The Role of Architecture and Urbanization in Developing the Capabilities of Government Housing Users (Case study: Al Mahrousa Project 1,2) Assist. Prof. Dr. Yaser Mohamed Elsaid Assistant Professor, Department of Architecture, Faculty of Fine Arts, Helwan University

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Introduction

Housing policies are a very important component of the national development strategy, and the Egyptian city is witnessing increasing rates of urban growth as a result of population growth and increasing rates of migration from the rural environment to the city, which led to an increase in informal settlements. A set of policies and programs to deal with this urban phenomenon and its dangerous repercussions, and to meet the needs of the community from the increasing demand for housing and basic services and the re-exploitation of available resources to provide adequate housing.

Despite the increasing interest in establishing development projects for social housing and the availability of expertise, efforts and material and human resources to establish urban development projects for social housing through local and international governmental and non-governmental organizations, civil society and various popular movements, it did not yield the desired results and there are still problems that affect the achievement of the projects' success, development and its sustainability, especially in the absence of cultural awareness and discipline concepts among its residents.

It has become necessary to pay attention to management approaches in development projects after implementation, while providing awareness programs for people through governmental and non-governmental agencies to support the desired sustainable development. And the success of housing projects depends on understanding the needs of the users of these projects, their cultural, social and economic backgrounds, and their financial capabilities.

Then the research deals with the development of a more effective framework for policies and directions to deal with these problems using architectural facilities that aim to develop the cultural, economic and social concepts of the population and meet their material and moral needs through these projects in general and Al Mahrousa project 1 and 2 in particular.

The research aims to identify the segment of the population of government projects in economic, social and cultural terms, and also aims to exploit the urban and architectural spaces to benefit from them in the work of architectural programs to develop the capabilities and tools of the residents of these projects, from the economic, social and cultural aspects, in addition to the trend towards transforming the project community to being local. The case study turned to an integrated productive society by developing the culture of this society and spreading positive ethics and spreading the behavior of discipline, respect for the law, belonging and urbanization among its residents.

It aims also to invest all inactive and helpless human energies and transform them into a working capacity to achieve development, and to achieve the hoped-for balance of values and principles in the face of the movement of development in society, which leads to overcoming all negative barriers between groups and institutions of society, and limits the causes of social backwardness and crime in society.

سبتمبر ۲۰۲۳

Basic human needs:

• Physiological needs for food, drink and shelter.

• A need to feel safe and secure, to reduce the feeling of fear, and to be protected from physical and psychological damage.

• The needs of belonging and love for the place and the society and the formation of social relations.

- Needs for appreciation, respect, inclusion, self-actualization, and privacy.
- The need of feeling that he is an active member and has the ability to control and contribute to the formation of his environment.
- Needs to sense, perceive and taste beauty.

Characteristics of slum dwellers:

• The residents of these areas suffer from low incomes and a high rate of unemployment, and most of the professions they practice are confined to working in small crafts, shops or self-employment as house guards, servants and street vendors, because they are often illiterate or have a low level of education

• Low educational and cultural level and the spread of poverty and frustration, which contributes to an increase in crime rates and the production of negative social phenomena such as violence, addiction, extremism, deviation and other problems.

• They are socially isolated from urban areas because of their low cultural level or differences in traditions and behaviors.

• The lack of family privacy and the low level of security in these areas, which contributes to the occurrence of social crimes.

• Lack of interest in the health aspect, in addition to the spread of diseases and epidemics as a result of ignorance and lack of hygiene and health awareness.

• They are distinguished by the strength of social ties among themselves, due to the closeness in the economic, social and cultural situation, and the types of problems and requirements.

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The role of architecture and urbanism in the development of government housing communities:

• Defining the social structure of the community and identifying the existing social networks and benefiting from them in activating community participation.

• Encouraging people and working to build their capacities by spreading awareness about community participation and benefiting from it by providing stimulating activities to take advantage of free time in new activities that motivate them to participate in the development process.

• Working on activating the role of local leaders and organizing groups for ease of communication and dealing with people and raising awareness.

• Paying attention to the education aspect in order to raise the cultural level of society by raising the efficiency of schools and activating literacy classes.

سبتمبر ۲۰۲۳

A Critical Study of the Development Project of Zeinhom Gardens, Cairo:

• Completely removing slums and constructing modern economic buildings with urban planning that have green spaces with decent health, environmental and humane specifications.

• Improving the housing and environmental conditions experienced by the residents of the areas falling within the scope of the project, known as the Zeinhom Gardens.

• Implementing a sustainable housing finance system based on the recovery of project costs through mobilizing financing from the target groups of the project, the commercial private sector and participating banks.

• There are some services in the area such as a gym, and a number of facilities such as a hospital, a nursery, a social center, a police department and a sufficient number of schools, in addition to natural gas, potable water, a sewage system, electricity, and a system for collecting garbage from homes.

• Not providing commercial services to the daily requirements of the population, except for a small market with some shops to meet the needs, which led to some people setting up illegal places to sell consumer products in the absence of the regulatory side.

