

# The Role of Cultural Heritages on the Physical Transformation of Rural Housing

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**Abstract** It is found almost everywhere in the world that there are some taboos and beliefs related with rural settlement. There are taboos and beliefs regarding the homesteads in rural areas. Religion is one of the major factors, which guided the formations of rural houses in Bangladesh. People's religious belief and culture is reflected over the rural settlements and homestead through the transformation process of rural housing. By the transformation of rural housing certain characteristics like building materials, utilities of space and construction technologies are changed but some elements are conserved as a part of the heritage and beliefs. As transformation is a continuous process, these conservations are carried out by some vernacular way which this paper has discussed about.

**Keywords:** Housing transformation, religious beliefs, cultural heritage, vernacular architecture, rural settlement.

## 1. INTRODUCTION

Housing is defined as the total residential environment or micro district including the physical structure, all necessary services, facilities and apparatus for the total health and social well-being of the individual and family (Abrams, 1964). It is seen as the physical environment in which the family and society's basic units develop and sustain. Housing structures are enclosures in which people are housed for lodging, living accommodation or even work places.

Distinct cultural and social factors along with differences in geophysical characteristics, materials, climate and technology guided the spreading of human settlements in the South Asia region, especially in Bengal (Islam, 2003). Diversity of culture is a major issue in many societies. Ratcliff (1999) mentioned that no society is mono-ethnic, and there is clearly a multiplicity of needs, desires and aspirations to be met. Obviously, there are also diverse expectations and need regarding housing. Lawrence (1987) suggested that

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the design and use of houses reflects certain cultural and social values and ideas. Aragonés, Francescato and Garling (2002) stated that the dwelling is more than a structure full of things; its form and organization are influenced by the culture in which it develops and may be viewed to reflect the relationship between culture and environment. Because the design and use of houses reflects cultural values and ideas, people may have different housing experiences according to their cultural backgrounds (Lee, 2004). Religion is one of the major factors, which guided the formations of rural houses in Bangladesh.

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## **2. METHODOLOGY**

The following methods have been used in this study:

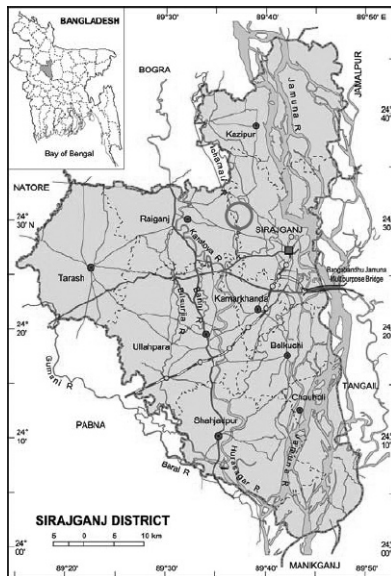
- a) Literature review: The literature reviews served the purpose of making the knowledge base about the characteristics of vernacular architecture of rural settlements. It creates a knowledge base about the present status and the physical transformations of the rural housing containing the characteristics of religious and cultural belief.
- b) Direct observation: Direct observation of the contexts was done through the two selected villages with respect to the religious and cultural characteristics of rural settlements. It helped to understand the present state of the architecture and get an overview.
- c) Sketches and photographs: The sketches and the photographs are used for documenting the use patterns of the spaces, the sequences of functional activities, and different influences those exist in the present condition of the rural settlement. It also helps to make documentation regarding the issue of cultural heritage conservation.

## **3. CONTEXT OF THE STUDY**

The context of the study is situated at the Sadar Upozila in Sirajganj District of Bangladesh. It is located 130 kilometers northwest of Dhaka. For this study two adjacent villages named Bagbati and Pipulbaria within the Sadar Upozila of Sirajganj district are taken as the context of survey. They are in approximately ten kilometer distance from the Sirajganj town. Both are old traditional village and have a good number of established inhabitants.

The economic growth of Sirajganj radically changed and increased after the building of Bangabandhu Bridge (Jamuna Bridge) over Jamuna River in the year 1998. After the building of the bridge the road networks of this

region with the capital Dhaka and the nearby districts developed which has an important role over the economy which influences the housing transformation process of this region.



