Policy Directions in Urban Health in Egypt; Towards Slum Improvement Approach

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Summary

Urban living is the keystone of modern human ecology. Cities have multiplied and expanded rapidly worldwide over the past two centuries. Cities are sources of creativity and technology, and they are the engines for economic growth. However, they are also sources of poverty, inequality, and health hazards from the environment. The urban development, or housing, sector has a longer experience of addressing the problems of the urban poor in developing countries than the health sector. In recent years the policy of 'Environmental Improvement', which involves both sectors, has attracted the support of international donors. On the other hand, environmental health science has broadened the scope of its inquiries, expanding its investigations beyond the effects of single pollutants on individuals to incorporate the entire panorama of external factors that may affect people's health. This paper discusses the development of the slum improvement approach, and analyzes the constraints to environmental health improvement in developing countries.

Keywords – Urban Health; Environmental Improvement; Sustainability; Developing Countries;

Introduction

One of the most essential needs of people everywhere in the world is adequate and healthy housing. This is recognized by the United Nations, and is emphasized in its Istanbul Charter. Thus governments are encouraged to facilitate their citizens' acquisition of adequate and healthy shelter. This involves: protecting the rights of owners and renters; ensuring that citizens of all classes have the opportunity to obtain satisfactory healthy housing; and to induce the private sector to invest in this economic sector. However, during the late 1970s and the 1980s two parallel movements which have recognized the needs of the urban poor in developing countries emerged in two distinct sectors at different times. The first was in the housing, or urban development sector. The second was in the health sector. Both of the above policy developments were partly a response to the sheer actual numbers and expected numbers of poor people living in intermediate and large cities of the world. The problems are acute, particularly in developing countries: estimates are that, at present, an average of 50% of the world's urban population live at the level of extreme poverty, with this figure rising as high as 70% in some cities. (Harpham, 1988).

1. Microbiological, Physical And Chemical Hazards In Slums;

Large cities in the least developed countries typically combine the traditional environmental health problems of poverty, particularly respiratory and enteric infections, with those of poor quality housing and unregulated industrialization. Residents therefore are often at risk from diseases and

injuries associated with poor sanitation, unsafe drinking-water, dangerous roads, polluted air, indoor air pollution and toxic wastes. The United Nations Centre for Human Settlements has written that ‘‘the deterioration in the built environment is sharply in evidence throughout most of urban Africa... This trend seems to have been accentuated by the effects of structural adjustment in many countries, according to which urban workers lost more than rural smallholders’’ (HABITAT, 1996). In developing countries infant mortality is typically four or more times higher in poorer segments of urban populations than in richer segments. There are also large differences between richer and poorer populations in the incidence of environmentally related infectious diseases such as tuberculosis, typhoid and cholera, and in exposure to local air pollution and indoor air pollution (Brennan EM, 1999).

Poverty, then, is more than income deprivation. Urban poverty is the most important predictor of environmental health risks when its definition includes other forms of deprivation such as physical assets, political influence, access to basic services and access to social capital (The world health report 1995). Satterthwaite concluded that: ‘‘Although considerable progress has been made since 1990 in improving housing conditions for low income groups in certain cities and more effective approaches are now being more widely applied, the number of people suffering serious environmental health burdens in urban areas probably increased significantly during the 1990s — in part because urban populations continue to grow rapidly in most of Africa, Asia and Latin America, in part because of weak and ineffective urban governance, in part because of continued increases in urban poverty in many nations’’ (Satterthwaite DE, 2000). He argues that what is often forgotten is the contribution towards reducing poverty that is made through the health benefits gained by improving housing and providing clean water, sanitation and waste removal.

1.1. Microbiological hazards

As it reshapes modern human ecology, rapid urbanization is expanding the traditional role of cities as gateways for infections. Crowding and unsanitary conditions are important amplifiers of the transmission of infectious diseases: many infectious diseases thrive where there is a lack of water, and inadequate drainage, sanitation and solid waste removal. Population movement from rural areas into cities and greater mobility within cities are bringing new opportunities for otherwise marginal and obscure microbes (Wilson ME, 1995). A new concern is that as global temperatures continue to rise, which they have done over the past quarter of a century, mosquito-borne infections, such as malaria, will become more prevalent in highland cities in low-latitude countries (such as Nairobi and Harare). Recent movements of such vector organisms and their diseases to higher altitudes may be an early response to climate change (Epstein PR et al, 1998), although causal attribution remains difficult because of the limited evidence. Associated with this is the belief held by some climatologists that rainfall patterns will intensify as a result of global warming and more local flooding will occur, facilitating the breeding of mosquitoes and causing microbiological contamination of urban sources of drinking-water.

