INFORMAL HOUSING COMMUNITIES: A CASE STUDY OF ALEXANDRIA

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ABSTRACT

Informal housing communities are one of the main challenges threatening the development strategies in the third world. This phenomenon is evidently spreading on the outskirts of cities, forming poverty belts around major cities. In third world countries, informal communities are built with limited resources and absence of effective development control from governmental departments. This results in socially unbalanced communities where physical illness persists in unhygienic living conditions and polluted environment. The reasons behind the enormous spreading of the informal housing communities are related to economic, political and social dimensions. In this study, the problem is examined in Egypt generally, with particular consideration to Alexandria city.

The study is mainly divided into two parts, the first is concerned with analyzing the factors and dimensions contributing to the problem and possibilities of improvements. The second part illustrates the major economic, social and environmental problems that have resulted from informal housing communities around the city of Alexandria, for which a number of recommendations are provided.

Keywords: Informal communities, Environmental conditions, Development control, Upgrading.

INTRODUCTION

due to the over expanding Today, densities developing population in informal housing communities countries. that have been illegally built, surrounding capitals and urban centers, are desperately in need for immediate solutions and remedies. Their dangerous effects have been well identified, through conferences. and advices. written researchers and planners. Still informal housing communities are being erected every day. Egypt is one of the developing where the phenomenon of informal housing communities has to be recognized and taken into account. This problem could negatively affect the economic, physical, social and health structure of the community.

Therefore, this research aims to study the problem of informal housing communities in urban centers, considering Alexandria city as an example, in order to arrive at planning principles to help in solving the problem in Alexandria city and

environments of similar conditions and localities.

FACTORS CONTRIBUTING TO INFORMAL HOUSING COMMUNITIES IN EGYPT

Various dimensions lead to the extension of informal housing areas in Egypt [1], those dimensions have influenced the problem, either separately or combined.

Economic Dimension

The continuous change in economic status of individuals, has led to internal migration, both vertically and horizontally (from rural to urban areas, and within urban areas). Low revenue from agricultural production, accompanied by poverty in both rural and urban areas, are the main causes.

During the last 40 years, Egypt has witnessed rapid economic changes, due to the vast industrialization policy adopted by the government in the 1960's. This called for great numbers of workers, who moved from rural areas into the main urban cities.

Whereas, Alexandria alone, contains 40% of the national industry, which attracted peasants from surrounding areas into the city, looking for jobs and better opportunities. For shelter, they built their own squatters on the peripheries of the city away from any legislation concerning zoning, land use, building codes and planning regulations.

As a consequence, informal/squatter neighborhoods expanded, engulfing most of the available agricultural land lots surrounding the city.

Political Dimension

One of the consequences of the 1967 war, was the partial destruction of the canal cities The Egyptian authorities then. initiated the evacuation of the resident population, placing them in main urban centers. This step has been carried out planning concerning the without prior housing capacity of those urban centers. As a result, people were given a free hand to their own housing problem. The authorities turned a deaf ear and welcomed the erection of thousands of housing units on the peripheries of cities on fertile land, that was cheaper then.

During the period that followed the 1973 war, Egypt witnessed an economic boom, creating industrial zones alongside the Cairo-Alexandria axis. These industrial zones attracted once more greater numbers of rural population, who, looking for better opportunities, built their shelters in non-official areas, surrounding cities.

The economic boom in Egypt (1975-85) was accompanied by a disinterest in agricultural production. As a consequence of urban growth and the demand for land, fertile agriculture areas on the peripheries of urban centers were divided into smaller lots and sold at lower prices than that of the market price. Informal/squatter housing, again, was a direct result.

Population Distribution

The historically unbalanced population distribution in Egypt along only 3.6% of its territory (1,002 million km²) has

been always related to the River Nile and its fertile banks. While 99.4% of the population dwell 3.6% of the land, the other 0.6% dwell 96.4% of the land on minor spots in the desert. Poor development and investment in other regions than Greater Cairo, has reflected dramatically on population development and distribution throughout the last 40 years.

The centralization of services and activities in both Cairo and government greatly Alexandria has helped accentuating the problem of population distribution. Population density in Cairo is 3 times as much as that of Alexandria, Cairo, alone, provides a living space for 17 million people, representing 1/3 of the Egyptian population (1996 census), while 5 million Egyptians live in Alexandria. Unbalanced population distribution and centralization of services have produced problems in economy, housing, services and human resources.

