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REVIEW

Regeneration as an approach for the development of informal settlements in Cairo metropolitan

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KEYWORDS

Slum upgrading;
Regeneration;
Ashwaeyat;
Informal settlements;
Metropolitan Cairo

Abstract The traditional approaches of mainstream for the development of informal settlements appear to be inadequate towards solving or alleviating the social and economic problems, and failed to cope with the rapid change that have arisen.

Urban regeneration has evolved from a simple form of renovation or rehabilitation to targeting the restructuring and the renewal of the urban economy, and seeking social interaction and equity. As the need for the government to adopt an enabling approach that supports people living in slums rose, urban regeneration was considered as the effective approach to deal with the informal areas of in the inner city.

A Profound literature review will take place on the meaning of urban regeneration and its application abroad.

The paper will study the causes and the results of the booming of *Ashwaeyat* in Egypt in order to reveal weakness and obstacles to realize goals. It emphasizes on the need of a generic deviation in the model of intervention.

Finally the paper ends by discussing the capability of the application of this approach in dealing with the informal settlements in Cairo metropolitan as proper approach to cope with the need of dealing effectively with those shadows in the urban context.

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1. Introduction

The problems in an urban area are caused by the change of cities over time. This change, such as different economic base (service industries instead of manufacturing) or different activities or population movements, leads to different needs within the urban area.

The problems that result from these changes are not only physical, such as underused or vacant land and abandoned buildings, but also social, such as unemployment and social deprivation. The search for and creation of solutions for these problems is known as urban regeneration, which usually takes the form of public policy in order to regulate urban processes and attempt to improve the urban environment [4]. There has been a fundamental shift in implementing regeneration policies from just urban renewal, to fostering community development.

While, according to Webster’s New World Dictionary, to regenerate means: “*to cause to be completely renewed, or restored or reformed.*” As for Urban regeneration is a comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, and environmental condition of an area that has been subject to change [12].

The regeneration approach facilitates not only improving the physical environment, but empowering the community to be more actively involved in the development and maintenance of their neighborhoods [26]. In this way, as a stakeholder in the development process, communities effectively become the drivers of change in their neighborhoods and areas [26].

It should be noted that it is different from urban renewal, urban rehabilitation and urban(re)development as urban renewal aims to achieve mainly physical change, urban rehabilitation does not describe the method of actions and urban (re)development has a general mission and lacks a well-defined purpose [12].

2. The evolution of meanings of urban regeneration in the world

Urban regeneration was first formalized in the USA in the 1960s, when relocation of marine activities triggered the total

abandonment of large territories, which have become harbor derelict lands. Municipalities have often reassigned these empty urban lands to central business type of activities as in Boston, Baltimore and New Orleans. In the 1980’s, a second phase was launched, on the London Docklands, and then in Barcelona [23]. Urban regeneration led to the complete transformation of empty lands, through reconstruction of multi-activity “bits of the city”. Later, in the 1990’s urban regeneration was launched in many urban areas, often densely-populated, functionally heterogeneous, but facing many urban malfunctions.

Over time, urban regeneration has evolved from a simple form of renovation or rehabilitation of obsolete infrastructure and built-up land, to targeting the restructuring of the urban fabric, the renewal of the urban economy, or the city image, while seeking more social interaction and equity, the participation of local populations and their social and professional integration into a multi-functional context [24].

Most countries have recently re-examined their urban policies and have put legislation into place to emphasize the need for greater effort to improve the condition of urban areas [6].

Table 1 Approaches to urban regeneration.

Dimensions	
Economic	Job creation, income, employment, skills, employability, development
Social/cultural	Quality of life, health, education, crime, housing, quality of public service
Physical/environmental	Infrastructure, built environment and natural environment, transport and communication
Governance	Nature of local decision-making, engagement of local community, involvement of other groups, style of leadership

