

# EGYPT

## HOUSING PROFILE





# EGYPT

## HOUSING PROFILE



HS Number: HS/025/16E  
ISBN Number(Series): 978-92-1-131927-9  
ISBN Number:(Volume) 978-92-1-132704-5

## COPY RIGHTS AND DISCLAIMER

### **Egypt Housing Profile**

Copyright © United Nations Human Settlements Programme (UN-Habitat) 2016  
All rights reserved

United Nations Human Settlements Programme (UN-Habitat)  
P.O. Box 30030 00100 Nairobi GPO KENYA  
Tel: 254-020-7623120 (Central Office)  
[www.unhabitat.org](http://www.unhabitat.org)

Written by: David Sims and Hazem Abd-El Fattah  
Reviewed by: Housing Unit - Ministry of Housing, Utilities and Urban Communities (MHUUC)

### **DISCLAIMER**

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any county, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries regarding its economic system or degree of development. Excerpts may be reproduced without authorization, on condition that the source is indicated. Views expressed in this publication do not necessarily reflect those of the United Nations Human Settlements Programme, the United Nations and its member states.

### **PHOTOS © UN-HABITAT**

## PARTNERS CONTACTS

### **Ministry of Housing, Utilities and Urban Communities**

The General Organization for Physical Planning  
1 Ismail Abaza St., Qasr Al-Ayni Street St.,  
11516 Cairo, Arab Republic of Egypt  
Tel.: +(202) 27921520 – 27921521 / Fax: +(202) 27921512  
E-mail: [info@gopp.gov.eg](mailto:info@gopp.gov.eg)  
GOPP website: [www.gopp.gov.eg](http://www.gopp.gov.eg)  
Project website: [www.CairoFutureVision.gov.eg](http://www.CairoFutureVision.gov.eg)

### **United Nations Human Settlements Programme**

(UN-Habitat)  
Egypt Office  
1 Ismail Abaza St., Cairo, Egypt  
Tel.: +(202) 27923086  
Fax: +(202) 27923086  
E-mail: [Egypt.programme@unhabitat.org](mailto:Egypt.programme@unhabitat.org)  
Website: [www.unhabitat.org](http://www.unhabitat.org)



## FORWARD



Being a central driver for social, environmental and economic development; the housing sector in many countries play an important role in sustainable urbanization. Not only does housing affect national budgets and expenditure, but more importantly, well planned and implemented national housing policies enable the enhanced equitable rights to various social groups, and support sustainable socio-economic balanced communities.

In Egypt, the public sector under various programs and agencies as monitored by MHUUC, implemented a number of projects aiming at providing youth and low-income groups housing. Examples of these programs are the Free Housing Project, Family Housing Project, Youth Housing Project (1997) and Future Housing Project (1998). During the period from 2005 till 2012, the MHUUC had implemented and supervised the National Project for Housing in all governorates and new cities and established 500,000 housing units. Following the model of the National Project for Housing, the Egyptian government

is currently adopting and implementing the Social Housing Program aimed at establishing one million housing units within 5 years, in addition to another part for the families of medium income "Dar Masr". Also there is a promotion of sites and services schemes for moderate income families "Ibni Beita" experiment in 2006- 2011. In 1966, Egypt had signed the United International Covenant on Economic, Social and Cultural Rights, which recognized "the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions" (Article 11). Additionally, in 2014, the Egyptian Amended Constitution refers to the right to adequate housing in Article 78. Accordingly, the MHUUC is currently aiming at adopting its National Housing Strategy to respond to the constitutional target of enhancing equitable access to adequate housing. In this sense, and to enable the definition of effective housing strategy, an updated housing profile needed to be drafted to serve as a basis than enables discussion and pave the road for the drafting of a comprehensive Egypt Housing Sector Strategy. This strategy will incorporate opinions of all relevant stakeholders and define a clear roadmap towards improved access to affordable and adequate housing for all.

This profile builds on the long efforts exerted by the Ministry of Housing, and specifically the drafted Egypt housing policies and strategies document in 2012 and 2013, which represented a very important effort that formulated basis for discussions with key stakeholders.

MHUUC is hoping that this housing profile will indeed support inclusive discussion based on real understanding of the sector, to support effective directing towards a new housing strategy that enables a change for the inclusive Egyptian population with special focus on youth and vulnerable groups.

**Dr. Mostafa Madbouli**  
**Ministry of Housing, Utilities and Urban Communities**  
**Minister, Egypt**



Providing adequate housing to millions of low-income households, particularly in urban centres, is one of the greatest challenges facing present-day society worldwide. For Egypt, to meet this challenge means building nearly 1,500 new dwellings every day until 2030. UN-Habitat welcomes the initiative of the Government of Egypt to undertake a national housing profile, one of the most effective tools for housing policy making, used in more than fifteen countries in Africa, Asia and Latin America since 2010.

A housing profile is the first step within the overall framework of the UN-Habitat Global Housing Strategy which aims to position “Housing at the Centre” of national and urban development, as an imperative for economic, environmental, cultural and socially inclusive cities. It is instrumental in assisting countries to formulate national housing policies, by improving the understanding of the challenges in the housing sector, allowing governments to seize opportunities and to respond.

The housing profile of Egypt uses a comprehensive approach to the factors influencing housing in the country - from housing finance, land and construction to institutional, regulatory and cultural settings. It provides decision-makers with the right information for effective policy development. The profile also makes clear recommendations in all core areas: new housing stock production should be accompanied by the upgrading of existing informal settlements; mechanisms to improve access to serviced land need to be implemented in order to provide housing solutions for 8.2 million households by 2030. Concurrently, measures need to be taken to improve the affordability of housing, namely through a stronger institutional framework.

Housing sector stakeholders now have a fundamental tool in their hands to continue working towards the realization of the right to adequate housing for all Egyptians. I am confident that the Egypt housing profile will be a fundamental tool to design sustainable and inclusive urban and housing development strategies, and contribute to poverty reduction efforts in Egypt.

I wish to express my appreciation and gratitude to all those who have contributed to this report, and my recognition for the commitment of the Government of Egypt. In turn, we commit to supporting Egypt in the implementation of its housing strategy which is in line with the recently launched New Urban Agenda, the outcome of the third United Nations Conference on Housing and Sustainable Urban Development, Habitat III.

The steps taken by Egypt to improve access to adequate housing will contribute to the efforts of UN-Habitat and partners at the global level to reposition housing at the centre of the New Urban Agenda for the 21st century.

A handwritten signature in blue ink that reads "Joan Clos".

**Dr. Joan Clos**  
**Under-Secretary-General, United Nations**  
**Executive Director, UN-Habitat**

## ACKNOWLEDGEMENTS

The authors would like to extend thanks to all who helped in the preparation of Egypt Housing Profile. In particular, thanks are due to the Minister of Housing, Utilities, and Urban Communities, Dr. Mostafa Madbouli, who found time to discuss the main elements of the Profile along with the report technical supporting sector headed by Eng. Nefisa Hashem/ First Undersecretary of the Ministry and Head of Housing and Utilities Sector (qitaa' al-iskan). Additionally, they would like to thank Dr. Assem al-Gazaar, chairman of GOPP. Constructive and detailed comments on an earlier draft were received from Eng. Hussein al-Gebali, Advisor to the Minister, and Eng. Mohamed Anas Mahmoud, housing sector expert, which have been incorporated in this final version. Sincere thanks are due to these efforts. Thanks are also extended to a number of academic experts who attended a panel discussion of housing profile concepts, organized by the Ministry Housing, Utilities and Urban Communities.

Sincere thanks are also extended to UN-Habitat who supported the authors throughout the process of preparing this housing profile. In particular, the organizational efforts of Ihab Shaalan, UN-Habitat consultant, were much appreciated. Thanks are also extended to Dyfed Aubrey, Director UN-Habitat Regional Office for the Arab States, and Rania Hedeaya, Programme Manager UN-Habitat Egypt.



# TABLE OF CONTENTS

	<b>FORWARD</b>	<b>VI-VII</b>
	<b>ACKNOWLEDGEMENTS</b>	<b>VIII</b>
	<b>LIST OF TABLES</b>	<b>XII</b>
	<b>LIST OF FIGURES</b>	<b>XIII</b>
	<b>ACRONYMS</b>	<b>XV-XVI</b>
	<b>EXECUTIVE SUMMARY</b>	<b>XVII</b>
	<b>BRIEF INTRODUCTION ABOUT EGYPT AND THE POPULATOIN STATUS</b>	<b>1</b>
1	1.1 Egypt's history, geography, demographics, and economy	1
	1.2 Urbanization and current urban issues	4
	1.3 Poverty, standards of living, and unemployment	5
	1.4 Government and governance	5
	1.5 Housing as an economic sector and economic stimulus	7
	<b>REVIEW OF HOUSING POLICIES AND THE UNDERPINNING LEGAL AND INSTITUTIONAL FRAMEWORKS</b>	<b>8</b>
2	2.1 Introduction	8
	2.2 Egypt's supply-side housing policies as they evolved up to 2011	9
	2.2.1 Government public housing 1952-1981	9
	2.2.2 Government housing production 1982-2011	9
	2.2.3 Sites and services programs as part of housing policies	10
	2.3 Implicit housing policies reflected in legislation before 2011	11
	2.4 Policies towards informal housing	12
	2.5 Absence of effective policies to deal with the sector as a whole	13
	2.6 Housing policies in post-2011 Egypt: the social housing program and other supply-side initiatives	13
	2.6.1 The Social Housing Programme (SHP)	13
	2.6.2 Recent supply-side housing initiatives aimed at the middle classes	14
	2.6.3 Aborted attempts to influence the wider housing market	15
	2.6.4 Stimulating the Economy: Real estate to the rescue?	15
	2.6.5 A draft housing strategy document dated April 2013	16
	2.7 The legal framework underpinning housing policies	16
	2.8 The institutional framework underpinning the housing sector	17
	3.1 Introduction	18
	3.2 Overall size and extent of the housing stock in 2006	18
	<b>THE EXISTING HOUSING STOCK</b>	<b>18</b>
3	3.3 Detailed characteristics of the 2008 occupied housing stock in urban Egypt	19
	3.4 Rural housing characteristics in peri-urban Cairo	22
	3.5 Deteriorated and other marginal housing	24
	3.6 Vacant housing and its underlying causes	25
	3.7 Informal housing as a portion of the total housing stock	28
	3.8 Maintenance of the housing stock	29
	3.8.1 Improvements and maintenance of the housing unit itself (inside the unit)	29
	3.8.2 Improvements and maintenance of the common spaces and the structure of the building itself (outside the unit)	29
	3.9 The housing stock in the new towns	30
	3.10 Demolition of the housing stock, resettlement, and forced evictions	30
	<b>HOUSING SUPPLY</b>	<b>32</b>
4	4.1 Overview of the main housing suppliers and their production volumes	32
	4.2 Public sector production and providers	33
	4.2.1 The period 1952 to 1981	34
	4.2.2 Government housing schemes in the period 1982 to 2005	34
	4.2.4 The National Housing Program (NHP) 2005 to 2011	40
	4.2.5 Evaluating the National Housing Program 2005-2011	44
	4.2.6 The new 'One Million' Social Housing Program (SHP) 2012-2017	46
	4.2.7 Evaluating the Social Housing Program (SHP)	48
	4.2.8 Assessing the evolution of social housing programs	50
	4.3 Formal private sector production and providers	50
	4.4 Informal sector production and providers	52
	4.5 Regulations governing housing production and the building permit regime	53
	4.6 Identification of groups excluded from government housing programs	54

5

**HOUSING NEEDS AND GAPS**

5.1 Estimating current and future housing needs – a difficult task	56
5.2 Estimates of current shortfalls and gaps	57
5.3 Estimates of future housing needs to 2030	60
5.4 Related land requirements for new housing to 2030	61
5.5 Related global investment requirements for new housing to 2030	61

6

**HOUSING DEMAND AND AFFORDABILITY**

6.1 Effective housing demand	62
6.2 Current housing prices and typical housing types	63
6.3 Price-to-Income Ratios for typical units	64
6.4 Percentile affordability of units	65
6.5 Affordable rental housing?	67
6.6 The current social housing program: affordability and eligibility	67

7

**LAND FOR HOUSING AND URBAN SPATIAL PLANNING**

7.1 Introduction: Overview of land supply for housing	68
7.2 Overview of urban planning systems and the designation of land for housing	68
7.3 Conversion of state desert lands for housing and other urban purposes:	73
7.4 Conversion of agricultural lands for housing:	75
7.5 Land tenure security in Egypt	78
7.6 Attempts at sites and services projects	78
7.7 Conclusion: A complete dichotomy in land provision for housing and urban planning that ignores the location factor	79

8

**HOUSING FINANCE AND GOVERNMENT CREDIT SCHEMES**

8.1 Overview of how housing construction and purchases are financed in Egypt	81
8.2 Financial and capital markets as sources of housing finance	82
8.3 Private developer housing finance systems	82
8.4 Housing mortgage systems and markets	83
8.5 Financing for the current 'One Million' Social Housing Program	87
8.6 Funding for other government housing programs	88
8.7 Informal housing finance systems	88
8.8 Micro finance for housing	89

9

**DYNAMICS OF THE HOUSING MARKET**

9.1 Introduction: Understanding housing market dynamics in Egypt	90
9.2 Residential mobility and tenure of moving households in urban Egypt	90
9.3 Housing market information, its exchange, and distorting features	91
9.4 Housing rents and rental markets under the new rent law	92
9.5 Housing purchase systems and prices, 2003-2008	93
9.6 Providers of urban housing on the market	94
9.7 Regional comparisons in urban housing market behavior	96
9.8 Housing markets in peri-urban Greater Cairo	97
9.9 Current trends in housing market behavior and prices	99
9.10 Impediments to housing market fluidity: transfer, registration and titling, and fees	100
9.11 Taxes on housing and the new property tax regime	101
9.12 Lack of information on housing markets	101

10

**INFRASTRUCTURE AND BASIC URBAN SERVICES**

10.1 Basic urban infrastructure provision in a nutshell	103
10.2 Water and sanitation	104
10.3 Roads and public spaces	108
10.4 Electricity and natural gas	109
10.5 Solid waste management	110
10.6 Infrastructure supply to informal settlements	112
10.7 Conclusion: Overall infrastructure needs, costs, and cost recovery	112

11

**CONSTRUCTION INDUSTRY AND BUILDING MATERIALS**

11.1 The construction sector in a nutshell	114
11.2 Institutional and regulatory frameworks governing the construction sector	115
11.3 Construction industry actors	116
11.4 Building materials: Traditional and industrialized production and costs	116
11.5 Construction skills and capacity needs assessment	121
11.6 Energy costs and efficiency in housing construction	122
11.7 Issues relating to building materials and construction and affordable housing	123

1 All data in this section comes from the Housing and Utilities Sector, MHUUC.

12

**CAPACITY BUILDING AND CROSS-CUTTING ISSUES FOR THE HOUSING SECTOR**

12.1 Capacity building	124
12.2 Cross-cutting issues	125

13

**TOWARDS A NATIONAL HOUSING STRATEGY**

13.1 Housing policies today and the need for a strategy	127
13.2 Main issues surrounding a housing strategy	128
13.3 Formulating a National Housing Strategy	129

**THE HOUSING SECTOR PERFORMANCE CONSTRAINTS MATRIX FOR EGYPT** 130**THE HOUSING SECTOR PERFORMANCE PRIORITY ACTION PLAN FOR EGYPT** 132**LIST OF STAKEHOLDERS CONSULTED** 134**Annex 01** 130**Annex 02** 132**Annex 03** 134**Annex 04** 137

# LIST OF TABLES

Table 1.1: Egypt Urban and Rural Populations 1947-2006 (in thousands)	4
Table 3.1: 2006 Distribution of Ordinary Buildings for Residence (mabani 'adia lil-sakin) Units by Type of Unit	18
Table 3.2: Distribution of Units in Ordinary Buildings by Current Use 2006	19
Table 3.3: Distribution of Housing Units by Type of Unit (in buildings normally for residence)	19
Table 3.4: Average Net Urban Housing Area per Capita by Income Quintiles	21
Table 3.5: Distribution of Urban Households by Tenure Types	22
Table 3.6: Regional Variations: Housing Tenure Status	23
Table 3.7: Egypt's Population, Households, and Housing Units	25
Table 3.8: Status of units assumed to be for housing purposes in 2006	26
Table 3.9: Egypt Electricity Customers by Type of Usage	27
Table 3.10: Housing Stock in the New Towns	30
Table 4.1: Population, Households and Housing Unit Totals 1996 and 2006 (in millions)	32
Table 4.2: National Housing Production 1996-2006	33
Table 4.3: Urban Housing Production 1996-2006	33
Table 4.4: Government Housing Production in Units 1982-2005 by Executing Agency	35
Table 4.5: National Housing Program Schemes and Unit Targets	41
Table 4.6 : Evaluation and Comparison of Egypt's Subsidized Housing Programs	51
Table 4.7: Large and Well-Known Housing Developers in Egypt	52
Table 5.1: Evolution in the Population Size, Number of Households, and Number of Housing Units in Egypt 1996-2006	56
Table 5.2: Number of housing units, surplus units and unutilised (unoccupied and vacant) according to the 2006 Census	57
Table 5.3: Number of available housing units according to the 2006 Census	57
Table 5.4: The 2006 housing needs in Egypt	58
Table 5.5: Housing gap in Egypt as of 2006	58
Table 5.6: The 2006-2015 housing needs in Egypt	59
Table 5.7: Egypt's projected population 2016-2030	60
Table 5.8: The 2016-2030 housing needs in Egypt	61
Table 6.1: Estimated Household Income Levels by Quintile 2014/2015 in EGP	63
Table 6.2: Selection of Typical Least Expensive Housing Unit Prices	63
Table 6.3: Normative Cheap Urban Housing Units 2015	64
Table 6.4: Price-to-Income-Ratios for Different Types of Inexpensive Housing 2015	65
Table 6.5: All Egypt Income Percentiles Reached for Housing Types (Base Case)	66
Table 8.1: Sources of Financing for Urban Housing Purchase in the 2003-2008 Period	81
Table 9.1: Distribution of Households Moving in the Five Years 2003-2008 in Urban Areas by Tenure of Acquired Unit	91
Table 9.3: Rent to Income Ratios for New Rent Contracts in the 2003-2008 period, by Urban Income Quintiles (in EGP)	93
Table 9.4: Prices Paid to Purchase Units Relative to Annual Income, by Quintile for Those Purchasing in the 2003-2008 period (in EGP)	94
Table 9.5: Prices and Payment Models in the Formal and Informal Sectors in the Last Five Years	94
Table 9.6: Purchased Urban Housing Units by Type of Building Owner 2003-2008	95
Table 9.7: Rented Urban Housing Units Distribution by Type of Building Owner in 2003-2008	96
Table 9.8: Regional Comparisons: General Housing Market Characteristics	98
Table 10.1: Water and wastewater infrastructure and capacity (2005-2014)	104
Table 10.3: Access to Water and Sanitation in Urban Egypt (2008): Regional Variations	105
Table 10.2: Water and Sanitation Service Provision Levels	105
Table 10.4: Governmental subsidies allocated for water and wastewater utilities (2007/2008-2009/2010)	107
Table 11.1: Divisions, Specialisations and Grades of Contractors registered with the Egyptian Federation for Construction and Building Contractors	116
Table 11.2: Egypt's exports and imports of cement (2007-2013), in EGP millions	117
Table 11.3: Rebar production over the period (2002/2003-2011/2012)	120
Table 11.4: Egypt's exports and imports of long products (2008-2013), in thousand tonnes	120

# LIST OF FIGURES

Figure 1.1	Mosque in model village of New Gourna, Luxor, designed by Hassan Fathi in 1947. Photo by D. Sims 2009.	1
Figure 1.2	Remains of some of the few original mud brick houses in New Gourna, 2009. Photo by D. Sims	1
Figure 1.3	Map of Egypt	2
Figure 1.4	1996 Census classification of urban and rural zones of Giza, Greater Cairo, showing urban overspill. Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 9.	4
Figure 1.5	Unemployment and Inflation in Egypt (2005 - 2014)	5
Figure 1.6	Governorates of Egypt; Source: Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 5.	6
Figure 3.1	Formal versus informal areas of Greater Cairo, 2005. Source: Sims, Understanding Cairo, p 60.	20
Figure 3.2	Contrasting fabrics of formal (Dokki to the right) and informal (Boulaq al-Dakrou) neighborhoods. Source: Sims, Understanding Cairo, p. 58.	21
Figure 3.3	Public housing estates built by Cairo Governorate 1985-1995. Source: Sims, Understanding Cairo, p. 54.	22
Figure 3.4	Cooperative housing (left) and police officer housing (center) near the Pyramids of Giza (right). Source: Sims, Understanding Cairo, p 81.	23
Figure 3.5	Narrow lane in older informal housing area, Ezbet al-Mattar, Giza, 2005. Photo by D. Sims	24
Figure 3.6	Deteriorated slum pocket next to railway line behind former Rod El Farag wholesale market, Cairo, 2003. Photo by D. Sims	24
Figure 3.7	Older raba' type housing, Ezbet Bekhit, Manshiet Nasser, Cairo, with six families in six rooms and only one toilet/bath, 2001. Photo by D. Sims.	25
Figure 3.8	Large garden apartments in a subdivision in New Cairo, 2010. Practically all of these units were vacant. Photo by D. Sims.	26
Figure 4.1	Public housing built in the 1980s, Sixth of October, 2009. Photo by D. Sims	36
Figure 4.2	Public housing built in the early 1990s, Sixth of October, 2009. Photo by D. Sims	37
Figure 4.3	Mubarak Youth Housing 1997-2000, Sixth of October, 2009. Photo by D. Sims	38
Figure 4.4	Map of Sixth of October New Town showing location of NHP housing schemes. Source: Sixth of October Town Agency, 2010.	41
Figure 4.5	NHP tamlik units (each 63 m2) in 6 October City, 2010. Photo: David Sims	42
Figure 4.6	Inside a NHP 63 m2 unit, 6 October, 2010. Photo by D. Sims	42
Figure 4.7	NHP Ibni Beitaik sites and services units, Sixth of October, 2010. Photo: David Sims	42
Figure 4.8	NHP private sector-built tamlik units 63m2, Digla Gardens, in Six October 2010. Photo by D. Sims	43
Figure 4.9	NHP Beit Al Aala units, Six October, 2007. Photo by D. Sims	43
Figure 4.10	NHP Al-Awla Bel-Re'aaya scheme, 42 m2 rental units. Photo by D. Sims 2010.	
Figure 4.11	Remote governorate social housing blocks under construction on Western Desert fringe. Armant, Luxor Governorate, January 2014. Photo: D. Sims	46
Figure 4.12	Formal private housing at various stages of completion on 600 m2 plots, New Cairo, 2009.	52
Figure 4.13	Private developer compound housing, New Cairo, 2009.	52
Figure 4.14	Informal housing under construction in Giza off ring road, 2006. Photo by D. Sims	53
Figure 4.15	Informal one-off tower blocks under construction, Boulaq al-Dakrou, 2009. Photo by D. Sims.	53
Figure 7.1	1997 Greater Cairo Master Plan with New Towns (produced by GOPP). Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 56.	69
Figure 7.2	Typical low-density new town street layout; El Obour New Town, no date. Source: GOPP	70
Figure 7.3	Entrance to Fayoum New Town, December 2013. As yet no inhabitants. Photo by D. Sims	70
Figure 7.4	Entrance to Qena New Town, April 2014. As yet no residents. Photo by D. Sims.	71
Figure 7.5	Low density neighborhood layout, Ibni Beitaik sites and services scheme, Sixth of October, July 2013. No inhabitants yet. Google Earth @ 2014, Digital Globe @ 2014.	74
Figure 7.6	Governorate public housing under construction on remote desert site in unplanned rural area, Al Tarif, Luxor, 2015. Photo by D. Sims.	75
Figure 7.7	Example of informal conversion of agricultural land along Cairo Ring Road (Giza). Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 26.	75
Figure 7.8	Example of Informal Expansion on Agricultural Land, El Muatamididiya Village, outside Cairo, Years 1947, 1977, 1993, and 2000. Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 27.	76
Figure 7.9	Piecemeal informal housing construction on converted agricultural land, Waraq, Giza, 2011. Photo by D. Sims	77
Figure 7.10	Wholesdale conversion of agricultural land for informal housing construction on agricultural land, Waraq, Giza, 2011. Photo by D. Sims	78
Figure 7.11	Growing Informal settlement on public land on the Eastern Desert fringe, Al Wasta, Assiut Governorate, July 2013, Google Earth, Digital Image @2014	78
Figure 9.1	Some of the 3 percent of Egyptian households who find new units through advertisements and real estate promotion. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.	92
Figure 9.2	Some of the 5 per cent of Egyptian households who purchase housing units from real estate developers. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.	95
Figure 9.3	One of the very few affordable housing schemes promoted through formal media. Units in Haram City, Sixth of October, built by Orascom. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.	99
Figure 10.1	Installing sewers in a mature informal settlement on State land (Ezbet Bekhit, Manshiet Nasser), financed by KfW, 2002. Photo by D. Sims	106

Figure 10.2	Example of advanced road network provision by NUCA, New Cairo, 2005. Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008	108
Figure 10.3	Newly tarmacked major avenue, Shara' Tisa'in, New Cairo, 2009. Photo by D. Sims	109
Figure 10.4	Recently paved lane in an informal settlement, Boulaq al-Dakrou, 2009. Photo by D. Sims	109
Figure 10.5	Electrical transformer and distribution box, New Cairo subdivision, 2009. Photo by D. Sims	109
Figure 10.6	Solid waste collection containers in Sixth of October, 2009. Photo by D. Sims	110
Figure 11.1	Cooperative housing blocks under construction, Sixth of October, 2010. Photo by D. Sims	114
Figure 11.2	Public housing blocks under construction, Al Tarif, Luxor Governorate, April 2015. Photo by D. Sims	115
Figure 11.3	Formal private housing under construction, New Cairo, 2009. Photo by D. Sims.	117
Figure 11.4	Typical informal housing construction, Waraq, Giza, March 2011. Photo: D. Sims	118
Figure 11.5	Informal residential tower under construction, Boulaq al-Dakrou, 2009. Photo by D. Sims	118
Figure 11.6	Example of red brick infill in informal construction. Note the small light well provided. Al Bairat, Luxor Governorate, 2015. Photo by D. Sims	119
Figure 11.7	Rare example of mud brick residential construction, Al Bairat, Luxor Governorate, 1982. Photo D. Sims	119
Figure 11.8	Use of soft limestone block as a cheaper alternative to red brick for wall infill. Al Bairat, Luxor Governorate, 2015. Photo by D. Sims.	121

## ACRONYMS

1 USD = EGP 7.63 (April 2015)

Fiscal year: 1 July to 30 June

1 hectare = 2.38 feddans

AFD	Agence Française du Développement
AfDB	African Development Bank
AMFP	Affordable Mortgage Finance Program
AMP	Affordable Mortgage Program
AUC	American University in Cairo
BOT	Build Operate and Transfer
CAPMAS	Central Agency for Public Mobilization and Statistics
CAPWW	Construction Authority for Potable Water and Wastewater Projects
CBE	Central Bank of Egypt
CBO	Community Based Organization
EEAA	Egyptian Environmental Affairs Agency
EFS	Egypt Financial Services project (USAID)
EFSA	Egyptian Financial Supervisory Authority
EGBC	Egyptian Green Building Council" (EGBC)
EGP	Egyptian Pound
EIPR	Egyptian Initiative for Personal Rights
EMFC	Egyptian Mortgage Refinance Housing Company
FAR	Floor-Area-Ratio
FMF-E	First Microfinance Foundation Egypt
FY	Fiscal Year
GDP	Gross Domestic Product
GOPP	General Organization for Physical Planning
GSF	Guarantee and Subsidy Fund
GTZ	German Technical Cooperation
HBRC	Housing and Building Research Center
HCWW	Holding Company for Water and Wastewater
HDB	Housing and Development Bank
HFH	Habitat for Humanity
HIECS	Household Income, Expenditure, and Consumption Survey
HSUE	Housing Survey of Urban Egypt
IDA	Industrial Development Authority
IDSC	Information Decision Support Center
ILO	International Labour Organisation
ISDF	Informal Settlements Development Fund

## ACRONYMS

JCEE	The Egyptian-German Committee on Renewable Energy & Energy Efficiency
KfW	German Development Bank
M&E	Monitoring and Evaluation
mBTU	million British Thermal Units
MED-ENEC	Energy Efficiency in the Construction Sector Project
MENA	Middle East and North Africa
MFA	Mortgage Finance Authority
MFC	Mortgage Finance Company
MFA	Mortgage Finance Authority (now part of EFSA)
MFF	Mortgage Finance Fund also known as GSF
MHUUC	Ministry of Housing, Utilities, and Urban Communities
MLD	Ministry of Local Development
MODMP	Ministry of Defence and Military Production
MOT	Ministry of Transport
MSWM	Municipal Solid Waste Management
MTTI	Management and Technology Training Institute
MURIS	Ministry of State for Urban Renovation and Informal Settlements
NGO	Non-Governmental Organization
NHP	Egypt National Housing Program
NAPWASD	National Authority for Potable Water and Sanitary Drainage
NUCA	New Urban Communities Authority
NUO	National Urban Observatory (in GOPP)
NWRP	National Water Resources Plan
O&M	Operations and Maintenance
OPEC	Organisation of Petroleum Exporting Countries
PPP	Public Private Partnership
SFD	Egypt Social Development Fund
SHF	Social Housing Fund
SHP	Social Housing Program
Tcf	trillion cubic feet
UN	United Nations
UN-Habitat	United Nations Human Settlements Programme
UNIDO	United Nations Industrial Development Organisation
UNFPA	United Nations Population Fund
UNDP	United Nations Development Program
USAID	United States Agency for International Development
USD	United States Dollar



## EXECUTIVE SUMMARY

The Egyptian government has requested UN-Habitat to prepare a Housing Sector Profile for Egypt. UN-Habitat has prepared a number of such profiles for various countries, and they have proven useful as comprehensive statements of the housing sector and its challenges.

This Profile covers both rural and urban housing. However, emphasis is put on housing in urban areas and also rapidly growing peri-urban settlements, which, although not classified as urban, are dynamic areas where housing is being produced at a very rapid rate.

