

Review Article

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Different Land Scaping Design in Bagh E Jinnah (Cantonment Board Nowshera)



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Abstract

A general field experiment about “different landscape design in bagh e Jinnah cantonment board Nowshera” was carried out about the landscaping and maintenance of parks and avenues etc. under cantonment board. The internship was done to identify lot of plants and main purpose of this project was to assess the different phases of landscaping and an effort was made to learn different aspects of its practical implementation with such a renounced organization. During this project we learnt about landscape plants (especially identification of plant species), Softscape and Hardscape. It was good research in gaining the practical knowledge and implementation of design and maintenance of the park as well as to know about the tremendous varieties of trees, shrubs, ground cover, cactus, seasonal flower, palm trees, climber and creeper. This project enabled us to identify different ornamental plants and properly manage to arrange them and design an eye catching landscape and practically implement these types of projects without presence of head instructor.

Keywords: Nowshera; Cantonment; Baghejanah; Softscape

Introduction

First of all we have to understand Landscape and Landscaping to have clear idea. Landscape is a piece of land having natural and build environment including both living and non-living things. e.g., plants, trees, birds, fountains, walls, electrification. It is the art and science of developing or transforming a piece of land in such a way that is gets aesthetic value and becomes more functional. Landscape comprises the visible features of an area of land, including the physical elements of landforms such as (ice-capped) mountains, hills, water bodies such as rivers, lakes, ponds and the sea, living elements of land cover including indigenous vegetation, human elements including different forms of land use, buildings and structures, and transitory elements such as lighting and weather conditions [1].

There are two types of landscaping, one is Softscape and another is Hardscape which are described. Softscape is that part of landscape which consists of living things or natural things and with which landscape architecture work, such as plant materials and soil itself. It is also known as Non-permanent part of landscape. Hardscape is the non-natural or dead portion of

landscaping. It is also known as Permanent part of landscaping e.g., walls, irrigation pipes, electrification, sculptures, and fountains etc. It is also known as Non-living or Permanent part of landscaping.

History of Landscape Architecture

The history of landscape is very much old and anyone can not specifically say about the history of landscaping. However, it is said that history of landscaping came into being in Bronze Age 4000-1000 BMA. “Landscape architecture” was first used by Gilbert Laing Meason in his book On the Landscape Architecture of the Great Painters of Italy (London, 1828). Olmsted and Vaux then in 1863 adopted ‘landscape architect’ as a professional title and used it to describe their work for the planning of urban park systems. Landscape architecture has since become a worldwide profession, submitted for recognition by the International Labor Organization and represented on a world-wide basis by the International Federation of Landscape Architects. Garrett Eckbo and Dan Kiley were prominent modernist landscape architects in the mid-20th century. Their work is represented by a shift

away from what might be termed the "Wild Garden" aesthetic of earlier landscape architects influenced by Romantic Naturalism, and toward a more spare and rectilinear aesthetic.

Importance of Landscaping

There are numerous benefits of landscaping. It transforms ugly and dull areas into beautiful and spectacular ones. It is possible to alter ordinary homes into spectacular ones and office buildings into warm, livable spaces through careful landscaping. Professional landscaping increases property value of homes. The American Society of Landscape Architects (ASLA) recommends that "you invest 10 % of your home's value in landscaping. This invest enhance your property appearance and can increase 20% of your home's value" Increases the value of your home. Makes your home more attractive to prospective purchaser reduces the time your property is on the market reduces heating and cooling costs reduction of storm water runoff reducing local flooding. Control temperature extremes, stay cooler in summer and warmer in winter erosion control reducing loss of soils in waterways.

Reduction in evaporation and soil degradation creates a healthier home by filtering pollutants and providing cleaner air. Keeps the family fit by fostering an active lifestyle. Creates a beautiful environment to decrease your stress levels provides privacy creates green buffer zones to increase the livability of our communities. Local noise and heat reduction attractive environment for entertaining and relaxing enhances livability of high density developments. A cantonment is a military or police quarters. The word cantonment is derived from the French word canton meaning corner or district. Cantonments in Pakistan are permanent military stations, which are administered by Cantonment Boards under the control of the Military Lands & Cantonments Department (ML&CD), Ministry of Defense and Government of Pakistan. Cantonments are established under and governed by the Cantonments Act 1924. The powers and functions of the Cantonment Board are synonymous to Municipal Committees in the cities.

