mountainous parts of the world. The majority of Asia would have been unproductive without it.

And so maybe it's a good idea to look into terrace farming in other parts of the world, such as Africa, America, and other parts of Asia where it's not being used, and the potential advantages of it.

Terracing is a farming method that was first used by the Incas in the Andes. Today, terraced rice paddies are widespread in Asia's highlands.

The terrace is usually a low, flat ridge of earth built over the slope, with a channel for runoff water directly above the ridge. Terraces are typically designed on a small incline so that the water captured in the channel travels gently toward the terrace outlet.

Level terraces may be used in areas where soils can absorb water easily and rainfall is often low.

How Does Terrace Farming Work?

Historically, terraced fields were built on pre-existing slopes by using flattened steps to collect rainwater and maintain soil moisture.

The flat portions allow for soil conservation, preventing nutrients from the soil from rushing down the stairs and down the hills.

When it rains, water flows down the terraced fields. Water-retaining walls catch the water and keep it from running down the slopes and taking soil nutrients with it.

In terrace fields, crops like maize, barley, and rice are grown. Terrace farming is most common in parts of Asia, especially in rice-growing countries and hilly terrains.

What are the Advantages of Terrace Farming?

Terrace farming is a method of properly optimizing the use of available land for agricultural purposes in regions with terrain that features hills and steep slopes, such as the Canary Islands.

And so, those who work the terraced farms and rely on their produce are the ones that benefit the most from this method of farming

Soil erosions are usually caused by steep slopes, making the soil less useful and less fertile.

Terrace farming acts as a barrier to hold soil moisture and nutrients in while preventing soil erosion and surface runoff. The terraces act as catch basins that transfer nutrients to the field rather than being washed away by rain.

It also enables people who live in mountainous areas to establish productive farms for growing food and industrial crops.

Terrace farming has given people a technique to maintain soil fertility to grow crops since land at very high altitudes is frequently less fertile than the soil at the mountain's foot.

What are the Disadvantages of Terrace Farming?

Terraced farms are often disadvantaged during the rainy season, with soil becoming saturated. Water overflows from terraces can cause runoff, which can lead to landslides if not properly managed.

They are, unfortunately, also labor intensive to construct and maintain, as they require multiple generations of laborers to create them.

Terrace farms are usually large projects that require significant investment. They're often neglected because they're considered too costly for farmers to maintain.

An example of this is in the Philippines where around 30 percent of the Banaue rice terraces have already been lost due to neglect. The terrace itself and its irrigation system had earned this area a UNESCO status in the past.

Climate change has also made it much harder to keep historical terraces in good shape. Changing seasons often bring drought, floods, and other extreme weather conditions that may not have been common in the area before, making it difficult for the terraced fields to adapt to the changing weather patterns.

Useful Resources to Get Started with Terrace Farming

Here's a site to get your creative juices flowing: a rather detailed drawing of a hillside garden — with a compost bin! — from a gardening blog with a rather risque name. Notice how features like a storage shed, a cold frame, and even steps and benches are built right in.

While this gardener had the help of a professional landscaper, you can see that much of the design — and the work — could be done by any reasonably energetic and skilled handy person.

Here are step-by-step directions, right down to making sure there are no buried wires on the hill you'll be digging up, for terracing a sloping yard.

Here's another from the Natural Resources Conservation Center which discusses different materials — wood, stone — to use for the walls and the steps to take to prevent heavy, water-logged soils from collapsing those walls (drainage is important).

There's also a discussion here of planning for the “run and rise” of your slope; in other words how deep and how high your terraces should be.

You'll also need to consider the contours of your hill, something that might require a level, stakes, and line, or even the services of a surveyor, to make sure the contours are just so.

Gardeners whose lands are mostly flat can still use the practice of contouring to conserve moisture in their xeriscape.

Don't feel like you have to convert your whole yard in one season. We're acquainted with one gardener — the proverbial friend of a friend — who visits only once or twice a year.

Each time he visits, we get a photo journal of his progress. He admits that he did his terraces backward, from the top down. But this allowed him to establish them at intervals.

From a couple of stone-walled narrow spaces where he grew lettuce and marigolds, to a full hillside of growing spaces hosting an abundance of vegetables and flowers, it's been great to see his progress and to hear him crow.

His neighbors up there in Missoula, Montana get a few tomatoes, sure. But his south-facing slope, with its built-in windbreaks and natural air circulation that keeps off those first few frosts (if not too heavy), gives him a bumper crop.

Before man was, gardening waited for him. The ultimate trade awaiting its ultimate practitioner.

Ok fine, Cormac McCarthy was actually talking about war when he wrote that, but if you ask me, it still holds true for gardening.

Along with mastering fire, the purposeful cultivation of plants is widely considered to be one of the technological leaps that set humans on the path to complex civilization, for better or for worse. Speaking as a city dweller and inhabitant of the current iteration of said complex civilization, we need gardening now, more than ever, to smooth out some of the rougher edges of this weird world we've built for ourselves.

Gardening can be a great way to relax and free your mind from the numbing pressures of The Screen. Futzing around with plants in the sun helps us reconnect with the glories of the natural world that we've become increasingly isolated from. And, as this bizarrely dark listicle puts it, gardening “reminds us of the cycle of life,” and thus helps us “come to terms with that most universal of anxieties: death.”

But hey, let's not worry about that just yet. The tall, skinny guy with the scythe and black robes comes for us all, but until he rings the buzzer, let's squeeze all the joy we can out of the here and now.

Which brings us back to gardening, and how to get into it.

For those of us who live in the suburbs or, even better, the country, the process is easy: go outside and plant some seeds in the ground, then watch them grow. For those of us living in a city, it's a bit more complicated.

But fear not. I have toiled for countless hours and spent thousands of dollars to thread that needle, so you don't have to. After four years of banging my head against the wall in an attempt to garden despite living in a tiny apartment in Brooklyn, New York, I have finally figured out a design that is relatively simple, works well, and, most importantly, is extremely low-maintenance once it's set up.

It's really just three things

There are an endless variety of ways to garden on a roof, but my setup consists of three components intended to address what I consider to be the three main problems confronting the would-be rooftop gardener.

A PVC structure wrapped in bamboo fencing to protect the plants from wind, which can be brutal on a roof.

Self-watering containers to reduce the amount of time spent lugging water up to the roof and to ensure that, if you don't do so for a few days, the plants won't suffer.

A homemade soil mixture to encourage a bountiful harvest by providing the plants with primo dirt that won't require constant fertilizing.

If you're just starting out and all that seems overwhelming, you can halve the time required to put this together by foregoing the custom soil mix and simply adding organic fertilizers to store-bought potting soil (only bags marked as "potting soil," no "in-ground" or "raised bed" stuff, as it's much heavier and will not distribute water properly). This will work fine, but not as well as mixing it up from scratch.

It should go without saying, but definitely ask your landlord for permission before building a rooftop garden, and make sure the roof in question has the structural integrity necessary to support one. Most apartment building roofs shouldn't have a problem supporting at least a small garden, but you do need to scope it out first. If in doubt, ask your landlord.

Build the structure

This part can seem intimidating, but it's actually fairly straightforward, as long as you think ahead.

First, decide where you want your garden to go. Measure the area, and plan the size of your structure accordingly.

Mine, for example, is 12 feet long, 8 feet wide, and 8 feet tall. Your length and width may vary, but I recommend a simple square or rectangle with 8-foot-tall sides to keep the wind from roughing up your plants. You'll also want to leave an opening on one side so you can get in and out.

Sketch a rudimentary blueprint (no need to get fancy with this), then figure out how much PVC pipe and bamboo fencing you'll need. Remember that you won't require horizontal pieces of pipe on the interior—you'll need space to walk around—and that you'll keep the entryway clear of fencing.

Boysen rooftop garden blueprint

Seriously, you don't need to be a good artist to sketch a blueprint. Ryan Boysen

What you'll need:

The materials listed below are standardized for one 4-by-4-by-8-foot section of garden space, which is the basic building block of my design. As you add square footage, you'll need slightly fewer pieces for each additional section, as they will share poles and joints.

Materials (for one 4-by-4-by-8-foot block of garden space)

18 or so 4-foot-long, 3/4-inch-thick PVC poles (about 12 for each additional block)

12 PVC pipe joints (your combination of tee joints, 3-way connectors, 4-way connectors, and 5-way connectors will vary depending on the size of your structure)

12 feet of bamboo fencing (4 feet for each additional edge block)

A can of PVC cement

A roll of string (or about 100 zip ties)

Tools

Hacksaw (or PVC pipe cutter)

Knife (or scissors)

Permanent marker

Once you've got your tools and materials, measure the pipe to your desired length, mark it, cut it, and start connecting. It's OK to be a little confused during this step, but once you put a few pieces together it should begin making sense pretty quickly. When everything looks good, go back and glue all the joints together with the PVC cement.

Once your frame is complete, wrap the bamboo around it and secure the fencing with zip ties or string. This may take an hour or two, but it's worth going slow and doing a thorough job. Your plants and neighbors will thank you the next time a storm rolls through. Tie the corners to something heavy to prevent your garden from flying away—wooden pallets work well if you're using those to support your plants, but you can also anchor the structure to the handles of your planters.

Craft the self-watering containers

There are many ways to build self-watering containers, but the basic idea is this: each one has a built-in, refillable water reservoir and a wicking mechanism that brings that water up into the soil.

And while this how-to deals with 5-gallon buckets, it's easy to extend the underlying principles to larger containers and other types of materials once you get the hang of things.

Boysen rooftop garden with self-watering containers

Self-watering containers, like those seen here, mean that even if you're not always around to take care of your garden, your plants will still have enough to drink.

What you'll need:

Materials (for one container)

2 plastic 5-gallon buckets (cheaper in bulk)

2 sponges

3 strips of foot-long cotton material (one t-shirt will make enough for about a dozen containers, but it must be 100% cotton—synthetic material doesn't wick properly)

A 3-foot length of 3/4-inch PVC pipe

A large funnel (you only need one, no matter how many containers you have)

A wooden pallet or something else to elevate the planter (optional)

Tools

Drill

1-inch drill bit

1/4-inch drill bit

Permanent marker

Scissors (or a boxcutter)

So, you've got two buckets. Put one inside the other and measure where the bottom of the inside bucket reaches on the outside bucket. Mark that spot with your marker, then draw a little circle a half-inch below that. Separate the buckets and drill a 1/4-inch hole within the circle you marked on the outside one, then set that bucket aside.

Now take the other bucket, flip it upside-down and drill a 1-inch hole in the middle of its bottom. Drill another 1-inch hole near the outside of the bottom. Now drill a dozen or so 1/4-inch holes all around.

Now, take two sponges and use a knife or scissors to cut a 2-inch-long gash in the center of each sponge. Take your cotton strips and thread them through one sponge, so about 4 inches of material sticks out the other side.

Stuff that material through the big hole in the center of the inside bucket so the sponge and the majority of the fabric remains within the bucket. Take the other sponge, place it on the outside of the bucket, and thread the dangling strips through it, making sure it's snug against the bottom of the bucket. These pieces of cloth will wick water from the reservoir into the soil, and the sponges will ensure they stay in place.

self-watering garden containers

How to set up the inside bucket, from left to right: drill holes in the bottom, place a sponge inside and thread the fabric strips through it, and then thread the cloth through a sponge on the outside.

Ryan Boysen

Now put the inside bucket back into the outside bucket. Jam the 3-foot length of PVC pipe into the other 1-inch hole. With the aid of the funnel you'll use this pipe to fill the reservoir.

When you eventually load the inside bucket with soil, try to make sure that the cotton strips extend upward to ensure even water distribution throughout the soil mixture. I'll usually fill it one-third of the way with dirt, lay one strip across that layer, add the next third and do the same thing with another strip, then try to bury the remaining strip just below the surface.

For you visual learners, this video directly inspired my container design and it's a great way to see the process play out.

When putting the buckets in your garden, it's best to place them on top of something to keep them from sitting directly on the roofing material. This will ensure proper drainage and prevent roof damage from any water trapped under the containers. I used wooden pallets, but pretty much anything that provides a bit of elevation will work just fine.

You should only need to fill your containers with water once or twice a week, depending on the size of the plants they hold and how much it has rained.

Mix the soil

You want your soil to be equal parts compost, vermiculite, and sphagnum moss—the amounts below are approximate.

Vermiculite and the moss are usually sold in bags of 1-3 cubic feet—more than enough for a single container. To save you the conversion time: one 5-gallon bucket holds about 0.7 cubic feet of material, so you'll need a little less than 0.25 cubic feet of each (or about 1.5 gallons).

Compost is the most important element, and you can find the good stuff at nearby community gardens or composting operations. You can make your own, too, but it might be hard to produce enough if you're building a large garden. Still, never settle for the store-bought stuff.

For best results, it helps to sift the compost and moss to filter out any large chunks. Doing so helps ensure even water distribution throughout the soil, but if you're tired and just want to get to the actual gardening, you can skip this step without too much worry.

What you'll need:

Materials (for one container)

- 1/4 cubic foot of vermiculite
- 1/4 cubic foot of sphagnum moss
- 1/4 cubic foot of compost
- 3 tablespoons of Azomite
- 3 tablespoons of kelp meal
- 3 tablespoons of all-purpose fertilizer
- A large tarp
- 3 tablespoons of worm castings (optional)

Tools

Soil measuring cup

If you're not going to sift, simply dump the proper amount of each material onto your tarp. If you're mixing soil for multiple containers, simply scale it up—your only limits are tarp size and how hard you want to work. If you've got a large container to mix in, that works, too, but a tarp is probably more practical for most apartment-dwellers.

Sprinkle kelp meal, all-purpose fertilizer, worm castings (if available), and Azomite on top. I usually use about 1 cup for six buckets worth.

Now mix it all up. Don't half-ass it.

dirt in a container with a shovel

If you have a large container to mix the soil in, great! But if not, a tarp works just fine. Ryan Boysen I had to pick out a bunch of worms during this process, so if your compost is also full of 'em (which means the compost is healthy), keep them safe. Just put a little bit of compost in a small container, stash the worms in there, and then either release them into soil somewhere, or return them to wherever you got your compost. Unfortunately, the conditions inside your containers will probably not be optimal for worm survival, and a bunch of dead worms in your containers could lead to fungus or disease problems down the line.

When your soil is well-combined, put it in your containers.

If you want to sift the compost and moss, you'll need to build a sifter.

What you'll need:

Materials (for the sifter)

2 2-foot-long 2-by-4s

2 4-foot-long 2-by-4s

A piece of 1/4-inch mesh (at least 4 feet long and 2 feet wide)

1.5-inch screws

Tools

Cutting pliers

Make a rectangle with your 2-by-4s and screw the corners together. Cut a length of mesh to fit over it all, letting the edges overlap the wooden frame so you can fasten it in place. Then, staple it tightly to the wood with the staple gun.

Place the sifter above your tarp by putting it on top of two chairs, boxes, tables, or whatever you have that'll keep it elevated. Dump the compost into the sifter, then rub it around with your gloved hands until most of it has fallen through. Put any large bits into another container and set it aside.

Now do the same with sphagnum moss. You don't have to sift the vermiculite.

As you get more into it, I'd recommend experimenting with liquid fertilizers to give your plants some extra oomph, but the nutrients in this mixture should be more than enough to get you, and your plants, started.

Now get out there and get gardening, and remember this: even though a man's at odds to know his mind because his mind is aught he has to know it with, as long as you're gardening you won't need to trouble yourself with all that. Just stand among the screaming leaves and call down the lightning, and know that the time has come for you to reap.

If your property happens to be situated on a hill or slope, you might think there's no way for you to cultivate a garden of your very own. But that couldn't be farther from the truth—a terrace garden design is the answer.

Terrace gardens allow you to grow a wide variety of plants and vegetables without the fear of all of your efforts being washed away. This option will allow any homeowner with steep slopes, where planting would otherwise be impossible, to create "mini-gardens" that prevent erosion by dividing hilly areas into smaller level sections. This way, the water can be better distributed and soaked into the ground.

A terrace garden can also serve other purposes on any kind of commercial or residential building or flat or slanting roof. By leveling out the area or tidying it up, you can create more outdoor living space. In this small terraced area, you can add water features, create a vegetable garden, or grow a variety of container-grown plants.

Terrace gardens can make a very attractive addition to any landscape, especially when they're planted with an array of perennials, annuals, or evergreen creeping shrubs.

Choose the Right Materials

Terrace gardens can be built from various materials, including bricks, rocks, and concrete blocks, although treated wood is the most popular choice. Its advantages include a lower price point than many other materials and the fact that it more easily blends in with natural surroundings.

