ETHNIC HOUSING PATTERN TO COPE WITH THE ENVIRONMENT IN THE CHITTAGONG HILL TRACTS

Z Islam, UNDP-DPHE, Bangladesh N Akter, M Z Hossain & N Akter, OSDAA-Bangladesh

Background

Chittagong Hill Tracts (CHT) is a renowned land of indigenous culture in Bangladesh, which enriches the cultural diversity of the country. It is the native land of 20 different ethnic groups. This land also owns natural diversity consisting of hills, forest, wildlife, surface water bodies, etc. Housing is an important component in the culture of CHT ethnic groups. Uniqueness belongs to the housing pattern of this area in Bangladesh context. The housing pattern is different from that of 'mainstream' (Bengali) culture in terms of design, architecture, technology, tools and materials, aesthetics, adaptive value, placing, usage, sustainability, etc. As other components of the culture CHT ethnic people traditionally foster this housing pattern for centuries. House or habitation is the 'core' element in ethnic society. It maintains the relation between two borders of culture and nature, plays significant role in knitting the whole ground of the culture. CHT ethnic groups have to base on houses to act on nature. House is the 'labour space' of CHT ethnic culture. Through living in a house members of the ethnic community adapt to nature and cope with inimical environment. To understand the adaptation and coping strategies of CHT ethnic people, the housing pattern has to be studied. The paper attempts to focus on three issuesfinding out the pattern of ethnic housing; assessing the relation between housing pattern and ecological system; analysing resistance capacity and adaptive value of ethnic houses in hazards, disaster and other inimical situations.

Methodology

The paper is a result of an anthropological study that was conducted from January - September 2000 among nine small and big ethnic groups of CHT, the natives of Ruma *mouza* under Bandarban district. These groups are - Marma, Murang, Bowm/Lusai, Tongchoinga, , Tripura, Kheang, Khumi, Chakma. The method of this study was participant observation. Some other anthropological techniques were supplemented, these are semi-structured interview, holistic and emic approach.

Socio-Cultural Aspects of Study Population

During the 16th century the ancestors of CHT ethnic groups, firstly settled their residence in this area [Hossain, 1993]. Some anthropologists indicated them as the 'Mongoloid' people [Resely, 1891]. Their social structure is patriarchy and patrilineal, although women play major role in household and economy. They believe that supernatural power creates them. Diversified religious customs exist in their community. Most of them are worshipers and animist. "They worship the terrene elements and have vague and undefined ideas of some divine power which over shadows all" [Lewin, 1869]. Some are Buddhists. Recently a few of the ethnic people have converted to Christianity. Jhum (cultivation of slash and burn) is the main subsistence system of their society. Interpersonal relations, social institutions and customs e.g. marriage, gender, family, clan, etc. have been developed on the basis of kinship and lineage system. Para (hamlet) is intermediary administrative unit that consists of 10-50 households and led by a chief named Karbari. It maintains relation among individuals, families and institutes of the state.

In revenue system para is under the mouza which is controlled by a Headman. All Headmans are controlled by the circle chief named Raja (the Chiefdom). Karbari, Headman and Raja are hereditary appointed posts. Every single group possesses an individual mother tongue, resources of arts, literature but these are in verbal and folk forms.

Worldview, Rituals and Housings

Ethnic people of study area view their world through the beliefs on supernatural beings e.g. deb, debi, debota (deities). This study identified some deities, which control everything of their life including household and householdbased activities. In fact, these deities had roles in constructing houses in prehistoric age. Till now these beings are active with their household life. Existing pattern of their houses was firstly introduced by these deities, which are mentioned in their text. They relate all things of their life with the divine. The profane life of ethnic people is in two worlds- Para and deep hill -forests. Para is their residence that consists of houses. Divine beings create these worlds. House is the 'core' of para centric world. This study also identified some deities who stay in para and are responsible protecting the para or houses from attack of evil beings. These deities are - chumunglay, basumoti, pathian, paithem, turai, patyen, surapar, nadag, etc.

