

A Move Towards Sustainable Urbanism: Reconnecting the City with Urban People Through a Vibrant Riverfront Landscape Design

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Abstract— Gentle-breezes, quench weather is always admired by Bangladeshi people because it refreshes human body so there is nothing but riverbank is one of the finest places for recreation. For designing riverbank as a recreational area, the investigation results indicate the Padma riverbank area because Padma is the largest river in Bangladesh, situated in Rajshahi City, is very resourceful, but yet not utilized properly, remains unplanned. Examination of recent landscape architecture, the river bank can be made attractive, a place for recreation, ensure public safety of the river bank with an aesthetic look, which will reduce the hazarded pressure of human. The main objective of the study is to make the riverbank safe, aesthetic and functional through a viable landscape design. Designing the site, at first a reconnaissance survey was held by the survey team. The topographic condition, soil characteristics, weathering condition, existing condition, public access etc. are considered during this survey. In addition, secondary data has been used from various articles through internet browsing. Analyzing the various determinant factors of the site, feedback from the inhabitants of the area, a proper guideline was determined on the basis of their demand. For multipurpose uses of this place, different types of equipment are arranged in the landscape design. The planning sketch demonstrating that the study area size is around 3.1 kilometers. This project offers a place where people of every age will find their needs in the term of recreation also increase the economic growth and will also articulate the river in urban space. As Bangladesh is land of rivers so this project initiative will expand and encourage developing other riverbanks.

Index Terms— Aesthetics, Articulate, Functional, Public Safety, Resourceful, Recreational Place, Unplanned.

1 INTRODUCTION

LANDSCAPING refers to any activity that modifies the visible features of an area of land to make it functional and give it an aesthetic view. A professionally worked out landscape design ensures that a well-patterned greenbelt is achieved. In landscaping by adding living elements such as flora and fauna, natural elements and abstract elements it is possible to give the place a homely charm.

Nowadays, demand for recreation and entertainment are increasing, especially in urban areas. In the last few decades, urban life was less dynamic and compact. With advantages of technology and demand for a better life, makes urban area populated. Under the concrete wall of a house, everyone's now looking for a personal time and closer to nature. Landscape planning at a small scale provides a touch of nature; reduce the stress of urban life. But demand for better recreation accommodating a large-scale population is still missing at urban areas like Rajshahi.

Padma river bank is resourceful in the term of recreation. Through a landscape planning it is possible to make the Padma River functional, safe and esthetic. A place for better recreation and accommodating a large number of populations, a

linear park is proposed in Rajshahi city at the Padma river bank. This area is consisted of alluvial soil which is good for most of the plants. High elevation of the land ensures of no water logging and less affected by flood. More of that, road connectivity is preferable for a better connectivity through the whole city. There is also some sensitive issue which is handling properly. A portion of the site was under private supervision and residential land use. Relocating the residents by applying site and service scheme provides a way for better development. As a portion was selected for the development, it was capable of accommodating a large number of people. The whole park is divided into various zones to provide the needing demand all over the city. Linkage between them makes the whole park work as a one and creates unity. To enjoy the beauty of river more closely, boat ride is available. To promote our culture various kind elements like, Bioscope is provided.

The most cornering fact of the project was erosion of Padma River and ensuring security at night. By using street light and less curvature of road provides a long sight view for the pedestrian. Safety of the riverbank is ensured by using bollards and lights. The whole project is prepared on demand analysis of the users and under the light of socio-economic condition of the area. Engaging the local people with the project provided a guideline for the landscape planning of the Padma river bank. These variables are successfully implemented in the project for better development. Furthermore, the outcomes can be used to make the river bank safe, aesthetic and functional through a viable landscape design.

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2 LITERATURE REVIEW

In 20th century, Harrisburg's tripartite plan called for a park system and riverfront development combining recreational and naturalistic aesthetic features which was shown by Wilson (1915). The plan outline was infrastructure based where gave the plan for controlling flood apparatus, connecting new water supply and street pavement and it was designed to benefit all of its citizens [1]. The study team took the main theme of the study which is park system development combining recreational and naturalistic features. Clifton *et al.*, (1980) concerned about the riverbank sustainability. To predict bank stability response to lateral erosion or bed degradation, here a slope stability analysis with a method of calculating lateral erosion distance had been shown. It developed a useful tool in analysis of bank instability with vegetation [2]. The study team proposed the slope sustainability incorporating vegetation by collecting the methods from the above paper.