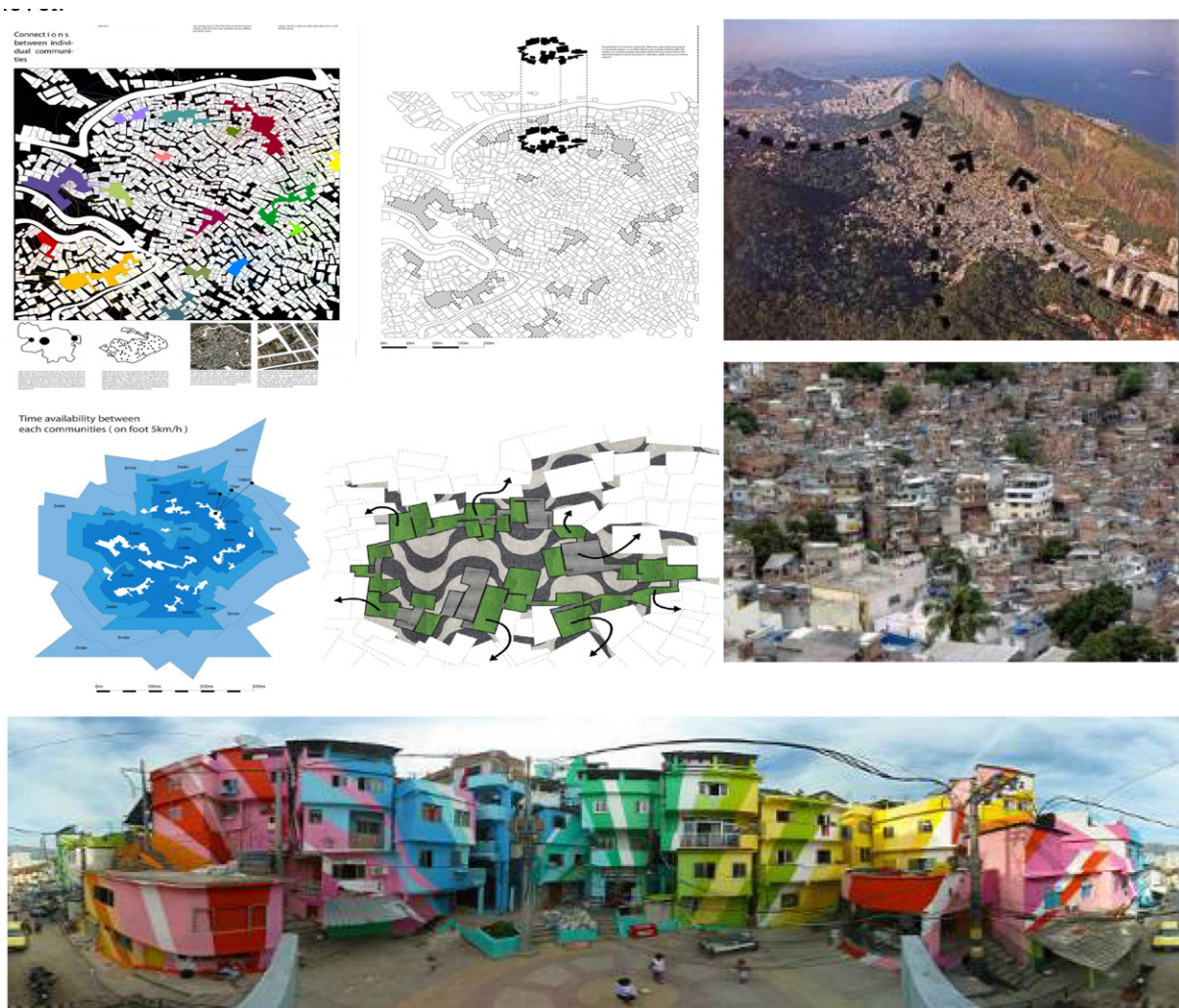
The UK government's Urban White Paper, which built on the report of Lord Rogers, Towards an Urban Renaissance, is a prime example of this. The French government also has produced a new Planning Act, the SRU of 2000, picking up many of the ideas of the Sueur report of 1998. The Social Cities program in Germany, the Major Cities program in the Netherlands and recent initiatives in urban planning in both Brussels and Walloon region of Belgium and in Italy reinforce the continent-wide nature of this awakening of interest in the future of their towns and cities.

The emergence of a new stream of action in the urban environment and urban regeneration, which is dominating the urban policy of several countries, in a way places the spotlight on the processes of intervention. The traditional approaches of mainstream urban planning appear to be inadequate for the task of managing the regeneration of cities towards solving, or at least alleviating the many other social and economic problems, and failed to cope with the rapid change that have arisen as the economies of the western world have evolved [4,8].

2.1. Why is it important to regenerate informal settlements?

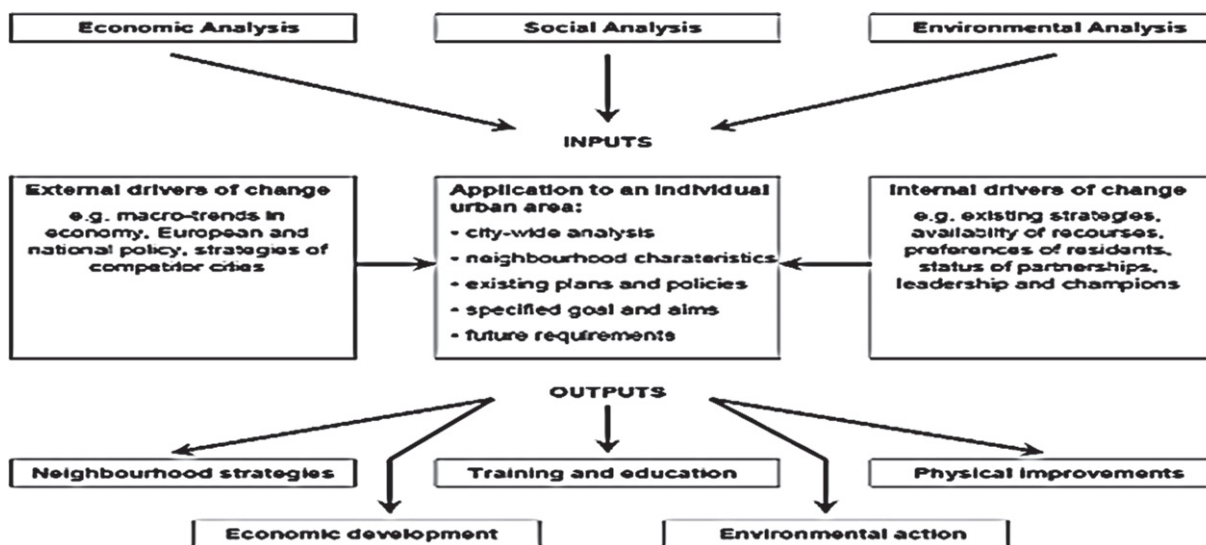
Informal settlements in metropolitan are considered now part of the inner cities as they are located in prime land. Regeneration of urban areas matters as 'the tragedy of inner city affects everyone' [8]. Cities matter, and effective urban regeneration is of fundamental importance to a wide range of sectors and stakeholders including local communities; city, regional and national government; property owners and investors; businesses; environmental organizations; residents and visitors at all levels from local to global [12]. Government and society have made the value judgment that cities should be maintained as the focus of urban life in the UK. Urban regeneration is required to keep pace with the consequences of continued processes of urban change.

