

RURAL HOUSING INITIATIVES BY DEVELOPMENT AGENCIES IN BANGLADESH: MILES TO GO

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Introduction

It is frequently heard that "Bangladesh is nothing but an amalgamation of 68,000 villages". However, despite major allocations for rural development in national planning and policy making, the actual implications of this statement is rarely understood. People in rural areas are often relatively more deprived than in cities, and are vulnerable to poverty, natural calamities and social insecurity. To improve their housing conditions, the primary task is to reduce their vulnerability. Throughout the world, millions of helpless people are living at vulnerable locations in great insecurity. From 'The New Internationalist' it is found that

... the number of the world's poorest rural people who are forced to live where the environment causes insecurity because of soil erosion, the threat of landslip or flooding and other environmental hazards ... is about 371 million."

(New Internationalist 1996)

This figure is about 6 years old and certainly the number is increasing alarmingly. Rural communities have evolved their own coping mechanisms to resist these natural disasters, but also they are often unable to protect themselves from the wrath of nature, which on the other hand is very close to them. This paper discusses organisational initiatives for resettlement of rural communities that have lost their houses due to various natural calamities like river erosion, flood, cyclone, etc. in response to the theme of this year's Housing & Hazards conference, i.e. 'Village infrastructure to cope with the environment',

The Present Conventional Scenario

The Government, international organisations and NGOs have been working for quite a while now 'to give' shelter to the victims of natural disaster. This has so far been the approach to solve the problem quickly and efficiently (but also superficially), relating to propaganda of such organisations. Several NGOs offer housing loans to the rural poor in Bangladesh. The National Housing Trust (NHT) of the government has recently begun working on collaborative projects

with some NGOs to provide housing on credit. This is certainly a worthy initiative and these efforts have to be commended for some of their achievements. However, on initial observation of some of these projects, it appears that community or household participation appears lacking or very minimal, and a paternalistic attitude seems to prevail among related policy makers and staff. There is hardly any recognition in these quarters that low-income communities have a reservoir of locally relevant resources that might contribute to the house building process. The entire process including beneficiary selection, site location, choice of materials and house construction is decided at the bureaucratic level and people using the house and loan are excluded from this process. It frequently happens that they are not happy with the house they are living in, they do not like the surroundings and are even mistrustful of the house cost they are required to repay. It is indeed alarming that the government has already invested large sums of money on these projects and is planning a very extensive programme based along the lines of present projects. The authors visited a number of projects and met several NGO staff members and beneficiaries, the primary basis of the paper.

Purpose of the Study

The study of housing conditions created by various agencies should be viewed as the beginning of a development process situated within a framework of a larger institutional initiative. It will help to establish the need for,

- independent evaluation
- public discussion
- review and analysis
- alternative ways of working with people

The purpose of this study is to introduce a way forward from this present stagnation in plans and actions for rural housing settlements. Both NGOs and government organisations have demonstrated good intentions of helping the landless rural community. However, so far the translation of these intentions reflect self-advertisement and propaganda, clearly apparent from their imposing methods such as compelling people to live in pre-determined model houses and thus providing a superficial quick-fix to very deep-rooted problems. It appears unknown that both the housing process and the house product itself are important issues for improving or creating a good housing condition; prevalent emphasis is only on the product. Successful examples of low-income settlement schemes are found elsewhere, including neighbouring South Asian countries, where situations are similar to Bangladesh. Incremental housing development, self-selection processes and working with the community are some of the approaches that have proven effective, albeit with regard to context. These ways

have been implemented and evaluated, then improved upon to move further. Development agencies in Bangladesh need to step forward to improve their housing support process by improving their mind-set, ideas and formulas for development with quick-and-easy solutions such as building row houses with army and navy personnel, imposing model houses and stigmatising these new rural communities from improving their lot further. It should be remembered that a house is principally a means to improve living conditions, not an end in itself.