In 20th century, the concept of landscaping is greatly influenced on riverbank development. Georgieva, (2014) in her research, the project illustrates a design proposal in two scales. In the first scale, a master plan was proposed for the riverbanks redevelopment by the water is developed. Secondly, design of one component of the green component of the green sequence will further be elaborated to feature a sustainable riverbank [3]. Romaine (2014) discussed about the environmental and weather effect on the landscaping with bringing communication to space and also arrange them in order are also important. The study team use the landscaping concept of redeveloping and connecting with the urban space through landscaping, the site will be functional as well as aesthetic. LI *et al.*, (2013) identified the studies have been conducted to document how 3D digital graphics are currently being used by landscape architect for better representation. The suggested 3D technologies in landscape architecture are Google SketchUp, ArcGIS, AutoCAD Civil 3D, 3D Studio Max, and AutoCAD [4]. The study team inspired using 3D technologies for better representation by using AutoCAD for 2D, submitting the 2D file in 3D SketchUp and then submitting the file in Lumion for motion effect [5].

The above papers are written for outside of Asia. In Indian sub-continent riverbank landscaping is quite rare. The most of the study are written for riverbank erosion controlling. Das *et al.*, (2014), in this review paper some cases of riverbank erosion and their impacts are discussed. Due to bank erosion, it is observed that after forced human migration, displaced people face economic insecurity due to loss of agricultural land and become unemployed [6]. The paper shows the impact of the overall riverbank erosion conditions all over the world as well as Indian riverbank conditions. Rana and Nessa, (2017) showed that the study presents a detailed investigation of riverbank erosion and population migration of Manikgonj, Bangladesh. The main aim of this study is to a better understanding of the impact of riverbank erosion on population migration. This paper assesses resettlement and riverbank erosion scenario of Bangladesh to find out the migration and resettlement patterns and the livelihood condition of the mi-

grated people of Bangladesh [7]. The study team concerned the riverbank erosion problem and impacts on Bangladesh as well as Indian sub-continent by the above two papers. The selected site has inhabitants that are greatly depending on riverbank erosion. Most of their lands are wash away because of riverbank erosion. So, concerning with riverbank erosion, and upgrading the riverbank through sustainable landscape planning with providing safety, the site is designed with the help of some additional research papers.






3 METHODOLOGY

The resourceful Padma River, the major river in Bangladesh, situated at south portion of the Rajshahi city. Nearly 3.1 Km (**Circuit House Road to Alupotti Road**) is selected for landscape planning. In general, river bank is an excellent space for landscaping but unfortunately the study area is deprived of many basic facilities and remains unutilized. That's why this place is selected for upgrading, making functional and aesthetically beautiful.

Some literature reviews are held for acquiring more specific concepts and more proficiency. This particular territorial survey is constructed by collecting data from primary and secondary sources. Primary data like soil characteristics, function and activity, uses of place, requirements of public etc. are collected through field survey and secondary data like maps, history, topography, geographical property etc. are collected through relevant books, articles, and website. After collecting this data, SWOT analysis like strength, weakness, opportunities and threat are considered that helps to prepare detail. Furthermore, technical, social and cultural values are also taken into account. The collected data greatly helps to prepare an effective and sustainable plan. After gathering all these data, a draft plan is prepared and finally a suitable plan is prepared by comparing alternatives which is compatible with recent age that reduces the mistakes and considers the limitations.

