

# "Basic urban services and security of land tenure in informal settlements of Cairo"

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## INTRODUCTION

## Informal settlements in Cairo

'Ashwa'iyator al-manatiq-al-gheir-mokhattata are among the different terms used to refer to informal settlements in the metropolis of Cairo. While the first one includes a normative statement about those areas, the second one gives a rather straightforward definition: informal settlements are characterized by their extra-legal development and their lack of planning. As a result, organized street patterns as well as public space and infrastructures are rather scarce. The absence of building control also led to very high population density. In 2009, informal settlements were home to 63% of the capital's population but only represent 39% of Greater Cairo surface (when excluding the vast desert land under development) (Sims, 2012).

Informal settlements started to appear in Greater Cairo in the late 50s on privately-held agricultural lands where no construction regulation applied. Their expansion throughout the war years in the 1960s and early 1970s allowed to accommodate the incoming migrants and the population evacuated from the Suez Canal zone. During those decades, the informal phenomenon spread to state-owned desert lands. With Sadat's policy of economic opening, Egyptian workers massively travelled to the Gulf. The remittances they sent home largely served as capital to build up informal areas. The 1996 decrees that prohibited further expansion have relatively slowed down the processes. However, informal areas still experience growth rate superior to desert developments on which the Egyptian state has focused in the last decades (Sims, 2012).

Egyptian media tend to portray informal city-dwellers as poor and illiterate, while settlements are often depicted as no-go zones and more generally considered as a social and environmental problem to cure Cairo from (Bell, 2009, 353). The nexus between informality and backwardness was supported by the state's concerns on fundamentalist development in those areas. As informal residents represented 11 million persons in 2009 (Sims, 2012), this essay takes the stance to see them as heterogenous populations with different profiles and lifestyles. While their creativity and resiliency were stressed by many scholars, informality should not be romanticized and the role of the state in setting common standards forgotten (Nagati, 2016).

## Basic urban services

Basic urban services (BUS) pertain to the sectors of water and sanitation, waste management, mobility and energy (UN Habitat). Education, health and safety are also necessary dimensions to take into consideration when discussing urban services. This essay however focuses on network utilities formed by pipes, sewers, roads, and wires which determine the city fabric and governance (Lorrain 2017). Many of these amenities traditionally falls under state's jurisdiction. Greater Cairo fits this traditional model, with the main urban services being publicly managed. According to the governance scheme, governorates have exclusive competency over solid waste management and upkeep of public spaces and they share competency over the other sectors with the central government. In practice however, most urban services are provided by public companies that are affiliated with the Ministry of Housing. To give a few examples, water is distributed by the Greater Cairo Water Supply Company, electricity by North and South Cairo Electrical Distribution Companies and water sanitation is taken care of by the Greater Cairo Sanitary Drainage Company. Yet, other services such as transportation and education have been taken up by the private sector since the liberalization of the economy in the 1970s. The discussion on the governance scheme is relevant as it impacts the services provided in informal areas of the city. As informal settlements are defined by the absence of planning prior to their development, they start off without any amenities or service. The questions are hence diverse: what are the levels of access to urban services in Cairo's informal settlements? How do they gain access to those services? Water, electricity and sewerage connections are considered almost universal in Greater Cairo. Informal settlements statistics are not far off formal ones (USAID 2009). However, Sabry argues that official numbers are inflated and that consequently, poverty levels in Cairo are underestimated (2010). Inadequate or lack of services in informal areas were confirmed by participatory workshops undertaken by the research initiative Tadamun in the early 2010s.

## Security of land tenure

This concept was chosen over legal status. While all informal settlements in Cairo are considered illegal by the state, distinct categories were created after the rock slide that killed 119 persons in Duweiqa, Manshiyat Nasr, in 2008 (Deboulet, 2012). This catastrophe led to the creation of the Informal Settlements Development Fund (ISDF). It classified informal settlements on a risk-related scale: from unsafe areas (categories 1 and 2) to unplanned areas (categories 3 and 4). While the latter is set for upgrading or even legalization, the former is to be demolished in priority and their residents relocated. In absence of transparent public institutions, such standards can easily be manipulated in order to clear informal settlements and capture the rent gap created by their redevelopment. From this perspective, investigating *security of tenure* rather than *legal status* relates more accurately to residents' lived reality. Inhabitants' self-perception is relevant as it was demonstrated that inhabitants tend to prefer secure land tenure rather than direct ownership (Razzaz 1991).

