Campus Neighborhood Planning: A Case Study on Jahangirnaagar University

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Abstract

A campus provides "place of excellence" for the academics and the neighborhood provides it for its habitants. A sustainable campus neighborhood plan can provide access of all in the community and utility facilities of the campus neighborhood area. Campus Neighborhood Plan is the planning for a campus in accordance with the needs both from the academics of the campus and people related to the campus neighborhood. It includes necessary elements of good living placed within easy access of the users. Being the first residential university of Bangladesh, Jahangirnagar University holds a key position in campus landscape and planning due to its locational advantage. This study tries to identify the needs assessment of Jahangirnagar University campus in accordance with the needs of the students, academics, officials, staffs and the people from neighborhood areas. Consultation with the users of the campus neighborhood was conducted through questionnaire survey and Focus Group Discussion (FGD). Analyzing the demands and existing scenario of planning in the campus neighborhood, a number of proposals have been recommended in this study. Finally this study tries to prepare a sustainable Campus Neighborhood Plan (CNP) for Jahangirnagar University.

Introduction

A university offers a host of opportunities for community members and families to engage with the campus. It engages a number of students, academics, officials, workers and a number of people for a mainstream campus planning. The overall campus becomes more a neighborhood than remaining only as an academic organization. It should be committed to working with not only with academic needs but also to address community needs along with providing learning opportunities for the students. The services provided for them should also be beneficial to all persons related to the campus neighborhood area. Different campuses reveal noticeable similarities and differences and their benefits are spread unevenly throughout the community. So, there is a need to identify the actual scenario and roles of the campus neighborhood in fulfilling the need of residents and how people are benefited from the neighborhood planning. This study tries to identify the needs assessment of

neighborhood area of a University campus in accordance with the needs of the students and the people of campus neighborhood areas. The study has been carried out with the following objectives:

- To illustrate current situation of neighborhood development across the campus area and redesigning it with the need assessments of coming decades.
- To address development of campus neighborhood in accordance with the needs of both the academics and the habitants of the Campus Neighborhood.
- To make a sustainable Campus Neighborhood Plan (CNP) for the neighborhood areas of Jahangirnagar University.

Concept of Campus Neighborhood

Campus Neighborhood Plan should have to provide different types of service provisions for a good living inside the campus area. Students not residing inside the campus should be facilitated with similar services during their stay inside the campus. Moreover it should be able find out ways of actions in solving emerging problems of the campus lives. Academics are also very important of the campus neighborhood. They are the key source of the main purpose of the campus; i.e. they help the students to fulfill educational purposes. The academics living inside the campus area requires themselves along with their families to be facilitated with the daily necessities. A campus neighborhood should be able to have proper supply of the daily necessities for the local people also as per they are also a part of the campus area. They should have access to common services such as medication, community road use etc.

Methodology

This study has been conducted using "Mixed Method Research" as per the study necessitates both qualitative and quantitative analysis. The major sources of data collection for the study are:

- Documents
- Interview
- Direct observation Focus Group Discussion
- Archival records
- Participant-observation and Physical artifacts

Table 1: Variable Matrix

Research Objectives	Variables	Data Collection Method	Sampling Unit	Sampling Technique
To illustrate current situation of neighborhood development across the campus area and	-Land Use Type - Accessibility type	- · ·	-Academic & Residential Places of the campus	Stratified Random Sampling

Research Objectives	Variables	Data Collection Method	Sampling Unit	Sampling Technique
redesigning it with the need assessments of coming decades.	-Healthcare & Education -Community & Utility Facilities	-Face to face Interview	-Neighborhood Area of the campus	
development of campus neighborhood in accordance with the needs of both the	to Services -Healthcare & Education	-Observation -Focus Group Discussion -Face to face Interview		Stratified Random Sampling
To make a sustainable Campus Neighborhood Plan (CNP) for the neighborhood areas of Jahangirnagar University.	Plans of the Campus -Running Programs	Discussion -Key Informants	Development Office	Stratified Random Sampling

Secondary data sources of information on Neighborhood Planning of Jahangirnagar University are very scanty. This knowledge was also helpful in formulation of the research questions and to give support to a certain part of research analysis.

