

HOUSING FOR DHAKA CITY A response to product fetishism

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THIS write up is inspired by my former BUET-colleague Prof. Ghafur. A more elaborate version of this has already been submitted to the Ministry of Housing and Public Works as a response by the Institute of Architects Bangladesh to the proposed 'Comprehensive Housing Programme for the Dhaka City'. I shall try to avoid issues already raised by Prof. Ghafur, published in The Daily Star on July 12, 2008.

Given that the housing problem is enormous which has always been dealt with in a piecemeal manner, the proposal presented in a public seminar should have been a 'Comprehensive' one, rather than shying away from the term.

Though the title also included the word 'Programme', there was no programme included in the proposal (except a table with set of requirements). Instead it included some examples most of which could be disputed as to their merit or qualification as good practice. Examples can be endless. 'Japan Garden City' has been widely condemned as a bad housing example devoid of any space or verdure. Financier of Baunia Bundh project (UNCDF) itself branded the project 'non-replicable'. Bhasantek has been more a political step than a desirable housing solution. Nawaz's 'Million Houses' was criticised when first published in DS in 1999 which was never refuted. Prof. Ghafur raised two additional but much valid questions -- the issue of sustainability in the use of scarce land, energy and natural amenities, and the responsiveness to the dwellers' way of life, add to that transport and employment, you could too foresee the 'impending catastrophe'.

Housing is not number, it rather is a 'process' through which housing units are produced, delivered, and then acquired. It also includes various stakeholder groups, services, infrastructure, amenities, i.e. a total settlement, not only the

dwelling unit. Yet questionable basis of 'self-referencing' made the necessary statistics irrelevant, as it matters little whether there are one million *bastibashis* or three million of them, the problem is still enormous which the conventional wisdom and government approach have failed to address. Also the level of severity (lack of services, etc.) was missing.

Analyses of the existing pattern and assessment of backlog failed to take cognizance of a scenario that could be influenced by decentralization, economic resurgence, industry relocation, implementation of the strategic transport plans including mass rapid transit, restriction on using agricultural land, better environmental awareness and increased enforcement of law, etc.

The nature of problem is over simplified because it failed to identify the problem. For example, inability of the government to provide housing cannot be a problem, as providing housing is not accepted to be the government's responsibility anymore. Though housing is one of the basic needs, guaranteed by the constitution, yet the government's role in this regard should be confined within that of an 'enabler/facilitator', not a 'provider'.

Properly defined aims and objectives could be followed by strategies to be adopted and tasks to be undertaken, and lead eventually to viable solutions. The objective of 'recommending a housing development programme' should have been the aim, while objectives could be such factors as providing satisfactory housing within affordable means to a majority of the population, creating an enabling environment wherein individuals, groups and organisations can meet their own housing needs, developing system(s) mechanisms whereby the government can make available housing resources for the other actors in the sector, creating institutions and regulations whereby a desired growth in the

Why everybody should need a plot. Why cannot the government own all land? Why everybody has to come to Dhaka in search of livelihood? And why housing problem shouldn't be seen in the context of overall settlement, environment, economy, transport, income generation, education, health, governance and security, in fact the whole gamut of national development and citizens' welfare?

housing sector can be ensured. The report does not include any strategy that would enable the government to achieve the aims and targets and meet the objectives, even if improperly defined.

The task of identifying system deficiencies in delivering finance, land and other sources was ignored. This indeed was the most important task required to be taken. If the problems to be addressed are not identified, there cannot be any useful solution, and no amount of tables and maps can render any value! Instead it included a set of planning principles, which were important and useful. Yet these were not addressed, which could have been a useful point of departure.

The report failed to provide a strategic direction for the future as how to tackle the severe problem in the urban areas of the country including in mega-city Dhaka. Instead of case studies, it should have suggested a system with set rules and control, providing incentives, infrastructure and finance, encouraging cooperation and participation of the cooperatives and the NGOs, etc. that should enable everybody to meet their housing needs with putting no extra burden on the government. Thus a 'Comprehensive Programme' should include how to produce and deliver all the facilities, and various components of a shelter like land and finance be made available to all.