Invited in 2003 by the Egyptian president himself, the scholar Hernando de Soto influenced policy making at the turn of the century. His argument on dead capital led to the implementation of internationally-funded pilot experiments which aimed at legalizing some parts of informal settlements. These attempts came into an atmosphere of relative de-marginalization of informal areas. The 1992 earthquake had indeed made the state both aware and anxious about Islamic charity organizations' power and influence over most settlements. The nexus between access to urban services and security of land tenure was thus reinforced in Egypt. On a broader scale, those two concepts define the fundamental right to adequate housing (UDHR 1948). Theoretical and practical relationships between service provision and security of land tenure deserve more concern.

## How does basic services provision affect security of land tenure in Cairo informal settlements?

While Deboulet puts upgrading policies (service provision) and legalization on a scale of state's interventions in informal settlements (2012), this essay places them in relation to each other. This approach is necessary as provision of basic services in informal areas is often not initiated by the state but rather by the inhabitants themselves. Consequently, this essay will investigate the practices informal residents engage with to secure land tenure. This perspective leads to define informal areas as spaces co-produced by the state and its policies on the one hand, and by people's behaviors and adaptations to them on the other hand (Berry-Chikhaoui and Deboulet, 2000).

Scholars have also argued that access to services is unrelated to the legal status of informal areas (Sims, 2012; Denis, 2012). Furthermore, the idea was defended that provision of services was more dependent on settlement age and size rather than on its degree of formality of tenure (Sims, 2002).

The case studies presented below challenge this line of reasoning for informal settlements on stateowned desert lands. This paper sheds the light on the dynamic relationship between security of tenure and provision of or access to services. Finally, the research question phrasing reverses the traditional conception of such relationship. This essay will focus on how access to basic services can impact security of tenure, rather than assessing consequences a certain legal status has on public provision of services.

## Method - case-studies comparison:

This essay is based on the discussion of three case-studies selected to follow a method of difference (Robinson, 2010). In other words, informal settlements under study here are as similar as possible except for elements pertaining to access to services and security of land tenure. The comparability of **'Izbit Khayrallah, Manshiyat Nasr,** and **'Izbit-el-Haggana** is thus optimized.

All three settlements belong to the same type of informal settlements as they are built on state-owned desert lands. They are to be distinguished from the main mode of informal urbanization taking place on privately-held agricultural land on the outskirts of the city (Sims, 2012). This classification means that residents are considered as squatters. Secondly, although they are not as distant as some periurban recent developments, the three case-studies are not centrally-located. Such caution is necessary because current neo-liberal policy making tends to favor destruction of central informal areas in order to make them available for real-estate redevelopment. Another reason for such caution is that central informal areas' connection to formal grids is less problematic, as networks extension is less costly.

A preliminary summary on access to basic services and security of land tenure can highlight the differences in the three cases. In **'Izbit Khayrallah**, services were provided by self-helpefforts or *guhud zatiya* from the 1980s onwards. Densification of the area and lack of investments led to amenities degradation. Security of land tenure has been hotly contested and largely dependent on service provision. In **Manshiyat Nasr**, upgrading policies funded by international donors were supposed to go hand in hand with legalization. Purchase of land parcels by residents from the state was expected to finance upgrading measures (Fahmi, 2005; Deboulet, 2012). While services were indeed provided, the legalization campaign failed, and better degree of security of tenure was not achieved. Finally, **'Izbit el-Haggana** differs from the two former ones as basic services were provided by the state and are of good quality over all. Yet, access to services and security of land tenure are highly dependent on differentiation of legal status within the settlement.

This essay will first present each case-studies situation with regards to service provision and tenure security. Maps are provided in the appendix. A discussion will follow to draw lessons from the three examples and investigate mechanisms through which the two concepts are related.