4 STAGING EXISTING SPACES

Staging existing space, at first a question arise that what will be the characteristics of the site and designing elements which will ensure the main goals of the plan aesthetically and functionally? As it will be a linear park so ensuring the public gathering as a recreational place and it is a large space so the space needs to be divided into some zone. So, to utilize the space more accurately, the space is divided into 5 zones. As this is the longest linear park in Bangladesh, so the park is divided by 5 zones with different characteristics. Each zone represents a central theme of the area. The proposed zones are given below-

-  Residential Zone
-  Natural Activity Zone
-  BGB Zone
-  Cultural Activity Zone
-  Riverbank Zone

Residential Zone

It is a living space for low class people which is situated along the Circuit Road. Unplanned and congested living place, which is unhygienic. It is a private property. Some proposals are made for development of the place as well as for landscape planning under the site and service scheme.

Figure 1: The overall view of residential zone



Site and service scheme: The designated government have not provided sufficient housing which is affordable for the poor people, which results slum and squatter settlement. Under this project, the whole area had been taken for development and 50% of the land have been returned to the landowner with residential 4 storied building. So, both the landowner and this project is being beneficial. This area is consisted of various actions. These activities are given below:

Common Gathering Place is a place for community gathering to grow community sense, a portion beside the residential building has been proposed. A lot of sitting place is provided here. A place beside the river with beautiful trees, shrubs, herbs, will fulfill a basic demand of the people. Sitting place, shades are provided for better relaxation. Jungle geranium, Hedge, Garden Croton, Salvia (red), China rose (white) are used in common gathering place. Stone is used for the ground surface. It will allow the rainwater, flooded water, runoff to go underground easily and will provide a better drainage system.

Playing zone is a place, where instruments for various sports are provided. Basketball, Cricket, Football are available there. No pavement is used therefor coving the ground, only grass is used. Individual tennis and badminton court are provided. This facility will attract people of any age to come here, which will make the project functional.



Figure 2: Residential plots with common gathering place

Kid's zone is basically a place for children. It is safe and various kind of toys, rides, slipper, swings are provided there for them. Sitting benches around the place will let to relax the guardians of the children and look after them. Like the playing zone, ground surface is covered with green grass. This will let the kids to have more contract with the nature, green. This is how this portion will be functional.



Sitting place is very common feature all over the park. It is provided, all over the park. To make your leisure time enjoyable sitting bench is provided around the fountains. This will make it more pleasuring, aesthetic and attractive. Sitting place is provided under various kind of trees. Some shades are also arranged to give a proper place to sit also in the sunny area. Shrubs and herbs also surrounded to the area in three layers. Flowers of various smell, color and provided on seasonal basis, so this will be colorful and enjoyable in all season. It is also important that, every visitor will find their very own seat. So, it will make a great place to enjoy for the visitors. Meditation place is supposed to be a quiet place for relaxation. It is surrounded by various kind of flowers, with various color and calming smell of the flowers. People will sit here and enjoy the natural and green view close to nature, will make mind and body fresh and healthy. Those, who is tired of urban life can have a very own time here. That's how this portion will work and will serve the people. Shades is mainly proposed to make people a bit closer to nature. There will no sitting bench only shades. So, visitors have to seat on the green grass. This will give them a natural pleasure with the Padma river in front of them. The beauty of river, this green space will let them to breathe freely and that's how the various parts of project is going to cooperate with each other and make the whole part successful, functional and effective.

Shadhinota Chottor is a sitting place with red and green marble and flowers, which will remind us the 1971, our nationality, our freedom fighters. The waving flag will inspire us for a new day, to fight on, will heal us mentally. This is the focus point of the activity area. The patterns of the road and line of

sight is created in a way that, it will always lead to various activity point and at the end, the Padma River. The big trees around the roads will give welcoming look to the visitors. Visitors will enjoy the color of flowers, smell, trees and a long green view at a glance. Trees, flowers are selected on seasonal basis. The place will always remain colorful, on various season. Shrubs are used to give shade on the sitting bench. It gives a natural comfortable feeling to the user. Mostly soft and cool color is used here, so it may help people to calm and relaxation. Food court and coffee shop are also provided and available, easy to access from everywhere. Overall, this zone is consisted of various kind of different activities.



