## Comments

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I wish to raise certain specific issues and in raising these issues, I will draw from my Karachi experience, simply because it is the only city I know well.

What Mona Serageldin refers to as squatter settlements, we call unorganised or invasion settlements. What she calls informal housing, we call illegal subdivisions. Unorganised invasion ceased to be created in Karachi in the early 1960's. Their place has been taken by illegal subdivisions and there are two reasons for this.

Firstly, after 1959, it became impossible for people to occupy land in the city centre and settle on it. We bulldozed such settlements.

The second reason is that land developed for the poor by the formal sector is not accessible to them for a number of reasons. One, it is unaffordable; two, the procedures are cumbersome; three, one has to wait for many years after application to get possession of it whereas the poor want land immediately.

Even after possession, no technical advice or credit is available for housing construction. Often no transportation exists to the places of work. So this land is purchased by speculators or the middle classes, and it lies empty for years. We all know the reasons for the failure of government schemes in the formal sector and the governments also understand and recognise these reasons. Yet we have not found viable alternatives and where they have been found, in small instances, they have not been replicated. There does not seem to be any move towards replication. Why is this so? This is a question that should be addressed very seriously.

I would like to turn to the process whereby illegal subdivision takes place in Karachi and in various other cities throughout the world.

Illegal subdivision in Karachi are developed mainly by middlemen. We call them the *lals*. By involving relevant state official and the police in a "business transaction", they illegally occupy state land, subdivide it in accordance with the local government regulations and sell it at a price that people can afford. They control speculation of this land by forcing the new owners to build within a month of purchasing the plot. If they

do not build within a month, the plot is confiscated. They also arrange for water and for transportation through their connections in the government. They invite contractors and building component manufacturers to give technical advice on building materials and they also arrange for credit. A credit system operates. They form a welfare organisation of all the people they sell the plot to and with this welfare organisation they lobby officials in government agencies for services and improvements. For this process, they hire a lawyer for legal advice on various issues and even hire journalists to project and explain to the people at large the plight of their area.

The difference between unorganised or invasion settlements and illegal subdivisions is as Mona Serageldin has explained.

There is a major difference between the two. Housing in the squatter colonies or the unorganised settlements varies from house to house. In the case of the illegal subdivision ones, it is fairly uniform.

Services in the squatter settlements were acquired through visible lobbying, demonstrations and contacts with politicians. In the illegal susbdivisions, they are acquired very quietly through the action of middlemen and welfare organisations. Something that is very important to us in Karachi, is that the unorganised settlements are ethnically and class-wise homogeneous, whereas the illegal subdivisions are diverse, both ethnically and class-wise

Here you have a model of development and professionals have again and again stressed that this should be incorporated into efficient planning. There have been attempts at that, but somehow we have not really succeeded in incorporating this model and we should discuss why that is so. What are the constraints? What are the reasons that prevent this model from being a part of efficient planning, and what are the adverse effects, if it does become a part of efficient planning? That is the second issue.

The government has decided to regularise and to develop all squatter colonies on state land in Pakistan whether they were established through unorganised invasions or through illegal subdivisions. However there has been a very poor response

from the residents with the result that after ten years and at enormous expense, only 5 per cent of the population has received development and 12 per cent has been regularised.

Meanwhile the illegal subdivisions increase at the rate of 7 per cent per year in the urban areas to a 4.8 per cent total urban growth. So, by the year 2000, we will have 60 per cent of the population in Karachi and in Pakistan's other urban centres in non-regularised colonies if this state of affairs continues, and they will all be without any services.

There are a number of reasons why regularisation does not take place. One is that in effect, security of tenure is already there, so the new security of tenure is not required. The cost of regularisation is too high to be paid in one go and since it is too high to be paid in one go, international funding is required for it and when it does come, usually the cost of development becomes much higher than when it is done through normal funding and the money cannot be recovered. For example, the initial Karachi housing projects of the 1960's were failures. There was no recovery of investment. There are other factors such as the residents do not trust government agencies. They feel that even if they pay the development charges, development may not follow. So this is the third issue.

Are there other ways of developing these areas? There are models that have been developed but somehow again their replication has been non-existent. I would like to know why that is so. Surveys reveal that in the inner city areas only plots that give good commercial returns have been regularised, immediately after the regularisation process began. However, only 13 per cent of such plots remain with original owners. The rest were purchased by merchants from the overcrowded squatter city and built upon in much the same way as Mona Serageldin has explained. I do not know exactly how this development can be controlled or if it should be, or how it could be made to create a better environment. This is a fourth issue for discussion.