## **CASE-STUDIES**

## 'Izbit Khayrallah: access to basic urban services through self-help and contested security of tenure (ANNEX 1)

a. General characteristics

'Izbit Khayrallah is located south of Cairo proper, and north of Maadi neighborhood. A first specificity arises from the spread of its territory across four different official districts: Misr-al-Qadima (or Coptic Cairo), Dar-al-Salam, al-Basatin and al-Khalifa. Population estimates vary according to the sources, as it is mostly the case for informal settlements. While local ONG claim there are over 650.000 inhabitants, official institution reported only 250.000 inhabitants in the whole district of Misr-al-Qadima, which contains most of 'Izbit khayrallah (CAPMAS, 2006).

b. Progressive gain of access to basic services through self-help efforts

The first settlers arrived in 'Izbit Khayrallah from Upper Egypt in the mid-1970s. Back then, it was an empty area with no services nor infrastructures. The migrants were defined as squatters and consequently the state did not wish to provide them with amenities. In the 1980s, as the legal action described below was unfolding, residents engaged in the struggle for access to basic services. Through collective actions, they installed pipes and cables to connect their area to water, sanitation and electricity formal networks. Later negotiations with utility companies legalized their connection. In doing so, they were helped by non-governmental organizations and some political candidates. In the late 1990s, the Ring Road cut across the neighborhood and led to the eviction of hundreds of residents. This megaproject did not directly provide 'Izbit Kayrallah residents with better mobility options as no ramp was planned for them to access it. However, through the construction of stairs, residents connected themselves with one of Cairo's biggest transportation corridors.

The current situation regarding service quality was the object of a research initiative workshop in 2013. It reported that "the absence of potable water and sanitation networks are two of the most crucial problems facing residents of 'Izbit Khayrallah" (Tadamun, 2013). A renovation project of the previous self-built sewage connections was financed by the Ministry of Housing and started in 2007. It was still not complete at the time of the inquiry. The quality of the road, recurrently damaged by sewage overflowing, was another major concern for 'Izbit Khayrallah residents.

c. Security of tenure fought for in Court

In the early 1970s, a presidential decree had allocated what was to become 'Izbit Khayrallah to the Maadi Company for Development and Reconstruction (MCDR). To make room for its housing projects, the Governor of Cairo issued in 1982 a decree to plan the settlement removal. Residents expressed strong resistance and filled a first lawsuit in 1984. It aimed at stopping the eviction process and at claiming their right to acquire the land they were living on. As a result, the 1982 decree was nullified and 'Izbit Khayrallah houses were protected from destruction. Residents had to wait until 1999 for the Supreme Administrative Court to rule in their favor. This legal decision finally granted them the right to purchase land from the state. As for today, this ruling is yet to be implemented. Current issues preventing selling operations include land price-setting. While residents argue it should be based on the land price at the time of their arrival in 'Izbit Khayrallah, it was officially set at current land market value, making it unaffordable to most of the residents.

## Manshiyat Nasr: successful provision of services and failed legalization attempts through internationally-funded programs (ANNEX 2)

Literature and research being very large on this case-study, this essay's summary had to leave many interesting remarks out. For a full review of the case of Manshiyat Nasr, see Runkel's thesis (2009).

a. General characteristics

Manshiyat Nasr is the largest informal settlement built on publicly-owned desert land in the Greater Cairo region. Located east of Cairo proper, the Moqattam limestone hill prevents it from further eastern and upward expansion. Official population estimates for Manshiyat Nasr vary between 300.000 (CAPMAS, 2014) and 800.000 (GIZ, 2007). Population is made up of migrants from the rest of Egypt as well as relocated low-income groups from other parts of Cairo.

b. Provision of services through internationally-funded upgrading programs

Provision of services occurred mainly through two internationally-funded programs. The Zabaleen Environmental Development Program (ZEDP) started in the 1980s after Egypt's economic opening to institutions such as the World Bank. As its name suggests, this plan focused on the Zabaleen community and area. The introduction of electricity was a crucial component of the program since it allowed Zabaleen workers to operate some machines necessary for their work. However, budget constraints did not allow to provide adequate water supply and sanitation service to the area. As a result, most of the residents connected their house illegally to sewage networks (Fahmi, 2005).