"Rituals is the means through which persons relate to the sacred; it is religion in action" [Haviland, 2000]. In all groups of the study area certain individuals are specially involved and active at dealing with the above mentioned deities and spirits through ritual activities. This study identified some rituals in the study area. Majority of these rituals are either exercised in houses or household oriented. One of the objectives of exercising these rituals is to activate above spirits or deities in protecting households from attack by wildlife, calamities or hazards. Some of these rituals are mentioned as follows-

- Chumunglay Puja (pre marital rites for receiving new couple in the house);
- Cha-pui chollai, nowhri (practiced in household or para);
- Oreng puja, Champua, khowjing puja;
- Nadag puja.

We observed the usage to totems (animal or plant apical ancestor of a clan). Ethnic people demonstrate totems in their house. We tried to trace the objectives of practicing totems. It has two objectives, firstly to express their clan identity, and secondly to protect them and their houses from evil beings.

Land System

In whole CHT area land consists of forest, uneven hills and water bodiesjhiri, fountain, canal, etc. Ethnic people use the land for jhum cultivation, house
settlement, gardening, etc. Bangladesh government owns the land of this area.
The chief of Bomang circle Raja is responsible for collecting land revenue on
behalf of the state through Headman and Karbari. Every couple is entitled to
use 2-4 acres for jhum cultivation and has to pay 5 Taka as jhum kar (revenue).

Structure of Houses

Due to kinbased society ethnic people follow lineage system in knitting family and constructing habitation. We found that the members of one or two individual clans settle every *para*. Clan indicates the unilineal descent group based on stipulated descent [Kottak, 2000].

Their houses are internalized in the *para*. One *para* consists of 10-50 households or families. There are two types of families in the study area- nuclear family (consisting of parents and children) and extended family (including three or more generations).

Ethnic people like to knit a *para* at the hilltop in deep forest and adjacent area of water bodies. Knitting a *para* in hilltop of forest is supported by their texts (divinities). This type of *para* is characterized as agglomerated habitation [Baqee, 1998], which is shown in Fig.1.

Every family generally owns one house, which is constructed on posts of wood or bamboo. Platform of the house is generally made at about 5-15 feet height from the ground (please see Fig. 2), where the floor of the house is built. Locally these houses are renowned as *machang ghor* or *tong ghor*.

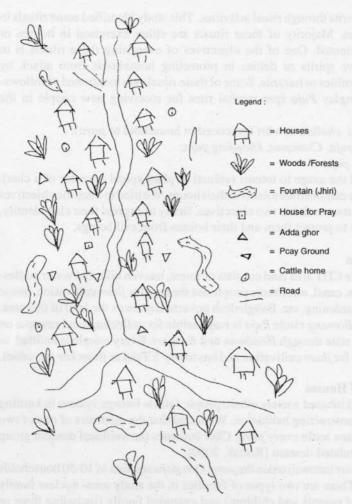


Figure 1: Social mapping of para

This pattern of houses is used by the CHT ethnic people for centuries and had been in harmony with their ecology. One house is divided into two major parts - balcony and inner portion. As per utility inner portion is divided into several rooms that also vary from community to community, which is shown in Fig.2.. These figures show every ethnic house consists of average 10 rooms. Each room is utilized for a specific purpose.

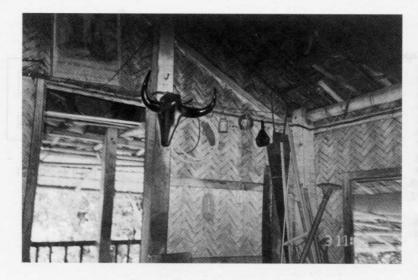


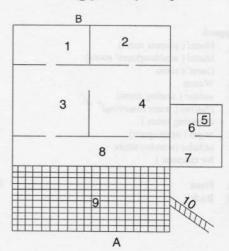
Figure 2: An ethnic house

Various Designs of Ethnic Housing [Hanafi, 1993]

Legend: 1. uingdong (parents room) 2. uingdong (children's room) 3. tongthach(store) 4. flauing (guest's room) 5. chuphu (oven) 6. thamakhauing (kitchen) razar (water reserving room) 8. prahjang (seating room) 9. tamang (open balcony) 10. hragrah (wooden stairs for entrance) Front A.