Figure 4: Shadhinota Chottor

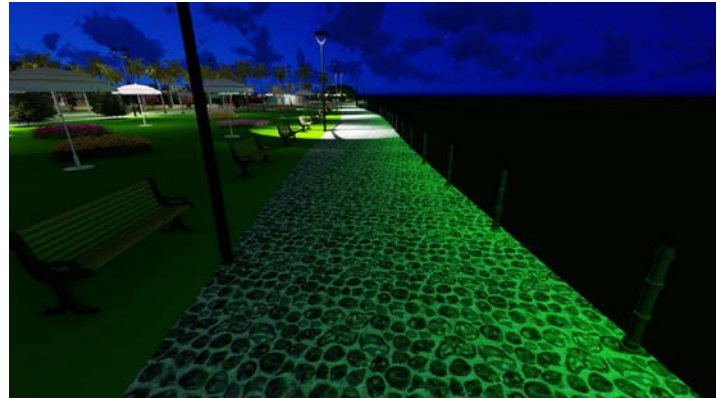
Picnic zone is beside the Activity area. This portion mainly a picnic spot. In this project, it is ensured that demand of every people will be fulfilled. For a family vacation, study tour or tour with friends, this zone offers a great opportunity. Food court, shades, open space, sitting bench are provided. Esthetic view is created with fountain. Colorful trees, flowers, tea table with shades are very functional for this space. A place to be one step closer to nature, enjoying the nature, spending some time without any pollution, this zone offers a lot to the visitors. It is necessary to provide a strong waste management system for the picnic spot. The most cornering object is to ensure the safety, that's why bollards are used at river bank to make the river bank safe as well as functional. At night, green spot is used on the bollard to make visitors aware of the river bank and as well as attractive.



Figure 5: Fountain with lights

Hedge, Marigold, Garden croton, Rose (Red), Debdaru, Krishnochura, Coconut Palm Tree, Willow Tree, Ash tree are proposed in the zone. All plants have different characteristics and blooming season that makes the site colorful in all season. Ash and Willow trees are used for preventing soil erosion.

Figure 6: Bollards for safety



Natural Activity Zone

Shimla Park is subjected by Natural Activity Zone. The condition of Shimla Park is very poor. Many steps should be taken to make the park functional and tourist attractions. Though the park is well known for Rajshahi peoples, so there is a huge opportunity to make the park.

Cultural platform is the first portion of the zone which represents the cultural identity of Rajshahi providing mango and lychee tree as well as traditional trees of Rajshahi. The whole area is round shaped. Mango and lychee trees are provided along the inner and outer side of the hexagon and Royal Palm trees are provided along the rounded road. In summer, mango and lychee can be found in the trees. Then the color of lychee tree



seems red because of lychee and also the color of mango tree seems greenish to yellowish because of mango. Salvia and China rose are provided along the picnic table area. Red Salvia creates natural focal point. Full inner side of the hexagon pathway are covered by hedge and outer side of the hexagon covered by the blue Garden Croton. These create the area colorful naturally when these bloom.

A café is provided in the opposite portion of the entrance gate. The area is provided as a picnic spot. A large picnic shed with benches is provided at the middle of the circle and other picnic benches are provided beside of the picnic shed. Children playing instruments are provided near side of the picnic benches. An ice-cream parlor is also provided just opposite portion of the café. Two gates which are made by wood, also given in the site. Two types of pavements are provided. Hexagon pavement is made by brick and rounded pavement is made by stone.

Figure 7: Cultural platform



Get Together is a place where people can feel the natural view of Padma River with their friends and family. This is the right place where people can gossip each other by having meals or coffee. For achieving the goals of the place, the place is provided closer to the river. Royal Palm tree is provided to cover the whole area which are naturally tall, so there will not be vision problem to the visitors. Garden Croton (Red), rose (pink) are provided for beautifying the area. One kind of herb is also provided in the area. The herb is lemon grass. Natural stones are also provided in the area. Basically, it can be used as common gathering place, so café can perform the important role to utilize the area. So, a café is provided in the central portion of the area with sufficient benches and tables. Stone made, and brick made pavements are also provided just like the figure. Bollards are provided as security provider. Lights are also provided along the pavements.