1.2. Physical and chemical hazards

The modern urban environment combines industrialization, crowding, waste generation, and dense transport systems. This combination, compounded by the per urban poverty that surrounds many cities in developing countries and the poverty of inner urban areas in cities in the developed world, introduces many environmental health hazards (Schell LM., 1991). These may be overt, as in the cases of road trauma or the increase in asthma attacks that occurs during episodes of high air pollution, or more insidious, as with exposure to environmental lead.

1.2.1. **Environmental lead exposure;** In 1997, the World Bank made the phasing out of lead in petrol the top priority of its 10 main objectives for improving health and the environment (Listorti J. 1999). Exposure to lead has developed in the urban environment over many decades; the lead comes from industrial emissions, house paints and the use of leaded motor fuel (Tong S, Prapamontol T, 2000). Many high-income countries, including the United States and Australia, have recently set new, lower standards for environmental exposure to lead to protect young children. However, childhood lead poisoning—a particular hazard in the neurocognitive development of children — is an increasing problem in many low-income countries, especially in urban environments. High concentrations of lead in blood have been observed in cities such as Bangkok, Jakarta, Taipeh, Santiago and Mexico City. In Dhaka, Bangladesh, the airborne lead concentration is one of the highest in the world, and the mean concentration of lead in blood in 93 randomly chosen rickshaw pullers was 53 mg/dl, five times higher than the acceptable limit in high-income countries. The lead content of petrol sold in Africa is the highest in the world and is associated with high concentrations of lead in the atmosphere, dust and soil. Many other exposures in Africa come from industrial sources, cottage industries and domestic sources. In recent surveys, more than 90% of the children in the Cape Province, South Africa, had lead concentrations in blood over 10 mg/dl (Nriagu JO, 1996).

1.2.2. **Urban transport and air pollution**; One consequence of the global influence of transnational corporations is that private car ownership is increasing spectacularly. In 2000 there are more than 750 million cars in the world. This rapid growth in car ownership reflects the influence of advertising, the power of the roads lobby, the wealth of consumers and their desire for status, comfort and mobility. In cities where there is no public transport, private cars are especially desirable. Car congestion is now endemic in cities everywhere (Newman P, Kenworthy G, 1999). In addition to the fragmentation of neighborhoods, intrusive noise, and restrictions on physical exercise, there are three broad categories of public health hazard from urban car traffic.

- **Firstly**, over 750 000 people die from car crashes annually, including car occupants, pedestrians and cyclists, most of them in developing countries (McMichael AJ., 1996).

- **Secondly**, emissions from vehicles cause local air pollution, particularly photochemical smog during summer. Urban air pollution has, in recent decades, become a worldwide public health problem, particularly in many large cities in the developing world. An estimated 130 000 premature deaths and 50–70 million incidents of respiratory illness occur each year due to episodes of urban air pollution in developing countries, half of them in East Asia (Maddison D., 1997). In Mexico City, for example, three-quarters of the air pollution is caused by motor vehicle exhaust, and nearly half of the toxins within that pollution come from the same source (Connolly P., 1999).

- **Thirdly,** exhaust emissions contribute to acid rain and to the global accumulation of carbon dioxide. Each of these have wide ranging consequences for human health. In developed countries, traffic exhaust accounts for approximately one quarter of all carbon dioxide emissions.

1.2.3. **Heat waves, urban vulnerability and mortality;** Heat waves adversely affect health. The frequency and intensity of heat waves will likely increase over the coming century as world temperatures rise (Second assessment report. climate change 1995). The impact of heat waves on mortality is typically greatest in the centre of large cities, where not only do temperatures tend to be higher than in the suburbs and surrounding countryside but night-time cooling is lessened. This

‘‘heat island’’ effect is caused by the large heat-retaining structures and treeless asphalt expanses of inner cities and the physical obstruction of cooling breezes. Studies of heat waves have shown that those who are most vulnerable to heat-related illness and death are elderly people, those who are sick and poor people living in urban areas. In the United States in July 1995 more than 460 extra deaths occurred as a result of a heat wave in Chicago during which temperatures reached 40 oC. The rate of heat-related death was much greater among African Americans than the rest of the population and among people who were confined to their beds or poorly ventilated inner-city apartment blocks (Semenza JC et al., 1996).

2. Health Issues In Slum Improvement Approach

2.1. Target Groups In Slum Improvement Projects

Reaching target groups is a complex process requiring detailed understanding of existing urban social and economic situations. Problems arise both from assuming initially that the poorest are static occupiers of a slum and in not analyzing thoroughly the existing housing markets within poor urban communities. However, we may ask who are the poor? and why are the poor so often mobile or renting? The reasons may be various: the poorest are often seasonal and manual laborers forced to shift regularly as work sources change. They rent partly because of a need for mobility and lack of fidelity to any one site, and often because they lack the funds to build or buy their own home. These groups may be extremely needy, but they tend to be too mobile to fit in with existing slum improvement projects which seek to improve facilities on one site and to serve a stable population over a longer period of time.