Social Dimension

Egypt, (according to the government official census,) grows in population at a rate of 2.7% in urban areas, and at 3% in rural areas. The annual increase of the Egyptian population is 1.5 million/ year. In 1960, the rural population represented 72.6% of the overall population, while in 1986, it has decreased to 65.1%. In 1994, the rural population again showed another decrease, representing only 60% of the country's population.

This is an indicator of the constant flow of migration from rural to urban areas which is a result of:

- Decrease of job opportunities in rural areas and small towns.
- The discrepancy in income between rural and urban zones.
- Lack of services and facilities in rural areas.
- The decrease in demand for Egyptian manpower in the Gulf area and Iraq.

As a result of the constant increase in population and the limitations of the fertile land, Egyptians headed in large numbers to the Gulf area and Iraq, where the market was thirsty for manpower. But, as a result of the Iraq-Iran war and the Gulf war in 1990 the demand for foreign manpower decreased suddenly, which meant the return of many Egyptians. Still looking for job opportunities, they invested what little they had into building houses on the peripheries of urban centers, where jobs may be more available than in rural areas.

Building Legislation

The construction policy has been affected by 2 main laws, in1976 and 1986 that have influenced land use and value in urban areas.

Both laws regulate building codes, site planning, built up area ratio and the relation between public and private spaces. They also regulate license issuing. To evade the application of these laws, and due to the exorbitant land prices within planned urban areas, people undertook the task of building their own housing communities on unplanned fertile land lots on the outskirts of cities-where the law does not apply, thus, creating chaotic communities, lacking any services or planning, which in turn is a continuous burden on the services and infrastructure of the city.

NATIONAL HOUSING POLICY IN EGYPT

The policy set by the government concerning housing in Egypt, has passed through four main phases, from 1952 to 1992. All of these phases have had a direct influence on the escalation of the problems of informal/squatter housing syndrome:

First; Until 1952, the housing industry was totally controlled by the private sector, according to supply and demand. With the 1952 revolution, economic and social changes took place, and directly affected the housing industry. Reform was a revolutionary target, involving social equality and the establishment of heavy industrialization. To achieve these goals, the government issued various laws, such as:

-The issuing of Agricultural Reform Law, limiting the ownership of fertile land, which reflected directly on the housing industry.

and people refrained from investment in construction for fear of confiscation.

- Laws decreasing housing units rental less 15-20% of its actual values.

The authorities took over the task of providing housing units in large quantities, mainly low income or "popular housing" throughout all the governorates. The built product, favoring quantity for quality, and as a consequence of lack of maintenance, whether from owner or tenant, has faced fast deterioration all through.

In 1955, the authorities again channeled government investments into industrialization, while limiting it in construction and infrastructure to only 32.6% of its yearly investments in this domain [2,3].

Second; As a result of political inclinations in the 60's, investments in construction were minimized, and directed mainly towards the construction of the Aswan High Dam in 1962, then into huge military expenditures to provide for both the Yemen war in 1962, and the June war in after which, most government 1967. investment went into rebuilding the Egyptian Army until the 1973 war. The Canal cities (Suez - Port Said - Ismailiya) were demolished during the 1967 war, their citizens were partially evacuated and to Cairo and Alexandria mainly, putting more pressure on the housing problem.

Decreasing rental charges by law, had a direct influence on the housing industry, as individuals (the private sector) refrained completely from investing into housing for rent, while, in the 70's, a new market has evolved, where housing units were for sale according to supply and demand.

Third; One of the most influential events affecting the building industry, was the reconstruction of the Canal cities, after the 1973 war. The rise in oil prices after 1973, lead to a general rise in prices of building materials, and eventually housing units market value, which in return helped in activating the market of informal housing.

The open economy policy approved a 15 year tax- exemption to projects related to construction in new cities. This law was soon abused, by private construction investment companies in favor of luxurious housing projects.

This policy led to:

A rise of 200% - 300% in the prices of land in urban areas.

 A rise in salaries of construction workers (most skilled workers being attracted to the Gulf countries).

The public sector then declined its role in building for the low-incomed, and ventured into construction related to, luxurious housing towers, touristic and summer resorts, bridges and tunnels, all in which, the public sector (The Ministry of Housing and Reconstruction) exhausted all its resources, and the low-incommode people, again, had to find their own shelters.