Turk's (2005) categorization of "people", "business" and "place" appears appropriate. In terms of people, regeneration aims at enhancing skills, capacities and aspirations to enable them to participate in and benefit from opportunities. Regeneration also aims to improve economic competitiveness in



Source: Vinnitskaya [25]

Figure 1 Regeneration of the Favela de Rocinha Slum project in Rio de Janeiro, Brazil. (See above-mentioned reference for further information.)



Sources: Roberts and Sykes 2000

Figure 2 The urban Regeneration process, edited.

terms of business performance to create more local jobs and prosperity. To attract both people and business, regeneration aims to improve general appeal of a place. In theory is that in balance all three elements combine to secure the upward trajectory of locality in a long term and sustainable manner. Dimensions of urban regeneration can be broadly described as economic, social and cultural, physical and environmental, and governance-related in nature as shown in Table 1 [7].

2.2. Regeneration of the Favela de Rocinha Slum project in Rio de Janeiro, Brazil

In Brazil, Rocinha began to develop after the 1930's when people began to migrate from the rural areas of Brazil to areas just outside Rio de Janeiro with the prospect of benefiting from the development of the urban center. The Favelas developed on the hillside with any means available creating hazardous living conditions with crowding and inadequate ventilation, natural light and sewage treatment. These types of conditions are true all over the world where the populations of urban environments have outnumbered rural areas since 2008. With such a high proportion of the world living in urban centers, many people are faced with the overcrowding and unsanitary conditions associated with living on the outskirts of a big city.

The strategies that Jan Kudlicka developed prioritize the need to preserve the space already built up and protect it from the vehicular traffic. The desire is to regenerate the existing conditions rather than demolishing homes to begin anew. The environmental conditions of Rocinha made this especially difficult because the site is built up to its limit, crowded on all sides by mountains from one end and the urban center of Rio de Janeiro on the other. The natural development of the Favela has produced overpopulated and dangerous conditions that do not account for emergencies or the general safety of the inhabitants. The organization of the dwellings creates dead ends and very few passages in case of fire or medical emergencies.

The process of regeneration as shown in Fig. 1 begins with selecting particular dwellings for intervention to push the residences up one floor and develop the street level as a space for commerce and services. This strategy creates spaces that contribute to the social and economic development of the community while protecting the living spaces from conditions on the street level.

2.3. The urban regeneration process in Slum upgrading

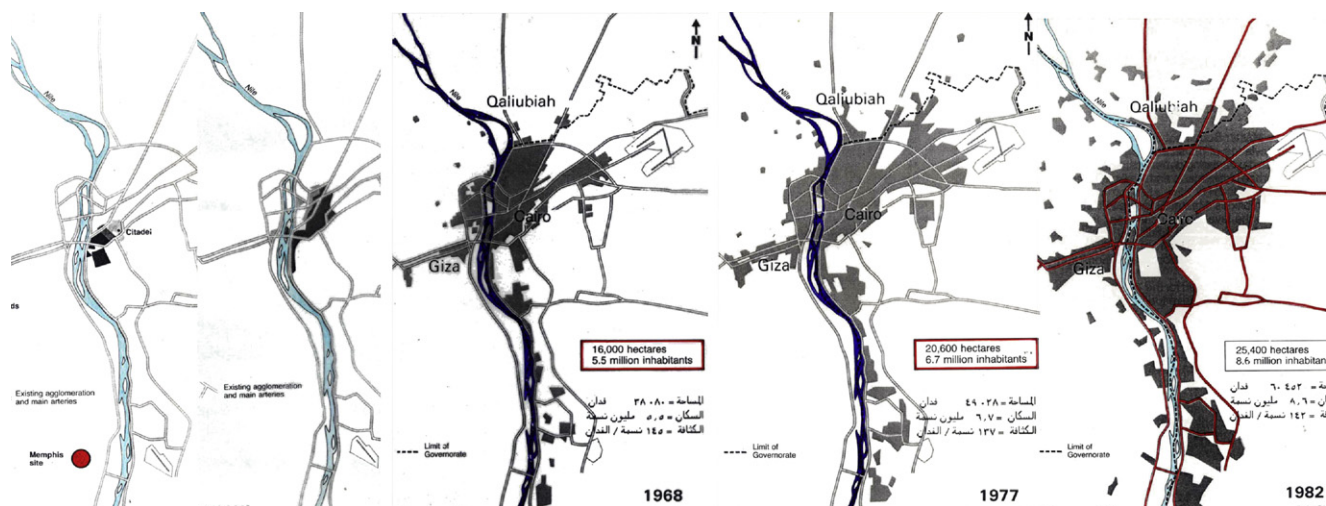
The first lesson is to recognize people as potential: to invest money, to manage and maintain the physical environment, and to participate in service provision.