This Housing Profile is aimed to serve as a basis for deliberations leading to a comprehensive Egypt Housing Sector Strategy that will incorporate opinions of all relevant stakeholders.

### Housing Policies

First, as far as is known, at no time has the Egyptian government issued an official housing policy statement or act. However, the 2014 Amended Constitution of Egypt refers to the right to decent or “adequate” housing in Article 78. Also, in 2013 the MHUUC produced a draft national housing strategy 2012-2027, which serves as a useful basis for discussions on future housing policies.

In past decades and up to today the government’s approach to housing has been dominated by one single feature – the production by the State of new housing units, most of which were ostensibly for those families of limited income, and all of which are subsidized and located on costless public land. It is this ‘supply-side’ approach that has pre-occupied national and local State agencies dealing with housing and has claimed virtually all of State budgetary allocations to the sector. However, there have been a number of laws issued that attempt to regulate the wider private housing sector. These together can be considered expressions of an implicit housing policy, and they include legislation on new towns, mortgages, rental markets, building and planning codes, and property tax and real estate registration. None of these laws explicitly aim at influencing markets in favour of poor and limited-income households.

The promotion of sites and services schemes for moderate income families has not been a major part of housing policies except for the Ibni Beitaq experiment in 2006-2011, which suffered from a number of problems.

### The Housing Stock

The Census of Buildings, Population, and Establishments is carried out by CAPMAS every ten years, and in 2006 it

enumerated 27.1 million physical units, of which some 52 per cent were in urban areas. Of this stock, 16.9 per cent of units were classified as occupied housing units, and the rest were either for work, work and housing, or unoccupied.

By far the dominant type of residential building in urban Egypt is the small, multi-story apartment block. In 2008 practically all occupied housing units were single apartments and (87.6 per cent) and only 7.9 per cent were classified as either villas or rural houses. Only 4.4 per cent of urban households lived in a single room unit. The median gross housing area of the occupied housing unit is 75 m<sup>2</sup> (the median net area is 70 m<sup>2</sup>).

The overall quality of the urban housing stock is adequate in terms of structural soundness, space, and amenities. For example, in 2008 only 5.8 per cent of urban households did not have private baths/toilets, and there was near universal access to electricity, piped water, and sewerage. Very few housing units were deemed precarious.

In urban Egypt, ownership tenure dominates with 44 per cent of units, followed by rental tenure at 39 per cent of units. A large percentage of rentals remain under the old, fixed rent regime although this was abolished for new units in 1996.

In terms of tenure security, most Egyptian families, whether living in formal or informal areas, or whether renting or owning housing units, enjoy relatively secure tenure. Even those living in units built on squatted State land are rarely evicted, except those living in buildings or areas deemed dangerous. And for these persons alternative housing is normally provided.

An important feature of the housing stock is an extraordinarily high level of vacancies. Assuming one household per housing unit, in 2006 in urban areas 37 per cent of the housing stock lay vacant or closed. For rural areas, 20 per cent of the housing stock lay vacant. For all Egypt, there were 7.0 million excess units, or 29 per cent of the total housing stock.

Another important feature of the housing stock is the very high portion that can be considered informal (also called un-planned or illegal, and in Arabic ‘ashwa’iya). Estimates of informal housing vary between 40 and 60 per cent of the urban housing stock.

### Housing Production

In Egypt housing is produced by three main sectors:

- The public sector including cooperative housing (under various programs and agencies as monitored by MHUUC)
- The formal private sector (recorded through building permits)
- The informal private sector (unrecorded and assumed to be all other housing production)

According to the Census, between 1996 and 2006 a total 7.9 million units were produced, of which 4.0 million units were in rural areas and 3.9 million units were in urban areas. This translates into an annual rate of production of 790,000 units for the country as a whole. Of this urban production it is possible to estimate production by sector as follows:

Urban Housing Production 1996-2006

Sector	Units produced	% share	Annual rate
Public	409,877	10.5%	41,000
private	948,104	24.3%	95,000
informal	2,542,019	65.2%	254,000
<b>Total</b>	<b>3,900,000</b>	<b>100.0%</b>	<b>390,000</b>

These results are quite dramatic. Over 65 per cent of all urban housing production was deemed informal, that is contravening one or more laws governing the built environment. After 2006, and especially after the Revolution of 2011, the rate of informal housing production has increased exponentially, and the informal mode of production is now totally dominant in both urban, peri-urban, and rural areas.

Government sector production (both in urban and rural areas) has had a long history in Egypt and can be divided into four main periods and programs as follows:

- Rental programs over 1952 to 1981 with average annual production at 37,790 units
- Various ownership programs over 1982 to 2005 with average annual production 54,700 units.
- The National Housing Program (NHP) over 2005-2013 with average annual production roughly 70,000 units.
- The current 'one million unit' Social Housing Program (SHP) 2013-2017 aims at producing 200,000 units per year but is seriously delayed. Some welcome innovations are being introduced, mainly in targeting, in mortgage financing, and in M&E.

These housing schemes have been assessed in terms of production delays, presence of the private sector, land availability and location, infrastructure provision, construction costs, housing designs, direct and indirect subsidy elements, targeting and beneficiary selection, affordability, and post delivery issues. A common problem to all schemes (and one that is becoming more acute) is the poor and remote locations of most public housing, both in new towns and on desert belonging to governorates. And in all schemes there are direct subsidies and also substantial indirect (and un-quantified) subsidies. Another problem is very high levels of vacancies following assignment and an almost total lack of post-delivery M&E. Yet another problem relates to the use of standard housing models that do not reflect regional climatic and cultural differences, and which result in very uniform and rigid housing estates with neither mixed land usage nor a mixing of social classes.

Formal private sector production is carried out by large developers, medium size developer-contractors, and by individuals using small contractors. This production is subject to the onerous and bureaucratic building permit regime, which is the only data source on private production. In the fiscal year 2013/2014 production was 103,283 units, three times greater than public sector production.

The production of informal housing is managed almost exclusively by families and individuals. Ironically, for what is by far the largest mode of housing supply in the country, little is known about production processes. The most common kind of informal housing is small apartment units in small footprint buildings produced progressively, although the one-off speculative residential tower has become common in some dense areas. Contrary to what many think, the basic structural quality of informal production is good. However, streets are narrow and housing units frequently suffer from lack of light and air.

### Housing Needs to 2030

Gross housing needs have been estimated until 2030, first by updating the total housing stock from 2006 to 2015, and then by taking into account (1) units needed for new household formation; (2) units needed to replace run-down or substandard units; and (3) units needed to account for attrition of the stock. It is also assumed that population growth rates will slowly diminish, as will the average household size.

The results of the estimation yield a total need of 8.2 million additional units from 2016 to 2030, representing an annual production of 547,000 units nationwide. This implies that there is a need for roughly 3,900 hectares of serviced land per year and implies a total investment in housing (in 2015 terms) of EGP 74 billion annually.

### Housing Demand and Affordability

The main problem with housing affordability is simply that most Egyptian households have only modest incomes. It is estimated that currently the median monthly household income in Egypt is EGP 2260 or USD 297 (for rural households EGP 2100 and for urban households EGP 2420), and this represents all sources of income (of which wages and salaries only account for half).

This is reflected in the current Price-to-Income Ratios for very modest housing units (meaning the ratio of median housing unit price to the annual median household income). For the median income household in Egypt, only cheap informal units have good ratios of 4 or below. The Social Housing Program's 75 m<sup>2</sup> subsidized unit has an acceptable ratio of 6, but the cheapest units produced by the private sector have ratios of 16 and above. Of course, households in the first and second income quintiles suffer from much worse ratios.

The percentile affordability (i.e. the percentage of households that can purchase a unit using 25 per cent of their income) is even worse. Only very small and modest informal units are affordable below the 40th percentile, and the SHP unit only is affordable at the 76th percentile. (Because of subsidies, and assuming high down payments, 35 per cent of income for instalment payments, and a payment escalator, the SHP unit is claimed to reach the 25 percentile of household income.)

It is no wonder that more and more families and newly weds in Egypt are giving up hope in home ownership and are resorting to the large and growing rental market. Until 2008 rents were remarkably affordable – rarely reaching more than 25 per cent of income – but prices have been increasing very rapidly, causing severe financial challenges to modest income families.

### Land for Housing and Urban Planning

Urban planning in Egypt is regulated by the Unified Building Code of 2008. The standards articulated in this law dictate modern, high standard housing and subdivisions. The inability of this law to reflect existing urban patterns and morphology in cities and/or address lower-income housing needs is one of the factors leading to the formation of informal settlements.

Government urban planning policy has been almost exclusively dominated by promoting new towns, mainly in remote desert locations. In spite of many problems associated with these new towns – as evidenced by their extremely slow increases in population – the new towns continue to be seen as the solution to all urban expansion and thus also for the supply of most land for housing.

Thus, today it can be said that there are two distinct sources of raw land for housing. On the one hand there is State owned/controlled desert and near-desert lands, and on the other hand privately owned/controlled agricultural land. It is this latter source of land upon which almost all informal housing is built. In general terms, such a stark dichotomy can be applied for all of Egypt's supply of land for housing.

Sites and services schemes as a means of producing land for low-income housing have only been applied on a wide scale under the Ibni Beitaq program in the new towns, and the results have been disappointing.

Based on the most recent urban land development plans and schemes, it is predictable that Egypt's dichotomy in land for housing will continue and even accelerate.

### Housing Finance

According to a 2008 representative household survey of urban Egypt (that allowed multiple responses), the single greatest source of finance for housing was of savings from regular income (65 per cent), followed by selling property or other assets (49 per cent). A total of 14 per cent of housing unit purchasers relied on savings from working abroad, mainly in the Arab Gulf countries. And, most significantly, only a tiny portion of purchasers, less than two per cent, relied at least partially on loans from banks. This reluctance to resort to the banking sector is underscored by the fact that only 13 per cent of all households in urban Egypt had financial dealings with banks, lenders, or financial institutions.

This needs to be phrased in another way. In urban Egypt over the 2003-2008 period all forms of formal credit represented only a totally insignificant part of housing finance, in spite of the fact that Egypt boasts a relatively sophisticated banking sector.

For private housing developers, a kind of "off-plan" non-bank financing is frequently offered, whereby purchasers make a number of payments over time before possessing the unit, and by making the remaining payments after possession. This allows the developer to restrict his equity contribution to the purchase of land and to avoid heavy bank loans for construction.

The mortgage system in Egypt is still in its infancy, having been introduced by legislation dating from 2001. In 2011 mortgage lending in Egypt was equivalent to less than half a per cent of gross domestic product (GDP), compared to say, for example, 13 per cent in Morocco. Since 2011 the overall size of the mortgage market in Egypt has hardly grown at all. This is in spite of the fact that a number of dedicated mortgage financing institutions were created in the 2005-2010 period and in spite of a government policy of supporting mortgage finance. The main constraints to expanding mortgage markets are the high rates of interest charged (currently 13.5 to 14.5 per cent annually by banks and mortgage companies), the very serious problem of registration of properties, complicated rules and bureaucracy, and a cultural aversion to taking out interest-bearing loans. However, the current Social Housing Program relies on mortgage-backed loans for its core housing products. Due to a recent decision by the Central Bank of Egypt, these loans carry a very highly subsidized interest rate.

As mentioned above, informal housing systems are currently producing over two-thirds of new housing units in urban Egypt. This colossal amount of housing is normally financed from liquid family capital. This means savings, pooling of resources among relatives (and remittances from relatives in the Gulf countries), informal loans, and conversion of other family assets such as land. Bank loans or other formal forms of finance are practically unknown. One of the great attractions of informal housing production is its progressiveness, which allows the owner to build when and as his personal finances permit. This makes building one floor or even room or concrete slab at a time very attractive.

Housing finance for the poor through micro-credit systems remains almost unknown in Egypt, although there are plans to promote it.

### Dynamics of Housing Markets

According to a representative household survey in 2008, of those moving into housing units in urban Egypt over the 2003-2008 period, the New Rent Law (a liberal contractual system reintroduced in 1996 following decades of rent control) was by far the most frequent form of tenure of the acquired unit at 35 per cent, followed by Ownership by Purchase on Market at 18 per cent. Together these represented 53 per cent of all moves, and these can all be considered "market" exchanges. Exchanges that can be considered non-market exchanges included Government Rent, Old Law Rents, Ownership by Construction, and Ownership by Inheritance, Gift, and In Kind Privilege. This is a surprisingly high incidence of unit transfers that do not take place on the open market, but rather through personal relations and

rewards, and this incidence is probably much higher in rural areas.

Although the New Rental law has been on the books only since 1996, New Law Rentals represented by far the largest tenure category of all market moves in urban areas in the 2003-2008 year period. Thus the New Rent form of market exchange became dominant in urban Egypt in a single decade and can be expected to become even more so.

Information on housing markets is obtained by households mainly through informal/casual means in 2008. The most common methods used to search for housing were consulting relatives and friends (60%), neighbours (16%) and co-workers (5%). Thus it can be concluded that the overwhelming majority of search methods depend on word of mouth. In other words, housing market information tends to be local, informal, and not dominated by the media or corporate intermediaries. In fact, only 3 per cent of the units exchanged over the 2003-2008 period in urban Egypt were found through newspapers and advertisements.

Over 27 per cent of all urban households enjoyed fixed rents under the Old Rent Law in 2008. This represents a significant portion of the housing stock effectively excluded from market exchanges and is inefficiently used, although this portion is decreasing slowly.

### Infrastructure for Housing

Virtually all infrastructure services in Egypt – water, wastewater, roads and bridges, parks and open spaces, electricity, and telephones – have until recently been provided exclusively by government agencies, and most of this provision is financed directly or indirectly from the budget of the central government. Of those infrastructure services that impose fees or user charges, only telephones and electricity services recover all operation and maintenance costs. Even with the recent trend towards privatization and greater roles for the private sector in Egypt, today the private sector's participation is severely limited to on-site infrastructure provision in up-market subdivisions and gated communities, mainly in the new towns. Public-private partnerships for urban infrastructure are almost unknown.

Central ministries and authorities plan and budget additions to system capacities and extensions to network coverage in order to keep up with demand. In most official urban areas, this has resulted in adequate to good system coverage. The following table exhibits the percentage of urban households connected to utilities in 2003 and 2012/2013:

## Infrastructure Provision in 2003 and 2012/2013

	2003		2012/2013	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Piped water	98.6	82.0	99.1	93.7
Public sewerage	84.6	21.7	91.5	25.8
Electricity from grid	99.7	97.8	100.0	99.3

Areas with deficient infrastructure coverage are mainly limited to peri-urban locations where new urban expansion is taking place and utility provision is lagging. However, the quality of infrastructure services is frequently poor, especially in locations where rising densities put heavy demands on older networks, in particular in mature informal settlements. Inadequate system performance is aggravated by the frequent problem of under-funding for operating costs, by poorly trained staff, and by very centralized administrations that find it difficult to adequately respond to local situations.

### The Construction Industry and Building Materials

Egypt has a well-developed construction industry, which represents about 4.6 per cent of national Gross Domestic Product and generates about 2.7 million job opportunities (some 11.4 per cent of the country's labour force). The country produces almost all of the basic building materials used in housing construction and even has export capacities.

Housing construction in Egypt is carried out almost exclusively by Egyptian contractors and Egyptian expertise and labour. There are an estimated 15,000 registered construction firms in the country, most of whom are small to medium sized and concentrate on smaller housing projects or act as sub-contractors in large projects. There are also an unknown but large number of informal builders and others self-employed in building trades, none of which are licensed. All formal construction contractors must be registered with the Egyptian Federation for Construction and Building Contractors. Each contractor is assigned a grade in its specialisation based on a number of set criteria (paid capital, turnover, experience, staff, etc.). In addition to construction firms, the industry is supported by a considerable number of engineering and architectural firms as well as firms that offer construction management services.

The main building materials used in housing construction in Egypt are (1) cement for reinforced concrete works, mortar, and some plasters, (2) steel, mainly for reinforcing bars, and (3) fired brick. These are used by

public and private sector suppliers of housing as well as by the huge informal housing sector. Egypt is largely self-sufficient in all three building materials, and there is some exportation of cement and steel. Both cement and steel production are capital-intensive and limited to a few large public and private sector firms. In contrast, fired brick production is mostly a labour-intensive industry carried out by thousands of small firms. All three building materials are heavy energy consumers, and, following recent steep increases of energy costs alongside interruptions of natural gas supplies, production has been compromised and prices have shot up.

Overall, the costs of basic materials are high and increasing at rates higher than general inflation. This is making the production of all types of housing units more and more expensive in Egypt, further complicating the already difficult housing affordability equation, particularly for lower-income families. Thus it would seem that efforts at developing alternative materials and at minimizing the use of expensive, energy-intensive materials in construction would be welcome. Unfortunately, currently there are few such initiatives.

### Information on the Housing Sector

In general, there is a huge lack of information about housing production and housing markets in Egypt. For example, there are no annual figures on housing units despite the fact that there are available annual data on the government-built housing units and the building permits issued. There is thus a pressing need for much improved housing information systems, both for the more efficient functioning of housing markets and for better informed housing policy decisions.

Even what information exists suffers from certain problems. One has to do with the unrealistic definition of urban areas (versus rural areas). Another has to do with the existence of a huge informal housing sector in Egypt, for which there are practically no coherent statistics or even accepted definitions.

### Capacity Needs Assessments

Construction skills in the formal construction industry are said to be good and evolving due to the relative

sophistication of the industry. Basic skills development takes place largely within firms, mainly through on-the-job training. Training and capacity building services are also offered by various building trades and professional associations, as well as through government vocational institutes and vocational secondary schools. It is understood that the traditional system of apprenticeship still operates in the small and informal builder sub-sector.

With MHUUC, there is a need to improve the capacities for monitoring and evaluating the housing sector, learning from past experience, and developing appropriate housing policies. This should be one of the roles of the new Social Housing Fund.

As pointed out above, the capacities of government and its private sector partners to develop and process information on the housing sector needs to be greatly improved. Only then will there be a basis for the development of relevant housing policies and their modification over time.

### Energy and Sustainability in Housing

Is Egypt beginning to face the challenge of energy efficiency and sustainability in the building industry? It appears that there are a number of recent initiatives that at least begin to tackle the problem and raise awareness, among them activities of institutes of the HBRC and of the Egypt Green Building Council (established in 2009). Regional and international agencies have also begun to support environmentally-friendly housing and community development in Egypt. Efforts have so far concentrated on developing green building codes and setting up demonstration projects. A major problem is the lack of enforcement of building codes in Egypt. And so far there are few efforts to develop alternative low-energy materials.

However, these initiatives will only address the energy equation as it relates to housing design and production. Another problem with energy relates to the location of housing and the dominant government promotion of low-density new towns in the desert. This means that energy consumption in transport and water conveyance to serve housing in these areas is great and will become even greater as more remote desert locations are developed for urban purposes. On the other hand, informal settlements around existing agglomerations and in peri-urban areas are much better located and are very compact. Thus ironically, the informal housing mode of production – although illegal and unplanned – scores high in terms of energy efficiency and sustainable urban development.

### Conclusion: Towards a National Housing Strategy

Egyptian families, including youth and newlyweds, are finding it increasingly hard to secure adequate housing. And this housing problem falls most alarmingly on the poor (households below the 30th percentile of household income distribution).

Until now all housing policies in Egypt have been preoccupied with the 'supply side,' that is in supporting the production of subsidized new units. Targeting deserving families is poor but improving. Yet there is currently a worrying trend in this supply side approach that increasingly focuses on the needs of the middle and even upper classes (above the 50th percentile of household income distribution.) And all government programs are based on the continued availability of costless remote desert land.

There have been virtually no successes in shifting housing support and subsidies to the 'demand side,' that is, to help the poorest limited families have the financial power to own or rent modest units, whatever and wherever they choose.

There is legislation that affects the whole housing sector but none of these laws have explicitly aimed to make housing more accessible or affordable to the poor or even the modest income household. In fact, most of this legislation had the effect of making housing more expensive and less accessible.

There is thus a need for a more comprehensive approach to the housing sector in Egypt, one that addresses the whole sector and one gives highest priority to ensuring that all citizens have access to affordable housing.

For this the development of a national housing strategy should be considered. To begin the process a number of issues need deliberation. These include:

- Issue 1: Vacancies in the housing stock
- Issue 2: Improving the efficiency and fluidity of rental markets
- Issue 3: Unsuitable and remote locations for government housing
- Issue 4: Subsidized housing for the middle classes
- Issue 5: Housing and social mixity
- Issue 6: Targeting housing subsidies to those who deserve them
- Issue 7: The feasibility of sites and services
- Issue 8: 'Demand-side' support for poor families
- Issue 9: Micro-credit for housing
- Issue 10: Informal housing
- Issue 11: Urban upgrading of informal areas
- Issue 12: Understanding and monitoring the housing sector

Issue 13: Need for a comprehensive national housing strategy

Issue 14: Need for better social housing design

Following on from this Housing Profile, UN-Habitat has been asked by the MHUUC to help develop a draft

National Housing Strategy, based on consultations and deliberations with a wide range of stakeholders, that can serve as the basis for the formulation of a national consensus strategy document.

# BRIEF INTRODUCTION TO THE COUNTRY AND ITS HOUSING

## 1.1 EGYPT'S HISTORY, GEOGRAPHY, DEMOGRAPHICS, AND ECONOMY

### Housing and history

Egypt is, in a sense, the mother of history, boasting some 5,300 years of continuous and mostly unified civilization. For our purposes though, it is enough to highlight the country's early attempts to provide improved housing for the masses.

Those seeking an understanding of ancient and medieval Egyptian history have a virtual mountain of material to turn to. However, those wishing to gain knowledge of domestic architecture and how it evolved over the centuries will be mostly disappointed. With rare exceptions (e.g. worker villages at Deir al-Medina and at Giza) there are no examples of popular housing extant from the Pharaonic or Christian eras, and examples of domestic architecture from the various Islamic periods are restricted to a handful of palaces and townhouses of the well-to-do.

It could be said that the history of modern housing in Egypt began with the introduction of European architectural styles and techniques that paralleled Mohamed Ali Pasha's and his heirs' efforts to modernize the country's army and administration in the Nineteenth Century. The first experimental housing designs, influenced by European architecture schools such the Bauhaus, began to be produced by Egyptian architects in the 1920s. In the 1940s Hassan Fathi began his well-known experiments in rural housing and village planning in Al Gurna and in the Kharga Oasis.



Figure 1.1 Mosque in model village of New Gurna, Luxor, designed by Hassan Fathi in 1947. Photo by D. Sims 2009.



Figure 1.2 Remains of some of the few original mud brick houses in New Gurna, 2009. Photo by D. Sims



The first attempts at social housing began with the design of the Madinat al-'Umal (Worker's City) in Embaba, a suburb of Cairo, in 1947. After the 1952 Revolution and under President Gamal Abd al-Nassir the government began to lean towards socialist examples of mass worker housing, and a number of social housing estates began to appear. The socialist and modernist approach to housing and urban design reached its greatest level with the launching of Madinat Nasr project in 1956, steered by the architect Sayed Karim. In fact, in 1958 it was called the "City of the Revolution" that sought to establish its legitimacy through building and development projects across the country. It could be said that this penchant for grand projects and State-led urban development has continued up to the present day, as evidenced by the new towns program, started under President Anwar El Sadat in the late 1970s, and, most recently, by plans for a huge new administrative capital east of Cairo, announced in March 2015.<sup>2</sup>

## Geography

It is impossible to talk of Egypt without stressing its unique geography. Today almost all of the country's population and main economic activities are concentrated along the Nile Valley, the Delta, and the Canal Zone, which together represent only some five to six per cent of its one million square kilometres total area. The rest is desert, which starts abruptly both to the east and west of the Valley. For its water resources, Egypt depends almost exclusively on the Nile, which helps explain such a geographic concentration. And this concentration of population and activities continues in spite of an overriding government spatial policy, in place since the late 1970s, to develop the desert to relieve the pressures of overcrowding in the Valley and to create new communities and to extend agriculture. This preoccupation with exploiting the vastness of the desert has coloured most recent policies towards urban development and housing.



**Figure 1.3**  
Map of Egypt

<sup>2</sup> For an excellent description of early housing and architectural development in Egypt, see Mercedes Volait, *Architectes et Architectures de l'Égypte Moderne 1850-1930; Genèse et essor d'une expertise locale*, Paris, Maisonneuve et Larose, 2005.

## Demographics

As of 15 February 2015 CAPMAS estimated the total resident population of Egypt at 88.02 million inhabitants.<sup>3</sup> At the time of the last Census in 2006, a total of 72.5 million persons were registered, implying an annual growth over the 1996–2006 period of 2.03% per annum,<sup>4</sup> which represents a substantial rate but below that of some other countries in the MENA region.<sup>5</sup> This rate of growth has slowed, especially from the peak in the 1950s and 1960s of 2.8% per year. Birth rates and total fertility rates also fell, and the results of the 2006 Census seemed to confirm that Egypt was finally on a transition towards lower population growth and an eventual stabilization (albeit with stubbornly high fertility in some areas, in particular rural Upper Egypt).

Although the latest UN population projections see a continued decline in fertility in Egypt and a slowing of population growth, with the “medium variant” assuming an annual growth of only 1.63% in 2015 and a population of 84.7 million,<sup>6</sup> these estimates seem considerably out of sync with those of CAPMAS (which are much higher, are based on annual vital statistics, and show for example that the crude birth rate rose from 27.3 births per 1,000 in 2008 to 31.9 births in 2012, a 17 per cent increase). That the trend towards lower fertility and reduced population growth has stalled seems to have been confirmed by the results of the 2014 Egypt Demographic and Health Survey, a respected representative sample survey that is carried out periodically. This Survey showed that the national total fertility rate (TFR) increased significantly from 3.0 in 2008 to 3.5 in 2014, and that increases were observed in all geographic areas and female age groups.<sup>7</sup> To many observers, this is a worrying development that may herald in a reversal of demographic trends in the country. In fact, one commentator was calling this trend reversal a kind of demographic “national suicide.”<sup>8</sup>

According to a March 2015 press report citing UNFPA and the Egyptian Ministry of Health, the national annual population rate of increase rose to 2.6% in 2014.<sup>9</sup> If this is true, then this would confirm that Egypt’s demographic trends are extremely worrisome.

What is certain is that – even if overall fertility will again stabilize – the momentum of higher birth rates

from earlier decades will continue to work through the population pyramid, producing a large portion of females of childbearing age,<sup>10</sup> which will in turn contribute to higher numbers of live births. The implications of this, in terms of the ‘youth bulge,’ new entrants into the workforce, and future family formation are taken up in Chapter 5.

## Economy

From the 1952 Revolution until the mid-1970s the economy of Egypt was highly centralized with prominent publicly-owned industries and a large agricultural sector dominated by smallholders following land reforms. Under Sadat’s *infitah* (open door) policy that started in 1974 foreign and domestic investments began to appear, and Egyptian workers were allowed to travel abroad. This latter measure ushered in large and ever increasing flow of external remittances that, it will be seen, has helped finance an explosive growth of formal and especially informal housing. In the 1990s, a series of structural adjustment reforms, coupled with massive external debt relief, helped Egypt improve its macroeconomic performance. In the 2000s, further fiscal, monetary, taxation, privatization and business-friendly policies helped Egypt move towards a market-oriented economy and stimulated increased foreign investment. Annual growth of GDP averaged 6 to 8% results between 2004 and 2010, but the government failed to equitably share the wealth and the benefits of growth and to improve economic conditions for the broader population. After the 2011 Revolution Egypt’s foreign exchange reserves fell dramatically, its balance of payments deteriorated, the budget deficit swelled, factories closed, and unemployment increased. In 2012 and again in 2013 Standard & Poor’s rating agency lowered Egypt’s credit rating. Egypt’s GDP growth fell to less than 2% in the 2012–2013 period.

In 2014 inflation rose to around 11 per cent annually, partly due to fuel and electricity price hikes, and it is expected to average 12 to 13 per cent in 2015, and partly due to the progressive devaluation of the Egyptian pound. Even so, some commentators see signs of a modest economic recovery, with foreign investments returning and with GDP growth in 2015 rising to above 3 per cent. And the budget deficit is expected to decline to 10.5 per cent of Gross Domestic Product (GDP) in

3 CAPMAS website ([www.capmas.gov.eg](http://www.capmas.gov.eg)) accessed 15 February 2015

4 CAPMAS, 2006. The 72.5 million refers to the population resident in Egypt. CAPMAS estimates that there were an additional 3 million Egyptians resident abroad in 2006.

5 It is interesting to note that average annual population natural increase rates of the Arab Maghrib countries clusters around 1.5%, whereas those for the Arab Mashraq cluster around 2.8%.

6 Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2012 Revision*, <http://esa.un.org/unpd/wpp/index.htm>

7 Ministry of Health and Population, *Egypt Demographic and Health Survey 2014, Main Findings*, El-Zanaty and Associates, Cairo, Egypt, the DHS Program ICF International, Rockville, Maryland USA

8 Magued Osman, “Rapid Population Growth Imperils Egypt,” 16 December 2013, *The Cairo Review of Global Affairs*, <http://www.aucegypt.edu/gapp/cairoreview/pages/articleDetails.aspx?aid=484>

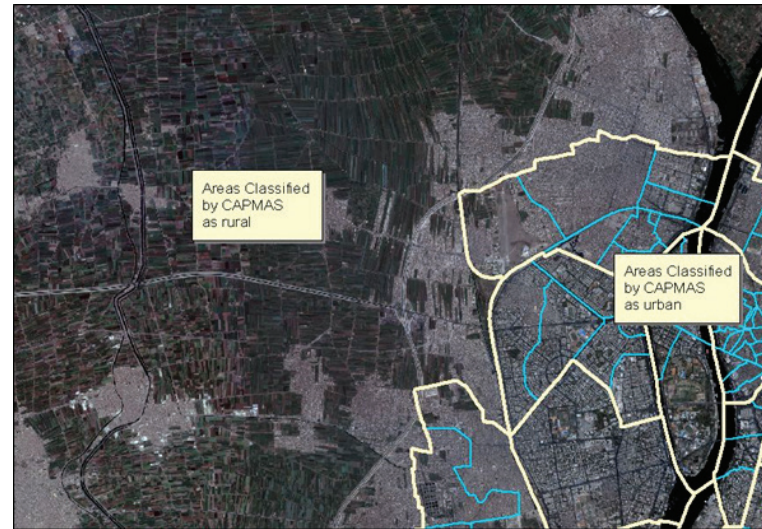
9 Daily News Egypt, Thursday 19 March 2014, p. 3.

