

Challenges of Upgrading Housing in Informal Development: A Strategic Option of Incremental Housing

Fahria MASUM, Germany

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SUMMARY

Informal housing development has been recognised as one of the important phenomena of cities especially in developing countries which triggered by high rate of rural-urban migration results in housing shortage, mainly for the poor. Therefore, a search for solutions to informal housing and fulfilling the rising need for formal housing delivery have been a challenge and issues of high importance for many developing countries. This paper suggests that formalising/upgrading informal housing is highly contextual and associated with prevailing land tenure system. Furthermore, different stakeholders involved directly or indirectly in the informal housing development processes influence the context also.

With reference to a case study in Dhaka, Bangladesh, the paper came up with the conclusion that the scope of providing new housing in the developing world is limited and prevailing housing development approval process and regulations rarely serve lower income people. Therefore, it is crucially important to begin the formalisation/upgrading process through enhancing the capacity of the community to improve and develop their housing. The paper highlights the importance of incremental housing approach which can yield better results to realise a number of potential benefits.

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1. FORMAL AND INFORMAL HOUSING DEVELOPMENT: THEORETICAL EXPLANATION

The world is becoming predominantly urban. According to UN-Habitat over three billion people live in cities and this number is expected to double by 2050. This phenomenon is mainly observed in Asian and African countries due to comparatively higher urbanisation rate. Rural-urban and urban-urban migration is playing a key role as a driving factor behind this higher rate of urbanisation. This dramatic expansion of population demands access to provision of shelter and therefore, it compels to follow a totally different approach for providing housing facility.

In developing countries informal land development takes place due to various reasons. One of the prominent reasons is that due to scarcity of land, demand for serviced land in growing cities is always higher and the poor cannot afford the cost of professionally developed and designed plots of land. Therefore, such type of informal development is alternative and only resort for the poor.

The clear distinction between ‘informal settlement’ and ‘informal development’ is hardly available. Often the term ‘informal development’ is used as synonym of ‘informal settlement’. Spontaneous, irregular, unplanned, marginal and squatter settlements are also used as synonyms of above two terms. Some literatures have used the terms ‘slums’ and ‘informal settlements’ interchangeably (UNHSP, 2003). According to UN-Habitat, informal settlements have two categories (2003, pp. 82-83):

- Squatter settlements - settlements where land and/or buildings have been occupied without the permission of the owner;
- Illegal land development - settlements where initial occupation is legal but where unauthorized land developments have been occurred (e.g. change in land use that does not follow zoning plans, building extensions without building permits, subdivisions without regard to services and infrastructure, etc.).

But a keen difference has been drawn by Enemark and McLaren (2008) based on the definition of OECD. According to them, ‘informal settlements’ are the group of housing units constructed on land where occupants have no legal claim to, or occupy illegally. On the other hand, ‘informal development’ areas are the unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing).

According to Pugh (2000 quoted in Sivam, 2003), developing countries have three types of housing development systems - formal, informal and organic. Formal housing developments have the legal basis of the planning agency. These are developed within the structure of government rules, controls and regulations (ibid). Informal housing development is illegal and consisted of unauthorized 'colonies and squatter settlements'. These types of developments happen mostly because of non affordability or sometimes unavailability of housing in legal housing market (ibid). Organic housing development is mainly emerged over a period of time without any conscious measures - legal or illegal. Old cities and urban villages are of examples of these types of developments (ibid). However, organic housing is often treated also as informal housing depending on its diversity, complexity and widespread nature.

'Informal housing' sector cannot be narrowly focused as it is closely related with much broader issue of informal sector emanating from the dualistic economy of cities in developing countries (McGee, 1991). In simplest way, housing is described as 'informal' when it does not conform to the laws and regulatory frameworks set up in the city in which it occurs. It can be provided through construction firms that are not licensed and whose work is not subject to guarantees (UN-Habitat, 2003). As informal housing is produced outside the formal legal channel, it can be also defined as self-help housing. 'Self-help' refers to the characteristics of homes and the processes through which the inhabitants themselves build them using simple and often hazardous materials (ibid). This is visible testimony of the failure to the plan for the most vulnerable population in times of crisis (Williams and Chan, 2003). Also formal housing can be informal by the process of extension and alteration by users without permission or without fulfilling the standards. Therefore, housing can be informal at different levels (UN-Habitat, 2003):

- Being built on land intended for another use though the building itself may conform to the standards laid down in the regulations
- Not conforming to all the standards laid down for the part of the city
- Not being subject of planning permission or building inspection
- Being built on land not owned by the occupier and without permission of the owners.