Land and finance are two most essential and crucial elements of housing development, and the lack in their availability is causing problem. At its root is the gap between the cost and affordability. Housing cost can be reduced by reducing the costs of individual

components like land, labour, materials, technique, services, infrastructure, transport, etc. through various tested methods. Overall economic uplift of the population would automatically enhance its affordability. Even then finance is one proven method of improving the affordability.

Scarcity and high cost of buildable land is a serious problem which was not identified, caused by speculation (including competition among the developers), encroachment, injudicious use etc. The issue of land has been inadequately dealt with. It is not a technical problem (of developing and delivering more plots), but a political one (providing access and right of use). Thus it requires fundamental structural reforms in the ownership and use pattern, not reduction in plot size, or filling upon wetland around the city.

Nevertheless, there are various methods available to increase supply of buildable land in right locations and control their price rise. These have been adopted worldwide both in developing and developed countries, and some of the more feasible ones could be introduced in Dhaka. The report could evaluate the viability of these methods in the local context, and suggest ways to adopt and practice them.

Low-income group's housing doesn't necessarily have to be low-cost or small in size. There are various internationally tested methods, like incremental building, service sharing, etc. available through which the cost of various housing elements (other than land) can be reduced or controlled.

Worldwide finance is now recognised as important housing resource/element. In countries like

Sri Lanka or Singapore the government has successfully solved the housing problem of the majority of population by using finance mechanisms. We too should base finance on domestic saving and enable a family to own a house when the aspirant is young, not when he retires. When the inflation is high, conventional market cannot provide long term soft loan very much necessary for housing. Therefore, unconventional sources like individual contractual saving, insurance fund, international market, etc. have to be tapped.

The report instead of looking for and addressing the cause tried to heal only the symptoms. As 30 percent of the housing is delivered by the formal non-government sector and 60 percent by the informal sector, the problems and needs of these sectors required to be identified and addressed. The developers could be brought to play a more desirable role. Though they supply only 5 percent of the stock in Dhaka city, they can realise the greater potential by increasing their coverage to address the needs of the middle-income groups too. In many countries, housing societies work as finance institutes, and REHAB can establish its own bank. It can also arrest the unabated price rise in land for which they are to be blamed. The government can also introduce 'valorisation' in partnership with the developers.

The report talked about implementing Housing Policy 2004, which in fact was never adopted. We urge for the 2004 Policy to be adopted as it was well studied, prepared through stakeholders' participation, and comprehensive and contemporary. In fact the government had many policies, but never followed those. For exam-

ple both the second and third Five Year Plans mention housing for the government employees as 'perennial wastage of scarce national resources, which should not be pursued anymore'. Instead, every plan includes a number of staff quarters in their programmes, as the bureaucrats that decide the programmes upheld their class interest. The Plans instead suggest introducing 'hire-purchase system' for the government employees and encouraging large employers and corporations to accommodate their own employees. The First Five Year Plan mentions of encouraging cooperative development by providing incentives. However, none of these was ever adopted. Thus to ensure good governance and accountability adopted policy must be followed, strategies adopted and plans adhered to and programmes be undertaken that have followed from the policies and the strategies.

Housing rights, guaranteed adequately by both the constitution and various policies, should be recognised. Eviction creates more problem than solving; hence the squatters' problems should be addressed more humanely. Various models in mainly Asian countries show that by accepting the rights of the low income group various innovative methods can indeed bring viable solutions to the problems, many of which can also be implemented in Bangladesh.

Too much has been wrongly pinned upon the Detail Area Plan which cannot be the cure for all urban ill. DAP should follow the broader policy as outlined in the Structure Plan, which we have ignored. DAP more than a decade behind due time, and still taking so



long to complete, has in fact been used as a scapegoat. From what has been seen and heard of the progress, content and quality of the under preparation DAP, there are reasons to fear that it will fail to provide a visionary direction for a mega city of the third millennium. Let's accept that conventional wisdom has made solution(s) to the housing problem impotent. It needs fundamental change in attitude and unconventional innovative methods that in a land-hungry poor country can provide suitable housing to all within affordable means. Also it is impossible for the government alone to meet the exact needs. It should

rather develop an enabling environment and appreciate public-private partnership. This needs to raise and address such radical questions as why everybody should need a plot. Why cannot the government own all land? Why everybody has to come to Dhaka in search of livelihood? And why housing problem shouldn't be seen in the context of overall settlement, environment, economy, transport, income generation, education, health, governance and security, in fact the whole gamut of national development and citizens' welfare?