According to Stephens health workers in the slums of the developing world may find themselves in an endless cycle of ameliorating the effects of preventable illnesses such as diarrheal disease; coughs and bronchial infections, parasite infections etc. *(Stephens, 1990).* Where slum dwellers live in extremely poor physical circumstances, health planners must be cautious in assessing the possibilities of enhancing health status for residents in their current situation. If tackled on site, health status of these poor households may be improved by an intensive health service input for an expensive (probably donor supported) ‘project’ period, but may not be sustainable in the long term by national governments of developing countries. Even if a project succeeds in improving other socioeconomic variables such as household income long-term health chances for the community may not improve. (Bapat, 1984).

2.2. Slum Improvement Projects and Land Tenure

Security of tenure for slum dwellers has several effects. Many of these are initially beneficial to the urban poor. Most importantly, they gain security from eviction and recognition of their existence as urban citizens although this can also make them liable for land or property taxes they can ill afford. Land tenure can also encourage families to invest in their environment and can create a willingness to demand rights to facilities such as health services, water supplies, education and infrastructure. It can also encourage families to contribute to the provision of those facilities which may not be provided by central government agencies. For example, Skinner described the government-supported Villa El Salvador settlement in Lima, Peru, where the secure tenure status of the community gave inhabitants the confidence to demand infrastructural improvements and later health programs, local industrial enterprises, and so on. When these were not forthcoming the residents voluntarily established their own alternatives, (Ward, 1982).

Problems of beneficiary identification also exist for the health planners of such projects-should they serve the renting population or the house owner (who may not live on the site but who, at point of registration, may insist on being identified as the beneficiary householder)'? In some cases trying to find the beneficiary groups by stipulating that the house 'dwellers' (owners or renters) will become the project displace group and get tenure rights and other inputs, not solve the problem since it assumes that the renting population (living in the house) is that in most need of assistance. Finding a target group for health inputs in this situation becomes extremely complex: if house owners are given tenure, health planners may end up with a mixture of largely unregistered (by tenancy) 'invisible' renting households who actually live in the slums, combined with outside families who own the slum houses, but who do not actually dwell in 'project' houses. Problems such as these are just beginning to be documented by project evaluations of slum improvement projects in developing countries.

2.3. Impact of Slum Improvement Projects on Women

When one attempts to look at the effects of slum improvement upon women, it is difficult to disaggregate the effect that simply living in an urban environment may be having upon their lifestyle and health status. The impact on women living in an urban context can be both detrimental and positive in poor urban areas. Slum improvement projects have been noted for their positive effects in improving conditions and status of women. These can include:

- Reduce in physical and household workload (Salmen, 1989);
- Reduce in physical dangers to children from poor infrastructure-particularly noted and appreciated by women;
- more opportunities for employment and education;
- Opportunities to increased personal status through: land tenure;
- Participation in slum management through committees; project employment (for example, as health workers or teachers);
- Improved access to health, and particularly maternal care including immunization for pregnant women; advice on family planning; nutrition;
- Better delivery (if training birth attendants is part of the program).

According to Moser, Women have a triple role as "reproducers, producers and community organizers", according to the author, and it is only if these roles and the requirements that they engender are taken into account that women can truly benefit from slum improvement schemes. Many policies are formulated on the assumption that a household consists of a nuclear family of husband, wife and 2 or 3 children, where the man's task is 'breadwinner' and the women's to take responsibility for the reproductive and domestic work involved in the organization of the household. Given that in many poor urban areas more than 50% of households are headed by women, this assumption needs reexamination. Health planners should also be aware of the shifts in women's working patterns and household organization. This is particularly so since many health programs continue to assume that women are less involved in labor outside the home and are free to attend health activities at any time in the day. Most urban health programs remain very much planned within this philosophy, and would benefit from a greater awareness of the changing character of women's roles in the urban context, (Moser, 1987).

3. Egypt's Particular Challenges; Scale And Magnitude Of The Problem

Available data appears incomplete and often contradictory. The population of the 23 informal areas in Greater Cairo (encompassing Cairo, Giza, and Qalioubia Governorates) seems to have reached

about 5 million by the end of 1999, out of a total population of 15.7 million—or 31 percent of the population. This is a low estimate compared with the figures provided by the "Annual Evaluation Report for Informal Settlements," prepared in 1993 by the Ministry of Local Administration. According to this report, the population living in informal settlements amounted 4.52 million from a total urban population in Greater Cairo estimated at 10.06 million. According to these figures, 48 percent of the Greater Cairo population would live in informal settlements. Informal settlements in Greater Cairo are more densely populated than other settlements. High population density in consolidated informal settlements on privately owned and public land complicates physical upgrading, redevelopment, and resettlement projects.

