

A Redevelopment Approach to a Historical Market in Sylhet City of Bangladesh

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Abstract Well-designed circulation and use of effective space in urban markets are considered as key elements in their success as they directly or indirectly influence the cost of operation therein. Consequently, well-designed spaces accrue many benefits: security, higher economic returns, better legibility and reduced congestion hence better market functionality. "Hasan Market" (located near Bandar bazaar, Sylhet) has great significance for its suitable position, historical background and commercial importance equally for visitors (mainly middle class and low income people) and Sylhet City Corporation (SCC). Still, this market has continued to experience space use conflict with incidences of its development and circulation pattern, lighting-ventilation, drainage system, shops layout and service facility especially within and around the market area. This study intends to address these problems of space use to ensure effective functionality of the market. This study also seeks to develop a form of solving conflict in space use by redevelopment proposal along with exploring design and other planning interventions.

Keywords Redevelopment, Market, Effective Space, Circulation, Open Spaces

1. Introduction

The rapid increase of population has led to raise demands and strain in existing public infrastructures within urban vicinity. In order to provide convenience to citizens demands like shopping for their daily needs at ease, several markets have been developed in the past within Sylhet city corporation authority. However, poor maintenance, dearth of basic facilities, absence of security and lack of circulation, service, parking and improper management have led to the downward spiral of these public shopping areas in favor of middle class and low income people. In addition to these, the mixed image that the Sylhet city has obtained in last decades has further altered the typology of public spaces demands. These increased population and demands now offer several

old-historical markets to be redeveloped to make more effective reply to ensure better shopping environment for the city people and the outsiders.

Furthermore, Sylhet is known as the remittance city of Bangladesh, as substantial amount of remittance is received by the city annually. This area is working as the main commercial hub of the Sylhet region. Different types of markets and bazaars are key centers of economic activity in Sylhet City. Presently it has 30 markets of different sizes and places, importance and specialization. The construction industry in Sylhet is currently booming with many shopping centers being built by expatriate Bangladeshis. London Mansion, Blue Water, Al Hamra, Millennium, City Center etc. were established to cater to the visiting Sylheti expatriate and the growing Sylheti middle classes. Although to serve over 3,00,000 people, Sylhet town has only 22 daily markets and many open hawker markets which are serving on and average 14 thousand populations [1]. However, these markets are not evenly distributed over the city to serve its inhabitants efficiently. In the central part of the proposed study area Bandar Bazaar is the key area for both whole sale and daily markets and main commercial supply route of Sylhet from ancient time. Presently this area works as a foremost wholesale market from where Sylhet City Corporation (SCC) receives huge government revenue every year. Within this area "Hasan Market" has the significant part and one of the important shopping center for its suitable location and available contemptible products to the visitors. Generally this market is used as a range of garments product for middle class and low income people and handle a huge amount of financial flow every month and provide both direct and indirect employment for the urbanites. Now, as a major shopping area in the city centre, "Hasan Market" needs to be more vibrant in responding to the different classes of people of the city and its development pattern. But still now, it has faced dense unplanned haphazard development even along the roadside just to meet the demand of rapid urbanization process. Therefore, it has been one of the major concerns for the Sylhet City Corporation (SCC) to reorganize the whole "Hasan Market" area under redeveloping process to make it a better shopping area and

therefore it may be able to handle the commercial activities more efficiently to cope with the city's economic need and future growth. In general, this study is thus chosen based on the investigation that indeed space use divergence exists in "Hasan Market". Though utilization of space is a big factor in determining the cost of operation of various businesses and so their survival as it came out in the research phase of the project. There is therefore need to invoke remedial measures to restore space use divergence to ensure there is free flow of goods and people as well as salvage businesses operating in the market area. This will be done through provision of a space use friendly model that maximizes space utility and at the same time bridges the customer/trader by facilitating customer's access to the sales point rather than traders luring customers from market paths. Redevelopment is chosen since it is relatively contemptible compared to an overhaul of the market, it incorporates three main components that will include design, infrastructure and circulation and the facility management.

2. Theoretical Review of Redevelopment Project and Market

A critical factor in the success of any center is the quality of space on offer. With growing competition for tenants, creating the proper space in the right location is critical if owners wish to maintain or improve their market position and thus their cash flow. On the other hand, maintaining high quality means adapting to changing economy, social, technological and sometimes political conditions [2]. However, during the decades of 1980s private sector investment got attention through 'creating confidence for managing efficient redevelopment schemes' (Yalcinta & Kilinc, 2010) [3]. Until date, it shifted to a more strategic management focus of multi-sectors and the citizens. 'Realization of visions of a sustainable city depends on cities being able to identify the issues and approaches best suited to their particular needs and circumstances' (Weingaertner, 2010) [4]. That is why the best way to future strategies for sustainable redevelopment is to look back to the experiences and take lessons from them (Ahsan, Asad & Alam, 2012). Yet again redevelopment is a much wider process, which aims to reposition the centre, increasing its reach and improving its market position. This often includes a thorough overhaul of the facility and can include the building of additional space. Redevelopment is a more serious investment that can cause disruption for tenants occupying the centre, sometimes making it impossible for them to conduct their business for the duration of the construction works. It is very important to carry out an in-depth analysis and to plan the entire process [5]. Some changes may be forced by shifting legal conditions in the area of safety for example, and such changes will not translate directly into an increase in value or lower maintenance cost [6].

The policy on the improvement of urban areas with neighborhood's market should consider the building of

sustainable communities displaying an extensive array with facilities for the enhancement of economic activities (McDonald, et al 2009). Again the objective of redevelopment and refurbishment of the Markets is to provide a new and better designed market having a clean environment (Deloitte, 2012). The most important goals of the processes of redevelopment and refurbishment are to:

- Increase the value of the retail space
- Improve the functionality of the facility and deliver high quality, safe public areas
- Reposition the facility in the market through its development and change of tenant-mix.