The second lesson is the need for the government to adopt an enabling approach that supports what people do, and to regulate to the benefit of the collective good. One priority should be the development of enabling/affordable housing standards, rather than standards so unfeasible that they leave most of the housing stock unregulated. The third lesson to be learned from informal areas is the importance of appropriate neighborhood planning: where street layout and distribution of commercial activities promotes sustainability, where value-for-cost is maximized, thereby allowing residents the opportunity to control and appropriate public space, and where people are encouraged to invest in the shared amenities and maintenance of their neighborhood [21]. Fig. 2 shows the corns stone for regeneration approach.

In general Regeneration is an approach that looks at the positive potentials of an area, and thus informal areas in return should be looked at not as problems to be solved but as areas with potentials, physical and human, by this view, interventions will differ completely.

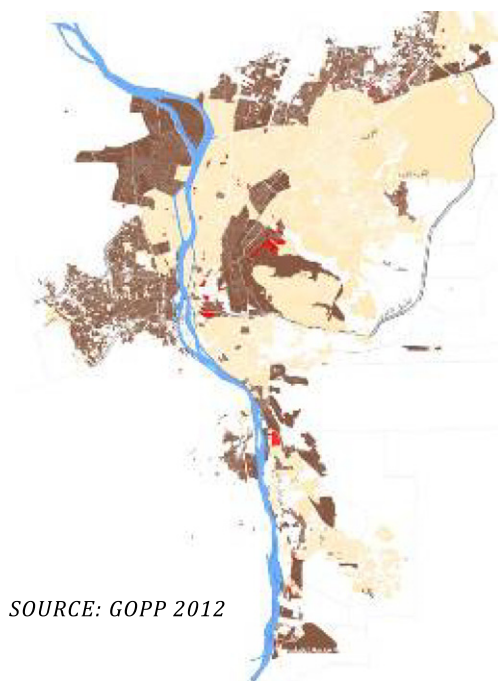
3. The informal settlement booming in Cairo metropolitan

The rapid urbanization in Egypt, over the past four decades, had caused the emergence of informal urban development



source: Gopp 2012

Figure 3 The urban growth of metropolitan Cairo.



SOURCE: GOPP 2012

Figure 4 The distribution of *Ashwaeyat* on the peripheries of Cairo metropolitan.

and informal housing supply. Informal settlements,¹ (known as *Ashwaeyat*) are thought to accommodate between 12 and 17 million inhabitants [1,14], or about 40–50% of Egypt’s urban population and over 20% of total population [27].

¹ According to the legal definition of the Egyptian law for *Ashwaeyat*: 1- to be built on the land non-assigned for construction (trespass on the property of the State, or encroachment on agricultural land), which does not allow the owner to register the land. 2- to be built in contravention of the laws and requirements of building, which does not allow the owner to obtain a license to build.



SOURCE: Author

Figure 5 The unplanned areas in Giza.



SOURCE: Author

Figure 6 The unsafe area located in the Mokattam.

Cairo metropolitan suffers also from the informality. It has characterized housing built in violation of existing urban planning legislation and the building code, often by converting (legally owned) agricultural land to urban uses without land subdivision or building permits, and in almost all cases without registered property titles (whether legally-owned land or squatter) [22].

Therefore, as well, many successive laws and decree since 60s till now directly caused the growth of *Ashwaeyat* in Egypt and changed consequently the morphology of the Cairo



Source: Huger [10]

Figure 7 Urban pathern of Khedevite Cairo. (See above-mentioned references for further information.)

metropolitan. Fig. 3 shows the urban growth of metropolitan Cairo. The rental control law, before 1967, that freeze housing rent to ensure affordability, caused the withdrawal of Private sector from the housing market, resulting in the long-run in a deficit in housing stock mainly for lower-income groups [9]. In plus that the old housing policies adopted by the government in 1950s till 1970s had led to housing shortage, and the exacerbation of informal housing, land speculation in urban areas combined with lack of access to State land by different low-income segments, reluctance to register real estate or housing properties and lack of financial resources for housing development [14].

While in the 70s (the period during and after wars) major reduction had happen in public investment in housing sector due to the concentration of the financial resources to rebuild the military forces or to the recovery after war. Consequently, the gap between supply and demand of affordable housing in existing cities increased, and informal settlements were the only available solution for the poor [9]. While In the 80s to the early 2000s emerged the concept of directing population growth to the desert outside Nile valley, the government decided to locate subsidized affordable housing to low-income groups only in these new cities. The inefficiency of direct supply of housing; the very bureaucratic, costly process for building permit issuance; unrealistically high planning regulations and standards; and the many difficulties associated with acquiring public land caused an increasing fiscal burden to ensure affordability.

As consequent, new communities attracted industrial development but could not attract people to live there and the *Ashwaeyat* were growing.

As Cairo, as shown in Fig. 4 holds more than 60% of the *Ashwaeyat* of Egypt, so the paper will concentrate on investigating their characteristics in the Cairo metropolitan. The uncontrolled spread of unplanned residential areas, as shown by the evolution of the main agglomeration, is the most visible symptom. According to recent studies, *Ashwaeyat* represent around 40% of GCR residential area. These informal settlements cover a residential block area of over 22,500 feddan, with the density of some of these areas reaching up to 800 inhabitants per feddan. These areas mostly encroach upon

agricultural land on the north and west and south peripheries. While the east peripheries suffers from the formation of development of *Ashwaeyat* in violation the desert state land.

The most critical of the informal areas are those, which have been designated as unsafe.² There are spread across 550 feddan and comprise approximately 63,000 housing units. Figs. 5 and 6 shows difference between the forms of both types.