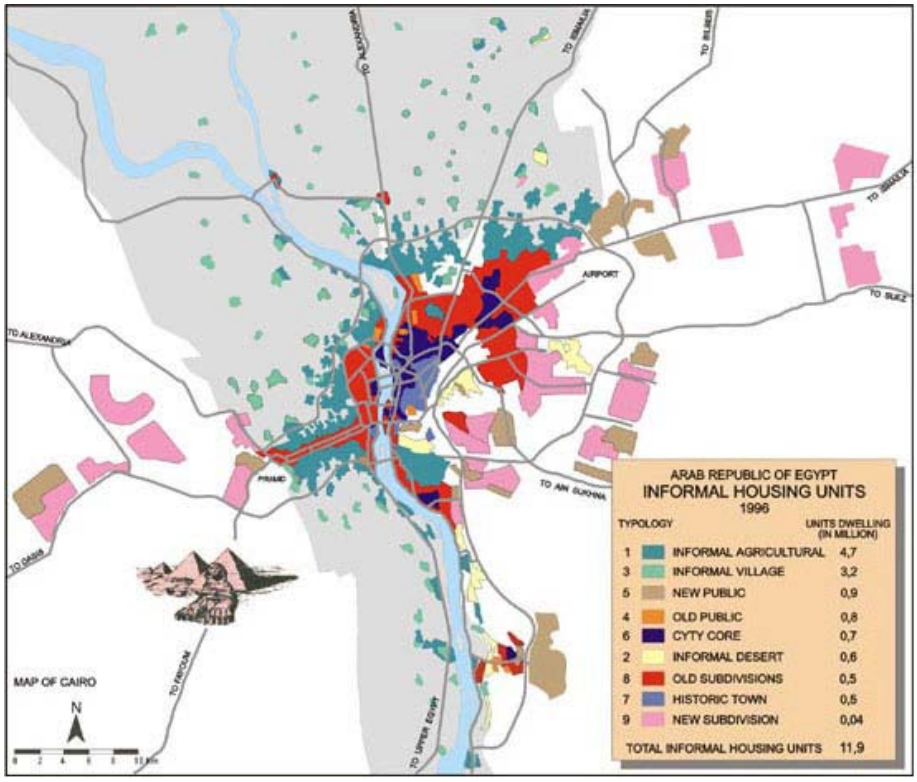

Figure 1; Informal Housing Units in Cairo
Source: http://ild.org.pe/sites/default/files/diagnosticos/egypt_en.pdf

Population density ranges between 300–1,400 persons per hectare. It can be even higher in centrally located old settlements. As of 30 June 1999, there were 909 informal settlements in Egypt Four hundred and sixty are currently being upgraded, 10 demolished, and for 439, nothing has happened yet. About 5714.6 thousand people live in those areas on 338.93 km^2, which means high population density, averaging about 16.9 thousand/ km^2. Distribution rates differ depending on location; the city of Cairo includes 8.4 percent of the areas, while the governorates of Kalioubia, Alexandria, and Giza have 6.8, 4.8, and 4.0 percent, respectively. The population in those four governorates is 3707.4 thousand, and 64.9 percent of the total were living in informal settlements as of 30 June 1999. (Alain, 2000). The total estimated cost to upgrade informal settlements in Egypt is about L.E. 4260.2 million. In Cairo Governorate alone the cost would be L.E. 872.1 million or 20.5 percent of the national total. The cost for upgrading informal settlements in the governorates of Giza, Alexandria, and Kalioubia would be L.E. 554.4, 395.3, and 369.6 million, respectively, or 13.0, 9.3, and 8.7 percent of the total. In other words, Greater Cairo (Giza, Cairo, and Kalioubia governorates) would require an allocation of more than 42 percent of the total cost of upgrading informal settlements in all of Egypt.

