



Redefining slums in Egypt: Unplanned versus unsafe areas

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A B S T R A C T

Keywords:

Egypt
Slums
Ashwa'iyyat
Unsafe areas
Unplanned areas
Informal Settlement Development Facility

This paper addresses the crucial need to revisit the criteria for defining 'slums' in order to present a more precise image of existing slums and categorize them according to the severity of risk they pose to human life and to property, as a means of prioritizing interventions. It reflects on the Egyptian initiative, started at the outset of 2009, to solve the problematic issue of defining what are called 'slums', or 'informal settlements', or 'Ashwa'iyyat', by replacing them with two distinctive terms; 'unplanned areas' and 'unsafe areas'. This approach is considered to underpin the identification of priorities for intervention and drawing up policies and strategies for improving slums' conditions and the lives of their inhabitants. The paper sheds light on the findings from a survey carried out by the Informal Settlement Development Facility (ISDF) in the period from February to May 2009. This attempted, for the first time to identify unsafe and unplanned areas spatially in all the urban centres in Egypt and classify the former according to degrees of risk based on certain criteria set by the ISDF. The results show substantial discrepancies between previous statistics concerning the size of slums and the more recently produced ones. Areas which are considered unsafe are estimated to contain 1.1 million inhabitants, represents the number of people in great need of immediate action to improve their living conditions. Such statistics would change the position of Egypt on the world map of slums.

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Introduction

'Slum' is an umbrella concept under which fall numerous categories of settlement, for example, decaying inner-city tenements, squatter settlements, informal settlements and shantytowns. The coverage of settlement types is even more complex when we consider the variety of equivalent words in other languages and geographical regions, such as Favelas, Kampung and Bidonvilles.¹ To date, defining what constitutes a slum is a controversial issue. The term 'slum' not only suggests indecent and miserable living conditions but also implies other important aspects such as informality (The World Bank and UNCHS (Habitat), 2000). Informality also implies more than one meaning; it can mean substandard, illegal or disrespecting building laws and planning regulations.

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¹ The word *favela* is confined in Brazilian usage to settlements founded through a land invasion and established by some kind of 'self-help' process, nevertheless, the word is used to translate the word 'slum' into Portuguese (Gilbert, 2007: 703).

- *Kampung* is the traditional, spontaneous, fine-grain, and diverse form of indigenous urban settlement in Indonesia which has grown locally, organically and incrementally over many years without planning guidance or regulations, building codes or the centralized and coordinated provision of services (Sihombing, 2002: 15).

- *Bidonvilles* is a shantytown on the outskirts of a city, especially in France or North Africa (<http://www.thefreedictionary.com/bidonville>).

Within the Egyptian context slums have been known as 'Ashwa'iyyat', which literally means 'disordered' or 'haphazard'. It refers to informal areas suffering from problems of accessibility, narrow streets, the absence of vacant land and open spaces, very high residential densities, and insufficient infrastructure and services (World Bank, 2008).

This research addresses the problematic issue of slum definition and how current definitions create confusion around what counts as a slum, focusing on 'Ashwa'iyyat' in Egypt, where most of the published figures on the proportion of slums' dwellers are over-estimated the real situation due to such problem. For example, in Mike Davis "Planet of Slums" (2006), Egypt appeared to have 39.9% of its urban population, with total number 11.8 million inhabitants living in slums. Furthermore, Cairo is located on the world map to have 4 out of 30 biggest "mega-slums" in the world; these include Imbaba² (1.0 million), Ezbet El-Haggana (1.0 million), City of the Dead (cemeteries) (0.8 million) and Mansheiet Nasser (0.5 million), as shown in Fig. 1.

² It is worth mentioned that Imbaba belongs to the Giza governorate (one of the five governorates composing Greater Cairo Region (GCR)), not the Cairo governorate while the other three slums belong to Cairo. Therefore, Imbaba should be excluded from these statistics if it covers Cairo governorate only.

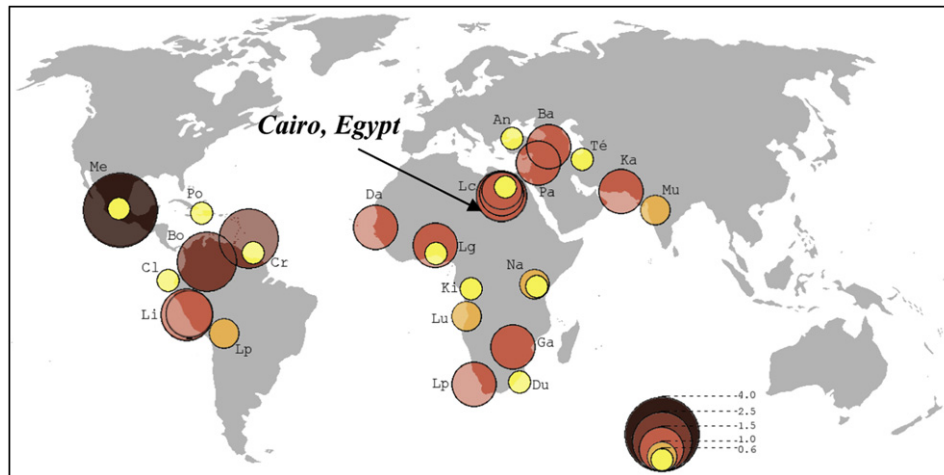


Fig. 1. Location of the 30 biggest “mega-slums” in the World (In the figure, the circles’ size and color indicate the number of inhabitants in millions, while the letter (code on map) indicate the name of the city. Raw data including slum’s name, city, country and population in 2005 is illustrated in the following URL.) (Davis, 2006: 30). Downloaded from (http://en.wikipedia.org/wiki/File:Principaux_Bidonvilles.png). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

These figures present an unreal image of the areas mentioned for many reasons which will be explained in detail later in this paper. Most significantly the criteria used to classify these areas as slums need to be revisited. The majority of these areas are developed in contradiction to building laws and planning regulations, as residents build houses on state-owned land or on privately-owned agricultural land without getting permission to build or fit in with land use plans, if these exist for the area. They can be considered illegal or informal settlements but not slums. In Fig. 1 for instance, Kibera³ and Dharavi appears in the same category with Ezbet El-Haggana, though they have completely different characteristics such as their physical conditions and accessibility to services.