Realizing the dangers related to informal/squatter housing, the government in 1977 adopted a new policy. Instead of removal of those communities, the policy aimed at providing these areas with the bare minimum services, which turned out to be poor in both quality and efficiency, helping furthermore in the disintegration of the built environment.

Law No. 14 issued in 1981, favored cooperative housing schemes by reducing land market values and free taxes.

Fourth; The Egyptian government through the first 5-years plan (1982-87) aimed at adjusting the situations by building 800,000 housing units in urban zones, of which 55% are for the low-income housing. Most of this target plan was built by private sector contractors. The government provided investments through long-term loans.

In the second 5-year plan (1987-92), the government aimed at building 900,000 housing units in urban zones, of which 73% economic housing, 24% moderate housing, and only 3% luxurious housing.

In 1987, the government went through a project for "low budget housing", providing unfinished housing units in the form of open spaces (varying between $45m^2$ - $90m^2$) at a low cost of 10,000 L.E., 20% of which is paid by the tenant, and the remaining 80% as a 30-year loan at 4% interest.

In another attempt to limit the growth of informal/squatter areas on the outskirts of Cairo, the government is planning to construct 10 new communities along the circular highway. These communities are planned to be new urban centers to attract dense population out of Cairo.

The previously discussed government policy (1952 to 1992) was not solely responsible for the escalation of the housing problem, but was aided by other factors that cannot be overlooked. These factors are:

- The increase in population was not met with adequate housing units for the lowincomed.
- Geographically unbalanced population distribution.
- The continuous internal migration from rural areas to urban centers.

TYPOLOGY OF INFORMAL/SQUATTER HOUSING IN EGYPT

1 - No-order pattern

This type of squatter housing takes shape as an extension to housing, industrial, or commercial zones. The informal growth has no order, and depends on fitting in empty land lots, wherever available. Houses are built attached, street width varies from 1.2m to 10.0m. Meet Okba, in Cairo, Ezbet Hegazi, Hagar El Nawatiya in Alexandria, are examples of this pattern.

2 - Longitudinal Pattern

This type of informal housing is usually built far from existing neighborhoods, on land lots along existing side routes, and is usually self-contained.

3 - Dispersed Pattern

This pattern usually overtakes fertile land, where the land is divided into smaller lots for housing purposes. In a very short time squatter housing in a longitudinal pattern takes shape, leaving large empty lots between housing clusters. Soon the empty

lots are filled with more informal dispersed units.

THE SOCIO-PATTERN IN INFORMAL /SQUATTER AREAS

1 - The Squatter Owner

Usually is a person who builds a house or/housing units on land lots he does not own.

2 - The Squatter Tenant

Those tenant, looking for any form of shelter, are usually low incomed immigrants from rural areas. Their only hope for shelter is in informal, illegal housing lots. Soon they become owners themselves.

3 - The Squatter Land Lord

Land lords are usually those who have been living for a long time in squatter areas. They make a living out of occupying land lots, dividing it and then either they resell it or built more informal houses for rent.

POSSIBILITIES OF IMPROVEMENT

Many researchers concerned with housing problems in the third world, concluded that informal housing usually produced health problems, and outlaws. Besides creating a society of contradictions and family disorder. They also concluded that squatter areas damage the urban fabric of cities.

As a counter policy, authorities took over the removal of squatter areas as being unfit environment for human existence, the policy also aimed at replacing this form of housing by more appropriate government housing schemes but unfortunately, this policy has failed to achieve its targets due to:

- The rapid development of informal housing on the outskirts of cities.
- The authorities were unable financially and administratively to provide alternative housing patterns to informal/squatter form.
- The removal of squatter areas could cause political and social instability to the local regimes.
- The interference of local politicians and elects in the process of squatter housing

removal, in favor of more votes during elections.

As a result of the mentioned factors, removal programs for squatter areas have failed in the Third world. The authorities looked upon informal housing as an acceptable solution to the overgrowing housing problem.

1 - Upgrading

Implementing improvement programs to upgrade the living environment in informal areas can be achieved by provision of funds from the private sector, international aid or increasing the local budget for housing improvement programs.

The improvement programs must include, infrastructure provision, sewage disposal, electricity, telecommunication, potable water, roads paving, garbage removal. Also the provision of essential services such as Police Station, fire brigade and emergency unit.