3.1. Governmental Efforts to Solve the Problem of Informal Settlements

Mobilization efforts to face the problem of informal settlements started in 1984. A full survey of those areas did not exist and efforts focused on a limited number in an unorganized, not efficiently studied manner, causing this experiment to be dropped. The problem of informal settlements drew great attention from the State following the devastating October 1992 earthquake, which resulted in problems emerging from informal settlements endangering national security and affecting citizens' lives and the development of communities, (Osman,2000). As a result of the aggravation of this problem, ministries and governorates began to focus attention on drawing up a concept for upgrading informal settlements. For this reason, the Ministry of Local Administration, with the assistance of different ministries and governorates, initiated clear efforts in May 1993:

4. Case Of Sustainable Improvement Project; Al-Fustat Potters Village Project to Upgrade Coptic Cairo

Due to the use of primitive methods, the pottery kilns used in Fatimid Cairo increased the levels of air pollution. A ministerial decree called for the removal of the pottery factories located in the area from Misr al-Qadima (al-Fustat) all the way to Shaq al-Thu'ban hills, far from urban areas. The order threatened to destroy the traditional art of pottery and ceramics, raise unemployment and bring about the extinction of the craft. Thus, the local community, with the help of a local NGO, took the initiative to solve the environmental, economic, social and urban problem. The community proposed to replace the old kilns with an upgraded, environment-friendly kiln, which the authorities approved and which resulted in the Cairo governor rescinding the decree and allocating 3.5 feddans to build a model pottery and ceramics village with funding from the Cairo Governorate and the Ministry of Tourism. The NGO (Coptic Evangelical Organization for Social Services—CEOSS) also participated in upgrading 20 kilns and introducing modern technology that limits air pollution. CEOSS also developed 150 of the kiln owners' and workers' houses thus benefiting about 600 families. This is the first example in Africa and the Middle East of constructing a pottery and ceramics village and upgrading its kilns. (Kamelm, 2004)

Figure 2 (Kum Ghurab) projects location, in Cairo. Source: modified from Google Earth' map (Aug 20 2007)

4.1. Social, Economic and Urban Conditions before the Initiative

The deterioration in social, economic, environmental and urban conditions in this area led to the people's initiative in order to save various sectors of the society living in the Kum Ghurab and surrounding areas from extreme environmental threats that threatened the inhabitants' health and livelihood, and led to their social disintegration. This area hosts the churches of Misr al-Qadima and the `Amr Ibn al-`As Mosque, as well as borders on the ancient synagogue. About 25,000 people live in the area. Most of the area's inhabitants work in the production of pottery, crushers and leather tanneries that emit many vapors and smoke and pollute the air with carbon monoxide and other harmful agents. Pottery production unit owners fire their pottery by burning refuse, such as rubber, wood and garbage. This harms the health of the local community and surrounding areas, which is afflicted with a high rate of respiratory diseases, such as asthma, bronchitis and lung cancer. In an attempt to deal with this environmental disaster, and motivated by the interest to rehabilitate the area as a tourist site, a ministerial decree ordered the kilns to be moved to Shuq al-Thu`ban, a mountain area far from urbanization, thus jeopardizing the handicraft production and livelihood of the affected population. This decision represented an economic and social disaster for those working in the field. It augured a rise in dropout rates and parents' failure to monitor their children's nutrition due to the deteriorated economic situation and living conditions of the families.

Figure 3; Heirs to an ancient Egyptian tradition - (Source: CEOSS)

4.2. Main Problems the Initiative Aimed to Address

Following are the main problems the initiative was undertaken to solve:

- Deteriorated health conditions of the local community and surrounding areas and high rates of respiratory diseases;
- High levels of carbon dioxide and carbon monoxide in the air causing major environmental pollution;
- The threat that the pottery production and its artistic and cultural endowment would deteriorate and cease to exist, due to the ministerial decree ordering its removal.

4.3. Primary and Secondary Objectives

Primary Objectives; The initiative/project aims to improve the living standards of the inhabitants of the area of al-Fustat and relocate the owners of ceramics kilns after developing their vocation through building model, environmentally friendly alternatives, and then measuring the environmental impact through the Environmental Affairs Authority.

Secondary Objectives; The project aims to develop and upgrade the old kilns and introduce modern technology in line with international standards. It also aims to allocate some commercial

units to kiln owners inside the ceramics and pottery village in the Misr al-Qadima area, secure ownership of their production units and land provided to kiln owners, renovate the houses in which kiln owners live and build new bathrooms to prevent the spread of disease, because more than one family share houses with one bathroom. In addition, the initiative sought to extend potable water, sewage and electricity networks to pottery production units, train local leaders and the Egypt Creativity and Development Association to organize themselves and seek funding opportunities for necessary development projects for the area.