The GTZ Participatory Urban Management Program (PUMP) aimed at covering the entire settlement. The settlement was divided in nine sub-areas (ANNEX 3) that the program connected very unequally to utility networks. In the oldest sub-areas (MN1-7), between 85% and 99% of the residents had access to water and between 70% and 98% were connected to sewage. On the other hand, the newly-built areas (MN8-9) had very poor connection to sewage and water (respectively 23% and 1%) (Runkel, 2009). The 2008 rock slide that killed 117 residents in Duweiqa was partly caused by sewage infiltration in the rock. Fraud scandal around relocation of victims brought PUMP to an end. Today, unequal access to basic services still characterizes Manshiyat Nasr (Tadamun 2015a).

c. Security of land tenure: failure of legalization attempts

Security of land tenure followed the same phases provision of services did. The programs mentioned above both answered to the same logic: upgrading policies were supposed to be financed to a certain extent by the residents' purchase of the plot of land they lived on. The ZEDP legalization chapter mostly failed because legal process to obtain ownership was extremely slow and because purchase price was set on land current value, which was too high for most residents (Fahmi, 2005; Runkel, 2009). Two decades later, the same issue around land price was compounded by very low political support and prevented the successful implementation of PUMP land titling program (Deboulet, 2012).

## 'Izbit el-Haggana: unequal access to publicly-provided services and divergent security of land tenure (ANNEX 4)

## a. General characteristics

'Izbit el-Haggana is located north-east of Cairo proper in East Nasr City district. While CAPMAS estimates the settlement population around 40.000 residents (2006), a local NGO has advanced the

number of one million (Al-ShihabInstitution for Comprehensive Development). Owned by the Egyptian armed force, it was occupied as early as the 1930s by the camel corps. When the desert land that would become Nasr City started to be developed in 1959, employment opportunities attracted migrants to 'Izbit el-Haggana. Yet massive arrival of residents did not occur before the late 1970s (Sims, 2012, 64).

## b. Unequal provision of basic services by the state

'Izbit el-Haggana is relatively well-serviced compared to the former case-studies. Water, sanitation and electricity amenities were provided as part of state plans to upgrade the area. Yet, two nuances must be brought in the picture. First, despite their tolerated presence, East Nasr City district does not allocate to them sufficient budget. Underinvestment is justified by underestimation of population and results in very poor education and health services.

More importantly, service presence and quality are highly dependent on the specific sub-area of the settlement. 'Izbit el-Haggana can be divided into four sections. Along Cairo-Suez road, area 1 is the oldest one. Its residents enjoy relatively good quality services and have direct access to one of Cairo's main transport axis. Area 4 located at the settlement southern boundary and near-by the Ring Road presents a similar situation. On the contrary, areas 2 and 3 suffer from poorer (and even lack of) services. During summer time, some of 'Izbit el-Haggana lower-income households cannot access water because of too low pressure (Sabry, 2010, 536). Two reasons can explain such inequalities within the same settlement. Firstly, areas 2 and 3 are in the middle of 'Izbit el-Haggana. As public provision of services was implemented by extending formal networks that surround the settlement, utilities do not reach its most central parts. Secondly, areas 2 and 3 are partly located under high voltage lines. Consequently, the ISDF labelled them as "unsafe areas". In other words, it gave the state the right to clear the houses and relocate residents. Therefore, public companies do not show any willingness to connect 'Izbit el-Haggana central parts to the formal networks. A clear impact of legal status on service provision is illustrated in this case.

## c. Different degrees of land tenure security and state's *defacto* tolerance

Different legal statuses apply to different parts of 'Izbit el-Haggana and result in different degree of security of land tenure. Residents of areas 2 and 3 suffer from cumulated difficulties such as poor access to services, dangerous living conditions, and very little security of tenure. The persistence of such a situation in the settlement can be explained to a certain extent by the divisions among the residents themselves. Older residents tend to stigmatize the gypsy and refugee communities who settle in the worst parts of the settlement (Tadamun, 2015b).

