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Evolution of informal settlements upgrading strategies in Egypt: From negligence to participatory development

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Abstract The issue of informal settlements represents a key challenge not only in Egypt, but also worldwide. A review of informal settlements upgrading policies shows that governments have moved away from eradication policies to provision, enabling and participatory policies. This shift was motivated by the recognition that informal settlements were not a problem but a solution stimulated by the society when the formal housing markets cannot fulfill its demand. In Egypt, despite all efforts to contain the growth of informal settlements, they are steadily growing. This paper aims at mapping the change of informal settlements upgrading strategies in Egypt starting from negligence to contemporary participatory development approaches and housing policies aimed at providing affordable shelter to the urban poor. Additionally, it examines some best practices of informal settlements upgrading projects to find out the influential driving forces affecting the success of these projects that are suitable for scaling up and replication.
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1. Introduction

Informal settlements represent a universal phenomenon, which many countries suffer from worldwide and Egypt is no exception. It is one of the major phenomena accompanying the accelerated urbanization process worldwide. They are a result of governments' failure to provide adequate and affordable shelter to the urban poor. Therefore, informal settlements should not be perceived as part of the countries' housing crisis but rather as a solution developed by the urban poor under the existing conditions of limited economic resources and bureaucratic control, and when neither the government nor the private sector could provide dwellers with adequate and affordable housing [1]. The vast number of informal settlements with a huge number of inhabited households is evidence that the policy adopted by government agencies and institutions in charge of managing and controlling urban development and housing policy has been largely ineffective. The total land area of Egypt is about one million sq. km of which only 7.6% is inhabited and cultivated areas (3.5% is the cultivation proportion). Total population is approximately 86.9 million (July 2014 est.) and the population

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growth rate is 1.84%. Rural inhabitants comprise approximately 56% of the total population, while urban inhabitants are about 44% [2]. Greater Cairo Region (GCR) is the largest metropolitan area in Egypt and the world's 18th largest metropolitan area, with a total population of 16.4 million (2006 census); GCR includes 19% of the total population in Egypt [3]. Informal settlements are considered to be the dominant mode of urbanization, spreading on urban fringes, either on privately-owned agricultural land or on state-owned land in desert areas. It is estimated that more than 60% of the region's population inhabits these areas [4]. Moreover, it is estimated that between 1980 and 2025 nearly half of Egypt's agricultural land will be lost to informal settlements in the absence of planning or the ability to enforce present laws governing the housing development [5].

This paper aims at investigating the change and evolution of informal settlement upgrading strategies and policies with a focus on the Egyptian context in the period from the 1970s to date. Given the fact that the government's policy to provide citizens with affordable and adequate housing was inefficient and was one of the key causes of the emergence and expansion of informal settlements, the investigation of the adopted policies encompasses both the ones dealing with the causes and the symptoms, a twin track approach as suggested by Payne [6]. Policies targeting the causes are principally discussed in the National policy for providing low cost (social) housing that can be afforded by the urban poor, while the ones targeting the symptoms discuss the upgrading of existing informal settlements and controlling its growth.

The structure of this paper is as follows: The following Section 2 explains the adopted methodology to carry out this research. Section 3 reviews the history of emergence and evolution of informal settlements in relation to political and macro-economic aspects within the Egyptian context. Section 4 explores the adopted approaches, strategies and policies of upgrading informal settlements and provision of affordable housing worldwide. Section 5 is an attempt to map out the changes of upgrading ideologies within the Egyptian context and sheds light on some of the best practices of informal settlements upgrading projects in order to identify the key factors for success and lessons learned from such projects and finally Section 6 includes the discussion and conclusions.

2. Methodology

To carry out this research, the author has adopted two main methods. Firstly, the literature review of publications and official documents is performed to understand the phenomenon of informal settlements and investigate the different academic stances and governments' responses to the challenge of informal urbanization. Secondly, nine semi-structured interviews with the representatives of three groups of stakeholders, who have considerable experience in informal settlements upgrading efforts and the shaping of related policies in Egypt, have been conducted. The stakeholders are: (i) Unit heads at the Informal Settlements Development Facility (ISDF), (ii) Senior officials at the United Nations Human Settlements Programme (UN-HABITAT) Office in Cairo, and (iii) Academic staff members from Ain Shams University, Cairo University and Alexandria University who have had practical experience in informal settlements upgrading projects in Egypt and have worked with governmental and official organizations such as the General Organization for Physical Planning (GOPP), ISDF and UN-Habitat. Interviews were carried out separately and were conducted as guided conversations. The main objectives of the interviews were to explore the roles of the different actors involved in shaping the policies and implementing the projects of informal settlement upgrading and whether there is any sort of coordination and cooperation among them. Additionally, the author draws upon her own theoretical and practical experience in the field of informal settlements upgrading since 2007.