10 The share of reproductive-age women (age 15–49) was 23.1% of the total population in 1986 and increased to 25.7% in 1996. This number is expected to rise to 26.5% of the total by 2025. (Khalifa, 2000)

FY15, compared to 12.8 per cent in FY14 and 13.7 per cent in FY13.

## 1.2 Urbanization and current urban issues

Official figures report that in 2006 a total of 42.6% of Egypt's population was urban, residing in 214 urban places. As Table 1.1 shows, this percentage grew slowly but steadily until 1976-1986, declined slightly over the 1986 – 1996 period, and remained virtually unchanged over the 1996 – 2006 period. Can it be that Egypt is the only developing country where urbanization rates have recently been declining or remaining constant? The answer is no, and such an aberration points directly at the problem of the definition of urban areas in Egypt. The Census records urban and rural populations according to an arbitrary administrative definition of what is an urban place. (see Box 1.1) As Denis and Bayat have documented in 2000, such administrative definitions have led to a gross underestimation of urbanization, one which is progressively more and more out of touch with reality.<sup>11</sup>



**Figure 1.4**  
1996 Census classification of urban and rural zones of Giza, Greater Cairo, showing urban overspill. Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 9.

Table 1.1: Egypt Urban and Rural Populations 1947-2006 (in thousands)

Year	Urban	Rural	% Urban	% Rural
1947	6,363	12,604	34%	66%
1960	9,965	16,12	38%	62%
1966	12,033	18,043	40%	60%
1976	16,036	20,59	44%	56%
1986	21,216	27,038	44%	56%
1996	25,286	34,027	42.6%	57.4%
2006	30950	41631	42.6%	57.4%

Source: CAPMAS Census various years; [www.capmas.gov.eg](http://www.capmas.gov.eg)

### Box 1.1: The official definition of urban places in Egypt

The official Census definition of urban areas in Egypt is purely administrative and thus is problematic. Urban areas considered to be either:

- (1) urban governorates – limited to Cairo, Port Said, Suez and, until recently, Alexandria;
- (2) agglomerations which have been declared “cities” and have a city council, or
- (3) the capitals of rural districts (marakaz) and

capitals of rural governorates.

This definition has no relation to the size of the agglomeration's population or its importance as an urban area. As a result, the urban population of Egypt has been located largely in the same geographic space for decades. The redrawing and reclassifying of Census areas by CAPMAS are rarely carried out, and the Ministry of Local Development is less likely to decree new urban areas for administrative purposes.

11 Bayat, A., and Denis, E. (2000). “Who is Afraid of Ashwaiyyat?” in *Environment and Urbanization*, Vol. 12, #2, October 2000, pp. 185-199.

### 1.3 Poverty, standards of living, and unemployment

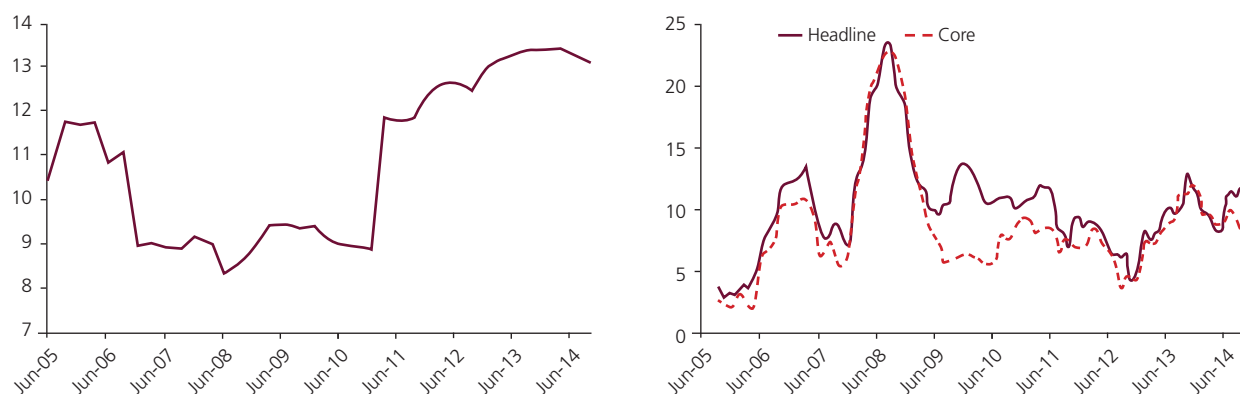
CAPMAS reports that according to the results of the latest Household Income and Expenditure and Consumption Survey (HIECS) for 2012/13, that the average annual household income in urban areas was EGP 30,135 and EGP 22,748 in rural areas, with a national average of EGP 26,250 (USD 3,450). The national average was only very slightly lower in 2008/2009 at EGP 25,082 (using constant 2010/2011 prices). The same source estimated that those living below the standard nutritional poverty line was 26.3% in 2012/13, significantly up from 19.6% in 2004/2005. (For those living below the extreme poverty line, the rate also increased over the same period from 3.6% to 4.4%.) The geographical incidence of poverty in 2012/2013 was as follows:<sup>12</sup>

Rural Upper Egypt	49.4%
Urban Upper Egypt	26.7%
Rural Lower Egypt	17.4%
Urban Lower Egypt	11.7%
Urban governorates	15.7%

Thus while urban areas exhibited less incidence of poverty than rural areas, there were still very significant numbers of urban poor. And one must remember that peri-urban areas, where population growth is the greatest and urbanization is rampant, are classified as rural.

In terms of food security, it should be noted that an estimated 13.7 million Egyptians or 17 per cent of the population suffered from food insecurity in 2011, compared to 14 per cent in 2009, according to the report by UN World Food Programme and the Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS). The same report indicated that in 2011, 48.9 per cent of Egyptians were below the Upper Poverty Line, up from 40.5 per cent in 2005. This basically means that in 2011 almost half of Egypt's population was counted as poor or near poor.<sup>13</sup>

**Figure 1.5:**  
Unemployment and Inflation in Egypt (2005 - 2014)



Sources: Central Bank of Egypt and IMF (courtesy of Chad Leechor, World Bank)

Overall employment conditions have been deteriorating in Egypt since at least 2011, with more job market entrants drifting towards informal and subsistence jobs and others dropping out of the labour force. The unemployment rate as calculated by CAPMAS stabilized at 13.3 per cent in 2013/14 yet it remains elevated compared to 9 per cent recorded in 2010. Out of the 3.7 million unemployed persons in 2014, some 70 per cent are between 15 and 29 years old, making youth unemployment probably the main challenge for economic inclusion and stability.<sup>14</sup> And it should be

added that official unemployment figures are considered by many observers to be unrealistically low and they do not reflect the considerable under-employment throughout the country.

### 1.4 Government and governance

The Egyptian government is unitary and very centralized, with most fiscal and executive controls located at the central level, either in ministries or economic authorities. There is a second level represented by 27 governorates, each of which is headed by a governor appointed by

12 All figures in this paragraph come from CAPMAS, "Important Indicators, Income, Expenditures, and Consumption Survey for Year 2012/13, November 2013 (in Arabic.)"

13 UN News Centre, "Hunger, poverty rates in Egypt up sharply over past three years – UN report," <http://www.un.org/apps/news/story.asp?NewsID=44961#.VOXtL8Zw3LU>

14 World Bank, Arab Republic of Egypt, Inclusive Housing Finance Program Program-For-Results Information Document (PID) Concept Stage, 8 August, 2014.



## 1.5 Housing as an economic sector and economic stimulus

Housing is rarely listed as a separate economic sector in national accounts, and is generally subsumed as part of the economic activity called “construction” and also “real estate,” although there are backward linkages to manufacturing, particularly to building materials like steel, cement, and brick, and to finishing materials. CAPMAS listed “construction” at 5.1 per cent of GDP at factor cost in 2010/2013 and “real estate (property)” at 2.8 per cent.<sup>15</sup> These contributions to GDP have not appreciably changed over the 2009 – 2013 period. However, looking at the weight of employment in “housing and construction” in public sector firms, we find that it represented 25.5 per cent of total employment in 2013 and has growing rapidly since 2010 when it represented only 21 per cent of the public sector labour force.<sup>16</sup>

There is considerable debate about the stimulating effect of a dynamic housing and real estate sector on employment and the wider economy. Some observers would say that housing is primarily an end consumer good without much in the way of multipliers and one whose employment generation is mainly temporary. On the other hand, those with stakes in real estate never miss the opportunity to extol the stimulating aspects of housing and construction on the economy. And the Egyptian government currently puts great hope in investments in the country’s real estate sector as the engine for stimulating rapid economic growth, as evidenced by pronouncements made at the March 2015 Egypt Economic Investment Conference in Sharm El Sheikh.

15 CAPMAS Statistical Year Book, September 2014, Table 19-8.

16 CAPMAS Statistical Yearbook, September 2014, Table 4-7.

# REVIEW OF HOUSING POLICIES AND THE UNDERPINNING LEGAL AND INSTITUTIONAL FRAMEWORKS

## 2.1 INTRODUCTION

This chapter reviews both explicit and implicit housing policies in Egypt and how they have evolved over the last sixty years. The aim is to provide a rapid overview of what housing strategies and programs have been adopted up to the time of writing (May 2015), in order to give the reader an understanding of how the government looks at the sector and where it has put the most emphasis. This will provide a context for subsequent chapters that assess various aspects of Egypt's housing sector, and will also set the stage for considering new strategy formulations.

Review carried out in this chapter touches on most of the subjects found in subsequent chapters, where much more detail is presented.

It is important from the outset to mention that, as far as is known, at no time has the government issued an official housing policy statement or act. There is no lack of housing related institutions, including the Ministry of Housing, Utilities, and Urban Communities (MHUUC) and its associated agencies, and no lack of statements about specific government housing programs. But as a sector as a whole, housing has been largely ignored in terms of overarching policy declarations. A draft Egypt housing policies and strategies document was prepared by MHUUC in 2012 and 2013.<sup>17</sup> This document, although so far not well circulated or discussed, represents a very important effort that could serve as the basis for

deliberations on a national housing strategy for Egypt. (See also Section 2.6.5 below.)

The 2014 Amended Constitution of Egypt refers to the right to housing in Article 78:<sup>18</sup>

*The State shall ensure the citizens' right to adequate, safe and healthy housing, which preserves human dignity and realizes social justice.*

*The State shall devise a national housing plan, which upholds the environmental particularity and ensures the contribution of personal and collaborative initiatives in its implementation, and the regulation of the use of State land and their provision with basic utilities within the framework of a comprehensive physical planning of cities and villages and a population distribution strategy, and in a manner serving the public interest, improving the quality of life for citizens and safeguarding the rights of future generations.*

*The State shall also devise a comprehensive national plan to address the problem of informal settlements, which includes re-planning, provision of infrastructure and utilities, and improvement of the quality of life and public health. In addition, the State shall guarantee the provision of resources necessary for implementing such plan within a specified period of time.*

<sup>17</sup> Housing Sector, MHUUC, "Draft Document towards Strategies and Policies for Housing in Egypt." (al-wathiqa al-marga'ia l-istratagiat wa siyasat al-iskan fi masr), April 2013.

<sup>18</sup> Retrieved from the State Information Service <http://www.sis.gov.eg/Newvr/Dustor-en001.pdf>. It should be added that Article 80 also provides that every child is to have a right to safe shelter, and Article 27 also provides for an economic system that is to improve the standards of living of the citizens of Egypt."

## 2.2 EGYPT'S SUPPLY-SIDE HOUSING POLICIES AS THEY EVOLVED UP TO 2011

In past decades and up to 2011 the government's approach to housing was dominated by one single feature – the production by the State of new housing units, most of which were ostensibly for those families of limited income.<sup>19</sup> It is this approach that has pre-occupied national and local State agencies dealing with housing, has claimed virtually all of State budgetary allocations to the sector, and takes priority for access to public lands. However, it must be recognized that there have been a number of laws issued that attempt to regulate the wider private housing sector. These together can be considered expressions of an implicit housing policy, and they are briefly addressed at the end of this section.

### 2.2.1 Government public housing 1952-1981

Government-provided, subsidized public and cooperative housing in Egypt has a long history, starting in the early 1950s. Various government-financed and government-implemented housing programs were ostensibly aimed at lower-income households, and the main types were small apartments in walk-up housing blocks. The serviced land upon which this housing has been built was, without exception, State-owned land provided at no cost, increasingly in remote desert locations. Thus in addition to subsidies inherent in low rents or low instalment payments, land and its associated infrastructure was also heavily subsidized.

Over the period 1952–1982, a total of 1.1 million units of government housing were built throughout the country, at an average rate of 37,790 units per year (not counting military and police housing). In 1981 the prevailing subsidized rental system was changed to one of *tamlik*, under which beneficiaries paid very low monthly instalments and, after 30 or 40 years, would become owners of their units.

### 2.2.2 Government housing production 1982-2011

Over the 1982–2005 period, production totalled 1.26 million units, with an average annual production of 54,700 units. These government programs were under different authorities (mainly governorates, the housing cooperative authority, and the new town agencies), but the housing models and payment conditions remained remarkably similar. Although theoretically government housing was aimed at households with limited income, as far as is known there were no attempts to target beneficiaries based on income or wealth thresholds or means tests. In fact, in most government housing programs the required qualifications were of the most

rudimentary, with available units being distributed by lottery if demand exceeded supply in a particular governorate or new town. State subsidies in housing production were large. For the typical Mubarak Youth housing unit (1997-2002), at least 68 per cent of every pound directly invested by the State was never recovered. And the true subsidy element is much higher, since calculations assume perfect repayment, no cost overruns, rapid construction and timely allocation.

Since land for government housing must be costless State land, the result is that almost all government housing was located either in the new towns or on local government desert lands which were for the most part are far from existing urban agglomerations. This made it difficult for beneficiaries, especially those of limited income, to pursue normal livelihoods. It is no wonder that in more recent government housing programs vacancy rates exceed 50 per cent.

Given the high subsidy element in past government programs, both the down payments and instalment payments could be considered affordable by at least 75 per cent of urban households. But were lower income households the main beneficiaries of government housing programs? It is extremely difficult to answer this question because the targeting/assignment system is depended on an 'application regime' that was executed partly on a lottery basis, and partly rationed by the small size of the unit and unattractiveness of certain locations. In any event, resell of units was very common although forbidden, making acquisition of a government unit a potential speculative monetary windfall more than anything else.

In 2005 the government of Egypt launched an initiative called the National Housing Program (NHP) which aimed to construct 500,000 subsidized housing units over six years spread throughout the country, a level of production never achieved before. The program coincided with Hosni Mubarak's new presidential term and in fact was referred to by many as "the president's promise" (*wa'ad al-ra'is*). The main features of this program, which represented some improvements from past practices, were:

- Engaging the private sector in the construction and marketing of some units
- Introducing new housing models, particularly systems for housing sites and services
- Replacing the old unclear financial subsidy mechanisms with a straightforward up-front cash subsidy for each unit. The remaining financing

<sup>19</sup> In Arabic *mahdudi al-dakhil*, but never defined. As recently as 2011, to qualify for the National Housing Program a family's salaried income must not have exceeded EGP 2,500 a month, which implies that in 2014/15 at least 70 per cent of urban families would fall into the category of 'limited income.'



comes from beneficiary down payments and mortgage loans made under Law 148 of 2001 and the institutions created under this law.

- Introducing more choice in equity down payments by beneficiaries to better fit household finances
- Re-introducing heavily subsidized rental tenure into the product mix, mainly for resettlement cases
- Improving financial management of housing projects through greater involvement of banks and mortgage institutions

The production targets of the NHP were eventually met, but only three years after 2011. The program was being implemented through seven schemes, among which three schemes – Ibni BeitaK sites and services plots, home ownership, and private developers – were considered the most important. Unfortunately, as of mid-2014 very few of the NHP units were actually lived in, and there were still some NHP units that were still unfinished or undelivered. It should be mentioned that such a preoccupation with achieving quantitative production targets was a common feature of the Mubarak regime, and any actual assessment of impacts and lessons-learned was practically never carried out.

Criteria for selecting beneficiaries under the program were only the most rudimentary. Applicants had to furnish documentary proof that his/her salaried income did not exceed EGP 1,750 per month if single and EGP 2,500 for a married couple.<sup>20</sup> In addition, the applicant (and the members of his nuclear family) must not already have acquired a housing unit or land from the government anywhere in Egypt, and he/she must sign a declaration to this effect.

The housing units produced by the NHP (except for the very limited number of rentals) were less affordable over older programs, especially for households who were equity-poor and whose incomes were not buoyant. In addition, the NHP continued many of the drawbacks of previous supply-side subsidized housing systems. The most serious of these were:

- Locations of new housing at sites that were remote and unattractive to limited-income families.
- High and rising infrastructure costs which were not accounted for in calculations and represented an additional burden on the State budget.
- Persistent cost over-runs and delays in housing production, which further compromised the NHP's financial viability and added to the subsidy burden.
- No explicit attempt for internal cross-subsidization to reduce overall costs of housing estates.

- No attempt at specifically targeting the poor and needy was used, with units distributed randomly by luck and rationed by unattractiveness.
- The phenomenon of unoccupied and vacant units would probably exceed the already embarrassing rates of previous programs. However, no government assessments of vacancies in completed units were undertaken.

### 2.2.3 Sites and services programs as part of housing policies

Up until the launching of the Ibni BeitaK program in 2006-07, successive Egyptian governments had largely ignored sites and services schemes (the provision of small, serviced land parcels for beneficiaries to self-build) to harness the dynamics of informal housing processes, in spite of their popularity in many other countries and in spite of donor-backed demonstration sites and services schemes in Egypt itself. The largest, most visible and most successful sites and services projects in Egypt were launched in Ismailia in 1978 and 1979 by the Governorate of Ismailia. Although these Ismailia projects became well known within Egyptian professional circles and abroad, such an approach was not followed to any significant scale elsewhere in Egypt. And in spite of considerable project preparation efforts made by the World Bank to launch a large sites and services programme under Cairo and Giza governorates in Greater Cairo in 1984-85, these never saw the light of day. In effect, the concept of self-build, whether with or without core units, was not part of the government's housing vocabulary, even though this form of housing provision was much less costly than the predominant social housing mode, could be set up on extensive and costless publicly-owned lands, and was extremely popular.

Given this history, it was somewhat surprising that in 2006-07 the Ministry of Housing suddenly decided to include the Ibni BeitaK program in the NHP, and on a massive scale. Over 95,000 plots were created in new towns throughout Egypt. The parameters of Ibni BeitaK were invariable: plots of 150 m<sup>2</sup>, buildable on 75 m<sup>2</sup>, maximum (eventual) height of G+2, and setbacks. An upfront construction grant was offered and serviced land was heavily subsidized.

The Ibni BeitaK program soon began to run into problems, mainly to do with poor and remote locations in new towns, to the inability of infrastructure to keep up with the pell-mell pace of land allocation and construction, to inflexible and complicated bureaucrat procedures (and accompanying graft), extremely slow build-out and occupation, and widespread theft. The

20 The ceiling for monthly incomes until 2008 had been EGP 1,000 for singles and EGP 1,500 for married couples.

Ibni Beitaq program is now considered by housing officials as a big failure, not to be repeated.

The new Social Housing program aims at over 20,000 plots from 206 m<sup>2</sup> to 260 m<sup>2</sup> in new towns, with each aimed at group development by up to four families. Thus location- and infrastructure-wise it will suffer from the same problems as Ibni Beitaq. The specifications and standards imply higher-end middle class housing, including with off-street parking, but credit for construction will be heavily subsidized. It remains to be seen if this scheme will succeed, but in any event it is hardly a sites and services project that even pretends to address the housing needs of the those of limited income.

### 2.3 IMPLICIT HOUSING POLICIES REFLECTED IN LEGISLATION BEFORE 2011

As mentioned above, there was nothing in Egypt that could be called a national housing act or document that specifically aimed at regulating the housing sector. The social housing programs, including the 2005-2011 NHP, had been based on Presidential or Prime Ministerial Decrees and had been incorporated in State budget planning. However, there are a number of laws and associated regulations that have had some impact on the wider urban housing sector in Egypt and together can be considered an implicit expression of housing policies, and these are briefly listed here. It is important to note that this legislation applied to all urban housing and property and was not intended – either explicitly or implicitly – to promote the production of affordable housing or to help low-income families find housing solutions. That, as we have seen, was exclusively the role of the various government public housing systems.

(1) *The New Urban Communities Law (Law 59 of 1979)*, which created the New Urban Communities Authority (NUCA) under the Ministry of Housing and gave it extensive powers to develop State lands and generate revenues from this development. These powers meant that NUCA was able to create urban areas in ways that neither governorates nor even other ministries could. It also gave NUCA the authority over all aspects of development in the new towns, including a direct role in housing provision, where over the years a very substantial amount of social housing (over 50 per cent) has been located. Not only do the new towns created over decades under this legislation underpin national urban spatial planning policy, they also imply that new housing estates should be of very high modern standards, with low densities, spacious landscaping, and none of the informal economy that dominates existing cities.

(2) *New Rent Law (No. 4 of 1996)*; For rental contracts made after this date, a new system of term-limited, contractual rents was established. This greatly improved rental markets, allowing the landlord and tenant to come to voluntary contractual agreements that set the rent, the period of validity, and also allowed for special conditions. Long overdue, it replaced the previous rental control regime. The affects and popularity of this new form of rental relations between landlord and tenant have been considerable, although some landlords remain hesitant to use it. In 2002 a Presidential Decree was issued which modified some aspects of the Old Rent Law, such as limiting inheritance of fixed rent contracts to one generation.

(3) *The Mortgage Law (No. 148 of 2001)* introduced, for the first time in Egypt, a system of property loans from banks and mortgage finance companies in which collateral for the loan was the property itself. The law and subsequent bylaws allowed for foreclosure of the loan and repossession of the property for delinquent payment, enforceable through civil courts. Basically, it is similar to enabling legislation for mortgage lending as found in most countries, and it reflects the neo-liberal policies of the government during the 2000s. Due to a number of structural problems, until 2014 the volume of housing financed under this law was restricted to a few thousand new upscale housing units as well as some units of the NHP. (For a further discussion of housing mortgages in Egypt, see Chapter 8.)

(4) *Property Tax Law (no. 196 of 2008)*, which replaced the inefficient 'awayid building tax, had been under preparation by the Ministry of Finance for years. It was finally approved by Parliament in 2008. Even so, by 2011 its executive regulations were still being modified, and considerable confusion remained both as to applicable rates, coverage, and implementation procedures. Populist calls for exceptions were many, and eventually properties with a market value of EGP 500,000 or less were considered exempt, which meant that exemption covered over 90 per cent of urban residential units. The main logic of this legislation was to uncover a new and buoyant source of government revenues, but it also was to discourage the holding housing in a vacant state. It remains unclear whether it should be applied to vacant and unfinished units, and the law specifically does not cover vacant urban land. Thus what is probably the greatest arena for pure property speculation – that on land – can continue happily, since there are no recurrent costs associated with holding such land parcels.

(5) *The Unified Building Code of 2008* (Law no. 119 of 2008 and its executive regulations of April 2009) became the core legislation for both urban development and housing construction, having incorporated previous legislation. Although the law allowed more local control of planning and allowed more flexible and realistic standards for subdivision and building in popular areas, some clauses in the law are being revised in order to overcome some of the complications in the procedures of detailed planning and building regulations. In addition, the law extended the building permit regime to rural areas, including the newly constructed urban-like buildings taking into consideration the standards and requirements that fits the rural building character. At the same time the law introduced a number of new aspects related to urban planning and land development, and these are discussed in Chapter 9.

(6) *Attempts at tackling the dysfunctional property registration and titling systems*; Under legislation in 1946 and 1964 a deed and object based property registration system was set up. However this system was never articulated well in urban areas and over the years became increasingly dysfunctional, to the extent that perhaps 90 per cent of properties have either never been registered or have fallen out of registration. Starting in 2005 a number of efforts, partly supported by international donors, have been made to rectify this situation, mainly to support the nascent mortgage system, but these efforts have had only a very small effect.

## 2.4 POLICIES TOWARDS INFORMAL HOUSING

Egypt has a very large and dynamic informal housing sector that represents two-thirds of urban housing production (See Chapter 4). Informal housing first became widespread in the 1960s and 1970s, mainly on the peri-urban and desert fringes of the main cities. This huge portion of national housing production has been and continues to be unrecognized and largely untouched by current government housing policies – except negatively in that it is illegal and proscribed, even though this huge subsector supplies both the majority of new housing and the vast majority of housing affordable to limited income groups.

Since the 1970s there have been a cascade of laws and regulations issued to prohibit and penalize informal construction, both that which contravenes building and subdivision rules and that which is constructed on agricultural land. Policing and enforcement of these

regulations fell upon weak and corrupt-prone local authorities, with the result that they were only effective in preventing the wholesale conversion of private agricultural land, forcing a kind of clandestine creep of informal settlements. After the 2011 Revolution, all attempts a control evaporated, and as a consequence informal construction, both horizontal and vertical, has exploded.

While there has been a total reluctance by government to try to make informal housing systems and markets function more efficiently and to be more responsive to demand by those in most need of housing, there have been a number of efforts to improve and upgrade informal areas. A small national informal housing fund ran from 1992-2005, concentrating on infrastructure improvements. Also, starting in the late 1980s there were massive and systemic improvements in water and wastewater systems in Greater Cairo and other urban agglomeration, and informal areas benefited as well as other urban quarters. And there have also been area-specific integrated upgrading efforts in Greater Cairo and some other cities, funded mainly by international donors. Even with all of these efforts, the vast scale of informal areas and their incessant expansion means that urban upgrading needs are greater than ever.

In 2008, a rockslide in Duweika, an informal area of Cairo, resulted in considerable loss of life and this event stimulated the creation of the Informal Settlements Development Fund (ISDF), and this agency has inventoried all unsafe areas in Egyptian cities and is undertaking reconstruction and, when necessary, resettlement. The sum of all these unsafe areas only house some one per cent of Egypt's urban population, but to many these interventions are somehow “solving” the problems of Egypt's ‘ashwai’at (informal or unplanned areas).

In 2014 a Ministry of State for Urban Development and Informal Settlements (MURIS) was created that incorporated ISDF. The focus and funding of this ministry is still under formulation, but it indicates that the government realizes belatedly that informal areas represent a serious challenge.

## 2.5 ABSENCE OF EFFECTIVE POLICIES TO DEAL WITH THE SECTOR AS A WHOLE

It should be clear that up until 2011 affordable housing policy in Egypt was effectively restricted to government

social housing programs. And the stark fact is that they, even if production targets were met and only the intended low income households benefit (very doubtful), these programs could only reach between 15 and 25 per cent of annual urban housing needs for the lower income strata. Moreover, the past programs have been largely a supply-side approach, aimed at increasing the production of new housing units either in the new towns or in governorates, always on State land and, increasingly, in remote desert locations poorly integrated with existing urban agglomerations. And as is shown in Chapter 8, there has been virtually no success in shifting housing support and subsidies to the demand side, that is, to help limited income families have the financial power to own or rent modest units, whatever and wherever they choose.

Other housing policies are implicit in legislation which has affected the whole housing sector, as pointed out above, but none of these laws tried to make housing more accessible or affordable to the poor or even the average income household. In fact, most of this legislation had the effect of making housing more expensive and less accessible.

Such an unbalanced and restrictive ‘supply side’ approach by government towards the urban housing problem has been recognized in the last few years by both Egyptian and foreign housing specialists. They have posed the question, how might interventions be devised that would influence the existing market to remove or reduce current distortions and to stimulate more affordable housing solutions? Over the period 2006 to 2008 policy studies were carried out for the ministries of housing and investment under the sponsorship of USAID and the World Bank, and these were presented to the government in 2007 and 2008.<sup>21</sup> Some of these proposals included recommendations for improving the supply-side NHP itself, but the proposals also tabled a wide number of measures which could be relatively easily adopted, to begin to make Egypt’s huge existing housing markets more efficient and more responsive to those most in need. Some of these proposals were purely regulatory, procedural, and institutional. Others tried to apply small government subsidies to improve affordability, especially to stimulate the demand side. Proposals focused on a number of housing issues, including:

- Unlocking some of the huge stock of vacant housing by providing incentives and guarantees to owners of vacant units encourage them to market such units, including small loans for finishing units

- Creating more efficient rental markets by strengthening regulations for fair and transparent dealings between landlord and tenant and accelerating the dismantling of the old system of fixed-rents-in-perpetuity.
- Enhancing affordability of housing options by including informal housing units as qualifying for finance and for subsidies in certain cases
- Improving the targeting of public subsidies to ensure that they are provided to (1) the lowest income households who require them to obtain adequate shelter and (2) specific market segments to assist in clearing well-defined market blockages.
- Grandfathering fixed rental contracts

Unfortunately, at the time these proposals fell on deaf ears. The government in 2008 seemed preoccupied in completing the production targets of the first NHP. Reforms and improvements within these programs were being considered, but stepping outside the NHP envelope was perceived as either legally too difficult or politically unacceptable. None of these 2006-2008 proposals have stimulated any interest up until recently, as we shall see.

## 2.6 HOUSING POLICIES IN POST-2011 EGYPT: THE SOCIAL HOUSING PROGRAM AND OTHER SUPPLY-SIDE INITIATIVES

Since the January 2011 Revolution little has changed in Egypt in terms of housing policies, and preoccupation with a single path – that of government financed and built “affordable” housing – continues. There have been only the smallest attempts to address housing affordability and pro-poor housing issues in the wider housing stock. More than ever, most housing in urban Egypt (and practically all suitable affordable housing) is being produced out-of-sight by the informal sector. On the other hand, successive post-revolutionary governments have pushed ahead with more supply-side housing programs, including those for the middle classes, as we describe in the following paragraphs.

