

INTERIOR LANDSCAPE

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DECLARATION

I Sanskriti Srivastava here by solemnly declare that the dissertation work undertaken by me, tiled "Interior Landscape" is my original work and whatever information I have imported in the form of photographs, text, data, drawings, etc., from different sources, has been acknowledge in my report.

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Originality of information and opinion expressed in this dissertation are of the Author and do not necessarily reflect those of the guide or the Coordinator or the Institute.

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ABSTRACT

This project proposes was to identify how Interior Landscape is becoming increasingly important in today's world. The aim of study is about how interior landscape has evolved around the world and how it is becoming increasingly significant in interior spaces. The objective of interior landscape is to study Interior landscape and its elements and feature, relationship between interior landscape and well-being of people and society and the scope and scale of interior landscape in contemporary times. This research shows that how interior landscape plays an important role on human mind as well as on its body and how exterior landscape come into interior spaces.

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CHAPTER 1

1.1 Need for study:

Today, interior landscape has become increasingly important part of interior design.

In recent years, urban development has resulted in lesser outdoor landscapes, fewer gardens, and a reduced number of trees in almost every major city of India.

Interior landscape provides broader context within human life, it contributes to the overall aesthetics of a building.

Such Interior landscaping works to create natural and pleasant space using greenery, color and light in manmade environment.

1.2 Aim

To study how interior landscape has evolved around the world and how it is becoming increasingly significant in interior spaces.

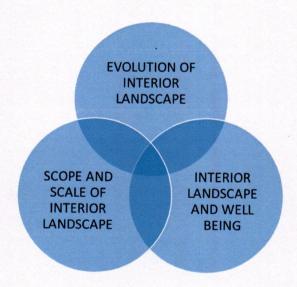


Fig 1: Evolution, Scope and Scale and Well-Being of Interior Landscape

1.3 Objective- To study and analyze:

1. Interior landscape and it's elements and features

- 2. Relationship between interior landscape and well-being.
- 3. The scope and scale of interior landscape in contemporary times.

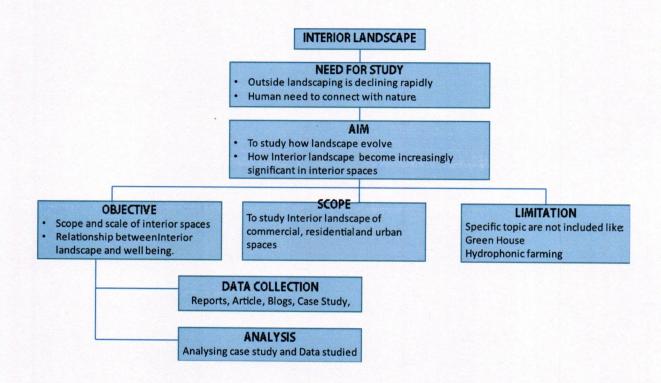
1.4 Scope-

- The research involves studying interior landscape of residential, commercial, office and urban spaces also the study will include the spaces like courtyards, parking spaces and indoor garden.
- 2. The research includes studying various factors that led to increase in scope and scale of interior landscape.

1.5 Limitations-

Specific topic like: Green House, Hydroponic farming etc. are not included in the dissertation.

1.6 METHODOLOGY



CHAPTER 2

INTERIOR LANDSCAPE: INTRODUCTION

Interior landscaping provides greenery and biophilic elements inside the buildings. It is about keeping interior of the place green so that one can enjoy nature both in indoor and outdoor. Important part of interior landscape is adding flowers, living plants or other natural element or décor object to enhance the beauty of indoor space.

Interior landscapes can vary in scale from an individual pot plant, to representations of entire plant communities like large glasshouses or atria. Keeping plants inside brings many challenges to plants like: -

(Inappropriate care, temperature, humidity, irrigation, sunlight, environment, nutrition), but potentially it brings many benefits to the humans like: -

(Higher humidity, reduced pollutants, psychological benefits, enhanced mood and improved aesthetic). (Pruyn. A.,2008)

Upcoming chapters will review the role, history, benefits, and types of interior plants and outlines their contribution to human society.

Only recently, people begun to understand that exposure to plants in their everyday activities, which may provide number of additional benefits from environmental improvements to positive impacts on health and well-being.

Landscaping is of two types depending on the zones where it has been applied-

- Exterior landscaping
- Interior Landscaping

Interior Landscaping refers to landscaping of enclosed interior spaces with various landscape elements to enhance the interior space.

Interior landscaping is frequently seen and has importance in improving the quality of mood, increase person's productivity, boost people's morale and make person's life efficient.

Technology is progressing everyday with its advantages and disadvantages which effected human's life and its environments.