Unplanned areas share similar problems, including unorganized and very narrow street networks (2–4 m wide), lack of sufficient vacant land or public space to provide needed services, and small land parcels averaging 80–120 sqm with nearly 100% land coverage ratio (no setbacks and minimal light wells). Due to the lack of construction licensing, there are no restrictions on building heights, which, over time, produces extremely high residential densities. Surprisingly, the quality of much of the informal housing stock in urban areas in Cairo metropolitan is of good quality. The most common type is 4–7 stories:

Apartment buildings are with reinforced concrete frame and slab construction and brick infill walls.

Planners distinguished their different morphology due to different patterns of intrusion and growth mechanisms [2]. Explained their growth as natural phenomena of city expansion, concentrated around roads, and integrated with economic activities. She argued that the informal settlement had absorbing migration from rural areas as well as expatriation of urban area. In 1987, Alkady explained that the characteristics of the *Ashwaeyat* around Cairo differ from “Tin” or squatter settlements and also differs from the formal low income housing. They formed many “sub-standard” cities of poor houses but built with reinforced concrete structures in most cases [2] and often narrow streets and lack of basic urban services, located on the peripheries of Cairo such as *Ezbet ElNasr* in Fig. 8.

In addition the *Ashwaeyat* of metropolitan encompasses a wide range of old historical cores such as *Fatimid Cairo* and *Khedevite Cairo* (Fig. 7). This left a large number of underserved areas in the inner city, which did not match the definition for eligibility in urban upgrading efforts, and left without improvement. Moreover, informal settlements which had been formed since the 1960s on the outskirts of cities, on both agricultural and desert land such as *ElMataria* and *ElMerg*, are currently representing poor urban pockets in the pattern of main agglomeration of greater Cairo. Such areas or housing types today (decaying housing in historical areas, cemetery and rooftop dwellings, etc.) [13] have large concentrations of precarious housing, on the whole lack clear legal tenure and access to services, and have become the locus of significant urban poverty in cities.

Recently, informal areas all around Greater Cairo have enjoyed a building boom, with new buildings rapidly being constructed and more floors added to existing structures. Should this trend continue (and there is no reason why it should not), the rate of absorption of greater Cairo’s additional population into informal areas will be increased even more, probably exceeding 80 percent of all population increase [19], and it is important to think out of the box and to start.

² After the Douweka incidence in 2008, *Ashwaeyat* was classified according to type of dominant problems. “Unplanned areas” basically suffer from narrow streets and lack of BUS, “Unsafe areas” are Non secure for souls of its inhabitants and need to be redeveloped. The informal settlement development fund ISDF was establish to.



source: Ketterer and Schade [11]

Figure 8 Urban Pattern of Ezbet ElNasr. (See above-mentioned references for further information.)



SOURCE : MADBOULY, M. 2006

Figure 9 The provision of utilities was the way for intervention before 1993.

3.1. Interventions in the “Ashwaeyat” in metropolitan Cairo

Governmental Intervention towards “Ashwaeyat” had passed through substantial phases. It was only a reaction of dramatic events or catastrophic incidence facing the state. Ways of intervention had mostly changed in accordance of the diagnosis of the apparent cause of this incidence.

Before the early 1990s, Informal settlements were usually neglected by public officials. There was a lack of government recognition of the *Ashwaeyat*, as being informal housing that was built in disagreements of the laws of planning and construction. Due to this definition, informal settlements were out of all state development programs and the absence of services (utilities, paved roads, schools, healthcare centers, etc.) was accentuated and their problem gradually had consolidated.

3.1.1. The provision of infrastructure for informal settlement

The incidents of social unrest took place in such places as Imbaba and Ain Shams in the early 1990s was initiating the first effort to upgrade informal settlement, especially with the increasing social unrest that emanated in such settlements.

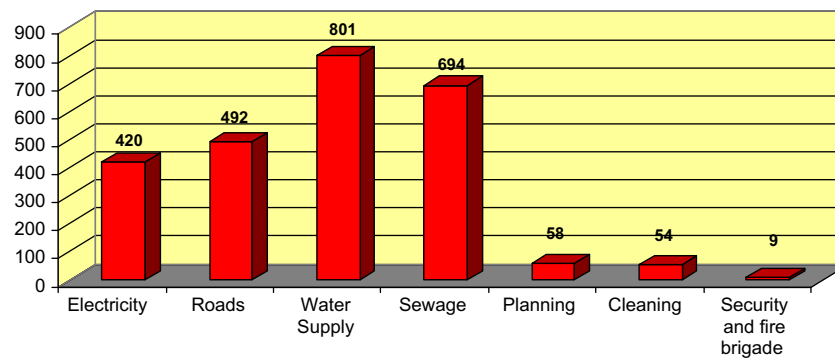
Informal housing could be classified physically, according either their constructions (permanent or non-permanent construction) or their location with proper use for residential use. The main positive outcomes were government recognition of informal settlements and residents’ right to have access to basic services and adequate facilities, and the delivery in many areas of basic infrastructure such as water supply and sewerage networks together with schools and healthcare centers, which resulted in improving living conditions.

As the government’s response to informality started taking shape, the government initiated the National Program of Urban Upgrading in 1992, and its adoption in 1993 National Upgrading Program for Informal Settlements,³ which put new précised definition that diagnose their urban problems, and then directed type of Interventions in informal settlements. Informal areas was classified according to their ability to be either upgraded (1201 areas) or evicted (20 areas).It started to operate in this phase to provide basic infrastructure and municipal services in almost all squatter and informal settlements in the GCR. After investing more than LE 2.8 billion in 13 years to improve infrastructure and selected upgrading activities in 895 settlements as shown in Figs. 9 and 10 (although without land tenure legalization/formalization).