The re-development initiative is expected to address problems caused by underutilization of the building with inadequate facilities and unhygienic conditions and enable re-development in a manner that provides a hygienic and clean environment for shopping (Deloitte, 2012). The broad objectives of the market re-development project are as follows (Deloitte, 2012) [7]:

- Ensure that the character of a Public Market is preserved.
- Reinvigorate the market areas as a retail shopping destination for local residents.
- Ensure improved parking and traffic management
- Promote the survival and predominance of small shops, marginal businesses, thrift shops, arts and crafts, and other enterprises, activities, and services which are essential to the functioning of the Market.
- Create a new attraction for a different type of visitor that is not currently drawn to the market.

2.1. Classification of Market

Types of market can be broadly defined according to a number of characteristics; by their physical and spatial characteristics, operation time, etc. These classifications are discussing in the following [8]

2.1.1. By Physical and Spatial Characteristics

- Undifferentiated open sales spaces, operated by an individual hawker or peddler
- Street or roadside markets (common in both rural and urban areas);
- Open-air markets (typically in a paved urban square);
- Covered markets (common in urban areas);
- Small-scale retail shops associated with urban market areas; and
- Markets sharing a number of the above characteristics, most commonly found in the center of small rural towns.

2.1.2. By Time of Operation and Services That Are Offered

- Markets offering a wider range of trading functions than retailing, combining retail and wholesale markets. Usually, they are found in small towns and cities.
- Buildings or areas specializing as markets on one day in the week or at a specific time of the day, the whole or

part of the site may be used for different purpose at other times such as a car park.

- Weekly or seasonal markets, generally termed "periodic markets"
- Markets operating every day on a permanent site, whether from a fixed building or a mobile stall (possibly with expanded activities at weekends or on specific days).

2.1.3. Function of Markets

Markets provide low-cost retailing facilities based on small-scale operations and are typically found in the low and middle-income, higher density areas of cities and small towns and in the centers of villages in rural areas (FAO 2008). According to Tracy White, the main functions of markets include the following [9]:

- To provide opportunities for the exchange of goods and services by producers and consumers
- To provide, at assembly markets, opportunities for the bulking-up and export of goods and produce to outside areas
- To provide easy access to a wide range of produce for consumers;
- To provide an important means of generating a diversity of retail outlets in towns and cities by supplying low-cost space for street vendors who use stalls or carts and do not therefore require buildings; and
- To provide an opportunity to achieve improvements in food hygiene standards and reductions in post-harvest food losses.

2.2. Regulatory Guidelines, Planning and Design Standards

This study considered space standards as provided in the physical planning hand book regarding market redevelopment standards—'The physical planning Handbook Market construction standards'; following table 1 and sections are the discussion about various building and shop standards, circulation space standards and public health space standards as provided in the physical planning hand book [10].

2.2.1. Building and Shop Space Standards

Table 1. Building and shop space standards

| Specification | Standard |
|--|---|
| Main thoroughfare of market | A 6 meters aisle to allow for circulation |
| Aisle inside building or shops | Minimum of 3.5 meters to allow a group of three people walking together to pass one person standing by a stall or two people walking to pass two other people |
| Maximum distance between cross aisle inside buildings | 12 meters |
| Minimum shop depth (Trader standing behind) | 2 meters for standing and staking of boxes plus 1 meter for the counter |
| Minimum shop depth(Trader sitting on shop) | 1.2 meters |
| Minimum shop height(Trader sitting on shop) | 0.7 meters |
| Minimum shop height(Trader sitting in front of the shop) | 0.7 Meters |
| Minimum shop width | 1.8 Meters |
| Small lock up shop | Between 2*2 and 3*4 meters with sales space taking up to 30-50 percent of the area |
| Sales or table area per trader | 0.8 and 1.2 square meters excluding standing space |
| Outdoor seating/low walls | 400mm high, between 300 to 500mm deep |
| Central market space for trading in the open | Max dimensions between 20 and 25 meters |
| Width of minor pedestrian routes | Not to exceed the height of the surrounding buildings |

Source: physical planning handbook 2007

2.2.2. Standards for Public Utilities Provision

Public utilities are those facilitate the effective operation of the market facility. Effective provision of Public utilities is essential for the proper functioning of the market facility. There should be proper space provision for the various utilities. Handling of businesses in areas specified for these utilities should be avoided as this impairs operation of such; it also affects the life of the utilities.

2.2.3. Water Supply

Water lines should be laid at a depth sufficient to protect against frost damage. The minimum pipe depth should be 0.5m below the ground level with the main water pipeline requiring a way leave of 10 meters. The reticulation systems in form of pipeline should be designed in a hierarchical manner, from the main pipeline distributor to the minor in order to achieve equity in distribution.

2.2.4. Garbage Collection and Disposal

Garbage collection sites must be environmental friendly. They should be located on the leeward side and have a 100m-protection belt.

3. Historical background of Hasan Market

The present position of "Hasan Market" has some historical consequences. From the beginning (during the

ruling period of King Gour Govinda) this place was used as open space, named Govinda Park. At first Roy Bahadur Girish Chandra Das who was the first Chief Engineer of Sylhet municipality established a school here named "Murari Chand School". But within some years this school was relocated from here and renamed as G.C. School and this site was then left as an open space, when it was named as Girish Chandra Park and used as an urban park. After that *in the beginning of 20th century, it was again used as a temporary campus of Modon Mohan College (M.C. College). But it was once more transferred to its permanent campus. Finally in the year of 1959, the chief collector Mr. Hasan Chowdhury announced this place as a market named "Hasan Market" (also known as Collector's Market) which is now used as a market authorized by the Sylhet city corporation. However, the remaining three trees still in the site are the last remainder of this historical park. Following figure 1 shows the modification of present "Hasan Market" that has been transpired in different instant.*