4.4. Legal and Administrative Framework

The initiative is grounded in the right to enjoy healthy living conditions and the Egyptian government's ratification of the International Covenant for Economic, Social and Cultural Rights, which enshrines the human right to adequate housing. However, problems remain in implementing the right. The UN Committee on Economic, Social and Cultural Rights observed, in 2000, that forced evictions without alternative housing already were taking place in the potters village. The Egyptian government promulgated Environmental Protection Law 4 (1994) to address pollution problems resulting from existing and new establishments. The law includes criteria for air, water and soil pollution. Major efforts are currently exerted to limit Cairo air pollution through monitoring it and obliging establishments to modify their systems in accordance with the Environmental Protection Law. A committee of beneficiaries was formed to manage the project and make decisions. It had the following characteristics:

- Participation of technical cadres represented by kiln owners;
- Access to government authorities, such as the Ministry of Tourism and the Cairo Governorate;
- The ability to hold meetings with target groups to explain the project and its objectives;
- Financial and administrative systems in cooperation with CEOSS;
- Capacity to manage, follow up and document various stages of the project with target groups;
- Administrative problem-solving capacity in cooperation with the Egypt Creativity and Development Association;
- Capacity to estimate community needs with the participation of target groups.

4.5. People's Process in Strategic Planning

Because the inhabitants remained unemployed for four years, they lacked funds to upgrade their Fatimid Cairo quarter, which strained the relationship between inhabitants and the government. This manifested in the psychological and social condition of unit owners, their families and unit workers. The project was ultimately carried out in cooperation between unit owners and CEOSS by building model, environment-friendly kilns and measuring their environmental impact in cooperation with the Environmental Affairs Authority. The community wanted to preserve the cultural heritage of al-Fustat and realized the need to commence work, especially in the face of the unbearable decrease in revenues, which, in turn, led unit owners to exert pressure on the Cairo Governorate and the Ministry of Tourism to complete construction work in the village. That would permit the unit owners to start their projects and upgrade their kilns. A number of entities were contacted through the Ministry of Tourism to collect the necessary funds for the project. The model suggested to achieve the initiative's objectives included a number of developments consisting of the following:

- An agreement was reached between kiln owners and CEOSS to develop and upgrade old

kilns and introduce modern technology in line with international standards;

- Allocating commercial units ranging between 100 and 150 square meters in the ceramics and pottery village to 30 kiln owners in Misr al-Qadima (Old Cairo) through the Cairo Governorate and the Ministry of Tourism;
- Contracts were signed with the Cairo Governorate allocating land to each kiln owner;
- Houses and rooms where unit owners live were renovated and new bathrooms were built;
- Extending water, main utilities and electricity to all pottery production units;
- Providing training to local leaders and the Egypt Creativity and Development Association to help them find solutions to foreseen problems and train them to find funding opportunities through proposal writing.

The project plans were prepared with the community selecting a group responsible for project implementing in cooperation with CEOSS, which provided training on how to prepare suggestions for a development project like kiln development. The committee also designed all administrative and financial documents necessary to implement the project. Female committee members participated in managing the project, and preparing financial and administrative systems. The committee prepared a list of the units to be upgraded, determined the dangerous tasks to which working children are exposed and prepared suitable training programs. Meetings were held for the community to raise awareness and participate in the project to improve their economic and social conditions. The initiative's strengths include the choice of technical cadres from within the village to help implement the project, the completion of successful examples, which encouraged the target group to adopt the project, beneficiaries manage the project and the provision of training for the committee in charge of managing the project in order to address expected problems. Moreover, 40% of the total project cost was provided through loans that were recycled to fund other needs. In the end, more than one government authority helped implement the project, such as the Cairo Governorate and the Ministry of Tourism, as well as various donors.

4.6. Weaknesses of the initiative included:

- The lack of sufficient funding to complete the project within a short period, which prolonged unemployment;
- The Association's lack of experience;
- The presence of administrative problems; and
- The lack of trust between the Association and unit owners.

4.7. Determining the Needs of the Target Group

The initiative's needs and priorities were determined through a set of activities:

- The preparation of a list of the units requiring upgrading, based on meetings held with unit owners;
- Meetings held with working children to determine dangerous jobs they performed;
- Meetings were held with various sectors of the community to determine their economic, social and environmental needs.

4.8. Resources

Material Resources; The project's material resources consisted of the cost of constructing the village, which amounted to LE6 million (US$967,741) provided by the Italian Embassy, as well as LE2 million (US$322,581) provided by the Egyptian Ministry of Tourism. The project was also funded through community contributions to implement the project and cover part of the cost of kiln construction through recyclable loans on the basis of implementing 40% of the total project, and then reusing the money to perform other required activities. (Kamelm, ibid, 2004)

Social Capital; The initiative/project is based on resources/social capital represented in the presence of highly skilled technical cadres among unit owners who were capable of explaining the project and its objectives to the beneficiary community. They were able to form committees responsible for the project and prepare their own regulations to manage the project through public participation, in addition to their ability to contact government authorities and exert pressure to gain the right to perform their work without waiting for the completion of construction work. They also were able to form working groups from among the beneficiaries to receive completed plans of the project bearing the technical and environmental specifications.

