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SOCIAL INCLUSION THROUGH HOUSING: AN EXPERIMENTAL PROPOSITION FROM A THEORETICAL PERSPECTIVE

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ABSTRACT

It is widely asserted by the 20th century housing experts that 'housing is a process, not a product'. As a process, housing has a phenomenal strength to change the behavioral pattern of a community. Here in this paper Monihar Harijan Slum (Harijan: an ethnic group of 'Dalit' or outcastes) of Jessore, Bangladesh was taken as a case to draw an experimental housing proposition from the perspective of this widely acclaimed theoretical concept. In Bangladesh, although Islam does not support caste based social discrimination still Muslim dominated mainstream society of the country is negligence to the Harijans claiming their unholy occupation (street sweepers) and uncleanness, results in the exclusion of these people from the society. The Monihar Harijan community of Jessore municipality suffers from exclusion and low-income occupation hereditary since their expulsion from Allahabad City during the British colonial era and these realities compelled them to live in inhumane conditions inside their slum. With this background, this research aimed to identify the appropriate housing proposition that can change the behavioral pattern of the community to eliminate the public claim and thus it can include the Harijans into the mainstream society. Various types of survey methods and research methods were used to determine the issues and prospects. It was found that strategic changes in the built-form pattern, a low-cost vertical extension of the built-forms, affordable sanitation infrastructure development and provision of income generation are the suitable strategies to achieve the desired goal. Finally, a housing proposition has been simulated adopting those strategies. Here, in this simulated proposition housing is seen as a society reformation tool as well as a model for the communities who share the same vulnerabilities.

1.0 INTRODUCTION

During the British colonial era Harijans, who were street sweepers in occupation by ethnicity, were expelled by the British government from different areas of Indian sub-continent to East Bengal (now Bangladesh) to fill the paucity of cleaners of the new British towns. Hereditarily Harijans were the victim of Hindu caste-based social discrimination. Although, Muslim dominated society of East Bengal had no caste discrimination, the society never accepted the Harijans and treated them as 'untouchable' since their advent [1]. Independence of Bangladesh was

established with the cognition of social equity, secularism, and economic development. However, till today people fosters negligence to the Harijans with the same manner as before.

Due to low-income occupation and social exclusion, every Harijan in the cities of Bangladesh lives in slum within his own community and belongs to a poor economic condition. Monihar Harijan slum is one of the three Harijan slums located in Jessore town. The Harijans of this slum were expelled from Allahabad city to Jessore in 1926. The municipal authority

provided the 0.5-acre land of the slum upon their advent. Over time, the population of the community tripled but the land remained the same. High population density and poor sanitation infrastructure made this slum congested and unhygienic, which resulted in inhumane living and frequent illness among the dwellers.

With this background, this research aimed to find out the appropriate housing for the Monihar Harijan community of Jessore municipality with a key target of eliminating social exclusion and poverty. There is, however, no current plan or policy on Harijan's housing neither by government bodies nor any private organization. Therefore, the implementation policies of the proposed design have been determined in a selfhelp approach. Moreover, no preceding research or implemented project into sustainable Harijan housing in Bangladesh has been found. As a first endeavor, this research aimed to produce a unique approach to self-help housing for Harijan communities, which is 're-incarnation with minimum demolition with phase-wise self-help implementation policy'. At site study, various types of survey methods such as nonparticipatory observation, unstructured interviews, and field surveys were used for collecting the primary data. Information from secondary sources was also used. Collected data was analyzed through SWOT matrix. Two major issues were found in the study- first, poverty and social exclusion due to society's negative outlook and second, the poor physical environment of the settlement. Both issues are interrelated. It was understood that a strategic improvement of the physical environment can turn the society's outlook from negative to positive as well as can contribute to alternative income generation to eliminate poverty. The whole paper describes the strategies for improvement of the existing housing so that it can contribute to eliminating poverty and social exclusion, which concludes with a self-funded implementation plan.

2.0 SITE STUDY

2.1 Socio-cultural realities:

Harijans are excluded from mainstream society; however, this social rejection strengthened their community bonding & belongingness. To the outsider, their settlement is just a warren but in reality, socially & culturally Harijans lead a very rich life of social compromise, mutual support, mutual dependence and resourcefulness within their

own community. This rich social mannerism shaped their culture & lifestyle. These greatly affected their space use pattern. They never bother about privacy and never close their doors. They use their 'front of the house' as a social meeting & sharing space. The most important thing is that they made the settlement by themselves according to their known construction technique, affordability, lifestyle & cultural need, which created a strong sense of belongingness to their architecture & settlement.