3. Origin and evolution of informal settlements within the Egyptian context

Informal settlements within the Egyptian context mostly take one of two forms; (i) expansion on privately-owned agricultural land, principally occurring on the urban fringes, and representing about 80% of informal urbanization, or (ii) squatter settlements on state-owned land, which represents about 15% of informal urbanization in Egypt [7]. For the former, informality does not stem from ownership rights but rather from the illegal conversion of agricultural land to housing as well as the contravention of building laws and regulations [8]. This type is characterized by good building quality and access to most services, while the latter is characterized by considerable variation in building quality, ranging from houses which are one story high and established from make-shift material to high quality cement structures, with an average building height of 6–8 floors and generally the access to services is limited [9]. More details about the formation, typology, characteristics and challenges of informal settlements "*Ashwa'iyyat*" upgrading can be found in [8–11].

The incidence of informal settlements began after World War II and sped up during the 1960s. For a better understanding of the emergence and growth of informal settlements in Egypt, it is worth mentioning the political and macro-economic driving forces that affected the housing provision in the period prior to the revolution of 1952 and continuing to date. Prior to 1952 housing was never considered a problem. Housing provision was supplied by the formal and mostly by the private sector. After 1952, Gamal Abdel Nasser's socialist government started to implement rules to enforce social justice. Thus, a series of laws has been issued to control rents of housing units. Additionally, the public sector assumed a major role in housing supply through local government and public housing companies. The issued laws gave residents more rights over their rented properties and limited the power of property owners in dealing with their properties [1]. These laws resulted in diverting the real-estate market away from rental housing to owner-occupied housing and contributed to the deterioration of the available rental housing stock as property owners stopped investing money in maintenance. Thus, many middle class and low income families were pushed to informal urbanization, which principally took place on agricultural lands at the urban fringes [12]. Another deriving force that played a significant role in the spread of informal settlements was the shift in the economy toward industrialization. Massive industrialization during the 1960s created employment opportunities around large cities, which increased rural–urban influx to Cairo and to the other cities.

In the period from 1967 to 1973 (the war against Israel), financial resources were largely directed to fulfill military needs and all government investments in public housing construction were restricted. During this period the private sector supply did not meet popular demand. The supply was mainly luxury units for the upper classes with the majority of properties for sale rather than rented, and thus residents with low income and middle classes found the informal sector as an appropriate solution to fulfil their demands [11]. After the victory of 1973, President Sadat engaged the country in a new direction, namely the Open Door Economic Policy (*Infitah*), distinguished by a larger political and economic opening to the west and a transformation from a state controlled economy toward a liberal market economy. The implication on the housing policy resulted in dividing responsibilities between the government and the private sector. The former was in charge only for the construction of low-income housing, and the later would have major responsibility for providing housing units to the middle and upper-classes. Additionally, the state disengaged from the production of rental housing and maintained the policy of rent control with only minor modifications. As both the private and public sectors disengaged from the rental housing market, those seeking affordable rented units could not find access to the formal housing market, as rent values were unaffordable for a large sector of the society [1]. Informal settlements became the only affordable solution to urban dwellers with low or middle incomes. Furthermore, during the 1970s, the oil boom in the Gulf States attracted many Egyptian workers to work in the neighboring oil-producing countries such as Iraq, Kuwait and Saudi Arabia. After their return, they invested their savings in informal housing, as the formal housing supply was inadequate to meet their demand. The offered properties by the public sector were neither sufficient nor affordable.