Improvement of open spaces, in terms of area and services, such as outdoor furniture and lighting, greenery and treescorresponding to the local social needs.

2 - Self-help Building

Involving the local inhabitants in building their dwelling is the most appropriate means suitable to the social and economic conditions of informal/squatter housing communities [4,5].

This participation wes emphasised more or less by demonstrating the building process of any home in the rural community. All the neighbours give a hand in the process without the help of outside labour, and are not paid for the work [6].

If and when this cooperative system could be practically applied to small rural / urban communities, the built product, definitely, will be cheaper, economically, and will have the ability to sustain its own growth and development.

The principle of self-help in building, could be advantageous in respect to local economy, and the local job-market. In addition to that it will create a dynamic construction motion, where demand for labour, building material and related services are concerned.

The policy of upgrading informal housing communities, together with the self building principle, will encourage the building processes and minimize informal squatter housing. It will olso accelerate the erection of housing units in response to the growing population known of the Third world cities.

INFORMAL HOUSING SETTLEMENTS IN ALEXANDRIA.

Alexandria is the second capital city in Egypt. It is bordered with significant natural constraints influencing the city into a linear form, extending about 30 kilometers along a narrow coastal strip, between the Mediterranean sea in the north and lake Marriout and agricultural land in the south.

This strip varies in width between 0.7 km in the west to 2.7 km in the east.

The population of Alexandria is about 5 million inhabitants of which 1.7 million live in informal housing communities [7] of poor physical and social environment with unhygienic living conditions. The residents of such settlements are either immigrants from surrounding rural areas in search for better jobs and services, who build their own shelter in areas where land is cheaper and away from governmental control, or low income families and newly weds in search for a living place they can afford.

Alexandria is Egypt's major seaport which deals in 80% of the country's cargo and houses 40% of the national industry. Being a major industrial city Alexandria is a major attraction for migrants from rural regions in search for better income and living conditions, faced with land limitations and exurbant prices of housing units, the low incomed find refuge in squatter/informal housing communities on the outskirts of the city.

PROBLEMS RESULTING FROM INFORMAL HOUSING COMMUNITIES IN ALEXANDRIA

The problems discussed hereafter were derived from a number of case studies that have been conducted in different areas in Alexandria. These case studies were examined by the authors through different field visits which depended on interviewing residents of different ages and observing the settlements open spaces and social behavior and activities, architectural pattern, level of services and infrastructure facilities. The areas selected on the out skirt of the city, were, Hegazi community, Haggar El Nawatei and El Saiadin community (Figures 1-2-3).

All cases represented the same problems which are:

- 1. The selected informal housing communities form a belt of poverty surrounding the city of Alexandria, and constitute a problem for urban expansion possibilities.
- 2. The studied areas are built on the approaches of the city. Such communities were built with limited resources and without the application of any regulations or planning codes, which negatively affect the appearance of the urban configuration of the city, and the built environment.
- Those poorly planned communities have produced a built environment which lacks open spaces, using building materials and techniques of poor quality, producing ugly architectural patterns.
- 4. The housing units in the studied cases lacked basic requirements as in privacy, residents adapted by time and their need for shelter, to live commonly.
- 5 Lack of basic open spaces in all the studied areas resulted in unheigenic conditions, regarding air circulation and sun penetration.
- 6. The studied areas showed poor infrastrure, producing a polluted environment.
- 7. Socially, the residents of those settlements have adapted to the unheigenic environment, and have no hope for improvement.
- 8 The narrow streets and alley patterns of the studied cases, is difficult to control in cases of emergency (some alleys are 80 cms wide only).

Informal housing Communities: a Case Study of Alexandria





Figure 1 Photographs were taken in Hegazi informal and squattering community in Alexandria.