Yet, when understood as a whole, 'Izbit el-Haggana enjoys rather high degree of land tenure security. The settlement is mentioned by official authorities as one of East Nasr City sub-district. Participants in a workshop identified stigmatization as a more salient issue than security of land tenure (Tadamun, 2015c). As no descendants of the original settlers remain today, current residents do not however have any title to the land they occupy. The absence of eviction or legalization attempts resulted in state's *de facto* tolerance towards the settlement. This dynamic can be explained by the complex ownership scheme of the land that includes both the armed forces and MNHD (Tadamun, 2015b).

### DISCUSSION

The following discussion comes back on the case-studies presented above. It sheds the lights on the various mechanisms that influenced provision of services and security of land tenure in 'Izbit Khayrallah, Manshiyat Nasr and 'Izbit el-Haggana. Comparative analysis first suggests that access to basic services in informal settlements does not depend on factors identified by Sims (2002). It further highlights the extent to which provision of basic services shapes security of land tenure.

As far as comparison between our cases is made, **access to basic services does not depend on the settlement age, size, or on the presence of NGOs**. Although historical trajectories are specific to each settlement, all developed massively in the 1970s when economic reforms attracted workers from the rest of the country to Cairo. Sims' argument on *age* cannot explain differences of service provision between settlements. Yet, it accounts for within-settlement variations. In Manshiyat Nasr, the areas on which squatters settled the most recently (MN8-9) are characterized by lack of adequate services. While residents of some other parts of the settlement enjoy almost complete connection to drinking water, inhabitants in the new uphill areas suffer from inadequate water supply and consequent health-related issues. This argument can also explain why the oldest part of 'Izbit el-Haggana (area 1) is better-off in terms of access to basic services.

The idea according to which more populated settlements benefit from better services needs further interpretation. *Population size* is a proxy for political patronage. Large settlements are thus of high interest for political candidates looking for votes. Beyond the case of Cairo, correlations between tolerance to informal settlements and election times have been identified in Istanbul, another Middle-eastern large metropolis (Leitmann & Baharoglu, 1998; Kucukmehmetoglua & Geymemb, 2009). Official population estimates should be examined here as they reflect expected political participation. According to CAPMAS statistics, Manshiyat Nasr is by far the most populated settlement out of the three case-studies. Yet, provision of basic services was undertaken by international organizations and even hindered by lack of local political support (Runkel, 2009).

Finally, *non-governmental and civil-society organizations* are present in all three settlements. In 'Izbit el-Haggana (Al-Shehab Institution for Comprehensive Development, Caritas), in 'Izbit Khayrallah (Khayrallah Lawyers Association for Rights and Liberties) and in Manshiyat Nasr (Soeur Emannuelle, Environmental and Youth associations), international and local initiatives play a role. Although it is difficult to assess their impact on service provision, they are identified as relevant landmarks of their neighborhood by residents (Tadamun 2013, 2015a and 2015b).

Settlement age, population size and NGOs presence cannot account for all differences in between the case-studies presented here. It is now time to investigate **how provision of services relates to security of land tenure**.

Provision of services initiated by the state impacts differently security of land tenure in informal settlements. While some argue that public connection to utility networks corresponds to *de facto* regularization (Séjourné, 2012), our comparison does not reach the same conclusion in all cases. In 'Izbit el-Haggana, public service provision increased perceived security of land tenure. Residents share the feeling that the state did not extent formal networks to evict them and destroy their houses the

next day. However, it secured land tenure only to a certain extent since within-area inequalities persist in the settlement. On the contrary, in the case of 'Izbit Khayrallah, public service implementation led to extreme forms of land tenure insecurity. The Ring Road quickly became one of the major transport corridor of the capital, serving hundreds of thousands of citizens every day. However, its construction led to the forced eviction of all residents who used to live on its path. Most of them chose to stay in 'Izbit Khayrallah and did not follow state's plans of relocation on the outskirts of the city. Although Egyptian law defines installation of utilities as a fair motive for expropriation (Séjourné, 2012, 105), forced evictions and the absence of access ramp showed how little informal residents' right to adequate housing meant to the state.