During the ex-President Mubarak era (1981–2011), almost no more new informal settlements have appeared. However, the growth of the existing ones has not slowed down in spite of the fall in population growth rates and the strict measures taken by the government against illegal urbanization such as the Military Decrees 1 and 7, which forbids encroachment on agricultural land. In spite of the good productivity of agricultural land, their sale for building was more remunerative than the revenues from farming, which encouraged farmers to sell their lands [8]. The government adopted the "privatization" policy, which dramatically affected the supply of affordable housing. The role of the public sector lessened to the extent that in 1991/92, the private sector contributed to 97% of the total investment in housing and 95% of the total value added in the housing sector. The informal housing sector was totally financed by private investment [13]. Between 1986 and 1996, the population growth rate in informal settlements reached 3.4% per year compared to 0.3% for legal areas, and informal construction growth was estimated to be 3.2% per year, compared to 1.1% in formal districts [14]. Only since 1994, the government has started to pay considerable attention to develop a program for informal settlements upgrading and reform the housing national policy, which will be illustrated in Section 5 of this paper.

Last but not least, the 25th January 2011 Revolution in Egypt, which raised the slogan of "Better living conditions, Freedom and Social justice", was a turning point not only from a historical, political and social perspective, but also for urbanism. Consequently, informal settlements dwellers have pursued new means of action and put pressure on the government to recognize their rights [15]. After the January revolution, the political changes that happened and continue to take place (second wave of the revolution 30th June 2013), meant to build an effective democratic system and advocate notions such as decentralization, transparency and accountability which have been missing before [16]. However Egypt, like many other Arab Spring countries, still faces turbulence on the economic, political and security levels. This has led to a great controversy between the different actors and stagnation of the democratic transformation of the country, and consequently development programs in different sectors, where the housing sector is one of them.

Thus, it can be concluded that there were fundamental key factors that lead to the existing and accelerated growth of informal settlements in Egypt. They can be summarized as follows:

- An imbalance between the demand, resulting from a large population increase, and the supply of adequate planned formal land for urban expansion.
- The inefficient rent control laws that led to the exit of the private sector from the housing market.
- Directing all resources to the successive wars that Egypt faced.
- A rural to urban influx to large cities.
- Mismatch between housing supply and housing demand.

4. Review of informal settlement upgrading strategies and policies

As Acioly [17] argued, informal settlements upgrading is not a new idea; countries such as Peru, Indonesia, India and Turkey already had adopted such approach to tackle the problems of informal urbanization since the 1950s. Conducting a review of policies to control and deal with informal urbanization from the 1970s to 2000s indicates a radical paradigm shift in the policy adopted broadly by international agencies. During the 1970s, the oppressive "bulldozer" eviction policy predominated. The official state reaction in this period tended toward the eradication of informal settlements and re-housing the people elsewhere, most likely in public housing [18,19]. Adopted policy emphasized land acquisition, land banking and conventional housing projects [20]. Many developing countries pursued this approach until research and the international experience started to provide evidence of the failures of these eradication policies, their deficiencies and the destructive effects they had on the urban poor.

In the 1980s, a gradual shift started to take place to promote upgrading approaches that minimize the harmful social, economic and environmental impacts derived from eviction policies, as it maintains the existing social relationships and community cohesion where they exist. Emphasis was on lending policies and integration into housing policies with projects and programs focusing on tenure legalization, infrastructure improvements, facilitation of credit to encourage self-help housing and housing improvement, and social and economic development. It was believed that the most informal settlements would gradually improve their living conditions when they have a secure tenure. Additionally, local taxes would be collected by registering the occupied lands [21]. The upgrading

programs were combined to produce sites and services projects where full tenure of land lots was granted to future residents. Sites and Services projects were to become the new ideology [17]. Evaluation of such an approach has been carried out in several studies. Findings revealed that the land legalization was an expensive and time consuming process which precluded the achievements of projects. Cost recovery could not be accomplished, as inhabitants faced difficulties in paying their share. The impacts of sites and services on institutional and policy reform were minimal if non-existent and site and service projects never managed to be replicated or scaled up on a larger level [22,23].

During the 1990s, with the emergence of new concepts of decentralization and privatization, the role of local governments in managing and steering urban development processes has been broadened. The adopted approach to deal with the informal urbanization problems shifted from dealing with informal settlements exclusively to more integration into programs in citywide policies and institutional reforms. The emphasis was on providing a package of infrastructure improvements, social services and the physical restructuring of the settlements followed by legalization of tenure and regularization of property rights [24].