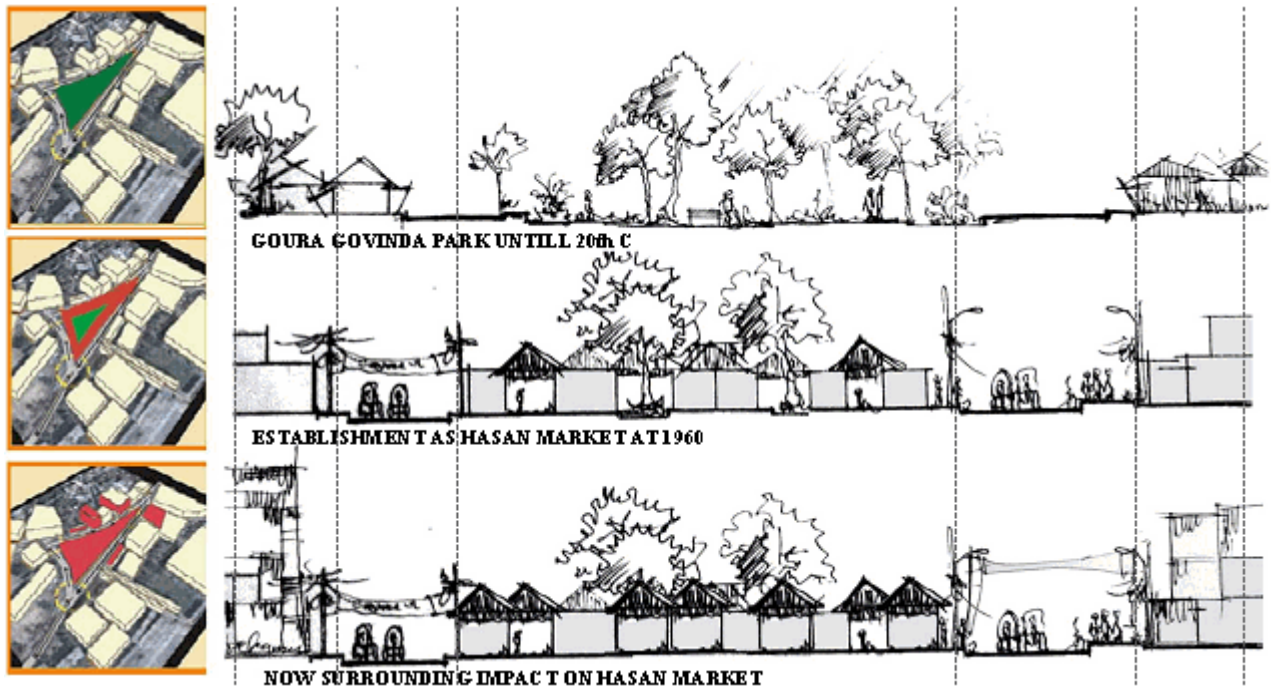
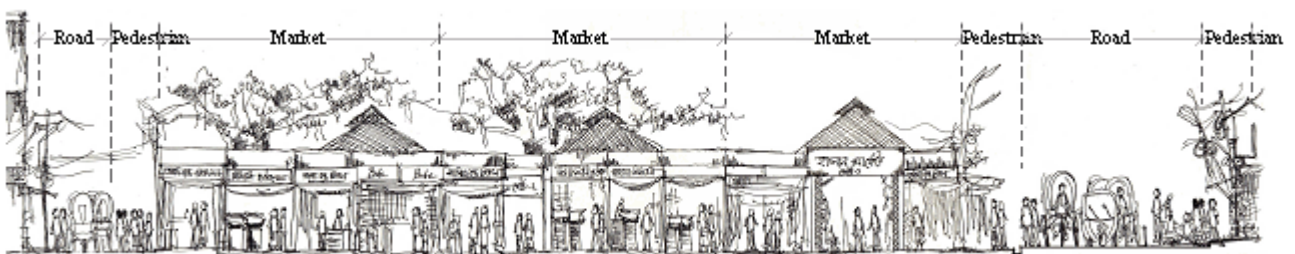


Figure 1. Modification of present Hasan Market area in different period



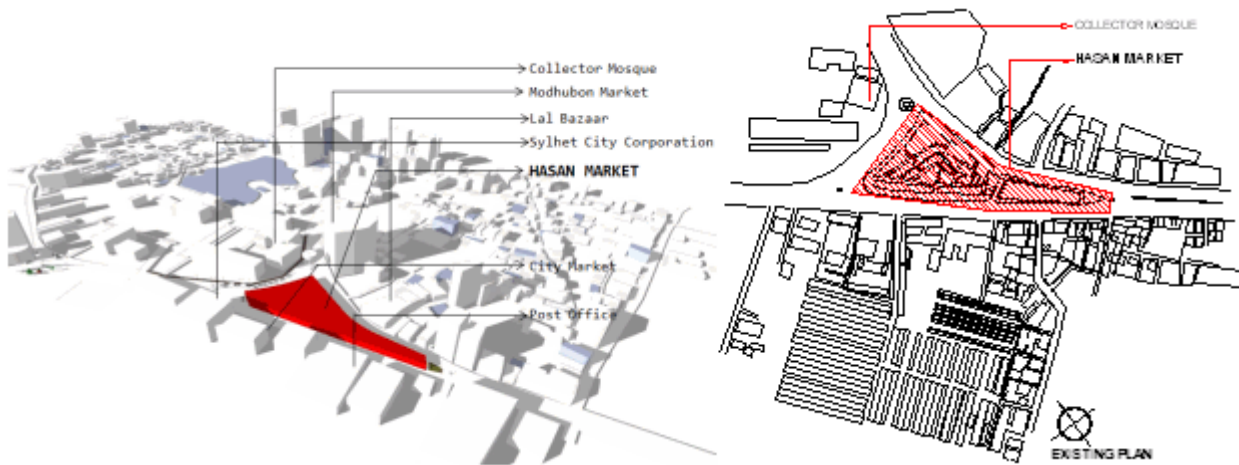


Figure 2. Existing location and condition of Hasan Market and its surrounding



Photographs 1. Narrow & poor lighting within circulation & open drain besides outside pedestrian area

4. Study Area and Present Situation

"Hasan Market" is one of the oldest and biggest hawkers and whole sale market in Sylhet city. It is located in the main commercial area of Sylhet city. At present it has 53,850 sqft area, 280 numbers of different sizes (large - 12' x 10', medium- 8' x 10', small- 8' x 6') shops and SCC has collected 1.5 tk/sqft rent from each shop monthly [11]. From the remote past it has a great impact both on the socio-cultural and socio-economic aspects of Sylhet city. But escalating demand of the city and poor design technique create this historical market as inhospitable for urban community. But still now "Hasan Market" has several problems (figure 2), such as circulation path is not spacious and well ventilated, no parking facilities within or around the market, day light and drainage condition is very poor (photograph 1), insufficient public toilet facilities and open patio do not utilize as an urban market place [12]. Again, it has been faced dense unplanned random development even along the roadside just to meet the demand of rapid urbanization process. Therefore, it has been one of the major concerns for the SCC to rearrange the entire "Hasan Market" area under redevelopment process to make it a better shopping area for urbanities.