As an attempt to solve the problematic issue of what counts as a slum, the Informal Settlement Development Facility (ISDF), since its establishment by a presidential Decree # 305/2008, has made a substantial change in the Egyptian vocabulary by replacing the term “Slums” or “Informal Settlements” or “Ashwa’iyyat” by two distinctive terms; “*Unsafe Areas*” and “*Unplanned areas*”. Unsafe areas are characterized by being subject to life threat, or having inappropriate housing, or exposed to health threat or tenure risks, while unplanned areas are principally characterized by its non-compliance to planning and building laws and regulations.

This research highlights the importance of the approach adopted by the ISDF in defining more precisely the nature of what were formerly called “Ashwa’iyyat” and how this approach dramatically affects the types of interventions to improve their physical conditions and the lives of their inhabitants. Moreover, it reflects on the findings from the first survey carried out by the ISDF to identify unsafe and unplanned areas *spatially* all over Egypt, along with other relevant information covering the urban, economic, social, environmental and legal status of each area using Geographical Information System (GIS). Previously data was only available as lists containing the name of each Ashwa’iyyat and its corresponding population, with no attempt made to identify and map its shape and boundaries. Therefore, the ISDF survey results can be considered to have added value, and to contribute to efforts made to improve “Ashwa’iyyat”.

³ Kibera and Dharavi are well known mega-slums; a) Kibera is home to 60% of Nairobi’s populations – Kenya; with an estimated 750,000 people in one square mile. It is the largest slum in Eastern and Central Africa; b) Dharavi is situated in the heart of the world’s third largest city Mumbai – India. It occupies an area of 500 acres and has a population of between 600,000 and 1 million people.

The structure of this paper is as follows: Section 1 reviews the literature on what constitutes a slum and explores recent approaches in redefining slums. Section 2 focuses on “Ashwa’iyyat” in Egypt; it describes the main types, the characteristics of each and addresses the main obstacles preventing “Ashwa’iyyat” upgrading. Section 3 explains the ISDF’s strategy and policy and demonstrates the criteria used for identifying degrees of risk. Section 4 explains the survey methodology used by the group of consultants who conducted the survey (of which the author is one of them), on behalf of the ISDF to identify unplanned and unsafe areas all over Egypt and classify the later according to levels of risk. It then reflects on the most significant findings. Section 5 includes the concluding remarks.

The challenge of slums and the problematic issue of definitions

The challenge of slums is a global concern and a growing one. World population is expected to increase by 2 billion by 2030, with almost all of the expected increase to occur in urban areas in currently developing countries (Pitcher, 2009). Moreover, approximately half of the population increase is estimated to be in urban slums, approximately doubling the size of the global slum population from 1 billion to 2 billion (Payne, 2005; UN-Habitat, 2008). Responses to this pressing challenge have been expressed by several international initiatives for improving the living conditions of slum dwellers all over the world. Most noticeable of these is the Cities Alliance⁴ campaign “Cities Without Slums” started in 1999. The campaign’s goal was later adopted as Target 11 of the Millennium Development Goals (MDGs), where it is one of the three targets of Goal 7; “Ensure Environmental Sustainability”. Target 11s goal is: “To improve the lives of at least 100 million slum dwellers by 2020” (United Nations, 2007: 25). Progress in achieving this goal will be monitored through the indicator of “Proportion of urban population living in slums”.

However, what is constituted a “slum” is still a controversial issue. Definitions of “slums” are abundant. The term “slum” goes

⁴ The Cities Alliance, launched in 1999, is a global coalition of cities and their development partners committed to scaling up successful approaches to poverty reduction. Alliance members include bilateral and multilateral agencies; Asian Development Bank, EU, UNEP, UN-HABITAT and the WB, Slum Dwellers International (SDI) and leading global associations of local authorities.

back to the 1820s, when it was first used to identify the poorest quality housing and the most unhygienic conditions (Lemma, 2005: 9). Nowadays, the term “slum” has many connotations and meanings. It usually refers to a residential area inhabited by extremely poor people who have no land tenure and characterized by low quality or informal housing. Buildings found there can vary from the simplest shack to permanent and sometimes unexpectedly well-maintained structures (Carrie, 2009; UN-Habitat, 2003a). Generally, what most slums share in common is a lack of basic urban services including clean water, improved sanitation, electricity, paved roads and drainage alongside with the absence of social services such as schools, health centres and market places. A comprehensive literature on what is constituted a slum can be found in UN-Habitat (2003b: 7) and Gilbert (2007: 699–700). However, the most operational definition of slums, which has recently been used by international bodies and in global statistics on slums, is the definition developed by the UN-Habitat, which defines a slum as:

“An area that combines, to various extents, the following characteristics (restricted to the physical and legal characteristics of the settlement, and excluding the more difficult social dimensions): inadequate access to safe water, inadequate access to sanitation and other infrastructure, poor structural quality of housing, overcrowding, and insecure residential status” (2003a: 12).