Proshika Palli : a Case Study

The National Housing Trust (NHT) of the Bangladesh government has developed a financing network with several NGOs to deliver housing programs to homeless people, especially to victims of natural disasters. Proshika, one of the well-established local NGOs is a part of this network. Proshika was established in 1988 with the purpose of working in different fields of community development. Under its housing program Proshika has built 30,506 houses for low-income people. They have established 37 resettlement villages, named "Proshika Palli"s for river erosion victims, at 23 locations in 15 districts. Total number of houses built in these resettlement villages is 1370. However, this large intervention must be evaluated in terms of its impact and contribution, not only in terms of the number of houses built. The authors visited Proshika Pallis in Bashail and Diabari in Manikgonj district and also a site at Teota in the same district where a new settlement is planned to be built. This study is based on field investigations, meetings and interviews with Proshika and other NGO staff members, villagers and project beneficiaries. Comparisons are also drawn with other planned and unplanned settlements visited in the course of this study.

The Process now

Beneficiary selection

Proshika Pallis are established for riverbank erosion victims. Beneficiaries are supposed to be selected from existing Proshika members. However, this is not always followed and people not involved with the organisation are selected in many cases. There is anecdotal evidence that beneficiaries are selected after building houses and then compelled to become organisation members. The common selection criterion was that beneficiaries were at a vulnerable state, living on erosion-prone riverbanks. They had lost not only their houses but also their belongings, hence their economic base was destroyed. Many families lived in makeshift plastic huts or under the open sky. Proshika has been able to reach these poorest (or most helpless) people of this society. They were landless, homeless, hazard-stricken and distressed people. It would have been difficult for them, perhaps impossible for many, to resettle themselves. It was

also possible that the loss of agricultural land, their source of production, would have led them to migrate to urban centres and live as squatters. Thus, by settling them in re-settlement villages Proshika is reducing such possibilities of rural-urban migration. Compared to other organisations such as BRAC who help only existing landowners to improve their houses, Proshika can claim some success in this regard.

Site selection & location

If available, Proshika tries to settle their "*pallis*" on government owned (*khaas*) land. The Assistant Commissioner of Land allots land on the basis of applications or acquires new land if necessary. Otherwise they look for suitable land and buy it for the beneficiary group. In most cases, it becomes necessary to develop 'uninhabitable' sites. Road connections into settlements are usually incorporated later.

● *Land Value*

In Diabari, the site is by the main road and Proshika staff claim that land price is high. Surprisingly, knowing this, in nearby Teota a large plot of agricultural land (paddy field) has already been bought for establishing a re-settlement village. Since good price was offered, the landowner was tempted to sell his agricultural land. Here arises the problem with repayment of such expensive land. Eventually the extra cost of land is transferred to the loan to be repaid by beneficiaries.

● *Preparation of land*

Before establishing a settlement it is essential to prepare the land. When land is raised for this purpose by bringing soil from another place, it should be left to settle properly for a certain period (6 months - 1 year). The soil must settle first before structures are built on it. Otherwise the soil settles and the house sinks gradually. This problem prevails seriously in the case of Diabari Proshika Palli. The soil is still settling and inhabitants need to regularly raise house plinths and repair them. Sufficient time and care is not given to site-preparation, causing a problem to the residents (Fig. 1).

● *Existing resources*

Trees, pond, roads etc. are the valuable resources of a site and the aim should be to make the best use of these resources. In the Bashail project it was found that the existing resources of the site, which was an orchard originally, were ignored and destroyed. All the trees of the site were cut down to build houses. Such an insensitive approach towards site planning cannot be encouraged (Fig. 2).



Figure 1 : Steepness of pond, Narrow streets deteriorating by washing away, in rainy season, The unsettled land causing sinking of plinths Proshika Palli in Diabari, Manikgonj.



Figure : 2 The 'orchard' site was cleared and trees were cut to create the new resettlement village. Background showing the existing trees outside the site. Proshika Palli in Bashail, Manikgonj.



**Figure 3 : The narrow strees in rainy season becomes muddy.
Proshika Palli in Bashail, Manikgonj**

Proshika Palli in Bashail, Manikgonj.