### 2.6.1 The Social Housing Programme (SHP)

In April 2011, only two months after the fall of Mubarak, the Minister of Planning and International Cooperation prepared a proposal for a “National Social Housing Program”. This new program called for building a colossal amount of low-cost housing – some one million units in five years, i.e. a level of annual production more than twice that of the 2005-2011 NHP targets, and four

<sup>21</sup> The two main documents were: World Bank and USAID/TAPRII, “A Framework for Housing Policy Reform in Egypt: Developing a Well Functioning Housing System and Strengthening the National Housing Program,” draft 20 May, 2008, and World Bank, “Arab Republic of Egypt: Next Step Recommendations for Affordable Housing Policy and the National Housing Program,” 2 June 2008.

times the average national annual production in the 1982-2005 period. The Ministry of Housing, the new Social Housing Fund, the Housing Development Bank, and NUCA would be the implementing agencies, and housing projects would be in the new towns as well as in governorates.

Although slow to start, the new Social Housing Program (SHP) has remained a very visible government priority. The SHP began in earnest in 2013, replaces all earlier programs, and it appears to represent the future path for organizing and financing all subsidized social housing in Egypt that is aimed at families of limited income. So far, however, production levels have remained only a small fraction of the targets.

The SHP is administered by MHUUC. On the supply side, initial funding for the construction of units is coming from central budget allocations and also from the Government of the United Arab Emirates. Public land for SFP housing is being provided by NUCA and the governorates at no cost, as is the on and off site infrastructure needed to service these lands.

It is planned that future funding for housing construction under the SFP will come from the new Social Housing Fund (SHF), created under Law 19 of 2014 on May 2, 2014. According to this law, the SHF will have a number of earmarked sources of funding. The targeting and selection of beneficiaries as well as marketing of units for ownership under the SHP is the task of the Guarantee and Subsidy Fund (GSF) and the Housing and Development Bank (HDB). In this aspect of targeting, it appears that considerable improvements over the NHP are being introduced. The extensive use of the media is helping to make citizens aware of the program. Applications are being closely vetted to assure there is no cheating and that only families with incomes within the approved ranges are accepted. Also welcome is much better management of the assignment of units. Only finished units are assigned, waiting periods are being drastically reduced, and applicants can choose among any qualifying units.

However, problems with the design of the SHP remain. Since all loans to beneficiaries are mortgage-backed, practically the only qualifying, low-priced units are those being built by the program itself in remote locations in the new towns or on governorate desert lands. These are deemed capable of being registered, a requirement of the Mortgage Law. Thus, even though it is claimed that the SHP subsidies fall on the demand side and give the beneficiary freedom to choose units, in reality the program repeats the supply side behavior which resulted

in some violations despite the fact that were lawful regulations to ensure the subsidized units reach their targeted beneficiaries who have a real need for subsidized housing. Other problems associated with the mortgage program include the requirement for qualifying families to have certified income within the specified range. This in effect excludes a huge number of income earners who are self-employed or work in the informal economy despite the fact that there is a way to evaluate the income of self-employed. Although the program provides units that are very affordable (down to the 20th household income percentile) as shown in Chapter 6, however this type is unclear.

The SHP is also intended to promote a very cheap rental programme, where 6,000 rental units were made available in the market to measure the demand on those units. This underscores how the SHP still has a lot to accomplish and that is very much a work in progress.

### 2.6.2 Recent supply-side housing initiatives aimed at the middle classes

At the same time that the SHP is being formulated and promoted, the government seems to be launching a flurry of other initiatives that, without any doubt, are aimed to providing housing schemes that meet the aspirations of middle-income families who are by any measure above the targeted income levels of the SHP. From 2012 to 2014 the following schemes have either started or are being planned (and note these are in addition to the mainstream housing schemes found in the new towns, most of which are definitely up-market):

1. The General Authority for Construction and Housing Co-operatives, is gearing up to produce over 100,000 middle income units by 2017, and for which loan funding is said to come from the National Investment Bank at concessionary rates.
2. The Al-Iskan al-'Aili (Family Housing) scheme, actually part of the SHP, has been launched in almost all new towns, which offers land plots from 206 to 260 m<sup>2</sup> upon which up to four families are to construct together a G+3 building. Some 100,000 plots of land are planned. This program's beneficiaries can benefit from the CBE subsidized loan package.
3. The Dar Misr (Egyptian House) scheme is being promoted for middle income housing estates in the new towns. A huge number of 150,000 residential units are targeted, with a first phase of 30,000 units underway in seven new towns. Units range from 100 to 150 m<sup>2</sup> and prices per unit are said to range from EGP 255,000 to EGP 637,500. If a unit is under EGP 400,000 in price, the purchaser can

22 See Egypt Daily News, 7 April 2015, p. 7.

- benefit from the CBE subsidized loan package.<sup>22</sup>
4. Beit al Watan (House of the Nation), 700 to 1200 m<sup>2</sup> plots land for high standard housing to be purchased by Egyptians working abroad, to be located in new towns around Cairo. Some 10,000 of these plots are said to be planned.
  5. Arabtec One Million Units is a huge middle-income housing program in 13 new towns for which there have been many pronouncements since early 2013 but for which there are very few details. A protocol was signed with the UAE company Arabtec, and presumably funding will come from corporate sponsors. A first phase of 100,000 units is said to be about to be started (April 2015).

The scale of these initiatives is certainly impressive, and virtually all of these will be implemented in new towns in the desert. And most will carry explicit or implicit subsidies. As another indication of the concern for targeting the middle class, in 2014 the Central Bank of Egypt allocated to banks a housing stimulus package with heavily subsidized interest rates that, in addition to being aimed at beneficiaries of the SHP, also are specifically aimed at middle class households whose monthly incomes do not exceed EGP 10,000, which means that all but the richest 5 per cent of urban households will qualify! (See also Chapter 6.)

In effect, it seems that the government's current housing policies are increasingly concerned with being seen as responding to the housing needs of the lower-middle and middle classes, in spite of the fact that these social layers are also prime targets of Egypt's corporate housing developers and that these government schemes are in direct competition with them, at least for the lower end. And it should be noted that there is already a great oversupply of middle and upper end housing.

### 2.6.3 Aborted attempts to influence the wider housing market

Three very interesting housing initiatives that tried to influence and improve aspects of the wider housing market were attempted in 2014:

- The first was a scheme, proposed by MHUUC, to allow some of the CBE's housing stimulus package to go as loans towards financing the completion of some of the millions of small vacant units in existing cities. The idea was that the owners of these units would put them on the market for sale or rent, thus increasing supply. The scheme was welcomed for sure, but unfortunately the CBE has rejected this scheme, at least so far.

- The second scheme was an initiative undertaken by the Housing and Development Bank (HDB). Based on a protocol with MHUUC, a specialized company -- the First Company for Development (al-shirka al-oula lil tamiir) -- was to offer to owners of vacant units the service of fixing up, renting out, and managing these units for a percentage of the rental revenues. Ensuring that tenants vacated at the end of their contracts would also have been part of the service. A pilot was begun in Medinet Nasr. Evidently, the company proposed such high percentages of the rents for itself that it found few takers, and the initiative collapsed.<sup>23</sup>
- The third was a scheme to allow the formalization of informal properties under the new tasalih law, allowing them to be inspected and pay a fine and thus be deemed "legal" so they could qualify for lacking utilities. However, this initiative too seems to have gone nowhere, at least so far.

Despite the failures of these schemes, it is welcome that at least there are some efforts being made to begin to tackle some of the issues that constrain the efficiency of general housing markets, as had been recommended in 2008.

### 2.6.4 Stimulating the Economy: Real estate to the rescue?

As early as February 2013, the then government saw that revitalizing the private real estate sector was a key to economic recovery. Steps were taken to revamp the land allocation rules of the New Urban Communities Authority (NUCA), aiming to replace controls and penalties with incentive based regulations to attract new investments and create a more business-friendly environment in the new towns. The faith in the real estate sector as the key to a national economic renaissance, almost all of which is expected to be financed by foreign -- mainly Arab Gulf investors -- has continued and even accelerated since. Most recently, in the run up to the March 2015 Egypt Economic Investment Conference in Sharm al-Sheikh, the Minister of Housing was quoted as saying "we are committed to a rapid push for (foreign) investors and cooperation to take maximum advantage of these investments, given that the real estate sector is the engine of growth that stimulates other sectors and creates thousands of employment opportunities."<sup>24</sup> And at this conference a colossal scheme for a new administrative capital in the desert some 70 kilometres east of Cairo was announced that would cover 700 km<sup>2</sup> and have a target population of 5 to 7 million inhabitants. Evidently that huge undertaking would become the receptacle for much of this real estate investment.

23 Al Youm As Sabaa newspaper, 23 February 2015.

24 Quoted in Al Masry al Youm newspaper, 6 March 2015, p 10, "al-iskan tuqa' muzakarat al-tfahim ma' tualafat misrya wa arabia," (translated from the Arabic.)

The point is that the current government perceives that housing and real estate are endeavours that will rescue Egypt's battered post-revolutionary economy. And this has been construed to mean encouraging, as an absolute priority, massive investments from mainly Gulf investors for glittering showcase real estate projects. In the face of this 'national imperative,' arguing that priority should be given to rational and pro-poor housing policies has become a difficult task indeed.

### 2.6.5 A draft housing strategy document dated April 2013

A draft Egypt housing policies and strategies document was prepared by MHUUC in 2012 and 2013.<sup>25</sup> This document represents a very important effort that could serve as the basis for deliberations on a national housing strategy for Egypt. It discusses the need, scope, and role of a housing policy document in Egypt, identifies the housing challenges and need for a vision, guiding principles, and clear objectives related to housing in the short term (2012-2017) and long term (to 2027). It identifies nine interesting strategy paths:

1. Strategy of Subsidizing the Citizen and not the House or Land
2. Strategy of Planning Centrally and Implementing Locally
3. Strategy of Supporting Secure Rental and Increasing its Share of the Housing Sector
4. Strategy of Organizing the State and its Housing Capabilities and Not Building Housing Directly Except for Limited Income Categories and Only in Defined Locations
5. Strategy of Incentivizing the Entry of Vacant/Closed Units into the Housing Market
6. Strategy of Preserving Property Resources (as Economic Assets)
7. Strategy of Incentivizing the Provision of Serviced Land for all Social Categories and their Links to Plans and Employment Opportunities
8. Strategy of Following Economic and Social Advancement Policies for Residents of Informal Areas and Depending on Civil Society Organizations
9. Strategy of Establishing Ties between Scientific Researches and the Goals and Strategies for the Housing and Construction Sectors

The draft document also develops housing programs in the short term (2012-2017) under four headings:

- The Social Housing Program
- The Economic Housing Program
- The Guarantee and Subsidy Program for Housing Finance

- The Program for Preserving the Housing Stock

## 2.7 THE LEGAL FRAMEWORK UNDERPINNING HOUSING POLICIES

The following are the main laws and decrees that underpin Egypt's housing policies.

### General Laws

- The Amended Constitution of 2014 (basic law): Article 78
- Law 131/1948 promulgating the Civil Code
- Decree Law 43/1979 promulgating the Local Government System Law (and its amendments)

### Land Rights and Property Registration Laws

- Law 114/1946 regulating the Deeds Registration
- Decree Law 142/1964 concerning (Title-based) Land Registration (and its amendment)
- Law 230/1996 regulating the ownership of developed property and vacant land by non-Egyptians

### Rent Laws

- Law 49/1977 concerning the Lease and Sale of Places and the Regulation of the Landlord-Tenant Relationship
- Law 136/1981 including some provisions in relation to the Lease and Sale of Places and the Regulation of the Landlord-Tenant Relationship
- Law 4/1996 putting into effect the Provisions of the Civil Code in relation to the places that have never been rented and the places whose leases expired or are going to expire with nobody having the right to stay therein (and its amendment)
- Law 6/1997 amending the second paragraph of Article 29 of Law 49/1977 and some provisions in relation to the Rental of Non-residential Places (and its amendment)

### Property Taxation Laws

- Law 222/1955 on the Betterment Levy
- Law 196/2008 promulgating the Developed Property Tax Law (and its amendments)

### Planning, Zoning and Building Standards Laws

- Law 59/1979 concerning the establishment of New Urban Communities
- Law 119/2008 promulgating the Building Code (unified law plus details)
- Decision of the Minister of Housing 144/2009 issuing the Executive Regulations of the Building Code promulgated by Law 119/2008

<sup>25</sup> Housing Sector, MHUUC, "Draft Document towards Strategies and Policies for Housing in Egypt." (al-wathiqā al-margā'ia l-istratagiāt wa siasat al-iskan fi masr), April 2013.

**Expropriation Laws**

- Law 10/1990 on Property Expropriation in the Public Interest (and its amendment)

**Housing Finance Laws**

- Law 107/1976 establishing the Economy Housing Project Financing Fund (and its amendments)
- Decision of the Minister of Housing 466/1976 regarding the executive regulations of Law 107/1976 establishing the Economy Housing Project Financing Fund
- Decision of the Prime Minister 745/1995 issuing the rules for managing the Economy Housing Project Financing Account in governorates

**Mortgage Laws**

- Law 148/2001 promulgating the Real Estate Finance Law. It has been amended three times: by Law no. 143 of 2004 (article 11), Law no. 10 of 2009 (article 3), and recently a comprehensive review by the Decree Law no. 55 of 2014.
- The Executive Regulations of Law 148/2001 issued by PM decision no. 1 of 2001 were amended 4 times: (i) by PM decision no. 465 of 2005; (ii) by PM decision no. 1864 of 2008; and very recently (iii) by PM decision no. 1 of 2015; and (iv) by PM decision no. 2 of 2015.

**Housing Cooperative Laws**

- Law 14/1981 promulgating the Housing Cooperatives Law (and its amendment)

**Social Housing**

- Law 206/1951 on Public Housing (and its amendments)
- Decree Law 33/2014 on Social Housing

**2.8 THE INSTITUTIONAL FRAMEWORK UNDERPINNING THE HOUSING SECTOR**

The following is a list of the main government institutions dealing with the housing sector. The functions of these are described in relevant parts of this Report.

**Ministry of Housing, Utilities, and Urban Communities (MHUUC) and its associated agencies, including:**

- The Minister's Office maktab al-wazir
- The Ministry Diwan diwan al-wizara (including the Housing and Construction Sector qita' al-iskan wa al-tshiid with its Department of Housing Studies idara al-bhuth al-iskan)
- The New Urban Communities Authority (NUCA) hay'a al-mugtema'at al-'umraniya al-gedida and its 22 new town agencies

- The General Organization for Physical Planning (GOPP) al-hay'a al-'ama lil-takhtit al-'omrani and its seven regional offices
- The Housing and Building Research Centre (HBRC) markaz al-bhuth al-iskan wa al-bina'
- The Central Reconstruction Agency al-gihaz al-markazi lil-ta'mir and its seven regional sub-agencies
- The Social Housing Fund sandouq al-iskan al-igtima'i (under formation)
- The General Authority for Construction and Housing Cooperatives al-hay'a al-'ama lil bina' wa al-gama'iyat al-tawiniya lil-iskan
- The Technical Inspection Agency al-gihaz al-taftish al-fanni

**Specialized Banks and Finance Institutions**

- The Egyptian Financial Supervisory Authority (EFSA) al-hay'a al-misriya lil-riqaba al-malia
- The Egyptian Mortgage Refinance Company (EMRC) al-shirka al-misriya l-a'adat al-tamwil al-'aqari
- The Guarantee and Subsidy Fund (GSF) also known as the Mortgage Finance Fund (MFF) sandouq al-tamwil al-'aqari
- Housing and Development Bank (HDB) bank al-iskan wa al-ta'mir
- Three major state-owned banks

**Utilities Institutions**

- National Organization for Potable Water and Sanitary Drainage (NAPWASD)
- Water and Wastewater Holding Company
- Water and wastewater companies in each of 27 governorates (water and wastewater separate in Cairo Governorate)
- Telecommunications Regulatory Authority
- Telecom Egypt (landline provider)
- Egypt Natural Gas Holding Company (part of the Ministry of Petroleum)
- Ministry of Electricity and Renewable Energy and its affiliates

**Other Government**

- Ministry of Local Development (MLD) wizara al-tanmiya al-mahaliya
- Housing directorates mudiriyat al-iskan in 27 Governorates
- Real Estate Publicity Department (idara al-shahr al-'aqari) with branches all over Egypt Min Justice
- Central Agency for Public Mobilization and Statistics (CAPMAS) al-gehad al-markazi li-ta'biya al-'am wa al-ihsa'



# THE EXISTING HOUSING STOCK

## 3.1 INTRODUCTION

An overall view of Egypt's housing stock can be extracted from the 2006 Census. This information is somewhat dated and is limited in scope, but it covers both urban and rural areas and is the only comprehensive data set on the housing stock. The other main source comes from the 2008 Housing Survey of Urban Egypt (HSUE), a large survey of occupied housing based on representative sampling of urban households. This survey allows a much more refined analysis of the housing stock than that found in the 2006 Census and is used extensively here. However, it also is a bit dated, does not cover unoccupied or unfinished housing units, and does not include a representative sampling of rural housing. Luckily, the 2008 HSUE included a representative sub-sample of occupied housing in peri-urban Greater Cairo (2850 households), most of which was in areas classified as rural. This allows a rare detailed look at

the rural housing stock, at least that found in rapidly growing rural fringes of Greater Cairo. In addition, the 2012/13 HIECS includes some data on the conditions of occupied housing.

## 3.2 OVERALL SIZE AND EXTENT OF THE HOUSING STOCK IN 2006

The Census of Buildings and Population carried out by CAPMAS every ten years starts with a building census that collects information on every building, including the number of housing and other "units" in each. (Identified as having unique entrances onto common/public space). This allows an enumeration of all "units" by physical type, as shown in Table 3.1 for 2006 at 27.1 million units, some 52 percent of which are in urban areas.

Table 3.1: 2006 Distribution of Ordinary Buildings for Residence (mabani 'adia lil-sakin) Units by Type of Unit

Type of Unit	Rural		Urban		Total	
	No.	Percent	No	Percent	No	Percent
Whole building	3334854	26.08%	514042	3.60%	3848896	14.22%
One floor or more	847410	6.63%	471495	3.30%	1318905	4.87%
Flat	7062515	55.23%	10678435	74.77%	17740950	65.54%
Separate room or more	374374	2.93%	481057	3.37%	855431	3.16%
One shop or more	1105453	8.65%	2057554	14.41%	3163007	11.68%
Garage	21946	0.17%	34625	0.24%	56571	0.21%
Other	40117	0.31%	45237	0.32%	85354	0.32%
<b>Total</b>	<b>12786669</b>	<b>100.0%</b>	<b>14282445</b>	<b>100.0%</b>	<b>27069114</b>	<b>100.00%</b>

Source: CAPMAS, *Statistical Yearbook September 2014*, Table 7-10 pp 206-207

These same units are classified as to current use, as shown in Table 3.2 for 2006. As can be seen 16.9 million units are classified as housing units

Table 3.2: Distribution of Units in Ordinary Buildings by Current Use 2006

	Rural		Urban		Total	
	No	Percent	No	Percent	No	Percent
Housing	8731722	68.29%	8186470	57.32%	16918192	62.50%
Work	748367	5.85%	1454451	10.18%	2202818	8.14%
Housing and work	37705	0.29%	18762	0.13%	56467	0.21%
Institutional housing	817	0.01%	3465	0.02%	4282	0.02%
Closed (family abroad)	27720	0.22%	135570	0.95%	163290	0.60%
Closed (other family unit)	873726	6.83%	966536	6.77%	1840262	6.80%
Unoccupied (khali)	2301303	18.00%	3428111	24.00%	5729414	21.17%
Other	65309	0.51%	89080	0.62%	154389	0.57%
<b>Total</b>	<b>12786669</b>	<b>100.00%</b>	<b>14282445</b>	<b>100.00%</b>	<b>27069114</b>	<b>100.00%</b>

Source: CAPMAS, Statistical Yearbook September 2014, Table 7-10 pp 206-207

Table 3.3: Distribution of Housing Units by Type of Unit (in buildings normally for residence)

	Rural		Urban		Total	
	No.	Percent	No.	Percent	No.	Percent
Whole building	2526645	28.94%	338825	4.14%	2865470	16.94%
One floor or more	637507	7.30%	289142	3.53%	926649	5.48%
Flat	5242701	60.04%	7218366	88.17%	12461067	73.65%
Separate room or more	316287	3.62%	332408	4.06%	648695	3.83%
One shop or more	2426	0.03%	2114	0.03%	4540	0.03%
Garage	0	0.00%	0	0.00%	0	0.00%
Other	6156	0.07%	5615	0.07%	11771	0.07%
<b>Total</b>	<b>8731722</b>	<b>100.00%</b>	<b>8186470</b>	<b>100.00%</b>	<b>16918192</b>	<b>100.00%</b>

Source: CAPMAS, Statistical Yearbook September 2014, Table 7-10 pp 206-207

### 3.3 DETAILED CHARACTERISTICS OF THE 2008 OCCUPIED HOUSING STOCK IN URBAN EGYPT

As mentioned above, a good understanding of the characteristics of the occupied urban housing stock can be constructed from the 2008 HSUE. First we look briefly at the characteristics of buildings and neighborhoods, then we look at the stock of units themselves.

#### Characteristics of buildings and neighborhoods

In 2008 by far the dominant type of residential building in urban Egypt was the small, multi-story apartment block. For example, practically all housing units surveyed in the HSUE were single apartments in buildings (84.7 percent) or more than one apartment in a building (2.9 percent). Only 7.9 percent were classified as either villas or rural houses. The remainder of units was classified as single rooms in buildings or apartments (4.4 percent). A majority or 56.6 percent of buildings had surface areas

(building footprints) of 100 m<sup>2</sup> or less. Only 6.8 percent of buildings had surface areas greater than 300 m<sup>2</sup>. The overall "smallness" of buildings is underscored by the fact that the median height was 4 floors and the median number of dwelling units in a building was 6.0 units.

General characteristics of occupied urban buildings were as follows:

- Average age of buildings: 38 years
- Average number of housing units in building: 6.9 units
- Median number of housing units in building: 6.0 units
- Median number of floors in building (including ground floor): 4.0 floors
- Average total surface area of building (building footprint): 131.6 m<sup>2</sup>
- Median total surface area of building (building

- footprint) roughly: 95 m<sup>2</sup>
- Overall condition of building: 80.9 percent "adequate", 18.1 percent "partially adequate", and only 1.1 percent "inadequate"
- Median width of street fronting building entrance roughly: 5.8 meters

The average number of housing units per building rises significantly with income quintiles, starting from 5.6 units at the first quintile reaching an average<sup>26</sup> of 13.6 units for the highest income quintile. This means that richer households tend to live in larger buildings than their poorer counterparts. There is a similar relationship between household income quintiles and the width of the street the building fronts, although this relationship is not so dramatic.

Almost 20 percent of buildings front on very narrow lanes of 4 meters or less, and 58 percent front on lanes of 6 meters or less. Only 12 percent of buildings front on streets which are wider than 10 meters. In the Egyptian Building Code, the maximum allowed ratio of building height to street width is 1.5. Since in the sample only 36 percent of buildings had ratios equal to or less than 1.5, it is obvious that this stipulation is widely ignored, even in "formal" neighborhoods. The median is a ratio of about 1.8, and 18 percent of buildings had ratios in excess of 3. These are truly remarkable statistics, and they underscore both how high population densities are in residential areas and the dominance of informal housing processes.

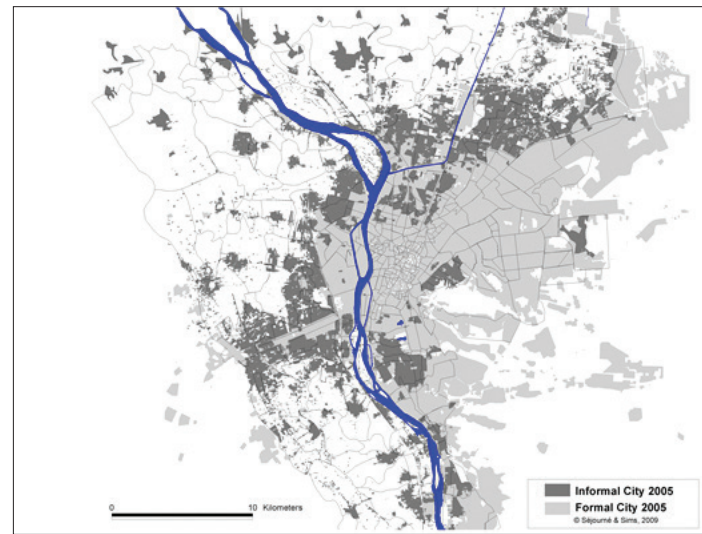
### Production of the existing housing stock

The HSUE survey revealed that 76 percent of buildings in the urban housing stock were originally produced by an individual or a group of individuals; 15 percent were produced by informal developers or "ahali" contractors; 8 percent were produced by government or the public sector; and only a little more than 1 percent were produced by private sector companies. This underscores the fact that, overwhelmingly, residential buildings in urban Egypt have historically been produced by individuals and informal operators. In contrast, the formal private sector has been almost non-existent as a producer, and government has played only a minor role.

### Conditions of neighborhoods

Overall 41 percent of households considered their neighborhood to be informal, and the rest considered their neighborhood to be formal. The portion of households who said they lived in informal areas correlated inversely by the income of the household.

For example, 57 percent of the poorest respondents (first household quintile) said they lived in informal areas, compared to only 23 percent of the richest (fifth household quintile).



**Figure 3.1 Formal versus informal areas of Greater Cairo, 2005.**  
Source: Sims, *Understanding Cairo*, p 60.

Only some 31 percent of households said they lived on a street which was paved and in good condition. Another 25 percent said they lived on a street that was paved but in poor or very poor condition, and a full 44 percent said they lived on an unpaved street. From these figures it can be concluded that the condition of residential streets in urban Egypt is not good.

The most frequently identified problems with neighborhoods were inappropriateness of neighborhood standards (20.3 percent); noise (15.8 percent) and overcrowding (12.0 percent).

### Characteristics of dwelling units in the occupied housing stock

Most households in urban Egypt (85 percent) live in an apartment in a walk-up building. Only 2.9 percent live in more than one apartment and 3.2 percent live in a separate house or villa. Additionally, 4.7 percent of households live in rural houses; 2.9 percent live in one separate room or more and 1.5 percent live in one room or more in a housing unit (i.e. sharing the same housing unit with other households). Only a tiny percentage lives in precarious housing.<sup>27</sup> The average number of building levels is 4.4 floors for those living in an apartment in a walk-up building. Separate houses have on average 1.7 floors.

<sup>26</sup> The terms average and mean are used interchangeably throughout this report.

<sup>27</sup> Precarious housing include places that are not designed primarily for housing but are occupied with households of the time of survey. Examples include parts of buildings inhabited by the doorman or the concierge, a shop or garage occupied by a household, cemetery yards inhabited by families, etc. Shanty houses, tents and kiosks used for housing are considered also as precarious housing. Source: Information and Decision Support Center, "Definitions Used in Census 2006," April 2007.



**Figure 3.2** Contrasting fabrics of formal (Dokki to the right) and informal (Boulaq al-Dakrou) neighborhoods. Source: Sims, *Understanding Cairo*, p. 58.

### Sizes of dwelling units

The median gross housing area of the occupied housing unit is 75 m<sup>2</sup> (the median net area is 70 m<sup>2</sup>) while the average gross area is 80.6 m<sup>2</sup>. Gross housing areas that range from 65 to 90 m<sup>2</sup> represent the 44 percent of all housing units. Housing with gross areas of 40 to 65 m<sup>2</sup> comprise 19 percent of the stock, and those with gross areas from 90 to 120 m<sup>2</sup> comprise 21 percent of the stock. Only 10 percent of housing units have gross areas in excess of 120 m<sup>2</sup>. Smaller housing units (less than 40 m<sup>2</sup>) represent 5.6 percent.

Overall, the average net area in a housing unit per person is 23.2 m<sup>2</sup>. This average varies significantly by household income quintile as shown in Table 3.2.

Table 3.4: Average Net Urban Housing Area per Capita by Income Quintiles

	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	Total
Average Net Housing Area per Capita (m <sup>2</sup> per capita)	12.8	16.3	19.3	25.9	40.2	23.2

Source: 2008 HSUE

Most urban households reside in three- or four-room housing, at 46 and 35 percent respectively. Only a few households reside in larger housing (8.1 percent of households live in five or more rooms). Conversely, only 10.9 percent live in units of one or two rooms. (a “room” includes living, dining, and sleeping rooms) In urban Egypt the average number of persons per room was 1.21 according to the HSUE.

About two-thirds (64.2 percent) of urban households use two rooms for sleeping, while 15.1 percent use one and 18.9 percent use three. Only 1.6 percent of sample households use four rooms for sleeping.

The mean (average) number of rooms in occupied housing units is 3.4 rooms, and the mean number used for sleeping is 2.1 rooms. These figures remain almost exactly the same across all household income quintiles.

### Amenities

The large majority of occupied housing units (93.1 percent) have a private kitchen, 94.0 percent have access to private bathing and toilet facilities. Only 5.8 percent of households have shared bathing and toilet facilities.

Almost all households have access to running water either by having a water tap inside the housing unit (97.0 percent) or having a tap inside the building (1.3 percent). Only 1.7 percent of households have no access to running water. The overwhelming majority (91.9 percent) of housing units have access to sewage lines. However, it may be that some of these housing units are connected to informal sewer lines and shared septic tanks rather than to municipal networks.

### Tenure

Data in Table 3.3 indicate that there are two main tenure types dominating the urban housing stock in

Egypt: ownership (44.4 percent) and rental according to the Old Law (26.9 percent). Rental according to the New Law is still limited (8.8 percent) while gift and in kind privileges are slightly higher (13.7 percent). Public housing represented only 5.5 percent of the housing stock.

Table 3.5: Distribution of Urban Households by Tenure Types

Facility	Percent
Old Law Rental	26.9
New Law Rental	8.8
Government Rental	0.8
Furnished Rental	0.0
Ownership	44.4
Purchase from Government	4.7
Gift	12.6
In-kind privilege	1.5
Others	0.2
<b>Total</b>	<b>100%</b>

Source: 2008 HSUE



Figure 3.3 Public housing estates built by Cairo Governorate 1985-1995. Source: Sims, *Understanding Cairo*, p. 54.