A household lacking any one of the above 5 criteria is classified as a slum dwelling. A detailed explanation of these criteria and the threshold used to classify a household as a slum dwelling or not is illustrated in UN-Habitat (2003a: 12, 2003b: 19). The above definition has a number of limitations including the omission of the social dimension which is clearly stated in UN-Habitat (2008: 90–92). Firstly, it does not differentiate between or prioritize the 5 shelter deprivations according to the risk posed to peoples' lives. People can live with insecure tenure but cannot survive when their houses are built on floodplains or on areas prone to landslides or where they are exposed to train accidents. Secondly, it does not consider the degree or magnitude of deprivation i.e. one cannot distinguish between a slum which lacks only one of the five deprivations mentioned above and a slum which lacks four of them, though in reality the difference is significant and affects the actions required to improve slum conditions dramatically. Moreover, it does not indicate which specific deprivations slum's households experience, for instance, lack of access to safe water or poor structural quality. Thirdly, the elimination of all types of shelter deprivation is the only way to move a slum area to a non-slum

status. Thus, there could be significant progress in alleviating one or more of the deprivations that slum dwellers experience, but no changes in the slum status would be recognized.

These limitations are the main reasons why Egypt appears to have 39.9% of its urban population as slum dwellers, a total of 11.8 million inhabitants (Davis, 2006: 24). The majority of them suffer primarily from a lack of improved sanitation; consequently simple low-cost interventions could help them to move to non-slum status. Furthermore, according to the latest estimates by UN-Habitat in 2005, after a change in the definition of what constitutes adequate sanitation in urban areas, Egypt appeared to have only 17.5% of its urban population as slums' dwellers, totalling 5.4 million inhabitants, which transferred Egypt to the lowest category of slum prevalence, where it ranked 38 out of 40 country in Africa (UN-Habitat, 2008: 97).

An enhanced approach is proposed by the UN-Habitat in its latest report (2008) to better describe the status of slums by grouping slum dwellers into broad categories of moderately deprived (one shelter deprivation), severely deprived (two shelter deprivations) and extremely deprived (three or more shelter deprivations). Therefore, if improvements happened to reduce one or more of the shelter deprivations, the resulting changes in slum status can be tracked more accurately. Furthermore, these categories provide a better picture of slum status and direct targeted programs and policies for more effective upgrading and improvement. However, it still fails to prioritize shelter deprivations according to the risk they pose to lives or property. According to these categories 14.5% of Egyptian slum dwellers fell into the first category of moderately deprived, 2% were classified as severely deprived and only 1% as extremely deprived, as shown in Fig. 2; a much closer approximation to the real situation in Egypt.

Ashwa'iyat profile in Egypt

This section aims to provide background information on “Ashwa'iyat” in Egypt. It explains briefly their origins and evolution, summarizes the main types and characteristics and reflects on challenges faced to improve these settlements. The problematic issue of definition arises not only at the global level but also at the national one. In Egypt, the recent Building Unified Law # 119/2008, which includes all definitions related to planning and urban development, the term Ashwa'iyat, otherwise known as slums or informal settlements, does not exist. Instead the term unplanned areas is used which is defined as: “Areas developed in contradiction to planning and building laws and regulations” (MTI & GOGPO, 2009: 8). A more operational definition is used by municipal authorities to define

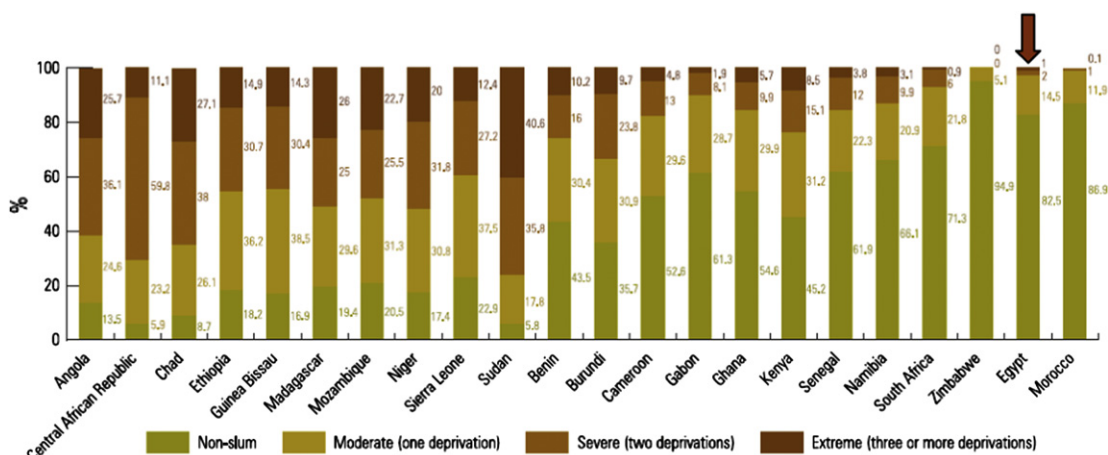


Fig. 2. Distribution of slum dwellers by degree of shelter deprivation (%) in Africa (UN-Habitat, 2008: 94).

Ashwa'iyat, as “Residential areas characterized by being developed in contradiction to planning and building laws and regulations in the absence of state’s supervision. They, in essence, might lack services and/or infrastructure” (General Administration for Planning and Plan Monitoring, 2008: 1). As can be clearly noticed, emphasis in official terminology is on settlements which infringe planning law i.e. are informal, rather than slums in the sense of poor living conditions.