The Cantonment Board is an organ of the local government and is free to formulate policies for local development within the frame work of the Cantonments Act and other Government Regulations. All Cantonments Board work under the administrative control of the Director General, Military Lands and Cantonments the Director General issues various directives on important policy matters from time to time and the Cantonment Boards comply with the same. The Cantonment Executive Officer is the principal executive at the local level. The Board normally decides and lays down policies and the Executive Officer executes these policies. He is the chief exponent of the Board's policies. He acts as an adviser and is a permanent Officer specially trained in local administration. He is sufficiently empowered to carry out the policies and decisions and ensure adherence to the various laws and bye-laws. Cantonment Board is a public benefit corporation responsible for providing municipal services in the

Nowshera. There are different departments which are assigned different tasks and they are performing their duties, functions and responsibilities for the management and beautification of the city.CBN is responsible for coordinating all endeavors for the development of the whole of region so that unity of purpose is ensured at all times.

Responsibilities and Services

Act as Regulatory Authority

- a) Building Code Standards.
- b) Environment Standards.
- c) Public Safety Standards.

Maintenance

- a) Local Roads Maintenance and Repair Work.
- b) Public Infrastructure Maintenance.
- c) Garbage Collection

Developer and Planner

Future planning

Objectives of Internship

- a) To understand the basic horticulture and landscape activities (Soft and Hardscape) which were done by cantonment board nowshera.
- b) To acquire knowledge about landscape plant species. i.e. trees, shrubs, creepers, hedge plants, edge plants, ground covers, climbers, seasonal lowers, its importance and proper utilization.
- c) To identify the problems faced in the field during implementation.
- d) To get over all practical experience of landscaping.

Review of Literature

The aim of this chapter is report the previous studies of different researchers regarding landscape planning in conservation of environment. As this is a bit new for Pakistan as well as for Khyber Pakhtunkhwa and very limited work is done on this important field. Anyhow, some references from abroad are viewed to understand the subject. Keeping in view the nature of problem, the findings of previous research are discussed in the following paragraphs [2]. Explained that Landscapes, their character and quality, help define the self-image of a region, its sense of place that differentiates it from other regions. It is the dynamic backdrop to people's lives. The Earth has a vast range of landscapes including the icy landscapes of polar regions, mountainous landscapes, vast arid desert landscapes, islands and coastal landscapes, densely forested or wooded landscapes including past boreal forests and tropical rainforests, and agricultural landscapes of temperate and tropical regions [3] designed a survey to determined public landscape.

Results indicated that 90% of the respondents felt that grasses have ornamental value and 96% felt that municipalities should utilize these plants material and public landscape [4]. Explained several landscape architects practicing in the 1980s and 1990s moved the discipline beyond its roots in High Modernism. These include Martha Schwartz, Peter Walker, and Michael Van Valkenburgh. Starting in the mid-1990s, a new disciplinary shift occurred toward what has been called Landscape Urbanism, a term that attempts to merge urban design, infrastructure design and landscape [5]. Described that Landscape may be further reviewed under the following specific categories: landscape art, cultural landscape, landscape ecology, landscape planning, landscape assessment and landscape design. The activity that modifies the visible features of an area of land is named Landscaping [6]. Green design and sustainable landscaping are not just buzz-words for environmentalism but can be sold to owners and developers to be a value-added component of the construction process. Once the project is complete, sustainable landscape will continue to add value to the property in time as the landscaping grows and matures [7].

Reports that the failure of urban landscape to meet the modern requirements of the users and the interest of some professionals provide a background against which any new design can be viewed [8] mentioned that Landscape architecture' was then taken up by John Claudius Loudon and used to describe a specific type of architecture, suited to being placed in designed landscapes. Loudon was admired by the American designer and theorist Andrew Jackson Downing and 'landscape architecture' was the subject of a chapter in Downing's book *A Treatise on the Theory and Practice of Landscape Gardening*, Adapted to North America (1841) [9]. formulated a study in Atlanta to examine the association between the Physiological health of the community and physical environment (e.g., landscaping and nearby land use) and socio cultural environment (e.g., population density and income). Results indicated that the characteristics physical and sociocultural environments were about equally important in explaining the variations in the psychological health of the community [10] installation of landscape is considered a cost effective way to reduce adverse effects of polluted or stressful environments. Tolerance of plants to environmental and man-made stresses varies with species and cultivar. Nebraska, USA and Hungary have many climatic and geophysical similarities. Irish (2000) describes that importance of landscape planting in modern town planning for the production of high quality environment. Data are given from questionnaire determining the requirements for land for different leisure activities in relation to age groups [11].