During the 2000s, the notion of "integration" replaced the concept of "upgrading". Actions moved toward linking informal urbanization with formal real estate market expansion. Integration encompasses three basic aspects. Firstly, physical integration by directing public investments toward such areas, opening of roads to improve accessibility, enabling the connection to the infrastructure networks and public services and linking to the city's official maps. Secondly, social integration by adopting specific programs to tackle community needs and promote social development. Thirdly, juridical integration through properties' regularization, land titling and resolution of land tenure issues which complements citywide cadastral needs to enable property taxes collection [17]. Fig. 1 indicates the timeline of changes in policy and informal settlements upgrading ideology.

5. Mapping out the change within the Egyptian context

In order to depict a clear picture of changes in the adopted policies and strategies for upgrading informal settlements, this paper explores three main strands in this section:

- The national policy of informal settlements upgrading, which represents the government's stance is illustrated.
- The national housing policy with relevance to providing affordable housing and corrective measures to improve access by the urban poor to the formal housing market.
- Parallel initiatives for informal settlement upgrading by donor agencies, private sectors and civil society organizations.

Furthermore, the empirical part of this research, the interviews with the representatives of ISDF, UN-Habitat Cairo office and Academia assists in clarifying the roles of the different actors involved in shaping the policies and implementing the projects of informal settlement upgrading and whether there is any sort of coordination and cooperation among them. Additionally, given the practical expertise of the interviewees, the interviews are considered a source for verifying information that is obtained from official documents and consolidating the author's understanding of the success factors and best practice for the upgrading of informal settlements projects that took place in Egypt.

5.1. National policy of upgrading of informal settlements

During the 1970s and 1980s and despite the accelerated growth of informal settlements, the government adopted the policy of "negligence and utter disregard" [25]. Only in the 1990s, governmental policy started to pay attention to informal areas for both security and humanitarian reasons. In 1992, the government launched a national fund for urban upgrading [26]. In 1993, a systematic approach to the upgrading of informal settlements all over Egypt was initiated and a national survey to identify informal settlements was carried out in urban areas. A total of 1221 areas were identified and classified as either in need of upgrading (1201 areas) or removal and replacement (20 areas) [27]. Consequently, a massive informal settlements upgrading program was initiated and a national plan was developed. The program included two main stages. First stage: 1994–2004 Informal Settlements Development Program (ISDP). This stage mainly aimed at providing infrastructural and basic services such as electricity, water supply, sewerage, paving the streets, tree-planting and landscaping for informal settlements as well as developing areas that had deteriorated. Second stage: 2004–2008 informal settlement belting program (*Tahzeem El-* Ashwa'iyyat). This stage focused on supporting local government in developing detailed plans that can restrict the growth of informal settlement [12]. By the end of the program, the ISDP only provided basic urban services which covers the following: electricity, municipal cleanliness, water, sanitary drainage, and road paving for about 352 informal areas and developed 13 areas of decline with a total cost of 3.2 Billion [1]EGP [28]. However, the ISDP lacked two main aspects, which limited its success:

- The concept of community participation in planning or implementation.
- Legalization of properties and security of tenure.

While the focus was on providing infrastructure and improving physical condition of the deprived areas, socioeconomic aspects were completely ignored [27].

In 2008, a presidential Decree No. 305/2008 was issued and established the Informal Settlement Development Facility (ISDF), related directly to the Egyptian Cabinet, with the main objective of coordinating efforts and finance for the development of an informal areas program. ISDF has made a significant change in the ideology of dealing with informal urbanization by replacing the common terms describing informal urbanization such as "Slums", "Informal Settlements" or "Ashwa'iyyat" by two distinctive terms: "Unsafe Areas" and "Unplanned areas". Consequently, policies and strategies have been changed with prioritizing intervention for unsafe areas [9]. Unplanned areas are defined in the Unified Building Law 119 # 2008 as " areas, which are not subject to detailed plans,

[1] 1 EGP (Egyptian Pound) = 0.14 US Dollar (Exchange Rate Effective February 13, 2014) (https://www.google.com.eg/?gws_rd=cr&ei=4tT8UtDYFcH8ywPbp4HwCA#q=money+converter).