History and evolution

The incidence of Ashwa'iyat began just after World War II and sped up during the 1960s, due to the increase in the number of people migration from rural to urban areas seeking better job opportunities. Informal urbanization took place on agricultural lands at the urban fringes. In the period from 1967 to 1973 (the war against Israel), financial resources were mainly directed to support military needs and all state investments in public housing construction were restricted. On the other hand, the private sector stock did not meet popular demand. The supply was mainly luxury housing for the upper classes with the majority of unites for sale rather than rented, thus the middle and lower classes found the informal sector an adequate alternative to fulfil their needs. During the 1970s, the oil boom in the Gulf States attracted many Egyptian workers to work in the neighbouring oil-producing countries such as Iraq and Saudi Arabia. When they came back, they invested their savings in informal housing, as the formal housing supply was inadequate to meet their demand. The supply proposed by the public sector was neither sufficient nor affordable. Since the 1980s, almost no more new informal areas 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. A detailed illustration of the history and evolution of slums in Egypt can be found in (Al-Malky, 2009; Séjourné, 2009: 17–19).

Ashwa'iyat types and characteristics

Ashwa'iyat or informal urbanization in Egypt took many forms. They can be summarized as the following types:

- *Expansion on privately-owned agricultural land*: this occurs especially on the urban fringes. Informal urban growth is estimated to have consumed about a sixth of the country’s traditional agricultural land in the past twenty years (UNDP/INP, 2004). This type is characterized by good building quality; cement structures, 3–5 stories high and access to most

of the services. Informality here does not stem from ownership right but rather from the illegal conversion of agricultural land to housing as well as the flouting of building laws and regulations (Séjourné, 2009: 17), as shown in Fig. 3. People turn agricultural land into barren land, and then either build houses for their own use or sell the sites to others as construction land, which is illegal. This type represents about 80% of informal urbanization in Egypt (MHUUD & Cairo Governorate, 2008).

- *Squatter settlements on state-owned land*: this is an alternative for families who could not afford an agricultural plot, they build houses on state-owned land, almost all of which was desert land, or buy parcels illegally from local brokers. The initial nucleus is usually formal, and then the area grows informally. Examples of 2 well known Ashwa'iyat in Cairo are Mansheiet Nasser, which developed around a core of garbage collectors relocated to the area by the government in the 1960s, and Ezbet al-Haggana which was initially established as a settlement for the families of soldiers based in the vicinity. This type 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 houses made of brick and reinforced concrete, with an average building height of 6–8 floors, as shown in Fig. 4 (Piffero, 2009: 22; Shehayeb, 2009: 36). The supply of services is limited. Almost all houses have access to electricity, while the supply of other services such as water and sanitation varies from one area to another. This type represents about 15% of informal urbanization in Egypt (MHUUD and Cairo Governorate, 2008).
- *Cemeteries or Cities of the Dead*: this type basically exists in Cairo and is not common in other urban centres, but it has very distinctive pattern. These cities host not less than 300,000 inhabitants (Richardson & Jacobs, 2003: 169). A typical prototype for graves is a chamber underground for burying the dead, usually accompanied by a few rooms and an open yard over the grave for the dead relative to mourn in peace, as shown in Fig. 5. Usually guards are employed to take care of the graves. Over time, they brought their families, settled there and have children and grandchildren. It also became a destination for the poorest category of migrants. Cemeteries mostly have electricity, water and a few have sewers, however, social services are completely lacking (Gerlach, 2009a: 51; Gerlach, 2009b: 67).

Challenges of Ashwa'iyat upgrading

Several studies have addressed the issue of slums and the different approaches taken to deal with it, including land sharing,



Fig. 3. Informal expansion on agricultural land.



Fig. 4. Informal expansion on state land, Mansheiet Nasser, Cairo.

re-blocking, reconstruction, rehabilitation and relocation (Burra, 2005; Ferguson & Navarrete, 2003; Handzic, 2010; Nijman, 2008; Payne, 2005; Viratkapan & Perera, 2006). It can be concluded that an effective strategy should tackle both the causes and symptoms in parallel, a twin track approach as suggested by Payne (2005). The cause principally results from the mismatch between housing supply and demand. If people found affordable and adequate housing, they would not opt for the informal alternative. Currently, the government is implementing a comprehensive national affordable housing programme with ongoing reforms on housing finance, but at a very slow pace, thus the gap between supply and demand is still substantial. On the other hand, considering the symptoms and given that slums are a reality and no longer just marginalized areas inhabited by the urban poor but in fact they represent the norm for a high proportion of the existing housing stock, then attention should be paid to upgrading existing slums in parallel with containing the growth or appearance of new slum sites.

Several pilot projects have been conducted, with no holistic strategy, for the upgrading of Ashwa'iyyat in cooperation with international organizations such as WB, GTZ, and UN organizations; Nasseria in Aswan and Mansheiet Nasser in Cairo. However, no tangible improvement can be recognized when comparing them to the vast number of Ashwa'iyyat all over Egypt. Furthermore, one of the main obstacles that was encountered is the lack of accurate and

consistent data. Figures about the number of Ashwa'iyyat in Egypt and their inhabitants differ significantly among different governmental authorities at the national level, as well as among international organization and publications address slum issues in Egypt. In this respect, two main drawbacks can be identified to explain the contradiction and inaccuracy of data:

1. The lack of a *spatial* dimension in identifying Ashwa'iyyat. Data is available only in terms of lists contain the names of Ashwa'iyyat and their corresponding population, with no maps identifying the shape and boundaries of each one. Furthermore, census information according to the Central Agency for Public Mobilization And Statistics (CAPMAS) statistics is only available for areas that are administratively separated. However, for Ashwa'iyyat which fall within more than one administrative area's boundaries, a common situation, the data is not available; Ashwa'iyyah expansion does not distinguish between administrative boundaries. Therefore, in most cases there is a mismatch between the available data and the real situation, and usually there is an underestimate of the actual size of Ashwa'iyyat populations (Sabry, 2009: 29–32).
2. Lack of a consolidated definition of what constitute slums or Ashwa'iyyat or informal settlements, as discussed earlier in this section. This is not only an academic stance but also an issue addressed by other actors concerned with slum upgrading.