It argued that sustainable landscape planning and use depends on understandings the nature-culture relationship, the natural world, human needs and spirituality; being towards of the country side; recognizing the importance of natural process; engaging an ecological design and restoration; and conduction

responsible tourism in sustainable landscapes [12] conducted an experiment on students, who were under stress because of examination. He divided them into two groups. One group was taken into parks while other remained in the hostels. After Lapse of time, students taken into the gardens were no more stress, so he concluded that parks and green places play very positive role in reducing mental stress and tension [13] discussed the development of the awareness of the need for rural landscape planning in Japan. The aspects in which such a plan must be taken into account are including the need for landscape resources to be used in relation to the environment in which they are set and culture of the population of the area. Present land use produces a disorganized appearance to the landscape and the quality of the landscape is declining continuously due to the various developments and changes, which are taking place. Such development gives a complex landscape and simplification of the existing pattern would be a step towards improvement.

Harris (1992) outlines a plan for public recreation and he involved consolation with the Department of environment, community interested groups, other governmental Department and authorities, undertaking numerous field trips, inspection of Fara, publicity and suggested comprehensive partnership for the establishment of public parks, landscape, conservation of environment , cultural and historic features [14]. reported that people might get recovered from mental fatigue in parks and green spaces. Similarly the condition from senile people can be improved with contacts with natural environments Grahn (1991), [15] conducted a survey and notices that the second important thing after marriage is parks. However, Getz et al. (1982) conducted an experiment on road side plantation and conducted that most important thing after education is parks. So we can see the importance of landscaping from these statements Barbaro et al. (2004). Respective influence of habitat conditions and management regimes on prealpine calcareous grasslands.

Plan of Work

This is the most important chapter of the project. This chapter includes all the practical methods adopted to complete the project. Here we will discuss how we practically perform project with CBN.

Planning the project

In Cantonment Board Nowshera, our co-advisor Mr.KhawarRiaz planned the project. He said that first you people should learn and memorize so many plants, trees, shrubs, ground covers, flowers and different ornamental plants that are used in landscaping and collected bio data of each plants, then visit different places in which landscaping is already done, most of the landscaping was planned by. After that we allowed to perform practically. We started our project in the following manner by visiting these places one by one.

I. CBN Nursery

- II. Visit to different Cantt areas
- III. Collect bio data of each plants
- IV. Landscaping in Bagh e Jinnah

I. CBN Nursery

First of all we visited nursery and meet Mr Shujat, working as supervisor. He instructed about different plants their propagation, type, flower color and their usage in landscaping. There we learnt those plants which were not present in our university nursery. Some of them are

- a) Trees (Table 1).

Table 1: Trees.

Common Name	Botanical Name
Alstonia	<i>Alstonia scholaris</i>
Neem	<i>Azadirachta indica</i>
Kanak Champa	<i>Michella champa</i>
Sheesham	<i>Dalbergia sissoo</i>
Silver oak	<i>Grevillearo busta</i>
Ashoka	<i>Saracaasoca</i>
Arjun	<i>Terminalia arjuna</i>
Sterkolia	<i>Sterculia foetida</i>
Jaman	<i>Eugenia jambolana</i>
Mulberry	<i>Morus alba</i>
Pine	<i>Pinus Sylvestris</i>
Bottle Brush	<i>Callistemon</i>
Suck chain	<i>Pongamia pinnata</i>
Sumbule	<i>Ferula sumbul</i>
Popular	
<i>Pipalficus religlosa</i>	
<i>Ficus elastic</i>	
<i>Jakranda</i>	
<i>Lagerstoemia Lagersto emia indica</i>	
<i>Spora</i>	

Table 2: Shrubs.

Common Name	Botanical Name
Har singar	<i>Nyctanthes arboritristis</i>
Gul-e-cheen	<i>Plumeria obtuse</i>
Cassia gluaca	<i>Cassia surrealiansis</i>
Jasmine	<i>Jasminum</i>
Motia	
Hibiscus	<i>Hibiscus rosa-sinensis</i>
Jetropha	<i>Jatropha curcas</i>
Nerium	<i>Nerium oleander</i>
Gardina	
Marwa	
Lygestrum	
Tecoma	<i>Tecoma stans</i>

Lal jhari	
Rat ki rani	
Din ka raja	
Lantana	<i>Lantana camara</i>
Hamelia	
Juniper	<i>Juniperus chinensis</i>

- b) Shrubs (Table 2).
- c) Climber and creepers (Table 3).

Table 3: Climber and creepers.