Some options include landscape timbers, which can last for many seasons in the garden, as well as cedarwood, which is an ideal choice for vegetable gardens because it can help prevent any chemicals from leaching into the soil.

Masonry and stones may not necessarily blend in, but they can create a focal point for your outdoor living space.

Know Your Slope

Before you get started, keep in mind that any terrace garden design you choose will have to suit your landscape. If you are dealing with a slope, you will need to factor this into your DIY terrace garden design plans. That means knowing exactly what kind of slope you're dealing with.

You should determine both the rise and run of the slope you're working with. The run is the horizontal measurement from the hilltop to the bottom, and the rise is the vertical distance from the bottom to the top of the slope. These measurements should be used to help determine the height and width of each bed.

Building Your Terrace Garden Levels

If you've decided not to hire a professional to install your terrace garden, the first thing you'll want to do is dig a trench for the first tier at the bottom of the slope. Keep in mind that the more levels you will have in your garden, the deeper the trench. However, it should always be kept level, and your foundational terrace layer should be situated within the trench.

The next step is to dig a trench for the sides of your terrace garden—just be sure that the bottom of the trench remains level with the first trench. Your building materials can be anchored together with spikes.

Finally, you'll have to push up the soil in the back of the terrace box towards the front, to ensure that the box is level. This may require adding additional soil. These steps should be repeated for each of the levels in your garden.

Planting Your Terrace Garden

Once the actual construction of your terrace garden is complete, that's when the fun begins. Now it's time to plan out the botanical elements for your landscape.

While your terrace garden will naturally require maintenance in order to keep its beauty, you can still make the most of your space by strategically choosing plants that will thrive in your hillside environment.

A variety of vegetables and fruits, herbs, and flowers can be successfully grown in a hillside garden. Some of the vegetables that are the least cumbersome to grow, and are typically quick to fruit, in a terrace garden include radishes, various types of gourds, leeks, cucumbers, tomatoes, and limes. Beginner-friendly terrace garden herbs include ginger and mint as well as thyme, rosemary, lavender, and sage.

And, of course, the flowers you choose can lend endless beauty to your garden. Annuals are a popular choice, such as varieties of hyacinths, primroses, and tulips. In the summer months, begonias, pansies, and petunias are popular, but you can also opt for more exotic flowers based on your climate.

Low-maintenance succulents, as well as aloes and various cacti, can also be great year-round choices for a terrace garden.

Just be sure that no matter what you choose to grow in your rooftop garden, you've properly researched what each plant will need to thrive, from optimal soil conditions to access to the sun

Introduction to Terrace Gardening

We are always looking for a spot of green in the concrete jungles we live in. In the past decade or so, there's been a rise in the number of urban homeowners starting terrace gardens. If you're a novice gardener, you might need some terrace garden ideas to create the terrace garden design of your dreams.

You can grow a terrace garden filled with flowers, vegetables, fruits, herbs, or a mix of all. If you're an enthusiast looking to get your hands dirty or even a pro-gardener, this ebook will help you advance your terrace gardening journey.

Gardening is Therapeutic

Gardening is much more than a hobby. There are many proven benefits of gardening that are important to us. It doesn't matter if you're a hobby gardener or a professional-level landscape designer, spending time in the garden pottering around in the soil and caring for your plants is very valuable. Here are 10 reasons you should start a garden:

Gardening can reduce anxiety:

When you make time to go out and work in your garden, your anxiety levels can go down and you could start to feel less depressed. Gardening can improve self-esteem: You may not have been born with a green thumb, but after planting and nurturing your garden, you might see a person who can grow things and is in tune with the earth. Harvesting that 1st tomato is the best feeling ever!

Gardening is good for your body: Digging, planting, and weeding can help burn some calories and strengthen your heart.

Gardening can make you happy: Getting soil under your nails while digging in the ground can make you quite happy. In fact, inhaling *M. vaccae*, a healthy bacteria that live in soil, can increase levels of serotonin and reduce anxiety.

Gardening can improve mobility: All the digging and planting do more than produce plants.

Gardening increases hand strength and mobility.

Gardening is great for bonding: Getting the entire family to tend to the garden together on the weekend, is a wonderful way to bond.

Gardening encourages a nature-connect: Nature deficit disorder is an accepted disorder in behavior in humans due to lesser exposure to nature. Research has shown that being in more concrete environments with no plants/nature can increase stress, low problem-solving capacity, and poor communication

Gardening can help save money: growing your own vegetable, greens, herbs, and fruit can help reduce market visits and help you save money

Gardening can help you get healthier: Consuming your own, homegrown, zero-poison seasonal vegetables which are higher in nutrition is good for your health

Gardening gives you a sense of purpose: Gardening is a way to care for something and nurture it from a tiny seed up to a large plant. This is enough to give us purpose and pride when the plants take root and grow.

Gardening helps you sleep better: Spending time gardening has the pleasant side effect of tiring you. It also helps you clear your head of all of the anxious or stressful thoughts and this can help you fall asleep faster.

Benefits of Terrace Gardening

Terrace gardening is an ideal form of landscaping for homeowners who don't have much space to grow plants.

It doesn't matter whether you live in a city apartment or a suburban house, terrace gardening can give you plenty of fresh vegetables and herbs without taking up too much room. In addition to providing fresh produce, terrace gardens also offer a number of benefits. Here are 10 benefits of terrace gardening.

1. Terrace Gardens Offer Space Savings

Terrace gardening allows you to maximize the amount of land available to you. Instead of growing plants on land, you can grow them in containers. This means you won't waste any valuable real estate.

2. Terrace Gardens Provide Easy Access to Plants

With terrace gardening, you can access your plants at eye level without reaching down too much or being over. This makes it easier to tend to your plants and harvest fruits and veggies whenever you want.

3. Terrace Gardens Reduce Water Use

Because terrace gardens allow you to grow plants in containers, you can water only how much is required. This reduces the amount of water used in watering your plants.

4. Terrace Gardens Save Money

Growing your own vegetables, herbs and medicine in open sunlight with good yield helps reduce your dependency on markets for vegetables. Planning for a compost bin also helps in reducing the costs for purchasing manure.

5. Terrace Gardens Help Prevent Pests

Pest infestation is one of the biggest problems facing urban dwellers. If you live in an area where pests such as ants, cockroaches, and termites are common, terrace gardening may be the perfect solution for you. By planting crops in raised beds, you prevent pests from entering your home. Plus, you can easily remove weeds and debris that attract insects.

6. Terrace Gardens Create Beautiful Landscapes

Terraces give you the opportunity to create unique landscapes. By using raised beds, you can create interesting shapes and patterns in your garden.

7. Terrace Gardens Increase Productivity

Raised beds allow you to grow multiple types of food simultaneously. For instance, you can grow tomatoes, peppers, cucumbers, and eggplants together.

This helps you cut back on wasted space and saves you money.

8. Terrace Gardens Improve Air Quality

Planting trees and bushes on your terrace improves ambient oxygen. As a result, air quality improves for you and your family.

9. Terrace Gardens Allow You to Grow Food All Year Long

Many people think that summer and winter are the best times to grow food. However, you can actually grow food all year round.

During winter, you can grow root vegetables such as carrots, turnips, radishes, beetroot, and potatoes. During summer, you can grow leafy greens such as lettuce, spinach, gourds, tomatoes, brinjals, etc.

These foods are nutritious and delicious. Plus, they taste great straight out of the garden.

Common myths and misconceptions about rooftop gardening

Terrace gardens are becoming increasingly popular. They provide an opportunity for homeowners to grow food without spending much money. However, many people still don't understand exactly what terrace gardens are and how they work.

Let me tell you about five common myths about terrace gardening.

Myth 1: Terraces are too small to grow plants

This myth is based on the misconception that terraces are too small to support a garden. This isn't true. Many homes have roofs that are larger than most backyards.

There are several factors that determine whether a terrace roof is suitable for growing food. First, the slope of the roof has to be gentle. If the slope is steep, water may run off the roof and cause damage to the house below. Second, the roof should have adequate ventilation. Third, the roof should be flat. If the roof slopes down towards one side, rainwater may collect and seep into the building. Fourth, the roof should be structurally sound. Lastly, the roof should be clean. Dirt and debris can prevent sunlight from reaching the plants.

Myth 2: Rooftops aren't safe places to grow food

Many people think that growing food on top of buildings is dangerous. While it is true that growing food on rooftops does pose certain risks, these risks are minimal compared to those posed by conventional farming methods. For example, pesticides used in conventional agriculture contaminate groundwater and soil. Growing food on rooftops doesn't pose any such threats.

Myth 3: Rooftops won't produce enough food

Some people believe that growing food on terraces won't yield enough food to feed a household. However, this is untrue. Most rooftop gardens produce between 50% and 100% of the vegetables needed by a household.

Myth 4: Rooftops cost too much to maintain

Growing food on terraces is often cheaper than buying groceries. Some studies show that growing food on terraces costs between Rs 500 and Rs 1000 per month. By comparison, grocery bills average over Rs 5000 per month.

So next time you see a terrace garden, remember that it's actually a very practical method of producing fresh food.

Organic Gardening

There is so much buzz in the last few decades on “going organic”, “organic farming” and “organic gardening”. It's one of the best transitions to have happened from a society that was utilising so much chemicals in everyday life.

What is Organic Gardening?

Organic gardening is “gardening without using synthetic products like chemical fertilizers and pesticides”. It involves the use of only natural products to grow plants in your garden. The natural products replenish natural resources as it uses them. It is the traditional way in which farmers managed their farms, before chemical agriculture.

We all want the food we serve to our families to be safe and healthy. An organic gardener ensures that their activities are in harmony with the ecosystem, minimizing exploitation as well as replenishing all the resources consumed by the garden.

There are three main objectives of organic gardening.

These are:

1. Soil management which is managed by using organic fertilizer;
2. Weed management which is managed by manual labor and use of organic ground covers
3. Pest control which is dealt with by promoting beneficial insects and companion planting

Organic gardening is simple and makes you a part of the nature around you.

Why go Organic?

If you have been dabbling with the thought of following an organic path, then we hope these top reasons will convince you to make the shift

Chemicals are toxic: From respiratory problems to skin rashes and blisters, using chemicals affects your health. These chemicals can remain within the body and this can reflect as different forms of cancer and growth defects.

Nutritious: Organic vegetable gardens produce yields that contain higher levels of important antioxidants, minerals, and vitamins that are good for you

Combats climate change: Its found that the practice of organic farming would reduce emissions compared to conventional farming when it came to factors like livestock and crop production

No pollution of water and soil: Since organic products are natural they dont cause any pollution

Promote biodiversity: Chemicals deter butterflies, birds, bees and other fauna. But if you practice organic gardening, you will be mesmerized by the insects and birds that visit your garden

Maintain healthy soil: Natural gardening practices like mulching, fertilisers and crop rotation, we build on the existing soil to make it more fertile

Tastier food: Any food that you grow organically tastes a whole lot better than chemically grown food.

Breathe easy: It's uncomfortable to walk into a garden that uses chemicals due to the choking smell.

Organic gardens don't have that issue

How do to plan an organic garden?

If you've been thinking about planting an organic garden, here are some tips to help you plan an organic garden.

1. Choose the Right Location

Before you decide to grow anything, you first need to determine whether you want to grow vegetables or flowers. Vegetables are easier to grow organically.

2. Plant seasonal crops

If you live in a warm climate, you may want to grow tomatoes, peppers, cucumbers, squash, melons, eggplant, onions, garlic, lettuce, spinach, kale, broccoli, carrots, peas, strawberries, blueberries, raspberries, blackberries, and herbs.

If you live somewhere cold, you may want to plant radishes, potatoes, cabbage, cauliflower, Brussels sprouts, celery, leeks, parsley, chives, basil, oregano, thyme, rosemary, sage, mint, dill, and cilantro.

3. Prepare the Soil Before Planting

Preparing the soil before planting helps prevent weeds and pests. This means clearing away any debris, adding compost, and leveling the area.

To prepare the soil, loosen up the soil to accommodate the root systems of each vegetable or flower.

Add fertilizer to the soil, then water thoroughly.

4. Water the Garden Regularly

Watering is essential to keeping your garden thriving. Make sure to water deeply once every week, especially after heavy rains. Use a drip irrigation system if possible. Drip irrigation allows you to control exactly how much water goes to each plant.

5. Fertilize the Garden

Fertilizing your garden regularly keeps your plants producing nutritious fruits and veggies. You can use farmyard manure, vermicompost, goat manure, or horsedung manure.

6. Harvest Your Produce

Harvesting your produce is another key step in maintaining a successful organic garden. Pick vegetables when they're ripe. Don't wait until they wilt. Remove leaves and stems from your produce. These parts contain pesticides and herbicides.

7. Maintain Your Organic Garden

Maintaining your organic garden requires regular attention. Keep up with watering and fertilizing your garden. Check your plants daily for signs of pest infestation. Clean out your pots and trays weekly.

8. Enjoy Growing Your Own Food

Growing your own food gives you complete control over what you eat. It's healthier, cheaper, and tastier than buying store-bought foods. Plus, you save money by eating fresh, local produce instead of processed foods.

So go ahead and enjoy growing your own organic garden.

Basics of Gardening

Sunlight

Plants usually get the light they need from the Sun. Plants use light energy to make a type of sugar called glucose, their energy source.

As part of the process of photosynthesis, plants make glucose in a part of their leaf cells called the chloroplast. Chlorophyll, the green pigment in chloroplast allows the plant to absorb light energy to create energy.

Different plants have different light requirements. Some need bright or direct light. Others can thrive in dimmer or indirect light. But NO plants can grow in darkness.

Flowering plants, vegetables, herbs and fruits love sunlight and would prefer anywhere between 6-8 hours of sunlight. Houseplants that are primarily foliage plants, can grow in conditions of 2-4 hours of diffused sunlight

Nutrition

Nutrients are substances that nourish a plant. In particular, plants need nitrogen, phosphorus and potassium. When dissolved in water, these nutrients get absorbed by a plant's roots. If a plant can't get the nutrients it needs from the soil, fertilizer need to be added.

Fertilizer provides plants with essential nutrients and helps them grow faster. Just like water, too much or too little fertiliser will impact the plants. A handful of manure or home made compost is hugely beneficial for the plant to provide N, P and K. The other micronutrients like calcium, magnesium etc

Water

Since gardens are a man-made creation, we can't completely depend on nature to take care of it. Watering is a regular activity to keep your garden healthy. Water is absorbed by the roots of the plant. The main root is divided into subsidiary roots and root hairs. Water travels through a plant's

stems to the chloroplasts in the leaves. Plants need water for photosynthesis. Water also helps move nutrients from the soil into the plant. Too little water can cause a plant to wilt or droop. Too much water can cause a plant's roots to rot. This is because the root hairs are able to absorb moisture and not water.

Stagnation of water around the roots have detrimental effects on plant health.

Site selection

Right plant and right place decisions is the most important decisions we make as gardeners because those choices can have the greatest impact on the success or failure of your garden.

A few of the important decisions to make regarding your garden are looking at the specifics of your terrace space.

Here are some important points to consider:

It's preferable if the terrace is open with ample sunlight. A shaded terrace may allow you to grow only shade plants along with ginger and turmeric.

It's important to have ample space. More space means more plants.

Waterproofing is very important. Although the runoff from a container garden can be less, stagnant water may result in seepage.

Is there proper drainage for water? Water should drain out and flow out of the terrace.

The answers to these points will determine the kind of garden you have and how well you can plan it for a luxurious garden.

Many home have terraces that are connected by a stair case so that there is ease of access for movement. If you are planning a terrace garden and your terrace is not accessible, you can plan to add a spiral staircase or a metal ladder which is sturdy to access the terrace space.

Plants need soil, manure and containers which generally end up being heavy items to move.

Therefore, an accessible terrace is better to ensure that these heavy items can be moved without any trouble.

Additionally, after the garden is setup, regular watering, nutrient application, sowing and harvesting means regular interaction with the garden, so make sure that its easy to get in and out of your garden without any issues.

The terrace space should be your daily dose of positivity. So easy access is the best to make this space your personal zen garden.

Soil

Gardeners often disregard the impact soil has on the health and vigor of their plants. Soil preparation isn't the most thrilling aspect of planting a garden, but it's certainly one of the most important. If your soil isn't right, your garden will struggle to reach its full potential.

Start by digging up a scoop of soil and examining its texture in your hands. A garden is a reflection of the quality of its soil. Gardens filled with beautiful soil have a vitality about them that we can almost feel.

Achieving that vitality requires understanding the chemistry and composition of your soil and creating the perfect environment for fertile plant growth. Good soil management is a continual process, but once you attend to the basics, your soil will do most of the work itself.