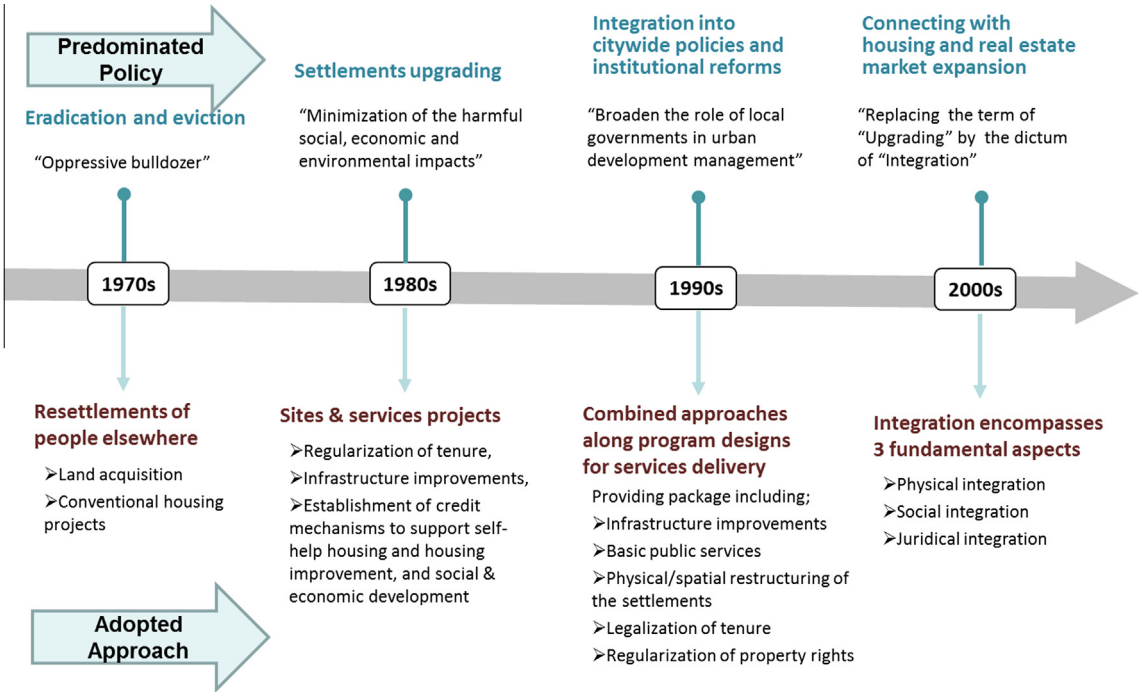

Figure 1 Timeline of changes in policy and upgrading ideology worldwide (Author based on Acioly [17]).

land subdivision plans nor compliant with planning, building laws and regulations'' [29]. On the other hand, unsafe areas are characterized by posing risks to life, health and tenure or having inappropriate housing. These risks might be due to severe deterioration over time, using makeshift materials to build houses, being located on sites subject to landslides, floods, or hazardous infrastructure e.g. high voltage cables, and risky health conditions due to the lack of safe drinking water or improved sanitations and industrial pollution. Unsafe areas were classified into 4 grades of risk, which were ordered according to the degree of risk and thus the urgency for intervention [30] cited in [9]:

- Grade 1: areas that threaten life including those located under or above sliding geological formations, in floodplain areas; or under threat from railways accidents.
- Grade 2: areas of unsuitable shelter conditions including buildings made of makeshift materials, e.g. shacks, sites unsuitable for building, e.g. solid waste dump sites or ruined buildings.
- Grade 3: areas exposed to health risks including those lacking accessibility to clean drinking water or improved sanitation, located in the vicinity of industrial pollution, or located under electrical power lines.
- Grade 4: areas of instability due to insecurity of tenure including areas located on the territory of state-owned land, on sovereign quarters or on the territory of endowments (Awqaf).

According to ISDF's estimations, unplanned areas constitute 60% of urban areas with average density of 500 person/feddan[2] and the building height ranges from 4 to 10 storeys; mostly they provide a safe residential environment and need medium or long term maintenance. Unsafe areas, on the other hand, are estimated to constitute 1% of the urban areas, with an average density of 200 person/feddan, and the building height ranges from 1 to 2 floors. They do not provide a safe residential environment and require deliberate intervention [28].