**Figure 1:** Map of the Sirajganj district. Circle indicating the study area. (Source: <http://www.banglapedia.org>)

#### 4. RURAL HOUSING TRANSFORMATION IN BANGLADESH

Bangladesh has one of the lowest per capita incomes in the world. It is only Tk. 51,945 (around US\$ 633) per year (BBS, 2011). One could easily imagine what would be the per capita income of the bottom half of the population who do not own any land or other assets to generate income. They struggle very hard for more physical survival and basic human dignity. The income levels of the rural population are considerably lower. Many of the people in this category are effectively destitute or near destitute. The rural landless poor in Bangladesh are also amongst those who suffer most when floods and cyclones occur, in part due to the marginal conditions in which they live. This raises their exposure to risk, and in part due to frailty of their homes, directly related to their poverty and the common lack of land security.

Although the landless rural poor provide the bulk of the agricultural labour, they are not primarily engaged in farming activities. Taking both the women and the men together, a substantial part of their time is spent on a wide variety of non-agricultural activities such as weaving, mat making, small scale

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trading, rice husking, rearing a few goats or ducks, keeping pigeons, sewing, potting and so on. Not all the time is used productively, but in many cases it is the lack of finance – and by extension the lack of material or the tools with which to be productive – which prevent the man or woman concerned from rising out of poverty.

The poor in Bangladesh find it beyond their means a roof to protect themselves and their families especially from monsoon and winter. Most often, only housing material a poor person can afford is jutestick. Jutesticks are placed side by side to form “wall” and “roof” of a “house”. Except for providing some visual image of a hut it virtually serves no purpose in protecting the inmates from monsoon rain and winter breeze. These huts cannot withstand even the moderate onslaught of nature through storm or incessant rain. Next best thing to jutestick for a poor person is bamboo for side wall and hay or thatch for roofing. Hay and thatch are better roofing materials. They are much more expensive than jutesticks but not much durable either.

A shelter is one of the basic requirements for a person to organize his thoughts, discipline his action, stabilize his mind undertake plans and program for doing something meaningful. A person having no roof over his/her head tends to be uncertain, worried and unstable which affects his every action. For the poor house is not just a consumption item. In fact it is a vital investment in health leading to increasing in productive capacity and overall well-being of a person and her/his family. Living under leaky roofs (if one has one) in a house made of jute sticks in winter and heavy monsoon does not equip a person to meaningfully engage in any income generating activities. Housing for the poor and housing for the rich belong to two distinct categories. While one is an absolute necessity, the other is comfort and luxury. Importantly much attention and most resource have gone for luxury and comfort for the upper section of the society while the basic necessity of the bottom half of the population was totally ignored. A house for a poor person means protection from weather and disease. For most of them a house is also their work place.

## **5 RURAL SETTLEMENT PATTERNS OF BANGLADESH**

In this 21st century, the numbers of houses have been increasing rapidly with the concomitant population increase. In the past, settlements took place by the riversides, where alluvial soil was ready for the cultivation. According to Sultana (1993), there are two main types of rural settlement: elongated-linear and amorphous, both patterns of establishing settlement on raised or high land above the annual flood level. The elongated linear type is built on high land along natural levees of rivers or water channels. The amorphous

type, consisting of clustered or scattered settlements built on raised land, is often dispersed throughout the terrain. In the plains land entire towns and villages have grown over time in the amorphous pattern by raising land and such settlements are still being built. Settlements are elevated to adapt to the annual flooding, but during extreme floods even raised settlements may become flooded.

Where high land is not available, earth obtained from excavating ponds or channels is raised into a mound about 2 to 3 meters high depending on the surrounding water level, on which a homestead or *bari* is established. A *bari* often begins with an individual household and incrementally develops into a settlement of several *ghors* (dwelling units and ancillary structures) of inter-generational households belonging to an extended family. Over time more earth is added to extend the mound as the settlement gradually expands in an amorphous pattern. In many places settlements thus established on raised mounds are scattered throughout the low-lying terrain and in the rainy season virtually become islands (Ahmed, 2006).