Fig. 5. A view of the City of the Dead, Cairo.

Here are excerpts from 2 separate interviews with the Minister for Economic Development and the Governor of Cairo respectively by Manal El-Jesri.

Dr. Osman Mohamed Osman, the Minister for Economic Development pointed to the necessity of coming up with new definition in order to be able to address the issues at the heart of the problem. He says “*well-built homes with access to basic services must not be considered part of informal settlements. There is a need for fresh data and information... The numbers that governorates and governors give us, claiming that Cairo, for example, has over 80 informal settlements, are not to be taken for granted if we apply the new ideas... There are more pressing issues we must deal with other than the lack of basic services. Are the buildings environmentally safe, do we have problems of accumulating solid waste?... if we were to apply the new criteria, we would find that Cairo is home to no more than seven or eight informal settlements in need of immediate attention*” (El-Jesri, 2009a: 147–148).

Abdel Azeim Wazir, the Governor of Cairo comments: “*The issue of informal settlements in Egypt is a multi-faceted one. What one expert may see as an informal area, another may perceive as a lower-middle class district displaying the characteristics of poorer areas. This is why clear definitions at the outset are extremely important × Definitions are important, but having a well thought-out action plan to deal with the issue must follow closely upon a clear definition*” (El-Jesri 2009b: 150).

There is a vital need for a new classification of Ashwa’iyyat that distinguishes between those which are simply built in contradiction to planning laws and building regulations and those with extremely poor living conditions, along with accurate and consistent data for these areas. Therefore, the ISDF since its establishment in 2008 has replaced the term Ashwa’iyyat by two précised distinctive terms “Unsafe Areas” and “Unplanned Areas”, which will be thoroughly explained in the following section.

The ISDF strategy and policy

In October 2008, a presidential Decree # 305/2008 established the ISDF with the main objective of coordinating efforts and finance for the development of what were formerly called Ashwa’iyyat. The ISDF is directly headed by the Egyptian Cabinet. It is managed by a management board which is formulated by the Minister of Local Development (president) and has a membership of 6 Ministries,⁵ 3 experts and 3 representatives from civil society organizations, the private sector and NGOs. It has an executive director, who is in charge of managing and supervising the technical, administrative and financial affairs of the ISDF. The ISDF’s main sources of funding include a share in the national budget, loans, donations, grants and revenues from cost recovery (President of the Arab Republic of Egypt, 2008).

The ISDF strategy hinges on the distinction between unsafe areas and unplanned areas and states that priority should be given to the former. The definition of unplanned areas is as specified in the Unified Building Law (MTI & GOGPO, 2009). They encompass areas, which are not subject to detailed plans, land subdivision plans nor compliant with planning and building laws and regulations. Therefore, informal settlements on privately-owned agricultural land and squatter settlements on state-owned land (as identified earlier in Ashwa’iyyat types) mostly belong to this

category. 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 the buildings experiencing severe deterioration over time, being located in a hazardous site or exposed to damaging health condition such as lack of safe drinking water or basic sanitation. According to ISDF (2009a) definition, unsafe areas are territories in which 50% of its housing structures satisfy one or more of the following conditions, ordered according to the degree of risk and thus the urgency for intervention:

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 make-shift 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:

- Areas located on the territory of state-owned land.
- Areas located on the territory of sovereign quarters; or
- Areas located on the territory of endowments (*Awqaf*)

Grades are ordered according to degree of risk, thus the higher risk overrules the lower, for example if a settlement is situated on a landslide (criteria of Grade 1) and if its buildings lack basic sanitation (criteria of Grade 3), in addition if they lack security of tenure as when buildings are established on state land (criteria of Grade 4), an unsafe area would be classified as (Grade 1). Dealing with this area simply does not require changes in land tenure or providing access to improved sanitation, but rather displacement to a new location as the current location poses a threat to life. Therefore, classifying the area as Grade 1 is sufficient to describe the area in terms of the degree of risk.

Based on the initial estimates by the ISDF unplanned areas constitute 60% of total urban area, while unsafe areas constitute 1% (El-Faramawy, 2008). The general broad lines of ISDF policy emphasizes that in situ slum upgrading should be the norm. One of the lessons learnt from successful past experiences is that slum upgrading plans do not work if people are uprooted and lose their source of income and social networks (Chowdhury & Nurul Amin, 2006; The Cities Alliance, 2008). The only exception is in Grade 1 areas, as displacement is mandatory. People should then be resettled in safe housing provided by the government.

For a better understanding of the ISDF’s current mechanism, a mental map that shows the interrelationships between its goal, main objectives and secondary objectives has been developed by the author, as shown in Fig. 6. Furthermore, it shows the enabling activities used to realize objectives and the indirect relationships amongst them. It is noticeable that all actions aimed at achieving the secondary objectives in turn lead to realizing the primary objectives of developing unsafe areas, as these have priority and require immediate intervention. On the other hand, the secondary objective of contributing to the development of unplanned areas is relegated to second priority, as it requires either medium or long term intervention. Moreover, the ISDF is wholly in charge of developing unsafe areas, while for unplanned areas it is only

⁵ Ministries included in the ISDF management board are: Ministry of Finance, Ministry of Electricity and Energy, Ministry of International Cooperation, Ministry of Local Development, Ministry of Social Solidarity and Ministry of Housing, Utilities and Urban Development.