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Climate change: Impact on forests

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IT is beyond doubt that Bangladesh is one of the badly affected countries from the impacts of climate change. Therefore, it is no more any fashion rather an imperative to call for effective measures for combating climate change. Of late, the government has given an announcement to create a fund for the purpose amounting to estimated three billion taka in the current fiscal year, which will be allocated to various adaptation and mitigation strategies against already set paradigm of bad consequences from the climate change such as losses from frequent cyclones in the south, drought in the northern region and decreasing agriculture productivity with recurring flood.

Though rest of the world is now emphasising on the restoration of and increasing green areas to combat climate change, yet we are still far from the reality. Most of our efforts to the green future concept are a matter of discourse in documents and seminars other than practice. The shirking of responsibility natural forests and afforestation with invasive exotic species in the form of social forestry or other schemes may not contribute to the battle against climate change at an expected level, many scientists revealed in their studies.

Evidently, rapid transformation of land-uses, in particular deforestation is releasing back the stored

carbon from forest into the atmosphere and thus increasing global warming. So, in the face of climate change, the effective management of forests for both goods and services to human well being becomes a challenge. For Bangladesh, this may be greater than others.

The Kyoto Protocol, an international agreement between the parties to climate change has recognised the important role of forests for reducing carbon dioxide, and they initiated the strategy of Clean Development Mechanism (CDM) for high greenhouse gas emitters like USA, EU to buy carbon credit through afforestation scheme. In reality, carbon trade encourages plantation of fast growing monoculture species irrespective of biodiversity which in turn degrades the previous natural forest structure that generally coped successfully with different events like solar radiation and various natural hazards.

Not only forest maintains biodiversity as a whole, but also provides subsistence livelihood to nearly 400 million people of the world who are living in and around the forests. International Institute for Environment and Development (IIED) estimates that climate change will increase the vulnerability of the most poor communities (approximately 1.2 billion people) in tropical region because of their livelihood dependency on natural resources.

The Intergovernmental Panel on

Forest ecosystems may be or not adaptive to climate variability will depend on the complex interactions of multiple organisms ranging from trees, animals to micro-organisms. Very often the presence of functional groups and response diversity of species within the forests determine the adaptive capacity to the impacts of climate change.



Climate change would affect unique flora and fauna of the Sundarbans.

Climate Change (IPCC) projected that the state of tropical forests is likely to be worsened from climate change. Bangladesh being in the tropical region, different physical effects of climate change including increased temperature and precipitation, increased salinity and extreme weather events such as floods, cyclones and droughts will have profound negative impacts on its forests.

Bangladesh is characterized by both natural and plantation forests

which, however, account for 17.5 percent of the total land in documents, but only 6-7 percent in reality. The notable natural forest ecosystems are tropical wet evergreen and semi-evergreen forest (hill forests), moist deciduous forest (sal forest), tidal forest (mangrove forest), and village forestry. The plantation forests are now increasing under the auspices of social forestry programme to ensure people participation and their socio-economic benefits. Each forest type possesses particu-

lar stand structure, composition and functional groups (i.e., the groups of species that perform multiple functions in an ecosystem such as pollination, nitrogen fixation, predation, decomposition etc.) and also builds site specific responses to climate variability.

However, continuous deforestation (approximately 3.3 percent per year) in this region is reducing natural forest stocks, threatening valuable wildlife, and thus degrading micro-climate in both forest and adjacent regions.