Complementary to these activities was the groups' ability to contact the media and prepare newspaper coverage of the project. Potters and pottery making belong to the most ancient traditions in the original human settlements in Egypt; however, it is believed that the Cairo potters of Fustat date back to the Fatimids, Egypt's Shi`a rulers (969–1168 AD). Situated behind the historic Hanging Church in the Old Cairo district of al-Fawakhir, popularly known as al-Qulaliya, small pottery and lime workshops have existed since the early 1960s. The deep tradition and sense of community built over the centuries in this section of Cairo constitutes an incalculable form of social capital and distinct culture that the initiative and project also sought to preserve.

Figure 4;From top: Old pottery kiln in Fustat, Old Cairo; Fustat potter constructing new kiln; New kiln in operation. (Source: CEOSS)

5. Results and Lessons Learned

5.1. Implementation

Partners in Implementation; The local community, representing owners and workers of ceramic and pottery-production units, as well as some Kum Ghurab inhabitants, with CEOSS, Cairo Governorate and some donors (Ministry of Tourism and the Italian Embassy), participated in the project implementation through the following:

- Changing the Cairo governor's decision to eliminate the community and, instead, to allocate the land to build the first ceramics and pottery village over an area of 3.5 feddans with unit areas, ranging between 100 and 150 square meters;
- The Ministry of Tourism provided LE2 million ($322,580), and the Italian Embassy provided LE6 million;

- CEOSS participated in upgrading 30 pottery kilns in the village;
- Renovation of housing units for pottery unit owners and construction of healthy bathrooms in the units;
- Specialists participated in training local cadres and leaders on writing project proposals/suggestions;
- Preparing financial and administrative systems and building the institutional capacity of the Egypt Creativity and Development Association.

A number of committees formed within the local community to manage and supervise the various stages of the project, including a committee responsible for contacting government authorities and completing administrative procedures; licenses and land ownership documents; a media committee responsible for preparing newspaper articles about Bedouin art, its relation to pottery and ceramics and the importance of developing the area to place it on the tourism map; a committee responsible for dealing with the local community, explaining the project, implementing the project and preparing administrative and financial systems; a committee responsible for receiving kilns and ensuring they meet environmental specifications, collect contributions and loan installments; and a committee responsible for defining housing repair and new bathroom construction needs.

5.2. Overcoming Obstacles

Financial obstacles represented in limited funds in the hands of unit owners and the lack of sufficient funding from the Ministry of Tourism. These obstacles were overcome when the Ministry of Tourism contacted fund donors to complete construction work in the village and obtain a grant of LE6 million (ca. US$ 1,719,197) from the Italian Embassy, as well as CEOSS contribution to the kiln upgrading project with a grant of LE6,000 per ($1,719) developed kiln, in addition to CEOSS participation in developing kiln owners' housing through the provision of LE600 ($172) per renovated room. Economic obstacles posed by high unemployment were overcome by upgrading 20 kilns in the pottery and ceramics village, thus creating employment for 100 persons. The local community’s technical incapacity to upgrade the vocation and introduce modern technology was overcome through the design of a model upgraded kiln in cooperation with environmental specialists. The Environmental Affairs Authority (EAA) approved the design. Administrative obstacles arose from the lack of experience and consequent weak role on the part of the Egypt Creativity and Development Association (ECDA) responsible for the project. Problems arose with government authorities in relation to licenses. These obstacles were overcome through providing training to local leaders and the Association's board of directors, as well as preparing financial systems, building the Association's institutional capacity and forming committees where community members participate to be responsible for the project.

5.3. Evaluating the Social Product

The initiative/project succeeded in achieving its objectives through realization of the following social gains:

- The social organization of the individuals benefiting from the project through collective work; Establishment of a civil association (ECDA), the aim of which is to encourage creativity in all areas of art;
- The ability of individuals to gain access to government authorities and legally ask for their rights; Signing contracts with the Cairo Governorate in favor of kiln owners to rent

allocated areas; Studying issues related to air pollution and introducing modern technology to develop the vocation; Form a group of project beneficiaries to address executive and public authorities on behalf of the association;

- Close links were established between the area of Misr al-Qadima and ECDA to issue licenses; Raising the income of 100 unit owners, in addition to assisting workers, after the kilns were upgraded; The upgrading of 150 houses belonging to unit owners and linked with the vocation where 600 families benefited.