• Failure to raise the behavioral level of the population led to the deterioration of the urban environment from the spread of garbage and deformation in buildings and encroachment on open green areas.

A critical study of the Children's Cultural Park project (Al-Hawd Al-Marsud) in Sayeda Zeinab, Cairo:

• This project, which won the Aga Khan Award for Islamic Architecture in 1992, is one of the most prominent urban projects serving the public sector implemented in the Arab world.

• The project achieved its functional goal in terms of reaching a distinct architectural pattern in line with the spirit of the community in which it resides.

• The cultural park for children contains galleries, a museum, a theater, a library, and a nursery.

• Realizing and reflecting the needs and desires of the user and the beneficiary of the project is reflected in the success of the idea and the purpose of the project.

• The project achieved its functional goal in terms of reaching a distinct architectural design in line with the spirit of the community in which it resides.

El Mahrousa 1,2 Housing Case Study:

An area of 33 acres was chosen in the Al-Nahda area in the second neighborhood of Al-Salam, and it consisted of sand pits, flat land areas, and a waste area that includes the Cairo garbage dump.

The total costs of implementing this project for the construction of 197 residential buildings, funded by the Slum Development Fund and Cairo Governorate, was about 890,430 thousand Egyptian pounds.

سبتمبر ۲۰۲۳

Statement of units in Al-Mahrousa 1 project:

The existing program of the Mahrousa 1 project includes 129 buildings, the total number of units (3229 housing units + 84 commercial stores + 39 administrative units).

The project's service buildings are outlets, incubation, medical center, police station, fire station, El Mahrousa mosque and a playground area.



Statement of units in Al-Mahrousa 2 project:

The existing program of the Mahrousa 2 project includes 68 buildings, the total number of units (1666 housing units + 6 administrative units).



The proposed plan to find an urban mechanism to develop the capabilities of the population

- Converting 24 commercial stores to 24 production workshops.
- Converting 8 administrative units to:
- Cinema hall
- Library
- Children's library
- Sports center
- Recreation center
- Technology Center
- Vocational training center
- A training center for sewing and tailoring clothes

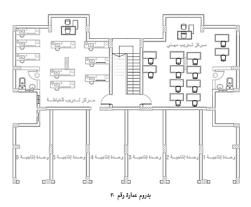
The total number of commercial stores is 60 and the number of administrative units is 20.

The proposed plan will be implemented through:

• Suggesting the most appropriate location for the center within the project to achieve the highest benefit for the population at the lowest possible cost.

• Organizing and conducting training courses on various professions through a vocational training center building that provides residents with training courses that provide vocational preparation programs at all professional levels or programs to raise efficiency to raise the efficiency of work practiced in the labor market, in various trades such as: (woodwork of carpentry and furniture, blacksmithing and welding, mechanical turning, milling and scraping, filing and handicrafts, metal foundry, sanitary and plumbing works, marble, and metal foundry).

• Providing classes for teaching women and children crafts and literacy classes to raise the cultural and economic level of families.



The proposed model as a center for vocational training and production units, and a center for teaching sewing and tailoring in the basement.

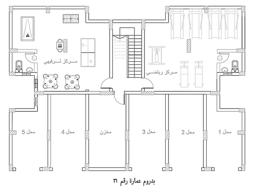
• Benefiting from the factories located near the project by feeding them with small industries, and supplying them with manpower from the residents of the area.



The location of the factories area and its relationship to Al-Mahrousa 1, 2.

• Providing an integrated and organized sports program with a group of sports coaches in order to take care of training the population, and organizing sports courses on a regular basis.

• Design and construction of a cultural, social and sports club serving El Mahrousa 1, 2.



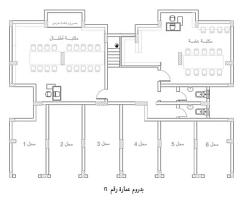
The proposed model as a sports center and recreation center in the basement.

• Providing places for public transportation on the outskirts of the project, helping residents to reach their workplaces.

• Proposing to offer the basements under the residential buildings for rent at nominal amounts for the residents to use as small stores or limited workshops to enable them to practice their previous professional lives in an orderly manner.

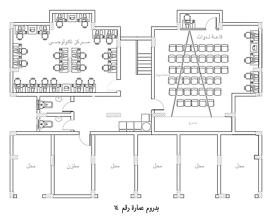
سيتمبر ٢٠٢٣

• Interest in and encouragement of reading by establishing a free library for the residents of the city, as well as a children's library.



The proposed model for public library and children's library in the basement.

• Design halls for events and seminars, used for cinema shows, and cultural competitions, and they can be used as halls for celebrations.



The proposed model for the technology center, seminar hall and cinema in the basement.

• Establishing small kiosks in the corners and intersections to sell books and cultural magazines.

- Providing targeted satellite stations that are concerned with spreading culture.
- Spreading the culture of volunteer work and encouraging residents on a regular basis to volunteer in maintaining service buildings such as mosques, stadiums, ...

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