Common Name	Botanical Name
Passiflora	<i>Passiflora discolor</i>
Railway creeper	<i>Ipomescalrica</i>
Tecoma	<i>Tecomagrandiflora</i>
PumilaFicuspumila	
Bombay creeper	<i>climber</i>
Climber rose	
Clerodendran	
Mosteradeliciousa	
Money plant	<i>Golden pothas</i>
chambali	

- d) Summer flower (Table 4).

Table 4: Summer flower.

Common Name	Botanical Name
Zinnia	<i>Zinnia elegans</i>
Kochia	<i>Kochia scoparia</i>
Portulaca	<i>Portulaca grandi flora</i>
Sunflower	<i>Hillanthusannus</i>
Cosmos	<i>Cosmossul phreus</i>
Cocks comb	<i>Celosia argentia</i>
Celosia	<i>Celosia plumose</i>
Balsum	<i>Impatiens balsum</i>

- e) Ground cover: Duranta, Iresen, Euphorbia, Nenthera, Silvery, Silver dust, Junipers, Rascus, Eunanimus japonica, Rasilia, Chlorphytum, Black grass, Keronda, exocaria,
- f) Palm: Phoenix palm, Kangi palm, Ravenia palm, Italian palm, Alexander palm, cana palm , washingtonia, becaurnia , Bottle palm, bismarkia, fish tail palm, little lady palm
- g) Indoor plants: Aloe vera, syngonium, purple heart, coleus, dracaena, zebra plant, English ivy, agloanema, begonia rex, schefflera, money plant (golden pothus) crussulabrophyllum, asparagus, aurocaria.

II. Visit to Cantt area

After training for one week in the nursery we were able to know different plants visually, and then we visited such places where proper landscaping along with plenty of ornamental plants was arranged. We were advised by our co-advisor to visit

cantt area, he gave us brief description about the landscape design. He appointed two guides for our visit of the entire cantt area and showed us the landscape arrangements. There we saw beautiful landscaping along with a lot of roses, ground cover, shrubs and different ornamental plants and trees. Here are some pictures cantt. The locality visited added a lot to our knowledge and was very enjoyable because we saw landscaping like European countries in Pakistan. Here are some pictures of the town landscaping.

III. Collection the bio data of plants

The main aim of the internship was to know about the ground and park activities of the garden branch of cantonment board with focus to acquire information regarding plants with special emphasis on the following:

- a. Trees
- b. Shrubs
- c. Ground cover
- d. Summer flower
- e. Palm trees
- f. Indoor plants

a. Trees: Trees are valuable assets providing many benefits such as an attractive outlook, shade, wildlife habitat, serve as screen as well as protect from wind, release oxygen and absorb carbon dioxide and dust particles. The detail of the five trees species are below:

i. Alstonia: *Alstonia* is a widespread genus of evergreen trees, family *Apocynaceae*. *Alstonia* consists of about 40-60 species, native to tropical and subtropical Africa, Central America, southeast Asia, Polynesia and Australia, with most species in the Malesian region. These trees can grow very large, such as *Alstoniapneumatophora*, recorded with a height of 60 m and a diameter of more than 2 m.

ii. Chinnar trees: *latanusorientalis*, or oriental plane, is a large, deciduous tree of the *Platanaceae* family, growing to 30 m (98 ft) or more and known for its longevity and spreading crown. The oriental plane is found naturally in revering settings, together with such trees as alder, willow and poplar. However, it is quite capable of survival and success in dry soils once it is established. Like other plane trees, its leaves are borne alternately on the stem, deeply lobed, and palmate or maple-like [16].

iii. Eucalyptus: It is a diverse genus of flowering trees and shrubs family, *Myrtaceae*. There are more than 700 species of eucalyptus, mostly native to Australia, and a very small number are found in adjacent areas of New Guinea and Indonesia. One species, *Eucalyptus deglupta*, ranges as far north as the Philippines. Only fifteen species occur outside Australia, with just nine of these not occurring in Australia.

