





# Window Farming

A complement to the global run towards greenifying

A frantic ritual of vertical expansion in all major cities of the world has been a pinch of worry to the community of green goers. But innovation always rips its way through! Window Farming is one of these innovative mechanisms that bring solace to those who live painfully separated from Mother Nature.

Lack of space and an escalating value of properties have encouraged people to shift into basically non-green spaces high up above the ground. Although balcony gardening has received a warm-hearted welcome from this strata of population, yet a considerable chunk, which is less fortunate about living spaces, still remains deprived of the goodness of green in their homes and offices. Window farming is a sunny bliss to them. Enabling people to grow vegetation and ornamental plants in as unimportant creations as plastic bottles, window farming is the

latest heart throb amongst greeners. We dedicate this section to the green farms of window farming. The name 'Window Farms' defines itself. It revolves around the cultivation of small herbs and vegetation against the windows of homes using both the conventional pot culture method as well as the 'neither so old, not so contemporary' methodology of hydroponics. It is a breath of relief to people who do not have a considerable growing place at their homes. Windows, at such homes, can be converted into cheerful growing places. They make a wise uti-

lization of the nutrient medium and the sunlight and air conditions prevalent in the adjoining room. The light conditions however, vary with the direction in which the window faces. Hence, illumination is a factor which might need a bit of tweaking. And if you have a menu of salad veggies to choose from, then it is a good idea to grow plants that are philic to the kind of light and temperature conditions under which they would be planted. Window farms are appropriate for growing kitchen herbs and the less space-consuming versions of berries.

## The ritualistic practice v/s the revolution

It has been an age-old practice to grow plants in pots and hangings outside the kitchen window. The pots are generally made of high quality plastic and the hangings are most preferably glazed wood. They are hung from a hook, hammered in the window ceiling or as is the case with width-length hangings, they can be fit at the window sills. They are like general garden plantations in their watering and tending routines. They are tough to maintain and require a constant supply of loving care to fruit to their fullest. Most kitchen window hangings make a mess when the soil is to be aerated. But as the saying goes, 'Old is Gold', kitchen hangings are a lot less expensive and a lot easier to maintain.

*Growing a column of fresh salad greens against the window could just be an experience! A 4-column installation provides for one salad platter a week.*

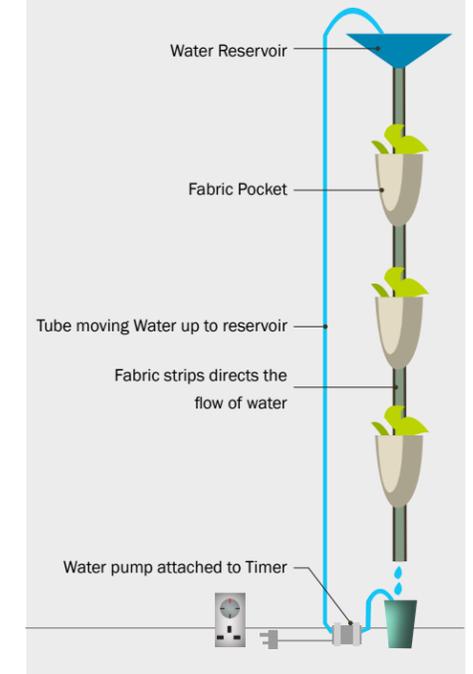
Hydroponic systems are the more sophisticated and the tidier version of the hanging plantations. They function on the principle of soil-less culture. Plants in these kinds of plantations have their roots growing in an inert medium like pebbles, wood chips and gravel, and in certain conditions, when nourishment is required in a greater degree, a compost sponge is included in the culture bowl as well. The basic nutrient medium consists of minerals dissolved in water. The roots of the plants are bathed in this solution from time to time. So there is practically zero involvement of soil in the entire system, which means all kinds of problems related to soil cultures are eradicated. This is the feature that makes hydroponics a popular option to harp on. Kitchen gardens, following this more recent mechanism are tidier, healthier and easier to maintain.

*A window farm following the hydroponic mechanism is way tidier and easier to maintain than a conventional pot culture. Almost any terrestrial plant would thrive without soil with hydroponics.*

## How it works

Window farms can be made at home without facing much technical hurdle. One window farm is conventionally a set of 2 or 4 columns of plants, grown in bottles. All that one requires are a few plastic bottles, a bigger gallon, a few tubes, a vertical stand and adhesive tapes to attach the bottles firmly to the stand. The bottles are

stacked in a vertical fashion, with the neck of one intruding into the base of the neck. This gives them an inverted structure. In each bottle is placed a small cup filled with the inert material in which the plants are to gain their roots. All the bottles are directed into the huger gallon that has been filled up with the nutrient medium. Here, it is important to note that the bottles must be covered with transparent tapes or with pieces of towels to keep the roots from photosynthesizing. An air pump is installed outside this arrangement and is connected to a timer. The outlet tubes of the pump are introduced into the gallon. At regular intervals, the pump livens up to spit spurts of air into the reservoir, so that an equivalent quantity of medium is displaced through the dripping tube that connects the reservoir with the top-most bottle. This way, the mineral-water solution passes through all the bottles, and the excess of it drips back into the reservoir. The process continues so that the roots of



all the plants get a fabulous supply of nutrients and with the utmost level of regularity. This was about making a column of window farm stand erect at the window sill. For the convenience of all those who wish there were a farm at their home, but do not have much of time to devote to its making, there are window farming kits available in the market which can be installed at homes without any kind of expertise in cutting and sticking. Window farms prove to be more fruitful when the plants cultivated, have a good and optimum exposure to sunlight along with a tricky supply of nourishment. This might cause problem for those who have inward facing installations of the farm columns. The sun light received at such areas might be dimmer than the actual requirement or it could be just cloudy outside, which would block the immersion of plants in sunlight. In such cases, it is a wise decision to go for 27 watt CFL bulbs, or better yet, an LED lamp. This gives the plants the required quantum of light and heat required for growth.

There is obviously no requirement to spell out the utilities of window farming using the culture medium concept. Apart from being easier to maintain and cleaner to look at, window farming has many other benefits. The foremost of them being that the space utility factor almost maximizes when the urban gardener chooses to create a window farm at his home. Secondly, it has been an observation that roots of plants, cultivated under hydroponics tend to be compact and bushy, in contrast to their immediate brethren that are cultivate don land. When the issue of expanding roots is almost done away with, there is no probability that be plant be harmed due to the unintended trimming down of the roots. All that the cultivator has to do is to trim the spilling leaves regularly, and change the nutrient medium in the reservoir once in a month. And the results of this kind of farming are highly appealing. One thing has to be religiously taken care of. The timer has to be set in such a manner that the plants do not get over-watered. Over-watering can lead to root infections due to excess dampness in the inert medium. A well maintained window farm produces enough herbs and veggies to make a family-sized salad platter a week. *If it has been reserved only for herbs, the culinary garden can become a haven for housewives!*