● *Employment opportunity*

The background of the beneficiaries shows that they used to depend mainly upon agricultural land and rivers for their main sources of income. Most of them were farmers or fisherfolk by profession. When resettled in a new place, they suddenly found themselves jobless. In terms of proximity to employment opportunities, none of the sites visited is very ideally situated. Again, prosperity of these settlements depends on residents having a wide range of economic opportunities. Proshika, although promising various economic programs to help residents build strong local economies, eventually did not follow that through. According to expert opinion, 'It has been established that monthly payments to repay the loan by a household should be between 15% to 20% of its monthly family income' (Anzorena 1997). Due to the lack of employment opportunity and the lack of income-generating activities, beneficiaries of Proshika Palli are getting compelled to repay a big amount of loan which hardly matches their income.

● **Physical planning :**

Very few policy guidelines are there for physical planning of these settlements. It seems true that 'inappropriate personnel without relevant experience' (Ahmed 1999) usually plan these settlement villages. The framework of ideas behind these housing schemes does not take into account the actual users. The entire process is decided at the bureaucratic level and people availing themselves of the housing loan are excluded from this process and thus, they are compelled to live in an alien environment that is imposed upon them. Several other studies of completed projects (Bhatt 1986) have identified the following problems that are inherent in such a design approach:

1. The bias of economics in planning typically discounts the social aspects of design.
2. During project planning incorrect assumptions are made concerning family size and income and plot sizes.
3. Projects lack variety of plot sizes to cater to diverse needs of different households.
4. Projects do not attempt to provide multi-family plots.
5. They follow a blind plot allocation process.
6. Projects lack quality and variety of open spaces.

The spatial needs of low-income household are not uniform, but vary considerably from one household to another. These variations depend on several factors such as: the size and structure of the family; occupations; if the family engages in some economic activity at home or not; whether they maintain animals at home or not and so on (Pandya 1988). While visiting "Proshika Pallis" the authors found that very little attention is paid to these factors. An average family size of five members is assumed (which is obviously not correct in many cases) and a pre-designed housing unit is thus inappropriate. Plots of same size (each 2 to 4 decimals) are allotted to beneficiaries and the allocation process does not allow the users to select the location or size of their plot. Without being responsive to the social, religious and family needs of its occupants, such housing schemes cannot be successful. Similar assertion have been made by Bhatt *et al* (1990),

For any housing design approach to be successful it is essential that it goes beyond mere economic factors, considers social and cultural aspects, and responds to the lifestyle of the people who will live in it.

Being responsive to these aspects involves by assuring users' involvement with the whole process of physical planning. They will select their own plot and determine its size according to their family size and affordability, construct own houses and decide what the materials would be and thus make such expensive projects successful. Users' participation in all steps of planning is very essential.

● **House placement on the site:**

Simply sub-dividing land and then building houses, as generally practised, is not adequate in planning low-income settlements. "The arrangement of houses on the site is another matter that requires competent physical planning and design skills" (Ahmed 1999). Planned settlements visited by the authors, like the Proshika Palli, including the Asrayon Prokalpa and Adarsha Gram (the government's resettlement villages for the landless) and cluster villages of Grameen Bank also have serious shortcomings in this regard.

Proshika usually arranges the houses in rows around a pond, which is dug to collect soil for the preparation of land, raising plinth, etc. In Diabari, where 44 families are rehabilitated, the pond is too deep and since a comfortable slope is not maintained, the pond may prove hazardous. (Fig. 1) Least attention is paid to the orientation of the houses. All the houses of Bashail Proshika Palli are orientated along the east-west direction and therefore fail to benefit from the prevailing southern breeze. The narrow lane between two rows of houses is rather tight and causes various problems of privacy and movement becomes very difficult in the rainy season. (Fig. 1,3) On the other hand, though different from Proshika, yet not very inspiring, is the planning approach found in Asrayon Prokalpo. Same regimental barrack type planning is practised there.