Thus, to reduce those disadvantages such as stresses and toxic gases etc, which are created by industries, people provide interior landscape within buildings to bring the beautiful natural landscape inside and to increase work efficiency and to strengthen the quality of work. (Kendle. AD.2000)



Fig 2: Garden Installation by Nathan Burkett

CHAPTER 3 EVOLUTION OF INTERIOR LANDSCAPE

3.1 INTRODUCTION

From as early as 1,000 B.C., the Chinese grew plants in the home as a symbol of wealth. Additionally, they believed it gave novice gardeners an opportunity to enhance their gardening skills all year round, isolating the plants from harsh outdoor elements



Fig 3: Hanging Gardens

One of the Seven Ancient Wonders of the World, the Hanging Gardens of Babylon were cultivated by King Nebuchadnezzar II around 610 B.C. for his Queen Amytis as a botanical haven. The fragrant flowers, and palm, cedar and date trees were thought to hang down from the ceilings of the gardens. (Pruyn. A., 2008)

"Columbus sailed the ocean blue in 1492" with tropical plants in town. Ever since Columbus landed in the Bahamas, tropical plants and trees have been transported across the oceans. This allowed these plants are ideal in warm, humid conditions, making them perfect houseplants. Anon (2003)

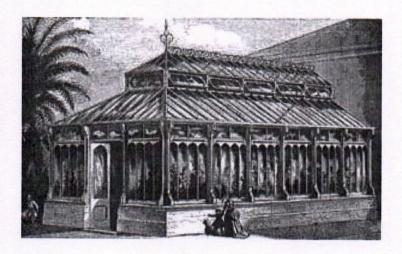


Fig 4: Glasshouse

Houseplants didn't gain much attention until the 17th century when Sir Hugh Platt, an English agricultural authority, wrote about cultivating plants inside his tome "The Garden of Eden" (1652). After that, the first glasshouses, called greenhouses today, began to take shape with the purpose of housing exotic plants.

Plants were not always considered a positive addition to the interior of the home during this era; in fact, it was believed that interior plants had the potential to suffocate one while sleeping due to the carbon dioxide emissions from the plants at night. This myth was quickly vanished when scientists discovered that the carbon dioxide emissions from plants in the bedroom were so minute, there was little risk. (Hashimoto. Y., 1995)



Fig 5: Victorian era

By the Victorian era, from 1837-190, houseplants were becoming more popular. Poorly lit houses and high levels of pollution caused by coal fires and gas lanterns made harsh conditions for some of the plants.

As time passes, architecture and technology gave way for more houseplant options. Homes were built with higher ceilings, more floors, larger windows and central heating, creating a more liveable environment for squiggly ferns and blue and blue-purple grasses – which were quite popular in England during this time. (Hashimoto. Y., 1995)

3.2 HISTORY

The domestication of wild plants for food crops about 10,000 years ago was a major factor in the development of human civilization. However, art and archaeological evidence from early civilizations in Egypt, China, Iran, Greece, and Rome reveal that plants were also selected and cultivated for ornamental purposes. Foliage and fruit plants in containers are kept in the inner courtyards and rooftop gardens of homes, and flowers were cultivated in hothouses for bouquets and garlands.

The given picture shows an example of a fresco tomb painting of the courtyard garden of a wealthy Egyptian homeowner.



Fig 6: Tomb painting of an ancient Egyptian garden

From the 15th to the late 19th century, European world explorers collected many plants for ornamental interest and enjoyment by the wealthy. Exotic plants from the tropics that were cultivated indoors in northern regions became the forerunners of modern-day foliage, flower, fern, climber, and succulent house plants. By the mid-19th century, indoor gardening was a popular hobby of the wealthy and the emerging middle class.



Fig 7: Exotic plants used in gardens

The impact of the Industrial Revolution on building lighting and heating increased the number of plants that could be grown indoors. Developments in building construction methods and heating and ventilation systems in the early to mid-20th century expanded the use of plants to beautify the indoor environments of offices, hospitals, public spaces, and private homes. (Perry. R., 1997)



Fig 8: Plants used in malls

During the energy crisis in the late 20th century, the construction of air tight buildings and use of synthetic materials were intended to reduce energy costs. However, toxic air pollutants such as trichloroethylene, benzene, and formaldehyde given off from paint, plywood, insulation, plastic, carpet and fabrics became concentrated in the air tight spaces and made inhabitants feel sick. The

NASA Clean Air study demonstrated that indoor plants purified air by removing and trapping air pollutants in leaves, roots, and soil.

3.3 INDIAN HISTORY

Gardening has been popular in India since ancient times, India is the place of origin of many plants like orchids (Cymbidium, Dendrobium etc.), Asoka tree, Cassia fistula, jasmine, Barleria, Clitoria etc. The Aryans, the Ramayana and the Mahabharat (compiled during 500 BC) these gardens, trees and flowers are being mentioned.

3.3.1 Gardening during Buddhist period

During the Buddhist period, gardens were laid out around the monasteries and stupas and there were beautiful gardens in Nalanda and Takshashila. The custom to use flowers for worship was borrowed by the Chinese and Japanese from India, also some trees were considered to be scary in India.