Besides Information on demographic characteristics of the people (such as age, sex, total population etc.) of the study area was collected from various offices of Jahangirnagar University like Planning and Development Office, Engineering Office, Estate Office, Transport Office, Registrar Office etc. Jahangirnagar University Planning Review was also a very good source of study on planning and development of Jahangirnagar University. There are some variables that will be used to analyze the current campus planning condition and relate it with the proposed Campus Neighborhood Planning for Jahangirnagar University (table 1).

The sample size for questionnaire survey was 100 among which 60% were male and 40% were female respondents. Respondents from different age groups were included as respondents as per different type of views and choices on campus neighborhood. Most of the respondents were students of the university along with some students of schools and colleges. Rest of the respondents was from academics, officials, staffs, visitors and people from nearby neighborhoods.

A few FGDs have also been conducted during the field study to identify the needs of the residents of the campus. The discussions were in different times, places and age groups. The overall process was recorded with a recorder and facial expressions of the respondents were also taken carefully. The overall report of the discussion was transformed to a database and analyzed. Three age groups were selected for the

discussion; i.e. 10-15 years, 18-25 years and above 30).. Each of the group was consisted with 6-8 members. After the discussion, some problems are found and also some recommendations were given by them.

Analysis and Discussion

As the study area is a university, most of the respondents are students who come here for educational purposes. People also come here for performing different activities as well as enjoying the natural beauties of the campus. 91% of the respondents were residences of the campus neighborhood area living in residential halls, quarters or in rented houses.

Most of the respondents are satisfied with the existing residential, recreational, transportation, healthcare, utility, transportation and educational facilities inside the campus neighborhood. Dissatisfied respondents' view about the problem is insufficient accommodation for students and teachers. Most of the respondents live inside the campus and as the academic and administrative buildings are almost near within the walking distance of the respondents, they prefer non-motorized vehicles. Most of the respondents are not satisfied about present condition of open space because of misuse of open space. Only 13% are dissatisfied about present condition of open space.

After the FGDs, problems found by the respondents regarding the campus neighborhood are:

- ➤ Medical Centre facilities are not sufficient
- Lack of primary and nursery school facilities for residential staffs
- Lacks of other religious Institutions for minority communities
- ➤ Inadequate numbers of markets and bazaar
- > Shortage of parks and playground facilities in accordance with the population
- > Service facilities of cafeteria is not sufficient
- > Space of TSC is not sufficient
- ➤ There is a water logging in Selim-Al-Din muktomancha
- > Drainage lines connected directly with the lake damages its beauty
- ➤ Haphazard parking system inside the campus
- Lacking of Hall library and cyber cafe in residential hall
- Residential facility in the residential halls is insufficient

Jahangirnagar University Campus Neighborhood Planning for 2040

In keeping pace with world class universities, Jahangirnagar University also need some improved and modernized facilities. For preparing Campus Neighborhood Plan (CNP) some goals have been fixed are:

• To ensure the uniqueness of Jahangirnagar University.

- To ensure the preservation of natural greeneries in Jahangirnagar University.
- Well planned and pollution free campus
- Proper connectivity and accessibility.
- Well recreation facilities.
- Well secured and digital campus.
- Well preservation of water body and natural resources

Neighborhood facilities and their proper provisions basically depend on non-academic development. In a sequences some best suited non-academic proposal for the campus neighborhood for the year 2040 are proposed below: The proposed non-academic facilities are categorized into five units. These are:

- Structural proposal
- Community facility related proposal
- Utility facility related proposal
- Residential hall related proposal
- Others facility

Structural Proposal: The structural proposals of CNP 2040 are given below:

Senate Building: There is no well-established senate building in JU. As the new registrar building is under construction, new facilities for teachers and administrators should be added.

Modernized TSC: TSC will be modernized with enough rooms for guests and high rise building for providing better services to the teachers and students.

Modernized Cafeteria: Cafeteria should be increased to be served well with TSC. Teachers who stay there should be served food by the TSC. Sometimes there is inadequate space for the users that needs improvement.