● **Plot size**

The most critical aspect of these Proshika villages is the inadequate size of homestead land. Each beneficiary has only about 3 decimals of land, inclusive of 1.5 decimals of pond area. No doubt, the place is too inadequate for maintaining a reasonable degree of privacy. There are direct and indirect effects of inadequate land. The direct effects are that it provides no space for vegetation, domestic animals, household activities (e.g. crop drying), socialisation and playing etc. There is also no scope for future extension. The indirect effects are lack of identity and privacy. Such inadequate land creates plot-minded or territorial mentality. Comparatively in Adarsha Gram and Asrayon Prokalpo, beneficiaries are more satisfied having 8 decimals of homestead land with a better environment there, in spite of poor physical planning principles. The allotted land allows for a frontyard and backyard in each house, where additional ancillary buildings or extensions can be built. Most beneficiaries have carried out substantial additions and extensions because of the availability of space. It can be expected that these projects would perform well over the long term as Ahmed (1999), suggested:

...if provided with the right amount of space and other necessary facilities, low income communities are able to maximise the potential of a site, incrementally transforming it to suit their needs

Authenticity of this remark is found during the visit in Adarsha Gram project at Boultohi in Gopalganj district that was established 15 years ago. A somewhat strong community feeling is sensed there and the rigidity of planned settlements, like Proshika Palli and Asrayon Prokalpa, is merely seen. However the question is, though adequate homestead land is an advantage for households, is it sufficient to obviate other drawbacks of planning? One should not negate the necessity of careful physical planning and user participation in the housing process.

● **Kitchens: tradition and demand**

In Bangladesh, kitchens are traditionally built in the yards and a distance is maintained from the main house to keep away smell, heat and smoke. The lifestyle of rural people, the way they cook and the stoves they generally use lead them to this type of planning. It was found that most of these factors are totally ignored in the Proshika settlements. Kitchens are built attached to the house and present great problems to residents. The smoke from the kitchens blowing into the houses is a constant source of discomfort. Therefore, most households have added a separate kitchen and use the attached kitchens for other functions such as a storeroom or extra bedroom. (Fig. 4) The already small individual plots and consequently the whole site is thus getting more congested. On the other hand, in the Adarsha Grams and Asrayon projects there is sufficient land for beneficiaries to utilise for their needs in a way they choose.

● **Water and sanitation**

Basic infrastructural services such as water and sanitation are basic requirements for making a settlement habitable. In a planned settlement, it is quite possible to cater to these requirements during planning. Still, "water supply in planned settlements presents a fundamental problem" (Ahmed 1999) and is also the same for sanitation and the absence of proper planning aggravates this.

In the Proshika villages, tubewells are installed usually in the ratio of 20 households to one tubewell. In Diabari, two tubewells serve 44 families in the settlement and similarly 59 families of Bashail Proshika Palli are being served by only three tubewells. ~~Reserve of the need for sprinkling tubewells are placed~~ outside, with no particular household responsible for vigilance and maintenance.

Two aspects are important in this regard to make these water sources more workable: number and location of the tube-wells. It was found that the number of tubewells was inadequate in these settlements. To have fewer than 20 households sharing the tube-well, where it would be shared with a small group of neighbours, might prove more workable. A group might consist of 10 households or less. In the Asrayon Prokalpa, 10 families share one tubewell and this presents a somewhat better situation. Moreover, an appropriate location of the tube-well

might reduce some of the problems as suggested by Bhatt *et al*(1984), "An ideal location for a stand-pipe (i.e. tube-well) is within a square in a cluster of few houses. The washing related functions blend well with other activities of the square."

No definite thought is reflected in the placement of tube-wells in Proshika settlements. They are located randomly at any available corner or by the road. For some families, the water source is at an inconvenient distance. The potential of a shared tube-well to develop as a square or community space is unrealised. Sanitation is, no doubt, another problem. "Not only in planned settlements, but in general where agencies had provided sanitary pit latrines...the latrines were generally not operational" (Ahmed 1999). As in Proshika villages, the quality of latrines are indeed poor and they break easily. These are not sufficiently deep as only three instead of five concrete rings are provided for lining the edge of the pit. In Diabari, after 5 months of establishment of the village, very few families were found who used their latrines. Beneficiaries were expected to build screens around the latrines and only few of them have done it. Both in Diabari and Bashail, serious complaints are there regarding the location of latrines. They are too close to the house and, as eventually they become dirty, become a constant source of discomfort for the residents (Fig.5) During the meeting with authors, beneficiaries suggested one common toilet instead, at a convenient distance from the house, for a number of families. In other Proshika villages built later, this idea of common toilet has been implemented and there comes the issue of user participation. If the users were asked at an early stage, this problem might have not arose. Time has come to ask ourselves that whether we have any right to use these people as laboratory guinea-pigs. Do we have enough time and money for experimenting with these people's lives? Is it ethically right?