Figure 8: Get together

The Eye is the most important and focal point of the area. The whole view of the area is like "Eye". The main pathway defines the boundary of eye and radical pathway defines the eye-ball. The figure shows the overall design of the eye. There are provided two types of pathway. The pathway which defines the boundary of the zone is made by stone. The pathway is covered by hedge. The radical pathway is made by brick. It is a symmetrical design where two coconut palm trees and one bayan tree are respectively provided from the two-entrance point of the zone. Four stone made benches are also provided beside the banyan tree. Eye-ball is the main central point

where whole pathway is surrounded by Debbaru trees radically. There also provided Krishnochura trees radically after the Debbaru trees. One cafe and one ice-cream parlor are also provided between Debbaru and Krishnochura trees. There are also provided 7 sheds with brick made benches (5 benches for each shed). An artificial pond is also provided central portion of the area. The pond is covered by three layers of shrubs and herb. These shrubs are china rose, Arabian jasmine and the herb is blue pea. The colors of the flowers are white, white and purple chronologically. So, these gives cool feelings when blooms.



Figure 9: The eye

The Green is the most significant and different area of the park. People can go closer to nature. This area hasn't any kind of manmade elements. All elements are made by nature so that peoples can feel the nature ignoring all types of artificial instruments. The Green is a place where a natural sitting place is provided. The whole area is like the word 'Green'. The height of the sitting place is approximately 1m. Full area is covered by grass. Stairs are also provided on each alphabet. In the center of the alphabet 'G', one stair is provided. In the lower portion of the alphabet 'R', one stair is provided. In the middle portion of the alphabet 'E', one stair is provided. Same stair is provided in another alphabet 'E'. In the lower portion of the alphabet 'N', one stair is provided.



Figure 10: Green

Refreshment Area is situated just near about the river. People can directly enjoy the Riverview with the place. The place is round shaped. This place is connected from the access road of the park. Full zone is covered by various types of sheds and lying benches. People can enjoy the natural view of the Padma lying on the benches. A water fountain is provided at the center portion of the zone. It makes the zone more attractive and enjoyable. Two food courts are situated at the access road of the zone. People can easily take food from the food court. Thus, they can enjoy the natural view with foods. Sunbath is an option of enjoyment where people can enjoy themselves with sun and river lying on the benches. Full rounded area is covered by royal palm trees which are provided like half circled and rest of the circle is free. The free space creates line of sight towards the river which is enjoyable for the visitors. Red China roses are provided along the round shape of the area. Red color gives natural focal point which makes the zone important.



Figure 11: Refreshment area

A **central activity** area is provided just opposite of the refreshment zone after the main pedestrian road. This shape of the area is also rounded. Main pathway is made by stone and boundary pathway is made by stone. The most important feature of the area is amphitheater. Amphitheater is a cultural platform where varies types of cultural activities are held. Basically, amphitheater which is provided in the central activity area is round shaped. A water fountain is also provided in the center of the zone. There are also provided four sheds with benches beside of the water fountain. Water fountain makes the zone attractive. Full boundary area is covered by hedges and china roses. These plants are provided one by one. Inner portion of the zone is covered by lychee trees. Under every lychee tree, one bench is provided for sitting. Visitors can sit on the benches and they can also get shadow from the lychee trees. There are also provided garden crotons and marigolds around the water fountain. Red garden croton and yellow marigold create natural focal point of the area. In front of the amphitheater two palm trees are provided and one stone is also provided between the palm trees.

Figure 12: Central activity area

In another **activity area** 'Tower of Abstract' is provided. The variation of the height of the tower represents the conditions of abstract mind in different situation. The tower is bounded by a boundary. The boundary can also be used as sitting place. The

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boundary as sitting place. Royal palm trees are covered the area. The height of the palm trees is high as a result it seems the tower so high. Two medium size palm trees are also provided on the entrance part of the area. White china roses are also provided beside the palm trees. The palm trees and china rose are bounded by red roses. Roses create restriction of the area. Two lights are also provided beside the boundary area and flood lights are provided on the tower.