In defining formal and informal (or illegal) housing the issue of land ownership is obvious. Though any housing developed without following formal rules and regulations (with or without having formal ownership) is considered as informal housing, the development processes varies depending on ownership level. The driving factors will be different also. Based on the ownership level, two different housing types can be categorised which are not formal housing.

First, sub-standard housing development by the landowner who is legal owner of the land. The situation actually reflects the owner's failure to follow formal development system. This can happen due to bureaucratic, complex and expensive procedure (like in Bangladesh).

Second, sub-standard housing development on illegality occupied public or private land mainly by the migrants coming from rural areas who don't have access to formal housing

market. In some countries such type of housing may be rented also by the occupier (like in Bangladesh, Indonesia and Kenya) which is also illegal in nature.

Therefore, the main obvious problem related with informal sector housing is limited or no provision of services where status of land ownership can be legal or illegal. But at theory and policy level the term ‘illegal housing’ is often used as synonymous of ‘informal housing’ which actually can not properly hinge the land ownership status. A distinction must be made between ‘illegal’ and ‘informal’ as these two terms possess distinct characteristics though in specific society informal housing can be defined as illicit. However, by explicitly distinguishing between ‘informal’ and ‘illegal’ housing it is possible to explore the land ownership level of the housing developed other than in formal way. In this respect, the first category mentioned above can be termed as ‘informal housing’ which refers non-conformity of regulations rather than illegality whereas the second category should be referred as ‘illegal housing’ which is illegal due to illicit use of land and informal as well because they don’t conform planning regulations. In this paper for the sake of brevity the research is focusing on informal housing which is developed on legally owned land without following planning regulations.

2. APPROACHES OF UPGRADING INFORMAL HOUSING

The term ‘upgrading’ refers to the measures to improve the quality of housing and provision of housing related infrastructure and services of the settlements that are considered to be slum or developed illegally (Satterthwaite, 2012). Though informal housing upgrading basically involves improving physical environment (i.e. water supply, electricity, sanitation, waste collection etc), secure legal right to land may be included as an additional strategy. According to International Conventions on Human Rights in United Nations informal housing (slum) upgrading refers to the access to basic rights and security of tenure for community in need which have survived many years without adequate housing and basic rights. According to Cities Alliance (2009), it is a process through which informal areas are gradually improved, formalised and incorporated into the city itself through extending land, services and citizenship to slum dwellers.

Considering land tenure status broadly there are two types of informal (and illegal) housing formalisation measures. First, upgrading the existing informal housing (i.e. improving infrastructure and service delivery) which can be called reorganization without considering land tenure issue, and second, officially formalise the informal housing into a formal one following a legal procedure and regulations.

Provision of improved infrastructure and services to informal housing is a central component of upgrading. Generally two dominant approaches exist to the upgrading of informal housing: the complete redevelopment and *in situ* upgrading process. The complete redevelopment is the process where the existing structure is demolished and a new building structure is developed. During the process the residents are relocated to some other place. However, as opposed to the practice of complete relocation of slum dwellers which has tendency to disrupt

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their “fragile community networks” and “livelihood opportunities,” current best practice advocates for the *in situ* upgrading approach (Franklin, 2012).

In situ upgrading it’s more likely to achieve large scale social inclusion than large scale redevelopment. It enables continued owner occupation of existing dwelling structure and their incremental improvement over time, thus not imposing rigid housing related cost. Therefore, community participation is at the heart of the whole process.

For Alain Durand-Lasserve (1999), regularizing informal settlements means that households by definition “must have access to basic urban services”. He also suggests that tenure regularization has distinct advantages for these households.

- It advances improvements of housing conditions by owners
- It facilitates the provision of urban services in settlements – beneficiaries are readily identifiable and locatable
- It facilitates and promotes investments in home based activities which play a role in poverty alleviation.
- It encourages community participation in the maintenance and management of settlement environments (ibid).