2.2 Socio-economic condition:

Social realities compelled the Harijans to belong to a specific occupation. This limited work opportunity kept them poor for decades. All of them are cleaner in occupation; besides some of them do pig rearing around the homestead and weave Nakshi Katha (ornamented blanket) for alternative income generation. They are not allowed to work in hotels-restaurants or shops. No one hires them for homestead works except cleaning of septic tanks. However, both male & female members of a family try to contribute to the family income. Their average monthly family income (avg. family member: four nos) is 5000 BDT (65 USD). The following table (table 1) shows their income data:

Table 1. Income Data

Source of Income	Cleaning	Pig rearing	Others
Income/month	4500 BDT	3000	1000
		BDT	BDT

2.3 Physical environment:

The settlement of the Harijan is located in the central business district of Jessore town, having all amenity services (e.g. hospital, markets, educational institutes, transportation stoppages) around. Along with congestion, the settlement suffers bad odour, mosquitoes & flies due to unmanaged pig rearing (i.e. uncovered wet food reservoir of the pigs inside the settlement) and unhygienic latrines. The housing units are arranged in a spontaneous & flexible pattern, which reflects their lifestyle & culture. The circulation cannot be defined as road rather it can be defined as space, which they also use for 'front of the house' activity (Figure 4). The settlement has a one-story brick building containing 15 dwelling units and 16 bamboo/CI sheet houses containing 32 dwelling units. At present 47 families with a number of 160 people are living in this settlement. The brick building was built in 1974 with a financial support from the municipal authority. Other houses are self-built & suffer from inadequate natural lighting and ventilation. There are only one tube-well & three toilets for the whole community and two temples for the religious rituals.



Fig. 1: Existing condition

3.0 PROBLEM IDENTIFICATION AND SOLUTION

The major problem is found from the observation is the habit of unclean living of the Harijans. Although the socio-cultural-economic condition is a major catalyst behind the formation of a settlement, this Harijan slum suffers mostly by habitual problem as well as knowledge deficiencies of managing unhygienic contents. After rigorous investigation, the following solutions were determined.

3.1 Renovation of built form to tackle congestion and to provide quality built environment:

It was found that they use only one conventional wooden window in each room. In the local market, this type of windows is quite expensive. To make it affordable they reduced the size into 3ft×3ft, which is inadequate for proper natural lighting & ventilation inside the rooms. In the proposed design, the bamboo bat/CI sheet facade has been cut with a regular interval & it has been transformed into several top-hung windows. A rack has been added under the roof so that the goods can be kept and thus the usable space of the room has been increased. By considering every house as 'a money maker', several components have been added. The proposal suggested a conventional pigeon-cote in front of every housing unit, hanging beneath the front roof cornice; a pig house on the back of every housing unit; and an ash gourd platform in between the housing unit & the pig-house. This ash-gourd platform will make a semi-outdoor space, which will also serve as a buffer between the housing unit & the pig-house. The ash gourd will not only make money but also keep the roof cool in the hot season and provide oxygen to

freshen the air. After some years, the Harijan may need an extension of housing units to meet up their housing need. In this case, the proposal suggested to extend the units vertically & showed an affordable way of vertical extension with the conventional low cost bamboo-wood structure. Figure 2 shows the details.



Fig. 2: Built-form Renovation

3.2 Rearrangement of the settlement to improve unhygienic environment:

As the settlement is a reflection of Harijan's unique culture and lifestyle, therefore, the proposed rearrangement neither demolished any built form nor broke the basic settlement pattern; it just suggested relocating the uncovered wet food reservoir from the front of the house to back of the house area & keep it covered. Therefore, the odor will not spread out and mosquitoes & flies will not grow. Three biogas plants have been also proposed at the peripheral area of the site, which can be operated easily with the solid waste of pig. Two zones of toilet & tube well consisting of low cost sanitary latrines have been proposed. A drainage network has been developed connecting all toilet zones. The proposal also suggested planting trees around the site area for providing fresh air. (Figure 3 & 5)



Fig 3: The proposition

3.3 Making catalyst to eliminate poverty & social exclusion:

It was found from the survey that the Harijan women often get work orders from boutique houses for weaving Nakshi Katha. There is a demand in the market for Nakshi Katha due to its ethnic artistic value. However, it is not available in local shops, as shopkeepers do not keep it in their shops prejudicing 'unclean'. Therefore, a community market has been provided in the proposed design where the Harijans will sell the Nakshi Katha and other handicraft products. The proposed community market is designed in such an architectural approach so that it can attract people to visit. While people will be ambling inside the market, they will be able to see the settlement too. It is expected that the neat and clean built-environment of the settlement may change the 'unclean' prejudice of the people and thus it may work as a catalyst to eliminate social negligence and exclusion. This concept is an 'inside-out' endeavor to eliminate society's negative outlook.