B.

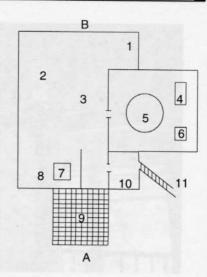
Back



Mrhang uing (Marma Machcang Ghor)

Legend:

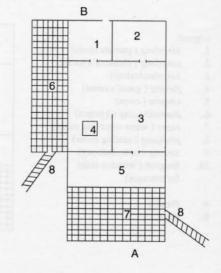
- 1. tuicrak (Space for preserving water)
- 2. space for old people sleeping
- 3. kimtok (Space for guests)
- 4. Kimsa (Room for husband and wife)
- 5. chapam (Granary)
- 6. taping (kitchen)
- 7. taping chikkoa (big furnace)
- 8. tagla (sleeping space of young girls)
- 9. jar (open space)
- 10. space for keeping shoes
- 11. Wooden stairs for entrance.
- A. Front
- B. Back



Kim (Murang Machang Ghor)

Legend:

- 1. khatal (parents room)
- 2. khatal (son/daughters' room)
- 3. Guest's room
- 4. Woven
- 5. naksar (seating room)
- chacroi (water reserving/ cleansing room)
- 7. nugui (open space)
- 8. akhului (wooden stairs for entrance)
- A. Front
- B. Back



Nogkucuk (Tripura Machang Ghor)

Ethnic people construct some other houses, which are- in *jhum* land, *adda ghor* (rendezvous house). House for keeping dead body for practicing rites of separation.

Housing Technology

Technology "...is the realm of culture that most importantly defines the conditions to which individuals and social units adapt. Technologies link individuals and social units to the physical environment, and individuals and social units are linked to technologies through the activities... These activities constitute the functional niches of a technological system...." [Handwerker 1981]. In the research area house related technology was found as 'traditional' systems which exist from generation to generation through verbal and practical transmission. The house related technology includes 3 major aspects - knowledge, technicians, and elements-tools. It is a 'science' of their community.

As other subjects of the culture ethnic people acquire knowledge on house building from the social institutions. They believe that many years ago the progenitors of their society took shelter in the hilltop in deep forest. They learn from this belief on how to build houses. There is no professional group for constructing houses. They build their houses themselves. Various kinds of choppers are the main tool for constructing houses. Excepting chopper they use spade for digging, axe and hammer, etc. As elements of the houses ethnic people use following raw materials which are available in locality-

- Wood and bamboo for making platform and posts;
- Leaves of bamboo, a kind of tall grass and reed for roofing and thatching;
- Cane and rattan for binding.

Aesthetics

Aesthetics is one of the specializations of ethnic houses. It refers "appreciation of the qualities perceived in works of arts; the mind and emotion in relation to a sense of beauty" [Kottak, 2000]. On the basis of the viewpoint of beauty we observed the aesthetical aspects of houses from three different angles, which are described as follows-

- Combination of elements: The study found that several elements of houses in different points are framed with each other in the rhythmic form. Like posts, platform, roofing, hedge are made with elements, where there is no mal-adjustment in the combination of them. Externally these look good.
- Artistic works in wood and bamboo: Ethnic people sketch and cut the figures of birds, domestic animals, wildlife, flowers, trees, fountains, hills, etc. in the front side of houses, specially on windows or door frames

and hedges of houses.

Demonstrating beautiful things: To make houses beautiful dwellers
demonstrate deferent types of apical of animal, trees and flowers with
houses. After hunting they process apical with head, horn and skin of
wildlife e.g. tiger, dog, cow, snake, etc. Expressing the clan identity of
house dwellers is another objective of demonstrating apical.