5. Redevelopment Outline for Hasan

Market

As suggested by the theoretical framework of market redevelopment, an efficient redevelopment process is expected to promote security, higher economic returns, better legibility and reduced congestion hence better market functionality. Then taking these things into consideration, this part of this study proposes the broad framework for redevelopment planning and designing of "Hasan Market". The complete proposal is how to keep the market area running rapidly with providing a better shopping environment to its occupants. It has been evident that unplanned and insufficient service facilities and this compact growth make the whole area excessively congested to provide better shopping services and to ensure a better living and working environment for the customers, businessmen and the employers working at "Hasan Market". Therefore, four major areas have been measured in this study under the redevelopment framework considering existing situation and previous history, i.e., circulation paths, open space, shops layout and service (toilet) facilities.

However, there are many old neighborhood /public markets in the city which if revived can not only prevent people from assembling to farther markets/malls for their basic needs but also add convenience to their shopping. Some of the markets within the city vicinity such as New Market adjacent to "Hasan Market" area which is authorized by Sylhet City Corporation (SCC) have facilities but remain

under-utilized and produce no revenue for SCC. These potential markets need to be explored and strategies need to be devised to ensure their optimal utilization by implicating this proposed redevelopment approach.

5.1. Redevelopment of Circulation Paths

The internal circulation area needs to be redeveloped in a planned way to minimize the dense development and easy access for the customers. The market area is now expanding illegally and in most cases occupies the main circulation paths, which creates problem to allow a group of three people walking together to pass one person standing by a shop or two people walking to pass two other people. Thus, to meet the growing economic demands and to provide better shopping facilities, circulation paths need to follow the standard. Present internal circulation paths have different categories of width and create problem to allow walking together to pass one person standing by a shop or two people walking to pass two other people. Even though main and minor circulation paths have 12 and 8 feet respectively in width but most shops display their products outside their

shops which make the circulation path narrow. Besides these, other circulation paths have various types of width and very narrow to walk for two or more people. Thus, this study proposed these paths should be free from all displayed goods and widen as per standard. Drainage line within the main circulation paths is open and not proper designed. Therefore, drainage line within circulation paths should be covered and properly designed which will assist to walk comfortably. Over again, the main circulation path was not design with natural lighting coordination. Even in day time most of areas need to provide artificial light, which is not proficient for both customer and shop’s owner. Consequently, these areas should be redeveloped with display free paths and widen circulation paths as it requires, covered and well-designed drainage facility and natural lighting provision over the circulation pathway (figure 3). One more outer area of this market has same kind of problems: uncovered drainage line and display product outside shop. Thus, this study again anticipated to design drainage line under the pedestrian and redevelop the outer pedestrian in two levels with green bed (figure 3).