Because of the increased rainfall in monsoon, water runoff rate on the forest floor has increased from the previous one. As a result, rapid soil erosion causes nutrient leaching and destroys micro-organisms and reduces overall site quality for better forest growth in the previously dense hill forests of Chittagong, Chittagong Hill Tracts (CHT), Sylhet, and Cox's Bazar. Most of the forests are also likely to be affected from the absence of ecological memory that is the network of species for interaction between each other and environment, and building the capacity for reorganisation within or outside the forest patch after different perturbations. Researches shows

that regeneration rate of Garjan (*Dipterocarpus Spp*) in the Chittagong and CHT has declined considerably in the last decades. The monoculture plantation of Teak in CHT also exacerbates soil erosion because of poor undergrowth during heavy rainfall. Forestry experts find monoculture seldom leaves the land very productive for further recolonisation.

Moreover, the increasing frequency of flood, as a consequence of climate change, and its prolongation also triggers the mortality of some home garden species such as jackfruit, papaya and bamboo mainly found in the plainland village forests.

Over the last fifty years, the sal forests, situated in central and north-western region have decreased drastically due to illegal deforestation. Only a few areas reminiscent of the original forest remains, while government is trying to reforest the area with some so called fast growing exotic species such as Akashi (*Acacia auriculiformis*) and Eucalyptus (*Eucalyptus camaldulensis*). Many forest scientists argue that these exotic species are detrimental to biodiversity of the area and may transform the local ecosystem into

aridity through their increased water uptake characteristics. Besides, climate change might increase the temperature in north-western region which in fact alters the ecological processes in the Modhupur and Barind tracts through increased evapotranspiration causing moisture stress (water deficiency) in winter, thus affecting the survival of sal forest ecosystem. Agricultural practices are now common phenomena in and around the previous forest patches instead of earlier forest based landuses.

Being the largest single tract of mangrove forests in the world, the Sunderbans, a World Heritage Site is already affected with climate change impacts, importantly from increasing salinity and extreme weather events like tropical cyclones. Though, the main causal factors of top dying is yet to be known, but, some researchers predict that top dying of sundari trees (*Heritiera fomes*) is likely to be the consequence of slow increase of salinity over a long period of time. Salinity increase also affects the species' combination and regular successional patterns in the Sunderbans as some non-woody shrubs and bushes replace the tree species, reducing the forest productivity and habitat quality for valuable wildlife. World Wildlife Fund for Nature Conservation (WWF) estimates that due to sea level rise, nearly 7500 hectare of mangrove

forest in the Sunderbans are projected to be flooded. Many researches have shown that tropical cyclones destroy the mangrove forests to a large extent. For instance, in the recent past, cyclone Sidr has destroyed one-third of the Sunderbans.

Forest ecosystems may be or not adaptive to climate variability will depend on the complex interactions of multiple organisms ranging from trees, animals to micro-organisms. Very often the presence of functional groups and response diversity (i.e., diversity of responses to environmental change among species that contribute to the same ecosystem function) of species within the forests determine the adaptive capacity to the impacts of climate change.

Recent studies show that massive afforestation with exotic species wouldn't be a pragmatic solution for the adaptation to the climate change. Rather, it is suggested that as implications of response, diversity and functional diversity-biodiversity should be conserved in their natural habitat by protecting existing natural forests, minimising soil disturbances, reducing carbon loss from soil, preventing potential loss of mycorrhizae and increasing freshwater inflow in the saline affected mangrove regions.

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Climate change to cause surge of 'envirogees'

BILLY I AHMED

ENVIRONMENTAL disasters from climate change and destruction of ecosystems will create a surge of refugees -- 'envirogees' -- across the planet.

Maybe the buzzword will catch on faster and shed some much-needed light on what will become a serious problem, probably by the end of this or the next decade.

That light is important, because so far 'envirogees' haven't been fully recognised by those who certify the civil liberties of Earth's various populations, whether it is the United Nations or local and national governments whose people are increasingly on the move for a whole new set of devastating reasons.

In short, immigration is about to enter a new phase, which resembles an old one with a 21st century twist. For thousands of years, humanity has fled across Earth's surface, fearing instability and in search of sustainability.

From earthquake to cyclone Sidr in Bangladesh to cyclone

Nargis in Myanmar, to water rationing in Los Angeles, societies are shifting like their borders.

And the entire outcry over so-called illegal immigration neglects to answer one time-honoured question: If the borders are not standing still, why should the people who live in their outlines do so? Especially when they're under attack from catastrophic floods, fires, droughts and any number of other environmental dangers?