**Photograph 1:** A typical Bangladeshi rural homestead (Source: Hasan, D.M., 1985).

Approximately for the last forty years people have been using brick in the rural areas as the building material. The use of bricks in the rural houses can be assumed as the influences from the urban areas as the durable and prestigious building material for shelters. C.I. sheets, bamboo, straw, jute sticks or *golpata* with the combination of mud are basically used for the construction of the enclosures. For the roofing, C.I. sheets and thatch are the most common in the rural areas. In some areas, clay tile roofing can be seen. In most of the areas of rural Bangladesh plinths of the rooms are constructed with rammed soil.

## 6 FACTORS EFFECTING RURAL HOUSING

In Bangladesh the rural houses are usually built with the traditional or indigenous knowledge. The houses vary from regions to regions according to the traditional

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knowledge of the local people. Hossain (2008) mentioned two factors for the diversification of the forms of rural houses. They are as followings:

1. Environmental factors (climate, soil condition, amount of rainfall, vegetation etc.)
2. Socio-economic factors (economic status, social hierarchy, availability of construction materials, religious beliefs, rituals etc.)

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In an earlier study, Islam (2003) expanded these factors affecting rural house forms into three categories. They are:

1. The differences of land characteristics, climate and available construction material;
2. The differences of cultural factors;
3. The differences of religious factors;

These diversities of house forms are described in the following discussions.

### **6.1 DIVERSITIES FOR THE DIFFERENCES OF CULTURAL AND RELIGIOUS FACTORS**

Culture is one of the most powerful factors, which is guiding the evolutionary pattern of households. Studying at the levels of human settlements, the impacts of culture in the formations of house forms can be understood. The traditional Bengali house shows the efficient use of building materials and evolutions of a house form having relationship with the limit and the possibilities set by various physical and socio-cultural factors (Hossain, 2008). In the case of the traditional Bangladeshi built environment, the user is also the designer, builder, landscape specialist, artist and craftsman. However, he or she is not the concept-giver (Haq, 1994). Among several categories, the *Chouchala Ghar* is the most common, where the others are seen very infrequently (Hossain, 2008).

It is found almost everywhere in the world that there are some taboos and beliefs related with rural settlement. There are taboos and beliefs regarding the homesteads in rural areas. 'Taboo' means reflection of activities regarding houses in rural areas which the owner does not believe but observes due to societal grounds (e.g. not to plant palm trees or tamarind trees). On the other hand, 'belief' means reflection of such activities regarding rural homesteads which the owner not only believes but also ensures in reality (e.g. in the Muslim owned homesteads the toilets are not made facing east-west; similarly, in Hindu owned homesteads in rural areas *Tulsi* and China Roses' trees are available) (Baqee, 2011).

Religion is one of the major factors, which guided the formations of rural houses in Bangladesh. Among the total population, 90% are Muslim, 7-8 % are Hindu and 2-3% are Christians, Buddhists and others. The impact of Muslim

and Hindu beliefs and lifestyles is seen most prominently in the layout and the arrangement of the built forms (Islam, 2003; Hossain, 2008). Such as,

- a. The houses of the Muslim families are more introverts in nature, because of some religious regulations. Usually the Muslims houses have some kind of special walls or partitions around the entrances for privacy. In a Muslim family, female members are more restricted within their inner areas. The situation is now changing. The Muslims women are taking parts in different types of activities outside their houses.
- b. In the Hindu religion, cow has a special status. For this reason a special attention has been given to the cows for the take care in a Hindu house. As the result the cowshed in a Hindu family looks more neat and clean than that of a Muslim house.
- c. The Hindu women are allowed to the outer court for taking care of the cows, which is uncommon in a Muslim family.
- d. The arrangement of the rooms in the Muslim houses follows strongly the cardinal directions for the easy recognition of the Kaba (the direction towards Macca that the Muslims use for their prayers) direction. The orientations of the sleeping mats, beds and toilets also follow this direction. But in the case of a Hindu family it is not necessary.
- e. In a Hindu family it is common that a place is reserved for planting holy tree '*Tulsi*'. There is also a specific place/room for the worship and for placing the images of Gods, which is unfamiliar in a Muslim family.
- f. An outhouse is an essential part of Muslim house whereas it is not so common in a Hindu family. Generally the purposes of the outhouse are solved at the '*Puja Mondop*' in a Hindu family.
- g. Some wealthy Muslim families in the rural society have two ponds. One for male and the other for female. If it is a single pond then there are two '*ghats*' prepared for male and female separately. The female *ghat* is surrounded by some kind of screenings for privacy.