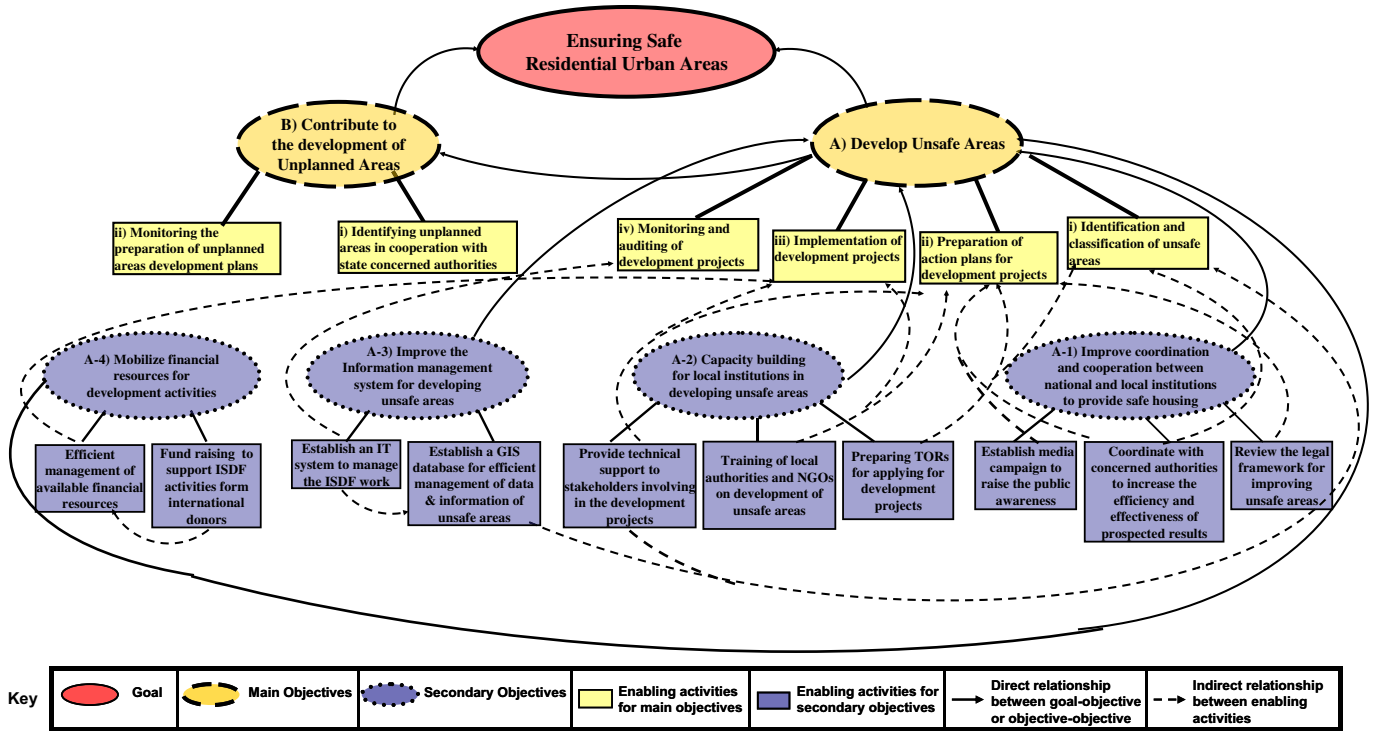


Fig. 6. The ISDF mental map (Source: author).

a partner with other concerned ministries and institutions, where responsibilities are distributed amongst them.

Identification of unsafe and unplanned areas

Responding to the problem of inaccuracy and contradictions between data sources and to calculate accurately the real size of Ashwa'iyat and identify their types and characteristics, the ISDF has to conduct its own survey to establish a concrete baseline data. The survey encompasses all of the 29 governorates of Egypt. A group of consultants has been appointed to conduct the survey, with assistance from governorates and concerned authorities. The author was in charge of conducting the survey in Sharqya⁶ governorate in the period from February–April 2009, where it was carried out in 15 cities of the governorate.

Survey process

The survey aims at identifying unsafe and unplanned areas spatially, classifying the former according to the degree of risk (Grades 1–4), collecting basic information on each unsafe area and establishing a database of unsafe areas using GIS techniques. Table 1 indicates each step and the method used in carrying out the required task. The survey encompasses two main phases.

Phase 1: identifying unsafe and unplanned areas

- Identify unplanned areas, as defined by the local municipality on the city map with the assistance of the urban planning

⁶ Sharqya governorate is one of Lower Egypt governorates. It is considered to be the 2nd biggest governorate in area in Lower Egypt (4911 km²) and the 3rd in population size in Egypt after Cairo and Giza (5.35 million inhabitants), where urban–rural ratio is 23% and 77% respectively, according to CAPMAS (2008).

division in each municipality and explore if any of these areas (or part of) meet the criteria which define them as unsafe areas. And then, investigate if other areas in addition to the ones identified as unplanned, might also fit with this definition, according to the information available at the local municipality.

- Conduct a site visit to each area to verify boundaries and the degree of risk for unsafe areas. Furthermore, photographs for each area are taken as evidence for the area description.

Phase 2: collecting basic information on each unsafe area

- In order to establish a comprehensive database for unsafe areas, a more detailed urban survey is carried out and further data is collected in order to identify the following:
 - *Site characteristics indicators*; legal status, population size, site area, estimated number of residential units, existing services (if any): commercial, educational, health, etc.
 - *Economic feasibility indicators*; average land price, average price for construction and sale of residential units.
 - *Risk degree indicators*; area (or part of) under threat of landslide, floodplain, railway accidents, high industrial

Table 1
Survey steps and adopted methods in carrying out each step.

