

# Therapeutic Garden: Role of plants in Boosting Mental Health

Swapnil Bharti<sup>1\*</sup>, Paramveer Singh<sup>1</sup>, Sachin A.J.<sup>2</sup> and Vikas Chandra<sup>3</sup>

<sup>1</sup> Assistant Professors (Floriculture & Landscaping),

<sup>2</sup> Assistant Professors (Medicinal and Aromatic Plants)

<sup>3</sup> Assistant Professors (Fruit and Fruit Technology)

Bihar Agricultural University, Sabour, Bhagalpur

Corresponding Author: [swapnilbau317@gmail.com](mailto:swapnilbau317@gmail.com)

## Abstract

Due to the rapid pace of urbanization, people's interaction with nature is gradually diminishing. As a result, the concept of leading a healthy lifestyle and relieving daily stress is becoming increasingly significant. In turn, many individuals are drawn away from the dense, gray cityscapes and seek solace in green spaces that offer a sense of joy and tranquility. Green spaces not only fulfill people's needs for both active and passive recreation, but also have a positive effect on their overall well-being. Therapeutic gardens, in particular, support individuals physically, mentally, and emotionally, helping them manage grief and personal loss. Additionally, these gardens assist the elderly in regaining diminished physical abilities and dealing with the challenges associated with aging. Unlike other gardens, the plants selected for therapeutic gardens should stimulate the senses, evoke memories, and encourage creativity. In this context, the success of plant design largely depends on selecting the appropriate plant species based on their intended use and positioning them to achieve the desired therapeutic effects. It should include sheltered areas for solitude as well as designated spots for social gatherings, with options for both sun and shade depending on the season.

**Keywords:** Green spaces, Lifestyle, Plants, Therapeutic, Stress

## Introduction

Throughout history, nature has played a key role in shaping human life. People have turned to it for healing, both mentally and physically, seeking relief from the ailments they face. Nature has served as a guide, helping individuals navigate their struggles and find inner peace. Among the many elements of nature, gardens stand out as spaces that nurture the human spirit and promote a sense of tranquility. The use of gardening activities as vocational treatments for people with illnesses and disabilities is gaining lot of popularity. Gardening can be an enjoyable medium way to promote

physical, social and emotional health. Gardening can also offer education and training opportunities, not only in horticulture skills but life skills, literacy and numeracy. Therapeutic Gardening (also known as 'Social Gardening' or Wellness Garden) is the use of various garden space and/or activities to help people enhance their physical, physiological and social well-being. According to The American Horticultural Therapy Association (AHTA), a therapeutic garden is defined as "being therapeutic in nature when it has been designed to meet the needs of an individual or group who strive to improve their well-being through actively engaging themselves in activities ranging from planting, growing and maintaining plants". It is a plant-dominated environment purposefully designed to facilitate interaction with the healing elements of nature. Depending on the garden's design and the users' needs, these interactions can be either passive or active.

## Types of Therapeutic Gardens

- **Alzheimer's Gardens** also known as sensory or dementia-friendly gardens, are specially designed outdoor spaces that provide therapeutic benefits for individuals living with Alzheimer's disease and other forms of dementia. These gardens engage the senses—sight, smell, touch, hearing, and taste—to evoke positive emotions, stimulate memories, and enhance overall well-being. Eg: Therapeutic Gardens of the Mother Teresa of Calcutta Centre
- **Healing Gardens** Available green spaces in hospitals and other healthcare facilities that specifically aim to improve health outcomes.
- **Rehabilitation Gardens** These gardens leverage the restorative properties of nature to aid in the recovery and rehabilitation process.
- **Restorative Gardens** also known as healing gardens, aims to promote physical, mental, and emotional well-being by providing a tranquil environment for relaxation and reflection. These

gardens are commonly found in healthcare facilities, community parks, and private residences, offering visitors a sanctuary to alleviate stress and rejuvenate.