### 3.4 RURAL HOUSING CHARACTERISTICS IN PERI-URBAN CAIRO

The 2008 HSUE carried out a representative sampling of 2850 households in nine marakaz (rural districts) of Giza and Qaliubia governorates that were mainly classified as rural. This allowed a relatively good understanding of housing characteristics of this occupied housing stock.<sup>28</sup>

How do the housing stock characteristics for peri-urban Greater Cairo compare to those for Greater Cairo proper and also for all urban Egypt, in terms of housing unit types, sizes, amenities, et cetera? In general, the main findings for all urban Egypt repeat themselves for peri-urban Greater Cairo. That is, the vast majority of households live in one apartment or more in a walk-up building. Most households live in housing units of area less than 90 m<sup>2</sup>.

However, there are some slight variations from the norm. For example, peri-urban Greater Cairo has a lower percentage of households living apartments in walk-up building (82.9 percent versus 87.6 percent nationally and 92.5 percent in Greater Cairo). At the same time, peri-urban Greater Cairo has a higher percentage of households living in rural houses (6.4 percent versus 4.7 percent nationally and 0.6 percent in Greater Cairo). Peri-urban Greater Cairo has a lower percentage of households living in housing units of net area less than 90 m<sup>2</sup> (73.0 percent compared to 76.9 percent nationally and 76.4 percent in Greater Cairo). But because households in peri-urban Greater Cairo have the highest average size (4.5 persons) when compared to the national urban average or the average for Greater Cairo, this explains why peri-urban Greater Cairo has the highest average number of persons per room (1.29 versus 1.21 nationally and 1.22 for Greater Cairo).

In terms of such amenities as private kitchens, private bathrooms, and access to running water, peri-urban housing units around Greater Cairo exhibit similar high percentages (all above 90 percent) as do all urban Egypt. However, peri-urban Greater Cairo has by far the lowest percentage of households with access to sewerage lines -- 54.6 percent compared to 91.9 percent all urban and 98.0 percent in Greater Cairo.

<sup>28</sup> In this analysis peri-urban areas are the contiguous rural administrative zones (marakaz or aqsam) on the Greater Cairo periphery where population growth has been significantly above prevailing natural increase rates. The 13 selected zones are Qaliub Markaz and Qism, Al-Khanka Markaz, Shibeen al-Qanatir Markaz, Al-Qanatir al-Khieriya Markaz, and Al-Khusus Qism; and Giza Markaz, Imbaba Markaz, Ousim Markaz, Al-Badrashain Markaz, Kerdasa Markaz, Waraq Qism and al-Hawamidiya Markaz and Qism. The total 2006 population of these areas was 4.25 million, of which 77% was classified by the Census as living in rural areas.



**Figure 3.4 Cooperative housing (left) and police officer housing (center) near the Pyramids of Giza (right). Source: Sims, Understanding Cairo, p 81.**

It is not surprising to note that peri-urban Greater Cairo has the highest portion of households who characterize their neighborhood as informal (48.4 percent compared to the national urban average of 41.0 percent and to 43.5 percent in Greater Cairo).

The distribution of tenure types in peri-urban Greater Cairo is quite different from that in all urban Egypt and in Greater Cairo proper, as can be seen from Table 3.6. There are two main tenure types dominating the housing stock in peri-urban Greater Cairo: ownership (57.6 percent) and gift-housing (21.0 percent). Ownership is much higher in peri-urban Greater Cairo than in all urban Egypt (44.4 percent) and in proper Greater Cairo (33.0 percent). Gift-housing is also much higher in peri-urban Greater Cairo than in all urban Egypt (12.6 percent) and in proper Greater Cairo (10.3 percent).

**Table 3.6: Regional Variations: Housing Tenure Status**

	Peri-urban Greater Cairo	Greater Cairo	Total All Urban Egypt
Old Law Rental (%)	13.3	39.3	26.9
New Law Rental (%)	6.8	10.2	8.8
Government Rental (%)	0.1	0.6	0.8
Furnished Rental (%)	0.0	0.0	0.0
Ownership (%)	57.6	33.0	44.4
Purchase from Government (%)	1.0	4.5	4.7
Gift (%)	21.0	10.3	12.6
In-kind privilege (%)	0.2	2.1	1.5
	0.0	0.0	0.2
	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: 2008 HSUE, special volume on peri-urban Greater Cairo

To what extent can one generalize? Are the characteristics of the housing stock in peri-urban Cairo representative of rural Egypt? Probably not, although in some aspects they may reflect “rural” housing features somewhat.

In conclusion, the characteristics of the housing stock described here for peri-urban Greater Cairo can probably be considered very similar to other peri-urban areas around large and medium size towns in Egypt.



**Figure 3.5**  
Narrow lane in older informal housing area, Ezbet al-Mattar, Giza, 2005. Photo by D. Sims

### 3.5 DETERIORATED AND OTHER MARGINAL HOUSING

One remarkable feature of the urban housing stock in Egypt is the extremely small number of deteriorated or precarious buildings and other marginal housing, at least as far as information is available.

From the 2006 Census, out of a total of 3.58 million buildings in urban areas only 17,489 or 0.48 percent were classified as “huts or tents” (‘asha – kheima). (Statistical Yearbook Sept 2014 Table 5-7) The proportion for rural areas was higher at 0.75 percent, but still almost insignificant. As expected, highest concentrations were in rural areas of Upper Egypt. The highest concentration was in rural Sohag, with huts and tents representing 2.0 percent of total buildings.

Other types of precarious or substandard housing have been enumerated in the Census. These are mainly structures that were not intended for housing but in which families were found. Examples include kiosks or a shop or garage occupied by a household, cemetery yards inhabited by families, etc. These also represented only exceptionally small percentages of the total housing stock. For example, in Cairo Governorate, the 1996

Census enumerated only 1805 households living in cemetery courtyards, and 2442 households living in tents or shacks. Both of these figures are negligible compared to Cairo’s total of 1.6 million households at the time. And it needs to be added that the category “cemetery courtyards” includes those living in Cairo’s City of the Dead, only some 7500 persons. This fact lies in sharp contrast with the widely believed myth that there are at least a million persons living in the City of the Dead!



**Figure 3.6**  
Deteriorated slum pocket next to railway line behind former Rod El Farag wholesale market, Cairo, 2003. Photo by D. Sims

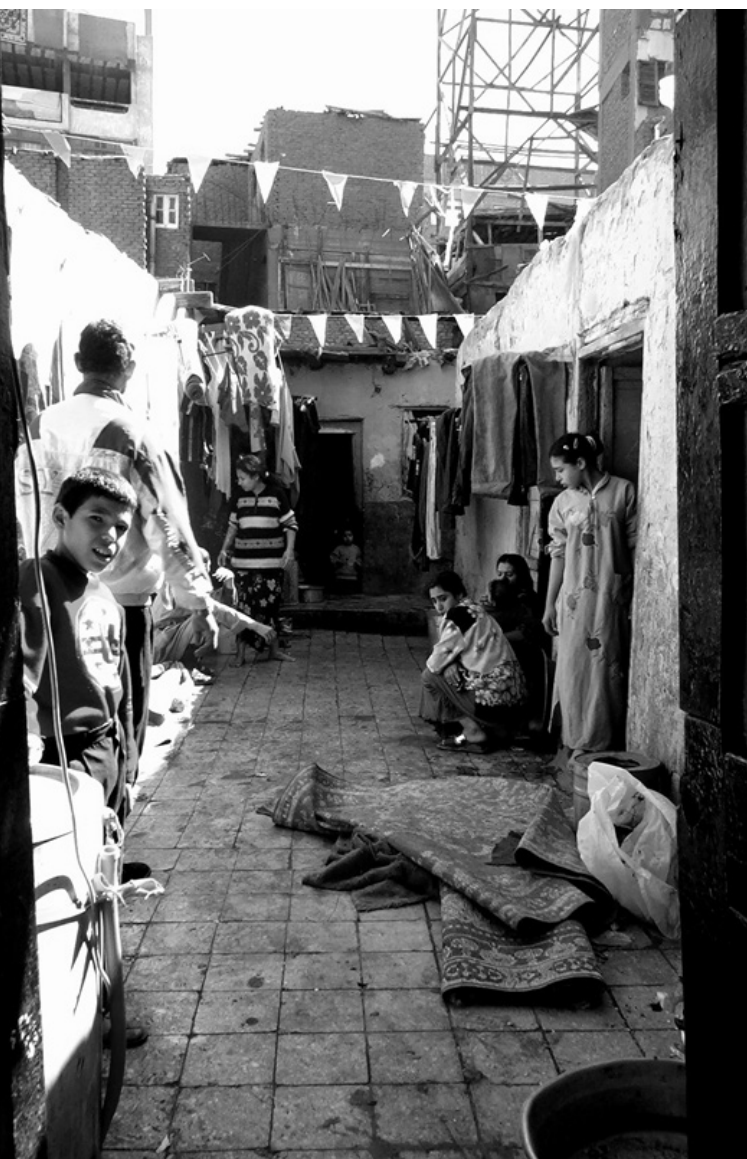
Slightly more significant are the number of households living in one room housing units or in separate rooms within a housing unit. These made up 1.1 percent of Cairo Governorate households in 1996, and we can see from Table 3.1, these made up some 3 percent of housing units nationally in 2006.

That there is only a very tiny portion of urban housing units that are in bad shape is also reflected in the 2008 HSUE. According to the survey, 91.3 percent of households were satisfied with their current housing, while the remaining households were dissatisfied. The most commonly identified source of dissatisfaction with housing was insufficient living area, expressed by two-thirds of those dissatisfied. Almost one third of dissatisfied households had internal utility problems (29 percent), and 23 percent complained of wall cracks.

Of course, these statistics may mask the fact some households live in apartment units and single rooms in buildings that have, over time, deteriorated considerably. These are mostly old buildings whose structural integrity have been compromised and are classified as “liable to collapse.” In fact, media reports are common of apartment buildings that suddenly collapse, causing

fatalities, mainly very old structures or those where additional floors were added illegally.

Another statistical view of marginal housing comes from the efforts of the Informal Settlements Development Fund (ISDF) that was created in 2009 following the collapse of a cliff face in the informal area of Duweika in Cairo that led to considerable loss of life. The ISDF has developed 4 categories of “unsafe” or “slum” areas based on a nationwide inventory, which all together represent only about 1 percent urban areas found in 369 sites, mostly small pockets. Of these, 259 sites were in ISDF’s second category “buildings made of make-shift materials, solid waste dumps, and ruins.”<sup>29</sup>



**Figure 3.7**  
Older raba’ type housing, Ezbet Bekhit, Manshiet Nasser, Cairo, with six families in six rooms and only one toilet/bath, 2001. Photo by D. Sims.

Yet another view of poor housing conditions comes from a GOPP led study of urban conditions in seven cities in Egypt carried out by the National Urban Observatory and consultants. The study’s aim stratified the conditions of neighborhoods into Informal, Poor, Medium, and High quality. The results varied widely, there was no consistent approach, and interpretations were subjective. In any event, this report was primarily an urban conditions study and did not focus much on housing.<sup>30</sup>

It needs to be added that in some cities of Egypt are still found “emergency” housing units (masakin ewa’) built mainly in the 1970s and 1980s to accommodate homeless families. These were mainly very basic single-story one and two room units located on marginal urban lands (e.g. Duweika, Telal Zeinhom). There numbers are unknown but probably do not exceed a few thousand units in total. No more of these are being built and existing units are slowly being demolished by governorates.

### 3.6 VACANT HOUSING AND ITS UNDERLYING CAUSES

From the 2006 Census a general idea of extent of housing vacancies can be constructed. The macro view is as follows:

Table 3.7: Egypt’s Population, Households, and Housing Units

	Urban	Rural	Total
Population	31.4 million	41.4 million	72.8 million
No. of Households	7.8 million	9.4 million	17.2 million
No. of Housing Units	12.4 million	11.8 million	24.2 million

Source: CAPMAS 2006 Census

Assuming one household per housing unit, these global 2006 figures imply that in urban areas there were an excess of 4.6 million housing units over need, or that 37 percent of the housing stock lay vacant. For rural areas, the excess was 2.4 million units, or that 20 percent of the housing stock lay vacant. For all Egypt, there were 7.0 million excess units, or 29 percent of the total housing stock.

The 2006 Census tried to give a better picture of this huge phenomenon of vacancies, as shown in Table 3.8.

<sup>29</sup> Based on ISDF’s inventory dated 14 January 2013.

<sup>30</sup> GOPP et al, ‘State of the Built Environment and Housing Indicators of Seven Egyptian Cities,’ Comprehensive Report, 2011.



Table 3.8: Status of units assumed to be for housing purposes in 2006

Type of Units	Rural		Urban		Total	
	No.	Percent	No.	Percent	No.	Percent
Occupied housing	8731722	72.93%	8186470	64.26%	16918192	68.46%
Occupied housing and work	37705	0.31%	18762	0.15%	56467	0.23%
Occupied institutional housing	817	0.01%	3465	0.03%	4282	0.02%
Closed (family abroad)	27720	0.23%	135570	1.06%	163290	0.66%
Closed (other family unit)	873726	7.30%	966536	7.59%	1840262	7.45%
Unoccupied	2301303	19.22%	3428111	26.91%	5729414	23.18%
<b>Total</b>	<b>11972993</b>	<b>100.00%</b>	<b>12738914</b>	<b>100.00%</b>	<b>24711907</b>	<b>100.00%</b>

Note: these figures vary slightly from those found in Table 3.2 because "other" and "work" units have been excluded for clarity.

Source: CAPMAS, Census of Egypt 2006



**Figure 3.8**  
Large garden apartments in a subdivision in New Cairo, 2010.  
Practically all of these units were vacant. Photo by D. Sims.

In other words, in urban areas all unoccupied or closed units represented 35.6 percent of the total units assumed to be for housing, of which about one third could be explained either that the family was abroad (uncommon) or that the family had a second home (common). This left roughly two-thirds of vacant units

simply as "unoccupied." In rural areas unoccupied or closed units represented a smaller but still very significant 26.8 percent of the units assumed to be for housing. (And only 28 percent of this amount could be explained, almost exclusively because the family had a second home.)

Can these figures be accepted as fact? Certainly there are definitional problems with the term "housing unit" used in the Census of 2006. For example, the way in which housing units are counted in the Census includes a portion of units that are unfinished or otherwise uninhabitable. And in any housing market a small portion of vacant units will be on the market to be sold or rented (rarely more than 5 percent.) Even so, the figures from the 2006 Census show that closed and especially unoccupied units are a huge phenomenon both in urban and rural areas, probably one of the highest in the world.

Can these figures be supported by data from sources other than the Census? The Ministry of Electricity and Renewable Energy publishes annual data on numbers of customers/connections, and these are presented in Table 3.9.

Table 3.9: Egypt Electricity Customers by Type of Usage

Usage	2007/2008		2011/2012		Annual % Change
	Customers	Percentage	Customers	Percentage	
Industry	621103	2.6%	572839	2.0%	-0.8
Agriculture	73841	0.3%	73260	0.3%	-0.1
Gov't & Utilities	177618	0.7%	200615	0.7%	1.2
Residential	16968095	71.3%	19823502	70.6%	1.6
Commercial	1217253	5.1%	1369251	4.9%	1.2
Closed and suspended	2925410	12.3%	3235494	11.5%	1.0
Other	428608	1.8%	512845	1.8%	1.8
Zero reading	1370283	5.8%	2277124	8.1%	5.2
	<b>23782211</b>	<b>100.0%</b>	<b>28064930</b>	<b>100.0%</b>	

Source: Ministry of Electricity and Energy, Annual Reports 2007/08 and 2011/12, (English) p. 36.

Assuming that on average 71 per cent of “closed and suspended” and “zero reading” customers were connected to residential units, in 2007/08 there were 17.0 million occupied residential units and another 3.05 million residential units that were unoccupied (“closed or suspended” and “zero reading”), yielding a total of 20.05 residential units, of which 14.9 per cent could be considered unoccupied. This would seem to indicate a much lower rate of housing vacancy than found from in the Census figures above, but such a finding needs to be qualified. First, second homes were not captured (as they were in the Census), which would add some 1.84 million units to the “unoccupied” total, which would increase the national vacancy rate to 24.4 per cent. Secondly, there were probably many housing units that shared a single meter/connection. Third, finished but as yet un-metered housing units were not captured. Thus it can be said that data on electricity connections more or less confirm the results of the 2006 Census that indicate a huge phenomenon of closed or unoccupied housing units in Egypt, perhaps as much as one third of the total housing stock.

There is one set of data that suggests that vacancy rates in urban housing are much less than the above figures indicate. In 2011, a study of urban conditions in seven cities was released by GOPP that included estimates of housing vacancies, based on a sampling of residential buildings in selected areas of these cities. This study yielded very low rates of vacancies, ranging from 12 percent (in informal areas) to 30 percent (in the new town of Sixth of October). However, the study only covered parts of seven towns, did not use randomized sampling, and its methodology was unclear.<sup>31</sup>

Where are vacancies the highest? Using preliminary results of the 2006 Census, gross vacancies in Cairo Governorate reached 28 percent, in Giza Governorate 34 percent, and in Alexandria Governorate 35 percent.<sup>32</sup> Certainly, high rates of housing vacancies are a phenomenon throughout urban Egypt. And these vacancy rates are high in both formal and informal housing areas as well as in government produced housing. They are certainly the highest in the new towns, where in some cases there are more housing units than there are households. For example, there were an average of only 1.23 inhabitants per housing unit in Six of October City and 0.96 in Sheikh Zayed City.

Interestingly, in those qisms (urban police districts) of Greater Cairo that can be considered mostly or all informal, vacancy rates were in general lower than average. Thus the gross vacancy rate in Manshiet Nasser was 22 per cent, in Zawiya al-Hamra' 15 per cent, in Matariya 19 percent, and in Embaba 24 per cent.

Why is such a large portion of the Egyptian urban housing stock un-utilized? There are a number of reasons:

- First, for many families, the main purpose for acquiring a housing unit is a means of investment. It is perceived that money put into bricks and concrete will be safe, incur no recurrent costs, and will appreciate at rates higher than inflation. Alternative investment opportunities for family capital (the stock market, banks, businesses, and bonds) are either risky or generate only small returns. This phenomenon has led some observers to describe Egyptian housing as primarily a savings vehicle.

31 GOPP et al, State of the Built Environment and Housing Indicators in seven Egyptian Cities, Comprehensive Report, 2011.

32 These are gross vacancy rates that include units for work and for housing and work, thus they may overstate slightly the vacancies in units used exclusively for housing. CAPMAS, Preliminary Results of the Census for Population and Housing and Establishments, volumes for relevant governorates, March 2007, tables 16 and 17.

- Second, it is very common for Egyptian families to acquire and hold a unit for the son's eventual marriage. Culturally, having an apartment is a prerequisite for most marriages. And this apartment must be provided by the groom's family, so forward-thinking fathers will seek units to hold even years and years before a son's marriage, especially since it is perceived that early acquisition will beat inflation in housing markets and building materials.
- There is practically no recurrent cost of holding a housing unit closed or vacant. There is no effective property tax, and the new property tax regime, only just beginning to be applied by the Ministry of Finance, has such low rates and so many exemptions that it will have little if any effect at discouraging the holding of vacant units. (See also Chapter X.) Water, wastewater, and electricity services are charged only on consumption. And there are few if any other charges on vacant units, except for those few located in gated compounds and other prestige housing complexes where monthly or annual service fees are charged.<sup>33</sup>
- Fourth, there is reluctance on the part of many apartment owners to rent out empty units. Even though the New Rent Law of 1996 allows for time-bound rental contracts with eviction at termination (or for non-payment of rents) that is enforceable in the courts, many owners fear the hassles and risks of such procedures. This reluctance is partly a holdover from an earlier time when it was virtually impossible to evict tenants, and also it is partly due to the lack of understanding of and positive support for new rental contracts on the part of government. Such reluctance appears to be much stronger in formal and more expensive housing, and in informal areas the use of New Law rentals is more acceptable.

These factors are not mutually exclusive. For example, one may purchase a housing unit for speculative investment but at the same time may have an eye on his son's eventual marriage. And at the same time he may leave the unit un-occupied, at no cost, for fear of the hassles associated with renting.

A final reason for high vacancy rates is the distortionary effect of rent control. Although cancelled in 1996 for all new rental contracts, it still applies to huge chunks of the existing housing stock,<sup>34</sup> A tenant of such a rent-controlled unit looks at such insignificant rents (practically never more than LE 50 per month, and sometimes as low as LE 7 per month), that leaving the unit vacant is an easy choice, especially since it is difficult to sublet the unit or to sell out his tenant rights.

<sup>33</sup> In most compounds the buyer of a unit must also pay a portion, usually between 2 and 5 percent of the total price, to go into an endowment fund which is supposed to generate income to cover maintenance and running costs. Typically this is never enough and additional contributions are usually solicited.

<sup>34</sup> Rent controlled units were estimated in 2008 to represent 27 percent of occupied units in urban Egypt, and an unknown portion of unoccupied housing. The rate for main agglomeration of Greater Cairo was 37 percent.

In the HSUE of 2008 gathered information about vacant units found in surveyed buildings (which always included occupied units). While this information cannot be considered at all representative of the universe of vacant units in urban Egypt, it throws some light on the phenomenon. Of vacant units enumerated in the HSUE, 74 percent were owned and 15 percent were held under old rent contracts. (Only 4 percent were held under new rent contracts.) Significantly, only 6 percent of vacant units were currently offered on the market for either sale or rent. Almost 30 percent of vacant units were only partly finished. Also significantly, 27 percent of vacant units had never been occupied since the unit was built or purchased.

Landlords whose buildings contained some vacant units were asked by the HSUE what were the main reasons for these vacancies. These were as follows (multiple choice response):

Left for children when they marry	75%
Rents or prices were too high to attract clients	13%
Left as a long term investment	9%
Unavailable utilities	6%
Location unsuitable	4%

One further note must be made about vacant housing in Egypt. All the information we have comes from 2006 or 2008. In the intervening years, and especially after the 2011 Revolution, there has been an explosion of informal and extra-legal construction in both urban and peri-urban areas, and anecdotal information indicates that much if not most of this remains unfinished or unoccupied. Thus the issue of unoccupied housing units, already a huge problem by 2006, has probably become much more acute.

### 3.7 INFORMAL HOUSING AS A PORTION OF THE TOTAL HOUSING STOCK

There is total confusion about just what portion of Egypt's housing stock can be deemed informal. Since the late 1990s when informal settlements began to receive attention, various government organizations have made cursory national inventories that tend to be accepted as fact. Contradictory as well as inconsistent estimates have been made in the past by the Ministry of Local Development, the Information and Decision Support Center (IDSC), GOPP, MURIS, and even CAPMAS. These estimates usually totally underestimate the scale of informality. In addition they suffer from confused definitions of what constitutes informal areas

and are rarely updated to account for their explosive growth. Even the nomenclature is confusing, with the terms ‘slums’ used interchangeably with ‘informal settlements.’<sup>35</sup> These estimates usually range from 1300 to 1750 informal settlements in all of Egypt with total populations in the 12 to 15 million range. IDSC estimated in February 2013 that areas covered by ‘slums’ in 226 Egyptian cities represented 37.5 per cent of the surface areas of Egypt’s 226 cities.<sup>36</sup>

In government inventories of informal areas, no consistent definitions are used. Such inventories are presented by governorate or city are usually simply a list of place names. And it is very rare that government organizations ever produce maps that show the extent of informal areas in cities.<sup>37</sup> ISDF has begun this process, but inspection of their work in Ismailia shows that most informal areas were missed. Even the populations of specific informal areas are in dispute. For example, estimates from various sources of the population of Ezbet Kheirallah range from 10,000 to 700,000 and those for Ezbet al-Haggana from 250,000 to 1 million.

In a GOPP report on an exhaustive study of urban conditions in seven cities in Egypt carried out by the National Urban Observatory, attempts were made to estimate the percentage of informal housing found in individual administrative districts. The study’s aim stratified the conditions of neighborhoods into informal, poor, medium, and high quality. The results varied widely, there was no consistent approach, and interpretations were subjective. In general, it seems that informality was seriously underestimated.<sup>38</sup>

The only rigorous attempt to ascertain the extent of informal areas and their populations was made for Greater Cairo based on satellite images and over 500 census enumeration districts. This effort, the methodology and results of which are reported in a 2012 World Bank report, estimated that the 2006 population of all informal areas reached 10.6 million inhabitants out of a Greater Cairo population of 16.3 million, or 65 per cent of the total. Included were peri-urban areas of Qaliubia and Giza.<sup>39</sup>

As mentioned in Section 3.3 above, the 2008 HSUE, a large representative sample survey of households in urban Egypt, asked respondents to state whether or not they themselves considered their neighborhoods ‘ashwa’iyya. For urban Egypt as a whole over 40 per cent

of households answered affirmatively, and this probably was an understatement since many would prefer not classify their areas as ‘ashwa’iyya because of its pejorative connotations.

### 3.8 MAINTENANCE OF THE HOUSING STOCK

As shown above, the overwhelming majority of housing units in urban Egypt are small apartments, and even in rural areas they dominate the housing stock. Thus there two separate aspects related housing maintenance and improvements for the majority of dwelling units, and each is treated in turn:

#### 3.8.1 Improvements and maintenance of the housing unit itself (inside the unit)

The 2008 HSUE shows that urban households frequently carry out repairs and improvements to their dwelling units, and 78 percent of households have carried out improvements or modifications at some point. In 2007, of the 7 percent of households that made improvements, 47% had their units plastered and/or painted, 49 percent did plumbing work or added a bathroom, 17% effected ceiling or wall repairs, and 17 percent carried out electrical work. For the large majority (86 percent) of households who carried out repairs, expenditures were less than EGP 3000. The 2008 HSUE also showed that in peri-urban Greater Cairo households carried out similar levels of repairs and improvements as did those in urban Egypt.

#### 3.8.2 Improvements and maintenance of the common spaces and the structure of the building itself (outside the unit)

There is no statistical information about maintenance of the common spaces of residential buildings or their structural repairs in Egypt. However, it is well known that such maintenance is rarely carried out, and one of the striking features of apartment buildings is the deplorable state of common spaces and shared utilities and equipment. In older buildings this is partly due to the fact that many units are under rent control and that building owners have little incentive to undertake either preventive or any other kind of maintenance. Yet poor building maintenance is a more general problem, even in buildings where all units are owner-occupied. In 1970s legislation was promulgated to encourage the formation of Owners Unions (ithad al mulak) in buildings to overcome this problem, and while a few of these were

35 In Arabic the term used is ‘ashwai’iat, but there is no accepted definition and the term itself has become a pejorative one.

36 As-Sharq Al-Awsat online, “Egypt’s government buckles down to tackle slum problem,” 29 June 2014, <http://www.aawsat.net/2014/06/article5333761/egypts-government-buckles-down-to-tackle-slum-problem>

37 A good example of government-promoted inventories of informal areas can be found in a large report in two volumes prepared in 2008: IDSC, “Al-‘ashwaiyat dakhil muhafazat gomhuriya misr al-‘arabia,” May 2008. (Slums inside governorates of the Arab Republic of Egypt: Analytical study of the existing situation and the preferred approaches.)

38 GOPP et al, ‘State of the Built Environment and Housing Indicators of Seven Egyptian Cities,’ Comprehensive Report, 2011.

39 World Bank, “Arab Republic of Egypt, Building a Platform for Urban Upgrading in the Greater Cairo Region,” SDD/MENA, draft version, June 2012.

successful in gaining common agreement to fund repairs and improvements, in most the Unions were either never established or never became effective, mainly due to disputes about shared payments.

In the 2008 Unified Building Law a new Union of Occupiers (itahad al shaghaliin) was created to which residents of buildings with five or more households were obligated to join and to fund and manage maintenance and improvements. An office (idara ithadat al shaghaliin) in each administrative district is supposed to handle the affairs of these Unions of Occupiers. According to data supplied by the MHUUC, 243 of these offices have been set up in local administrative units in all governorates of Egypt, reflecting almost total national coverage.<sup>40</sup>

However, the same data lists a total of only 11,019 Unions of Occupiers having been registered in all Egypt, an almost negligible sum given that there were over 1.2 million apartment blocks enumerated in the country (of which 729,000 were in urban areas) according to the 2006 Census. One can only conclude that these Unions of Occupiers have proven to be extremely unpopular.

Since the majority of dwelling units in urban Egypt are in small buildings (with an average of six to eight units per building), poor building maintenance is mainly a minor issue of unsightliness and uncleanliness. But in larger and taller buildings such poor maintenance, especially concerning lifts, other equipment, and security, can become serious problems.

### 3.9 THE HOUSING STOCK IN THE NEW TOWNS

According to NUCA, there are four types of housing found in 18 new towns. The total number of housing units in all new towns, as of 31 December 2014, by type, was as follows:

Table 3.9: Housing Stock in the New Towns

Type of Housing	Number of units completed	Percentage
Public sector housing (by various government agencies including NUCA itself)	324,081	35.9
Cooperative (gama'iat)	112,349	12.5
Individual (afraad)	374,433	41.5
Investor (mustethmir)	91,140	10.1
<b>Total</b>	<b>902,003</b>	<b>100.0</b>

Source: data from the Property and Commercial Affairs Sector of NUCA, and the Housing and Utilities Sector of MHUUC

Public sector housing, almost all of which is “economic” housing aimed at those of limited income, was fairly well distributed among the 18 new towns. The greatest number was in Sixth of October.

Cooperative housing, almost all of which is aimed at the lower middle and middle classes, was mainly concentrated in the new towns around Greater Cairo, with the highest number found also in Sixth of October.

Individual housing, virtually all of which was aimed at the middle and upper classes, was found in almost all new towns, but with a definite concentration in the new towns around Greater Cairo. The highest number was found in New Cairo, followed by Al Obour and then Tenth of Ramadan.

Investor housing, almost all of which was luxury housing in compounds, was found only in the new towns around Greater Cairo. The largest number was found in New Cairo, followed by Sheikh Zeid.

Note these totals do not include housing units of the Ibni Beitaq program.