Understanding soil types

On the basis of origin, colour, composition and location, the soils of India have been classified into: (i) Alluvial soils (ii) Black soils (iii) Red soils (iv) Laterite soils (v) Arid soils (vi) Saline soils (vii) Peaty soils (viii) Forest soils.

Alluvial Soil: Found in the Northern Plains of India and river valleys. The texture of these soils vary from sandy to clayey. High in potassium but poor in phosphorus. The colour of the alluvial soils varies from the light grey to ash grey. Alluvial soils are intensively used for cultivation.

Black Soil: Black soil covers most of the Deccan Plateau. The black soils are generally clayey, deep and impermeable. They swell and become sticky when wet and shrink when dried. Because of this character of slow absorption and slow loss of moisture, the black soil retains the moisture for a very long time, which helps rain-fed crops, sustain even during the dry season. Chemically, the black soils are rich in lime, iron, magnesia and alumina. They also contain potash. But they lack in phosphorous, nitrogen and organic matter. The colour of the soil ranges from deep black to grey.

Red soil: Red soil is found along the eastern and southern part of the Deccan plateau. The soil develops a reddish colour due to a wide diffusion of iron in crystalline and metamorphic rocks. The fine-grained red soils are normally fertile, whereas coarse-grained soils found in dry upland areas are poor in fertility and lack nitrogen, phosphorous and humus.

Laterite Soil: The laterite soils develop in areas with high temperature and high rainfall. These are the result of intense leaching due to tropical rains. These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess. Hence, laterites are not suitable for cultivation; however, application of manures and fertilisers are required for making the soils fertile for cultivation.

Arid soil: Arid soils range from red to brown in colour. They are generally sandy in structure and saline in nature. They lack moisture and humus. Nitrogen is insufficient and the phosphate content is normal. These soils are poor and contain little humus and organic matter.

Saline Soil: Saline soils contain a larger proportion of sodium, potassium and magnesium, and thus, they are infertile, and do not support any vegetative growth.

Peaty Soil: They are found in the areas of heavy rainfall and high humidity, where there is a good growth of vegetation. Thus, large quantity of dead organic matter accumulates in these areas, and this gives a rich humus and organic content to the soil.

Forest Soil: forest soils are formed in the forest areas where sufficient rainfall is available. The soils vary in structure and texture depending on the mountain environment where they are formed. Lower elevation forest soils are more fertile than high elevation.

Science of Soil

Soil is the most important factor that supports all terrestrial life. It is what supports trees, grasses, crops, and so many other organisms on the earth's surface. The bulk of our food and much of our clothing is derived from land-based crops that grow in the soil. This soil on which we depend so

much has evolved over thousands of years by the various agents of weathering and gradation have acted upon the parent rock material to produce a thin layer of soil.

Soil is a complex mixture of inorganic materials derived from erosion of rocks and organic matter or humus, the decomposed remains of plants and animals. The actual amount of each of these depends upon the type of soil. Sand, loam and clay are important elements of soil that determine its texture and porosity. Water-holding capacity is defined as the water content of a thoroughly wetted soil after surplus water has drained out by gravity. Sandy soils retain less water, whereas the addition of humus increases the water holding capacity, the moisture being held in the small spaces. Clayey soil on the other hand sticks to water and makes a sticky tight mix that even roots are unable to break. It therefore doesn't aid in root respiration and gaseous exchange.

Soils can also be determined based on their pH. Soils are acidic or alkaline ranging with pH from 1-14. The neutral pH of 7 is most preferable for plants while, some plants like acidic and alkaline media. Plant media (Soil+Nutrition) is made up of macro and micro nutrients. Macronutrients are those used in greatest quantities by plants. Micronutrients are used in lesser amounts, but vital for a plant's growth.

Macronutrients

Carbon, Hydrogen, Oxygen, Nitrogen, Phosphorus, Potassium, Sulphur and Calcium

Micronutrients

Magnesium, Iron, Copper, Zinc, Manganese, Molybdenum and Boron

Whichever part of the world you live in, it is always better to use the soil that is most locally available to you. Any soil can be enhanced by adding nutrition to enhance the macronutrients of N, P and K. This can be manure or home made compost.

What is the best soil for your garden

Unless you live in a completely undeveloped area, native soil is probably not a large part of your landscape, and you are stuck with what you have.

The good news is that gardening science has shown us what the ideal soil looks like: a combination of clay, sand, and silt, with a bit of organic matter. We know that pore space within soil is critical for retaining both water and oxygen and that compaction is primarily to blame for lifeless soil and struggling plants. We have easy tests to determine soil texture and pH, and university and government labs can provide us with additional information about nutrient levels, organic matter content, and possible contamination. Armed with this knowledge, it's possible to turn nearly any soil into great soil.

Remember, N, P, K needs to be provided in the nutrition that you provide which is available in manure or home compost.

Additional to soil itself, an addition of cocopeat and sand are very important to enable drainage and aeration in the soil.

Fungi and fungal networks in garden plants

In nature, fungi play an essential role in decomposition processes. They break down dead organic matter and recycle nutrients back into the ecosystem. Fungi are also involved in the formation of soil structure and contribute to nutrient cycling.

They also provide food for animals such as birds, insects, and mammals.

However, most people don't realize that fungi are present in our gardens and yards.

This article discusses the importance of understanding these organisms and their roles in the environment.

What are Fungi?

Fungi are eukaryotic microorganisms that lack cell walls. This means they cannot reproduce sexually and therefore produce spores instead. Spores are small, single-celled structures that contain DNA and can survive anywhere in the world.

Fungi are classified according to their shape and size. There are two types of fungi: filamentous and yeasts. Filamentous fungi include mushrooms, truffles, and puffballs. Yeast fungi include baker's yeast, brewer's yeast, and wine yeast.

Functions of Fungi

Fungi perform several functions in the environment. These include breaking down dead organic matter, recycling nutrients, forming soil structure, providing food for animals, and protecting plants against pathogens.

Decomposing Dead Organic Matter

Fungi decompose dead organic matter. Decomposition involves breaking down complex molecules into simpler ones.

For example, cellulose is composed of sugar units joined together by glycosidic bonds. Cellulase enzymes break down cellulose into glucose.

Recycling Nutrients

When fungi decompose dead organic matter, they release nutrients back into the environment.

Nutrient recycling helps maintain the health of ecosystems.

Forming Soil Structure

Some fungi form soil structure. Soil structure refers to the arrangement of particles within the soil.

Soil structure affects water infiltration, air permeability, and drainage.

Protecting Plants Against Pathogens

Plants protect themselves against pathogens using physical barriers and chemical defenses.

Chemical Defenses

Plant chemicals defend against pathogens. Plant chemicals include phenolics, alkaloids, terpenoids, glucosinolates, and cyanogenic compounds.

Plant nutrition

Nutrition is one of the important elements of our garden. Regular addition of nutrition to our garden helps to give plants good health and vitality to be able to fight against pest and fungal infections. Just like us, when we eat bad food or irregular meals, we tend to lose immunity and fall sick. Same with plants, when it lacks important nutrients from the plant media, it loses immunity and tends to get infected easily.

Strictly speaking, the essential elements are those that plants require to complete their life cycle. This chemical collection is constantly changing as we learn more about plant biochemistry.

Most manure contributes nitrogen, phosphorus and potassium. These important nutrients contribute to healthy plants and play a role in different parts of a plant life cycle - growth, reproduction and new progeny.

Stages of growth

Nitrogen is always given importance because it's what keeps plants green and healthy above ground. Nitrogen is incorporated into the structure of chlorophyll and proteins. Proteins construct cell membranes, build genetic matter and enzymes all of which are vital for growth. It helps in production of new shoots and overall plant growth. Plants lacking nitrogen tend to show yellowing of the leaf and also are stunted.

Phosphorus builds healthy roots, therefore prominent as a nutrient for below ground growth. It also promotes fruiting and flowering. They are a vital component of phospholipids, which help in transporting materials through the plant body and maintaining structure.

Potassium is important for overall plant health. Potassium is associated with the movement of water, nutrients and carbohydrates in plant tissue and to build strong cells which helps the plant deal with stresses of changing temperatures and disease. If K is deficient or not supplied in adequate amounts, it stunts plant growth and reduces yield. It also improves disease resistance and general plant health.

What is manure

Manure is one of the most useful things in nature. Manure has been used since ancient times to improve soil fertility and crop production. Today, manure is still widely used to fertilize crops and livestock feed.

There are two types of manure: organic and conventional. Organic manure is produced without using any chemical fertilizer or synthetic pesticides. Conventional manure is made from animal waste products such as urine, feces, and bedding materials.

Organic manure is considered to be an excellent source of nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, and trace elements. However, conventional manure is usually rich in nitrogen, phosphorous, and potassium.

In addition, organic manure is generally richer in humus content than conventional manure. Humus is a form of carbon that helps plants absorb water and nutrients.

Humus is also known as black gold. It is formed when organic matter decomposes under certain conditions. This process is called composting. Composting is a natural phenomenon that occurs whenever organic material decays.

Types of manure

Farmyard manure refers to the decomposed mixture of dung and urine of farm animals along with litter and left over material from roughages or fodder fed to the cattle. On an average well decomposed farmyard manure contains 0.5 per cent N, 0.2 % P₂O₅ and .0.5 % K₂O.

Sheep and Goat Manure: The droppings of sheep and goats contain higher nutrients than farmyard manure and compost. On an average, the manure contains 3 per cent N, 1 per cent P₂O₅ and 2 % K₂O.

Oil cakes

After oil is extracted from oilseeds, the remaining solid portion is dried as cake which can, be used as manure. The oil cakes are of two types:

Edible oil cakes which can be safely fed to livestock; e.g.: Groundnut cake, Coconut cake etc.

Non edible oil cakes which are not fit for feeding livestock; e.g.: Castor cake, Neem cake, Mahua cake etc.,

Both edible and non-edible oil cakes can be used as manures. However, edible oil cakes are fed to cattle and non-edible oil cakes are used as manures especially for horticultural crops. Nutrients present in oil cakes, after mineralization, are made available to crops 7 to 10 days after application. Oilcakes need to be well powdered before application for even distribution and quicker decomposition.

Green manuring can be defined as a practice of ploughing or turning into the soil undecomposed green plant tissues for improving physical structure as well as soil fertility. Green manuring, wherever feasible, is the principal supplementary means of adding organic matter to the soil. The green-manure crop supplies organic matter as well as additional nitrogen, particularly if it is a legume crop, due to its ability to fix nitrogen from the air with the help of its root nodule bacteria. The green-manure crops also exercise a protective action against erosion and leaching. Green manure to be incorporated in soil before flowering stage because they are grown for their green leafy material, which is high in nutrients and protects the soil. Green manures will not break down in to the soil so quickly, but gradually, add some nutrients to the soil for the next crop.

Leaf Compost Leaf composting, can be achieved by heap or ditch composting or by windrow composting. Windrows are preferred as they allow efficient handling of materials. Provide good aeration, allow efficient absorption of water and are easy to be formed.

Making your own compost

If you are a beginner to composting, start off with the most popular method: aerobic composting in a pot. Aerobic composting is done above-ground with the help of microorganisms that consume and decompose organic waste matter in an aerated environment. You can make the composting container yourself or buy one. Usually, three pots are used, stacked one on top of the other.

Here are the steps involved:

Segregate your household waste into dry and wet—right in your kitchen. Fruit peels, teabags and leftovers of food are wet waste, while paper, plastic and packaging are dry waste.

Put the wet and dry waste in two different containers in the kitchen.

Once the wet waste container is full, put its contents into the first compost pot.

Add dried leaves of the same quantity as the waste.

Add semi-composted material, buttermilk or cow dung to start off the decomposition process.

Turn the pile around every other day.

The pile has to be kept at the right level of dampness. If it is too wet, add dried leaves and stir. If it is too dry, add water and stir.

Once full, leave the pot open for 30–45 days for the composting to happen.

Once the container is full, move the semi-composted matter into a larger container or bin.

After two months, the waste will turn into rich compost that can be used or sold as manure.

Note: Do not add cooked food, meat and dairy products, at least in the beginning, to avoid a stench.

Like any other initiative, it will take you a couple of months to familiarize yourself with the composting process. Initial problems like too many maggots, soldier flies, fruit flies or the stench might put you off, but stay on course and complete at least two cycles of composting. Not only will you be reducing the waste generated in your city, but also contributing to an environment-conscious society.

Other Soil amendments

Jeevamrutham - is an important liquid fertiliser which helps with the regular dose of nitrogen to the plants. It consists of a rich mix of microorganisms. Jeevamrutham is the rich source of the beneficial microorganism such as nitrogen fixing and phosphate solubilizing bacteria.

Jeevamrutham is efficiently used between 8th and 12th days of preparation. Addition of such organic liquid manure would help to improve efficient microbial consortia thereby increasing NPK content and plant growth promoting factors. Jeevamrutham hastens the natural functions of the soil there by increasing the growth rate of plants and their yield. Earthworm, inevitable to the fertility of soil moves up towards the top as a result of this. The elements in the excreta of earth worm, is broken down into molecular form by the microbes in the jeevamrutham, so that, it can be easily absorbed by the roots. These microbes disintegrates wastes in the soil there by making soil more fertile. The upward and downward movement of the worms loosens up the soil. This creates a positive environment for the growth of the plants. It also helps plants to absorb nutrients from the soil.

Preparation of jeevamrutha

List of ingredients

Cow dung (native cow's) - 10 kgs

Cow Urine (native cows) - 10 litres

Jaggery – 1 kg

Gram Flour - 1 kg

Local soil – 1 handful

Water free of chlorine – 200 litres

Take a big plastic barrel and fill it up with cow dung, cow urine, jaggery, flour and soil. Mix them well. Cover the barrel with a sack. Using a piece of log, stir in a clockwise direction daily. Since it is under fermentation, carbon monoxide, carbon dioxide, ammonia and methane are produced. The

sack allows these gases to escape. It will be ready to use in 2 days if it is summer, or 3 days in winter. The jeevamrutham produced should be used up in 5 days.

Jeevamrutham is a store house of microbes. This shall not be emptied into the roots. Instead, pour this mix into the shade of the plant at 12 pm when the sun is out. Mulching The ground where jeevamrutham has been added is compulsory. This retains the moisture in the soil. It also increases microbial activities in the soil. Depending upon the availability of jeevamrutham, 200 litres per acre of land can be used twice or thrice in a month. This can be mixed in water used for irrigation also. In sprinkle and drip irrigation system, introduce a tube into the main water pipe and add well strained jeevamrutham through this tube.

Neem cake

Neem cake is another very important soil amendment in gardening

It is made by crushing neem leaves, bark and fruit

They have high levels of N, P, & K that make them perfect for plants

It is best when it is mixed with other fertilisers, as it acts as a slow-release fertiliser, which means that it regularly releases nutrients than in a single shot

To use it for your garden, about 100 grams can be sprinkled on the top soil of your garden once a month

The dual activity of neem cake being a fertiliser and pesticide helps many gardeners and farmers in having healthy plants. It particularly helps with soil pests like nematodes and white ants

It is one of the ways to prevent pest attack on lawns. Soak 1 kg of neem cake and honge cake in half a bucket of water and sprinkle on the plants

Pongam cake

Pongamia a multipurpose leguminous tree containing non-edible oil grows widely in India.

Oil extracted from the seeds of Pongamia is used as energy source as well as in tanneries while the cake (a by-product after extracting oil) was found to be rich in all plant nutrients in general and nitrogen (4.28%) and sulphur (0.19%) in particular.

Use of Pongamia cake has Table 7- Grain yield of soybean as influenced with sources of nitrogen provided essential plant nutrients for crop production in addition to organic carbon content

Citrus Bioenzyme

Bioenzyme is a multipurpose product that is produced by fermentation of fruit or vegetable peels where anaerobic microbes decompose organic matter in absence of oxygen.

Commonly, bio enzymes are used for cleaning purposes and as pesticide or fertilizer for plants. It is 100% organic and safe to use.

The natural properties of citrus bioenzyme make it suitable as a biopesticide and fertilizer which can be used as foliar spray.

Bioenzyme is particularly beneficial for encouraging flowering and fruiting in plants

Bioenzyme Preparation

Ingredients: Jaggery, citrus peels, water, pinch of yeast

Apparatus: plastic or glass container

Process:

Fill the container with jaggery, citrus peels and water in 1:3:10 ratio by weight and close tightly

Open the container once a week to let out the gas

The process completes when the peels settle at the bottom of the container

Strain out the liquid part and store it to use as a foliar spray

Duration:

21 days with the addition of yeast, if not 2 months

Peels of any fruit or vegetable can be used to make bioenzyme but citrus peels are most suited for cleaning purposes.