Three types of houses emerge in the illegal subdivisions in Karachi. There are *Kacha*, or temporary houses. These are owner built and only 4 per cent of the housing begins in this

manner. They are dangerous to live in, they collapse in storms and frequently they are washed away in the rains.

Then there are *Pucka* houses or permanent houses. They have reinforced concrete roofs, plastered walls, reinforced concrete structures. Most of them are contractor built and 3 per cent of houses begin in this manner. Then you have houses which are semi-permanent — 93 per cent of houses begin in this way. They have plastered, precast, concrete walls. As these are the most numerous, I will deal with them in more detail.

Surveys that have been carried out show that 87 per cent of these houses have taken materials on credit from the local building component yards and the larger percentage of the ones who have received credit, are of better quality than the ones that have not received credit. 6 per cent have also taken cash credit. 62 per cent have hired a mason and provided unskilled labour themselves. These semi-permanent houses have a large number of physical defects. I will not go into the design aspects because that is something that right now would be irrelevant. They have a lot of physical defects because of the use of bad materials from the building manufacturing yards. They use bad materials, defective aggregate, bad concrete mix, and so on. There is also poor workmanship because of a lack of knowledge and incompetence on the part of masons. Since the hereditary system is dead, it has been replaced by the apprenticeship system and all the bad apprentices seem to find their way into the low-income areas. There is an attitude that this is a poor man's house so almost anything will do. There is another reason for it and that is the unequal relationship that exists between the building component manufacturing yard and the owner of the house. Also, the unequal relationship that exist between the mason and the owner of the house. Because of this unequal relationship, bad relations develop very early during the house construction. This unequal relationship is there because the owner does not know what to expect from the mason or what to expect from the house since the old tradition is dead and he does not know how he is going to deal with the new materials, or new building systems, that he is exposed to. The final reason is that 15 per cent of the cost of the house is for tools that have to be hired from the building component manufacturing yard. It is a very large proportion of the cost.

Here we come to the next question. Can the quality of construction of these houses be improved and has the architect any role to play in this? This question I will answer myself to some extent because we are involved with giving advice to the building component manufacturing yard to improve their products and the quality of construction and we have introduced numerous roofing systems through them. We have also made tools available at a cheaper price. But the most important part is that the user has to be educated in construction supervision and management so that his relationship with the building component manufacturer and with the mason is a more equal one and a more equitable one. To do all these things, one must have access to these people and to the institutions that function in these areas and here the question arises as to how can this access be created? We need access, not a superficial access, and a real understanding. The other question is whether the architect should work not only in these semi-legal settlements but also in completely illegal ones?

I will touch upon a few other aspects of the Karachi case but all these three types of houses that I have mentioned have certain features in common. They all have courtyards and all the toilets and bathrooms are on the exterior — on the street side so as to facilitate cleaning by the scavengers or alternatively they are connected to a sewage pit.

There is a difference between the Karachi situation and what Mona Serägeldin has described. Our surveys have shown that about 67 per cent of the people come from inner city areas into these fringe areas, and only 19 per cent come from other parts of the country. Also 70 per cent of them belong to the 20th percentile and below.

There are many defects in houses, foundations being eroded, opening up of joints, walls not properly bonded, poor masonry quality, floors sagging, inappropriate technology, cracks where the house has been extended, corrugated iron sheets held down with stones which are blown off when there is a storm. The sewer pits eventually overflow because as the

density increases, you cannot have this form of drainage. Although water can be brought to the settlement, the problem of sewerage remains and also that of garbage. Of course after these systems are installed, the problems of their maintenance and operation remain. The authorities cannot possibly take care of them and they have somehow to be taken care of by the community itself.

In conclusion, it is very difficult to theorise about informal settlements, their requirements and the directions that they should take on the basis of observation or research that takes place through questionnaires, interviews and contacts. The architect has not contributed to these settlements. Very often they have been created in defiance of policies that he has been instrumental in supporting and it is only in the last few years that he has become interested in these settlements. So, if there has to be any theorising it can only take place after a prolonged association and after a considerable amount of practice.