Figure 13: Tower of abstract

Another central feature of the zone is 'Sculpture of A.H.M Kamaruzzaman. A.H.M Kamaruzzaman was the one of the greatest leader of four national leaders and his birthplace is Rajshahi. So, to remember him and his sacrifice of Bangladesh, a sculpture is provided. The sculpture is provided central portion of the 'm'. The boundary of the sculpture is covered by red salvia. Red salvia creates natural focal point of the sculpture. Full area is bounded by Debbaru trees and inner portion of the 'm' is covered by china roses and marigolds. The china roses are provided the inner portion of the two arms and marigolds are provided in the middle portion of the 'm'.



Figure 14: Sculpture of A.H.M Kamaruzzaman

Fountain zone has been proposed in the area. Many fountains are proposed in the area in linear shape. The pathway pattern is a special characteristic of the zone. The pathway pattern of the zone is like "double helix of DNA". There are several spaces in between the pathway. To make the space aesthetic



and functional, many fountains are proposed. Beside 'Sohor Rokkha badh' Debdaru tree are provided horizontally and near the river ash trees are also provided horizontally. Mainly Ash tree is provided near the riverbank to prevent soil erosion. The pathway is covered by hedge. This is a symmetrical design. So, same elements of the section are provided in entrance and ending portion. So, as same as entrance portion there is provided a food court, a gate and two coconut palm trees. Sufficient lighting systems are also provided in the section.

Figure 15: Fountain zone

BGB Zone

In Rajshahi near the riverside, the Simante Obokash and the Simante Nogor are very famous place for the visitors. Most of the people are passing their leisure time here. The decoration and sitting arrangement of this place is very well. Decorated sitting place, lighting system, well-connected road pattern, dustbins, trees and flower trees etc. are provided by the landscape project. In the site, well-developed road pattern is provided everywhere so that people can move one place to another easily and comfortably. With all the sitting shades, link roads are provided. All the roads are made by bricks. In the site, all the roads are walking road so any kinds of transportation cannot enter in the road. So, it ensures the safety issue. People of all ages are like to visit the river site. So, sufficient sitting place with shades are the most important need for the site. Near the river site, huge amount of people come every day and pass a lot of time. So, sufficient café is needed. In the site, many food cafes are provided for the people to cope with the demand of the people. In this portion, Colorful lighting system are providing for the aesthetic view of the site and increase the beauty of the river. Colorful lights are increased the pleasure of the visitor. Lighting system also provide the safety of the site. So, sufficient lights are provided in the site. Sufficient dustbins are provided to make the site neat & clean.

Figure 16: BGB zone

I-badh is another most important and attractive portion of the project. This is basically an embankment "I" Shaped. In the front of the I-badh a musical fountain is proposed. It creates an aesthetic design. The fountain is designed for entertainment purpose. In night, the fountain refracts the effects of timed wave and timed light. The water reflects the light. Beside the fountain, there are benches and benches with tables. A food court is also provided for active people. People can rest and relax in benches and enjoy various kinds of fast food. For security purpose, lighting elements are also provided.



Figure 17: Musical Fountain



Cultural activity zone

It starts from Lalon Shah Park and ends at last portion of Padma garden. This is the most crowded place of Rajshahi as a recreational place. The active users of this area are the recreation seeker of Rajshahi city. So, the users are the main concern during design proposal.

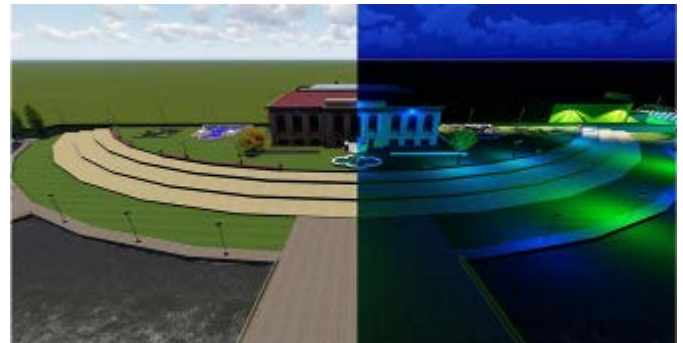
In the beginning of the cultural activity zone, there already exists an amphitheater which is also replaced by an amphitheater in the opposite direction and a flower garden in the middle. The amphitheater is made of tiles and basils are in the garden.





this portion, there is a narrow portion where some temporary shops are available. But in the design, it is used for walking purpose where Debdaru tree on both sides and beautiful pitch on road to attract people.