Fig 9: Bodhi tree Bodhgaya Bihar

Siddhartha Gautama, the spiritual teacher who became known as the Buddha, is said to have attained enlightenment or Bodhi circa 500 BCE under it.

3.3.2 Emperor Ashoka

The great Emperor Ashoka (264-227 BC). He encouraged the planting of avenue trees. Hinduism always nurtured plants by giving religious sanctity to plants like Tulsi, Hibiscus, Lotus etc. During the rule of Hindu kings (the regime of Gupta) which is considered as 'Golden Age', many Indian trees and plants were in use like Burflower-tree, Lotus, Ashoka tree, etc. During this period, gardens were mostly attached to the residence or temple. Flowers were mainly used for worship or as ornaments in various forms by ladies.



Fig 10: Bur flower-tree

3.3.3 Gardening during Mughal era

Early Islamic gardens in India were inspired by Persians and very much resembled the gardens of Iran. The greatest Islamic gardens in India were those planted by the Mughal emperors. Mughals were the true lovers of plants and gardens. The square or rectangular flower bed are special features of Mughal gardens. Another important contribution by Mughal emperors was the introduction of exotic plants like cypress rose, carnation, narcissus, daffodil, Lilies, tulips etc. They introduced many new ornaments and plants in India. Moreover, several historic gardens were developed during Mughal period. Babar (1526-1530AD), Akbar (1556-1605 AD), Jahangir (1605-1627 AD), Shah Jahan (1627-1658 AD) were the Mughal rulers who made significant contribution in garden development in India and laid the foundation of 'Mughal style gardening'

and its popularization. Remarkable gardens like 'Nishat gardens', 'Shalimar gardens' etc. were built during Mughal period. (Van der Voordt, T., 2010)



Fig 11: Shalimar Bagh was built by Mughal Emperor Jahangir for his wife Nur Jahan

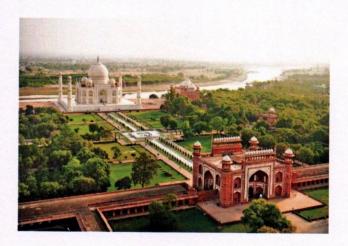


Fig 12: Taj Mahal Garden and Red Fort

3.3.4 Gardening during British era

British rule in India (1600-1947) had a great and long-lasting impact on Indian gardens. A partial transformation from orthodox Hindu and Mughal style to non- conventional and informal designing gradually came in. The influence of English style gardening was in peak during 18th and 19th centuries. Indian gardens had fragrant trees and shrubs, but these were not so colourful.

On the other hand, flowering annuals like aster, carnation, Nasturtium, Pansy etc introduced by the English were more attractive. Symmetrical gardening style was replaced by serpentine paths, flat lawns, colourful herbs in combination with trees, shrubs and climbers, which completely altered the old gardening style. The concept of systematic botanical planting came into practice by the establishment of botanic gardens by the Britishers. They also made ornamental and pleasure gardens in the form of parks and gardens around forts and monuments. After independence, gardening style had not been subjected to any major change. Both formal and informal styles of gardening have been followed depending upon suitability of the place and purposes. Buddha Jayanthi Park, New Delhi (established in 1956) in memory of 2500th birth anniversary of Gautam Buddha is an example of informal garden laid out under the influence of English garden. Another example is Rose Garden in Chandigarh (est. in 1966). (Hus. S., 2000)



Fig 13: Rose Garden (Chandigarh)

Rapid urbanization and industrialization in India during the last quarter of 20th century and sudden rush of land requirement for housing and industries drastically reduced the scope of development of large gardens. There was change in the gardening style and purposes also. Interior Landscaping like mall space gardening, container gardening, roof gardening, vertical gardening are the requirements of present-day garden designing.

CHAPTER 4

INGREDIENTS OF INTERIOR LANDSCAPING

4.1 AESTHETICS OF INTERIOR LANDSCAPING

Indoor landscaping is planning and installing plants, water features, rocks, and other natural elements to create an attractive indoor atmosphere. It blending the hardscapes (concrete, bricks, and stone) with softscapes (flowers, shrubs, succulents, and trees) to bring nature inside the building

There are a few basic rules to follow while undertaking interior landscape of a space which includes: -

4.1.1 PROPORTION

The area of the room and the height of the ceiling determine the size of the indoor plants. Overly large plants can overwhelm a space.



Fig 14: Large plants can overwhelm the space.

4.1.2 TEXTURE

The right mix of texture provides either blending in or a contrast. Different leaves texture creates different looks.



Fig 15: Different shape of plant that blend in the environment

4.1.3 COLOUR

Warm and cool color combinations give different visual impacts in the landscape. The color of the leaves and flowers can pull a landscape together.



Fig 16: Colorful plants that pull the overall landscape together

4.1.4 FOCUS POINT

Plants are used to create focal points or symmetry in a room. The plant can draw attention to an object or bring balance to space.