ISDF's policy and approaches differ when dealing with unsafe areas rather than unplanned areas:

- Unplanned areas require market based mechanisms with partnership of the private sector, residents and public sector. Such mechanisms should consider the significance of concealed land values through planning and building regulations in addition to the benefit of tax collection.
- Unsafe areas require deliberate state intervention to improve shelter conditions. ISDF's policy emphasized that in situ upgrading should be the norm when dealing with informal settlements. Successful past experiences proved that upgrading plans do not work if people are uprooted and lose their source of income and social networks [31]. The only exception is in Grade 1 areas, as displacement is compulsory. People should then be relocated in safe housing provided by the government or get appropriate monetary compensation. For Grade 2, intervention alternatives include the following: (i) in situ housing replacement with densification or displacement to nearby state owned land, (ii) monetary compensation, (iii) housing rehabilitation or (iv) credit for housing improvement. For Grade 3, intervention alternatives include the following: (i) transfer or conversion of aerial power lines to land cable in cooperation with concerned Ministries and Governorates, (ii) regularization of polluting factories in cooperation between the Ministry of Environment and the Ministry of Industry or (iii) the implementation of safe water supply systems and

[2] Feddan: an Arabic term refers to a unit of measurement of agricultural land, equals approximately 4,200 square meters (World Bank, 2008)

sanitation facilities within the plan of the Holding Company for Water and Wastewater. For Grade 4, intervention alternatives include the following: (i) legalizing tenure with charge or (ii) provision of alternative housing [28].

The finance strategy is based on conceiving ISDF as a revolving fund seeking cost recovery with focused grants to provide citizens with a safe housing environment. Finance modalities include direct credit and grants, as well as linking credit to development and commercial banks to facilitate finance for the private sector. As an incentive, citizens shall receive market value compensation for properties or be compensated for property devaluation as a result of the development action [28].

5.2. National housing policy

As illustrated earlier in Section 3 of this paper, housing policies have failed to address the needs of the whole society and particularly providing affordable shelter to the middle and low income classes. Neither the socialism policy of Abdel Nasser nor the open door economy policy of Al Sadat succeeded in supplying affordable housing to a large strata of the urban dwellers.

In response to the housing problem in Egypt, President Sadat introduced the ''New Towns'' policy in the late 1970s aimed at tackling the problems of inadequate supply of housing and the informal urbanization encroachment on agricultural land. However, the main challenge was to relocate the demographic growth that took place on agricultural land to public housing on the desert fringes of the city. Most of the newly developed public housing units were left unoccupied due to their high prices, the remoteness of these cities and the inadequate supply of services [12].

From the 1980s, most of the governmental investment was directed to the new cities and the provision of housing was based on the principle of site and services or self-help [32]. However, this was beyond the ability of the low income strata. In 1996, the government started the ''Mubarak Youth Housing Project''. Its aim was to provide 70,000 affordable dwelling units, in a healthy and productive residential environment. The beneficiaries were the youth who belong to the disadvantaged/low-income groups. The project was completed in December 2000, and its units were distributed in 15 new cities. Project's finance was underpinned by the concept of social solidarity, where the state cross-subsidized nearly 40% from the sales of high-income residential areas and dwellings in both new cities and resorts. In addition, the state offered subsidized credit of 15,000 EGP per unit, payable over 40 years at 5% interest rate [33]. The project proved a success and has been replicated in other cities; however, the supply was much less than the demand.

5.3. Parallel initiatives for informal settlement upgrading and provision of affordable housing

The Government of Egypt, in an attempt to attract new financing for urban development, has tried to involve other international cooperation actors in the upgrading effort [11]. Parallel to the national effort for informal settlement upgrading, there were some initiatives by donor agencies, the private sector, civil society organisations, charities or religious institutions for service provision, sectorial development and housing provision. Examples include the upgrading of schools in poor and informal areas as part of the ''100-Schools project'' implemented by the NGO Heliopolis Services sponsored by Mrs. Suzan Mubarak (Ex. first lady) and the upgrading of youth centers in poor neighborhoods by the Coca Cola Company [10]. From late 1970s to 2000s, there were several successful pilot projects in ''sites and services'' and informal settlement upgrading supported by fund agencies. Examples include Hai El Salam in Ismailia (1978), Nasseriya in Aswan (1986), Hadayek Zenhom and Manshiet Nasser in Cairo (1998) among others. There was no sole mode of intervention in such upgrading projects. Abdelhalim [10] distinguished between 2 basic modes of interventions namely ''upgrading'' and ''redevelopment''. Firstly, upgrading encompasses services provision, sectorial upgrading as well as planning and partial adjustment which maintains most of the urban fabric and physical structures. ''100-Schools project'', upgrading youth centers, Hai Elsalam project and Manshiet Nasser project fit into the upgrading mode of intervention. Secondly, redevelopment that encompasses on-site redevelopment and relocating that entails substantial replacement of the physical setting. Hadayek Zenhom project fits with the later mode of intervention.