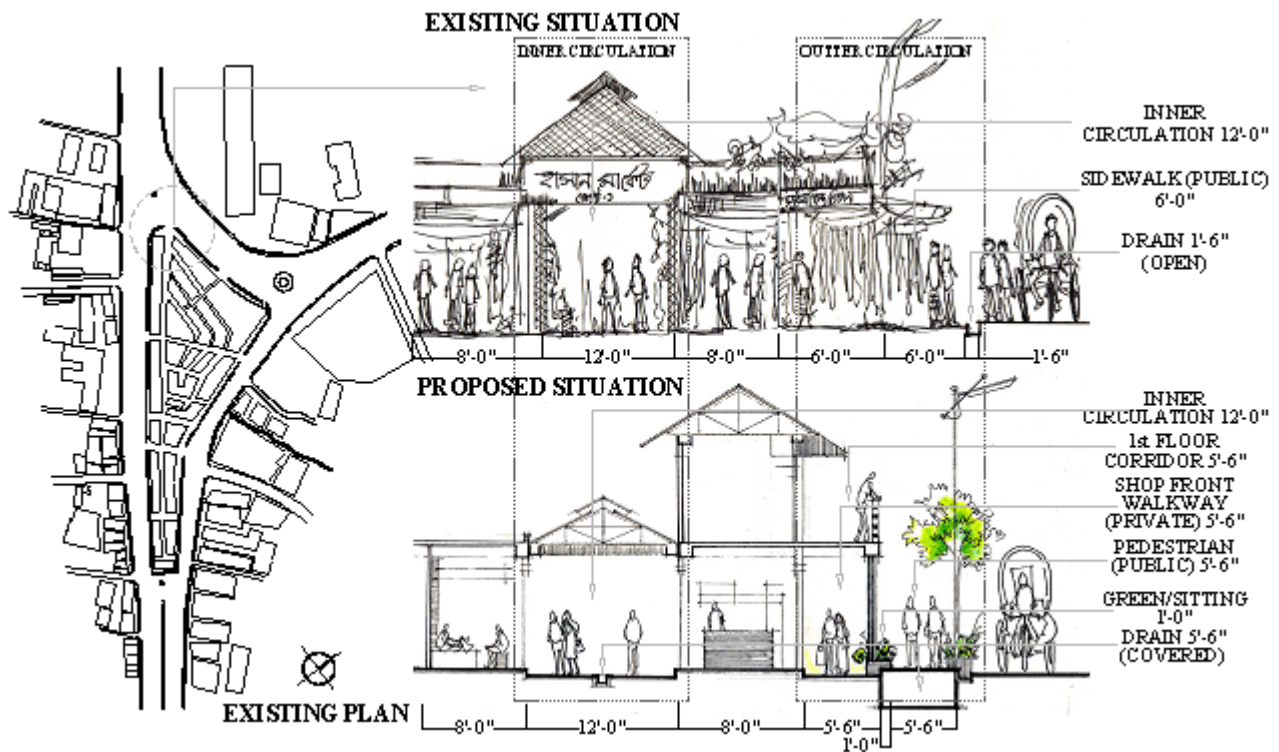


Figure 3. Existing and proposed circulation paths for Hasan Market

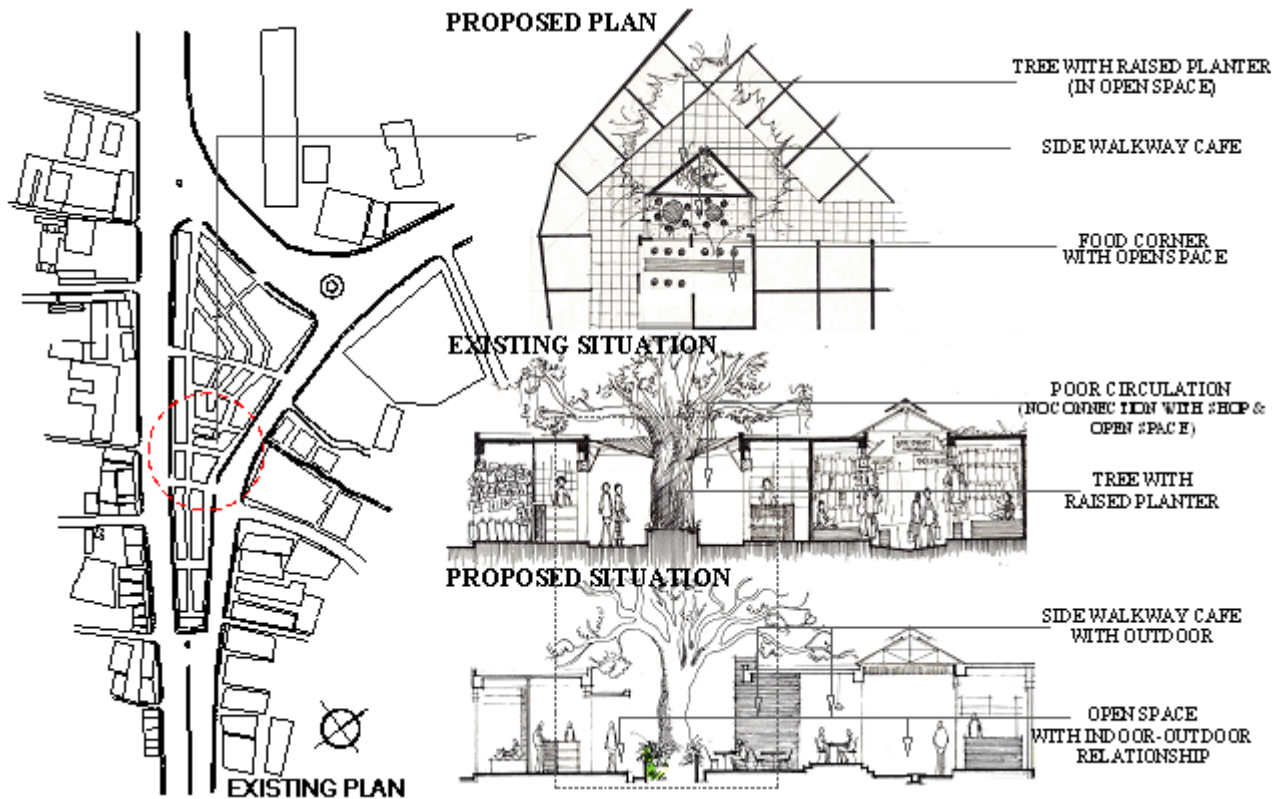


Figure 4. Existing and proposed open space for Hasan Market

5.2. Redevelopment of Open Space

Every urban market needs some spaces where customers can find rest or break. As history describes, this place was an open park area for the surrounding neighborhood. Now only three large trees exist here in between three major circulation nodes and sustain as an ineffective open space. No special treatment for these open spaces moreover it can be effectively used as a rest or sitting area for the customers. Therefore, surrounding shops within the open space should be rearranged again with considering these open space and these three historical trees. This study proposed to redevelop these areas surrounding by shops which can be used as fast-food or self-service restaurant with outdoor or semi-outdoor sitting facilities under these trees (figure 4) where customer can take rest and relax.

5.3. Redevelopment of Shops Layout

This study area is a very busy and one of the main commercial centers of Sylhet. City Corporation earns huge government revenue every month from this area. However,

for many years, "Hasan Market" has faced dense unplanned haphazard development even along the roadside. Therefore, the outer facade of the market and pedestrian area remain always full of activities and difficult to buy products from this site. This area needs to be redeveloped in a planned way to lessen the dense development and easy access for both the customers and side walk people. In equally side, outer shops of the market are smaller in size and narrower in width (8'x6') compare to inside shop. Thus, most of the shops displayed their products outside their shops which create difficulties for the people who are walking towards pedestrian area. In addition, drain line besides pedestrian is open which creates problem for customers and also creates unhygienic environment. This study hence proposed only outer facade of the "Hasan Market" redeveloped with additional story (figure 5) to make the pedestrian free and spacious and to make the shops larger for display and storage facilities. Accordingly, this redevelopment endeavor also formulates this area more vibrant as a hawker market with surrounding commercial neighborhood.