During the visit in Adarsha Gram project in Gopalganj district, not a single family was found to re-install their latrines when the first one (given by the government 15 years ago) was filled up or broken down. This indicates the residents' reluctance to use sanitary latrines and their poor affordability. Therefore, not considering the present only, but forecasting the future is also another job of a planner. Keeping all these things in mind, proper sanitation should be planned.

● House Construction:

When a person builds his/her house, a sense of possession and responsibility grows inside him. Selecting a building material, buying it, designing the space according to requirements, doing the construction works and thus having a house for the family is a desired and useful experience. It allows residents to take their own decisions and feel that they own the houses and the maintenance



Figure 4 : New kitchen added outside the basic house, Proshika Palli in Diabari, Manikgonj



Figure 5 : The position of latrine between houses, causing discomfort to the users. Proshika Palli in Diabari, Manikgonj.

of the houses is their responsibility. However, the process followed by development agencies is quite different. They do not want to leave out any responsibility for the beneficiaries, except the responsibility for the failure of the project. Not only in Proshika Palli, but also in other planned settlements established so far like Adarsha Gram, Asrayon Prokalpa, cluster villages of Grameen Bank, this paternalistic attitude is prevailing. From the part of the beneficiaries, it is too hard to be satisfied with a finished product, especially when it is a house to live in. Naturally, they have serious complaints regarding the building material, cost to be repaid, etc. People, working in this field, must realise that the process is more important than the product. Nowadays, the process being followed world-wide is the self-help process. The concept of self-help housing includes the complete cycle of design, formulation and execution of a housing and habitat production process. For example, the alliance of SPARC/ NSDF/ MM in India that claims themselves as:

"Community based, community led, community initiated and community focused organisation," through their works have

- shown to the Govt. that if they give land to poor people they can build cheaper and better houses for themselves
- built skills and capabilities of community groups to build houses themselves and each project is a training process that will help more people to try this possibility (Anzorena 1998; Anzorena 1999).

The residents of Proshika Palli expressed a similar desire and claimed that they could have built better houses spending less money. Similarly, in Asrayon Prokalpa, army personnel, without any participation of beneficiaries, build barrack houses. During planning these settlements, conventional approach implies that,

... local vernacular traditions of house-building in their variety and richness should be suppressed and supplanted by modern housing conformation to some Westernised 'urban' official standards.

(Gunaratna 1991)

No option is offered to the people, they find no scope to utilise their knowledge and are living in these settlements with great dissatisfaction. If the beneficiaries get involved at the construction phase, they become trained in building houses and may contribute with innovative input.

● **Materials: responsive to users' desire?**

Regarding the building material, Proshika is trying to be innovative and especially responsive towards climate and environment. Chemically treated

bamboo and MCR tiles are introduced in the Proshika settlements. Surprisingly, this is done without even asking the residents and they are not at all aware about the positive or negative aspects of these materials.

● *Chemically treated bamboo*

One of the main problems in chemical bamboo treatment is that the chemical compound used is toxic and is hazardous. Awareness-formation and strict vigilance is essential for this material so that it does not become a source of hazard to human health and safety. However, safety regulations seem lacking in Proshika villages. From meetings and conversations with the beneficiaries, it is found that, despite the durability of treated bamboo, it is still less desired than CI sheet. In status or re-sale value, it cannot compete with CI sheet.

● *MCR tile*

For roofing, MCR tile is promoted as an alternative to CI sheet. Some of the main advantages in comparison to CI sheet, suggested by its promoters, are its better thermal qualities, use of local materials where CI sheet is imported, and small-scale labour-intensive production with potential for generating local employment instead of centralised factory manufacture (Parry Associates, undated). Still, a successful dissemination of this material will be possible only where a significant cost advantage can be established. It was found by Ahmed (1999) that the cheaper variety of MCR tile is 24% less expensive than CI sheet, not enough for a significant cost advantage. Moreover, all the beneficiaries of Proshika settlements denounced it as fragile and undesirable. Since there is no local supply of MCR tile and skilled workers, beneficiaries fail to repair or replace the tiles. They complained that it is difficult and laborious to dismantle and a market for resale does not exist. In addition, the residents mentioned some plus-points of MCR tiled houses like these are much cooler and more comfortable than CI sheet and generally do not tend to lift off during storms like CI sheet does, since the tiles are tied to the roof frame. Yet, provided with the choice, they would have certainly opted for CI sheet. It is their desires and needs that should have been considered.