Right now, the 1951 Geneva Convention does not recognise the 'envirogee' phenomenon, instead focusing on immigration because of political persecution.

Here are some startling 'envirogee' numbers to crunch: According to the Nobel-winning Intergovernmental Panel on Climate Change, Earth's cracking communities will have 150 million 'envirogees' by 2050.

According to Australian climatologist Dr. Graeme Pearman, coastal flooding resulting from a mere two-degree rise in temperature would kick 100 million people out of their

danger-zone homes by 2100.

Here's more scary data. Desertification is claiming land from China to Morocco to Tunisia and beyond at an increasing rate. New Orleans and parts of Alaska are slowly sliding into the sea, while the former, as Hurricane Katrina showed, is becoming a target for intensifying weather events, human corruption and half-baked infrastructure.

Aquifers around the world are shrinking, while acidification is claiming cropland in Egypt and beyond. Hypoxia has claimed portions of the ocean itself with alarming speed, as stretches of the Atlantic and Pacific lose oxygen and, by extension, it would claim the marine life that not only feeds millions but also sets up the continuity of the food chain.

The rate of increase in carbon dioxide concentrations accelerated over recent decades along with fossil fuel emissions, explained a report on methane and CO2 rises by the U.S. Department of Commerce's National

Organisation for Atmospheric Administration.

"Since 2000, annual increases of two ppm or more have been common, compared with 1.5 ppm per year in the 1980s and less than one ppm per year during the 1960s." As for methane, in 2007 it exploded by 27 million tons after a decade with relatively no rise at all.

So what's an 'envirogee' to do, other than opt out of wasted fantasies like Happy Meals, factory farming, bottled water and Hummers? What else? Move.

This is what 'envirogees' worldwide are already doing right now, by choice or at gunpoint, and will do more often than not as situations on the ground and in the air worsen.

The conflict raging in Darfur is a sobering example of the complexity. It has so far displaced 2-3 million people, and for all the talk of political or religious persecution, the fact remains that it is at its root an environmental crisis.

An arid desert whose water is drying up by the day, Darfur is one

of the first flashpoints of our new phase of climate conflict, a conflict that U.N. Secretary-General Ban Ki Moon explained in the Washington Post as one "that grew at least in part from desertification, ecological degradation and a scarcity of resources, foremost among them water."

And like Darfur, we are numbly sitting atop our climatological past while it races to catch up with us. Parched by thirst and hungry for fossil fuels which, in turn, only aggravate that thirst and the wars it causes, 'envirogees' are streaming out of these hot zones into less murderous ones, whose inhabitants are circling their wagons on the outsiders. Civil wars are breaking out. Outsiders, in turn, are becoming invaders. The irony is rich.

It gets richer, or poorer, depending on where you stand on oil. The planet's shrinking petroleum reserves are now more valuable than ever, and the prices for its capture and capitalisation show zero signs of returning to normal.

That expense is also beginning

to be measured in lives, as carbon concentration exponentially increases and weather events become more extreme.

But one can't, because it is reality. And so are 'envirogees,' regardless of the outdated assertions of the Geneva Convention or the steadfast refusal of the insurance industry to wake up and smell the hurricanes.

"If we keep going down this path," French President Nicolas Sarkozy argued to the superpowers gathered at the Major Economics Meeting in Paris, "climate change will encourage the immigration of people with nothing towards areas where the population do have something, and the Darfur crisis will be only one crisis among dozens of others."

That is, we won't be worried about Mexicans coming to the U.S. for economic reasons, or Africans doing the same in France and England. We will be worried about hyper-violent cyclones, floods and droughts destroying what's left of our jobs and the people who want them,

as we pack and move to where soothing weather and more bountiful supplies of water, gas and food lie.

We will be the ones enduring the hard stares and perhaps bullets fired from locals who are circling their wagons against victims of their own consumption and apathy.

Whether we can settle with that solution, time will tell. But according to the continually

underperforming science of climatology, we won't settle for long.

Barring any meaningful socio-political or economic engagement, to say nothing of much-needed technological revolution, on the issue, we'll have turned from territorial citizens into climate nomads, all in a cosmological eye-blink.

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