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MASS HOUSING VERSUS SITE AND SERVICES SCHEMES FOR LOW INCOME GROUPS.

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Mass Housing Versus Sites And Services Schemes
For Low Income Groups.

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Summary

The objective of the present paper is to assess the different approaches of shelter provision for low income groups in Egypt. It takes into consideration the role of the government as well as the role of the informal sector in providing such a shelter. The assessment would help recognizing the merits and drawbacks of the various approaches. It would allow reaching some recommendations concerning the best policies to be adopted in the future for shelter provision.

Introduction

Shelter provision for low income groups has been the main concern of the Egyptian Government since the fifties. However, statistics show that the role of the informal sector in providing such a shelter surpassed the efforts of the government. The informal sector provided 80% of the shelters directed to low income groups for the last three decades. In fact two main scenarios prevailed:

- governmental mass housing schemes producing totally finished apartment buildings through a highly centralized process.
- informal housing schemes developed according to a decentralized process: people procure land and manage to develop non planned parcellization schemes with their limited resources.

The objective of the present paper is to assess the two scenarios in order to understand their merits and drawbacks. The assessment will take into consideration different factors, mainly physical, environmental, financial and organizational. It is believed that such an assessment would lead to a third scenario enhancing the merits and avoiding the drawbacks of the previous two.
Description and Analysis of Governmental Housing Projects

General description: governmental mass housing projects for low income groups usually consist of completely finished flats in four to five stories apartment buildings. They are mainly walk-ups having a stair access serving two flats on each floor level. The layout of the housing scheme consists of parallel bars of apartment buildings surrounded by public spaces reserved for pedestrian foot paths and public greens, see table 1. The objective of the government is to provide a descent, completely finished, hygienic dwelling to the needy.

However, a post occupancy evaluation of such schemes showed the following:

Physical quality of the scheme: dramatic changes in the physical characteristics of the buildings are rather striking. It seems that the descent, completely finished, static standard flats designed by professional architects do not answer the varied and ever changing needs of the users. The users interfere and change the internal designs of the flats. Moreover, in need for more space, they close balconies and even add a new structure to the existing one. They share with neighbours in subsequent floors the expenses of adding such a new structure. One may ask how the government does not intervene and stop such non-planned additions. In fact, the expenses of the management and maintenance of such mass housing projects are increasingly high and after one or two decades the government loses control over the project thus allowing chaotic decisions having a destructive effect on the whole project. The illusive concept of having a neat and completed design comes to an end.

Environmental quality of the scheme: the outer public spaces mainly reserved for pedestrian foot paths and public greens are completely neglected and left as garbage dump. Sometimes, a positive action (which would be considered as a negative action by the initial conceivers of the project) is undertaken by the users of the ground floors. They try to add parts of the outer space to their territory and use it as a vegetable garden.

Financial scenarios within the scheme: mass housing projects are heavily subsidized by the government. The low income users are paying symbolic fixed rents. Such rents do not cover the necessary expenses for maintenance. Meanwhile, the income of the renters increases within time - which explains their active behaviour and the affordability of undertaking expensive and technically sophisticated actions such as adding a new structure to the existing one. Users are in fact "participating" in changing the initial physical and environmental characteristics of the scheme.
Accordingly, the economic scenario provided for such projects is irrelevant. The economic power of the government is decreasing while the economic power of low income users is increasing leading to a non-planned, uncontrolled participation. The formal project is thus transformed to an informal project.

Organizational scenarios within the scheme: the organizational role of the government over the project decreases within time without offering an alternative. Such a situation gives the opportunity to the users to take over and alter their environment, but not on a collective level. Every user is taking decisions for his own flat and his immediate environment without concern to the impact of such fragmented decisions on the overall scheme. Users' interference, with all its power and potentialities is not directed to replace the government role. In very few cases, the users organized their efforts to maintain and upgrade the scheme.