3.1.2. Physical upgrading approach

In several studies and official reports housing types, land tenure and locations were used to determine the different typologies of informal settlements. Subsequent government interventions aiming to upgrade these areas typically face the problem of lack of vacant land on which to provide needed services and amenities, Case of in situ relocation in Telal Zenhom was typical method for the reuse of spaces available in

³ According to National Project Slum Upgrading 1993, Slums is the area of population concentrations, which resulted in the absence of Physical Planning. This represents an infringement on the property of the State or others. Slums grew without license, utilities and services, whether partially or totally.



SOURCE : MADBOULY, M. 2006

Figure 10 Investments in urban upgrading by sector, 1993–2004 (in million LE).



SOURCE : MADBOULY, M. 2006

Figure 11 The provision of needed services as a way to prevent illiteracy and diseases.

upgrading, and the provision of needed services was as the way to prevent illiteracy and diseases.

However the provision of infrastructure to the informal settlements had encouraged their growth. Therefore, these areas also suffer from lack of infrastructure and services (Fig. 11), and often from such problems as high rate of unemployment and illiteracy. Moreover, the program was criticized for the non-legalizing/formalizing land tenure. This problem constrains the functioning of the land and real estate market and cannot be converted into credit which to finance housing improvement or business start-ups and expansions, with Very little attention was devoted to community participation through NGOs and CBOs and the private sector plays no role in the process.

3.1.3. The integrated approach for upgrading

In 1996 was the first definition⁴ cited in ElShoura report of informal settlement that addressed to the inhabitants as part of the problem and needed an integrated approach combining infrastructural and socio-economic development. In 1997,

⁴ Report of the Shura Council – 1996 [15] Slums are urban Settlements that have arisen in the absence of overall planning, with disagreements of law and violation upon the property of the State. Consequently, these settlements are lacking of all types of facilities and basic services including water and electricity, they do not have a police or health unit or a school or transport and are not reached by the emergency vehicle. As a result of this cruel deprivation of the minimum standard of living, the situation has spread among the inhabitants of these areas endemic diseases and the spread of ignorance and illiteracy and unemployment, appeared category extracurricular law became a source of violence and terrorism.

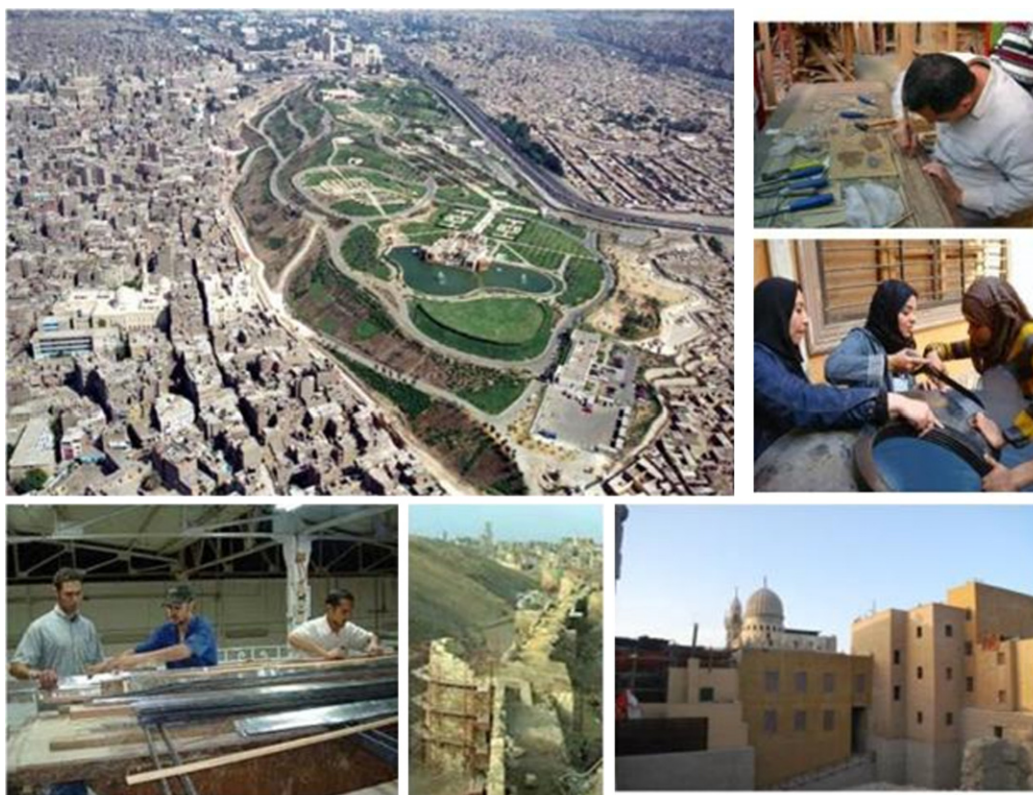
Hernando De Soto's ILD and ECES conducted a comprehensive multi-year study of informality in Egypt.