Gate: There is only a structural gateway in dairy gate. So the study proposes two gateways, one is prantik gate (Joy Bangla gate) and another in Bishmile gate.

Residential Halls: A residential hall for male and another for female students are proposed at the vacant land behind the Al-Beruni Hall and Pritilota Hall. The 3 storied building will accommodate 550 male and other 6 storied building will accommodate 700 female students.

Provision of New Institute: Institute of Urban & Regional Planning will be a model institute for the year of 2040. It will be situated at just beside the CSE and Geological Science building.

Senior Teachers' Quarter: Provision of a senior teachers' quarter is proposed to be established. The quarter will be provided with all modern facilities as it is designed for the senior teachers.

Staff Quarter: Provision of a staff quarter is proposed to be established. The quarter will be provided with all possible modern community and utility facilities for the residing staff families.

Community Facility Related Proposal: The proposals of CNP 2040 for community facilities are given below:

Recreation Centre: The study proposes two recreation centers in this area-one is in teachers' colony and another is in 3rd and 4th class staff colony.

Medical Facilities: Maximum users of the campus neighborhood are not satisfied about the present medical facilities. So they suggest increasing this facility.

Swimming Pool: Two swimming pools, one is for male and another is for female have been proposed. One will be behind the Gymnasium for male students and another will be adjacent to the Khaleda zia hall and Sheikha hasina hall for female students.

Improvement of Selim-al-din Muktomancha: To avoid water logging an underground drainage system can be introduced. It should be modified and reconstructed without changing its design because it's structural uniqueness.

Stadium: A stadium is very needed in this area as per different sports events intra and inters universities frequently. So a stadium is proposed which should be built in the Central Field of the campus. There should be provision of preservation of beauty of the Selim-al Din Muktamancha. So the stadium would have only two pavilions; one in the eastern part and another in the southern part. But walking roads will be available for going to the central Temple.

Lawn Tennis Ground: The study proposes a lawn tennis court behind the gymnasium. Male and Female students can use it conveniently in this place.

Other Facility

Parking Zone: The study proposes a parking zone beside the social science faculty which is near to the dairy gate.

Fountain: A fountain is proposed for the popularly known meher chattar just after the entrance of the campus by the Dairy Gate.

Gardens: Gardens are proposed for the beautification of the central Jame Mosque just beside the Dairy Gate and another in front of the exam controller's office. The gardens will have different flower trees, seasonal flowers with fragrances; variation in fencing (basically natural) strong rooted trees will be given priority and will be contained of trees from local and overseas.

Playing Equipment: Multi-purpose playing equipment will be provided in front of the residential quarters for playing of the resident's children. It will include a slipper, a mini bridge, a jumping bridge, cradle, Hole Hider etc.

Murals: The residential halls are named after by the names of different renowned persons of the country. So a mural of those renowned persons is proposed just before that particular hall. Here a proposal is given below for the provision of murals of Shahed Salam & Barkat in front of Shaheed Salam Barkat Hall. The mural bears the testimony of the language movement in 1952.

Street Lights: The main roads of the campus will be provided with sophisticated solar lighting system.

Walkway and Cycle Lane: An individual cycle lane and walk way for the residents of this area is proposed in the study.

Public Toilet: There is no well managed toilet facility in the entrance of this area. So, hygienic toilet system in the dairy gate, prantik gate and Bishmile gate are proposed.

Market and Bazaar: A market is proposed in dairy gate, prantik gate and Bishmile where people can buy their daily necessities.

Wooden Bridge on Lakes: There is a proposal for the provision of a wooden bridge just behind the swimming pool. The bridge will connect the two parts of the lake and enhance the natural beauty of the campus. This will attract the students as well as visitors much more.

Finally, we get the layout below for Jahangirnagar University Campus Neighborhood Plan-2040.



Source: Author, 2018 Figure 1: Proposed CNP-2040

Conclusion

Being a residential one, Jahangirnagar University demands for a planned campus neighborhood following an effective master plan. It should be taken into consideration that with the current rate of growth in the population of the country, the university may in future become a small town in itself. As a result, its non-academic facility will be of serious concern in future. So, it is high time to undertake necessary measures in terms of development and planning of the campus neighborhood.

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