The sugars in jaggery help to produce anaerobic microbes which feast on the sugar and break down the peels to produce an enzyme.

The acidity can be adjusted to a comfortable level by diluting with water, so that it is not too concentrated for your needs and you do not end up consuming all of it too quickly till the next batch is ready.

Banana Bioenzyme

Making homemade organic liquid fertilizer is surprisingly easy to do, and it only uses three ingredients: water, over-ripe bananas, and brown sugar.

Bananas and their peel contain many micronutrients, including nitrogen, phosphorus, and potassium.

This can result in roses and other flowering plants producing more prominent, more beautiful blooms when they absorb this fertilizer.

Slice the overripe bananas fruit into small circle-shaped pieces

Place the cut bananas into a bowl

Sprinkle the organic jaggery over the bananas and mix them well

Put the mixture into an airtight container. Place a cloth or paper towel covering the top of the container for added air-tightness

Close the lid of the container very tight to prevent ants or flies from entering

Leave the container at room temperature for 21 days.

After 21 days, the liquid formed can be diluted. Add 10 ml of enzyme to 1 litre of water and spray on the plants, especially those that are not flowering, or about to flower

Containers

Contrary to common belief, you need not have acres of open land to grow a beautiful garden – whether this is of flowers or edibles.

You can very well do it in containers. All you have to do is consider each container as a small plot private to each plant. With the help of containers you can build a most beautiful and useful garden within your home or outside.

The plus point here is that anyone can make a great container garden.

This is the best project for a novice who wants to grow green fingers. The fact that this can be done in the smallest possible places adds to the excitement. It does not matter whether you have too much sun or too less – there are enough plants that you could use to match your conditions.

Container gardening is just a portable garden

Types of containers

You can choose any type of container when you plan to start your “garden in a pot”. There are plenty of choices for containers – you have plastic, terracotta, concrete, wood, ceramic, and even metal. The newage containers are Fibre-reinforced-plastic or FRP. They look like ceramic, but are light and Be careful however, that you do not use any pot that once contained any type of poisonous or toxic material; especially if you are planning to grow something edible.

Concrete Planters:

Concrete planters are hardy and strong

At a base layer, they are grey in colour, but it can be painted over in any other colour

Their material is quite dense, and sometimes does not allow for enough porosity for water to get evaporated

The planters are very heavy, and moving it around is a little hard, especially if it is filled with wet soil

If the concrete chips, it's easy to fix, and therefore long-lasting

Shapes vary from rectangular, circular and square. Any shape can be created if a mould is available

Metal Planters:

Metal pots are cheap and light.

The drainage hole is important, as the material prevents the evaporation of material

They can be painted over with any colour and usually available in multiple colours

Railing and hanging planters are the usually available options

The planters are lightweight and easy to move around and store, when the planter gets changed.

The one problem with metal planters is that they may start rusting over time with continuous water exposure

Terracotta planters:

Terracotta planters are made of red mud which is baked and mould into planters

The material is very porous and allows for water to get absorbed through the pores

This is great for the excessive water to move out from the root zone, but if the terracotta planters are kept on a bright, hot sunlight space without planters around, the soil can get dry soon

The planters are not too strong and sometimes a strong movement can result in the planter breaking

Nevertheless, terracotta planters are more natural and great for your plants

Wooden pots:

This isn't very popular in India because it's hard to get strong, treated wood in India

Wooden planters tend to start rotting within a few months because of constant water in the planters

Wooden planters can be lined with tarpaulin or a water-proof sheet to prevent water exposure

Wooden planters look great and give your garden a very natural, earthy

Fibre-reinforced Plastic (FRP) planters

FRP are new age planters that can be found in contemporary and traditional designs

Fibre-reinforced plastic is a composite material made of a polymer matrix reinforced with fibres.

The fibres are normally glass, carbon or basalt. Each fibre brings in its characteristics based on the intended use of the final FRP planter.

FRPs are commonly used in the aerospace, automotive, marine, landscape and construction industries.

FRP planters are cheaper than ceramic planters.

Used commonly in hotels and offices.

Recycled containers

Any container can potentially become a planter, if it can hold plant media and a drainage hole can be created.

It is a great way to reuse and upcycle containers you would otherwise be recycling

Old buckets, mugs, bottles, boxes, suitcases and even an old car can become a container garden. It's up to your imagination.

You can colour it, all interesting addition, hang it or place it on the ground and convert your garden into a beautiful space, by not investing too much on buying containers

Grow your flowers, or even vegetables in a recycled container garden

Important aspects of container gardening

Keep in mind that it's easier to grow plants in large containers than small ones. That's because large containers hold more soil, which stays moist longer and resists rapid temperature fluctuations.

Small planters are prone to drying out, and during hot summer weather, you may have to water them twice a day to keep plants alive.

Several factors help determine how large and deep the container must be.

Consider the size and shape of a plant's root system; whether it is a perennial, annual, or shrub; and how rapidly it grows. Rootbound plants, which have filled up every square inch of the soil available, dry out rapidly and won't grow well.

Choose a large pot or tub for a mixed planting, one that will offer enough root space for all the plants you want to grow.

Light-colored containers keep the soil cooler than dark containers.

The maximum size (and weight) of a container is limited by how much room you have, what will support it, and whether or not you plan to move it.

If your container garden is located on a balcony or deck, be sure to check how much weight the structure will safely hold.

Containers range from small ones which are 4-9 inches in diameter, which are good for succulents, seasonal flowers, some herbs and greens

Containers that are 9-14" inches in diameter are considered medium. These are great for almost all greens, vegetable, herbs, and flowers

Containers that are 16" - 2' in diameter are great for growing small flowering and fruit trees as well as climbers.

Recycled container garden

There's literally no end to the uses of different containers in your recycled garden. For instance, egg cartons can be used to sprout your seedlings, tin cans are great as recycled garden pots, used kitchen cleaner spray-bottles and a little neem oil make perfect pest control devices, while plastic fruit crates and even shopping baskets can be used as highly efficient garden riddles to remove the lumps from your compost. PET bottles are the most commonly used kinds of recycled gardens. Old suitcases, chest of drawers, old tires and even a old commode can be used to create a garden.

Cardboard can be used as a weed suppressor when placed carefully around your saplings and delicate plants, eventually decomposing right into the ground. And, don't forget about those difficult-to-recycle Tetrapaks—they make for ideal little bird shelters or bug hotels, helping you to encourage diversity in your recycled garden.

In truth, there are infinite recycled garden ideas out there, and with just a little imagination you can build, landscape, and grow everything you need while still contributing to a more circular model of consumption. Remember, with a little creativity, what's considered waste can be the next piece of spectacular recycled garden furniture or useful garden tool!

Gardening Tools

It's easy to go overboard when purchasing gardening tools. They can take up a lot of space and cost money, but staying focused on the basics can keep your storage area from becoming overcrowded.

Here are essential garden tools to get you going on any garden project

Hand pruners, also called secateurs, help reign in plants that are getting out of control and taking over. Anvil pruners are best for dead wood and can cause crush injuries to fresh, green stems and branches. Bypass pruners are better for live plants and green wood. Pruners should fit easily in the palm of your hand. For cleaner cuts and less injury to plants, pruners should be sharpened regularly. Garden fork: An efficient tool for turning soil, garden forks can dig into dense soil better than a spade. Forks with a slight curve to the spines are useful for scooping mulch or turning compost piles.

Hand spade: These short-handled square shovels are garden workhorses. They make easy work of digging holes for plants, edging, lifting grass clumps, and moving small bits of soil from one area to another. A good spade will last you the rest of your gardening life.

Hand Rake: When leaves and debris fall, your rake is there to remove or move them around. Rakes come in a wide variety of styles and sizes, but a great starter is a standard leaf rake.

Watering can: If you don't have a hose, a watering can with a shower head is great for your plants.

Hose Pipe: For the terrace garden, a hose with a water connection will be the most apt setup to ensure easy watering of plants without the hassle of carrying multiple buckets. It would be worth it, if you want the exercise.

Plant selection

When it comes to gardening, most people just throw whatever seeds they find lying around in their yard onto their soil. But not everyone has the same amount of space, and not every seed will thrive in every type of soil.

There are many factors that go into choosing the perfect plants for your garden. Learn how to choose the best plants for your garden based on your available space, climate, and soil conditions.

Native vs Non-native plants

Native plants are adapted to the local climate and soil conditions where they naturally occur.

These important plant species provide nectar, pollen, and seeds that serve as food for native butterflies, insects, birds and other animals.

Unlike natives, common horticultural plants do not provide energetic rewards for their visitors and often require insect pest control to survive.

Native plants are also advantageous, because:

Native plants do not require fertilizers and require fewer pesticides than lawns.

Native plants require less water than lawns and help prevent erosion.

Native plants provide shelter and food for wildlife.

Native plants promote biodiversity and stewardship of our natural heritage.

Native plants are beautiful and increase scenic values!

Healthy spaces for people

Unfortunately, most of the landscaping plants available in nurseries are alien species from other countries.

These exotic plants not only sever the food web, but many have become invasive pests, outcompeting native species and degrading habitat in remaining natural areas.

Flowering Plants

Starting a flower garden is both fun and rewarding. If you love to fill up your garden with different species of flowering and ornamental plants, there are a few things to keep in mind before getting started:

Create Unity: Use colours that blend together. According to popular landscape plant palettes red-yellow-orange colours go well and blue-purple-white colours blend well. Also referred to as energetic colours and calming colours.

Create excitement: You can plan a brightly corner of your garden, which can have lots of flowering plants and some colourful containers

Create calmness: Based on how much light gets into your terrace, another part of the garden can be mostly foliage plants and maybe a little bit of white to create a very peaceful and relaxed environment

When designing a garden you should plan not only colour, but texture, form and height of the plants. Having a mix of large and small leaved plants with a background of a tall plant creates highlight points in the garden

Plan with fragrance as movement through the garden

The eye like variety, don't keep a repetitive monoculture garden

You have designed your flower bed, you have prepared the soil, now its time to plants

Low-growing and ground cover plants such as portulaca, wedelia and rain lilies work well as front-of-the-border plants.

Add zing in the front of the house with a colorful mixture of varied-height beauties like periwinkle, marigold and jasmines

Tall flowers, such as ixora, jatropha and ervatamia can be especially inviting placed in large planters behind a few small and medium sized planters

Container planting ideas include a center row of tall and medium-height blooms with a border of cascading flowers like rhoeo, hemigraphis and osbeckia

Vegetable and greens garden plants

First, decide which vegetables you want to grow

The first step in planning a vegetable garden is to decide what to plant in your garden. It is always best to start small and work your way up as you gain knowledge. Taking a look at what vegetables your family consumes is a good starting point.

Decide between short-term vegetables and long-term vegetables

There are vegetables that can be harvested in 1-1.5 months, and then there are those that take 2-3 months. For a beginner, the recommendation is to start with vegetables that are short-term. These include:

Spinach

Methi

Coriander

Mint

Lettuce

Radish

Some long-term vegetables are:

Tomatoes

Brinjal

Capsicum

Chilli

Cauliflower

Cabbage

Zero in on a location for the garden

Most vegetables need 4-6 hours of direct sunlight. Vegetables grow well in locations that receive 6+ hours of light. For a location that receives 4 hours or less, salad greens can be an option.

South and west facing balconies get the most sun, followed by east facing. Since north facing balconies get sunlight only during summer months, salads and leafy greens can be planted here.

Fruiting plants such as tomatoes and eggplants can be planted in south or west facing balconies.

The size of the garden can be based on the number of different vegetables one is thinking of growing.

Ten square feet is adequate space for a garden with few different crops. That said, there is no minimum space for a garden.

There are two types of seeds: open-pollinated and hybrid. The open pollinated seeds give rise to plants from which you can save seeds for the next crop, whereas hybrid plant's seeds cannot be saved as they will not be the same as the parent plant's characteristics.

The process of getting the seed to sprout is called 'germination.' For this, seeds need to be sown at the right depth. The seeds need to be buried twice as deep as they are wide. Seeds can be sown in the potting mix described in the previous steps. As soon as the seeds germinate, they need to be exposed to sunlight, failing which the seeds will become tall & lanky. What seeds to sow also depends on the location and the time of the year.

Some plants can directly be sown in their final growing area, whereas certain plants have to be transplanted from one location to another. Tomato, capsicum, brinjal and chilli seeds are usually planted in seed trays and then transplanted as seedlings to the final container

Staking is done to hold the plant from falling by supporting it with a pole or a stick. For taller plants, a twine or a long stick can be used.

For climbers like gourds, a trellis support can be provided so that they can spread and sprawl over them.

Herbal plants

For a self-sustaining gardener, just growing vegetables is not enough. Your garden can contribute to your overall health in many different ways. Growing medicinal herbs is one way. All plants are medicinal, in some way or the other. With the advent of english medicine, we have stopped depending on our natural surroundings for everyday ailments. Our grandparents and ancestors healed themselves with herbs grown in their backyard rather than any store bought medicines as we commonly see.

The Foundation for the Revitalisation of Local Health Traditions (FRLHT) has found that patients were able to drop their doctors bills by 40% once they switched to using traditional remedies using medicinal plants. Common ailments like cough, cold, fever, menstrual problems, stomach related problems, hair and skin problems can easily be taken care of by using plant-based medicinal preparations. From Kashayams, juices, decoctions and oils, there are a variety of herbal preparations that have been documented in Unani, Siddha and Ayurveda. Plants have been used for medicinal purposes long before the prehistoric period. Ancient Unani manuscripts Egyptian papyrus and Chinese writings described the use of herbs.

The following are some common plants that have medicinal value

Doddapatre (Coleus aromaticus) - cough & cold, stomach infections, respiratory ailments

Onedelga/Brahmi - brain health and memory

Tincture/Hemigraphis - wound healing

Long pepper - bronchitis

Black pepper - asthma, digestion

Lemon grass - digestion, menstrual problems, perfume

Pudina - digestion

Spearmint & Peppermint - digestion and anxiety

Tulsi - Queen of Herbs - skin infections, gastritis, cold/cough, fever, earache, diarrhea

Kalanchoe - kidney stones, menstrual problems

These are a few of the most commonly used medicinal plants. There are many others which you can learn about and start adding to your garden on further exploration.

Indoor plants

Indoor gardening gives you an opportunity to have your plants closer to you all the time. There are many plants that like diffused light. They grow well with 2- 4 hours of sunlight. If your terrace has a space that is shaded and opens out into the sunlight area, this would be the best place to grow shade loving or indoor plants.

The most common way of indoor gardening is planting in containers like pots, empty containers, or grow bags. If you are reusing the containers from your home, ensure to poke some holes for proper water drainage. Keep a tray under your pots to prevent the excess water from spilling. Also, keep changing your pots as your plants grow to give the roots room they need.

Space: Growing healthy plants is easy, but they need the right spot to thrive. Pick an space that receives a sufficient amount of direct or indirect sunlight. Some plants may require a little amount of sunlight while others cannot survive without it. However, there is no plant that will grow in complete darkness. Choose your plants according to their lighting requirements. If you are very serious on growing some house plants or herbs, grow lights might suffice. Experiment with moving your plants to find the right spot for them.

Water: Watering is one of the most important parts of gardening. The watering needs of every plant are different, some like less water while some prefer more water. Water your plants whenever you feel they're drying out. You can even check the soil drainage level by poking your finger into the soil. Balance is the key when it comes to watering your plants. Keep them hydrated but do not overwater your plants. Don't forget the rule of thumb, water only if the soil is dry. If it's moist, don't water.

Soil: Indoor plants require light and fluffy soil that can soak in the water quickly and can drain adequately. The Plant media has to be a mix of soil (60%), manure (20%) and Cocopeat (20%). Medium weight soil is better for the plants that will be under the direct sunlight and lightweight soil will be ideal for the hanging plants which won't receive any direct sunlight. The texture of the soil defines its water-retention property. The lighter soil drains quickly. For shade plants, we don't want soil that holds too much water.

Manure: Your indoor plants will need a regular dosage of organic fertilizers. Repot your plants and use a healthy potting material whenever you feel your plants are dying and drying out fast. Repotting is recommended once in 6 months or a year. An extra supply of nutrients will help your plants stay healthy even when they're indoors. A handful of manure once in 2 months is good enough.