Species of eucalyptus are cultivated widely in the tropical and temperate world, including the Americas, Europe, Africa, the Mediterranean Basin, the Middle East, China and the Indian Subcontinent, though most species do not tolerate frost [4].

iv. Pines: These are evergreen, coniferous resinous trees growing 3-80 m tall, with the majority of species reaching 15-45 m tall. The smallest are Siberian dwarf pine and Potosi pinyon, and the tallest is a 268.35-foot 81.79-meter tall [9].

v. Azadirachtaindica: It is known as Neem and Indian Lilac is a tree in the mahogany family *Meliaceae*. It is one of two species in the genus *Azadirachta* and is native to India and the Indian subcontinent including Nepal, Pakistan, Bangladesh and Sri Lanka. Typically growing in tropical and semi-tropical regions. Neem trees now also grow in islands in the southern part of Iran. Its fruits and seeds are the source of Neem oil [17].

b. Shrubs

i. Hibiscus: Hibiscus is a genus of flowering plants in the mallow family, *Malvaceae*. It is quite large, containing several hundred species that are native to warm-temperate, subtropical and tropical regions throughout the world. Member species are often noted for their showy flowers and are commonly known simply as hibiscus, or less widely known as rose mallow. The genus includes both annual and perennial herbaceous plants, as well as woody shrubs and small trees. The generic name is derived from the Greek word which was the name *Pedanius Dioscorides* (ca. 40-90) gave to *Althaea officinalis* [5].

ii. Gardenia: Gardenia is a genus of flowering plants in the coffee family, *Rubiaceae*, native to the tropical and subtropical regions of Africa, southern Asia, Australasia and Oceania. They are evergreen shrubs and small trees growing to 1-15 metres (3.3-49.2 ft) tall. The leaves are opposite or in whorls of three or four, 5-50 centimetres (2.0-19.7 in) long and 3-25 centimetres (1.2-9.8 in) broad, dark green and glossy with a leathery texture. The flowers are solitary or in small clusters, white, or pale yellow, with a tubular-based corolla with 5-12 lobes (petals) from 5-12 centimetres (2.0-4.7 in) diameter. Flowering is from about mid-spring to mid-summer and many species are strongly scented [18].

iii. Cestrum nocturnum: *Cestrum nocturnum* is a species of *Cestrum* in the plant family *Solanaceae* (the potato family). The species is native to the West Indies, but naturalized in South Asia. Common names include Raatraani, "Night Queen", night-blooming cestrum, Hasna Hena, lady of the night, queen of the night, night-blooming Jessamine and night-blooming jasmine. It is an evergreen woody shrub growing to 4 metres (13 ft) tall. There is also a variety with yellowish flowers. There are mixed reports regarding the toxicity of foliage and fruit

iv. **Cestrum diurnum:** *Cestrum diurnum* (Din Ka Raja) is a species of *Cestrum*, native to the West Indies. Common names include Day-blooming *Cestrum*, Day-blooming Jessamine, and Day-blooming Jasmine. Also known as Din ka Raja (King of the day), in Urdu and Hindi. The scent of this quick-growing and evergreen woody shrub, often used for screens and borders, is released by day. *Cestrum diurnum* is easily propagated from the seed, which it produces in abundance [19].

c. Summer flower

i. **Zinnia:** *Zinnia* is a genus of 20 species of annual and perennial plants of the family *Asteraceae*. They are native to scrub and dry grassland in an area stretching from the Southwestern United States to South America, with a centre of diversity in Mexico. Members of the genus are notable for their solitary long-stemmed flowers that come in a variety of bright colors. The genus name honors German botanist Johann Gottfried Zinn [7].

ii. **Balsam:** *Impatiens balsamina* (garden balsam, garden jewelweed, rose balsam, touch-me-not) is a species of *Impatiens* native to southern Asiain India and Burma. It is an annual plant growing to 20-75 cm tall, with a thick, but soft stem [20].

iii. **Cockscomb:** *Celosia* is a small genus of edible and ornamental plants in the amaranth family, *Amaranthaceae*. The generic name is derived from the Greek word *kelos*, meaning "burned," and refers to the flame-like flower heads. Species are commonly known as wool flowers, or, if the flower heads are crested by fasciations, cockscombs. The plants are well known in East Africa's highlands and are used under their Swahili name, fungus.

iv. **Helianthus or sunflower:** It is Greek word *Helios* "sun" and *hantos*, "flower" is a genus of plants comprising about 52 species in the *Asteraceae* family, all of which are native to North America. The common name "sunflower" also applies to the popular annual species *Helianthus annuus*. The genus is one of many in the *Asteraceae* that are known as sunflowers. It is distinguished technically by the fact that the ray flowers, when present, are sterile, and by the presence on the disk flowers of a pappus that is of two awn-like scales that are cauducous i.e., easily detached and falling at maturity [3].