Survey steps	Method
<ul style="list-style-type: none"> • Identify unsafe and unplanned areas spatially 	Site visit and collecting data from local municipality
<ul style="list-style-type: none"> • Classify unsafe areas according to the degree of risk (Grades 1–4) 	Expert judgment based on criteria of risk degrees (Grades 1–4), as in TOR (ISDF, 2009a)
<ul style="list-style-type: none"> • Collect basic information on each unsafe area 	A more detailed urban survey in addition to collecting data from local municipality
<ul style="list-style-type: none"> • Establish a database of unsafe areas using GIS system 	Importing collected data into the GIS model developed by the ISDF

pollution, electric lines, located on dump sites or existed in cemeteries.

- *Building construction indicators*; buildings (or part of) made of make-shift materials, ruined, deteriorating, in bad or in good condition.
 - *Access to safe drinking water and improved sanitation indicators*; proportion of units connected to water supply networks or other sources (should be specified), proportion of units connected to sanitation network or other sources (should be specified), proportion of units with toilets or having access to public toilets.
 - *Urban indicators*; average building height, gross and net residential area, built up area, floor area ratio and occupancy rate.
 - *Security of tenure indicators*; type of ownership (if any), type of tenure document (if available) and type of occupancy (according to old rent law or new rent law)
 - *Land value indicators*; the area is located in the city centre, an urban fringe inside the city boundary or outside the city boundary
 - *Site development indicators*; availability of vacant land at the site or close to the site, availability of infrastructure in the proposed development site, type of land tenure (state owned, sovereign quarters, endowments (*Awqaf*) or private)
 - *Community leadership indicators*; natural leaders' stance (approval/disapproval) from the development of unsafe area, public local council stance and availability of active NGOs.
 - *Financial participation indicators*; availability of a budget in the local municipality for the area's development and willingness of the local community to participate financially in its development.
- Establish a database of unsafe areas using GIS techniques.

Survey findings

An outcome of the survey has been the production of maps for all of the urban centres in Egypt indicating the location and

boundary of unsafe and unplanned areas in the form of KMZ files along with a database for unsafe areas in ESRI GIS format. This section reflects on the most significant findings of the survey, with examples from some governorates. The analysis and charts included in this section are produced by the author based on the raw data compiled from the ISDF survey.

Size of unsafe areas

Survey findings identify 404 unsafe areas containing a total number of residential units 212,201 units (ISDF, 2009b) across all governorates in Egypt. Given that each unit represents a household and the family size is 5.1 persons (national average), an approximate population can be estimated, which is roughly 1.1 million inhabitants. Apparently, these inhabitants are the ones in urgent need of immediate action to improve their living conditions. Furthermore, it provides a more exact record of the actual size of areas which experience poor physical conditions and pose a threat to either life or properties. This figure of 1.1 million inhabitants indicates the real size of the problem, unlike the estimate by Davis of 11.8 million slum dwellers (2006: 24) or even the more optimistic figure estimated by the Un-Habitat; 5.405 million inhabitants (2008: 97).

Unsafe areas are not necessarily parts of unplanned areas

Survey findings indicate many cases in which unsafe areas were not part of unplanned areas, such as inner urban pockets in the city core with severe deteriorated conditions, confirming the drawback of the current definition of Ashwai'yyat. These areas, although in great need of intervention, did not even appear before in formal statistics and official records, as they were only concerned with informal areas. Fig. 7 shows an example; El-Qenayat city, Sharqya governorate, where unplanned areas, according to the municipality definition, have appeared as a result of urban expansion onto agricultural land surrounding the city, while the recent survey identifies 2 unsafe areas in the inner city with unsuitable shelter conditions (Grade 2).

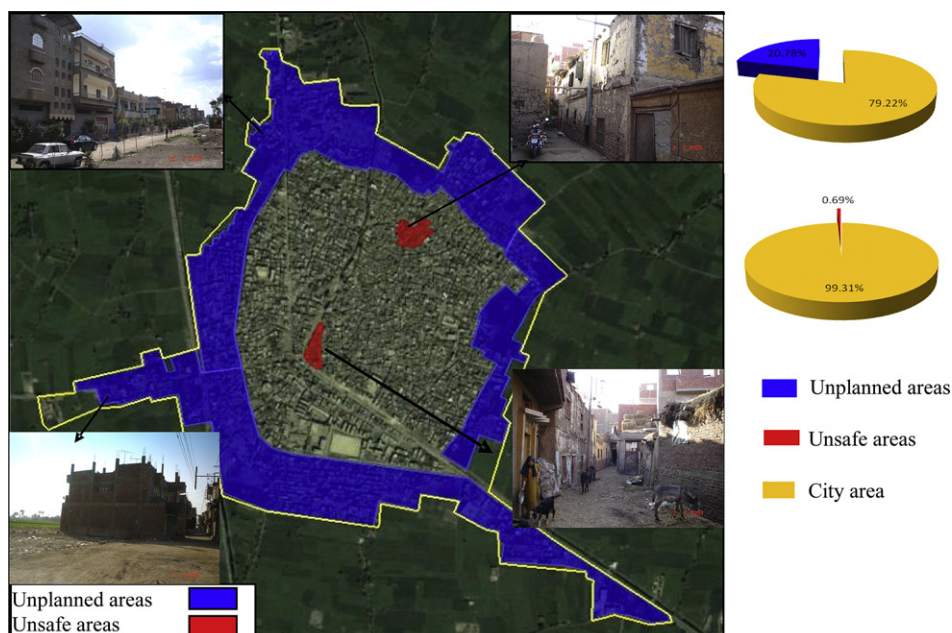


Fig. 7. Example of El-Qenayat city, Sharqya governorate where unsafe areas are not parts of unplanned areas (Source: author).