Fig 17: Create a focus in the room

4.2 ELEMENTS

4.2.1 GREEN GARDEN (SOFTSCAPING)

Green garden or soft scaping means green plantation displayed indoor in a small, contained space within a well-lit area. Soft scaping includes flowers, plants, shrubs, trees, and flower bed planted in moveable containers. This style is suitable for courtyards and room dividers, since green gardens require proper management, grading, planting, trimming and spraying they are high maintenance.



Fig 18: SOFTSCAPING

4.2.2 STONE LANDSCAPING (STONESCAPING)

A landscape with rocks or stone gardens which combines stone with plants that can structure space and form an attractive natural environment. This type of indoor landscaping is ideal for

entrance lobbies, courtyards, meditation zones, or any place where it can connect with the external environment. Because of its anti-weather properties, it is a low-maintenance alternative to green gardens.



Fig 19: STONESCAPING

4.2.3 WATER LANDSCAPING (WATERSCAPING)

Water landscaping produces a feeling of calmness. It includes fountains, ponds, streams, or miniature waterfalls constructed in lobbies, restaurants, meditation centers, and passages.



Fig 20: WATERSCAPING

4.2.4 LIVING GREEN WALLS (VERTICAL GARDENS)

Living green walls are also called vertical gardens, green walls, living walls, or eco walls. They are green plants installed and grown vertically by using hydroponics or drip irrigation. They have

become an integral part of modern indoor landscaping, contributing to the building's LEED (Leadership in Environmental Energy and Design) standards.



Fig 21: VERTICAL GARDENS

4.2.5 FLOATING INDOOR LANDSCAPING

Floating indoor landscaping has water and aesthetic of flora and fauna. Water plants like lilies and lotus are a visual delight, these floating gardens also serve as the habitat for fish, frogs, and turtles.



Fig 22: FLOATING INDOOR LANDSCAPING

In India, there are certain plants considered holy. Holyscape are designed by installing a statue of the God/Goddess/scriptures and surrounding it with plants like basil (Tulsi), star jasmine (Kunda), Indian magnolia (Champa), and lotus.

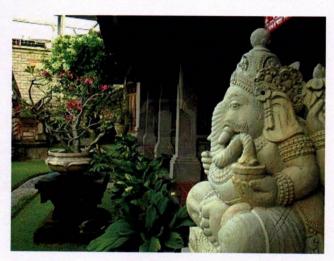


Fig 23: Religious statue used in landscape

4.2.6 MICRO-FARMING

Micro farming is small-scale, high-yielding, environmentally-friendly farming that is typically done by hand in urban or suburban regions. Modern people use a blend of high-tech innovations and traditional practices to preserve the natural fertility of the land.

People worship TULSI plant, then they moved toward simple elegant balconies and later some people started doing micro farming within their own houses.

TULSI was not only placed for worshiping but has medicinal and other values which make it very significant in Indian context



Fig 24: TULSI PLANT

Balcony are relaxing space for people with just a chair and some greenery like vertical garden and grass carpet



Fig 25: MODERN BALCONY

It is almost similar to any other balcony, except the plants are harvested for further use. It is perfect for indoor plants like tomatoes, spinach, herbs as well as some flowering plants.



Fig 26: MICRO-FARMING

4.3 INTERIOR LANDSCAPING IN VARIETY OF BUILDING

4.3.1 Offices

Plants are being used to create unique and aesthetics in all types of office space. Creating a welcoming environment with office plants brings on positive feelings. Brighten the reception area and dark corners with fresh smells and colours from live greenery and foliage. Indoor plants have shown to increase problem-solving skills, job satisfaction and productivity



Fig 27: WIPRO OFFICE

4.3.2 Atrium

Plants put people in better moods. Live greenery in atrium creates an inviting environment which is nicer to work and wait in. Living walls are a great way to brighten up the areas. Greenery has a way of making professional space more connected with nature.



Fig 28: ATRIUM

4.3.3 Restaurants

Using plants in a restaurant gives character and a sense of connection with nature. Plants are also natural air purifiers, which gives customers a sense of relaxing mind with many plants around them because it provides cleaner air. Plants also remove toxins and take in carbon dioxide from the atmosphere to produce oxygen, improving the air quality.



Fig 29: RESTAURANT

4.3.4 Hospitals

Plants decrease stress - gardens or living wall creates a calming environment, where patients can benefit from lower blood pressure and stress levels. Plants have even been shown to increase productivity for those who work in the hospital.



Fig 30: HOSPITAL ROOMS

CHAPTER 5

SCOPE AND SCALE OF INTERIOR LANDSCAPE IN CONTEMPORARY TIMES

5.1 BENEFITS

5.1.1 Human Health and Well-Being

Interior plant decoration provides a pleasant environment where people can work and relax, but there are also various health benefits that accompany the aesthetically pleasing arrangements. Many people spend the majority of their days indoors for work, but this increases the chances of feeling oppressed and getting Sick Building Syndrome. Adding indoor plants to offices, as well as the home, decrease the feelings of being trapped.