### 3.10 DEMOLITION OF THE HOUSING STOCK, RESETTLEMENT, AND FORCED EVICTIONS

As can be seen from Section 3.5 above, in Egyptian cities there is a need to periodically demolish housing and rehouse inhabitants for three main reasons: (1) old buildings that have deteriorated to an extent that they are declared “liable to collapse,” (2) illegal housing (whole buildings and illegal floors) that are given demolition orders, and (3) natural threats or disasters that require the clearance of residential areas. In all cases premises must be cleared and the residents rehoused, something that is the responsibility of the governorate and/or municipality. This has been a commendable policy of the government for many decades, but the problems of its implementation are many.

One basic problem is that families are usually re-housed in public housing units located far from their old neighborhoods. For example, in Cairo they have been assigned units either in the huge Salam/Nahda estates or in the even more remote Al Badr new town. And in Giza they are usually relocated in public housing in the desert in Sixth of October City. In these areas families are severed from their old employment and enterprise opportunities as well as the personal contacts and social capital of their old neighborhoods, which for poor households are crucial. Also, the relocation housing itself may not be

<sup>40</sup> Data sheet (bian) produced by the Administration of Housing Research, Housing and Utilities Sector, MHUUC, no date. According to this data sheet, a total of 518 “temporary committees” have also been set up.

of good quality and situated in lifeless, forbidding areas where making a new home is difficult. As a result it is very common for families to sell or rent their assigned units and move back to their old neighborhood or to some nearby lively informal area.

Resettlement in remote areas has been criticized for a long time, and successful cases of resettlement in the same locale after redevelopment (example of Telal Zeinhoum) or resettlement in very close by public housing (Duweika/Manshiet Nasser) have shown that much better alternatives exist. The resettlement policy of the Informal Settlements Development Fund (ISDF) is said to have recently shifted in this direction, and in most of their target areas affected families are given rent money for the year or two required to build their new housing in situ.<sup>41</sup>

The other basic problem is that the process of resettlement itself is frequently poorly carried out, due to negligence, corruption, or simply bad management. Inventories of families to be resettled frequently miss many deserving families, who find themselves evicted and homeless when the resettlement is carried out.<sup>42</sup> At the same time, due to personal connections and bribes, some of the resettlement units are assigned to those who have

nothing to do with the affected area. And during the resettlement process itself transport and compensation payments can be totally mismanaged.

These problems with resettlement and violations of basic rights have been brought to light in a number of studies by human rights organizations such as the Habitat International Coalition and Amnesty International, and reference should be made to a recent report entitled “We are not dirt: Forced evictions in Egypt’s informal settlements.”<sup>43</sup>

These studies make recommendations on how to improve the resettlement process when it is necessary by organizing representation of the affected community and by measures for better monitoring and oversight. Even in the case of emergency, where law 119 (2008) entails evacuating and compensating residents by providing alternative housing elsewhere. Still, it should be added that the availability of well-located social housing units earmarked specifically for such resettlement should become part of any larger social housing policy. In fact, the argument could be made that one of the best uses to be made of well-located subsidized rental housing is for such resettlement.

41 Based on interviews with officials of MURIS and ISDF in March 2015.

42 On the other hand, when it is known that a building or area is to be demolished, it is common for opportunistic families to move in just to be able to claim resettlement units.

43 Amnesty International, ‘We are not dirt: Forced evictions in Egypt’s informal settlements,’ 23 August 2011, Index number: MDE 12/001/2011. <https://www.amnesty.org/en/documents/MDE12/001/2011/en/>

# HOUSING SUPPLY

## 4.1 OVERVIEW OF THE MAIN HOUSING SUPPLIERS AND THEIR PRODUCTION VOLUMES

In Egypt housing is produced by three main sectors, each of which is described in subsequent sections:

- The public sector including cooperative housing (under various programs and agencies as monitored by MHUUC)
- The formal private sector (recorded through building permits)
- The informal private sector (unrecorded and assumed to be all other housing production)

It should be pointed out that public sector housing is supplied in both rural and urban areas, and that production by governorates of this housing is increasingly

outside city boundaries. Also, until the Unified Building Law of 2008 building permits were not issued in rural areas, thus data on private sector production before this period is theoretically limited to urban areas. Finally, informal or extra-legal housing is constructed both in urban and rural areas.

Also, it should be remembered that the 22 new towns of Egypt are increasingly where new social housing is being built, and it is also where much of private sector housing is built, especially that catering to the luxury end of the market. Conversely, there is virtually no informal housing construction in new towns.

What are the volumes of production of these three sources? The best means of making these calculations involves focusing on the 1996 to 2006 intercensal period, as shown in Table 4.1:

Table 4.1: Population, Households and Housing Unit Totals 1996 and 2006 (in millions)

	1996			2006			Percentage Increase 1996-2006		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Population	25.3	34	59.3	31.4	41.4	72.8	124%	122%	123%
No. of Households	5.8	6.9	12.7	7.8	9.4	17.2	134%	136%	135%
No. of Housing Units	8.5	7.8	16.3	12.4	11.8	24.2	146%	151%	148%

Source: CAPMAS, 1996 and 2006 Censuses

This implies that housing unit production between 1996 and 2006 reached 7.9 million units, of which 4.0 million units were in rural areas and 3.9 million units were in urban areas. This translates into an annual rate of production of 790,000 units for the country as a whole.

How did the different suppliers contribute to this production? The MHUUC's Housing and Utilities Sector keeps good annual records of public sector production

(including cooperative housing), and by adding up the years 1996/97 through 2005/06 a total production of 409,877 units of all types of public housing is reached. These are completed units, but they may not have been distributed or occupied. As mentioned above, it is not possible to separate out rural from urban units.<sup>44</sup>

To estimate the amount of housing built by the formal private sector, recourse is made to data on issued building

<sup>44</sup> By definition, new towns are urban areas, as are the urban governorates of Cairo, Alexandria, Suez, and Port Said.

permits, also compiled by the Housing and Utilities Sector of MHUUC and based on annual reporting by governorate directorates of housing and by NUCA. We sum the unit production from the years 1995/96 through 2004/05, reaching a total of 948,104 units, under the assumption that construction of a building takes on average two years (as is assumed by CAPMAS in its Statistical Yearbook).

The amount of unexplained housing units produced over the concerned period is obtained simply by subtracting the known production of public and formal private sector units from the overall totals, giving:

Table 4.2: National Housing Production 1996-2006

<b>public</b>	409,877	5.2%
<b>private</b>	948,104	12.0%
<b>unexplained</b>	6,542,019	82.8%
<b>total</b>	7,900,000	100.0%

Source: CAPMAS, 1996 and 2006 censuses

The staggering figure that almost 83% of units that were produced nationally were unexplained can be partly attributed to rural housing, where building permits were not required before 2008. Thus it is impossible to make a rural breakdown by source of production into public, private, and informal sectors. However, for urban areas this is possible, as follows:

Table 4.3: Urban Housing Production 1996-2006

Sector	No of Units and %	Annual rate
<b>Public</b>	409,877 10.5%	41,000
<b>private</b>	948,104 24.3%	95,000
<b>informal</b>	2,542,019 65.2%	254,000
<b>total</b>	3,900,000 100.0%	390,000

Source: CAPMAS, 1996 and 2006 censuses

These results are quite dramatic. Over 65 per cent of all urban housing production is deemed informal, that is contravening one or more laws governing the built environment. Some of these additional units could have been added to private buildings beyond what was licensed, and in addition some could have been added to formal private buildings constructed before 1996 (mainly extra floors). Thus although technically illegal (i.e. informal), these units would more or less exhibit

the 'formal' characteristics of the original structures. On the other hand, quite a number of public sector units assumed to have been built in urban areas were in fact built outside urban boundaries. Thus it can be said with confidence that at least 65% of all housing units produced in urban areas over the ten year period 1996-2006 were informally built.<sup>45</sup> And these figures ignore the huge amount of informal housing units built in rural peri-urban areas around cities over the same period.

Some formal public sector housing units, i.e. those built by security agencies, parastatals, and the armed forces for their own personnel, are not included in the public sector totals for the 1996-2006 period. This may lead to a slight overestimate of the 'unexplained' or informal housing production in urban areas, but not by much.

These findings for 1996-2006 see a much greater informal sector contribution to urban housing production than those estimated by a USAID Ministry of Investment study for the inter-censal years 1986-1996. Formal private sector housing production was set at 27.2 per cent, public sector production at 27.6 per cent, and informal production at 45.2 per cent out of a total volume of production of 2.6 million units over the period.<sup>46</sup>

It should be added that after 2006 the rates of production of formal private sector units increased somewhat, with an average annual production of 122,000 units (2007 to 2014) compared to 95,000 units 1996 to 2006, and some of this private construction was in rural areas. At the same time average public sector production declined slightly from 41,000 units per year in 1986-1996 to 38,400 units per year in 2007-2014. Conversely, informal housing production has virtually exploded after the January 2011 uprising. Therefore, one can say with confidence that the weight of informal housing production in urban areas, already dominant in the 1996 to 2006 period, has significantly grown since then.<sup>47</sup> (See also Section 4.5 below.)

## 4.2 PUBLIC SECTOR PRODUCTION AND PROVIDERS

In this section we present a rapid review of the Egyptian government's many programs and projects to provide housing to those of limited income. This review is broken down into four distinct periods:

- the years 1952 to 1981 to provide the historical context,

45 It may be that some of the informal units produced in the 1996-2006 period included empty non-housing units in residential buildings (such as shops). Thus the total production of informal housing units may have been slightly less than 65 percent of the total. But on the other hand there were housing units produced in buildings that were not primarily residential, thus countering this reduction. See also tables in Chapter 3 above.

46 USAID and Ministry of Investment, Housing Demand Study for the Arab Republic of Egypt, TAPR II, June 2006, Annex B, p. 168.

47 All figures in this paragraph come from either the Census of Egypt 1996 and 2006 or from the Housing and Utilities Sector, MHUUC.



- the years 1982 to 2005,
- the years 2005 to 2011 which coincide with the National Housing Program (NHP)
- the current 'one million unit' social housing program

In this manner it is possible to summarize the evolving programs, approaches, and subsidy elements over time and thus deepen the understanding of Egypt's quite large public housing sector and its policy shifts and improvements over time. Most attention is placed on the current Social Housing Program (SHP) and its predecessor the National Housing Program (NHP). In Table 4.6 below we summarize the results in matrix form.

#### 4.2.1 The period 1952 to 1981

Government-provided housing in Egypt has a considerable history. The first project aimed to address the needs of the lower and working classes was the Workers City (medinet el 'umal) that was begun in 1944 in Embaba, Giza. Under the socialist government during the 1953-1967 period there was an increasing volume of social housing built in the capital and in other main cities. This housing, almost all of it 3 to 5 floor walk-up housing blocks with small flats, was distributed through the governorates, the Ministry of Housing, and specific government authorities to the newly wed, government employees including the armed forces, and relocation and welfare cases.

In all cases very low rents were charged, and the rental contracts gave the tenants and their heirs absolute and perpetual rights against eviction as long as rents were paid. Thus social housing during this period was heavily subsidized, with all financing for these units as well as associated infrastructure and social facilities coming directly from the State budget. There was no accounting of expenditures to estimate the subsidy element or to try to reduce it.

An important feature of these government housing programs – still valid today -- was that all housing was built on available State land, under simple land assignments mainly by governorates, and land ownership itself remaining with the assigning authority. All land was thus free of charge.

Medinet Nasr, a large town extension scheme northeast of Cairo's centre in the desert fringe, planned in 1958 but only started in 1965, was to be the government's socialist new town show case with thousands of government-built apartment units mostly for various government

employees, along with large government office buildings and monumental recreation complexes.

In the 1967-1974 war period this and all over all government-sponsored housing activities were put on hold.

Starting in 1974, Egypt saw a resurgence of government housing programs throughout Egypt and especially in the Suez Canal Zone as part of post-war reconstruction. Financing came mostly from the State budget through the Ministry of Reconstruction but there were also large housing estates which were funded directly by Gulf donor countries.

This led to an increasing rhythm of social housing production, and by 1980 many social housing projects were being constructed in the new towns, a national project which had been launched with Tenth of Ramadan new town in 1977 and was soon followed by many other new towns. Also in the 1980s very large social housing estates were established, for example Medinet el Salam and El Nahda northeast of Cairo off the Ismailia Desert Road.

Over the period 1952-1981 MHUUC records show that a total of 1.1 million units of government housing were built in Egypt, at an average annual rate of 37,790 units. (This figure does not include armed forces or police housing.)

#### 4.2.2 Government housing schemes in the period 1982 to 2005

Starting in 1982 a major policy shift was introduced which resulted in a conversion of the tenure of existing public housing units from rent to monthly instalment payments leading to eventual ownership (tamlik). This new policy also began to be applied to new units, and throughout this period practically all public housing produced was sold to beneficiaries under monthly instalments over 30 to 40 years.

Data obtained from MHUUC shows that total annual production over the whole 23 years 1982-2005 was 1.26 million units. It ranged from 14,000 to 100,000 units per year, with an annual average production of 54,700 units.<sup>48</sup> In the 2001-2005 period, annual production dropped way below the average (only 15,000 to 35,000 units). See Table 4.1.

Social housing built during these periods were produced by four main providers:

<sup>48</sup> Note that figures in Table 4.1 refer to housing production in both urban and rural areas, although most was in urban areas. Also, these figures do not include housing produced by government or para-statal authorities for their employees (police, army, railways, the petroleum sector, etc.). Information on such housing production by most of these entities is not readily available. These figures also exclude government "emergency housing" built by governorates.

**Governorate housing:** The largest portion of total government housing was produced by local government, i.e. by governorates using central government budget allocations as well as their own special funds. Together they represented 44% of the total for the 1982-2005 period. However, from a high annual production rate of almost 50,000 in 1992-93 governorate housing production declined fairly steadily, and in the 2002-2005 period such production averaged only 12,000 units per year.

**Housing cooperatives:** The second most important type of government housing production was by housing cooperatives, with 22% of total production over the 1982-2005 period. However, from a high rate of production up until 1997, cooperative housing declined dramatically, so that in the 2002-2005 period the annual rate was less than 3,000 units. Cooperative housing estates were established both in new towns and elsewhere on governorate (State) lands. (For a description of cooperative housing see Section 4.3 below.)

**Housing by NUCA:** The third most important type of government housing production was by NUCA, all of which was located in new towns, with 20% over the 1982-2005 period. Central government allocations financed most of these units, although some of NUCA's own source funds were also used. In the 1997-2002 Five Year Plan period annual new town housing production averaged 25,000 units or 45% of the Government total, but in the 2002-2005 period production fell dramatically to less than 2000 units annually (9.4% of the Government total for that period).

**Miscellaneous:** Other executing agencies included government housing companies, the Joint Projects Agency, the Housing Fund, the Housing and Development Bank (HDB), and t'imir agencies, as shown in Table 4.4. Together they represented only small contributions to the total production of Government housing (less than 14% over the whole 1982-2005 period).

Table 4.4: Government Housing Production in Units 1982-2005 by Executing Agency

Fiscal Year	Governorates	Housing Companies	Joint Projects	Coop Housing	Housing Fund	Housing Bank	Tamiir Agencies	NUCA	TOTAL	Total by 5yr Plan
1982/83	20428	987	238	3140	0	1018	3882	2952	32645	
1983/84	22660	350	0	2561	0	696	2091	4633	32991	
1984/85	22536	2146	0	14533	0	0	2432	2410	44057	197647
1985/86	21258	1876	0	8942	0	0	1652	4624	38352	
1986/87	17563	2283	0	21818	0	0	1824	6114	49602	
1987/88	29807	2745	3500	5540	0	7270	2041	11922	62825	
1988/89	35953	1569	4105	9271	0	6156	1884	8369	67307	
1989/90	46221	4104	1739	8012	5970	1312	752	8370	76480	386880
1990/91	47812	5433	0	21779	1313	6767	1243	11527	95874	
1991/92	42972	3469	0	24603	327	5034	410	7579	84394	
1992/93	49228	3067	0	30659	406	2142	198	13750	99450	
1993/94	23938	2184	1289	16037	458	6556	1602	12369	64433	
1994/95	17599	3528	277	21865	0	3589	3994	7174	58026	331417
1995/96	25467	1852	856	19888	360	2899	1104	3471	55897	
1996/97	21507	399	601	20104	304	1602	0	9094	53611	
1997/98	12109	639	339	12250	4136	8209	0	20852	58534	
1998/99	16854	1154	441	12741	2240	950	0	31545	65925	
1999/2000	14882	540	1176	6364	5192	2613	804	38804	70375	288157
2000/01	14424	416	1186	6151	0	2022	1892	31886	57977	
2001/02	15279	652	304	7747	480	1878	299	8707	35346	
2002/03	12719	1448	364	1477	750	2213	12	2805	21788	
2003/04	11165	1245	432	0	160	647	113	1183	14945	54173
2004/05	11397	1032	805	2795	72	100	118	1121	17440	[90288]
TOTAL	553778	43118	17652	278277	22168	63673	28347	251261	1258274	
% share of total	44.01%	3.43%	1.40%	22.12%	1.76%	5.06%	2.25%	19.97%	100.0%	

Fiscal Year	Governorates	Housing Companies	Joint Projects	Coop Housing	Housing Fund	Housing Bank	Tamiir Agencies	New Towns	TOTAL
1982/87	104445	7642	238	50994	0	1714	11881	20733	197647
% share	52.8%	3.9%	0.1%	25.8%	0.0%	0.9%	6.0%	10.5%	100.0%
87/92	202765	17320	9344	69205	7610	26539	6330	47767	386880
% share	52.4%	4.5%	2.4%	17.9%	2.0%	6.9%	1.6%	12.3%	100.0%
1992/97	137739	11030	3023	108553	1528	16788	6898	45858	331417
% share	41.6%	3.3%	0.9%	32.8%	0.5%	5.1%	2.1%	13.8%	100.0%
1997/02	73548	3401	3446	45253	12048	15672	2995	131794	288157
% share	25.5%	1.2%	1.2%	15.7%	4.2%	5.4%	1.0%	45.7%	100.0%
2002/05	35281	3725	1601	4272	982	2960	243	5109	54173
% share	65.1%	6.9%	3.0%	7.9%	1.8%	5.5%	0.4%	9.4%	100.0%

Source: General Administration for Planning and Follow Up, Housing and Utilities Sector, MHUUC

It should be noted, however, that there were considerable amounts of public housing built over the years by the armed forces and Ministry of Interior for their personnel, as well as housing built by parastatal agencies such as the Suez Canal Authority. Unfortunately there is no information about this housing.



**Figure 4.1**  
Public housing built in the 1980s, Sixth of October, 2009.  
Photo by D. Sims

Overall, a total of EGP 26.4 billion were expended as government housing investments during the 1982-2005 period (in current values, not counting the Ministry of Interior and the Armed Forces). These figures do not include associated infrastructure or services. The largest investments were expended by the General Organization for Housing Cooperatives, followed by the governorates,

showing that cooperative housing units were considerably more expensive than governorate units.

In terms of geographical distribution of government housing production over the 1982-2005 period, Greater Cairo received by far the largest share. The three governorates of Greater Cairo benefited from just over 50% of all government housing production<sup>49</sup> Alexandria, Egypt's second city, only received 100,000 units or 8 per cent of the total. Of secondary towns in Egypt, Port Said and Suez received higher than average shares of government housing. The same can be said for frontier governorates, although in absolute numbers the volume of production in these remote locations was very small.

The availability of large amounts of vacant State land (mainly desert) within proximity to urban centres is a major factor in explaining the concentration of government housing in particular governorates and particular cities. Prime examples of heavy concentrations include the frontier governorates and Port Said and Suez. Conversely, the almost total lack of such State land in the inner Delta governorates (Gharbia, Dakahlia, Kafr El Sheikh for example), goes a long way towards explaining why little government housing was built in these areas.

#### 4.2.3 Evaluating government housing schemes in the 1982-2005 period

While it could be said that social housing programs before 2005 are now only of historical interest, it is worthwhile to identify their main strengths and weaknesses, since it is upon earlier efforts that newer programs have evolved. This evaluation is presented in the following paragraphs:

<sup>49</sup> It should be noted that the new towns of New Cairo, El Obour, and Shorouk are considered part of Cairo Governorate, and that the new towns of Six October and Sheikh Zayed are considered part of Giza Governorate.

*(1) Delays in implementation*

Government housing production over the 1982-2005 period was characterized by various execution problems which result in serious shortfalls in actual production over planned production. For example, comparing planned versus executed public housing production by five year plan, shows that over the whole 1982-2005 period the shortfall averaged 38%, and that this shortfall was over 60% in the 2002-2005 period. The underlying causes include unavailable land, infrastructure delays and high costs, construction cost inflation, and tendering and construction delays.



**Figure 4.2**  
Public housing built in the early 1990s, Sixth of October, 2009.  
Photo by D. Sims

*(2) Multiplicity of government providers and absence of the private sector*

Until 2005 there were a number of government agencies at the national level that received finance and land for housing programs and built and distributed subsidized public housing units. In addition, each of Egypt's 27 governorates had their own subsidized housing programs. And in the new towns there were seven agencies that were active in providing social housing, and some of these also had programs in the governorates.

The governorates, which provide housing through their Housing Directorates, had theoretically an important role to play in subsidized housing provision since they were close to its citizens and should have been able to tailor their housing programs to respond to demand in appropriate locations. However, their performance varied widely, administration and follow-up was generally very poor, and most operated under roughly the same supply-side command approach as national agencies.

Up to 2005, there was no involvement of private sector developers in subsidized housing provision, and even most construction was let to public sector construction companies.

*(3) Land availability, location, & matching of geographic supply with demand*

Over the period the reliance on vacant, cost-free public lands for the construction of subsidized housing in Egypt caused serious distortions in attempts to geographically match supply with demand.

First, at the regional or governorate level there was a clear miss-match between government housing supply and housing need. It was no coincidence that government housing programs were concentrated in new towns and in governorates with ample nearby desert areas, simply because land was available. For example, during the 1982-2004 period over 69% of subsidized housing units built in the new towns was concentrated in the seven new towns surrounding Greater Cairo (excluding Tenth of Ramadan), even though Greater Cairo contains only 23% of the national population.

Secondly, at the micro- or metropolitan-level, the miss match between need and supply was a persistent and even growing problem. For those governorates which had publicly-owned hinterlands, major land tracts allocated for social housing were located mainly in desert sites which were usually far from existing densely populated agglomerations. Decades of urban expansion through supply-side State land policies had already used-up or locked-out those near-fringe desert lands which would have been best suited for public housing, and there was an ever increasing centripetal search for new sites, usually accompanied by stiff competition among different State entities.

Experience has shown that government housing estates which were remote and badly located (in terms of access from major towns and transport corridors and in terms of proximity to popular and dense urban areas) tended to remain largely vacant and depressed for years, regardless of the success in distributing units.

Housing projects with the new towns had a particular location problem. The new towns had been planned on gigantic scales, and NUCA enforced high development standards that lead to low urban densities. Furthermore, the mechanistic, wholesale approach to land assignments resulted in a scattering of public housing estates throughout these vast spaces. Thus there was rarely any 'critical mass' of habitation that would attract private transport and services, and the distances even between one part of a new town to another could be tremendous.



**Figure 4.3**  
Mubarak Youth Housing 1997-2000, Sixth of October, 2009. Photo by D. Sims

#### *(4) Infrastructure provision and costs*

Pre-2005 subsidized housing projects built in the new towns were provided, in most cases, with a good standard of basic off-site and on-site infrastructure (roads, water, electricity, telephones, and water-borne sewerage), public spaces, and social services. The same could be said for governorate housing, although on average the overall level of quality and operation was lower and there were some cases of serious neglect, especially for older projects. However, there were a number of problems with infrastructure provision for public housing estates. First of all, infrastructure was expensive. However, there were no hard figures on infrastructure costs, only indications that varied widely.

**On-site infrastructure** was costly because of the high planning standards and spacious grouping of buildings and the ample open areas between them. This is particularly true of newer projects in the new towns. The land required per housing unit within a superblock (not counting land for schools and other services) in most cases exceeded the housing unit surface area and could even exceed this, frequently resulting in Floor Area Ratios that can be less than 0.7. **Off-site infrastructure** was costly because trunk water, wastewater, power, and phone lines serving a public housing estate had to run over considerable distances due to the remote location of most estates, especially in the new towns. The same is true for main roads. Thus the cost of construction of these lines could be extremely expensive, as were the associated recurrent O&M costs.

<sup>50</sup> Donor-supported pilot housing schemes in the past introduced some innovative designs (e.g. the Helwan New Communities project of USAID), but these were never adopted and generalized. Similarly, sites and services targeted at low income households have only been piloted by donor-supported efforts. By far the largest and most successful of such schemes were developed in the late 1970s and 1980s in Ismailia, with UNDP and British Aid support. Unfortunately such an approach (small plots and eventually services, with full cost recovery coming from land sales) has never been applied in government housing schemes.

#### *(5) Construction costs and inflation*

Before 2005, average dwelling unit costs were used throughout the budgeting process, and they were the basis for calculations of down payments and instalment payments by beneficiaries. Obviously, if these unit cost estimates did not cover all associated costs or if they were lower than actual construction costs, then there would be funding shortfalls that would need to be covered by other budgetary sources. Also, without accurate construction cost data it became impossible to maintain the calculated subsidy structure and this resulted in further shortfalls in repayments over decades, leading to accumulated budgeting problems. In fact, there was a lack of clarity over what is covered by unit costs, there was poor estimation of the total costs in the light of the economic situation, and inflation in construction costs was steep and rarely included in calculations.

#### *(6) Housing designs and layouts*

In the 1982-2005 period typical government social housing in Egypt was 4 to 5 story walk-up housing blocks, usually with between 2 and 4 units per floor. Housing blocks were arranged in geometric patterns within the site. Different layouts and architectural combinations were tried throughout the years, but in all cases an essential design feature was that all light and air for a unit comes through windows and balconies in the building facades. That is, there were no internal light and ventilation shafts. While such a system allowed for economies in the building design (less walls and less unusable space in a building), it demanded wide spaces between buildings which required landscaping and maintenance, and which in turn required larger land-per-unit ratios.

Over the 1982-2005 period there were remarkably few attempts by planners to introduce housing designs which deviated from the “apartment block” norm. There were no core housing schemes, no attached duplex or townhouse units, no purpose-built infill blocks, no “sky-street” multi-story buildings, and no sites and services projects.<sup>50</sup> However, in the 1980s the concept of “harafi” housing was introduced, notably in Medinet El Salam and El Duweika (both in Cairo Governorate). Standard apartment blocks were built, but with the ground floors devoted to workshops, the owners and workers of which were to live in the apartments above. This concept had only limited success and has not been repeated on a wide scale.

It should be noted that shops were practically never built on the ground floors of government housing buildings, in spite of the fact that it was and is common for ground floor residents in mature public housing areas to convert part or all of their units for commercial purposes.

#### *(7) Direct subsidy elements*

Up until 2005 government social housing programs carried quite high direct subsidies elements. These frequently reached 50 to 70 per cent of the housing unit's nominal construction costs. In addition, there were various sources of these subsidized funds, which included the National Investment Bank loans, governorate housing funds, cooperative housing loans, NUCA housing grants, and other sources. Also, direct subsidies were hard to quantify since they were based on below-market interest rates on loans. Such subsidies were never up-front cash subsidies, but were allocated to housing authorities in tranches related to construction phases. The use of present value calculations to estimate true project costs, or even the use of constant prices over years, were never practiced.

#### *(8) Indirect and hidden subsidy elements*

Indirect and hidden subsidy elements were many and extremely hard to quantify. Governorates, new town agencies, and other subsidized housing providers would absorb the costs which were in excess of their budget plans. These included delays in tendering and construction, cost overruns, delays in distribution and hand-over of units, and delayed or delinquent instalment payments. These increased dramatically the real per unit costs and decreased the real revenue streams, which added to the effective subsidy and affected a housing authority's financial viability.

These very common negative deviations from housing budget plans forced authorities to try to balance their annual accounts, either by creative shifting of line items, by reducing the number of units built, or by tapping discretionary funds which were outside the housing budget envelope. The difficulty in mobilizing cash funds to keep to housing budget plans was in itself another cause of delays in housing provision. Stalled, semi-finished housing projects were the result, with restart depending on the bounty of next year's budget allocations.

Beyond this, both on and off-site infrastructure needed to service housing project sites were provided by various government sources and their costs were never recovered. This represented a very significant additional subsidy, and one which was hardly ever quantified. And the land for

social housing projects was always State land provided at no cost, which meant there was an additional and sometimes very high opportunity cost associated with these projects.

#### *(9) Targeting and beneficiary selection*

Over decades the Egyptian government relied on a standard application process to begin the housing unit distribution process. National level housing authorities and governorates announced that there is a housing program and accepted filled in applications (istimarat) from citizens or cooperative members. These applications were usually very straightforward, only requiring personal identification and the payment of a nominal fee. A "reservation" down payment was required either at the time of application or at a future announced time. Under some housing schemes, another payment was required upon delivery of the unit.

Although theoretically new government housing was aimed at households with limited income, there were no attempts to target beneficiaries based on income or wealth thresholds or means tests or through social investigations. In fact, in most government housing programs the required qualifications were of the most rudimentary. In some programs unmarried youth were targeted, and in governorate programs one had to prove residence in the relevant governorate. Available units were allocated either by the date of submittal (oldest first), or by a lottery and applicants were picked randomly until the required number was reached.

It should be added that in all housing programs in Egypt the allocation of units in a particular housing project was random, with valid applicants assigned units through lists. That is, there was and are no means for a group of families to acquire units in the same building or area, and thus they could and can not hope to bring with them even a fraction of the social networks and social capital embodied in extended family or co-worker relationships. With regards to the youth housing project, an investigating unit was set up to follow up on the owners of the units after delivery. If violations occur, the unit is immediately confiscated.

#### *(10) Affordability of housing units*

Before 2005 practically all urban families could afford to meet instalment payments for government housing unit acquisition.<sup>51</sup> For example Mubarak Youth Program (1997-2003) required fixed instalment payments of EGP 73 per month over 30 years. Virtually all urban households were able to cover this amount at 25% of income. Other housing programs required somewhat

<sup>51</sup> Other than a few hold-overs from the 1980s, there are no government housing programs which are on a rental basis.

higher monthly instalments, but in these all but the lowest decile or quintile of the urban household income could afford to pay 25% of their incomes.

Also, down payments required from beneficiaries to acquire subsidized housing units were quite low and affordable. They rarely exceeded EGP 5000.