Other factors: When planting indoor gardening, factors like light, humidity, temperature play a very important role in plant growth. Without an adequate amount of light, plants might grow tall and spindly. You might not have enough direct sunlight indoors for plants to grow well. Besides adequate lighting, plants also need the right humidity and temperature level to thrive. A lack of humidity and proper temperature level indoors can be challenging for plants to grow well. If you see your plants turning yellow or brown, mist your plants daily or as often as needed. You can even place your plants together to create a microenvironment with a higher-relative humidity level.

There are multiple benefits to building an indoor garden. It will not only beautify your place but it will also improve the air quality.

Money Plant

Pothos plants grow quickly and easily. They don't need much care, and they thrive indoors and outdoors. Pothos plants are available in a wide variety of sizes, shapes, and colors.

They come in a range of leaf types, such as variegated leaves, single leaves, double leaves, and others. Some varieties even have flowers.

Pothos plants are ideal houseplants because they tolerate low humidity levels and bright sunlight. They also adapt well to indoor conditions.

In addition, pothos plants are extremely versatile. They can be used as groundcovers, hanging baskets, container plants, patio pots, window boxes, and planters.

Pothos Plants Grow Quickly And Easily

Pothos plants grow fast. If you give them plenty of water and fertilizer, they can reach heights of 3 feet in one season.

Pothos Plant Uses Include Groundcover, Hanging Baskets, Container Plants, Patio Pot, Window Box, Planter

Pothos is an excellent houseplant because it tolerates low humidity levels and bright light.

Pothos has a number of advantages over other houseplants. For example, it doesn't require too much maintenance. It also thrives in low humidity environments

Pothos does not need much attention. It can survive without any special care.

Pothos can be grown indoors or outdoors. It can be planted in soil, gravel, sand, pebbles, or mulch.

Pothos needs regular watering. It should be watered regularly. Watering once every two weeks is sufficient. Pothos loves moist soil. It should be kept evenly moist.

Pothos likes full sun exposure. However, it can tolerate partial shade. Pothos prefers average temperatures between 55°F and 75°F.

Pothos enjoys moderate air circulation. It should be placed near a window or fan.

Pothos requires ample nutrients. It should be fertilized regularly. Pothos benefits from frequent feeding. Feed it weekly.

Aromatic plants

There are many types of aromatic plants that grow in our environment. Some of these plants are used for medicinal purposes, others are used for food preparation, and still others are used for decoration.

What are aromatic plants?

Aromatic plants are flowering plants which contain volatile oils. These oils give off pleasant fragrance. This class of flora also consists of herbs and spices.

Aroma therapy has been practiced since ancient times. There are several methods of aromatherapy such as burning certain essential oils, inhaling steam or vaporizing herbal blends. Essential oils vary

depending upon their source. They are taken internally or applied externally to treat specific ailments.

Which aromatic plants are beneficial?

Here are some aromatic plants that are beneficial to health:

- Basil leaves - they help prevent colds, flu, bronchitis, sinus infections, coughs, fever, vomiting, diarrhea, indigestion, ulcers, and headaches.
- Bay leaves - they help digestion, fight infection, relieve gas pain, and promote urination.
- Black peppercorn - it helps cure sore throat, toothaches, rheumatism, arthritis, and insect bites.
- Cardamom pods - they help control diabetes, regulate menstrual cycle, and stimulate appetite.
- Cinnamon sticks - they help improve memory, prevent Alzheimer's disease, and lower cholesterol levels.
- Cloves - they help prevent cold, flu, cough, asthma, and stomach aches.
- Coriander seeds - they help prevent constipation, gastritis, and intestinal worms.
- Curry leaves - they help prevent asthma, cough, and chest congestion.
- Fennel seeds - they help prevent colic, dyspepsia, and flatulence.
- Ginger root - it helps prevent nausea, motion sickness, hangovers, and morning sickness. It also relieves muscle spasms, cramps, and digestive problems.
- Garlic - it prevents cancer, fights bacteria, and treats skin diseases.
- Lavender flowers - they help relax muscles, ease anxiety, and induce sleep.
- Lemon balm - it helps prevent insomnia, stress, depression, and nervous disorders.
- Lemongrass - it helps prevent malaria, dandruff, and impotence.
- Mint leaves - they help prevent indigestion, migraines, and nausea.
- Oregano leaves - they help prevent respiratory tract infections, indigestion and diarrhea.
- Rose petals - they help prevent influenza, reduce fever, and soothe sunburn.
- Sage leaves - they help prevent migraine, headache, and dizziness.
- Thyme - it helps prevent colds, flu and pneumonia.
- Vanilla beans - they help prevent high blood pressure, gout, and kidney stones.

All of these plants can be easily grown in a home garden.

Ornamental plants

Ornamental plants are one of the most popular types of plants used in gardens. They come in various shapes, sizes, and colors. They add beauty to our homes, offices, and parks. Some ornamental plants are grown indoors, others outdoors.

Some common examples include roses, geraniums, hibiscuses, ferns, ixoras, pentas, dahlias, etc. In addition to these, there are hundreds of other varieties of ornamental plants available.

There are two main categories of ornamental plants: flowering plants and nonflowering plants.

Flowering plants produce flowers and fruits. Examples include roses, carnations, chrysanthemums, daisies, lilies, and marigolds.

Nonflowering plants don't produce any flowers or fruit. Instead, they provide color and shape to the garden. Examples include bamboo, cacti, succulents, and ferns.

Here are some tips to help you grow your own ornamental plants.

1. Choose the right location for your plants.
2. Make sure that your soil has adequate nutrients. If you live in an area with cold winters, you may need to fertilize your plants regularly.
3. Plants should receive sunlight for 6 hours per day.
4. Water your plants daily. Watering once every 2 days is sufficient.
5. Keep your non-flowering plants away from direct sunlight. Direct sunlight causes leaves to dry out quickly.
6. Maintain proper humidity levels. Humidity helps prevent diseases and pests.
7. Repot your plants annually. This ensures that your plant's roots remain healthy.
8. Remove dead leaves and branches periodically. Dead leaves and branches attract insects and diseases.

Trees in containers

If you have space constraints but are passionate about growing fruit trees, don't worry! You can grow fruit trees on your terrace in larger planters or drums. The drums need to be placed in bright open parts of the terrace.

Here are some tips on how to set up your Fruit Garden in drums:

1. Use drums with the capacity of 70-130 litres and choose them according to the growth of the tree.
2. Make at least 3 holes of 8 mm to 16 mm at the bottom of the drum at a distance of 3 inches from each other. These are drainage holes for the excess water to be drained out from the bottom.
3. Fill a potting mixture of soil, manure and cocopeat in the ratio of 3:1:1 and then plant the tree.

4. Water them at least once a day or once in two days
5. Apply a handful of manure every month and aerate the soil well
6. If you are concerned with weight on the terrace place these drums on load-bearing structures like beams below or on the sides, along the wall.

Theme gardens of your choice

Depending on what you would like to grow on your terrace there are a variety of garden themes that you can choose from. Here are a few to get you thinking:

Vegetable garden
Ornamental gardens
Tropical foliage garden
Herb garden
Tea garden
Greens garden
Butterfly garden
Medicinal garden
Educational garden
Garden for elders
Aquatic gardens
Vertical garden
Green wall gardens

To name a few. You can get creative with whatever you would like to make your gardening journey more exciting

Biodiversity and plants

Biodiversity gardens are becoming increasingly popular. They provide an opportunity for people to learn about plants and animals, and connect with nature.

They also offer a chance to teach children about biodiversity and conservation. Biodiversity gardens can be found in schools, community centers, parks, and private homes.

Here are 10 tips for building a successful biodiverse garden:

1. Make sure you have the right space. If you don't have room for a garden, you can still grow vegetables indoors.
2. Choose native species. Native plants are adapted to the climate and soil conditions of your area. This means they won't suffer from pests or diseases.
3. Plant in groups. Plants that grow together attract beneficial insects and birds.
4. Use drought tolerant plants. Drought tolerant plants are those that survive without irrigation. Some examples include cacti, succulents, and desert plants.
5. Grow food crops. Growing food crops such as tomatoes, peppers, cucumbers, squash, and herbs helps kids understand nutrition.

6. Include pollinators. Bees, butterflies, and hummingbirds visit flowers to feed on nectar. Pollinating insects transfer pollen between plants, helping them reproduce.

7. Provide habitat for wildlife. Birds, reptiles, amphibians, and small mammals live in the wild. Providing habitats for these creatures encourages them to visit your garden.

8. Create a water feature. Water features encourage bees, butterflies, and dragonflies to visit your garden. Kids can watch these insects as they drink water from the fountain.

9. Build a rain barrel. Rain barrels collect rainwater and store it for later use. Children can play in the rainwater collected in the barrel.

10. Invite visitors. Visitors to your garden are often interested in learning about plants and animals. Ask visitors to bring their own containers filled with seeds or cuttings.

With these tips, you can create a biodiverse garden that conserves our natural resources.

Aftercare for new plants

New plants are wonderful additions to any indoor space. They add color, fragrance, and beauty to our homes. However, caring for these plants after planting can be challenging.

Plants need water, sunlight, fertilizer, and proper care to grow properly. If you don't provide these things, your plants may wilt, die, or become diseased.

Here are some tips to ensure that your plants thrive.

Water Plants Regularly

It's important to water your plants regularly. Watering helps prevent soil from drying out, which causes roots to rot. Roots absorb moisture from the air, so watering keeps your plants hydrated.

Make sure to water your plants thoroughly. This means soaking the entire pot, not just the top inch of soil.

Do not let pots sit empty for too long. Once you remove the plant from its container, place it back in an area with plenty of sunlight.

Fertilize Plants

Plant fertilizers are available in liquid form or granular form. Fertilizer provides essential minerals such as nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, and micronutrients.

Sunlight Helps Plants Grow

Light is necessary for plants to grow. Without adequate light, plants cannot produce food.

Most plants require direct sunlight for 6 hours each day. Direct sunlight allows plants to receive the full spectrum of light needed for growth.

Indirect sunlight works well for foliage plants. Indirect sunlight comes from windows, skylights, or fluorescent lights. These sources emit low levels of ultraviolet radiation, which does not damage plants.

Store Plants Properly After Planting

After planting, store your plants in a cool location away from direct sunlight. Store them in a shady spot inside or outside.

A sunny window sill is fine for short periods of time. Avoid storing plants in areas with excessive humidity.

Store plants in a plastic bag filled with pebbles or sand. Peat moss absorbs moisture and retains warmth.

Remove plants from storage 2-3 days prior to reusing them outdoors.

Be careful not to overwater plants. Overwatering leads to root rot.

Overfertilizing plants can lead to nutrient deficiencies.

Check your plants daily for signs of pests or diseases. Check for insects, fungi, algae, or mold.

Clean up fallen foliage immediately.

Maintain Good Air Quality Around Plants

Air quality affects plants' health. Use humidifiers to moisten air.

Sunlight

Direct sunlight - Sun Loving plants

Sun-loving plants don't have to be worrisome. As long as you choose the ones that thrive in your area and are heat and drought tolerant, you should be rewarded with beautiful flowers and foliage.

So here is the good news. Sun-loving plants tend to be among the most free-flowering of all garden plants. If you are lucky enough to have a sunny garden or terrace, then with the help of some regularly watered soil, you will be able to grow a huge range of plants.

Recognising sun-loving plants

The best plants to use in a sunny garden are those that would naturally be found in exposed positions with high light levels, and low rainfall. Plants that can cope in such locations have evolved by developing certain characteristics such as effective water storage. A sunny garden planted with suitable plants will be much easier to establish and maintain than one with poorly chosen plants.

Here are categories of plants that will make the best of all the sunshine they can soak up.

1. Succulents

Succulents are one of the most beautiful companions you can choose for your full-sun garden. Being hassle free, and requiring minimum maintenance and water, they are the ones you should be looking for if you find yourself with limited time for caring for your garden. Succulents will give you the joy and fulfilment of a low-maintenance garden, and even surprise you with a beautiful display of flowers.

2. Flowering Plants

All flowering plants are sun-loving. They prefer anywhere between 6-8 hours of sunlight to grow, flower and fruit. When choosing plants for areas with full sun, it's generally better to stick with native plants whenever possible. These plants are well suited to your particular area and climate, giving them the best chance for success. However, you can also select plants that share similar growing conditions according to your site such as soil type, light and water requirements. Some of the best native flowering plants are

Hibiscus

Jasmine

Oleander

Ixora

Jatropha

Paneer rose

Periwinkle

Shankapushpi

Spatika

Table rose

Daisies

Lilies

and many more

Diffused sunlight -shade loving plants

Shade loving flowering plants cannot just do their well in scorching full sunlight; they will dry out in just a few days, if not cared for properly. Not just plants, but there are some trees that grow in shade in India too. India is one such country that has a tropical wet climate which means it usually experiences persistent warm or high temperatures. Hence, some shade-loving plants are bound to have a hard time in these climatic conditions. If you are one of the people who love to be surrounded by some plants, then you can trust these plants that do well in full shade conditions in India. You can easily find these plants over some reputed online as well as offline nurseries.

Peperomia

Syngonium

Agalonema

Peace lilies

Palms

Alpinia

Philodendrons

Money plant

Monstera

Fiddleleaf fig

These plants like diffused light. Please note - there are no plants that can grow in complete darkness. All plants need at least a minimum of 4 hours of sunlight to thrive.

Watering the garden

Watering plants in containers is one of the most common gardening tasks. If you don't water your plants regularly, they won't grow properly. And if you don't water your container plants regularly, they may die.

So, here are some tips on watering plants in containers.

First, you need to understand how to water plants in containers. Watering plants in containers is similar to watering indoor plants. However, you need to pay attention to certain details.

For example, you need to ensure that the soil has adequate moisture content. This means that the soil should be moist but not wet. Moisture content varies depending on the type of soil used. For instance, sandy soils tend to dry out faster than clay soils.

Second, you need to avoid overwatering. Overwatered plants become weak and prone to diseases. They also tend to rot easily.

Third, you need to provide the right amount of sunlight. Plants that receive too much sunlight burn and wilt quickly. On the other hand, plants that receive insufficient sunlight tend to grow slowly.

Fourth, you need to water the roots first. Roots absorb water from the surrounding air and soil. Therefore, you need to water your plants' roots first.

Fifth, you need to water deeply. Deeply watered plants grow better and produce more fruit.

Sixth, you need to wait until the soil dries out completely. Wait until the top layer of soil becomes dry before you water again.

Finally, you need to water frequently. Frequent watering ensures that plants receive sufficient amounts of water.

Drainage for container gardens

When you water your plants, the soil absorbs all the moisture it can and the rest of it will sink to the bottom of the pot. This is where the drainage hole(s) at the bottom of the pot come in: This extra moisture drips out of the pot. This drainage hole is very important for the health of your plant

Container gardens are so much easier to maintain than gardens on the ground. If you forget to water your plants, you can simply refill the pot with fresh water. Containers are also easy to clean. Simply empty the contents of the pot and wash away the debris.

However, container gardens aren't suitable for everyone. Some people find that planting directly in the ground provides greater satisfaction. Others may dislike the idea of using plastic pots.

Regardless of whether you decide to go with traditional gardening methods or container gardening, you'll still need to drain your potted plants regularly.

Drainage is necessary for two main reasons. First, drainage prevents the growth of algae and fungus. These organisms can cause serious health problems if left unchecked. Second, drainage keeps the roots of your plants moist. Roots should remain moist to ensure proper root development.

If your gardens are having drainage issues do check the following

1. Water should not stagnate on the top of the soil surface
2. Check if water is draining out from the drainage hole
3. If water is not draining, you may have to take a stick and poke it into the hole until you see water starting to drain out.
4. If even after draining the hole water is stagnated, then you may have to transplant the plant and change the soil media to add a lot lighter aerated soil.

Irrigation systems

Container gardening has become one of the most popular methods of growing plants indoors.

It allows you to grow plants without soil, and it provides an environment that is much easier to maintain than traditional outdoor gardens.

However, container gardening does come with its challenges. For example, watering containers can be difficult, especially if you live in a dry climate.

Irrigation systems are designed specifically to solve these problems. They provide water directly to the roots of the plants, ensuring that they receive adequate moisture.

In addition, irrigation systems allow you to control the amount of water that flows through each individual pot. This means that you don't waste any water, and you can save money on your utility bills.

There are several types of irrigation systems available. Some are designed to fit inside the pots themselves, while others attach to the sides of the pots.

Regardless of which system you select, you'll still need to connect it to a source of water. There are two basic types of connections: drip emitters and sprinklers.

Drip emitters deliver small amounts of water to the root zone of the plants. Sprinkler heads spray larger volumes of water across the entire area of the pot.

Both types of connections are effective, but drip emitters tend to be better suited to smaller areas. If you plan to grow multiple plants in a single container, you should probably go with a drip emitter.