Some benefits which plants provide when kept in a Restaurant, home, offices etc: -

5.1.2 Aesthetically pleasing

Plants are pretty and most people add plants to their decor for the visual appeal. Small and large trees, succulents, ferns and various other plants can boost the aesthetics of a home. These decorative plants add colour, ambiance, personality and provide life to a bland space. (Singh.P., 2013)

5.1.3 Reduced stress

Being close to greenery makes people feel more at ease, and people experience less stress when there are plants around them. Statistics show that workers are more productive in offices with interior landscaping and in hospital patients benefit more from rooms full of plants and flowers. There is also evidence that shows students performing better in green environments. The green colour of plants relaxes the mind and puts the body at ease. Many offices have reported a decrease in employees taking sick days and an increase in productivity when there is interior landscaping. Minor health issues like headaches and fatigue are also reduced in the presence of green plants.

5.1.4 Improved air quality

One of the most well-known benefits of interior plant is that it improves air quality. Plants are known for absorbing carbon dioxide and releasing it back into the environment as oxygen, which is a huge benefit for people. Some plants also absorb harmful chemicals and toxins, which helps clean the air. The presence of indoor plants creates a feeling of clean refreshment. The Sansevieria plant, or Snake plant, is also known for absorbing carbon dioxide and turning into oxygen even at night, which makes it a beneficial plant for bedrooms. Indoor plants can also help increase humidity, reduce dust levels, reduce certain pollutants and keep air temperatures low. Das, P. 1999

5.1.5 Increased well-being

Owning and taking care of plants helps improve emotional health. It helps people feel needed and they won't feel alone. Adding a few indoor plants to a space will help in releasing tension, reduce stress, feel calm and feel happy.

5.1.6 Quieter background noise

Research shows that plants can help reduce noise. Plants and their leaves absorb noise, which makes the environment more comfortable for residents and workers. Adding plants to a space is an easy way to help filter and absorb excess noises in order to provide a calmer and more comfortable environment to others. Das, P. 1999

5.1.7 RECOVERY OF HOSPITAL PATIENTS

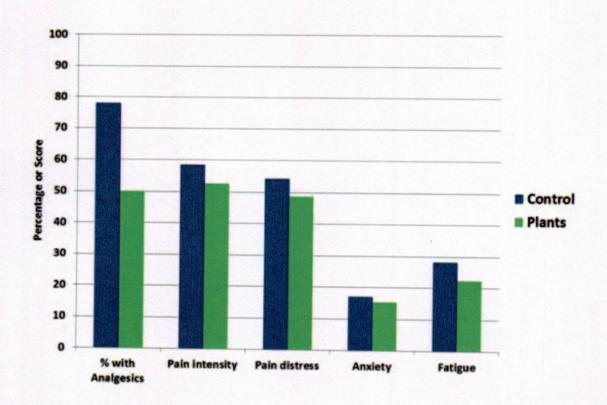


Fig 31: Percentage of recovery of people in hospital

Hospital patient recovery when plants present (plants) or absent (control) from hospital rooms during recuperation. Data represents percentage of patients taking pain killers (analgesics) 3 days after surgery and scored for self-reported feelings of pain (intensity and distress), anxiety and fatigue following surgery. (Singh.P., 2015)

5.2 Scale of Interior landscaping

Interior Landscape goes way back before one can even imagine but only in recent times, major importance on interior landscape took place.

Indians used to worship many plants but main one was named "TULSI" because they believe it was the plant of Lord Vishnu. (Singh.P., 2018)

They used to have picture of plants on their walls of bedroom because they use to believe that plants were not a positive addition to the interior in fact, it was believed that interior plants had the potential to suffocate one while sleeping due to the carbon dioxide emissions from the plants at night. (Singh.P., 2018)

In the Mughal Empire, the gardens were constructed. Babur, the first Mughal conqueror-king, had built gardens in Lahore and Dholpur. (Woodrow. MG, 1999).

At first Interior landscape was done only for the purpose of growing fruits, vegetable and colorful shrubs on their terraces and courtyard, but later it was more for aesthetic purpose

With the passage of time when urbanization happened and cities developed, there are no place for plants to grow which caused Global Warming and massive destruction of flora and fauna. Later people began to understand that apart from aesthetic plants should also be saved and that's how plants came in interior spaces and later it evolved from houses to offices, restaurants and in institutional building etc. (Singh.P., 2020)

With the increasing demand of interior landscape, people use plants in pots, vertical gardens, on ceiling and as inside topiary. (RS and Das, P. 1999.) The scale of interior landscaping has increased dramatically. An example of large-scale interior landscape project is "The Gardens by the Bay" Singapore. Gardens by the Bay is a showpiece of garden artistry that presents the plant kingdom, entertaining while educating visitors with plants seen in different part of the world.