#### *(11) Post-delivery issues*

Between 1982 and 2005 practically all subsidized government housing was allocated to beneficiaries under a system of “hire-purchase” with eventual full ownership. A preliminary contract would be issued, monthly payments were required for 30-40 years, and then a final ownership contract would be issued. A prominent part of most preliminary contracts was the stipulation that the beneficiary cannot sell, sub-let or otherwise transfer the unit to a third party without approval of the first party until the final contract is issued.

Since practically all government housing was built on State land through administrative assignment (*takhsis*), the land remained nominally in the State domain and could not be registered under the property registration system (*shahr el aqari* of the Ministry of Justice), either as a single project or as individual housing units. Thus practically all of the government housing stock of over two million units built before 2005 remains unregistered and thus cannot be used as collateral for loans under the mortgage finance system which began in 2001.

Vacancies can be said to be the biggest problem with government housing units built in the 1982 to 2005 period. Although there have never been exhaustive surveys of the problem, a number of small sample surveys, as well as investigative reporting, have disclosed that closed and un-occupied units are extremely common.<sup>52</sup> In governorate housing estates, especially the older, better located ones, the percentages of uninhabited units rarely exceeds 25 per cent. But in the new towns vacancy rates are quite commonly 50 to 75%. (The issue of vacancies is discussed in Chapter 3.)

Another post-delivery issue has been the resale and renting to third parties. This has been very widespread, amounting to 30 to 50% in older public housing estates, and it is even common in newer projects, although it

is forbidden. The phenomenon of resale and renting to third parties has both a positive and negative aspect. On the one hand, the practice leads to a reduction in unit vacancies, but on the other it means that the original beneficiary was either not in need of the unit or that his/her acquisition of the unit was for speculative purposes and eventual windfall profit.

A final post-delivery issue concerns housing project monitoring, follow up, and feedback for improved design. There was a lack of regular monitoring and evaluation for the projects after the finishing the construction and handing over the units. It is extremely rare to find consolidated or detailed accounting of repayments, attempts to enforce the ban on transfer to third parties, or any serious monitoring or evaluation of individual housing project success, let alone generating ‘lessons learned.’

#### **4.2.4 The National Housing Program (NHP) 2005 to 2011**

The National Housing Program (NHP) began on 1 October 2005 and was to run for six years, with a target production of 500,000 units. The NHP was also called “the President’s Promise” since it formed an important part of President Mubarak’s 2005 election campaign platform. This Program target thus called for an average annual production of 83,300 units per year, higher than had ever been achieved before (over the 1982-2005 period average government production was 57,700 units per year.) It also represented a considerable departure from earlier programs, introducing new products and encouraging for the first time participation of the private sector.

As can be seen from Table 4.5, the NHP has finally, after considerable delays, reached and even exceeded its targets. However, some units have not yet been completed/delivered, and it is said that vacancies of delivered units remain very high.

The program was implemented through six schemes, of which three schemes - *Ibni Beita* land plots, home ownership, and private developers — are considered the most important and widely applied, as can also be seen from Table 4.5.

52 See USAID/TAPRII, “Review of Egyptian Subsidized Housing Programs and Lessons Learned”, February 2007.

Table 4.5: National Housing Program Schemes and Unit Targets

Schemes		Total number of units according to original plan 2005-2011	Total number of units according to the adjusted plan 2005 to September 2012
1	Home Ownership (Governorates/ New Cities)	199,000	327,141
2	Provision of small land plots for individuals in New Cities (Ibni Beita)	89,000	93,756
3	Provision of land for private developers in New Cities to build 63 m <sup>2</sup> housing units	100,000	85,050
4	Family Home Ownership (Beit El Aila)	3,000	3,0200
5	Government Rental units	42m <sup>2</sup> Units for "Al-Awla Bel-Re'aaya"	46,750
		63 m <sup>2</sup> units by Awqaf	37,807
6	Rural Home Ownership in Governorates and Desert Hinterland	8,000	14,563
<b>Total</b>		<b>500,000</b>	<b>608,087</b>

Source: Egyptian Initiative for Personal Rights (EIPR), *siasa al-iskan fi masr – bein istimrar siyasat al-madi wa wada' siyasat 'aadala lil mustaqbil*, Cairo, December 2014



Figure 4.4  
Map of Sixth of October New Town showing location of NHP housing schemes. Source: Sixth of October Town Agency, 2010.

Generally, to apply for housing or housing plots under the NHP, the applicant had to furnish documentary proof that his income does not exceed EGP 1,750 per month if single and EGP 2,500 if a married couple.<sup>53</sup> The applicant (and the members of his nuclear family if married) must not already have acquired a housing unit or land from the government anywhere in Egypt, and he/she must sign a declaration to this effect.

#### Scheme 1: Home ownership (tamlik) in governorates and new cities

This scheme aims to help the low income households purchase public housing units of 63 m<sup>2</sup> typically.<sup>54</sup> To apply for a housing unit under this scheme, the age of the applicant should not be less than 21 years and should not exceed 40 years old. The income of the applicant or nuclear family shall not exceed the cap of the NHP general conditions. These general conditions also require that the applicant shall not have previously acquired a government housing unit or plot anywhere. Although the subsidy grant per unit is a constant, a choice of down payment and instalment arrangements are possible.

<sup>53</sup> The ceiling for monthly incomes until 2008 had been EGP 1000 for singles and EGP 1,500 for married couples.

<sup>54</sup> The Mortgage Finance Fund (MFF), formerly the GSF, has provided units under this scheme in Shurouk and 6th of October having area of 70 m<sup>2</sup>.





**Figure 4.5**  
NHP tamlik units (each 63 m<sup>2</sup>) in 6 October City, 2010. Photo: David Sims



**Figure 4.6**  
Inside a NHP 63 m<sup>2</sup> unit, 6 October, 2010. Photo by D. Sims

The price of unit was originally set at EGP 50,000. The applicant paid EGP 5,000 as down payment, and receives EGP 15,000 as a non-refundable grant from the State. The remaining EGP 30,000 is paid through a 20 year mortgage from State-owned banks (National Bank of Egypt – Banque Misr - Housing and Development Bank) with monthly instalment of EGP 160 pounds increasing by 7.5% annually. Having the State grant as a constant, a range of alternatives for paying down payment and monthly instalments was developed as well to suit every citizen.

### **Scheme 2: Land plots for individuals to build housing (Ibni Beita)**

This sites-and-services model initiated by the MHUUC in 2006 has been developed in 13 new cities and 3 governorates. Each household is allowed to build a maximum of a ground plus two floors on 50% of the 150 square meters land plot. Accordingly, the floor area is 75 per m<sup>2</sup> (63 m<sup>2</sup> apartment + 12 m<sup>2</sup> for stairs) and

the total built area allowed is a maximum of 225 m<sup>2</sup>, resulting in a Floor-Area-Ratio of 1.5. Normally front, back and one side setbacks are required, although the requirements vary from project to project.

In new cities, the serviced land price is EGP 70 per m<sup>2</sup> (compared to an average of EGP 150 per m<sup>2</sup>, as indicated by the Ministry, for infrastructure cost recovery). Accordingly, the total land price is EGP 10,500 with a 10% down-payment, and the balance in annual instalments over 7 years without interest. An EGP 15,000 subsidy is disbursed to the beneficiary in three tranches, tied to construction progress.



**Figure 4.7**  
NHP Ibni Beita sites and services units, Sixth of October, 2010. Photo: David Sims

To apply for a housing unit under this scheme, the age of the applicant should not be less than 21 years and should not exceed 40 years old. The income of the applicant must not exceed the NHP cap. The applicant shall not have previously obtained a State subsidy (in the form of housing units, through cooperatives or Housing Finance Fund, or at the Youth project or Future project). The applicant and his nuclear household shall not have previously acquired a plot of land in any new city.

Other incentives and facilities for beneficiaries apply. In case of beneficiaries' non-compliance with the determined schedule for constructing the ground floor, the land shall be withdrawn and the allocation shall be cancelled on the spot.

The Ibni Beita scheme encountered many problems, mainly said to relate to management and infrastructure, and as a result there is no consideration of repeating this sites and services scheme.<sup>55</sup>

<sup>55</sup> For a review of the Ibni Beita program, see Azza Sirry, *op. cit.*

### Scheme 3: Private investors housing projects

As the National Housing Program aims at engaging the private sector, the MHUUC announced a new scheme within the Program through which tracts of land in new towns are allocated to developers to build housing units within the Program. Land is immediately allocated to developers in case part (typically 50%) or all of the land area is to be used for developing housing units of 63 m<sup>2</sup> or less within the National Housing Program. In addition, the Ministry of Housing in 2008 started the allocation of land lots under this scheme to be developed by housing cooperatives, syndicates and government bodies.

The part of land lot dedicated for the development of units under the Scheme is priced at EGP 70 per m<sup>2</sup>, and the price of the remaining area (used to develop larger, market units and commerce, where applicable) is set in accordance with the relevant rules. The land value is paid in annual instalments for 10 years with a 10% down payment, a grace period of 3 years and instalments over 7 years. Land lots are delivered with off-site infrastructure (infrastructure on the borders of the land) and the companies shall execute the on-site infrastructure.



**Figure 4.8**  
NHP private sector-built tamlik units 63m<sup>2</sup>, Digla Gardens, in Six October 2010. Photo by D. Sims

Each company/entity shall submit the master plan of its project to get approval from the technical affairs department in NUCA. As for building permits, they are issued from the corresponding city agency.

To apply for a housing unit under this scheme, the age of the applicant should not be less than 21 years and should not exceed 50 years old. The income of the applicant

and/or household shall not exceed the NHP income cap. The applicant shall not possess an owned or a rent-controlled unit. The applicant and his nuclear household shall not apply for more than one housing unit.

### Scheme 4: Family home ownership in 6th October City (Beit El Aila)

Beit El Aila is an experimental neighbourhood with 3,000 units in 6th of October City. There are 2 types of units under this scheme: a floor-through apartment of 63 m<sup>2</sup> and a duplex of 70 m<sup>2</sup> with a private garden. These units have been allocated to some government employees.



**Figure 4.9**  
NHP Beit Al Aala units, Six October, 2007. Photo by D. Sims

There is no intention of repeating this type of three story housing blocks, perhaps because it was too high standard and too low density.

### Scheme 5(a): Rental units for the most deprived groups (Al-Awla Bel-Re'aaya) in governorates and new cities

This scheme aims to provide rental units with area of 42 m<sup>2</sup> for the needy citizens who can not afford ownership and for factories' workers in new cities. The duration of the rental contract is usually 7 years (renewable). the monthly rent is EGP 60 (including EGP 10 for building maintenance). Many of the units of this scheme have been allocated to families being resettled from central areas of Greater Cairo.

The scheme aims as well to provide rental units with the same area (42 m<sup>2</sup>) in Egypt's poorest villages. A total of 1142 villages were identified in 10 governorates.



**Figure 4.10**  
NHP Al-Awla Bel-Re'aaya scheme, 42 m<sup>2</sup> rental units. Photo by D. Sims 2010.

#### **Scheme 5(b): Rental units of 63 m<sup>2</sup> in governorates, new cities and by the Awqaf Authority**

This scheme aims to provide rental units with area of 63 m<sup>2</sup>. This scheme aimed to attract low income youth households with a preference for rental, as they can not afford ownership. Protocols were signed between the MHUUC and governorates as well as with the Awqaf (religious affairs) Authority. There is no information about the popularity or success of this scheme.

#### **Scheme 6: Rural home ownership in governorates**

This scheme aims to provide rural/Bedouin houses for ownership in some governorates with available lands or with desert hinterlands. The implemented houses have a ground floor of 50-63 m<sup>2</sup> on a 120-200 m<sup>2</sup> plot. This scheme is mostly made up of the 'Desert Backyard' project (al-zahir al-saharawi) which has constructed 42 villages in desert locations near to the Nile Valley. It was executed by the Central Ta'mir (Reconstruction) Agency. All units remain empty as of 2015, and the whole concept is generally recognized to have been poorly thought through.

#### **4.2.5 Evaluating the National Housing Program 2005-2011**

It is possible to make a provisional evaluation of the first NHP. In doing so we use the same evaluation criteria applied to government social housing programs in the 1982 -2005 period.

##### *(1) Delays in implementation*

The NHP revised in 2012 due to delays in implementation. This is particularly true of the Ibni Beita scheme, due to

tardy and mismanaged infrastructure provision, which has also happened in other plans. Although according to MHUUC data, the NHP has finally reached and even exceeded its targets, it is not clear what percentage of completed units have been delivered. It is known that some units continue to be allocated through the GSF and Housing and Development Bank. Even so, the achievements of the NHP in sheer production terms are certainly impressive.

But in rushing to achieve production targets, there are many projects where utilities lag, almost no roads are paved, and in some of the new towns there is lack of phasing in the development and construction. This is particularly true in the southern quadrant of Sixth of October, where there is a mix of NHP schemes.

Another worrying aspect is that most of the NHP units have already been delivered to beneficiaries, actual residence in these units is extremely rare so far. Anecdotal evidence suggests that only 20 to 30 per cent of units are actually occupied.

##### *(2) Multiplicity of government providers and absence of the private sector*

For this issue, the NHP scores high. While there are still many government housing providers, their production is at least coordinated by the NHP administration. And the production by the General Authority for Building and Housing Cooperatives, have been reduced to almost zero.

Also, private sector developers are now major players in social housing production, going from zero in the pre-2005 days to about 20 per cent of NHP total production.

##### *(3) land availability and location & matching of geographic supply with demand*

For this issue, the NHP continues the problematic situation of earlier social housing programs and even exacerbates it. Location of NHP projects are almost all in remote desert sites, distances are enormous, and accessibility will be a problem for years.

NUCA has recaptured some of the plots that were allocated for private and governmental entities to develop housing plans within the NHP and failed to deliver. Also, NUCA now has a policy of allocating land for a private sector scheme in phases, forcing developers to complete a phase before commencing on another.

##### *(4) Infrastructure provision and costs*

Some small improvement can be seen in this issue. Under

the NHP there is a base, although highly subsidized, price of infrastructure for land under Schemes 2 and 3. Yet all other schemes receive serviced land at no cost, and these extra off-plan subsidies must be absorbed by the executing agencies. Worse, there is still no accounting of the real costs of infrastructure provision. Not only is the true infrastructure subsidy cost associated with a project ever known, there are no attempts to minimize these costs through efficient layouts and system design. State land continues to be served with infrastructure as if the cost per m<sup>2</sup> of land is the same, regardless of location.

#### (5) Construction costs and inflation

The NHP has been plagued by rising construction costs of its projects and also inflation, and has not tried to index or forecast these rising costs into its programming. For example, in the tamlik model (Scheme 1) the cost of a 63 m<sup>2</sup> unit was set at EGP 50,000 in 2006, whereas by 2012 construction costs are far in excess of EGP 100,000, and it is government agencies which must absorb these costs, adding to the already high subsidy element associated with this model. And whereas it was intended that private sector developers would sell their units at roughly EGP 80,000, now most have been charging EGP 130,000 and more.

#### (6) Housing models, designs and layouts

The NHP scores quite high in its introduction of new housing models and designs. Foremost is the sites and services model of Ibni Beita (Scheme 2), which was totally new for social housing programs in Egypt and which represented almost 20 per cent of the NHP1 production total. Other new housing models were introduced, such as in Schemes 4, 5, and 6.

Yet the NHP still lacked diversity. Except for Ibni Beita, virtually all NHP units were either 63 m<sup>2</sup> or 42 m<sup>2</sup> in size. (There were a tiny minority of 70m<sup>2</sup> units.) And the majority of these units were found in walk-up apartment blocks of five floors.

In terms of layouts of NHP housing estates, there appeared to be a slight increase in densities over earlier programs, but neighbourhood layouts still had very large open space reserves and minimal consideration for economic activities. And no shops were allowed on ground floors.

#### (7) Direct subsidy elements

The direct, upfront subsidy element in the NHP was set at EGP 15,000 per unit (EGP 10,000 per unit for private developers). This was increased in later years to EGP 25,000. This one-off cash subsidy, budgeted from the central government, is a great improvement over previous housing programs, where even direct subsidies were confusing, came from various budgets, and were

hard to calculate.

#### (8) Indirect and hidden subsidy elements

Unfortunately, indirect and hidden subsidy elements associated with the NHP continued, as before, to be many and large. First, the opportunity cost of land was never calculated. Second, the considerable infrastructure costs associated with housing estates of the NHP were always subsidized, either totally or partially. (And since repayment was over 7 to 10 years, there was an additional hidden subsidy in the present value of the land price.) Third, in the tamlik scheme (Scheme 1, by far the largest) government banks of the tamlik scheme lent to beneficiaries at interest rates of 10.5 per cent, significantly lower than market rates of 13-14 per cent, absorbing the losses. Fourth, construction cost increases and delays added to the total cost of all the NHP units and, except for the private sector scheme (Scheme 3), these increased unit prices were absorbed by the executive authority.

#### (9) Targeting and beneficiary selection

In terms of who is eligible, how they are screened, and who receives priority, there was little change in the NHP from the very weak targeting systems of previous social housing programs. The NHP instituted an income ceiling over which an applicant could qualify, but this ceiling was very high and only excluded less than 10 per cent of urban households or individuals. Luck and first-come-first-served were the main factors in determining who benefits, and there was still little linkage to real housing need.

#### (10) Affordability of housing units

It appears that units under the main NHP schemes (schemes 1, 5, and 6) were quite affordable (at least in the early years) to most urban households with below-median household incomes. However, the private developer, ibni beita, and beita al aila schemes (schemes 2, 3, and 4) had as main beneficiaries middle class families and youth who were car-mobile and aspired to, but could not afford, the more opulent lifestyles inherent in most private sector schemes in the new towns.

#### (11) Post-delivery issues

Although the NHP started almost ten years ago, there have been virtually no attempts to monitor and evaluate it and its separate schemes in terms of vacancies, poor accessibility, repayment problems, etc. which have plagued earlier programs. Units were built and allocated and, so far at least, there appears to be no intention to judge successes over time or to learn lessons. This represents an acute failure of the NHP, as with other programs.

### 4.2.6 The new 'One Million' Social Housing

### Program (SHP) 2012-2017<sup>56</sup>

Although the Social Housing Program (SHP) – with a goal for providing one million housing units for low-income households in five years– was first announced in April 2011 and construction of units started in 2013, due to frequent changes in government it was not until 2014 that the outlines of the Program began to become clear. In May 2014 the Social Housing Law (Law 33 of 2014) was issued by Presidential Decree. (The Law’s executive regulations have not, however, been issued yet.) In June preparations for a World Bank project, called the Inclusive Housing Finance Program and aimed at supporting MHUUC and the SHP, began with considerable technical assistance.

To implement the Social Housing Program, the Law mandates that the Ministry “propose, plan and release social housing projects, and supervise their implementation, to secure suitable residence for low income citizens and land lots for middle income citizens.” The Law also provides for the establishment of an implementing body, the SHF, a legal entity whose executive director is nominated by the MHUUC.

The SHF will consolidate and expand existing housing programs. It will create new programs to fill the housing gap for the poorest and most underserved segments of the population, both for rental housing and ownership. In addition, the SHF is intended to address major housing issues that hinder private investment in the housing sector, and cause the underutilization of the stock (vacancies) and poor location of new residential construction.

In terms of the financing, release, and payment structures for this new subsidized housing approach, changes over previous housing programs are considerable. The Affordable Mortgage Finance Program, funded by the World Bank as a pilot since 2009, and implemented by the Guarantee and Subsidy Fund (GSF /MFF), is expected to replace existing social schemes. The stated aim is to move gradually from the poorly-targeted supply-side subsidy approaches of the NHP and to create mortgage-linked demand-side subsidies systems and much improved and effective targeting of subsidized units to those in need. Beneficiaries will have choice and be better able to have their needs reflected in the market, and the lower the household income the higher the subsidy elements. Also, by improving through privatization and outsourcing the targeting regime, those who should not qualify are more likely to be excluded.

So far the SHP is composed of two main schemes:

- A mortgage linked apartment ownership program, with units of 75 m<sup>2</sup> net (90 m<sup>2</sup> gross)
- A lottery housing plot program, with lots 206 to 260 m<sup>2</sup> aimed at four families who collectively build their own units with subsidized credit according to set plans
- A subsidized apartment rental program for the poorest families is also to be part of the SHP. In this regard, the private sector will be encouraged and utilized to partake in the program. Other schemes might be created in the years ahead.

It needs to be underlined that, in comparison with the NHP, the sizes of units in all main schemes are considerably higher. In fact, the housing plot program is specifically aimed at the middle and even upper classes. (See also Chapter 6.)

The SHP has been given considerable support from the Central Bank of Egypt (CBE) through below-market-rate funds, totaling EGP 20 billion (first tranche EGP 10 million), for use by the mortgage sector to stimulate the financing of house construction for low- and middle-income groups, that will allow mortgage loans at 7 and 8 per cent per year respectively, both with a 20 year term. Additional up-front subsidies will be available for low-income households. (See also Chapter 8.)

Serviced land for the SHP will be provided by NUCA in the new towns and elsewhere by governorates. All lands are State lands. It is understood that the costs of servicing these lands will be born by the providers.



**Figure 4.11**  
Remote governorate social housing blocks under construction on Western Desert fringe. Armant, Luxor Governorate, January 2014. Photo: D. Sims

56 Parts of this section are based on World Bank, Program-for-Results Information Document (PID), PID0018128, January 2015.

Screening to make sure applicants conform to eligibility criteria will be carried out by MFF, with checks being outsourced to private companies. Linkages are intended to be made to social safety net listed being maintained by the Ministry of Social Solidarity (including a new cash transfers program for the poorest families). Mortgage finance companies and local banks would offer mortgage loans to beneficiaries already screened by MFF who will check that they qualify, assess their ability to pay and creditworthiness. Also, MFF will maintain waiting lists.

In terms of awareness raising and promotion of the SHP, it appears that the MFF and MHUUC are making considerable efforts. Workshops and training courses are being organized to increase awareness among actors in the property sector, and publicity and awareness campaigns are being aimed at the general public. Also, MFF has a comprehensive web site has established a call centre for queries

#### *Housing programs in addition to the SHP*

It must be realized that there are many other government-sponsored housing programs set to run in parallel with the SHP. These include Dar Misr, aimed at creating high quality middle class housing estates in the new towns (and implemented by NUCA). Also running in parallel is an expanded cooperative housing program also to be in the new towns. (see Box 4.1). Similarly it is understood that the Waqf (religious endowments authority) rental units formula of 63 m<sup>2</sup> will continue, although the number is unknown and will depend on Waqf land availability and funding. In addition, there is the Arabtec Housing program, supposed to build one million apartment units of between 75 and 160 m<sup>2</sup> in nine new towns.<sup>57</sup> Other non-SHP housing schemes are in the works. Almost all of these, it must be underlined, aim at what are considered the middle classes and not those of limited income. Thus, looking at these programs as well as the SHP, it seems that government housing policy in the current period aims to satisfy middle class housing needs as much as those of the lower income households and the poor, or even more so.

#### **Box 4.1: Cooperative Housing Providers\***

*The General Authority for Construction and Cooperative Housing was established by Presidential Decree No 193/1977, and the cooperative housing sector is governed by Law 14 of 1981. The legislation was written to encourage groups to form cooperatives for the purpose of building collective housing. A group must have at least 30 members who have some common bonds (professional or geographic affiliation or 'youth'), and each cooperative is governed by an elected board. Currently there are over 3000 registered housing cooperatives. In the past cooperatives, with the help of the Authority, obtained State land for housing projects at very low prices. The Authority assisted them in obtaining soft loans from the National Investment Bank (currently the loan per unit is EGP 50,000 at 5 per cent interest), and members were supposed to pool their resources to cover the financing gap.*

*A special feature of the Authority is that it itself builds housing units, also with credit from the National Investment Bank, which it then sells to citizens. Housing production by the Authority combined with that of housing cooperatives was in the past very significant. Since 1982 production has totalled 287,000 units (of which 190,000 were built by the Authority itself), with the greatest production in the 1990 to 1997 period. However, production has subsequently declined and since 2005 has rarely exceeded 1000 units per year. Lack of finance, lack of land, mismanagement and corruption are said to have been the main causes.*

*The current chairman wishes to re-establish housing cooperatives to their former prominent position. A five year plan 2012 to 2017 sees a target production of 150,000 units, of which 100,000 will be built by housing cooperatives, 35,000 by the Authority, and 15,000 in rural productive*

<sup>57</sup> According to the Minister of Housing, an agreement was reached with the Arabtec Company of the UAE in April 2015 to begin a first phase of 100,000 units. Al Masri al Youm, "tanfiz al-million wahda b'ad towqia' al-marhala al-oula," p 3, 20/04/2015.

villages. The 1981 law is being revised. And in 2013 a protocol with NUCA was signed for the allocation of 1,200 feddans (acres) for cooperative housing in 12 new towns. The price of this land is below market and varies from EGP 450/m<sup>2</sup> to 1,490/m<sup>2</sup>. The Authority would also like to take over the stalled Desert Backyard villages project and make them integrated economic centres.

It is important to note that cooperative housing is aimed mainly at middle class families. Housing units sizes cannot exceed 150 m<sup>2</sup> and they tend to average 90 to 115 m<sup>2</sup> new per unit. New regulations stipulate that units cannot be sold or rented to third parties for five years, and after this only through the Authority. And to enforce this the shah al-'aqari offices have been instructed not to endorse any sales contracts of cooperative apartments.

\* Based on an interview with the current chairman of the Authority Hussam Risk on 4 March 2015

#### 4.2.7 Evaluating the Social Housing Program (SHP)

The SHP (and the SHF) are still works in progress, and aspects are still being formulated and refined. However, it is possible to make a preliminary assessment of the program, based on the same criteria used to evaluate earlier housing programs found in Sections 4.2.5 and 4.3.4 above:

##### (1) Delays in implementation

After more half of the SHP 2012-2017 period has passed, the program is seriously behind schedule. MHUUC pronouncements are sometimes conflicting, but by February 2015 only some 25,220 units had been completed, all in the new towns, and of these only 8,100 were in the process of being delivered to beneficiaries. And the program is scheduled to have 144,000 units completed or under construction by June 2015, representing only 10 percent of the one million unit target.<sup>58</sup>

##### (2) Multiplicity of government providers and absence of the private sector

Whereas the SHF is supposed to consolidate all providers of social housing under its umbrella, it appears that there are still questions as to what entities will be involved. The core program will be financed and coordinated by MHUUC and land provided and units built by NUCA and governorates directly. There is already an established partnership with the private sector, in accordance with the decree of the Cabinet of Ministers year 2016. The Armed Forces have had an early role, and it is not clear whether other agencies will have a role.<sup>59</sup> Certainly the General Authority for Construction and Housing Cooperatives will maintain their independent operations (see Box 1.) Also, it is unclear if the Awqaf Authority will participate.

The private sector is intended to have a roll in the SHF, but so far no agreements with private developers have been made, nor have the parameters of such agreements been established. In effect, the SHP seems set to be very much a system where government provision dominates totally. (The SHP relies mostly on smaller private contractors for housing construction through tenders.)

##### (3) Land availability and location & matching of geographic supply with demand

Efforts are well underway to identify and designate land – in all cases State land – for the SHP. Lists of land needed by all 27 governorates began to appear in December 2013, protocols between governorates and MHUUC have been signed for land enough for 75,000 units, and piecemeal land assignments (takhsis) are underway through ministerial decrees. Special standards and criteria were defined for the selection of residential buildings' locations to be used for social housing. For instance, the plots have to be within the approved urban boundary; otherwise if it is not possible, approvals have to be obtained from the relevant stakeholders. Moreover, the plots have to be distant from dangerous and unsafe areas, proximate to the public basic services (or easy to reach), and within the already existing urban mass, or the availability of approved plans if the location is within urban expansion areas. In addition NUCA has designated land in 19 new towns. However, it is difficult to obtain information about the scale, location, and services for the social housing programs.<sup>60</sup>

It appears, in the headlong search to find enough State

<sup>58</sup> See [http://www.newcities.gov.eg/about/Projects/Housing\\_projects/SocialHousing/default.aspx](http://www.newcities.gov.eg/about/Projects/Housing_projects/SocialHousing/default.aspx)

<sup>59</sup> MHUUC production figures for public sector housing show that in FY 2013/2014 housing and development companies built 932 units, the Housing and Development Bank 506 units, and the Ta'mir agencies 110 units. Presumably these units were not part of the SHP.

<sup>60</sup> For example, based on information provided by Giza governorate, a large parcel of 270 feddans in Dahshur is earmarked for 16,000 SHP units on what had been a central security camp, far in the desert and far from any substantial urban agglomeration. Another site for 2,600 SHP units has been designated on 65 feddans at Girza near Al-'Ayat, located just off the Assiut Desert Highway many kilometers from any habitation (Information provided by the director of the Housing Directorate, Giza Governorate, 2 March 2015).

land for the colossal SHP, that the locational mistakes of previous programs will be repeated and even compounded. Even assuming infrastructure and services can be provided in a timely manner, most SHP housing will be decidedly in unattractive and remote locations where low-income households will find it extremely difficult to make a livelihood. The result is predictable: massive amounts of allocated but un-occupied SHP units. Under the World Bank's upcoming Inclusive Housing Finance Program for Egypt, one criterion for disbursement of loan moneys is that SHP sites be within a certain time distance of employment opportunities. It is hard to see how this criterion will be defined, let alone met.

#### *(4) Infrastructure provision and costs*

There is little information about how the many SHP sites are to be provided with necessary infrastructure by governorates and NUCA. Given problems encountered in previous housing programs, and given the sheer scale of the SHP, it is likely that the provision of infrastructure – especially for water and sanitation – will be challenging for the specified authorities. What the costs of this infrastructure will be, and how it will be financed by NUCA and governorates, are also difficult issues despite the fact that the special set standards and criteria indicate that the plots to be used for social housing have to have basic infrastructure or can be easily connected to those services, and to be connected to the road network. Regarding the internal infrastructure, the MHUUC finances the services and the directorates supervises the work. Presumably infrastructure costs for the Iskan al-'Aili plot component will be recovered through land sales, but for the 75 m<sup>2</sup> apartment component it will be up to NUCA and governorates to somehow cover finance infrastructure.