Providing enhanced tenure security to the informal settlers is often an integral part of most upgrading projects in developing countries. De Soto (2002, quoted in Harrison et. al., 2007) argued that housing should be linked to the provision of the freehold tenure for each household which will allow the poor people to use these as loan collateral in order to start small business and thus activating dead capital and solving problems of poverty. Moreover, it helps local authorities to increase the proportion of planned urban land and provide services more efficiently. According to UN-Habitat (2003) it also integrates informal housing within the tax system and improves the efficiency of housing and property markets. According to Fernandes (2004), regularization programmes focus exclusively on the formal titling of individual plots and tends to reinforce unacceptable housing and living conditions in unserviced areas that are frequently remote and environmentally unsuitable.

But Payne, Durand-Lasserve and Rakodi (2009) have argued in a different way. According to them, land titling often fails to increase access to credit, and low-income households who obtain titles are often as reluctant to take loans as banks are to lend to them. Titling also does not necessarily improve infrastructure and services provision, while many settlements have obtained improved provision without titles. Therefore, there is an important distinction between providing security of tenure and issuing land titles (Doebele, 1983; Payne, 2001).

But Jenkins (2001) emphasised to seek the way to regularize or cope with informality i.e. integrating formal and informal systems where possible as full regularisation is impossible. Demsetz (1967) argued that property rights develop when there is sufficient demand for them, that is, when the benefits of internalizing the externalities exceed the costs of not doing so.

Based on this perspective, the absence of property rights reflects the absence of demand for them—not a supply constraint.

3. CHALLENGES OF UPGRADING INFORMAL HOUSING

Though it is the prime task of government to provide land and housing for low income groups, in developing countries very few initiatives taken by the government that have been successful are found. Moreover, most of the programmes are not being succeeded as for adoption of any policy it should consider traditional land management practices which are often ignored.

According to Habitat for Humanity International some common barriers to informal housing (slum) upgrading are:

- Insufficient legal and regulatory systems
- Excessive land regulation
- Gender discrimination
- Corrupt, inefficient, or inadequate land registration systems
- Disintegration of customary and traditional protections
- Lack of political will around the issue

It is widely acknowledged that an inadequate supply of affordable housing finance remains a major barrier to improving informal housing. Non-affordability of debt-service required to finance the project, anti-poor loan condition and few institutional incentive to lend to the poor are major reasons for this. The challenges can be associated with the upgrading project itself also. Experience from different upgrading projects show that high standard of development which are not economically feasible often cause failure to the project. Difficulty of cost recovery also often remains unsolved.

4. INFORMAL HOUSING IN A FAST GROWING CITY: EXAMPLE OF DHAKA, BANGLADESH

In Dhaka one of the major problems associated with its increasing population is increasing number of informal housing development in form of slum proliferation. Slum at its simplest, is a heavily populated urban area characterized by sub-standard housing and squalor (UN-Habitat 2003, p. 8). This definition conceptualizes three essential characteristics – high density, low standard of housing (structures and services) and squalor. The first two criteria are physical and spatial while the third one is social and behavioural (ibid).

Generally the informal housing in form of slums can be developed in two ways. First individual households buy or inherited land and develop at their own initiatives without any institutional support. If these are low land, they may develop such land by hiring manual

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labour directly or engage small informal contractor to supervise such works. Low land in the fringe area is generally developed slowly over a long period of time (Islam 1998, p. 54).

Under this category urban fringe land is transformed from agricultural use to urban use by the landowners who divide agricultural land into plots for housing. Through such type of development farmers find it profitable 'crop' for their land (UN Habitat 2003, p. 83). Second, some private owners put their land to housing use for a very large number of poor in relatively small area, thus creating slum (Islam, 1998).