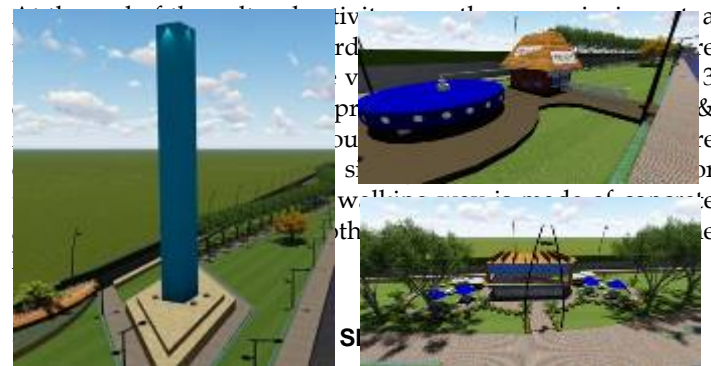
Nearly in the middle portion, there is a historic building named Boro kuthi which is restored in the design, enhanced the beauty of this zone by remodeling its surroundings. Remodeling includes 3 fountains, 2 gardens, hedge barrier, amphitheater and walking way.



After that there is a huge open space which is used for grazes but in the design, it is replaced by an amazing Glass tower, bioscope which helps to know Rajshahi's own tradition and food court. The glass tower is made of glass and searchlight in four corners to detect the tower from anywhere and the main structure of bioscope is made of steel for its long-term sustainability.

In the existing condition, there is a park named Padma Garden, but in the design, it is replaced by asymmetric playlot that is elevated from the ground and cosmos is planted here to soften the edge corner which is aesthetically beautiful. A public toilet is designed here to ensure safety and sanctity. Debdaru tree is planted here as barrier to hide the toilet.

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After Th is connected with each other so that one can visit or enjoy one zone to another without any hesitation. Thus, this zone is prepared on the basis of demand analysis so this park can serve all over the city what they actually need. In this park, proper mixer of urban and natural elements is ensured so that the dynamic and exciting lifestyle of urban people will enjoy the freshness and clarity with the nature.

Living in residential zone, the peoples can use the elements like playlot, meditation garden, picnic spots, Shadhinota Chottor with lots of enjoyment. On the other side of the residential zone some VIP residence and Riverine School are situated, so the residential and natural zone can be the easy way to enjoy the nature. Focusing on the active users like, high ranked people on the other side of the road have a demand for morning work and picnic on weekends. Passive users who actually like to visit this place on various special occasions. For them, riverside restaurants will meet up their demand and make this place functional on basis of functionality. Arrangement for kids, children make this site more comfortable for the families.

6 CONCLUSION

The rising demand for recreation in urban towns is a concerning issue. It is essential to make sure that, urban population have the proper recreation. Riverbank was always played an important role in the recreation issue. As the civilization was more dynamic at riversides, nowadays it also plays an important role in the term of recreation. riverbanks are full of potential to fulfill this demand. But lacking of proper utilization and planning, riverbanks remained unsafe, polluted and unaesthetic.

This is a planning based on demand analysis showing the proper process of utilizing the riverbank providing a full set of recreations for all the people in the society. The dynamicity of the linear park is ensured with seasonal change in the nature. Seasonal and colorful plants are used to connect the urban life with nature. Different zones of the park will serve different types of recreations and an interlinkage between the zones make the whole park functional and effective. The safety of riverbanks is ensured by using proper pattern of roads, changing the line of sight, using appropriate trees and bollards. The elements of the park are used regarding the rough weather of Rajshahi. Long-lasting and less maintenance required elements have used for material design which will ensure the sustainability of it.

In the big picture, this project has the ability to adapt with the changes through time. Prepared on basis of socio-economic condition of the people, analysis active and passive users and a full package of recreations for the urban people.

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