Secondly, 'Izbit Khayrallah struggle in Court illustrates that *connection to public utilities provides tenants and owners with evidence of their presence* (Deboulet, 2012, 218) *and can be used to claim their right to own the land*. In the legal case that opposed the resident committee to the Governorate of Cairo, water and electricity bills were waved as a "documentary evidence of a certain degree of legality" (Séjourné, 2012, 104). More than fifteen years after the beginning of the case, the Supreme Administrative Court ruling was final: residents had the right to purchase the land. In other words, connection to formal networks participated to improve possibilities to achieve better security of tenure. However, many limits to that mechanism must be raised. Theoretically, such ruling could deter the state from installing amenities in informal settlements. By doing so, it would avoid another situation in which it has to sell its land. At the same time, this would worsen living conditions for residents. In practice, the 1999 legal decision is still not implemented in 'Izbit Khayrallah. Slow and complex administrative process have discouraged many from completing their application, while disagreement over the land price has not been resolved. Cairo Governorate has set sale price at current market value, which makes legalization unaffordable for most residents.

Basic services provision impact on land price-setting is the last point of this discussion. Manshiyat Nasr and 'Izbit Khayrallah residents face issue of land unaffordability. In both cases, they were given the right to purchase the land they live on. The GTZ program fought hard to reach such an agreement with the authorities and finally managed to make it part of their intervention in Manshiyat Nasr (Runkel, 2009). 'Izbit Kayrallah fought in Court to obtain the same right. However, tenure legalization was only achieved by a minority of households in the two settlements. In the case of Manshiyat Nasr, a paradox emerged from the GTZ plan: legalization was supposed to finance upgrading but upgrading made legalization too expensive. Indeed, the price set by Egyptian authorities does not only correspond to current market value, but also reflects the area equipment with amenities. If living conditions were not bearable, land would most likely be sold for lower prices. Instalment of basic infrastructures over time makes redevelopment of the area less costly hence more interesting for the state which has no incentive to sell it cheap to current residents. The same logic explains high land prices in 'Izbit Khayrallah. In this case, residents wish to purchase land at the value it had at the time of their first arrival. Such a claim is legitimated by the fact that they developed the settlement by themselves, equipping the area with amenities through self-help efforts. In conclusion, provision of services coupled with market logic result in making land price higher. It hampers attempts to achieve tenure security, especially so for the most vulnerable residents. Runkel identified "the importance of negotiated low prices for successful implementation of land titling" in Ismailia and Aswan (2009).

### CONCLUSION

This essay presents a careful analysis of three informal settlements in the Greater Cairo Region. It did so with two specific focus points: access to basic services and security of land tenure. In 'Izbit Khayrallah, basic urban services were made accessible by community efforts and security of land tenure was claimed in Court yet not achieved until today. In Manshiyat Nasr, internationally-funded programs were successful in providing services but mostly failed in their attempt to legalize tenure. 'Izbit el-Haggana is characterized by spatial inequalities in access to services and security of tenure.

A comparative perspective allowed to reach some conclusions concerning the three case-studies. While access to basic services does not depend on settlement age, on population size, or on presence of NGOs, provision of services impacts security of land tenure in various ways. This essay's weakest finding is related to state's provision of basic services. Depending on the case, it enhances perceived security of tenure or leads to extreme insecurity. A second conclusion is that connection to formal networks provides residents with a certain degree of legality and can open the way for more secure tenure. Even though such principle was recognized by Egyptian Supreme Court, residents still face many obstacles in legalizing their tenure, one of them being land unaffordability. From a certain perspective, the rationale behind cost-recovery upgrading programs makes sense. Indeed, investing revenues from land purchase in infrastructures should incentivize population to participate (Runkel, 2009). However, if provision of services precedes legalization procedures (and this is necessary to build trust), then land price set by authorities increases to reflect the value of a better-serviced area. Costbenefit analysis is quickly made by residents, and participation rates to legalization attempt will be low.

All case-studies being informal settlements developed on state-owned desert land, it would be interesting to assess the extent to which the conclusions presented here can be extended to other settlements of the same type.