5.4. Degree of Social Production

This initiative/project constitutes a form of social production of habitat in so far as the community and direct beneficiaries organized to raise awareness about how to demand rights; the ability of the community to change a ministerial decree in case it contradicts the needs of the local community and State obligations to respect, defend, promote and fulfill the human right to adequate housing; ensure freehold tenure for unit owners; register and develop the institutional capacity of a civil association that aims to develop the area. Following are some of the most significant lessons learned from these experiences:

- Realization that a well-organized community and society can challenge ministerial decrees;
- The importance of civil society participation (in certain cases) toward posing solutions to the financial burdens borne by the State;
- Reliance on more than one fund donor to ensure that the project does not stop at any stage;
- The need to select specialized cadres to train the community on successfully managing projects;
- The need for the local community to participate in all the studies related to determining its actual needs.

The future and continuation of this experiment is linked with the degree to which a society is organically related to its members and able to plan and cooperate to face any interference or problems. There is a potential to repeat this experiment in other areas in general, and in areas with traditional vocations in particular.

6. Conclusion Remarks & Recommended Potential Solutions.

In conclusion, it is recommended that the following activities are undertaken:

- **Obtaining security of tenure as priority**. Self-help housing schemes complement environmental health improvements Social analysis of neighborhoods before defining ‘communities’.
- **Begin project with affordable accessible curative services**; add preventive activities gradually. And use the municipality as umbrella organization; form an urban community development within municipality. Keep sectors up to date with each others ideas.
- **Form health coordinating committees at community and/or municipal levels**, and form maintenance agreements between community and municipality.
- **True volunteer workers or avoid volunteers or municipality employs the workers**. The trend is towards the latter.

- **Recognize different needs of renters, owners**, transient slum dwellers and encourage health workers to keep up to date with a specified number of slum families.
- **Feedback regularly to managers and workers in other sectors**. Assess nutrition status related to socioeconomic status of families.
- **Encourage health workers** to include environmental health monitoring in their terms of reference. Workers from health, social and engineering sectors meet regularly.
- **Health workers encouraged** to alert project managers of health hazards of high density living and promote policy discussion.
- **At planning stages health workers gauge the potential health improvements achievable in on-site improvement of dangerous slums**. Relocation may benefit health in extreme circumstances.

Some of these potential approaches will make improvements in quality of life for the urban poor. Health planners need to be sensitive to the lessons of other sectors. A first step for health planners is to identify accurately the extent of possible health achievement in any one slum site. Where the physical conditions are extremely poor, or a family's economic situation life threatening, no amount of health service delivery will succeed in improving slum dwellers' overall health and quality of life. In this case, health planners have an advisory role in the formative stages of slum improvement planning, alerting other planners to potential health problems in project design. On the other hand, health planners can benefit from information from other sectors. For example, knowing of slum dwellers' debt burdens and individuals' dependence on the cash economy may mean the health planners decide not to ask community recruited health workers to serve voluntarily on health projects but decide on providing a stipend, or having more volunteers on part-time service (so that income generating activities can still be carried out).

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تطوير السياسة العامة في "مجال الصحة الحضرية" في مصر؛ نحو منهج متكامل للارتقاء و تحسين المناطق المتدهورة

الملخص:

يعتبر نمط الحياة الحضرية بالمدن هو حجر الزاوية في نمو و ازدهار الحضارة الانسانية المعاصرة، فخلال القرنين الماضيين تعرضت المناطق الحضرية و المدن لموجات من النمو المتسارع و الغير مخطط في بعض الاحيان، فهو من جهة مثل مصدر لنمو الحضارة و محرك للنهضة الاقتصادية على مستوى العالم، و من جهة اخرى مثل هذا النمو المتسارع الغير مخطط مصدر من مصادر الفقر و تفشي المخاطر الصحية الناتجةعن التدهور و الخلل البيئي نتيجة التنمية الحضرية العشوائية و غير المستدامة.

و لقد ظهرت خلال السنوات الاخيرة ملامح تطور لسياسات التنمية الحضرية تركز على اهمية الاهتمام بالجوانب الصحية و البيئية للتنمية العمرانية عند مواجهة مشروهات تطوير المناطق المتدهورة. و بما يشمل دراسة الاثار الجانبية الضارة و الملوثة للنشاطات داخل البيئة العمرانية و امكانية مواجهتها.

و تناقش هذه الورقة البحثية تطوير سياسات الارتقاء بالأحياء الفقيرة من خلال رصد و معالجة المشاكل الصحية و البيئية بها، ويقوم بتحليل العقبات التي تعترض تحسين الصحة البيئية العمرانية في البلدان النامية، و ذلك من خلال عرض و تحليل لدراسة حالة من الواقع المصري و الوصول الي توصيات عملية لتطوير سياسات التنمية الحضرية للمناطق العشوائية و المتدهورة.