In Dhaka informal housings are characterized by temporary and semi temporary structures of single storey. However, the occasional two stories small buildings are also found but they are mainly occupied by land owners. This type of informal development includes i) rental houses (or huts), which is most common and predominant ii) the rental mess units (or single persons' cheap lodging) and iii) the owner occupied units (Islam 1992, p. 136). The developers follow neither any plan nor the development project is being approved by the government authority. The ownership of land may be fully private, or may have multiple private ownerships, and sometimes mix with public land illegally. However, in case the land is occupied illegally, the housing cannot be called informal housing, rather illegal housing. In informal housing services and infrastructures are below the adequate or minimum level. The condition is also dilapidated. The inhabitants constantly have to deal with issues such as lack of water, no sewage or solid waste facilities, pollution and insecure tenure.

4.1 Process of informal housing development: example of Khilkhet slum

4.1.1 Size and location of study area

In Khilkhet a cluster of slum areas have been found where 18 chunks of land have been developed separately informally. The cluster is commercial enterprise of slum entrepreneur. The case study area is one of them locally known as Khilkhet Bottala Fakir Bari slum located in the northern side of Dhaka city. The total area of the land is 0.70 acre (= 0.283 hectare) where the number of structures is 70. The sizes of residential structures vary between 1 and 2 rooms. The average occupancy rate is 4 persons per room. The highest numbers of people living in one room is recorded 6. Out of 70 structures, 30 are occupied by the eight inheritors of landowners. The rest 40 structures are rented out. The settlements have residential density of 578 persons per acre (142826 persons per sq. km) which is fortunately lower than average population density in slum. The study shows that one has to pay monthly Tk 3,500 (US\$ 46) as rent on average for a 10-feet by 8-feet room excluding utility bills.

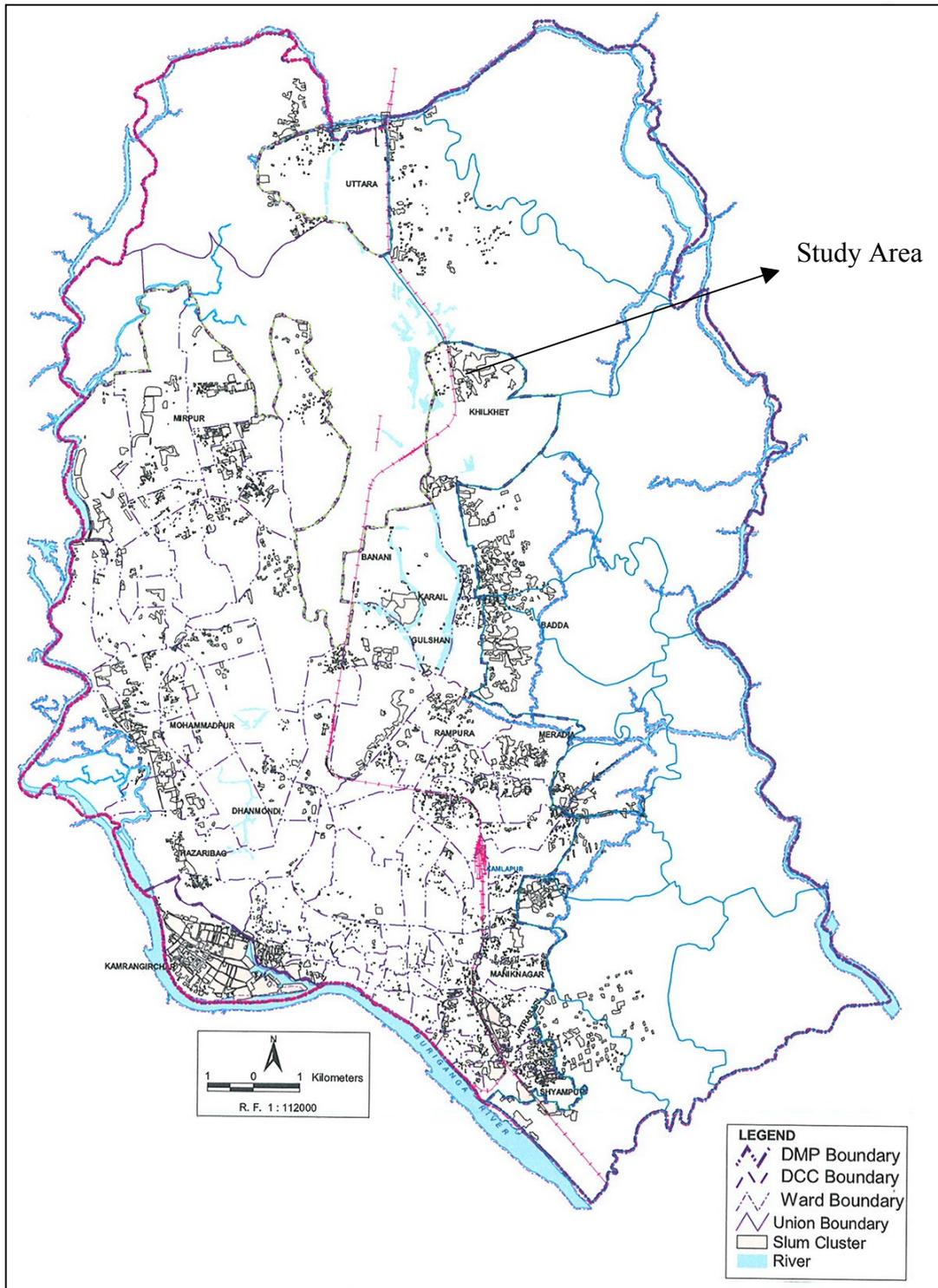
Physically the area is characterized by permanent and semi permanent structures of single storey only. The housing condition is superior to the normal squatter settlements. One of the important physical characteristics of this slum area is that it is very near to Nikunja and Joar Shahara - the planned residential areas developed by Dhaka City Development Authority.