Sprinklers are generally used for larger spaces. However, they may not be suitable for every situation. For instance, they may not be appropriate for indoor environments where humidity levels are too low.

When selecting an irrigation system, you'll want to pay attention to the following factors:

- Size - How big is the space that you intend to cover? Will you be using it for a single plant or multiple plants?
- Water volume - How much water will you need to deliver over the course of a week?
- Frequency - What frequency will you need to water the plants? Daily, weekly, monthly, or seasonal?
- Flow rate - How fast will the water flow? Do you need to ensure that the water reaches the bottom of the pot, or is it okay if it runs off the side?
- Type - Which type of connection will you use? Drip emitters or sprinklers?
- Ease of installation - Can you install the system yourself? If not, will you need to hire a professional?

Once you've selected an irrigation system, you can choose between manual and automatic controls. Manual controls let you adjust the settings manually. Automatic controls automatically adjust the settings based on weather conditions.

Manual controls are typically cheaper than automatic ones, but they aren't as convenient. With automatic controls, you won't have to remember to adjust the settings.

Automatic controls are usually more expensive, but they offer greater convenience. For example, you can set the system to turn itself on and off according to a schedule.

That way, you can leave the house knowing that the plants will be watered whenever needed.

Natural Farming practices

Natural Farming is an alternative method of agriculture that uses no pesticides or synthetic fertilizers. Instead, farmers rely on nature itself to provide the necessary nutrients needed for growing crops.

In addition to using no chemicals, Natural Farmers also don't use any genetically modified organisms (GMOs). This means that they aren't altering the DNA of plants or animals. They simply let nature take its course.

While most conventional farms use chemical fertilizers and pesticides, Natural Farmers believe that these methods cause harm to the environment.

They also believe that organic food production is healthier for consumers. Organic foods contain higher levels of antioxidants and vitamins than non-organic foods.

Organic produce has been shown to improve health and prevent diseases such as diabetes, asthma, allergies, and certain cancers.

So, what exactly does Natural Farming entail? Here are three things that you need to know about Natural Farming.

1. No Pesticides or Synthetic Fertilizers

Pesticides and synthetic fertilizers are used extensively in conventional farming. However, Natural Farmers avoid using these harmful substances.

Instead, they focus on providing the soil with the right amount of water, sunlight, air, and minerals.

This allows the plants to grow without the use of pesticides or synthetic fertilizers that may pollute the soil and water.

2. Using Nature's Own Ingredients

Natural Farmers use composting instead of artificial fertilizer. Composting involves breaking down organic matter found in manure, leaves, grass clippings, and kitchen waste.

Composting helps the soil retain moisture, add nitrogen, and release oxygen.

It also prevents erosion and improves the quality of the land.

3. No GMOs

As mentioned earlier, Natural Farmers avoid using genetically modified organisms (Gmo's). Gmo's are created by genetic engineering.

These types of seeds are designed to withstand harsh weather conditions and resist pests.

However, critics argue that GMO's pose serious risks to human health.

For example, Monsanto's Roundup Ready soybeans were engineered to tolerate glyphosate herbicide. Glyphosate is known to cause birth defects and damage the liver.

Critics also claim that GMO's alter the composition of our food supply. For instance, studies show that GMO corn contains higher levels of pesticide residues than non-GMO corn.

Natural Farmers believe that GMO's should be avoided due to the potential dangers they pose to humans and the environment.

There are several benefits associated with Natural Farming. These include:

- Improved Health

Studies suggest that eating organic foods reduces the risk of developing chronic illnesses such as cancer, diabetes, and heart disease.

- Increased Productivity

According to research, organic farms tend to yield more fruits and vegetables per acre than conventional farms.

- Reduced Environmental Damage

Conventional farms often contaminate groundwater and streams with toxic chemicals.

On the other hand, Natural Farms do not use these harmful substances.

- Better Quality Food

Non-organic foods are often grown under poor conditions.

They are usually sprayed with pesticides and fed with synthetic fertilizers.

Organic foods, however, are grown naturally without the use of harmful chemicals.

Therefore, they are free of toxins and offer better nutrition.

Overall, Natural Farming offers numerous benefits over conventional farming. If you're interested in learning more about Natural Farming, then read on!

Mulching

Mulch is one of those things that most people don't think about until the summer sets in. Mulch is used to protect plants from weeds, insects, and drought. It keeps soil moist, helps prevent weed growth, and protects roots from drying out.

There are several types of mulches available, each with its own benefits. Some mulches are organic, others aren't. Organic mulches include straw, leaves, grass clippings, wood chips, composted manure, and shredded newspaper. Non-organic mulches include plastic sheeting and weed mats.

Organic mulches provide nutrients for plants, keeping them healthier and stronger. They also add moisture to the soil, helping plants grow faster. In addition to providing nutrients, organic mulches also help control pests such as slugs and snails.

Non-organic mulches don't contain any nutrients, so they won't benefit plants. However, they may still help keep weeds down.

When choosing mulch, remember that it should match the type of plants you plan to grow. Straw and leaf mulch is ideal for vegetable gardens, whereas wood chips are better suited for flower beds.

To ensure that your plants get the right amount of nutrients, fertilize them regularly. Fertilizing encourages plants to grow bigger and produce more fruit. Fertilizer comes in liquid form or manure. Liquid fertilizer is sprayed on the plants. Manure is placed into the soil and left to decompose naturally.

Spread mulch thickly near the base of plants to encourage root development. Thicker mulch also helps prevent weeds from sprouting.

After applying mulch, wait three weeks before watering your plants. During this period, the mulch will break down and become part of the soil.

Keep your garden looking beautiful all season long with mulch.

Organic pesticides

The use of organic pesticides for agriculture and gardening is getting very popular. Here are some benefits of using organic pesticides:

Organic pesticides are less harmful than synthetic pesticides. In the process, it also supports the environment and builds healthy soil.

It allows farmers to extract optimum usage of land as it helps produce a bountiful harvest even over a small plot. As such, it makes effective use of a limited resource like land.

It controls the population of pests and insects, which could become carriers of vector-borne diseases.

It reduces the manual labour involved in hand weeding.

In addition to sustaining the produce, organic pesticides also secure the safety of products when they are in storage.

Some examples of organic pesticides -

1. Green chilli, ginger and garlic paste
2. Neem oil
3. Agniastra
4. Turmeric
5. Neem cake

Organic pesticides are naturally more beneficial for the environment. Given their natural origins, they are more eco-friendly than the water-soluble, synthetic pesticides that percolate into the water table and cause water pollution. However, it is worth mentioning here that certain types of organic pesticides are found to be less effective, which causes farmers to overuse them, which may lead to upsetting the balance of the ecosystem.

Organic fertilizers

The term 'organic' refers to food or other materials produced through biological processes rather than chemical ones. These fertilizers are made from natural ingredients such as manure, compost, blood meal, bone meal, fish emulsion, seaweed extract, kelp meal, rock phosphate, etc.

Fertilizers play a vital role in growing crops. They provide nutrients to the soil and thus increase soil fertility and soil quality. There are several types of organic fertilizers available in the market. Let us discuss some of these below.

Organic fertilizers are often considered to be better for the environment because they don't contain synthetic chemicals or pesticides. They also tend to be less expensive than their conventional counterparts.

Organic fertilizers are natural substances derived from plants or animal waste. They contain no synthetic chemicals and are considered safe. Organic fertilizers are also environmentally friendly because they don't pollute groundwater and soil.

Organic fertilizers are often preferred because they don't pollute the environment. They also reduce the risk of food poisoning. Some organic fertilizers are also rich in micronutrients, which are essential elements for plant growth.

Chemical fertilisers contain harmful elements such as arsenic, cadmium, chromium, mercury, lead, nitrates, phosphates, and sulfur. These heavy metals pose serious health risks to humans and animals. On the other hand, organic fertilizers are free from these toxins.

There are two types of organic fertilizers: compost and manure. Compost is created from kitchen waste or garden trimmings, whereas manure comes from animals. Both are rich in nutrients and can improve the quality of your soil. It also helps in maintaining soil stability.

Organic garden fertilizer is safe for plant health. The amount of fertilizer required depends on the type of plant and soil conditions. Apply them at least once every two weeks during the growing season.

Here are some common types of organic fertilizers:

Bone meal

Bone meal is used for fertilizer and is made from animal bones. The process of making bone meal involves grinding up bones into a powder, then mixing them with water until they form a paste. This mixture is dried, ground again, and mixed with other ingredients such as lime, gypsum, and salt. Bone meal is often used as a fertilizer for plants, especially crops like corn, wheat, and soybeans.

Bone meal is a fertilizer that contains calcium phosphate, which helps plant roots absorb nutrients. The best way to use bone meal is to sprinkle it around the base of plants, such as tomatoes, peppers, eggplant, and cucumbers.

Organic manures

Organic manure is a natural fertilizer made from animal waste such as urine, feces, and dung. The benefits of organic manure include no chemicals, no synthetic fertilizers, and no pesticides. Organic manure also has high levels of nitrogen, phosphorus, potassium, magnesium, calcium, sulfur, and trace elements.

Fresh manure is an organic fertilizer made from animal manure. They contain nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, and trace elements such as iron, zinc, copper, and manganese. The nutrients in manure help plants grow faster, stronger, and healthier.

Chicken manure, cow manure, green manure, horse manure, goat manure are the different types of organic manure. They help in improving the soil structure.

Peat moss

Peat moss is an organic product obtained by decomposing sphagnum peat bogs. Peat moss is rich in humus, which makes it ideal for gardening. It's also good for mulching vegetables, trees, shrubs, and flowers.

Rock phosphate

Rock phosphate is a mineral source found in rock formations that contains phosphorus. This mineral is used for fertilizers and animal feed. It is an excellent source of phosphorus.

Liquid fertilizer

Liquid fertilizers are used for growing plants indoors. They contain nutrients such as nitrogen, phosphorus, potassium, and magnesium. The main advantage of using liquid fertilizer is that it is easy to apply and use. They help in root growth. It can also be used as a foliar spray.

Liquid fertilizers are made from natural ingredients such as fish meal, urea, and ammonium nitrate. They are used for growing plants like tomatoes, peppers, cucumbers, eggplants, and other vegetables. Liquid fertilizers are also used in animal feed. They are rich in nitrogen contents and help in plant nutrition.

Jeevamrutha is a type of liquid fertilizer prepared from cow urine and cow dung. It promotes plant growth.

Seaweed extract

Seaweed extract is a liquid fertilizer that contains minerals like phosphorous, potassium, and nitrogen. Seaweed extract is derived from seaweeds, which have been soaked in seawater.

The benefits of using seaweed extract as a fertilizer include being free of chemicals, having no side effects, and not harming the environment.

Alfalfa meal

Alfalfa meal is a natural fertilizer that contains nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, zinc, copper, manganese, and other nutrients. Alfalfa meal is used for soil improvement, plant growth promotion, and pest control.

Feather meal

Feather meal is a fertilizer used for growing plants such as corn, wheat, soybeans, and other crops. The main ingredient is chicken feathers which contain high levels of phosphorus, calcium, magnesium, zinc, and other minerals.

Feather meal is used for making fertilizer. The process of making fertilizer includes mixing the ingredients and then spreading them out evenly across the field. This mixture is called "feather meal".

Compost

Composting is the process of converting organic waste into compost. The compost is then used for gardening or landscaping purposes. There are two types of composters: aerobic and anaerobic.

Compost is organic material that has been decomposed by microorganisms. The process begins when food waste decomposes into a mixture of carbon dioxide, water, nitrogen, and other gases. This mixture then goes through a series of processes until it becomes soil.

Composting is a great way to recycle organic waste into soil for gardening. The process of composting breaks down organic matter such as food scraps, plant material like grass clippings, leaves, and manure into rich humus which is used to fertilize plants. This helps decompose the organic matter and release nutrients back into the soil.

Composting is a way to turn food waste into fertilizer for gardens. The process begins when organic matter such as food scraps and yard trimmings are added to a compost bin as compost piles. After about six weeks, the mixture becomes rich healthy soil for plants.

Vermicompost

Vermicompost is a natural way to recycle food waste into rich soil for plants. The process uses worms to break down organic matter such as kitchen scraps, grass clippings, leaves, and other yard wastes. This helps reduce the amount of garbage going into landfills.

Vermicompost is a process where organic waste is turned into fertilizer for plants. The process begins when food scraps are mixed with worms and bacteria. Worms eat the food scraps and excrete earthworm castings which are then used as fertilizer. This method is much cheaper than using chemical fertilizers and much more eco-friendly.

Vermicompost is a natural way to recycle food waste into rich soil for plants. The process uses worms to break down organic matter such as kitchen scraps and garden trimmings. Worms eat food waste and excrete castings which contain nutrients essential for plant growth. It also helps in soil aeration.

The worm-based vermicomposting system consists of a container filled with worms and their food source. Food sources include kitchen scraps, grass clippers, leaves, and other organic materials. These materials are placed in the container and covered with dirt. Over time, the worms will eat the food waste and excrete nutrient-rich castings.

Citrus bio enzyme

Citrus bio enzymes are enzymes extracted from citrus fruits such as oranges, lemons, limes, grapefruits, tangerines, etc. Citrus waste is fermented to produce enzymes that help the plants in flowering and fruiting. It also helps in root development.

Citrus Bio Enzyme is a natural product derived from citrus peels. It contains enzymes that help in breaking down the cell walls of the roots of plants. It also helps in promoting the growth of the roots, stems, and branches of plants.

Advantages of organic fertilizers

Organic fertilizers are better for the environment than chemical fertilizers.

They do not pollute water supplies and they don't contain harmful chemicals like pesticides.

Organic fertilizers help prevent pollution and conserve resources.

They are made up of ingredients that have been grown or collected naturally.

They are less likely to cause health problems because they aren't made with toxic chemicals.

Organic fertilizers can be applied directly to your lawn without harming it.

They won't harm animals if you use them on your farm.

Organic fertilizers are made from things that grow naturally. They are usually made by fermenting animal manures, fish emulsion, and other organic substances.

These fertilizers provide nitrogen, phosphorus, potassium, and trace elements.

They do not harm the beneficial insects in the garden.

Organic fertilizers are generally safe to use around pets and children.

Garden maintenance

Daily care for gardens

Proper garden care can increase the quality and longevity of your plants, fruits, and veggies. A few hours of full sun is a must for nearly every plant, but different plant species require different levels of care. If you want your outdoor crops and beautiful flowers to withstand the seasons, it's important to learn the right way to take care of your garden.

Plant care can be simple when you know what to look for. Below are a few key care tips for maintaining a vibrant and healthy garden:

1. Check the health of your plants. Whether you're transplanting plants from nurseries or growing your own from seeds, fully inspect your garden plants to make sure they are pest and rot-free. Bringing in infected or diseased plants can harm the whole garden. Aside from plant disease, destructive bugs like aphids, mealy bugs, and whiteflies should be eliminated using the appropriate pesticides or other effective extermination methods.
2. Water properly. Overwatering can lead to fungi growth, leaf spots, and unhealthy plants. Only water as often as necessary during the growing season for your specific plant species, and let the soil dry between waterings to keep from oversaturating. The trick is to keep your garden well-watered but not soaking and avoid wetting the foliage. Water directly onto the soil instead. This is easy to do when watering by hand, but if you want to automate things, opt for a drip irrigation system rather than sprinklers.
3. Treat your soil. Soil degrades over time and needs to be refreshed every so often. You can buy new soil from a local garden center, so make sure to check the quality of your garden soil and replace when necessary. Adding mulch is also useful for retaining the soil moisture of your garden. Mulching material will keep weeds down while also supplying organic matter to your soil when it begins to degrade. Fertilizing your garden is another method to keeping it healthy. Depending on the type of plant species you're growing, use the right amount of fertilizer and apply appropriately to make sure you don't overstress your plants.

Clean your gardening tools. Garden tools should be cleaned to control disease and prevent transferring any bacteria or dangerous elements into your garden. In addition to the other methods of garden care, clean tools can help keep your garden healthy longer.

Perform plant maintenance. Deadhead, prune, and remove your plants as needed. Deadheading removes old flower blooms to encourage new growth. Pruning is cutting back the branches of your plants to control growth and make room for more. Culling your plants will clean up the unhealthy bits and also create more space for your garden to flourish. These gardening methods can all promote growth, clearing out any possible hidden pests or undesirable parts, and increasing room for your flower or vegetable garden to flourish.

Destroy the weeds. Weeds are garden killers. They can suffocate the roots of your healthy plants, harbor pests, and become an unsightly nuisance. Weeds take up space and resources that your plants could be using, so weeding your garden can keep it healthy and growing.