- **Senior Community Gardens** are shared spaces designed to provide older adults with opportunities to engage in gardening activities, fostering physical health, mental well-being, and social connections.
- **Cancer Gardens** is a restorative environment, often located near oncology centers or within hospital campuses. Eg. Healing Garden at Dana-Farber Cancer Institute in Boston
- **Enabling Gardens** is a type of therapeutic garden that removes barriers and enables everyone, regardless of physical ability—to garden safely, independently, and with dignity. These spaces promote wellness, skill development, and social interaction.
- **Meditation Gardens** is a tranquil environment intended calmness, presence, and stillness. to support quiet contemplation, breathing exercises, prayer, or meditation practices. Every element is carefully chosen to encourage.

### Points to be considered while designing a Therapeutic Garden

When designing therapeutic gardens, it's important to consider not only the age and medical conditions of the target patient group but also the needs of other users who will benefit from the space, such as caregivers, staff, and patients' family members.

- Simplicity in design is essential to ensure that the spaces within the therapeutic garden are easy to understand. Clearly defined areas and easily recognizable pathways should foster a sense of peace and security.
- External stimuli that may cause noise pollution, should be kept to a minimum.
- Transitions between different functional areas should be smooth and easily navigable.
- Garden boundaries should be defined with plants to enhance safety and create a secure environment.
- A balanced combination of symmetrical and asymmetrical elements should be incorporated.

- Both planting and structural materials should be scaled appropriately for human interaction.
- To ensure year-round visual appeal, plants should be selected with seasonal variety in mind. Additionally, warm-colored, fragrant species with diverse textures and forms should be included.
- The garden should feature not only low-maintenance plants but also resilient species that can withstand varying conditions.
- Native plant species should be prioritized to promote the garden's long-term sustainability and reduce the risk of failure.
- Raised planting beds are essential for providing accessible gardening opportunities for wheelchair users.
- Plants selected for the garden should be non-poisonous.

### Examples of Therapeutic Garden across the world and in India

1. **Joel Schnaper Memorial Garden or Garden of Hope:** Established in 1995 and re-established in 2004. It is a restorative garden built on the idea that "well-designed and maintained gardens can alleviate stress and promote well-being for long-term healthcare patients." Designed by Dirtworks Landscape Architecture in New York, the garden offers everyone the chance to engage with nature in a way that suits their individual needs, pace, and abilities.
2. **Elizabeth and Nona Evans Restorative Garden:** designed by Dirtworks Landscape Architecture, PC, New York, NY. This restorative garden follows a "best practices" approach to therapeutic gardens, blending design principles with advancements in medical technology learned in a hospital environment and applied to a public space. The garden features three distinct areas, one for peaceful reflection, one for individual exploration and group learning, and one dedicated to horticultural therapy.
3. **The Warrior and Family Center Support Center Healing Garden:** designed by Quatrefoil Inc. of Portland and located at Brooke Army Medical Center in San Antonio, Texas, serves as a sanctuary for soldiers and their families during their physical and emotional recovery. This

thoughtfully designed garden aims to foster an empathetic and supportive atmosphere as they transition back into civilian life. It offers fitness trails and exercise stations for physical activity, as well as peaceful natural spaces where individuals can relax, reflect, and connect with loved ones.

4. **The Crown Sky Garden is located in Chicago, Illinois** spans 5,000 square feet and offers stunning views of the city. Featuring natural bamboo plantings, serene seating areas, and playful zones for children, the garden is designed to appeal to visitors of all ages. With its vibrant walls and use of natural materials, the space creates a welcoming and comforting environment, particularly for patients seeking rest, relaxation, or recreation.
5. **The Olson Family Garden at St. Louis Children's Hospital** is situated on the 7<sup>th</sup> floor of the facility in St. Louis, Missouri, offering a scenic view of Forest Park, the city's largest green space. This rooftop garden is an intensive green roof, featuring three feet of soil to support a diverse array of 7,000 plants, including flowers and trees.
6. **The Therapeutic Dementia Garden** in White Plains, New York, is specially designed for individuals with dementia and stands out due to its location on a fifth-floor balcony and its elongated layout, an uncommon feature, as most dementia gardens are typically square or circular to support simple walking paths. Designed to alleviate symptoms without medication, the garden uses thoughtful layout and color to provide a therapeutic environment.
7. **Therapeutic Garden Panchatatva in Hyderabad Indira Park established in 2020.**

The Panchatatva Garden, spanning one acre, is a thoughtfully designed space based on the five elements of nature—earth, water, fire, air, and ether (Panchabhutas). It features a unique walkway inspired by these elements, incorporating wellness-focused components such as the Panchatatva, Acupressure Walk, an Infinity Walk aimed at managing diabetes, Criss-Cross Walking paths, a Navagraha Vanam, Raasi Vanam, a herbal garden, and soothing water cascades. The highlight of the garden is the Panchatatva Walk—a

circular track constructed with eight natural elements to provide a therapeutic walking experience. These elements include 20mm stone, 10mm stone, 6mm chips, river stones, rough sand, tree bark, black soil (tank silt), and water.