Description and Analysis of Informal Housing Projects

General description: as mentioned earlier, 80% of the housing stock for low income groups has been produced by the informal sector. Such a situation is a consequence of many factors - mainly political and legislative - that will not be discussed in this paper. However, the outcome of the phenomena is worth assessment since it reflects the potentialities of the settlers and their ability to provide their own shelters. The settlers were responsible for all the activities related to the development process including land reclamation, parcellization, provision of necessary resources (money, labour, material, equipment) for the progressive erection of their shelters. Such shelters are not temporary mud or tin huts, they are solid shelters built with bricks and concrete slabs. An assessment of such settlements would show the following:

Physical quality of the settlement: settlers are building on very small plots usually less than 100 square meters in area. They built 95% to 100% of plot area. The notion of open spaces within the plot is completely absent. They are after the maximum ratio of closed spaces. The buildings are two to five stories high. They are usually finished from the inside and unfinished from the outside. Many inner spaces are without natural lighting or ventilation which leads to unacceptable hygienic conditions of the dwellings.

The environmental quality of the settlement: the scarcity of open spaces is also reflected on the communal level. The only open spaces within such
schemes are the narrow roads leading to the dwellings. Such roads (3 to 6 meters wide) flanked by buildings of two to five floors without proper inner open spaces mean doubtful hygienic conditions within the dwellings since they are mostly deprived of sunlight and proper ventilation. Open spaces are a luxury that cannot be afforded by the settlers.

**Financial scenario within the settlement:** without official loans or governmental subsidies, the new settlers financed the informal development. Savings from work in arab rich countries plus minor savings offered by the housewife represented the main financial source for the development process. The modest fragmented sums are reflected on the small scale operations typical within the settlement. Buildings are erected according to phases. One phase could be the addition of one room or even the slab of one room. The fragmented sums of money could be considered as meaningless in a development process; however the outcome showed how powerful is such a decentralized fragmented financial scenario which built 80% of the shelters offered to low income groups within the last three decades.

**Organizational scenario within the settlement:** in the progressive development process, the settlers proved their efficiency to organize their efforts and provide the resources for the process (money, labours, materiels, equipment), for instance:

- **Money:** is available from modest savings as mentioned earlier.
- **Labours:** are available within the community. Small contractors using unskilled and semi-skilled labour are ready to undertake small size operations.
- **Materials:** are available in small scattered shops. They provide the necessary materials and accept to be paid in installments.
- **Equipments:** are rather simple. Traditional methods of construction are used without need for sophisticated machinery.

Thus, within a simple and decentralized organizational pattern, the settlers develop their informal settlement. They succeed to provide shelters where the cost of the build square meter is 1/3 to 1/2 the cost of governmental mass housing projects. This is due to many factors such as the absence of the overheads of large contracting companies, the absence of intermediate dealers and also to the lower standards of finishing.

Another aspect of the organizational behaviour of the settlers is the pressure they exercise on governmental officials to introduce infrastructure network to the community. They usually succeed on the long run.
The Interface Between Public Housing And Informal Schemes for Low Income Groups.

Based on the previous analysis, it is possible to recognize the merits and drawbacks of the two scenarios:

- In governmental mass housing projects, some merits could be recognized on the physical and environmental levels at the early stages of the projects. Designs are respecting building laws allowing hygienic conditions within the dwellings. Outer open spaces that could be directed to various activities are provided. However, on the financial and organizational levels, many drawbacks are encountered: the finished dwellings are heavily subsidized and such schemes cannot cover the demand of the low income groups. However, the fixed low rents do not allow a proper organizational scheme to maintain the project within time. Consequently, the utopia of a centralized development process comes to an end leading the way to a decentralized, non planned action of the users. The quality of the scheme within time is not much better than that offered by the informal sector.

- In the informal sector obvious drawbacks are expressed on the physical and environmental levels. Non planned areas, non designed dwellings against all building regulations are providing non hygienic conditions from the early phases of development. However, on the financial and organizational levels, these projects express potentials that cannot be denied. The decentralized development process is providing shelters to the low income groups in much larger quantities. It succeeds in procuring the necessary resources for the development process (money, labour, material and equipment).

Two points emerge from the previous discussion:

**first:** the centralization of all decisions and actions in governmental schemes is against the flexibility of the development process. The decentralization of all decisions and actions in informal schemes leads to the low physical and environmental quality of the settlement. There should be a solution in between allowing centralized decisions on certain levels of action and decentralized decisions on other levels of action.

**second:** the power of users participation cannot be any longer denied since
it expresses itself anyway. In public housing as well as in informal settlement, users interefear to build and change their dwellings. They provide the necessary resources for their action. If such an action is not planned, it could lead to a destructive effect. Such a potential should be recognized in the first place, then approaches for its channelling could be provided in order to reach a constructive effect of users participation instead of a destructive one.