4.0 IMPLEMENTATION PLAN

Every design decision has been taken keeping in account the Harijan's known construction technique and affordability to assure the self-help capacity. There is flexibility to use materials whatever the Harijans can afford, because, with the economic improvement of the Harijans the choice of material may be changed.

4.1. Cost:

Table 2. Development Cost

	ExtensionR			enovation		
Option	Materials		Cost	Materials	Cost	
	Wall	Floor	Cost	14141011415	Cost	
01	Bamboo	Bamboo +Wood	וטטו	Bamboo	2000 BDT (26 USD)	
02	CI Sheet	Bamboo +Wood	16000 BDT (207 USD)	CI Sheet	3000 BDT (39 USD)	

4.2 Development phase:

The implementation has been planned with 5-phase development scheme requiring 15 months to be executed, which needs only an investment of 200 BDT initially!

Phase 1: First of all they will plant the seed of ash gourd on back of their house and will make a platform for that ash gourd so that the plant can climb the roof. It will cost 200 BDT. After three months this plant will give about 12-15 ash gourds, which's market price is about 1000 BDT.

Phase 2: With this 1000 BDT profit they will make a conventional wooden pigeon-cote which will cost 500 BDT. With the rest 500 BDT, they will buy 10 young pigeons. After two months they can make a profit of BDT 1500 by selling that pigeons. After more four months the profit will be 4500 BDT.

Phase 3: With this profit of 4500 BDT they will make the pig-house and buy two young pigs. After 6 months they can make a profit of 14000 BDT.

Phase 4: with this profit, they will reconstruct their housing unit, pig house & buy more young pigs for rearing.

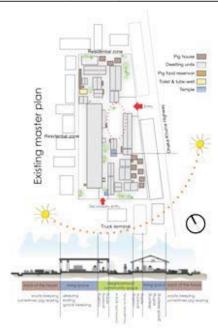


Fig 4: Existing Master Plan

5.0 CONCLUSION

Housing is a process, not a product. Housing needs to engage the multiple socio-cultural, economic, and political dynamics surrounding the livelihood of residents and the politics of place, addressing the diversity in realities and necessities of communities. Similarly, housing integrates people and makes a change in their livelihood, socio-cultural-economic state even behavioral pattern [2]. Therefore, a housing can be used as a tool to make positive changes to a community. Human makes space and objects of space which can be a dwelling, parks, roads, dustbin etc, according to their needs and demands. Through another lens, these needs and demands also can be created by existing elements. (i.e. if there is a road, the need of a car can be aroused). As an example, a newborn baby who discovers all of these elements just after his arrival on the earth, he just copes with those elements; his growth will be directed by the elements. Housing is an integration of livelihood and culture that produces its physical elements such as a house, roads, drains, public spaces as per culture and livelihood. Therefore, housing has the strength to impact on human psychology and thus it can change the livelihood, behaviors, and culture of the human. It may be a matter of argument that- is it possible to eliminate social exclusion through 'housing'? The

society of Bangladesh is liberal to respect all people despite their economic condition or occupation. Then why do the Harijan suffer from negligence? When a mainstream child goes to school, he/she is instructed by his/her parents not to touch his/her Harijan classmates. On a contrary, the parents never forbid their child to play with the child of a rickshaw puller/day laborer. Then why do they reject Harijans? Field survey and observation revealed Harijans suffer from this negligence and exclusion due to their visible unclean lifestyle, which proves the 'unclean' accusatory of the mainstream people.



Fig 4: Proposed Master Plan

As discussed, 'Housing' as a process can reshape a community's lifestyle. From first to last this research focused on the redesign of the settlement of Harijans, which will contribute to eliminating 'unclean' accusatory from the mind of mainstream people and thus gradually social exclusion and poverty will be eliminated.

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