People used to put picture of plants on their bedroom walls because they have the fear that plants release harmful gasses



Indians used to worship different plants but main plant was "TULSI" because they believe it was the plant of Lord Vishnu



Mughals mainly brought the concept of gardens



People started growing fruits, vegetable and colourful shrubs on their terraces and courtyard.



Interior landscape emerges and now landscape is used inside hotels, restaurants, offices etc.



Indoor topiary is becoming popular and it is very fascinating to see differently shaped animals with different shurbs



The scale of landscape emerges and went from potted plants to vertical gardens



And from vertical gardens/ walls to grass ceiling



"The Gardens by the Bay" this presents the plant kingdom, entertaining while educating people with different type of plants seen in the world.

CHAPTER 6 CASE STUDY

6.1 PRIMARY DATA COLLECTION

CAFES

6.1.1 GARDEN LOVER

Site name- Garden Lovers Location-Sector 62, Gurugram, Haryana 122102

This place is nursery cum café where people can sit and have a cup of coffee while enjoying the nature

The purpose of the place was to have a real connect with nature because of increasing urbanization and emerging of new industries the outdoor landscape is torn down. So people can enjoy their coffee with fragrance of flowers, soil, and coffee powder.

The place has all kinds of plants from artificial to tall trees with the color theme of white and green.

It was completely organized from small sets of plants to bunch of large trees.



Fig 32: INDOOR SEATING



Fig 33: BOOKING COUNTER



Fig 34: 2 ENTRANCE



Fig 35: OPEN SEATING



Fig 36: NURSERY



Fig 37: RELIGIOUS STATUES FOR DISPLAY

6.1.2 Guftagu café

Site name- Guftagu café

Location- 34 Main Road, opposite Pillar No 33, DLF Phase 2, Gurugram, Haryana 122002

Guftagu cafe is a semi open cafe with ecofriendly and green environment.

The flooring differs according to the spaces, the wooden flooring has the table chair seating with the space provided for live performance.

The concrete flooring has the wooden deck seating which surround with the original tree concept and the overall cafe has grass ceiling with hanging lamps.

Fairy light are surrounded around the tree.

Other than original plants, there are some different types of potted plants on side walkway Strip lights are used on the side of the walls

Arch shaped windows are being used with crawling plants also the pillars are covered with artificial grass carpet.



Fig 38: PILLARS COVERED WITH GRASS



Devil's ivy



Fig 39: ORIGINAL PLANT WITH FAIRY LIGHT



Ashoka tree

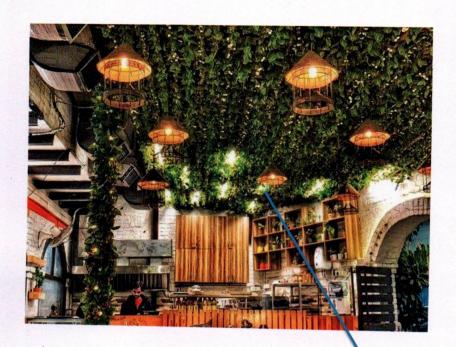




Fig 40: GRASS CEILING WITH HANGING LAMPS

Devil's ivy

COMPARISION BETWEEN GARDEN LOVER CAFÉ AND GUFTAGU CAFE

S.NO	TOPICS	GARDEN LOVER CAFE	GUFTAGU CAFE
1	PURPOSE	The purpose of place is to have a real connection with nature and create an ecofriendly environment for customers	The purpose of the place is to conserve the trees which are already there and provide the seating around the trees.
2	THEME	The theme of the place was the combination of white and green.	The theme of the place was green land. The café was surrounded with trees and small plants even on the ceiling.
3	TYPE OF LANDSCAPING	Nature plants used in the courtyard and open space, artificial planters where in the enclosed spaces	There were no artificial plants all plants and trees were original. The ceiling had the crawling plants on

			wrapped around the wooden duct.
4	SCALE	At the end this café was all about different types of potted plants.	Café was about showing greenery in the environment from keeping potted plants in the corner to used green walls and grass ceiling.
5	BENEFITS	Plants that are kept in the enclosed space helps in cleaning the air quality and also due to huge variety of plants present there, some of the plants even absorb background noise.	It purifies the air and create an ecofriendly environment

6.1.3 India Habitat Centre

Site name- India Habitat Center

Location-Lodhi Road Near Airforce Bal Bharati School, Lodhi Rd, Lodhi Estate, New Delhi, Delhi 110003

The place was filled with plants and the purpose was to conserve as much as possible of what was already on site. Landscape Architects of that place does not believe in adding something by ripping out plants and materials just to impose their own design on a garden. Instead, they were

willing to keep what is there and just amend it, they found the water feature in the garden which was extended into a far more effective large pond while keeping the original feature at the centre.