● *MS angle roof frame*

MS angle roof frame is another option adopted by Proshika.

At only about 5-10% less expensive than timber, this might not offer much cost advantage. Nonetheless, an MS angle frame, painted for rust protection, may serve much longer than timber or bamboo ...

(Ahmed 1999)

By avoiding direct contact with water, its durability can be increased. The beneficiaries, apparently look satisfied with this roofing frame, though lack of replicability and cost are still obstacles to the widespread adoption of this frame. This frame is also used by other organisations like Caritas, BRAC and in Asrayon Prokalpa. If widely used, hopefully it may reduce pressure on declining organic resources.

● **Maintenance:**

“Not all damage results from specific hazards. ...Poor maintenance commonly contributes to house damage...” (Hodgson and Seraj 2000,)

Generally, people prefer to use such materials in construction that need less maintenance and repairing. That is one of the main reasons of rural people to opt for CI sheet. Uncommon and unfamiliar materials made the beneficiaries of Proshika settlements uncertain about the future of these materials, especially about the MCR tiled roofs. In our climatic context, algae and moss tends to form on these tiles. Though it is claimed that it is possible to maintain them and keep them clean, the residents need to climb on the roofs to do so. It is hard to be done without damaging the tiles. Hazards associated with negligence and poor maintenance must be avoided.

Conclusion

● **To be independent both in policy and people's independence**

In order to make improvement in the field of low-income housing, a new more people-centred approach would have to be followed. This approach may be hard to implement because of self-interest and lack of understanding of the situation by development agencies. Additionally, in general professionals and academics do not have the necessary orientation to contribute significantly; indeed they are like outsiders in their own society, stated quite directly by Rahman (1993):

We the intellectuals of Bangladesh, trained in a colonial environment, with colonial attitudes and aspiration are educated to form and to join a class of our own, aspiring for recognition by the international brotherhood of intellectual, but alien from our own society, ignorant of the social life and the conditions in the countryside and of the mind, the spirit of the potentials of the man in rural Bangladesh.

A better approach in policy-making would be context-specific and there should be independence in thinking and judgement. At present agencies imitate Western methods of physical planning and build prototype design solutions: monotonous, basic model houses to create a Western-biased 'modern' housing

system in a sort of blindfolded way, and this is then described as progress and development.

● Learning from the present lack

Unless attitudes change towards development the situation will remain stagnant. The rural community will remain unsatisfied with anything they receive from agencies, if their problems, opinions and decisions are not taken into account seriously. The changing attitude shown by a 'support-based system' instead of 'provider-based deliveries' has helped the Million Houses Programme in Sri Lanka to become a success (Gunaratna 1991).

On the other hand what happens in our country, described accurately once again by Rahman (1993), is :

The vast majority of the people classified as 'poor', are objects of pity, paternalistic intervention and assistance. Many of these people under the blinding light of compassionate observation which was flashed upon them, have internalised this negative self-image ... Perceiving themselves as 'inferior', sought to be developed by the sheer power of 'development' effort which has often uprooted vast masses of people from their traditional life, to become inferior citizens in alien environments itself has concentrated power

This clearly undermines the inner resources people have that could contribute towards social improvement. By cultivating a sense of inferiority and obliterating the self-value of low-income communities and individuals, the possibility for developing independence and resourcefulness is lost. Hence a problem is created, which if not addressed will continue to make the 'poor' dependent on others.

Willingness for improvement

The so-called educated policy makers are pursuing the same mentality of dependency. The image of poverty is the license for personal development. Bangladesh as a whole is defined as a 'poor' country, overlooking the unexplored rich qualities in rural Bangladesh. Because of the poverty in the minds of policy makers, the whole country has become dependent on top-down deliveries. The 'poor' policy-makers sure have miles to go before they reach the real rural Bangladesh.

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