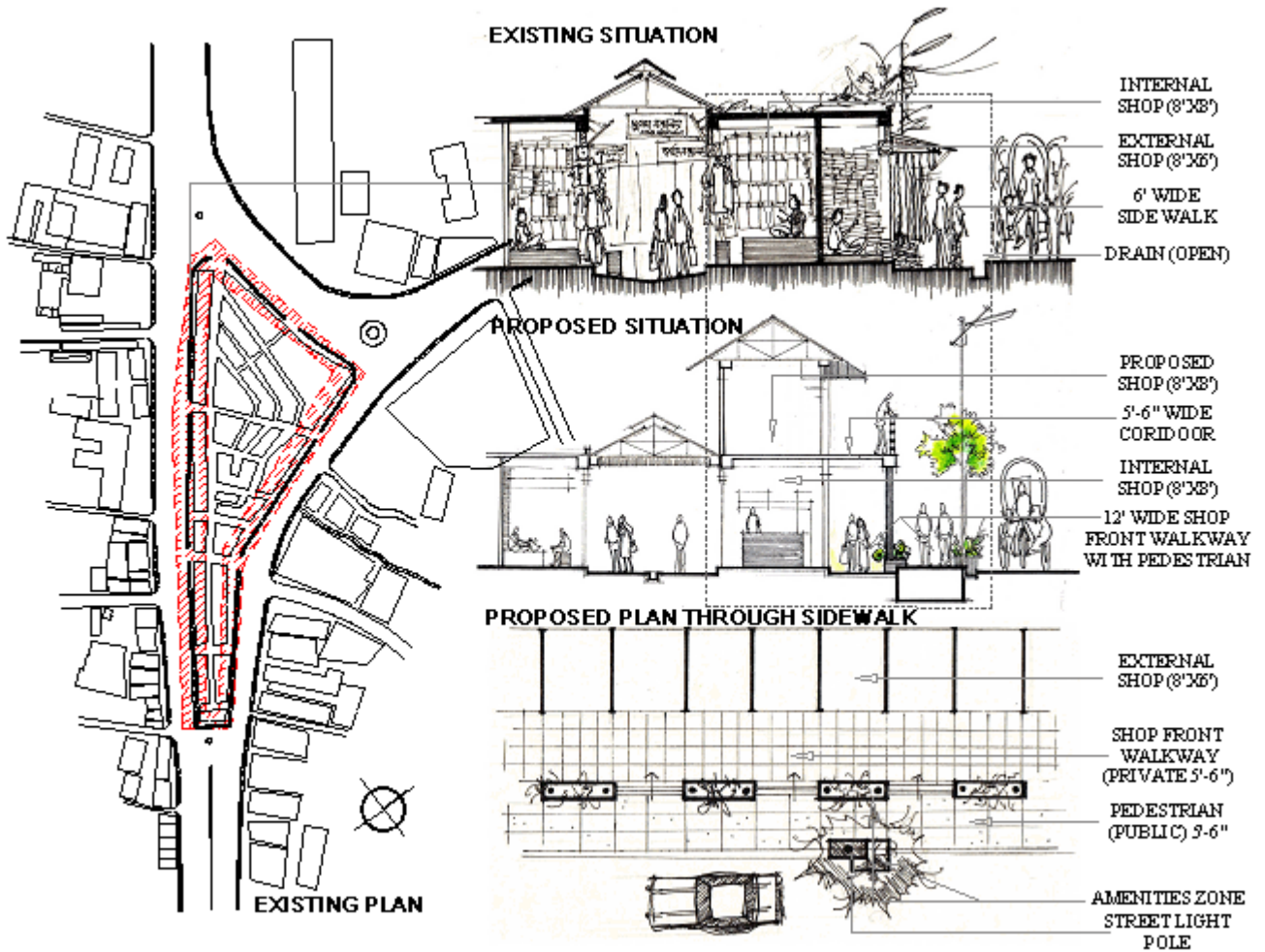


Figure 5. Existing and proposed shops layout for Hasan Market

5.4. Redevelopment of Toilet Facilities

As described before, "Hasan Market" has 53,850 sqft areas with 280 numbers of different sizes of shops. Every day a huge number of people visit here for shopping. But this study finds that toilet and other amenities or services are not in satisfactory level. Only one existing toilet area which has no separate zone for male-female and the total number of toilet is not adequate. What's worse, existing toilet area is very narrow, unhygienic and insufficient natural lighting provision. In addition, existing toilet area has an entrance from outside of the market which generates privacy and security problem. Therefore, this study proposes separate toilet facility for male and female with hygienic and sufficient lighting provision and also anticipated to close the extra entry for security and privacy concern (figure 6).