Stake your plants. Staking involves fixing sticks into the ground and tying your flower stems or other garden crops to them with cloth or thread (you can also use a trellis). Staking your plants—like cucumber, pepper, or tomato plants—reinforces the stems and keeps them from bending or breaking, keeping them upright and healthy.

Companion plant. Companion planting, or intercropping, is when you plant a variety of different crops together to increase growth productivity, provide pollinators, ward off pests, and control the habitat for beneficial insects. Intercropping is a great way to keep your garden and flower beds thriving by surrounding them with the right plants that will enable their successful growth.

Try raised beds. Adding raised beds (or garden containers) to your garden plans can significantly increase your plant's longevity. Raised beds are great if you want to start small, or plant a variety of sections. Raised beds come with a barrier, provide proper drainage, and can help keep your garden bed safe from pathway weeds and other menaces.

Design a Terrace Garden

How to Start a Terrace Garden?

Terrace Garden Design and Materials

The materials needed for a rooftop garden are quite simple. As long as you have a roof, you can grow anything you like!

Terracotta pots are one of the most popular choices for terrace gardens. They come in many sizes, shapes, colors, and styles.

Pottery is durable and weatherproof, making it ideal for outdoor use. Excellent quality pots are available.

There are many different types of terracotta pot designs available, such as planters, urns, vases, baskets, and flowerpots.

Planter boxes are another type of terracotta pot that is used for gardening.

They are usually made out of clay and painted white.

Many people prefer using terra cotta pots over plastic containers for planting flowers and vegetables.

Plastic containers are cheap, but they don't last forever. Terra cotta pots can last for decades.

If you're looking for a new terrace garden idea, consider using a terracotta pot instead of a plastic container.

Here's what you need to know about choosing the right terrace garden design and material.

1. Choose the Right Size Pot

Most terrace garden designers recommend using a large pot for plants and small pots for herbs and flowers.

A large pot is easier to water and maintain. Smaller pots require less maintenance.

When you buy a terrace garden, make sure it has drainage holes.

2. Consider the Material

Choose a terracotta pot that matches your style and taste.

Some terracotta pots are made of

, while others are made of glazed porcelain.

Porcelain pots are more expensive than ceramic pots, but they are more resistant to heat and wear.

3. Consider the Color

Color is an important part of terrace garden design.

White pots are generally considered classic, while colored pots add color to your terrace garden.

4. Find the Perfect Spot

Wherever you decide to place your terrace garden, be sure to choose a spot that gets full sunlight throughout the day.

Small Terrace Garden Design Ideas

The garden should be designed so that it provides shade and shelter from the sun. It should also provide a place where you can relax and enjoy a cup of tea or coffee and have a greenery of plants.

A small space can seem like a daunting task, but there are many ways to make it into something beautiful and a perfect space.

Here are some tips for creating a great outdoor space.

1. Choose plants that complement each other

Plants that grow well together are easier to maintain.

For example, a plant with lots of leaves like mint or basil would do well next to a tall, thin plant like lavender.

Plants that don't do well together include ones that require different soil types, such as tomatoes and strawberries.

2. Use containers

Containers allow you to choose what kind of plants you want to use. They're also easy to move around, making it easy to change up your garden design.

Choose pots that fit the size of the plants you want to place inside them. For example, larger pots are needed for plants with large roots.

Use taller pots for plants that need room to grow.

3. Add height

Tall plants give your garden a vertical element.

This makes it easier to see and enjoy your garden.

4. Create a focal point

A focal point gives your garden focus and helps visitors find their way around.

Think about where you'd like people to stop first. This could be a bench, a table, or a bed of flowers.

5. Make sure everything works together

When designing your garden, think about the colors, textures, and shapes of your plants.

Make sure the colors match and contrast. For example, a bright yellow flower looks better next to a dark green leaf than it does next to a pale pink one.

6. Consider the weather

The climate of your area will affect what kinds of plants thrive in your garden.

If you live in an area with extreme heat or cold, consider planting hardy plants instead of tender ones.

7. Think about maintenance

What's the easiest way to care for your plants?

Is it watering once a week or twice a day? Is it mulching every month or only once a season?

8. Don't forget the ground

It's not just for growing plants. If you plan to add a patio or deck, make sure the ground is prepared.

Add gravel or sand to create a stable surface. Then lay down landscape fabric to prevent weeds from taking over.

9. Be creative

You don't have to stick to traditional designs. There is a wide variety of options.

Consider adding a rock wall, a fountain, or a trellis.

10. Get started

Now that you've got some inspiration, get out there and get planting.

It may take a while to get your garden looking exactly how you want it, but the payoff will be worth it.

Raised bed is a great option

Raised beds are a great way to grow vegetable plants in a small area. They allow you to grow taller crops like tomatoes and peppers without needing a large plot of land. The soil is kept moist by water runoff and they provide a natural barrier against pests.

Raised beds are great for growing vegetables, aromatic flowers, herbs, fruits, and berries. They're also great for growing food indoors and varieties of plants.

A raised bed is a container that's about 6 inches taller than the soil inside it. You fill the container with soil and plant seeds, then water and wait until the plants grow big enough to transplant into bigger pots.

Why use raised beds?

Raised beds make it easier to reach the produce you've grown.

Raised beds allow you to harvest crops earlier than traditional gardening methods.

Raised gardens are less likely to flood, making them safer for small children and pets.

How do I make my own raised bed?

Find a sturdy piece of wood.

Drill holes along one edge of the board.

Cut two pieces of wire to fit through the drilled holes.

Tie the wires together to create a frame.

Fill the frame with potting soil.

Plant seeds in the soil.

Water the plants every day.

Wait until the plants grow large enough to transplant into larger containers.

What else do I need to know about raised beds?

A raised bed doesn't have to be made out of wood. It can be made out of concrete, plastic, metal, or anything else that has drainage holes.

The height of the raised bed depends on what type of plants you plan to grow. For example, tomatoes usually require a higher bed than lettuce.

When choosing plants, consider whether you want to grow annuals, perennials, or biennials. Annual plants live only one season, while perennials live two seasons. Biennials live two seasons.

There are many different types of raised beds available. Some come with built-in frames, while others don't.

Raised garden beds are not suitable for growing trees.

The furniture needs to blend well

It is important to choose furniture that blends well with the rest of the house. For example, if you have a modern style home, then a modern sofa is a perfect fit. On the other hand, if you have a rustic look, then a rustic couch would be a better choice. You can also think about different elements like a garden fountain or a bird bath in a corner.

Furniture is one of the most important parts of your home. You spend a lot of time there, so you need to make sure that it's comfortable and looks great too.

But what about the furniture that goes outdoors? How do you ensure that it blends well with the rest of the house?

Here are some tips to consider.

1. Choose Furniture That Fits In With The House

When choosing outdoor furniture, think about how it fits into the overall design of the space.

For example, if your patio is large, don't choose a small table. A large table will look out of place in a smaller space.

Similarly, if you're using a patio as a dining area, don't use a coffee table. Instead, opt for a sideboard or buffet.

If you're unsure about the size of the space, talk to your designer. They can give you advice on whether a specific piece would fit in well.

2. Consider Functionality When Choosing Outdoor Furniture

Outdoor furniture isn't just for sitting. You can use it for eating, drinking, reading, and lounging.

So, when choosing pieces, think about the functionality of each item. For instance, if you plan to eat al fresco, then you might want to buy a table that has a built-in umbrella.

Likewise, if you plan to read books while relaxing, then you'll probably want to invest in an ottoman.

3. Use Color Coordination To Create Balance

Color is another key element to consider when selecting outdoor furniture.

Think about the colors used throughout the house. Will these colors be visible outdoors?

If not, then you may want to avoid matching your furniture to the house.

Instead, go for color coordination. This means that the beautiful furniture matches the other items in the room.

4. Make Sure It Looks Good From Every Angle

One thing that separates outdoor furniture from indoor furniture is that it must face the elements.

This means that it needs to withstand rain, snow, wind, heat, and cold. So you will need a weather furniture.

To achieve this, you'll need to pay attention to its durability.

Look for furniture made from materials such as aluminum, steel, teak, and wicker. These materials are sturdy and durable.

5. Be Aware Of Any Potential Issues Before Purchasing

Before purchasing any piece of outdoor furniture, make sure to research the potential issues.

For example, you should know whether the furniture is weatherproof, waterproof, or UV resistant.

In addition, you should also find out whether the furniture is suitable for pets and children.

6. Don't Forget About Maintenance

Finally, remember to maintain your outdoor furniture properly. Choose furniture that will be protected against heavy rains and sun.

It's important to clean it regularly and apply maintenance products to protect against the elements.

Decide your color palette

Deciding what colors to use in your terrace garden can be difficult. You want something that looks great, but isn't too loud.

Here's a few tips for choosing your colors:

1. Choose a neutral base color

This is the foundation of your design. Neutral colour palette include white, cream, gray, tan, and brown. These neutral colors provide a blank canvas for adding interest.

2. Use contrasting colors

Contrasting colors create visual interest and excitement. They make a statement and accent color.

3. Create balance

Balance is achieved through repetition of similar colors. For example, using 2-3 colour shades of green or 2-3 color shades of blue creates a sense of harmony.

4. Consider scale

Smaller plants can add texture and depth to a space. Larger ones can overwhelm a small area.

5. Use plants that match your style

A formal garden might feature plants in rich reds, greens, and purples. An informal garden could feature bright yellows and oranges.

6. Add seasonal flowers

Spring and summer are ideal times to plant annuals. Fall and winter are perfect for perennials.

7. Be creative

There are no rules for designing a terrace garden. Just think outside the box.

Jazz up with lighting

Lighting is one of the most important elements of any outdoor space. It sets the mood, creates ambiance, and allows you to enjoy your garden at night. There are so many different types of lights available, but they all serve the same purpose – to illuminate your garden.

Garden lighting can make a big difference in the appearance of your outdoor space.

Lighting can add drama to your landscape, making it look more interesting and inviting.

If you're looking for ways to spruce up your outdoor area, consider adding lighting to your terrace garden.

Here's what you need to know about lighting options for your terrace garden.

What kind of lights do I need?

There are many different types of lighting available for gardens. You can choose from traditional overhead fixtures, wall sconces, pendants, recessed downlights, and spotlights.

Traditional overhead fixtures are usually installed directly above the plants. They provide ample light for most plants, but they don't give off much heat.

Wall sconces are small lamps that hang over a plant container. These are great for smaller spaces where you don't want to install overhead lighting.

Pendant lights are suspended from the ceiling and are ideal for larger areas. Pendants come in various shapes and sizes, giving you plenty of options for decorating.

Recessed downlights are designed to fit into a hole drilled into a concrete slab. This type of lighting is ideal for large outdoor spaces.

Spotlights are powerful lights that shine directly onto plants. Spotlights can be used indoors or outdoors.

How do I decide which lighting option works best for my terrace garden?

First, think about what you'd like to achieve with your lighting. Do you want to illuminate an entire room, highlight specific plants, or create a romantic mood?

Next, consider the size of your terrace garden. How much space does each type of lighting take up? Can you easily move the lighting fixture? Is there adequate clearance between the lighting and any nearby walls or fences?

Finally, consider whether you want to use incandescent, fluorescent, or LED bulbs. Each has its own benefits and drawbacks.

Incandescent bulbs produce lots of heat and last longer than other bulb types. But they also generate a lot of energy, so they may not be appropriate for every terrace garden. Fluorescent bulbs are less expensive and require little maintenance, but they aren't as efficient as LED bulbs.

LED bulbs are extremely energy efficient and last a long time. But they cost more than other bulbs.

Which lighting option should I choose?

It depends on how you plan to use your lighting. If you want to illuminate a room, go with a pendant or wall sconce.

If you want to highlight certain plants, go with a potted plant or hanging basket.

If you want a romantic atmosphere, opt for a pendant or a spotlight.

You can find these and other lighting options online or at home improvement stores.

Keep the space open

The roof garden should be designed keeping in mind the size of the building. It must be large enough to accommodate all the required features.

Keep the roof garden space open for the summer

A roof garden is a great place for growing plants, flowers, herbs, vegetables, fruits, and trees.

Roof gardens are usually located on top of houses, but there are many types of roof gardens.

There are two main types of roof gardens:

- Vertical Roof Garden - This type of roof garden is built vertically on the side of a building. It has walls with planters. It is a type of vertical gardening.
- Horizontal Roof Garden - This type is built horizontally along the edge of a roof.

Both types of roof gardens are popular.

Vertical Roof Garden

Vertical roofs are usually flat and wide. They are easier to maintain than horizontal roofs.

They are also easier to access.

Horizontal Roof top Garden

Horizontal roofs are usually sloped. Slopes make plants grow up instead of out.

This makes it easier to harvest crops.

If you live in a city, vertical roof gardens are probably the easiest option.

However, if you live in a rural area, horizontal roof gardens might be a better choice.

How do I choose the right type of roof garden for my home?

First, consider what kind of plant life you want to grow.

Do you want to grow only one type of plant, like tomatoes? Or would you prefer to grow a variety of different plants?

Next, think about where you plan to put your roof garden.

Is it going to be near an outdoor patio? Near a window? In the middle of the house?

Finally, consider the amount of maintenance you're willing to give.

Will you spend hours every day watering? Will you prune back the plants yourself?

Once you've decided on the type of roof garden you'd like to install, contact an UrbanMali landscape designer or a gardening expert locally.

We can provide tips on how to design and install your new roof garden.

Hedge the borders

The most important thing you should consider before planting anything is the climate where you live. In case you live in a hot place, you must plant something that can withstand heat. For instance, if you live in a cold region, you can grow something like a cactus or succulents.

Terraces are great places to grow food, but they can be difficult to maintain. A hedge along the border of the terrace helps prevent weeds from growing into the garden. A hedge also keeps the soil moist and protects against erosion.

We, at UrbanMali, as Gardening experts, recommend using a variety of plants to create a hedgerow. Variety of plants can texture and dimension to the space.

Here are some tips for creating a beautiful hedge along the border of your terrace garden.

Choose Plants That Grow Well In Terraced Gardens

Plants that do well in terraced gardens include strawberries, raspberries, blueberries, blackberries, and tomatoes.

These plants thrive in the shade created by the terraced walls.

As these plants mature, they provide fruit that can be harvested throughout the season.

Use A Variety Of Shrub And Tree Species To Create A Hedgerow

A shrubbery hedge creates a natural barrier that prevents weeds from invading the garden.

Some shrubs, such as Plumbago, Honeysuckle, and Hibiscus, add beauty to the yard while providing privacy.

Tree species offer additional protection from the elements.

Create A Natural Barrier Along The Border Of Your Terrace Garden

If you live near a wooded area, consider planting trees along the border of your garden.

This provides an attractive backdrop for your garden.

However, make sure to plant the right tree species for the climate where you live.

Mulch Around Trees For Moisture Protection

To protect the roots of your trees, mulch around their base with straw or leaves.

This helps keep the soil around the roots moist and reduces the chance of waterlogging.

Watering Tips

When watering the garden, try to avoid over-watering.

Overly wet soil encourages mold growth.

This can lead to root rot and other problems.

Soil moisture levels should be kept between 50% and 60%.

Make the best of vertical space

The most important thing to remember is that a small rooftop garden doesn't mean you can't grow anything. It just means that you should focus on what you can grow well. And if you don't like something, you can always replace it with something else.

Flooring needs to look great

The floor is one of the most important parts of any room. It should be able to withstand wear and tear, and provide comfort for all who enter the room. There are several different types of flooring materials available today, including hardwood, laminate, tile, carpet, vinyl, and linoleum. Each has its advantages and disadvantages, but they all serve a purpose.

The focal point matters

It is important to choose a spot where people can see you and enjoy your garden. This will give them a reason to visit your home often.

The shade is important

It's all about the light! The sunnier the better. But, don't forget about the wind too! Make sure that you have enough ventilation so that the air doesn't become stagnant.

Tall walls are useful

Tall walls are useful for creating indoor gardens, but they don't always look good. They can also block out light and views. The ideal height for a tall wall is between 3 and 4 feet (1–1.2 m).

Bamboo mats look great

If you don't have a balcony or terrace, then a bamboo mat is one of the best ways to add greenery to your home. The bamboo mat is a vertical garden that grows plants vertically using hanging baskets. They come in different sizes and shapes. Some of them are made out of metal, plastic, wood, and stone.

Elegant Planters and Pots

The key here is to choose a planter or pot that suits your needs. For example, a large pot is perfect for a plant that requires a lot of room but doesn't like being moved around. On the other hand, a smaller pot is ideal for a plant that likes to be kept close to the window.