Fig 41: Keeping the water feature as the Highlight

The design is not only beautiful but also something that can last, and is not too difficult to maintain. The focus was to producing something that is easy to maintain, and the scope of interior landscape can grow.

It was ecologically more important to give a pleasurable interior landscape can be preserved. Preserving native plants is equally important as bringing some other plants to some totally different environment.



Fig 42: LANDSCAPE OF INNER COURTYARD



Fig 43: COURTYARD OF IHC



Fig 44: WALKWAY TO GO UPSTAIRS

Virginia Sweetspire Shrubs

6.2 SECONDARY DATA COLLECTION

6.2.1 RESIDENTIAL AREA

Site name- Residential area Location- DLF Phase 3, Sector 24, Gurugram, Haryana 122022

The courtyard of the house was covered with plants and artificial animals, which has the perfect mix of landscape and stone cape.

Every room was designed in such a way so the people could have the view of their courtyard regardless of the fact where they are seating.

Motive to design the interior landscape was to have a real connect with nature.

Also, the space has the touch of gothic era with warm tone of brick wall and statue of different animals with large heighted plants

There was a double heighted courtyard and the tree was as high as ceiling with the height between 4m-6m long

People of the house believed being around plants help their children grow happier and healthier because they don't have to go outside to have a connection with nature



Fig 45: PLANTS AND ARTIFICIAL ANIMALS IN COURTYARD



Fig 46: VIEW OF OUTDOOR SPACE WHILE SEATING IN A ROOM

Banana tree

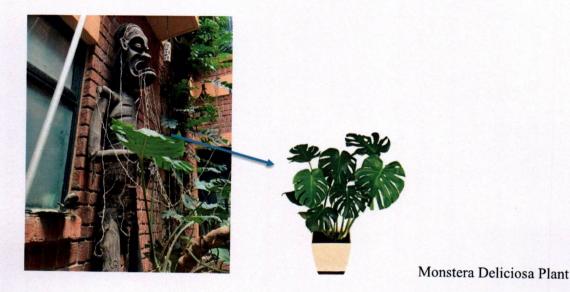


Fig 47: STATUE COVERED WITH FAIRY LIGHTS

6.2.2 GARDENS BY THE BAY IN SINGAPORE

Site name- GARDEN BY THE BAY IN SINGAPORE Location- 18 Marina Gardens Dr, Singapore 018953

It is a nature park spanning 101 hectares (250 acres) in the Central Region of Singapore. The park consists of three waterfront gardens: Bay South Garden (in Marina South), Bay East Garden (in Marina East) and Bay Central Garden (in Downtown Core and Kallang). The largest of the gardens is the Bay South Garden at 54 hectares (130 acres).

Gardens by the Bay was part of the nation's plans to transform its "Garden City" to a "City in a Garden", with the aim of raising the quality of life by enhancing greenery and flora in the city. Gardens by the Bay was intended to be Singapore's premier urban outdoor recreation space and a national icon.

It is designed as a series of large tropical leaf-shaped gardens, each with its own specific landscaping design, character and theme.

The overall concept of its master plan by Grant Associates draws inspiration from an orchid as it is representative of the tropics of Singapore, being the country's national flower. The construction of the glasshouses is special in two ways. First of all, such large glass-roof is designed without additional interior support (such as columns). Secondly, because the constructions aim strongly at minimizing the environmental footprint. Rainwater is collected from the surface and circulated in the cooling system which is connected to the Supertrees. The Supertrees are used both to vent hot air and to cool circulated water.





Topiary

Fig 48: THEME GARDEN

Flower Dome

The Flower Dome is the largest greenhouse in the world as listed in the 2015 Guinness Book of World Records at 1.2 hectares (3.0 acres) and replicates a cool-dry Mediterranean climate. It features a changing display, the flower field, and eight other gardens, namely The Baobabs, Succulent Garden, Australian Garden, South African Garden, South American Garden, Olive Grove, California Garden and the Mediterranean Garden. These eight gardens exhibit exotic flowers and plants from the Mediterranean and semi-arid regions from five different continents



Fig 49: FLOWER DOME

Cloud Forest

The Cloud Forest is higher but slightly smaller at 0.8 hectares (2.0 acres). It replicates the cool moist conditions found in tropical mountain regions between 1,000 metres (3,300 ft) and 3,000 metres (9,800 ft) above sea level. It features a 42-metre (138 ft) "Cloud Mountain", accessible by an elevator, and visitors will be able to descend the mountain via a circular path where a 35-metre (115 ft) waterfall provides visitors with refreshing cool air.

The design by Grant Associates was inspired by the Maiden Hair Fungus and consists of a number of levels, each with a different theme, including The Lost World, The Cavern, The Waterfall View, The Crystal Mountain, The Cloud Forest Gallery, The Cloud Forest Theatre and The Secret Garden.