v. **Cosmos:** *Cosmos* are herbaceous perennial plants growing 0.3-2 m (1 ft 0 in-6 ft 7 in) tall. The leaves are simple, pinnate, or bipinnate, and arranged in opposite pairs. The flowers are produced in acapitulum with a ring of broad ray florets and a center of disc florets; flower color is very variable between the different species. The genus includes several ornamental plants popular in gardens. Numerous hybrids and cultivars have been selected and named.

d. Indoor plant

i. **Aglaonema:** It is a genus of flowering plants in the arum family, *Araceae*. They are native to tropical and subtropical regions of Asia. They are known commonly as Chinese evergreens. These are evergreen perennial herbs with stems growing erect or decumbent and creeping. Stems that grow along the ground may root at the nodes. There is generally a crown of wide leaf blades which in wild species are often variegated with silver and green coloration. Plants of the genus are native to humid, shady tropical forest habitat [21].

ii. **Dracaena:** *Dracaena* derived from the romanized form of the Ancient Greek - *drakaina*, "female dragon"), is a genus of about 40species of trees and succulent shrubs. It has also formerly been separated (sometimes with *Cordyline*) into the family *Dracaenaceae* or placed in the *Agavaceae* (now *Agavoideae*). The majority of the species are native to Africa, with a few in southern Asia and one in tropical Central America. The segregate genus *Pleomele* is now generally included in *Dracaena*. The genus *Sansevieria* is closely related, and has recently been synonymized under *Dracaena* in the Kubitzki system [2].

iii. **Begonia:** *Begonia* is a genus of perennial flowering plants in the family *Begoniaceae*. The genus contains about 1,400 different plant species. The *Begonias* are native to moist subtropical and tropical climates. Some species are commonly grown indoors as ornamental houseplants in cooler climates. In cooler climates some species are cultivated outside in summertime for their bright colourful flowers, which have sepals but no petals [8].

iv. **Coleus:** *Coleus* was a genus of flowering plants in the family *Lamiaceae*. In recent classifications, the genus is no longer recognized, and the formerly included species are instead placed in the genera *Plectranthus* and *Solenostemon*. Because the type species, *Coleus amboinicus* is now placed in *Plectranthus*, *Coleus* is regarded as a synonym of *Plectranthus*. The term "coleus" is often used as a common name for species formerly placed in the genus *Coleus* that are cultivated as ornamental plants, particularly *Coleus blumei* (*Solenostemonscutellarioides*), which is popular as a garden plant for its brightly colored foliage [22-28].

IV. Landscaping in Bagh e Jinnah

After visiting different places, we were instructed to a task to draw some designs on paper and the best drawing was selected by the supervisor to practically perform the design without any help of landscaper or administrator. We practiced 4-5 designs there in which one is selected [29-31]. In this design we utilized *duranta*, *Irseen*, *Nenthera*, *euphorbia*, *washingtonia* and *bismarkia*. Some pictures are taken before and after the work which is given below:

Summary

Major emphasis of the internship was to know about the ongoing activities pertaining to landscaping and maintenance of parks and avenues etc. under cantonment board. The internship was done to identify lot of plants and main purpose of this project was to assess the different phases of landscaping and an effort was made to learn different aspects of its practical implementation with such a renowned organization. During this project we learnt about landscape plants (especially identification of plant species), Softscape and Hardscape. The horticulture staff in Cantonment Board was very cooperative and well experienced. They were well aware of day today changes in the field and bringing those changes in Cantt Area. It was good internship in gaining the practical knowledge and implementation of design and maintenance of the park as well as to know about the tremendous varieties of trees, shrubs, ground cover, cactus, seasonal flower, palm trees, climber and creeper. This project enabled us to identify different ornamental plants and properly manage to arrange them and design an eye catching landscape and practically implement these type of projects without presence of head instructor. I got the chance to handle few running projects in Bagh e Jinnah at Canttarea. In short, the project was much beneficial for us and enhanced our creativity.

Recommendations

As it is clear that landscaping is highly conceptual and technical task, so a lot of flaws were there in design and its implementation mostly due to unskilled labors and shortage of some expansive plants, to minimize the cost of landscape structures. Some of them are listed below:

- a) A lot of weed problem was there in grass/turf lands (parks), so before grass/turf implementation the land should be properly prepared by special treatments.
- b) Some of the work was carried out by contractors and not by professionals, so there should be right person for right job to have quality work.
- c) Repetition of some designs was there which were destroying the whole symmetry, so there should be innovation in designs to have more esthetic value.
- d) Maintenance of landscape designs and plantation must be managed properly.
- e) There should be a botanical garden for the knowhow and interest of the public.

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