Accordingly, it is believed that a third scenario is needed for shelter provision to low income groups. Such a scenario would combine the merits of public and informal housing and avoid their drawbacks.

**Site and Services Schemes for Low Income Groups.**

Site and services schemes could represent the third scenario for low income groups. In such schemes some of the decisions are centralized, others are decentralized according to the level of action. Moreover, users participation is closely related to the development process as will be discussed next.

**Centralized versus decentralized decisions:** In site and services schemes centralized decisions mainly concern the planning level. Central bodies would prepare the scheme deciding the proper location of infrastructure network, the community facility program, the implementation phases and the proper building regulations for small plots allowing proper and hygienic designs, thus assuring an acceptable physical and environmental quality for the settlement. The development of the buildings on the plots will be subject to a decentralized decision making process. The users will select the proper designs within the frame of preset building regulations. They will decide the areas for their dwellings at the early stages of development and will undertake further building activities within time according to their needs and affordability.

**Users participation:** In site and services schemes, the active users participation previously expressed in formal and informal schemes will have the chance to occur within a rational frame work. The changes and additions reflecting the varied and ever changing needs of the users will happen within the preset building regulations. The users will be the main responsible for the development process from the financial and organizational points of view, they will continue to provide the necessary resources for the development: money, labour, materials and equipment. Official
<table>
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<tr>
<th>PHYSICAL ASPECTS</th>
<th>ENVIRONMENTAL ASPECTS</th>
<th>FINANCIAL ASPECTS</th>
<th>ORGANIZATIONAL ASPECTS</th>
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<tr>
<td>- Dwellings built according to building regulations</td>
<td>- Adequate outer spaces for different activities</td>
<td>- Highly subsidized by government.</td>
<td>- Centralized development bodies.</td>
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<td>- Users change the physical features of the buildings according to non-planned scenarios</td>
<td>- Neglected outer spaces (mainly public).</td>
<td>- Limited number of supplied dwellings</td>
<td>- Maintenance decreases within time</td>
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<td>- Absence of building regulations</td>
<td>- Narrow roads not allowing vehicular traffic are the only outer spaces within the scheme.</td>
<td>- Users invest in unplanned changes</td>
<td>- Unorganized users action serving immediate needs damages scheme</td>
</tr>
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<td>- Inner spaces deprived of natural lighting and ventilation.</td>
<td>- No loans or subsidies, users are financing schemes</td>
<td>- Decentralized financial scenarios based on small savings.</td>
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<tr>
<td>- Unacceptable hygienic conditions</td>
<td>- Government financed and subsidized infrastructure.</td>
<td>- Settlers provide resources according to a decentralized process.</td>
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<tr>
<td>- Gradual development controlled by building regulations.</td>
<td>- Users financed dwellings.</td>
<td>- Infrastructure developed by central bodies.</td>
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<tr>
<td>- Changes and additions to dwellings within preestablished framework.</td>
<td>- Loans and private savings for gradual development</td>
<td>- Scheme developed according to decentralized organizational pattern resources provided by settlers.</td>
<td></td>
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<tr>
<td>- Appropriate street pattern.</td>
<td>- Private open spaces (within plots)</td>
<td>- Limited areas of public spaces.</td>
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<th>POSITIVE ASPECTS</th>
<th>NEGATIVE ASPECTS</th>
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Table 1: Some positive and negative aspects of different approaches to housing for low income groups.
bodies could help the users to get some technical assistance, subsidized loans, building materials and building components, etc...

**Conclusion**

The assessment of formal and informal housing schemes for low income groups in Egypt pointed up that:

- concerning the physical and environmental aspects of the schemes, a better quality is achieved in formal schemes specially at the early stages of the projects while a very low quality prevails in informal schemes.

- concerning the financial and organizational aspects, the highly subsidized formal schemes do not answer the demand of low income groups while the active informal sector provided 80% of housing for the same income group during the last three decades. The informal sector proved to be highly efficient in providing the necessary resources for the development through a simple decentralized organizational process.

It is believed that site and services schemes could combine the merits of the assessed two scenarios and avoid their drawbacks. In such schemes the physical and environmental qualities are assured through a global framework presented by formal central bodies. Meanwhile, users participation is closely related to the development process. The users would continue to provide the necessary resources for the progressive development of their settlement according to their simple decentralized organizational process.

**References**