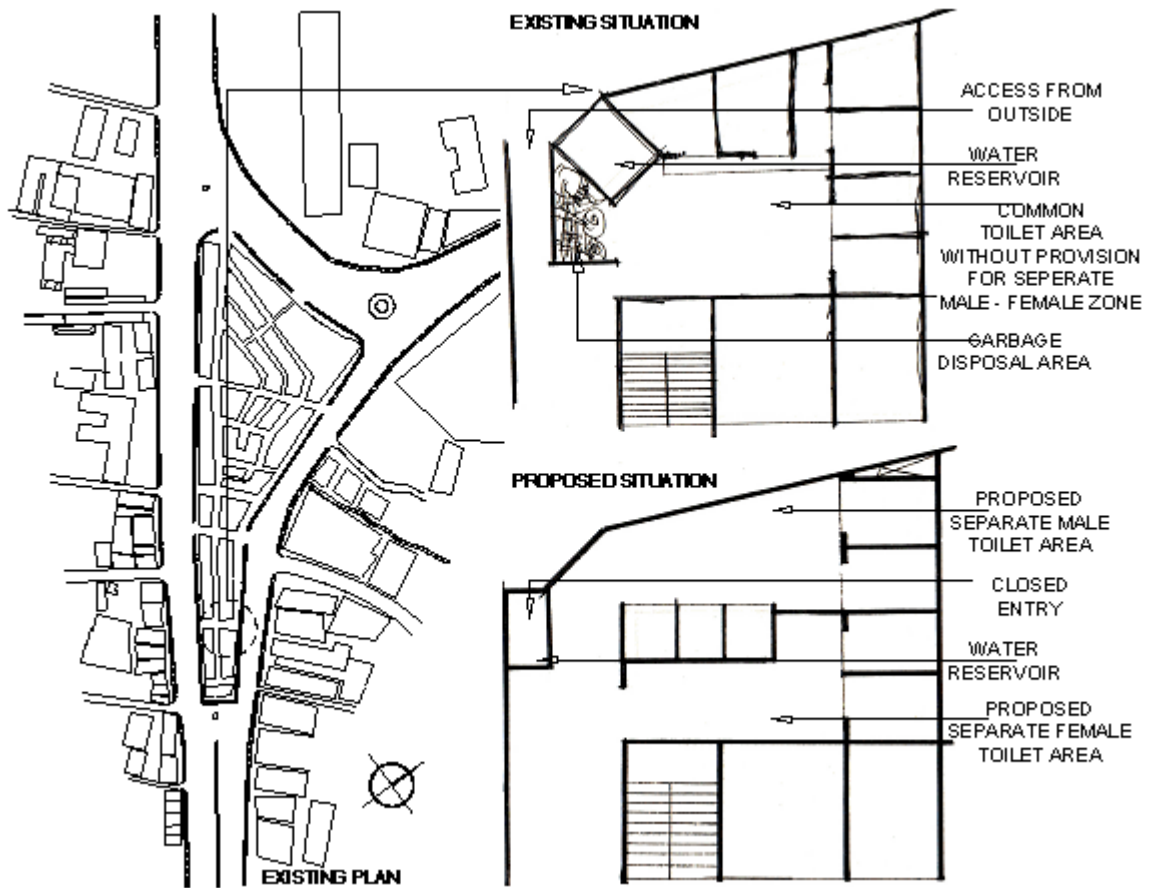


Figure 6. Existing and proposed toilet layout for Hasan Market



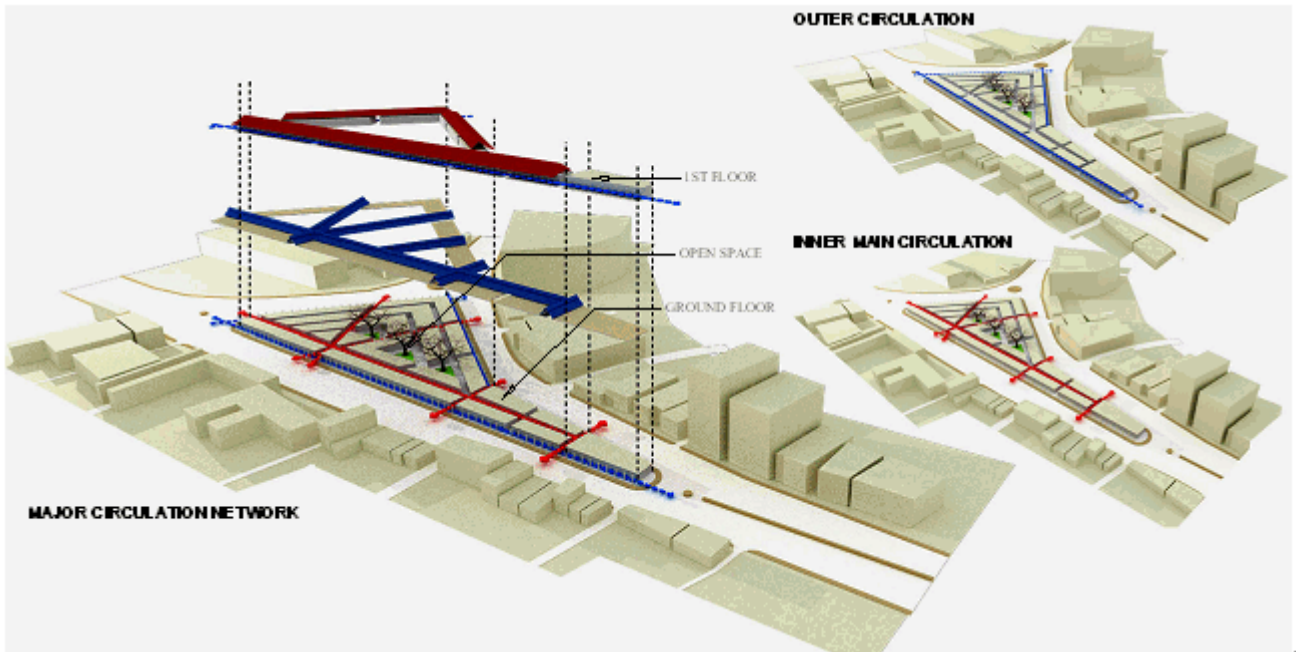
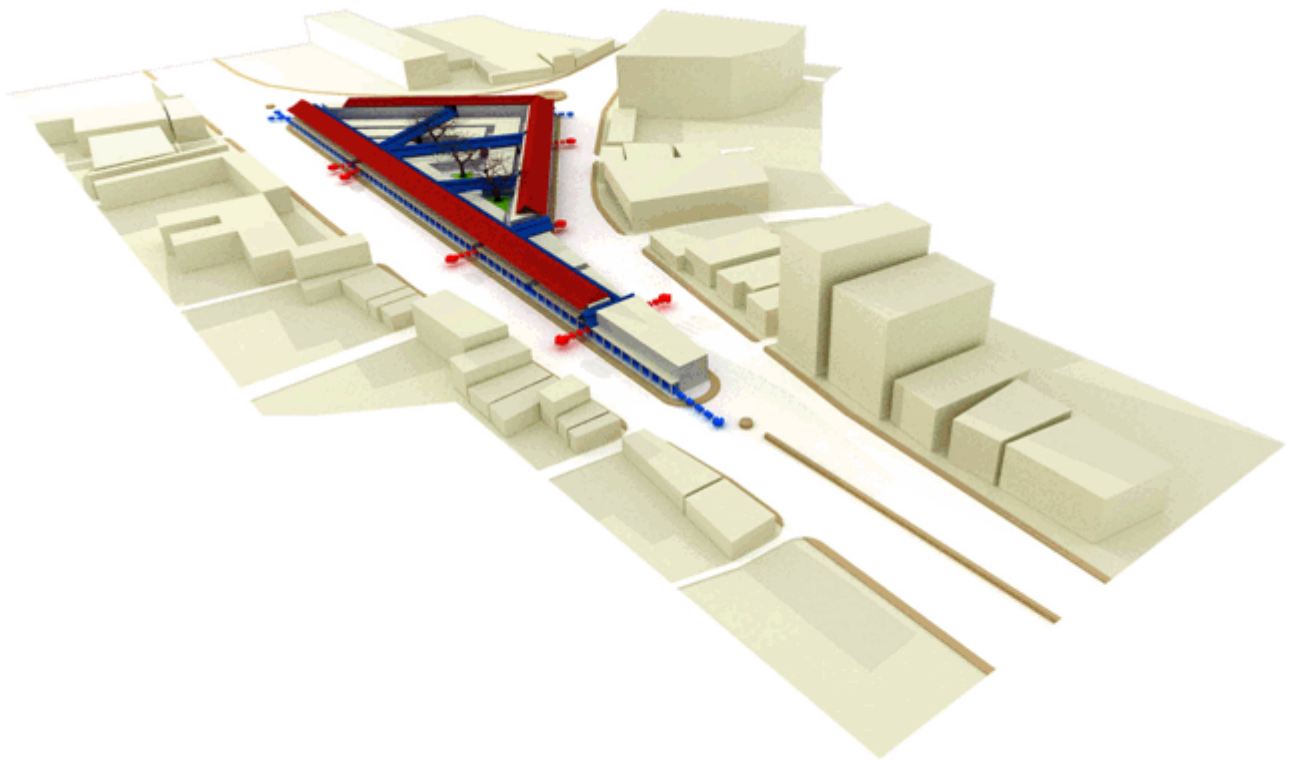