In order to support the government's effort in the program of ''Shelter for all in Egypt, 1996 – 2001'' and promoting the concepts of social solidarity and partnership, in March 1998, with the support of Mrs. Susan Mubarak an NGO named ''*Gameyet el Mostaqbal*'' (Society of the Future) was established to supervise the implementation of ''The Future Housing Project''. The board of this NGO is composed of businessmen in real estate, manufacturing and construction. The project is designed to construct 70,000 dwelling units with an area of 63 sq. m./unit, at an estimated total cost of 2.1 billion EGP, without the cost of land. It is replicated afterward in 15 new cities in Egypt. This project has received the Council of Arab Ministers for Housing and Reconstruction Award in 2000 for its innovative approach that integrates architectural, planning, social, economic, cultural, technological, and environmental dimensions [33].

Another initiative that advocates the concept of community participation in upgrading projects is the Participatory Development Programme in Urban Areas (PDP), which was launched as an Egyptian-German development measure in 2004 and is currently in its third implementation phase (2015). It is jointly implemented by the Egyptian Ministry of Planning and International Cooperation (MoPIC) and the German Development Cooperation (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) [34]. The PDP focuses on the upgrading of informal areas in the Greater Cairo Region by introducing and supporting the implementation of participatory methodologies for urban upgrading with local government and civil society organizations to improve service provision and thus living conditions in an integrated manner to alleviate urban poverty. Accordingly, the PDP is assisting local actors in communicating their priority needs and obtaining support from partners on the regional and national levels [35]. The PDP has implemented 2 pilot projects in Manshiet Nasser and Boulaq el Dakrour, principally focused on the upgrading