A garden like space

A rooftop garden is a wonderful place to relax and enjoy the fresh air. It can also be used to grow herbs, vegetables, flowers, fruits, and even trees. The space can be utilized to host parties, barbecues, picnics, and even weddings.

Advantages of Terrace Gardening

The advantages of a terrace garden are obvious – it gives you the opportunity to grow something beautiful and green all year round. It's also a great way to add greenery to your home without spending too much money. You can also create a space where you can relax from the urban life and concrete jungle.

Being Close To Nature

The most important thing is to keep the area clean and tidy. Also, try to avoid using too much water during the summer months. It is better to let the plants dry out than to overwater them.

Contribution To Reduce Carbon Footprint

The first step towards reducing carbon footprint is to reduce energy consumption. This can be done by using solar power, LED bulbs, and CFL bulbs.

Enhancing The Look and Feel of Your House

It is important to add beauty to your house, but it should not cost a fortune. For this purpose, you can try out these ideas which include using natural materials like wood, stone, and concrete.

Keeps The Indoors Cool And Pleasant

It is always better to keep the inside cool and pleasant. This way, you can enjoy the fresh air and save money on energy bills.

Disadvantages of a rooftop garden

The disadvantages of a rooftop garden are that they require a lot of maintenance. They need regular watering and care. Also, they cannot be used during winter months.

Tips to Maintain your Terrace Garden

Grow Organic Produce

Growing organic produce is one of the most rewarding experiences you can have. It's easy to grow your own food, and the rewards are endless. From fresh herbs to delicious fruits and vegetables, there's something for everyone.

Soil and fertilizer to use in Terrace garden

The soil should be rich and well drained. It should contain enough organic matter so that it doesn't dry out quickly. The pH level should be around 6.5. Fertilizer should be applied at least once every two weeks.

Waterproofing and drainage

The roof should be waterproofed so that water does not seep into the house. This is done by using a waterproof membrane. It is important to ensure that the roof has proper ventilation because this helps prevent condensation.

Container gardening on the terrace

Planting containers on the terrace will give you a chance to grow vegetables in a way that is convenient for you. It's easy to water and harvest, and you don't have to worry about pests or diseases.

Plants for terrace garden

The most important thing to consider before planting anything is safety. Make sure you know what kind of plant you are planning to grow and whether they are suitable for your area. Also, be careful about the amount of sunlight they receive. Some plants like sun but others don't like it at all.

Diversify Plants

It is important to have a variety of plants in your garden. This way you can enjoy different colors, textures, and scents throughout the year

Here is a list of Indian plants to grow in your garden. These plants are suitable for terraces and balcony garden. They are easily available, require little maintenance, and are free from pests and diseases. Grow them in your garden and enjoy the fresh produce.

1. Aloe vera

Aloe vera is a succulent plant that grows well in hot climates. It requires low water and sunlight. This plant is used in traditional medicine for its medicinal properties. You can grow aloe vera indoors or outdoors. It is usually grown in pots.

2. Basil

Basil is a popular herb that adds flavor to many dishes. It is widely cultivated throughout India, and is one of the most commonly used herbs. Basil is easy to grow and does not require much attention. It is a perennial plant that can be grown in containers.

3. Bitter melon

Bitter melon is a vegetable that belongs to the cucumber family. It is native to tropical Asia. In India, bitter melons are eaten fresh, cooked, pickled, and dried. They are rich in vitamin C, folate, iron, potassium, calcium, fiber, and antioxidants.

4. Bottle melon

Bottle melon is an annual vine that produces large fruits. The fruit has a thick skin and contains seeds. It is used as a vegetable, and is also known as bottle melon. It is a common ingredient in chutneys, curries, and other Indian dishes.

5. Carrot

Carrots are a root vegetable that is native to Europe and Asia. It is also called Queen Anne's lace. Carrots are a source of beta carotene, vitamins A and C, folic acid, dietary fiber, manganese, magnesium, phosphorus, potassium, copper, and zinc.

6. Cinnamon

Cinnamon is a spice derived from the bark of cinnamon trees. It is used to add flavor to food and drinks. Cinnamon is also used in perfumes, cosmetics, and medicines. It is native to Sri Lanka, Indonesia, China, India, Madagascar, and Mexico.

7. Coriander

Coriander is a fragrant herb that belongs to the cilantro family. It is native in tropical regions of Africa, Asia, and South America. Coriander leaves are used as a garnish, a flavoring agent, and a digestive aid. It is also used in cooking.

8. Dill

Dill is a flowering plant that belongs to the carrot family. It is native across North America, Europe, and Asia. Dill is used in salads, soups, stews, sauces, breads, and condiments. It is also used as a natural remedy for upset stomachs.

9. Eggplant

Eggplants are members of the nightshade family. They belong to the Solanaceae family. There are different varieties of eggplants such as small, medium, and large. Eggplants are considered

vegetables because they contain nutrients like Vitamin K, thiamine, niacin, riboflavin, pantothenic acid, biotin, and minerals like potassium, phosphorus, and iron.

10. Garlic

Garlic is a bulbous plant that belongs to the lily family. It is native all over the world. Garlic is used as a seasoning and a preservative. It is also used medicinally.

11. Ginger

Ginger is a rhizome that belongs to the Zingiberaceae family. It is native mostly to Southeast Asia and Australia. Ginger is used as a spice and a culinary herb.

12. Bamboo

Bamboo is one of the easiest plants to grow indoors. It has a long history as a plant used in architecture, furniture, and paper making. The leaves of this plant are edible and have a mild flavor. It grows quickly and can reach heights of 10 feet.

Indian flowering plants are beautiful and useful for gardens. They add color and fragrance to your garden. You can grow these flowering plants in your terrace garden.

Decorate Rooftop Garden with Tires

The tires are one of the easiest ways to decorate your roof gardening. They give a unique look to your garden. You can place them anywhere in your garden. Just remember to keep them away from the water source.

Bonsai Theme Rooftop Garden

The bonsai theme is one of the most popular themes among gardeners. It gives a natural look to the garden. This theme includes miniature trees which grow well in pots. They are easy to care for and require little maintenance.

Indian bonsai plants are known as one of the most beautiful flowering trees. They are native to India and China. These plants grow well in terrace gardens.

They require full sunlight and moist soil.

Here is a list of different types of Indian bonsai plants that you can grow in your garden.

1. Bonsai Tree - This type of plant grows into a small tree.
2. Dwarf Bonsai - This type of plant is smaller than the first type.
3. Flowering Bonsai - This kind of plant produces flowers.
4. Japanese Bonsai - This plant looks similar to the first type.
5. Chinese Bonsai - This variety of plant is native to China.
6. Evergreen Bonsai - This is another type of plant which remain green throughout the year.
7. Semi-evergreen Bonsai - Similar to evergreen bonsai.
8. Deciduous Bonsai - This tree loses its leaves in winter.

9. Hybrid Bonsai - This hybrid plant combines characteristics of two different types of plants.

10. Perennial Bonsai - This perennial plant is hardy and requires little maintenance.

11. Succulent Bonsai - This succulent plant has thick roots and stems.

12. Umbrella Bonsai - This umbrella shaped plant has large leaves.

Cost

How much does it cost?

Gardening is an affordable hobby to have. If you get creative you can actually reduce the costs of setting up your garden. Here are some basic costs:

Balcony Garden - Rs 5000 to Rs 15000

Terrace Garden - Rs 10000 to Rs 35000

Villa Garden - Rs 15000 to Rs 1.5 lakh

Calendar & Schedule

Daily To-Do

On an everyday basis remember to

Water your garden regularly

Check for pests and diseases

Talk to your plants and connect

Enjoy all the small and large growth and reconnect with nature

Rooftop gardens can be an oasis in an otherwise built-up urban setting. Gardening on a rooftop has a number of benefits—including privacy, no deer, and good sun—but there are several things to consider about urban gardening before you start planting. If you have decided to create your own rooftop garden, here's how to get started.

What You'll Need

Tools

Containers

Soil

Fertilizer

Water

Plants

Gathering the Tools

You will need far fewer tools for a rooftop container garden than you would for a traditional ground-level garden. You'll be doing a lot of scooping and filling, so a trowel and a soil scoop are

the first tools you'll need. A small tarp will come in handy when you are emptying soil, to keep from making a mess.

The only other essential tool would be a good pair of pruners to prune and clean plants. After that, the rest of the tools you'll need all depends on what you're growing and how much maintenance you intend to do.

Choosing the Containers

Containers are where you can express your style in a rooftop garden, but that's not to say you need to spend a fortune on them—although you easily could. Besides aesthetics, there are two things to keep in mind when choosing your rooftop containers are size: weight and material.

You will need containers large enough for the roots of whatever plants you choose, but the weight of the container becomes an issue if you are worried about how much your rooftop can support. Remember, containers get even heavier when you water the plants. Traditional materials such as clay, terra cotta, and cement can be quite heavy.

Plastic pots and the newer synthetic containers are light enough to lift, but you also need to consider balancing the height of your plants. A tall or top-heavy plant, like a small tree or a tomato plant full of ripening fruits, will topple over in a lightweight pot. If your rooftop garden is windy, heavier containers are a must.

In addition to being heavier than synthetic materials, natural materials such as clay, terra cotta, and ceramic also tend to heat up more than synthetics. When the pot heats up, the soil and roots heat up and the plant requires more frequent watering. You can help somewhat with a little shade and mulch the top of the containers, but drip irrigation or self-water pots will make your life much easier.

Wooden raised garden beds filled with plants in front of brown trellises

The Spruce / Phoebe Cheong

The Right Soil

Soil is often the least interesting thing to a new gardener, but it is the most important part of your garden. Good soil means healthy plants and less work for you. If you are growing in containers and raised beds, you will have the advantage of bringing in soil (rather than being stuck with what's already on the ground). The amount of soil needed will vary, so research your choices, before you plant them.

There are several good potting mixes on the market, but you can mix your own by combining three parts compost or composted manure with 1/4 part peat for lightness. Add a handful of perlite per pot, for improved drainage.

The soil in containers needs to be replaced periodically, usually every spring. You can lift and repot or simply top dress the existing soil.

Selecting a Fertilizer

Container plants, such as in an urban rooftop garden, will require regular fertilizer. Even a great potting mix will become depleted over time, as plants take up the nutrients and the water leaches them out. The larger a plant grows and the more water it takes, the faster the soil is depleted. The type of fertilizer you use will determine how often you will need to fertilize, but every two to three weeks should be sufficient.

There are many good fertilizers on the market, including increasingly more organic choices. A water-soluble fertilizer is the fastest way to get the nutrients to your plants, either by watering the soil and getting it directly to the roots or by foliage feeding.

Picking Your Plants

You can plant virtually anything in a container, but a lot of plants are labeled as "great for containers"—this is a good place to start. Because most rooftop gardens get a lot of sun and are potentially very hot, during the day, drought-tolerant plants are recommended.

Take into account the rooftop's sun exposure and hardiness zone. Because rooftops hold heat, they can create microclimates that hover about a zone higher than a garden on the ground would be. You'll need plants that can handle the heat, but since they are in containers, they probably won't have better cold tolerance than ground planted gardens.

There is no list of certified rooftop hardy plants. Your choice of plants will require some trial and error. Honestly, with the exception of tall trees, there is little you can't grow on a rooftop. Many rooftops are little microclimates that can overwinter plants that would not be hardy at ground level. And if you have space and are willing, you can bring tender plants indoors for the winter. Annuals will require more frequent watering but will eat up the sun.

Some good rooftop plant choices would be plants with limited root systems, that don't need a lot of soil, such as herbs and vegetables and smaller to mid-sized perennials. Trees and shrubs require more soil and larger pots, but you need fewer of them to make an impact.

Raised garden bed with herb plants in front of brown trellis

The Spruce / Phoebe Cheong

Rooftop Gardening Tips

Pot feet will lift your pots off the floor, allowing for better drainage.

Don't let cost keep you from gardening. A kiddie pool makes a wonderful raised bed, suitable for growing just about any kind of vegetable.

If you are going to be moving plants around or moving them indoors and out, place them on locking dollies.

Even a rooftop garden will be subject to pests and problems. Insects can fly, as can spores, so monitor your plants and try to catch problems while they're small.

The different waterproofing solutions are enumerated below :

Coating waterproofing - In this method the rooftop is applied with a coat of materials such as bitumen-polymer mastics ;polymer mastics;bitumen-rubber mastics.

Paint waterproofing - This is the application of bitumen and polymer coatings, paints or emulsions on your roof coating. Paint waterproofing can be applied by hand or can be sprayed.

Waterproofing foil - This is very essentially used in pitched roofs – slate, pile, metal roofs

Polymeric membranes - There are PVC membranes, PDM-diffuse membranes and diffuse membranes which are used over the concrete surface.

oftop gardening is a concept that has been around as long as there have been roofs. City dwellers have been tucking plants on roofs and fire escapes for generations. Even green roofs, roofs covered with soil and plants, have been around for years. It seems no matter how much land a gardener has, we always seem to be looking for more space, and rooftop gardens of all kinds are gaining popularity in both residential and commercial sites.

There are plenty of good reasons to consider a rooftop garden:

They make use of unused or underused space

A garden beautifies an empty space

They can provide privacy

They can be extremely environmentally friendly

There is usually good sun exposure

No deer, rabbits, or other non-flying pests to worry about

Options for Your Rooftop Garden

There are a couple of directions to go in when considering a rooftop garden. Fully planted green roofs, where the roof is covered with soil and the plants are in the soil, make great environmental sense, but they are too difficult for homeowners to undertake on their own. The weight of green roofs can easily top 100 lbs. per sq. ft., before adding people. You would need to hire a structural engineer or architect to conduct a structural analysis and probably a professional company to install it.

The easiest and most personal approach to rooftop gardening is the use of containers and raised beds.¹ You can create any style of rooftop garden with container grown plants, from a few simple herb plants to a formal, elegant potager. Containers are perfect for rooftop gardens because they are light, portable, flexible, and affordable.

Raised garden bed next to table with basket and plants in front of trellis

The Spruce / Phoebe Cheong

Caring for Your Rooftop Garden

While caring for container grown plants on a rooftop is much like maintaining containers on the ground, there are a few rooftop idiosyncrasies to consider before you start hauling your pots outside.

Permission: First, check with your landlord and/or the building code. Questions about accessibility, building height restrictions, and fire regulations can prohibit any type of roof use.

Structural Integrity: Make sure the roof can hold the load. Get a licensed pro to do this. Soil and pots are heavy to begin with and will get heavier as the plants grow. If you've ever tried to move a pot full of wet soil, you know how much weight water can add.

Access: How are you going to get your materials and supplies in and out? If you live in an apartment, make sure you are allowed to use the elevator. Some municipalities require multiple access/exits and possibly exit lighting, fire alarms, and emergency lighting.

Water: Will you be able to run a hose out to the roof? Watering cans can become a nuisance and containers require a lot of water. Consider installing a rain barrel and drip irrigation.

Sun Exposure: Are you shaded by nearby buildings or the terrace above you? Even some sun can be a problem when plants are sweltering on top of concrete.

Heat: Besides the sun beating down on the roof, there is ambient heat being reflected from the roof surface, surrounding buildings, streetcars and metal exhaust and utility structures. You will probably want to provide some sort of shade, if not for the plants, then for you.

Wind: Wind can whip down straight urban streets, especially on high-rises. You may want to consider some type of wall or fencing. If so, you will probably need to check your building code again for required heights and structural stability. This is especially important when building safety dictates barriers for kids and pets.

Privacy: Most rooftops are surrounded by neighboring buildings. If your rooftop garden will be in full view, you may want to plan for screening. You can plant a hedge of evergreens, run vines up a trellis wall, or simply tuck under an umbrella table.

Electrical Wiring: Electricity isn't essential, but it sure makes things easier. If you are planning on enjoying your garden at night, candles aren't the best lighting for weeding.

Storage: There's a lot of paraphernalia associated with gardening: tools, fertilizer, compost, buckets. Space is limited on a rooftop and it's hard to camouflage a storage area. Shelves will suffice. Some rooftop gardeners opt for narrow closets. Another option is bench seating with built-in storage, to do double duty.

Cost: Last but not least, how much are you willing to spend? You can start small and add on, buying more pots and plants (and soil) as you go. The real expense comes when you want to start hardscaping and building on the roof. Laying tiles or stone, building raised beds and boxes, adding lighting and furniture can all start to add up. Plus, you may need more structural work to support them.

Regardless of your design starting out, large or small, a rooftop garden is an investment in peace of mind for many urban dwellers, providing hours of relaxation and reward.