4.1.2 Informal housing development: link with formal sector

Findings from case study area show that informal housing development is largely shaped by social, economic and physical context, and also influenced by the formal system, but informally. The informal housing (slum) dwellers are not entitled to have any service like access to water and electricity from formal public sector; but they are getting these facilities from same source in informal way. There are very few slums that have legal water connection.

Generally a household that does not possess a legal holding number on land cannot access services from public sector. Therefore, no slum dwellers have legally official water supply pipelines. Most of the slum residents create a network with 'muscle man' (locally known as mastaan) who acts as a broker, assisting the slum dwellers to have access to basic services for a high fee. The local power structure helps to get illegal water connections from formal source forcing the slum dwellers to pay exorbitant price for water. The slum dwellers have access to electricity supply also following the same way.

Map 01: Slums in Dhaka and location of study area



Source: CUS, 2005

4.1.3 Informal housing: why lacks planning regulations

Informal housing represents an effective mechanism through which low-income people get access to housing in Dhaka. Initially, the physical environment of the area developed informally is usually poor in quality since little investment is made in infrastructure. They lack adequate services and community facilities. By sparing land, settlers perform other income-generating activities in the areas that are not used for household activities. These income-generating activities represent an important contribution to the household economy. Small grocery shops, vegetable market and other services were also observed in the study area. As observed in the study area, housing development process is totally in land developers' hands. No design standards are enforced. They follow the process whatever is convenient for them. Only the strictly required resources are invested in this structure. Very rare these dwellings are improved or maintained. Such type of development actually takes place while the household is saving money to build a more permanent one.

Photo 1&2: Building development without planning regulations in study area



Dhaka Development Authority (Rajdhani Unnayan Karttripakkha-RAJUK) is responsible for monitoring the land development and building construction activities in Dhaka metropolitan areas. Without getting designs and plans approved by RAJUK, no one is allowed to build anything. But the regulatory framework which specifies the planning and building standards, regulations and administrative procedure makes constraints for low-income group to conform to official requirements. The formal process of dealing with land is complex, time-consuming and extremely expensive. For example, to get the land clearance and building construction approval there are two regulations that are difficult to comply with for lower income group – one, application have to be submitted by the registered architect and payment of Tk. 5.00 per sq. metre charged by RAJUK for building approval (Shafi and Payne, 2007). Total cost does not confine within this given amount by the RAJUK as bribing also costs a high amount without which the application for approval cannot be proceeded. As a result, to avoid this complexity and expenses the lower income groups are compelled to develop land and construct buildings without following the rules. The situation reflects either malpractice of lower income group or irrelevancy of the rules and regulations. Obviously under such

conditions laws have no meaning or relevance to the urban majority – the urban poor (McAuslan, 2000).