Figure 7. Proposed plan and perspective views as to circulation, open space and extension while redevelopment outline for Hasan Market



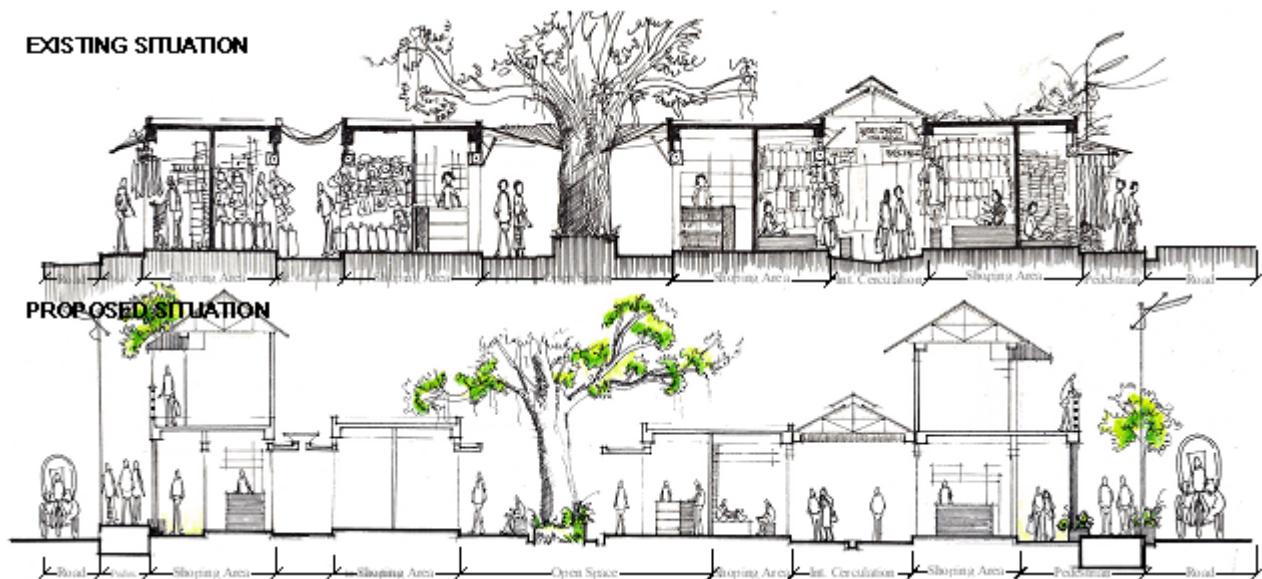


Figure 8. Existing and Proposed final perspective and sectional view of Hasan Market

6. Conclusions

Redevelopment strategy can be an important intervention to prolong the lifecycle of a shopping area. Advance towards redevelopment could be seen as a temporary consequence of the financial crisis, we believe it as a permanent trend that will become increasingly evident in the market. Many markets that were built in good locations and had a good socio-economic impact for the city now require investment to generate high revenues and both the cost and investment risk of redevelopment can be more constructive than the construction of a new centre. Today's consumers expect urban markets to deliver not only high quality but also added value. Not only demanding for a wide variety of stores, they want to be able to spend their leisure time in attractive surroundings and be entertained and inspired [13]. Moreover, urban markets are a public space at the heart of communities. This is why it is increasingly important to deliver the right combination of stores, circulation paths and entertainment within an urban market. Yet again, under the redevelopment outline, it is important to consider the context, its historical evolution process and the future growth trends. Therefore, the redevelopment process is also related to the historically constructed urban morphology and redevelopment initiative has to protect the originality along with meeting the standardized demands. Within "Hasan Market" redevelopment framework, it is also important to maintain the originality of the area which covers the present economic importance of the site, past historic value of the area as an economic hub; the image ability of Sylhet city with its cultural heritage and how it could accommodate the future growth of both population and economy. The process has to consider the character of the market and the economic importance of the area. Therefore, the proposed plans are also based on the physical importance of the area and the role they played in the 'market' morphology. In conclusion,

based on above issues, several major developments have been proposed as to circulation, open space and extension (figure 7 and figure 8) and by this revision and under this redevelopment framework, it will certainly generate better shopping environment for the city people to ensure socio-economic significance of the present "Hasan Market" itself.

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