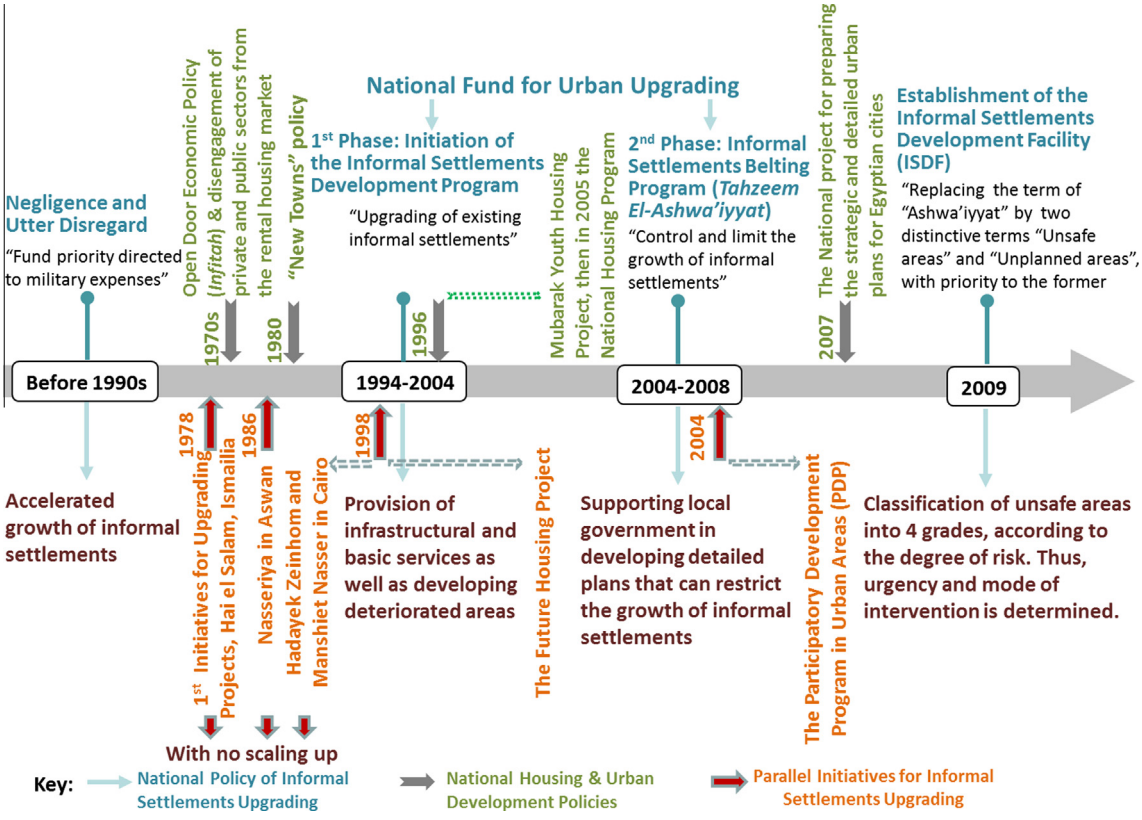

Figure 2 Timeline of changes in housing policy and informal settlements upgrading interventions in Egypt (Author).

of infrastructure and community facilities to demonstrate that such methods can work. Fig. 2 indicates the timeline of changes in policy and upgrading interventions in Egypt from the 1970s to date.

6. Discussion and conclusion

Informal settlements are a reality that many developing countries have to cope with. Despite all efforts to contain their growth, informal settlements are steadily growing. Within the Egyptian context, in spite of all the efforts exerted to upgrade informal settlements and improve the living conditions of its inhabitants, the magnitude of informal urbanization proves that the outcomes of such efforts are still far beyond achieving its objectives. The pace of informal settlement growth is much faster than the pace of any upgrading or development efforts; thus no visible improvements can be recognized on the ground. Simultaneously, the pace of supply of formal affordable housing is much slower than the pace of high demand by the low-income and middle-income households. Comparing the trajectory of the international predominant policy of informal settlements upgrading and the Egyptian National Policy of informal settlements upgrading, a wide gap can be recognized. For instance, during the 1980s "Settlements Upgrading", focusing on regularization of tenure, infrastructure improvements and supporting self-help housing and housing improvement was the predominant international approach, while in Egypt this approach has been "partially" adopted in 1994 with the launch of the ISDP. Upgrading principally focused on the provision of infrastructure to informal settlements, while almost all other components of upgrading, such as security of tenure and housing improvement were neglected. To date, there is no sound implication of the advanced approaches adopted by the international agencies: "integration into city wide policies and institutional reform" during the 1990s or "connecting with housing and real estate market expansion" during the 2000s on the Egyptian National policy for informal settlements upgrading. The shift from exclusion to integration has not been revealed in any strategy of governmental institutions or other official structures that provide support and services to informal areas. On the national level, the adopted policies to respond to the challenge of informal urbanization encompass a combination of different approaches as well as different actors. Actors include governmental institutions, donor agencies, private sectors, civil society organisations and charities. Although there is no evidence of sound coordination among those actors, no contradiction in their adopted policy and modes of intervention in informal settlements upgrading and provision of affordable housing can be recognized. There is no successful sole mode of intervention in informal settlements upgrading projects. Modes of intervention vary between provision of services, sectorial upgrading, planning and partial adjustment, on-site redevelopment and relocation of dwellers. Each mode is appropriate under the particular physical, socioeconomic and environmental conditions that are found in or affecting the respective informal settlement. Common factors of success in upgrading projects that were implemented by the government are the availability of funds and political

will. Once any of these two factors is terminated, projects come to halt. As for parallel upgrading initiatives, additional factors are needed to ensure success. For instance, the PDP that adopts participatory methodologies for urban upgrading requires cooperation from local government and active civil society organizations to enable the implementation of its methodology. The pilot projects that have been implemented so far constitute only demonstration cases with no institutionalizing mechanisms to ensure replicability and scaling up of such experience in the strategy of governmental institutions. Informal settlements upgrading programs should be part of the citywide policy reform and institutional building effort, not as separated reform programs. Addressing the informal urbanization challenge can be a win–win situation for everyone as improvement programs not only benefit the urban poor, but the city as a whole. Additionally, effective approaches to informal settlement upgrading must go beyond addressing the specific problems of settlement, whether they are inadequate housing, lack of infrastructure or services, poor accessibility or severe environmental deterioration and must deal with the underlying causes of urban poverty. More attention should be paid to land regularization and legalization of tenure, non-conventional schemes of community financing, integration to housing markets and land supply and finally emphasizing partnership between public, private and community stakeholders.

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