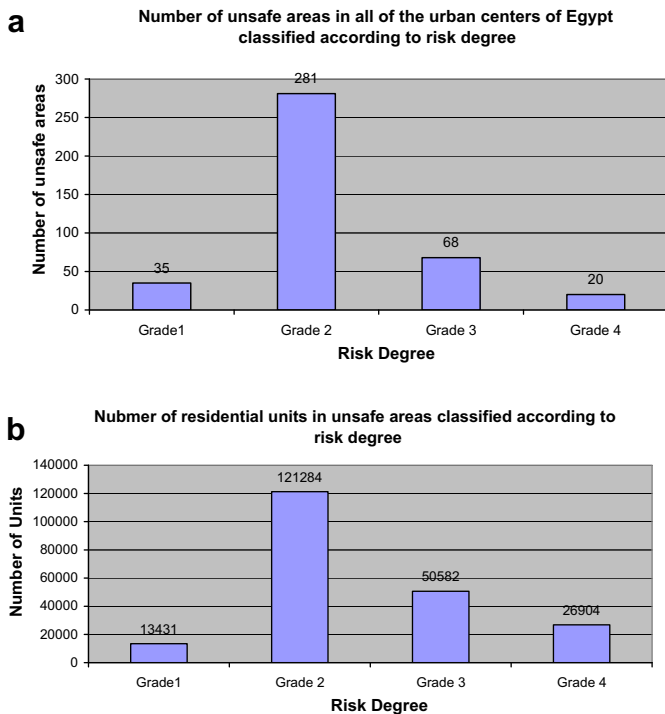


Fig. 8. a: Number of unsafe areas classified according to risk degree. b: Number of residential units in unsafe areas classified according to risk degree.

Unsuitable shelter conditions is the dominant cause for life threat in unsafe areas

The survey findings classify unsafe areas according to the degree of risk they pose (Grades 1–4) in terms of the number of areas and number of residential units in each category, as shown in Fig. 8a and 8b. It can be clearly recognized that Grade 2, which includes areas with buildings made of make-shift material or sites which are unsuitable for building on or ruined buildings, represents the highest proportion and comprises 70% of the total with 281 areas out of 404 areas falling within this classification. Furthermore, it contains 57% of the residential units, which are in need of development with a total of 121,102 units out of 212,201 units. However, it should be kept in mind that the ISDF system of classifying areas according to grades of risk degrees means that the higher grade overrules the lower grade, as explained earlier in this paper. Therefore, areas classified as Grade 2, might also fit below Grade 3 or Grade 4, but definitely not Grade 1. This classification provides a clear indication of the type and magnitude of interventions required. Furthermore, it assists decision makers in directing appropriate development programs according to each degree of risk.

Concluding remarks

The problematic issue of defining what counts as a slum is of great interest, particularly in Egypt. Within the Egyptian context, the confusion and overlap in terminology between informal urbanization in terms of illegal urban expansion on state-owned land or privately-owned agricultural land and deteriorating urban areas which experience poor physical living conditions in terms of unsuitable shelter conditions and a lack of basic urban services, as both cases are considered *Ashwa'iyyat*, has led to an overestimate in the actual size of the population of slum dwellers in Egypt. At a global level, the term 'slum' has many connotations and meanings

and even the most deliberated definition of a slum, which has been developed by the UN-Habitat Programme implies a number of drawbacks. Therefore, current approaches to identifying and classifying slums need to be revisited in order to prioritize criteria for action. These should include the risk posed to peoples' lives and properties. The newly adopted Egyptian approach developed by the ISDF, has been to replace what was formerly called 'slums' or 'informal settlements' or '*Ashwa'iyyat*' with the two distinctive terms of 'unplanned areas' and 'unsafe areas' and classify the later according to the degree of risk to life and property is considered a sensible approach to solve this awkward situation.

Findings from the survey conducted by the ISDF to identify unsafe and unplanned areas in all urban centres of Egypt identify 404 unsafe urban areas with approximately 1.1 million inhabitants. This presents a more accurate figure of the number of people in urgent need of development and improving their living conditions. This is in contrast to the previous figures which showed Egypt to have 39.9% of its urban population as slum dwellers with a total of 11.8 million inhabitants (Davis, 2006: 24) or the more optimistic figure estimated by the UN-Habitat indicating that 17.5% of urban population lived in slums with a total of 5.4 million inhabitants (UN-Habitat, 2008: 97). Furthermore, the ISDF approach is very useful in identifying priorities for intervention; based on the distinction between unsafe areas and unplanned areas, the former requires immediate action, while the later requires either a medium or long term strategy. Moreover, unsafe areas are further classified into four categories according to the degree of risk and thus the urgency for intervention. This classification is of great help to direct development programs and resources according to the needs of inhabitants. For instance, unsafe areas graded as category 2 require programs to develop unsuitable shelter conditions, while unsafe areas graded as category 4 require programs to legalize tenure in areas of instability. Survey findings also indicated that some unsafe areas which are not parts of unplanned areas are not included in any of the official records or formal statistics. Therefore, the new approach employed by the ISDF alongside with the survey outcomes can be considered to add value, which should change the position of Egypt on the world map of slums.

Acknowledgements

I would like to express my gratitude to Dr. Aly El-farmawy for his guidance, Dr. Steve Connelly for his constructive comments and Mrs. Nikky Welson for her assistance in language revision.

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