Usage of House

It was mentioned earlier that the profane world of ethnic people is in twolife types- firstly *para* centric inner life and secondly hill/forest oriented outer life. In inner life almost all daily activities are performed within the area of houses. House is used by its dwellers in ethnic community for various purposes. During the whole period of the life of a person the house is widely used. The study identified some issues for which house area used - resting, sleeping, enjoying conjugal life, guest entertainment, seating, cooking, preserving water, storing logistics, cleansing, perambulation, crops processing, husking, child caring, storing fuel wood, nursing the patients and treatments.

The house is important as a post-marital residence. In CHT ethnic community two types of post marital residence are existing- uxorilocality (residence with wife's relatives after marriage) and virilocality (residence with husband's relatives). First type's practice is minor and temporary.

Adaptive Value

Adaptation indicates that process by which organisms cope with environmental stresses. The study tried to understand how ethnic people cope with or adapt to the environment that is made of hills, trees, natural calamities, wildlife, etc. through this pattern of houses. For centuries they lived in *machang ghor*. It was one of the research questions "are the houses able to protect the dwellers from any kinds of hazards?" Basically houses are the only shelter and ecological niche in their community. Due to the natural condition ethnic people have to maintain close and balancing relation with the environment for survival, development and continuing total life system including houses and settlement.

In CHT locality ecosystem is developed with balancing relation between natural elements (hills, plants, forests, wildlife, fountain, rivers, etc.) and cultural traits. Housing settlement is one of the parts of the ecosystem. The settlement and existing ecosystems are not threatening to each other. Ethnic people have their own indigenous technologies to build the houses within the given environment. They use locally available natural resources as raw materials for housing. They do not damage nature in collecting and utilizing raw

materials. Their lineage and kin-based habitation and housing are favourable for their subsistence system *jhum* (modes of production). The collected data show that the ethnic houses have resistance capacity to protect the dwellers from any hazards and natural disasters (like - storms, floods, attack of wild animals, firing, etc.) and have adaptive value to face any inimical situation. (like - ethnic people use bamboo leaves for roofing because bamboo leaves do not catch fire easily). In fact this pattern of housing and habitations have adaptive value for survival and development of ethnic groups within a certain environment and ecological niche.

We questioned some ethnic people "why the floor of their houses are built on pillar of bamboo or wood"? It is their traditional practice. They answered that the *machang* is helpful to protect them from attack of wildlife and snakes. They pointed out how *machang ghor* is suitable for coping with the environment and natural hazards as follows-

- Protecting from cold, hot, storm and rain;
- Protecting from attack of wildlife;
- Providing satisfaction and enjoying family life.

Conclusions

In Bangladesh context as a developing country, CHT ethnic house is one of the major cultural resources, which is in endangered situation. Its entity ensures the cultural diversity and heritage in the country. Not only that from the viewpoint of sustainable development, a significant question is raised-

"Why this pattern of houses is used by the ethnic people for centuries". An answer has come in response to this question- "This house contains the quality of sustainability". For this reason ethnic people don't reject this house.

As a representation of diversity of culture the ethnic housing pattern of CHT should be widely studied which could be inputs in the plans for sustainable and environment friendly housing in the millenium.

References

Baqee, A, 1998, Grameen Bashati, Banga Prokashoni, Dhaka.

Hanafi, Jafar Ahmad, 1993, *Upajatio Nandan Sangscriti*, Bagladesh Shilpakala Academy, Dhaka.

Handwerker, WP, 1981, Reproductive Choices and Behavior, in Medical Anthropology Vol. 5, No. 3, Redgrave Publishing Company, N.Y.

Haviland William, A, 2000, Anthropology, Harcourt College Publishers, London.

Hossain, Ferdous, 1993, Parbortya Chattagramer Proshasan Byebostha: Oitihasik Potobhumi O Bartaman Parjay, in Bangladesher Upajato O Adibashi: Ongshidaritwer Notun Digonta, Bandarban, Bangladesh.

Kottak, Conrad Phillip, 2000, Anthropology: The Exploration of Human Diversity, The McGrow- Hill, New York.

Lewin, Captain, TH, 1869, The Hill Tracts of Chittagong and the Dwellers therein, Calcutta.

Risely, Sir HH, 1891, Tribes and Casts of Bengal, Calcutta.