## **7. REFLECTION OF CULTURAL HERITAGE IN DIFFERENT LEVELS OF RURAL HOUSING**

As discussed earlier, some characteristics from cultural religious beliefs are being conserved through the vernacular way. Characteristics that are found in the survey area are discussed in this section.

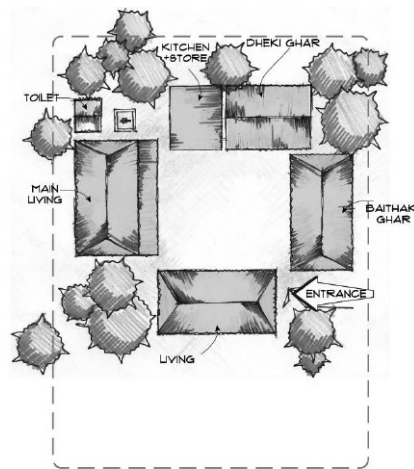
Hasan (1985) mentioned the traditional house in its basic form is a cluster of small 'shelters' or 'huts' around a central court-yard called the '*Uthan*'. The huts are usually single roomed, detached and loosely spaced around the central court.

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An extensive landscaping is done to define the house in the larger landscaping and the surrounding environment. The latrine and bath are never considered as parts of the main structures and are always kept at a distance. The combination of all the huts is called the *Bari* or the 'House'. In the traditional system, *Bari* represents the nuclear, joint or extended family while the huts represent individual households. The courtyard or 'Uthan' serves to maintain both unity and individual identity of the families in the house (Hasan, 1985). It is found in most of the cases that the houses of the homesteads of the survey area are organized with this tradition. People rarely break this tradition (see Figure 2).



**Figure 2:** Organization of a rural homestead of the survey area.

During the transformation of rural housing some homesteads having the scarcity of land and it is not possible to create two courtyards as the traditional Muslim households have. In that case at least one small internal courtyard which is used for both the cultivation process and daily households activities. Courtyard is a part and parcel of rural life and always have the tendency to preserve this heritage in their own way (see photograph 2).



**Photograph 2:** Small internal courtyard is used by the women. (Source: Author)



The houses of the Muslim families are more introverts in nature, because of some religious regulations. This is done by fencing or wall made by local building materials that are available. It is found that people considered this sort of introversion of women as a part of their culture and religious belief (see photograph 3).



**Photograph 3:** Boundary wall by local materials is used to ensure privacy for the women. (Source: Author)

Hindu women are allowed to go out house frequently. Using a common pond inside the community is a traditional feature of rural Hindu settlements. During the transformation of housing this feature is remaining unchanged for the community. Common pond which is open for bathing and other household activities (e.g. cloth washing, puja etc.) is used for some homesteads belongs to peoples with Hindu religion which is not a common feature for Muslim households (see photograph 4).