Towards offering credits and microcredit's for poor, *The Social Development Fund* was established to consolidate this idea. It supports the establishment for small business. It offers many programs performed for youth, women, and poor. On the other hand, the government established *The National Committee for Women* to defend rights of women, to protect her from violence and to secure social development. Moreover, many dispersed efforts but not unified, were done to prevent poverty, and provide better life condition for the informal areas inhabitants such as the establishment of social centers, libraries, the attempts of illiteracy remove for dwellers of poor area, the offers of temporary health care for women and child [17].

The Government in 2008 started to incorporate the issues of community participation by the law 119 year 2008 and the legalization of land tenure in upgrading projects in several squatter settlements developed on State-owned land by declaring it possible to sell the land to occupants based on predetermined fixed prices per square meter applicable to each area (ranging from LE 50 to 200 depending on location) [14].

After the stone fall of Doweika in 2008, a general strategy for dealing with unplanned and unsafe areas was set. Ways of intervention in unsafe areas⁵ are determined according to their degree of safety, with considerations of all different aspects. On the other hand, a national strategy was formulated

⁵ The Informal Settlement Development Funds (ISDF) was established by the presidential decree 305 year 2008 for financing and monitoring upgrading operations through a concrete coordination with the governorates, to end unsafe areas within 10 years.



SOURCE : THE AGA KHAN DEVELOPMENT NETWORK, 2007

Figure 12 The socioeconomic development and Revitalization of Darb al-Ahmar By Aga Khan program.

by ministry of housing to define Ways of intervention in existing informal areas and preventing the formation of new informal areas at the same time. The national intervention was enabling formal lands for needed housing and services, and social housing that absorb population increase and preventing the informal growth. On the local level, existing *Ashwaeyat* was accepted as partner, the intervention of unplanned areas was to Lessen population density by enlarging roads, and providing BUS (raise the Living condition of dwellers) and to encourage the contribution of civil society and NGOs to focus on socio-economic needs for developments.

Even though that there is a conceptual shifts in the ways of dealing with *Ashwaeyat* to respond to different incidences, but in fact, governmental intervention in unplanned area was not varying. It is limited in providing basic urban services and open roads or relocation in situ if there is available land. However, such dealings do not appear to reflect the shift in government policy, rather it appears to be a case-by-case approach. This was missing the adoption of flexible and adapted planning regulations and building standards, the bureaucratic procedures related to land subdivision and building permits, the community participation in finance and implementation of service delivery, and a more responsive and cooperative role for local authorities in the process [13].

While, private sector and NGOs interventions are generally limited to be for social charity actions or temporary donations, or are for the investment in El *Ashwaeyat* whose areas are of high value. The main problem facing this type of intervention is the lack of coordination and integration of efforts done and the lack

of visioning for combining objectives and the lack of the clear identification of roles for each partner of upgrading in such area

3.2. Upgrading in ElDarb el Ahmar project in Cairo as example of the integrated approach

The project showed an integrated intervention to restore and upgrade The ElDarb el-Ahmar neighborhood which is one of the poorest and most populous areas of Cairo, lacking adequate sanitation and rubbish-collection services with roofs and walls collapsed, the historic monuments came under greater and greater stress, and expectations for the quality of life declined along with physical decay [16].

The project for socioeconomic development of the neighborhood was conceived with the idea that the removal of the former rubble dump and its metamorphosis into a park would have a catalytic effect on the general improvement of the district, as shown in Fig. 12. However, the project's scope had to encompass the cultural monuments in the neighborhood and the people of this area. This approach took the form of an integrated urban area development plan containing a series of pilot interventions aimed not only at the restoration of landmark buildings, but at wide-based socioeconomic development, the participation of institutional partners, local non-governmental organizations, municipal institutions, neighborhood representatives, local businessmen and people living and working in the area. Priorities emerged, including training, sanitation, housing rehabilitation, a need for microfinance, rubbish collection, primary health care and a community centre, among others.

Many of the skills-training programs have been implemented in conjunction with restoration and rehabilitation interventions. Apprenticeships offered to local youth in connection with stone masonry and carpentry, among other trades, is also part of the program. The project has offered over training positions in activities such as stone carving, masonry work and materials conservation. Micro credits financed within three principal categories: shoemaking, furniture and tourist goods. Loans are used to buy new materials for traditional workshops or to create new businesses, such as a dry cleaner and an Internet café.

This project was a successful case for type of integrated intervention due unified efforts (the Aga Khan program), the proper timeline for interfering, that enable to test needs and satisfaction and then enable the adaptation of action according to the situation.

This project reveals the potentials that exist in such area, not only historical culture, but also potential of human resources as drivers to realize the project.

As demonstrated above, major events that took places in Egypt, act as being the turn in changing the conceptual way of interfering in the informal area. The “*social unrest*” and the “*Doweka Rock fall*” had been the key motivations in the consciousness of new aspects of the informal settlement. The *Egyptian revolution* amplified the needs to the quality of life, for deprived people who were suffering from bad living conditions.

3.3. Potentials in Ashweyat in Cairo metropolis

The paper tries to reveal the potential and the advantages of living in an informal area, for the mass of Cairenes, outweigh the disadvantages. Why do people choose to live in poorly serviced informal areas, rather than inhabit the planned, ‘modern’ New Towns? To answer such a question we must look deeper and understand the economic, social, and psychological needs that people seek to fulfill in their residential environment, and thereby unravel the hidden attraction of informal areas [20].