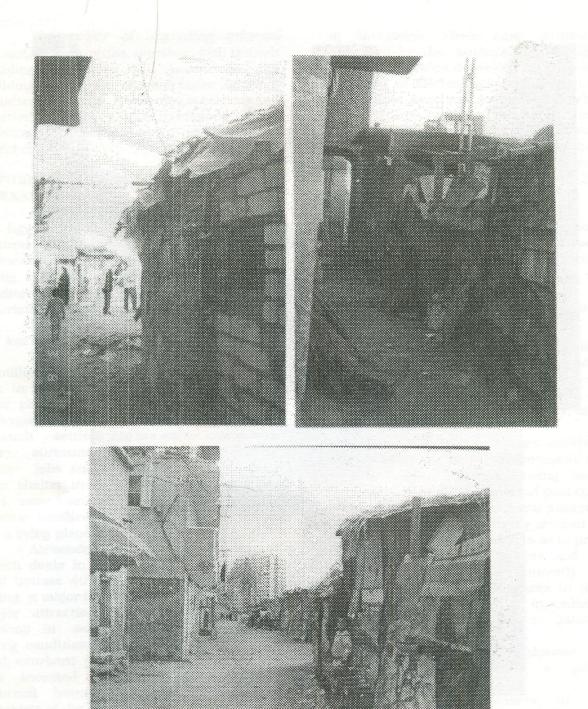


Figure 2 Photographs were taken in Hagar El-Nawateya informal and squattering community in Alexandria.

- 9. Most areas contained unauthorized industrial activities, contributing to the pollution of the local environment.
- 10. These settlements lacked provision of services such as schools, medical aid, and basic adminstrative services. The local population is generally uneducated (one of the case studies showed that of the 5000 inhabitants none reached higher education levels).
- 11. As a consequence to the deteriorating living environment in the studied cases, the local residents undergo a feeling of social segregation leading to isolation from any activities concerning the city of Alexandria.

CONCLUSION AND RECOMMENDATIONS

The study has indicated that the problems of communities of informal nature has not undergone any governmental claim that those interference. Officials communities are outside city borders which means out of their responsibilities. However, the study showed, lack of communication between all bodies involved (residents, governmental departments and professional expertise). The residents established their communities on their own basis and philosophy in housing, with their limited exploiting the absence of resources, governmental intervention and control. Professionals (architects, planners, social economists, etc.) are partly workers. involved in the formation of the problem, since they took part in planning strategies and proposals of housing system and policies, set out by decision makers. However, the result is informal, illegal, constructed housing patterns poorly and polluted environment with unhealthy living conditions and a segregated society.

From the previous discussions, it can be concluded that, developing and upgrading the informal housing communities, spreading out on the out-skirt of the city has become an urgent issue, if not overdue. Recommendations for immediate interference as a short-term policy has been set, accompanied by a long

term policy aiming at putting an end or limit to informal over growth.

Short Term Policy

- 1- Effective planning and development control is a must, as shown from the study, that the residents do not reject governmental departments control if it provides more services and better conditions for living.
- 2- Strong penelties should be applied against any building that over looks building codes and regulations.
- 3- A comprehensive planning for the city and it's future extensions and urban challenges should be prepared in advance, providing the people to grow in channeled preplanned directions.
- 4- The process of problem solving and decision implementation is always slower when compared with the development of informal settlements. Therefore, good communication between decision makers and other authorities responsible for implementation is a must.
- 5- Cooperative development strategy to upgrade and improve the quality of life inside those communities must be applied, including the cooperation of governmental authorities, professional bodies and the residents themselves. who showed readiness to participate in self-help programs that aim to improve their living environment. Developing and upgrading those informal and polluted housing communities have to be the responsibility of government departments, professional consultants and expertise and the residents themselves. The case studies showed that the majority of residents are ready to participate with money and labor and the rest can participate as laborers, as they are already working in building and construction. Providing laborers means saving about 30% of the total cost for developing the community. participation will make residents feel loyal to their environment and always keep it clean and in good form and

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shape. Professionals and expertise can participate by preparing comprehensive development and detailed plans for developing and upgrading those informal communities. Governmental departments can participate through providing money and follow up and control of the development

- 6- Preparing processes.a detailed plan for upgrading settlements based on:
 - A. Provision of adequate infrastructure fa-cilities, such, as sanitary work, electricity, water supply, etc. all infrastructure facilities that a community needs for good and healthy living.
 - B. Replanning and readjustment of settlements layout pattern, with minimum changes and losses, to enhance open spaces needed and recommended.
 - C. Enhancing building configuration and elements in order to arrive at a unified architectural pattern and vocabulary.
 - D. The community should contain the necessary services such as, a school (or schools), health care unit, administrative unit, shopping area, etc.,

Long Term Policy

for long term policy, the government must setup for the strategies for development aiming at the absorption of population growth in newly, developed regions, such as Toshka, Sinai, and the South of the Valley, where land opportunities Such are vast. new settlements must accommodate for all activities to encourage people to move into the new regions with better opportunities and less taxes.

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