4.2 Informal housing development: future trend

According to UN Habitat (2003, p. 9) slum can be divided into two broad classes: *slum of hope* which is in the process of development and *slum of despair* which refers declining neighbourhood in which environmental conditions and domestic services are undergoing process of degeneration. In Dhaka, informal housing development in form of slum formation goes under the first category. It has been mentioned earlier that generally the landowners build temporary structures due to shortage of capital. But with the span of time semi-permanent structures are erected which are more suitable for the lower- middle income group and no longer affordable by the poor. Finally, the land owners go for permanent buildings. Sometimes, many real estate developers buy the informal housing area and the housings are replaced by high rise buildings affordable for higher income groups or used for commercial purpose. In this process the original households are obliged to leave the site and look for accommodation elsewhere. This situation indicates *land use succession* where the changes of land uses by different income groups take place over time.

5. INCREMENTAL HOUSING DEVELOPMENT: AN OPTION

In the context of developing countries where barriers to the development of formal housing encompass institutional, financial, and technical capacity constraints, fundamental policy shifts to allow incremental housing could have far reaching impacts; for instance moving from a supply-approach to support-approach (Agarwala, 2013). Similarly, depending on the capacity of the national, state and local governments, private sector as well as the community, the extent to which an area is serviced with public infrastructure and housing could vary; thus providing affordable options to the community.

From 1960 onward importance of incremental housing which is also known as self-help housing has been addressed by many authors (Ferguson & Smets, 2010). According to Smets (1999), self-help housing is the process by which shelter is constructed step by step and improved over a period of time in terms of quality and size. The approach fits the livelihood strategies and condition of the poor. The paper suggests that housing can be upgraded incrementally as long as financing and tenure are available. Considering the case of Dhaka, incremental housing approach could be a panacea to unaffordable real estate housing for poor.

Incremental housing can be termed as an ‘enabling approach’ which distinguishes itself by ‘bottom-up’ process. However, public agencies have role to play by providing appropriate legal and technical supports. It is the responsibility of government to create an enabling environment through policy to create public-private partnership in housing delivery. The inclusion of incremental housing programme as an integral part of national housing policy requires political willingness. In this respect Pugh (1994) defines ‘enablement’ as providing the legislative, institutional, and financial framework whereby entrepreneurship in the private

sector, in communities, and among individuals can effectively develop the urban housing sector.

However, the paradigm of incremental housing revolves around two conditions: low income land development and access to credit. Findings from the case study in Dhaka shows that unnecessary bureaucracy, expensive and complex procedure of land development project approval encourages informal housing development. Therefore, simplifying the process and reducing incurred cost and development standard involved in land development is necessary. This will reduce the upfront costs and will allow for incremental upgrading of housing infrastructure and further stimulates low-income housing developments. The case study from Dhaka further shows that landowners at the initial stage of house construction use their own savings and loans from relatives and friends. In the later stage they tend to use other funding sources including credit from informal sector. Access to credit from formal sources is still impossible for many lower income people. NGOs are marginally involved in the housing sector. The study suggests that an innovative financing model that fits in the incremental housing process should be initiated by public and private sector. NGOs can play a vital role here also.

6. CONCLUSION

The paper discussed the binary concept of 'informal housing' and 'illegal housing' and argues that using these two terms indistinctly does not adequately describe the tenure status. As the selection of housing upgrading approach lies at the core of tenure status, its necessary to bring difference between informal and illegal housing. Informal housing is a type of non-conventional low-cost housing which has been world wide phenomenon and common residential content for many urban families in developing countries. It reflects the non-ability of poor people to follow the formal land development process due to expensive, bureaucratic and lengthy processes. Public housing policies definitely should take into account the ability of low income groups to earn, save and invest in their housing development and therefore, the study finally suggests the scope of incremental housing development to provide affordable housing for the poor.

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CONTACT

Dr. Fahria Masum
Centre of Land, Water and Environmental Risk Management
Technische Universitaet Muenchen
Arcisstrasse 21
Munich
Germany
Tel. +49 89 289 25790
Fax + 49 89 289 23933
Email: masum@landentwicklung-muenchen.de
Web site: <http://www.bole.bgu.tum.de/>