First of all the affordability of housing, and the wide range of choice under all kinds of tenure arrangements is available [19]. Secondly the social aspect, due to the very vibrant, albeit mostly word-of-mouth housing markets found in every informal area, families can relocate near to other family members, kin, friend, and those coming from the same part of Egypt. These close neighborhoods ties or social “social glue” has many advantages not normally found in formal Cairo [19]. Informal areas are structured and organized; they like formal ones comply with rules. Social networks and cultural norms are the organizational bases that dictate those rules. Dina Shehayeb, high lights some spatial characteristics of areas that support positive aspects of the residential environment, such as “walk-ability” “self-sufficiency” in terms of daily needs, “convenience” and “home-work proximity”, safety in residential streets, and resident participation in the provision of public amenities and regular upkeep [21]

Moreover, Hernando De Soto’s ILD and the Egyptian Center for Economic Studies (ECES) shows in numbers the economic value of housing building in the informal area, which need to be protected and consolidate [5].

The persistent misconceptions of informal areas as being ‘chaotic’ and their residents ‘uncivilized’ and ultimately a ‘dangerous threat’ and ‘undesirable’ reflect ideas about the government as controller rather than as guide or facilitator.

The next section tries to discuss the ability of considering regeneration as proper approach to interfere the *Ashwaeyat* of Cairo for the next period.

4. Discussion

4.1. The regeneration approach: an appropriate approach to interfere with informal settlements in the metropolitan Cairo

As Discussed previously, regeneration is a concept of looking beyond negativities to potentials and how to obtain the best of them. Looking at *El Ashwaeyat* in Cairo, we can easily pin point both human and physical potentials for regeneration. Human potentials are the popular committees which were born out of a moment of chaos and fear; they have proved themselves to be capable of self-organization in the days that followed the revolution. As Sims, many social potential and small but important businesses were found in *El Ashwaeyat*. Such assets must be improved in a way to contribute in the whole city development.

As In China, Maw Tsetung transformed his faith in the oppressed masses of china to productive energy which place china in the row of developed country [18]. Then the high population density in *El Ashwaeyat* had to be managed in a likely way.

Accordingly on the Eve of the revolution, Egypt had one million unemployed aged from 20 to 24 [3] and since *El Ashwaeyat* encompass about 40% of Cairo’s population, we can easily see the huge number of working force awaiting to be put on the track, especially in development projects that gives them hope for the future.

As for Physical potentials, *El Ashwaeyat* areas include numbers of under-utilized buildings, either their functions seized to exist or its place does not fit anymore with the surrounding context. These buildings has to be looked at differently and how to reuse these valuable assets towards the development goals.

Some of *El Ashwaeyat* areas include Touristic sites that are neglected and are not put in the touristic map of Egypt, Mataria for example has the only obelisk from the City of the Sun “Heliopolis”, and huge archeological area that is simply left without even supervision.

Regeneration as being an approach that looks at the positive potentials of an area, might be adopted in *El Ashwaeyat* to look for and to re-use assets to not only realize the slum upgrading but also to merge *El Ashwaeyat* with its urban context and to contribute in the development of the whole metropolitan.

5. Conclusion

As result for the improper approach to deal with, *El Ashwaeyat* areas in Cairo are suffering from several interrelated problems:

- First, economic problems, which is the most important factor responsible for the *Ashwaeyat* growth. Low income, unemployment, informal vendors, women-headed households and child labor characterized the place.
- Second: social problems that appear in the poor health and lack of education and social services for youth. They negatively affect the behavior of the population and cause spreading drugs and tendency to violence, as well as the isolation from the rest of society.

- Third, urban problems, such as inadequate housing and lack of services and facilities, narrow streets and difficult access, especially in cases of emergency.
- Fourth, environmental problems which are the result of all of the above. The absence of water and sanitation and the negative behaviors of individuals affect directly the environment, as well as the spread of disease, ignorance, high population densities and lack of services, lead to environmental degradation in those areas.
 - The turns of the ways of intervention in *Ashwaeyat* were sort of reactions towards an unexpected incidence. Major events have always unfolded new eras for dealing with slum areas. For the first recognition of these areas after the terrorist acts in the early 1990s which led to social unrest, the government realized that these terrorist came from deteriorated parts of the city and this was a kind of eye opener to the existence of such areas. The fall of the Dewiqqa stone in 2008, this loud cry led not only to national but international recognition to the problems of informal areas and the need for quick interventions especially in unsafe areas. Currently, the need for the reform and to improve living condition to all the people deprived from basic needs and suffering from poverty inequality bad living conditions, in the metropolitan become an obligation.
 - Government must look at informal areas and their inhabitants differently, and thus a different approach for intervention should follow.

Following the regeneration approach, the government must transform the perception of the *Ashwaeyat* from being problems need to be solved, to be potential and resources need to be managed and used in the development of the metropolitan and to be partner in realizing its future vision.

- The need to Re-discover the resources and assets in such areas, whether human or economic (skills, character, or urban markets...) (Real Estate, land, ...) and the active intervention towards improving the living conditions of *Ashwaeyat* inhabitant result from the efficient management and use of those resources and the regeneration of urban areas to become capable of production and self-development.
- This is achieved by establishing the institutional set up that unify effort and took the responsibility, and activates the coordination of all related stakeholders and partners, setting the proper legal framework to facilitate and to ensure that approach. In parallel, prevent the continued migration from the countryside to the cities in by supporting rural development, especially economic

In return, *Ashwaeyat* should be looked at not as problems to be solved but as areas with potentials, physical and human, by this view, interventions will differ completely.

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