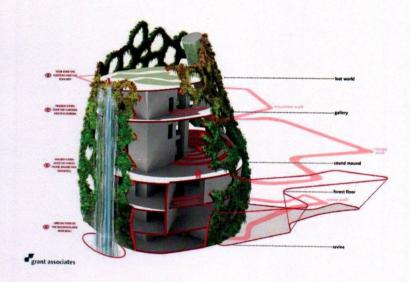


Fig 50: STRUCTURE OF CLOUD FOREST



Fig 51: CLOUD FOREST

Concept derived from algae

Supertree

Supertrees are the 18 tree-like structures that dominate the Gardens' landscape with heights that range between 25 metres (82 ft) and 50 metres (160 ft). They were conceived and designed by Grant Associates, with the imaginative engineering of Atelier One and Atelier Ten. They are vertical gardens that perform a multitude of functions, which include planting, shading and working as environmental engines for the gardens.

The Supertrees are home to enclaves of unique and exotic ferns, vines, orchids and also a vast collection of bromeliads such as *Tillandsia*, amongst other plants. They are fitted with environmental technologies that mimic the ecological function of trees: photovoltaic cells that harness solar energy which can be used for some of the functions of the Supertrees (such as lighting), similar to how trees photosynthesize, and collection of rainwater for use in irrigation and fountain displays, similar to how trees absorb rainwater for growth. The Supertrees also serve air intake and exhaust functions as part of the conservatories' cooling systems.

It comprises 3 levels, the ground floor, the Observatory Space and the Open-Air Rooftop Deck. Visitors would take the lift up to the Observatory Space and thereafter take a flight of stairs up to the Rooftop Deck. The Observatory Space is located one level below the rooftop deck and it consists of an indoor area with full-height glass windows, as well as a peripheral outdoor walkway. Here, visitors can also experience a message about the effects of climate change creatively conveyed through digital media. The Open-Air Rooftop Deck, which is an openair observation deck on the canopy of this Supertree, offers 360-degree unblocked views of the Gardens and the Marina Bay area.







Concept derived form Orchid flower

CHAPTER 7 ANALYSIS

Analysis of different spaces

Comparison between different area

S.no	Location	Interior landscape and it's elements and features	Relationship between interior landscape and well-being
1.	GARDEN LOVER	The place has colour contrast which was pulling the whole landscape together, also it has floating indoor landscaping with religious statues like	It improves the air quality because this place is also a nursery thus, there are all kinds of beneficial plants which helps in reducing the outdoor noises and stress.
2.	Guftagu café	Buddha and Ganesh. The place has a focal point which was drawing the attention towards ceiling also the place has living green wall design.	It is aesthetically pleasing and also reduces the stress level because people do their office work while having a cup of coffee and relaxing which gives them mental peace.
3.	India Habitat Centre	It has water landscaping in the courtyard with green garden which was planted in moveable containers. It also has some stone landscaping in the centre.	It's a place where people can sit and chat in the shed which gives them wellbeing and have a social connect with people and nature.
4.	RESIDENTIAL AREA	The area has different texture and shape of plants which perfectly blend in the environment and also have a proper proportion which does not overpower the space.	It is aesthetically pleasing but also it increases the productivity, concentration, puts someone in a good mood and reduces the stress level which is helpful for any age group but specially for growing children.

5.	GARDEN	BY	The place combines all the elements	Apart from being aesthetically pleasing it helps in
	THE BAY		and features of Interior landscaping all	purifying the air also plants here are being used
			plants were in proportion, the place has	for many medical purposes also it improves the
			different textured plants with colourful	productivity of people who are working there.
			shrubs and with some specific	
			functional focal points.	

CHAPTER 8 CONCLUSION

- Interior Landscaping was only seen for decorative and medicinal purpose, but now it has emerged into something important.
- Improving and conserving the environment is very necessary and thus, the concept of
 Interior landscaping and gardening is growing rapidly.
- Ornamental landscaping has expanded as a big industry which involves activities such as
 propagating and rearing ornamental plants, landscaping, pots and other accessories, etc.
 Interior Landscaping gives huge employment opportunities and simultaneously promoting
 different activities that would improve the environment.
- Due to urbanization and development of cities, plants are nowhere to be seen, there are no
 place for plants to grow which caused Global Warming and destruction of flora and fauna
 and to prevent and reduce these disadvantages landscape has come to interior spaces which
 is now evolved from houses to offices, restaurants and in institutional building etc.
- Plants is an important element in landscape design which help in reducing the pollution
 of the environment and minimizing some of the effects of heat, sound, wind, air etc.
- Now, evolution of Interior landscaping has spread worldwide and has reached towards
 India. First there was Mughals who brought exotic plants to India and now many
 Landscape architects are bringing the concept from different countries to India for
 example: -

Concept of supertree which was drawn from Gardens by The Bay has been incorporated into a placed name "Cyber Hub" in Gurgaon.



Fig 53: Stainless- streel artificial tree

It's a stainless-steel artificial tree in which crawling plants are used and through drip irrigation method plants are being watered.

CHAPTER 9

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