Characters (space included): 31217

#### SOURCES

BELL J. "Land disputes, the informal city, and environmental discourse in Cairo" in SINGERMAN D. (dir.) (2009), Cairo Contested: Governance, Urban Space and Global Modernity, The American University in Cairo Press

BERRY-CHIKHAOUII., DEBOULET A. (2000) Les compétences des citadins dans le monde arabe. Penser, faire et transformer la ville. Paris : Karthala.

DEBOULET A. "Secure Land Tenure? Stakes and Contradictions of Land Titling and Upgrading Policies in the Global Middle East and in Egypt", in ABABSA M., DUPRET B., DENIS E. (dir.) (2012), *Popular Housing and Urban Land Tenure in the Middle East*, The American University in Cairo Press

DENIS E. "The commodification of the Ashwa'iyyat: Urban Land, Housing Market Unification, and de Soto's interventions in Egypt" in ABABSA M., DUPRET B., DENIS E. (dir.) (2012), *Popular Housing and Urban Land Tenure in the Middle East*, The American University in Cairo Press

FAHMI W.S. (2005) "The impact of privatization of solid waste management on the Zabaleen garbage collectors of Cairo", *Environment and Urbanization*, Vol 17(2)

KUCUKMEHMETOGLUA M. and GEYMEMB A. (2009), "Urban sprawl factors in the surface water resource basins of Istanbul", Land use Policy, Vol 26(3)

LEITMANN J. and BAHAROGLU D. (1998) "Informal rules! Using institutional economics to understand service provision in Turkey's spontaneous settlements", *The Journal of Development Studies*, Vol 34(5)

LORRAIN D. (2017) Métropoles en Méditerranée : Gouverner par les rentes, Sciences Po Les Presses

NAGATI O. "The risk of romanticizing informality" in *Housing Cairo, the informal response* (2016) edited by Marc Angélil and Charlotte Malterre-Barthes, in collaboration with Something Fantastic and Cluster

RAZZAZ O. (1991) "Law, Urban Land Tenure, and Property Disputes in Contested Settlements: the case of Jordan" PhD diss., Harvard University

ROBINSON J. (2011) "Cities in a World of Cities: The Comparative Gesture", International Journal of Urban and Regional Research, Vol 35(1)

RUNKEL C. (2009) "The Role of Urban Land Titling in Slum Improvement: the case of Cairo" Diploma, Institut for Stadt-und Regionalplannung, TU, Berlin

SABRY S. (2010) "How poverty is underestimated in Greater Cairo, Egypt", Environment and Urbanization, Vol 22(2): 523–541

SEJOURNE M. "Inhabitants daily practices to obtain legals tatus for their homes and security of tenure: Egypt" in ABABSA M., DUPRET B., DENIS E. (dir.) (2012), *Popular Housing and Urban Land Tenure in the Middle East*, The American University in Cairo Press

SIMS D. "What is secure tenure in Urban Egypt" in PAYNE G. (dir.) (2002) Lands, Rights and Innovation: Improving Tenure Security for the Urban Poor. London: ITDG Publishing.

SIMS D. (2011) Understanding Cairo: The Logic of a City Out of Control, The American University in Cairo Press

Housing Study for Urban Egypt, USAID, 2009

Tadamun (2013) http://www.tadamun.co/?post\_type=city&p=2741&11ang=en&11ang=en#.WsoCdoiuw2z

Tadamun (2015<sup>a</sup>) <u>http://www</u>.tadamun.co/?post\_type=city&p=7656#.WsoCf4iuw2y

Tadamun (2015b) http://www.tadamun.co/?post\_type=city&p=5469&11ang=en&11ang=en#fn13

Tadamun (2015c) http://www.tadamun.co/?post\_type=voice&p=5229&11ang=en&11ang=en

#### APPENDIX

## **ANNEX 1**





### ANNEX 2



Source: Tadamun (2015a)

### ANNEX 3



Source: GIS-Unit, PDP, GTZ (2008)

Source: Runkel (2009) from GIS Unit, PDP, GTZ (2008)

## **ANNEX 4**



Source : Tadamun (2015b)