### Benefits of Therapeutic Garden

The therapeutic use of horticulture offers a range of benefits, including physical activity, relaxation, and enjoyment. It also supports skill development, creative expression, social interaction, a sense of accomplishment, intellectual and personal growth, sensory engagement, and a deeper spiritual connection with life.

1. **Intellectual benefits:** Helps in attaining of new skills, improves vocabulary and communication skills, arouses sense of curiosity, Increases the observation powers, Vocational and prevocational training and stimulates the sensory perceptions.
2. **Social and Emotional Benefits:** Provides opportunity to interact with others, develops cooperation and team working skills, enables one to deal with success and failure, improves confidence and self-esteem of an individual, provides opportunities for the satisfaction of creative drives and activities that promote interest and enthusiasm for the future.



**3. Physical Benefits:** Helps in increase range of motion, improves fine motor skills, tone under used muscles, improve coordination and balance and increase muscular strength.

#### **Various ideas and activities undertaken in Therapeutic Garden**

- Preparation of indoor crafts using artificial flowers, needles, ribbons etc.
- Making of various outdoor crafts and items such as wind chimes, garden sculptures, bird attractors.
- Making of Collages of pictures from garden catalogs and magazines which includes wall hangings, trash boxes, supply bins etc.
- Making of floral jewelry from seeds, cones and dried flowers.
- Wall plaques such as seed mosaics, seed pod pictures, and dried flower plaques
- Stationery, book marks, sachet bags, display items for bulletin display boards and note cards using such techniques as leaf and flower prints, potato block prints and pressed flowers.
- Flower arranging, corsage making, bouquet making, terrariums, dish garden, bowl garden, hydroponic, aeroponic garden etc.,
- Engaging themselves in different types of outdoor gardening related activities.

#### **Plants suitable for Therapeutic Garden**

**Scented flowers:** Blue bottle (*Centaurea cyanus* L.), Stock (*Mathiola incana* L.) *Lavendula angustifolia*, *Rosa damascene*, *Gardenia*, *Agave amica* M., *Lilies spp.*

**Scented Climbers:** Star Jasmine, Rangoon creeper, Bower vine, Potato vine, Madhavilata, Honey suckle.

**Scented Shrubs:** *Abelia grandiflora*, *Gardenia jasminoides*, *Cestrum diurnum*, *Murraya exotica*, *Jasminum sambac*, *Cestrum nocturnum*, *Tecoma jasminoides*

**Flowering and Shady trees:** Ornamental peaches, Ornamental plums, Ornamental cherries, *Cassia fistula*, *Cassia nodosa*, *Delonix regia*, *Azadirachta indica*, *Moringa olerifera*, *Pongamia pinnata*

**Anti-stress herbs:** *Lavandula angustifolia*, *Ocimum sanctum*, Passion flower (*Passiflora sp.*), *Rosemarinus officinalis*, Balm mint (*Melissa officinalis*), Chamomile (*Matricaria recutita*), *Piper methysticum*,

**Edible herbs:** Alpine strawberry (*Fragaria vesca*), Basil, Cilantro, Thyme, Pineapple, Sage, Citrus, and Vegetables like tomatoes, peppers, carrots, and leafy greens.

#### **Conclusion**

Today, plants play a significant role in both the aesthetic and functional aspects of plant design, their diverse leaf shapes, colors, textures, and a wide variety of flower forms and hues. A garden in close harmony with nature, surrounded by trees, flowers, and greenery should provide well-designed walking paths, spaces for various forms of exercise, and opportunities for relaxation. Therefore, given the numerous benefits they offer, it is essential to promote the use of therapeutic gardens. Additionally, these gardens should be designed in accordance with general design principles to ensure the desired outcomes are effectively achieved.

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