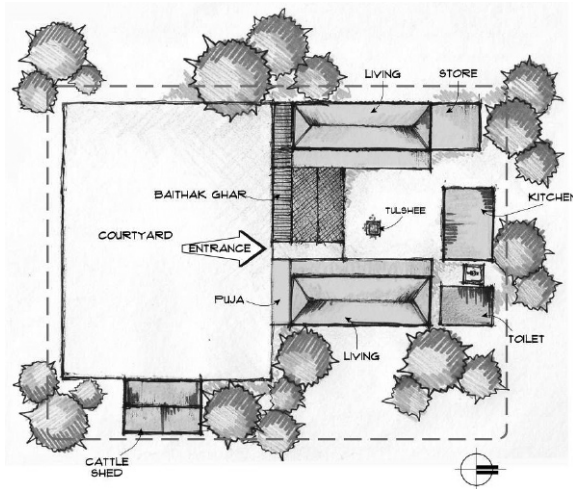
**Photograph 4:** Common pond for Hindu households. (Source: Author)

In a Hindu family it is common that a place is reserved for planting holy tree 'Tulsi'. There is also a specific room for the worship and for placing the images of gods, which is unfamiliar in a Muslim family. Generally *Puja Ghar* (room made for prayer containing idol) is located at the outside of the homestead

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(beside *baithak ghar*) and *Tulsi* is placed at the internal courtyard. These traditional features are present at the Hindu households of the survey area (see Figure 3 and Photograph 5).



**Figure 3:** Organization of a Hindu homestead containing the *Puja Ghar* and *Tushi (Tulshee)*.



**Photograph 5:** *Tulsi* inside the internal courtyard and *Puja Ghar* at the Hindu households. (Source: Author)

In Islamic culture, an *Eidgah* is an open-air mosque usually outside the city (or at the outskirts) to perform the Eid prayers. It is usually a public place. It is a large open ground for people to assemble and offer their prayers early in the morning on the Eid day. It is considered that every village has their own *Eidgah* in Bangladesh. Due to the transformation process this *Eidgah* is being developed with materials that are not vernacular but people has a tendency to conserve them with more permanent materials (see Photograph 6).



**Photograph 6:** *Eidgah* that is being conserved with more permanent materials as a rural heritage. (Source: Author)

*Chouchala Ghar* is a house with four units on four sides of a courtyard. It is not the most ancient form of house in Bangladesh, but it is not new either (Hosasin, 2008 and Islam, 2003). It is an old type of houses which can be found in most parts of the country. The yard (uthan) of this type of houses is square or semi-square in shape. It also has an outer-court which is usually east-faced. A drawing room and outer court are the essential parts of the Muslim *Chouhala* house while the Hindus usually do not use them. During the process of the housing transformation it is found that in some cases the *Chouchala* is being transferred by its construction materials. Generally Corrugated Iron sheet is the most indigenous material that is used to construct the roof of a rural house. When concrete is used as a material for roof construction people also trying to make a *Chouchala* or a part of it as a symbol of their heritage (see Photograph 7).



**Photograph 7:** Roof materials are transformed but the shape of the roof is being conserved as a rural heritage. (Source: Author)

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Construction material is a major component of housing transformation (Rashid, 2013). In vernacular architecture people always have a tendency to improve their construction material from temporary to more permanent. This scenario is found in the survey area. Chicken shed is a traditional object that most of the rural household have within (in most of the cases at the internal courtyard). During the housing transformation in the vernacular way materials might be changed but chicken shed is being considered as a heritage of rural households (see Photograph 8).

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**Photograph 8:** Chicken-shed is being conserved as a heritage of rural household. (Source: Author)

There are so many features of rural heritage that are being considered as a subject of conservation during the housing transformation process. Such as, *Dheki* (locally made rice husking machine) functionally which is not a necessity for the rural people and already being replaced by power-generated machine but still people put them inside their house as a heritage of their living. *Gola* (rice storage) is a similar object which people conserves as a heritage (see Photograph 9).



**Photograph 9:** Dheki and Gola are still present in the rural households which are considered as rural heritages. (Source: Author)

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## 8. CONCLUSION

The rural houses are usually built with the traditional or indigenous knowledge in Bangladesh. The houses vary according to the traditional knowledge of the local people. Climate, culture and religion are the key factors that affect the rural housing widely. Due to many factors the transformation of housing is an unavoidable process for human living. Some heritages that are being carried out from the ancestry are considered as a part of the life of rural people. They think them as their culture and as their heritage. They feel these heritages for their living. Though there is no master plan or experts' direction to keep them with their livelihood rural people conserve them though their own way, the vernacular way.

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