#### *(5) Construction costs and inflation*

The nominal construction cost of the 75 m<sup>2</sup> SHP unit is set at EGP 130,000, and it is upon this cost that the financing arrangements and payments by beneficiaries are tied. Given past experience and also given the steep inflation in building costs, it is inevitable that actual construction costs will creep up significantly, and as far as is known there is no mechanism for these additional costs to be quantified or incorporated other than to resort to additional funding from the central government budget as need arises.

#### *(6) Housing models, designs and layouts*

The standard apartment unit for ownership in the SHP is 90 m<sup>2</sup> gross (roughly 75 m<sup>2</sup> net) with a living room

and three bedrooms (smaller units around 65 m<sup>2</sup> were made available on the rental market to test the demand on the subsidized rental units for people with income less than 1,500 LE per month as a part of the SHP). All units are to be in standard walk-up apartment blocks without elevators. These apartment units are significantly larger than those of the NHP, but they do not represent any departure from the norm in terms of innovation, except that in rare cases the ground floors may be used for commercial and other non-residential purposes (ref Giza).

There will also be plots of land (209 to 276 m<sup>2</sup>) upon which four families are to build units of 140-165 m<sup>2</sup> gross as part of the Iskan al-'aili program. This can be considered a kind of middle-class sites and services scheme, an evolution from the Ibni Beitaq program. No other serviced lots are to be part of the SHP, at least so far.

In terms of layouts, the SHP seems to be repeating the practice in previous programs of segregating types of housing into large and uniform residential superblocs. However, there are attempts at infill, where SHP blocks are inserted into existing urban fabrics.<sup>61</sup>

In other words, the unimaginative and standardized approach to housing types, design, and layouts found in earlier programs seems to also be a feature of the SHP. Of course, it may be that some innovation will occur as the SHP progresses.

#### *(7) Direct subsidy elements*

The direct, upfront subsidy for the standard SHP apartment unit is clear, ranging from EGP 6,250 to EGP 25,000 depending on beneficiary income levels. What is not clear is how this direct subsidy will be financed once the AMP moneys are exhausted. Presumably it will have to come from the central budget.

#### *(8) Indirect and hidden subsidy elements*

The indirect and hidden subsidies associated with the SHP are substantial. First, infrastructure to service SHP lands are to be financed by governorates and NUCA, and these costs are nowhere reflected in the SHP financing arrangements. Second, demand-side mortgage loans for SHP beneficiaries are heavily subsidized by the CBE stimulus package (7 per cent interest for low income families and 8 per cent for middle income families, versus market rates of 13 to 14 per cent.) Third, as inflation and delays raise the real cost of housing unit construction, there will be an increasing gap between the nominal price upon which beneficiary financing is based

<sup>61</sup> This having been said, it appears that some land being designed for the SHP in governorates is quite small, meaning that there may be some un-intended infill, at least in rural areas on desert fringes. For example, 9 parcels of land allocated in Sohag governorate according to Prime Ministerial Decree 518/2014 range from 0.5 feddans to 5 feddans, enough for only a handful of housing blocks in each.



and the unit delivery price. Who will absorb this?

In other words, it seems that in comparison with the NHP, the subsidy elements inherent in the SHP will be less clear, and who will cover these costs will also be less clear.

It should be added that the State land upon which SHP housing is constructed has an implied opportunity cost, represented by what such land would fetch if put on the free market. While most SHP land will be in remote areas of little value today, given steep increases in land prices in Egypt, this is an issue that should at least be considered.

#### *(9) Targeting and beneficiary selection*

Calls for applications for the SHP have been prominent in newspapers since September 2014.<sup>62</sup> Information about the conditions and criteria for qualifying are also well advertised. In addition, the GSF system of vetting applications, verifying information, and preventing cheating represents a huge improvement over earlier housing schemes.<sup>63</sup> Also, the time between an application's approval and unit delivery has been dramatically reduced, meaning the SHP is responding better to real time need.

Since so far the number of applications being processed remains small, it remains to be seen if this good application screening process will be able to handle the much increased load as the SHP goes to scale.

An issue surrounding beneficiary selection relates to the very mechanistic way that household incomes are set and verified. Qualifying for the SHP and the amount of up-front subsidy enjoyed by beneficiaries are both based on this. It seems that the system will allow many whose real income is much higher than levels allowed to qualify, meaning that there will be significant raiding of the SHP by what are in fact middle income households. This issue is discussed in Chapter 6.

Another issue relates to the fact that a huge number of households – those who do not have stable and verifiable incomes – will not be able to qualify unless they go through an almost impossibly difficult and bureaucratic process. This issue is also taken up in Chapter 6.

#### *(10) Affordability of housing units*

According to World Bank reports, it is claimed that the standard apartment ownership component of the SHP through the GSF will be affordable to households down

to the 20th percentile.<sup>64</sup> And the intention is to set up a Rental Financing Fund (RFF) that will deliver very affordable rental units for very poor households. If true, this means that the SHP will be very affordable, but there are a number of questions that remain unanswered. These issues are taken up in Chapter 6.

#### *(11) Post-delivery issues and M&E*

In terms of monitoring and evaluation, the new SHF system will be a definite improvement. The GSF intends to run a very sophisticated M&E system that will track beneficiaries in the post-delivery period – looking specifically at perennial problems such as vacancies and re-sale and renting, and thus actually learn some lessons about how to improve program parameters.

### **4.2.8 Assessing the evolution of social housing programs**

The three main housing programs described and assessed above -- the housing programs of the 1982-2005 period, the National Housing Program of 2005-2012, and the 'one million' Social Housing Program 2013-2017 – can be compared in matrix form as is shown in Table 4.6.

### **4.3 FORMAL PRIVATE SECTOR PRODUCTION AND PROVIDERS<sup>65-A</sup>**

As shown at the beginning of this chapter, formal private sector housing production accounted for almost 25 per cent of total housing unit production over the 1996-2006 period in urban areas. From 1982 through mid 2014 total private sector production amounted to 3.38 million units. This translates into an average annual production of 106,000 units. The highest production, some 172,000 units, was recorded in March 2002. The lowest production, some 32,000 units, was recorded in 1993/94. Over the last five years for which data is available (mid 2009 to mid 2014), production averaged about 110,000 units.

Not much detail is known about private sector production, since the only data source is that derived from information on building permits. For example, in the fiscal year 2013/2014 production was 103,283 units at a total estimated investment of EGP 6.196 billion, which translates into a unit investment cost of EGP 61,100, which seems quite small. It is understood that investment estimates derived from building permits are usually seriously underestimated, since the permit fee is based on a percentage of this value.

62 According to Al Masri al Youm, 27/09/2014, p 3, citizens in 18 governorates could begin to apply.

63 For applications received for SHP units in Assiut, Sadat, and Tenth of Ramadan new towns by 30 September 2014, of out of a total of 33,769 applications only 15,039 or less than half were determined to have met all conditions.

64 See World Bank, PID, op cit.

65-A All data in this section comes from the Housing and Utilities Sector, MHUUC.

Table 4.6 : Evaluation and Comparison of Egypt's Subsidized Housing Programs<sup>65-B</sup>

Criteria	Housing programs 1982-2005	National Housing Program 2005-2012	Social Housing Program 2012-2017
(1) Delays in implementation	Endemic	Slow to start and 2 year delay	Very slow start; one million target impossible in time frame
(2a) Multiplicity of providers	Many and confusing	Fewer but still confusing	Only two providers for SHP (but many other government providers running in parallel)
(2b) Private sector inclusion	None	Small inclusion and problems encountered	Inclusion planned, but probably will be very small
(3) Land availability and location	Varied locations, but mostly remote and inappropriate	Remote and inappropriate	Special standards and criteria for selecting the locations were defined
(4) Infrastructure provision and costs	Problematic and non-factored costs	Problematic but nominal costs factored	Special standards and criteria for internal and external basic infrastructure were defined
(5) Construction costs and inflation	Nominal units costs always exceeded	Nominal unit costs exceeded but somewhat adjusted for inflation	Nominal costs will be exceeded, and no mechanism for adjustment
(6) Housing models, designs, & layouts	Mainly standard walk up apartment blocks	Mainly standard walk-up apartment blocks, but including Ibni Beita sites and services	Exclusively standard walk-up apartment blocks, but with middle class land plots also
(7) Direct subsidy elements	Large but unclear	Less subsidy and clear (up-front)	Some subsidy and clear (upfront)
(8) Indirect and hidden subsidy elements	Many, large, and confusing	Less and smaller, but still confusing	Many, large and confusing
(9) Targeting and beneficiary selection	No targeting, random luck	Minimal targeting plus random luck	Excellent targeting planned, but criteria somewhat exclusionary
(10) Affordability of housing units	Very good	Fair	Good in theory
(11) Post-delivery problems and M&E	Vacancies and resale common No M&E	Vacancies and resale very common. No M&E.	Vacancies and resale may become huge problems. Good M&E plans

How is housing produced by the formal private sector in urban Egypt? Production is carried out by: (1) large corporate developers that produce housing estates and compounds (mainly in the new towns, but also in some up-market areas of Greater Cairo and Alexandria), (2) by smaller developers who construct one or a handful of buildings at a time, and (3) by individuals who construct only one building. Production by individuals is more prominent in the smaller towns, but also is common in new towns on subdivided plots provided by the State. All formal private developers employ consulting engineers to design and supervise construction and

registered contractors who carry out construction. Some larger developers have in-house design and supervision capacities and also have affiliated contractors. Individuals who produce single apartment buildings will employ a registered architect for design and working drawings, since a building permit is required, and will probably employ a contractor for construction, although this is not required by law.

65-B This was the impression while the report was being prepared in 2015, however the project was able to achieve a major milestone as the number of housing units have reached 300,000 in 2017.



**Figure 4.12**  
Formal private housing at various stages of completion on 600 m<sup>2</sup> plots, New Cairo, 2009.

It is well known that most production by the private sector targets the high end of the housing market, although there are no precise production figures to confirm this. In the new towns, with rare exceptions, housing units built by private developers or individuals will typically range from 150 to 350 m<sup>2</sup> in area. Some developer projects will claim that they also offer some down market units of between 115 and 150 m<sup>2</sup>, but these projects are relatively rare.

The means of financing of private housing projects are various. Developer equity is usually required for the land purchase. Bank loans are sometimes taken to finance construction, but it is very common for the developer to sell units 'off plan,' that is, before and during construction under a system of instalment payments. This is extremely advantageous to the developer. For a number of reasons consumers rarely take out mortgage-backed loans to purchase private sector units, using savings and other forms of family equity instead (see also Chapter 8).



**Figure 4.13**  
Private developer compound housing, New Cairo, 2009.

The more established private housing developers operating in Egypt are listed in Table 4.7. These develop housing estates and compounds almost exclusively in four new towns around Greater Cairo (New Cairo, Sixth of October, Sheikh Zayed, and El Shorouk) and along the Alexandria-Cairo Desert Highway.) Most of these also concentrate on resorts and leisure homes in coastal areas and may undertake retail schemes (malls). In fact, of the developers listed in Table 4.7, only the Talaat Mostafa Group and Ma'mar Al Morshedy restrict themselves to just residential projects. There are many other smaller developers who build slightly down market housing in Cairo, Alexandria, and some provincial towns and who promote their projects through newspaper advertising and by the internet (either directly or through agents.)

Table 4.7: Large and Well-Known Housing Developers in Egypt

Developer	Main Residential Products
Orascom Development Holding	Mid level residential units
Talaat Mostafa Group	High level residential units
Palm Hills Development	High level residential units
SODIC	High level residential units (plus one mid level project in West Cairo)
Ma'mar Al Morshedy	Mid and high level residential units
Al Ahly Real Estate Development	High level residential units
Amer Group	High level residential units
Emaar Misr	High level residential units
DAMAC	High level residential units
Qatari Diar	High level residential units

Source: Alexbank, *Sectoral Survey: Egypt's Real Estate Industry, January 2012*, pp 18-19.

#### 4.4 INFORMAL SECTOR PRODUCTION AND PROVIDERS

For informal housing, which as has been pointed out above in Section 4.1, represents at least two-thirds of all urban housing production in Egypt, the process of production is quite different from that of the formal private sector. The vast majority of informal buildings are managed by an individual or single family. For smaller buildings design is either made by a local master mason,

by an informal “ahli” contractor, or by a local architect/engineer. The design parameters, norms of construction, and structural requirements are very well known locally. Building permits are not required. Progressive building is the norm. The building is normally constructed one floor at a time or by phases, with foundations and RC frame and slab first, then brick infill, then windows and doors and utilities and interior finishings. In the past the property owner was likely to manage and supervise the construction process himself, hiring skilled and unskilled workers and purchasing and assembling required building materials. However, at least in Cairo, it is now more likely that the property owner contract out the building process to a local contractor, who will also be very knowledgeable about how to get around officialdom and gain the necessary permissions for utilities through extra-legal payments. Even in this case the owner is likely to be on site continuously to ensure quality construction. Under this form of informal construction, a single building may take years and years to complete, and further vertical expansion is still possible.



**Figure 4.14**  
Informal housing under construction in Giza off ring road, 2006.  
Photo by D. Sims

In the last few years, in some informal areas of Cairo and other large towns, a new type of informal construction has become more and more popular. This can be called the “one-off tower” usually 10 to 15 floors high. The building is constructed all at once and quite rapidly. Units are immediately put on the market, usually for sale. Cash payment is the norm, although it is understood payments can sometimes be spread over three to five years. Units usually range from 90 m<sup>2</sup> to 175 m<sup>2</sup>. It is understood that in most cases a group of persons, frequently from the same clan or same village of

origin, will pool their resources to construct the tower, looking for rapid returns through sales. In some cases an informal developer will have acquired a large parcel of agricultural land some years ago, then will sell off part of this land, using the very handsome profit to finance his tower project. While these towers are being built in informal, unplanned areas, it is understood that at least some that front on major streets have obtained building permits, at least for the lower floors.

The phenomenon of the one-off tower is becoming more and more common, but as far as is known there have been virtually no studies of it, and even the most anecdotal information is lacking. This is an example of the serious gap in the knowledge of housing production in urban Egypt, since informal housing represents huge and rising investments in the sector, and it produces quite good quality housing units of the sizes most demanded by a wide segment of household demand. Perhaps most importantly, it tends to be very well located and accessible within large urban agglomerations. In effect, this mode of informal housing production is in direct competition with moderately priced private housing that is beginning to be built by some private developers.



**Figure 4.15**  
Informal one-off tower blocks under construction, Boulaq al-Dakrou, 2009. Photo by D. Sims.

#### 4.5 Regulations governing housing production and the building permit regime

The Unified Building Code of 2008 (Law No. 119 of 2008) is now the core legislation for both urban development and housing construction, having combined the urban planning and urban development standards in Egypt that had been covered by the Planning Law, No. 3 of 1982,<sup>66</sup> and construction and building regulations

<sup>66</sup> It should be noted that the legal frameworks for local urban management are mainly covered by the various laws which govern local administrations (governorates, marakaz, city councils etc.) Also, urban planning and management functions in the new towns are largely governed by the New Urban Communities Law No. 59 1979.

that had been covered by the Construction Law No. 106 of 1976, frequently amended. These laws (as well as a number of other related legislation and presidential decrees) were merged into what is commonly called the Unified Building Code. Its executive regulations were issued in April 2009.

Many observers have put much hope in the new law as a means to allow more local control of planning and to allow more flexible and realistic standards for subdivision and building. A reading of the law and its executive regulations gives very little hint of this, and in fact seems to impose the same or even stricter hierarchical control of all aspects of planning, local development, and building. Local (governorate and city) planning units are mentioned as responsible for strategic and detailed local strategic plans within their jurisdiction, but both the standards to be applied and the ultimate approval rests with the national GOPP (or through its regional offices). Exemptions and variations to subdivision and building standards for a particular area can only be made by the national Supreme Council for Planning and Urban Development (itself to be set up under the Law) upon request of the concerned Governor. Building and street standards seem to be exactly the same as under old legislation (e.g. building heights not to exceed 1.5 times the street width with a maximum of 36 meters height), but these standards are prone to change in the case of activating the local strategic plans. Special regulations also govern special zones such as downtown and historic zones, re-planning areas, and unplanned areas. The law introduced a new one-stop shop mechanism for issuing the permits by combining all the requirements from the different relevant stakeholders for issuing permits. This one-stop shop led to the advancement of Egypt by 64 positions compared to last year in the Global Activity Report 2017 issued by the International Finance Corporation (IFC). Currently, Egypt occupies the 64th place out of 190 countries compared to last year were Egypt occupied the 113th place out of 179 countries<sup>67</sup>.

In effect, it seems that the new draft Law is primarily a vehicle for certain new urban concerns and concepts. Part II of the Law (Articles 25 through 36) is devoted to ways to promote better urban and architectural styles and less visual pollution, and the Law gives a

jurisdictional personality to the “National Agency for Urban Harmony” (established by Presidential Decree in 2001.) Chapter Eight (Articles 60 through 65) introduces the requirement that all finished buildings have occupancy permits.<sup>68</sup> Part Four makes compulsory the establishment of Occupants Associations in all residential buildings mainly for building maintenance purposes (Articles 68 through 87 and related to the issue of maintenance, Articles 88 through 95). Finally, it introduces land re-adjustment or pooling for newly planned neighbourhoods on private land (Article 23).

In practice, the Unified Building Code only applies to the formal private sector, although the 2008 law stipulates that public sector providers must follow its stipulations also.

The building permit regime is required for all private construction by companies or individuals. (Law 108 of 2008 requires that public agencies also obtain building permits, but this stipulation is usually ignored.) To obtain a building permit for a residential construction is a long, expensive, and arduous process in most areas of Egypt. The building permit process is described in some detail in Chapter 10.

#### 4.6 IDENTIFICATION OF GROUPS EXCLUDED FROM GOVERNMENT HOUSING PROGRAMS

Applying for current government housing programs requires that a national identification and other civil status papers (such as social insurance) be in order. Thus, a priori, a number of those in need of housing are excluded. These include citizens who do not have separate IDs, homeless persons, foreign and stateless residents, refugees, older persons who never officially registered in the state system. The numbers of these persons is significant and regularizing civil status is often a very difficult process.

Also, there are in Egypt many low income and marginal people and families who live very precariously, are illiterate, and who – although their identification papers are in order – would never think of going through the bureaucratic processes involved in applying and qualifying for social housing units. Even among established families

67 One welcome change relating to private subdivisions was recently introduced by Prime Ministerial Decree 67 of 2014. It modifies the executive regulations of the Unified Building Code to reduce the area that a subdivider must set aside for public use from 33 to 25 percent of the total.

68 In a particular example of bureaucratic overload, Article 65 states that all sale or rental contracts for units in a finished building must indicate all details of the building license, including the number, issuing authority, date, number of allowed floors & units, required off-street parking spaces, etc. as set by the Executive Regulations, or else the contract shall not be registered.

it is not hard to find those who avoid any dealings with the government. For these persons housing solutions lie in the private sector, whether formal or informal.

Also, as shown in Chapter's 6 and 8, Egypt's current social housing program, while an improvement over preceding schemes in terms of targeting, eligibility requirements that preclude a huge portion of poor and middle income households, and all households that do not have formal jobs.

# HOUSING NEEDS AND GAPS

In this chapter an attempt is made to establish the scale and nature of national housing needs and gaps in 2015 and to project them to 2030. It is purely a quantitative approach. Section 5.1 provides a snapshot of the population, the households and the housing stock in Egypt relying on information from previous censuses. It gives also a brief on the approach used to estimate current and future housing needs. Section 5.2 is an effort to estimate the current housing needs and assess the housing gap as of 2015 despite the lack of comprehensive and reliable data. The main concern of Section 5.3 is to estimate the future annual needs for housing in Egypt to 2030 based on a realistic population forecast. The calculated housing needs are then compared to government estimates. Sections 5.4 and 5.5 focus on estimating land and investment requirements for the needed housing to 2030.

It must be stressed that what is estimated here is only one side of the housing needs equation, and it ignores real, effective demand for housing, i.e. what households can afford to pay to access modest housing units, either for rent or purchase. This issue is taken up in Chapter 6 below.

## 5.1 Estimating current and future housing needs – a difficult task

With a few exceptions, Egypt has conducted a population census every 10 years since 1882. The latest in this series was conducted in November 2006. The national census in Egypt covers four dimensions: population, buildings, economic establishments, and living conditions. The following table summarizes the relevant results of the latest census as well as the comparable figures from the 1996 census. The table shows that the Egypt's total population increased from 59.3 million in 1996 to 72.6

million in 2006, with an average annual population growth rate<sup>69</sup> of 2.05 per cent. Over this period, the total number of households grew from 12.70 million in 1996 to 17.27 million in 2006. Meanwhile, the average household size decreased from 4.65 in 1996 to 4.18 in 2006.

Table 5.1: Evolution in the Population Size, Number of Households, and Number of Housing Units in Egypt 1996-2006

	1996	2006 <sup>70</sup>	% Increase (1996-2006)
Population size	59,312,914	72,798,031	22.4%
Number of Households	12,702,600	17,289,299	36.1%
Number of Housing Units	16,210,305	24,131,771	48.9%

Source: CAPMAS censuses of 1996 and 2006

Egypt's housing stock comprised 24.13 million housing units in 2006. The number of households living in Egypt has increased by 36.1 per cent over the 10 years between 1996 and 2006, while the number of units has increased by 48.9 per cent over the same period. This inconsistent growth of units and households could be explained as an outcome of building more units than needed, with these extra units are eventually kept vacant and closed.

69 The following exponential formula is used for all population forecasts herein:

$$P_t = P_0 e^{rt}$$

Where  $P_t$  is the population to be forecast at time  $0 + t$ ,

$P_0$  is the population at time  $0$  – the base year,

$t$  is the number of years between  $0$  and  $t$ ,

$r$  is the annual growth rate

According to this formula, the annual rate of growth over a given period is calculated as:

$$r = (\ln P_t / P_0) / t$$

70 According to the final results of 2006 Census

Housing needs are influenced by population growth rates, household size changes and new household formation rates, as well as the characteristics of existing housing stock in terms of quantity and quality. Using these figures to estimate the current and future housing needs is not a straightforward task, and a set of background assumptions as well as statistical forecasts are needed. This is what the next sections reveal.

## 5.2 ESTIMATES OF CURRENT SHORTFALLS AND GAPS

Estimating the current housing gap or shortfall requires the use of extensive data on demographic attributes and housing stock characteristics. Typically, such data are only provided by national censuses. That's why the ideal time to estimate the current housing gap is in the aftermath of the publication of the results of a national census. Trying to assess the present gap as of 2015 requires that first the 2006 housing gap, estimated by the Central Agency for Public Mobilization and Statistics (CAPMAS), be first considered. Then, changes due to population growth and housing supply will be investigated in order to reach an estimate for the actual housing gap.

### The 2006 housing gap

The housing gap can be defined as “the difference between available housing units at a specific point of time and estimated needs for housing at the same point”. This definition was adopted by a thematic report prepared by CAPMAS in 2008. The report, entitled “Study of Current and Future Housing Needs in Egypt (2007-2022)”, used the then fresh data obtained from the 2006 Census to estimate the housing gap as of 2006. The methodology used to calculate this “quantitative” housing gap was straightforward and can be summarized in three steps: (a) computation of current housing needs as of 2006; (b) estimation of available housing units; and (c) calculation of the difference between estimated housing needs and available dwellings, i.e. the housing gap.

The available housing units in 2006 were assumed to be equivalent to the sum of unoccupied and vacant housing units<sup>71</sup>. This assumption was grounded on the fact that the number of unutilised (unoccupied and vacant) housing units exceeds the number of surplus housing units on the national level. The following table compares the two figures for urban, rural and total Egypt.

Table 5.2: Number of housing units, surplus units and unutilised (unoccupied and vacant) according to the 2006 Census

	Number of households	Number of housing units	Surplus housing units		Unutilised housing units (unoccupied – vacant)	
			Number	% of units	Number	% of units
Urban	7,751,512	12,647,970	4,896,458	38.7%	4,580,122	36.2%
Rural	9,514,055	12,167,342	2,653,287	21.8%	3,318,962	27.3%
National	17,265,567	24,815,312	7,549,745	30.4%	7,899,084	31.8%

Source: CAPMAS censuses of 1996 and 2006

The following table shows the breakdown of the unutilised/available housing as of 2006.

Table 5.3: Number of available housing units according to the 2006 Census

	Housing Units					
	Unoccupied		Vacant		Total	
	Number	%	Number	%	Number	%
Urban	1,175,412	55.1	3,404,710	59	4,580,122	58
Rural	957,607	44.9	2,361,355	41	3,318,962	42
National	2,133,019	100	5,766,065	100	7,899,084	100

Source: Study of Current and Future Housing Needs in Egypt (2007-2022), p. 24

71 A housing unit is counted as “unoccupied” (aka closed) if the unit is owned by people who have a permanent residence elsewhere but occupy the unit from time to time on a temporary basis. A housing unit is counted as “vacant” if no one is living there on a permanent or temporary basis.



The 2006 housing needs was computed by summing:

- (i) The units needed for households living in marginal/inadequate housing (iskan gawazi)<sup>72</sup>; and these were around 317,000 units.
- (ii) The units required for new household formation; and these can be obtained by adding adults (males aged 18 years and above and females aged 16 years and above) who were never married (13,659,314) and those who already concluded prenuptial agreements (335,035) and dividing the sum by 2.
- (iii) The units necessary for replacement of run-down stock (estimated at 1 per cent of existing units or households); and these are estimated to be about 173,000 units
- (iv) The additional “reserve” units needed for residential mobility (estimated at 8 per cent of occupied dwellings); and these can be obtained by adding housing units in ordinary buildings for residence (16,525,589) and housing units in ordinary buildings for work (73,644) and multiplying the sum by 8 per cent .

Overcrowding is disregarded as the priority is to provide housing to households without homes. The following table shows the 2006 housing needs.

Table 5.4: The 2006 housing needs in Egypt

No.	Needs	Housing units	
		Number	% of Total
1	Units needed for households living in marginal housing (iskan gawazi)	316,995	3.6
2	Units required for new household formation	6,997,174	79.4
3	Units necessary for replacement of run-down stock (1% of existing units or households)	172,656	2.0
4	Additional “reserve” units needed for residential mobility (8% of occupied dwellings <sup>73</sup> )	1,327,939	15.1
<b>Total</b>		<b>8,814,764</b>	<b>100</b>

Source: *Study of Current and Future Housing Needs in Egypt (2007-2022)*, p. 22

The following table illustrates the housing gap or the difference between computed housing needs and available housing units.

Table 5.5: Housing gap in Egypt as of 2006

	Number of housing units
Needs for housing units	8,814,764
Available housing units	7,899,084
Housing gap	(915,680)

Source: *Study of Current and Future Housing Needs in Egypt (2007-2022)*, p. 25

As can be seen from Table 5.5, the housing gap as of 2006 was a shortfall (unmet needs) amounting to about 916,000 housing units. This figure could be substantially less than the actual housing gap because available units include unoccupied housing units, a substantial portion of which might not be placed on the rental or sale market.

### The 2015 housing gap

Calculating the current housing gap using the same methodology adopted by CAPMAS is not feasible, given the lack of comprehensive nationwide data for 2015 similar to the data provided by the 2006 Census, especially on housing units. Thus our methodology will be slightly augmented using an additional definition

<sup>72</sup> Marginal housing (al iskan al gawazi) comprises graveyards, huts, shacks, tents, etc. People living in marginal housing are regarded as homeless.

<sup>73</sup> According to the 2006 Census, the actually occupied housing units represent 98 per cent of the units ideally occupied by the enumerated households.

for the housing gap as “the difference between the net number of dwelling units added to the housing supply in a given time period, and the number needed to accommodate population change”<sup>74</sup>.

The estimation of the net number of dwelling units added to the housing supply over the referred to period (2006-2015) is a challenging task. Although the formal housing supply by the public and private sectors can be estimated using official figures, these modes of supply represents but a small portion of the total housing supply since most housing construction is informal and unrecorded.

To quantify the number of housing units added to the housing supply over the referred to period, the only it option is to project linearly the total housing stock as provided by the 2006 Census into 2015 using the annual growth rate between the 1996-2006 Censuses. According to this forecast, the total number of housing units in Egypt on the first day of 2015 is estimated at 30.5 million units, with an increase of about 6.4 million units since the 2006 Census. Of this increase, the formal housing supply (mostly in urban areas) by the public

and private sectors is estimated to contribute 1.4 million units<sup>75</sup> or what represents 21 per cent only of the supply. The informal housing supply (mainly on agricultural land and in peri-urban areas) accounts for the remaining share: 5.1 million units representing 79 per cent of the supply. This estimate is not an exaggeration by any means, especially with the illegal/ informal construction boom since 2011. Estimates declared by some government agencies<sup>76</sup> surpass this figure. Other estimates are more conservative.

As for population change, Egypt’s total population grew from 72.6 million in 2006 to about 88 million on the first of January 2015,<sup>77</sup> with an annual population growth rate estimated at 2.33%.<sup>78</sup> Using the same growth rate, the number of persons in households is estimated to increase from 72.3 million in 2006 to 87.4 million in 2015. According to the 2012/2013 Household Income, Expenditure, and Consumption Survey (HIECS), the average household size is 4.33 persons. This means the number of Egyptian households increased from 17.3 million in 2006 to 20.2 million in 2015. The following table shows the number of housing units needed to accommodate the population change.

Table 5.6: The 2006-2015 housing needs in Egypt

No.	Needs	Housing units	
		Number	% of Total
1	Units required for new household formation	2,900,273	91.8
2	Units necessary for replacement of run-down stock (1% of the increase in the number of households)	29,003	0.9
3	Additional “reserve” units needed for residential mobility (8% of increase in the number of occupied units <sup>79</sup> )	232,022	7.3
	Total	3,161,298	100

The 2015 composite housing gap can be calculated as the sum of the 2006 gap and the gap over the period between the 2006 Census and the first of January 2015. In other words, it is the difference between the net number of dwelling units added to the housing supply over the 2006-2015 period and the number of housing units needed in 2015. The total housing needs in 2015 can be estimated by summing the unmet housing

needs in 2006 and the emerging needs during the period (2006-2015). Accordingly, the total outstanding housing needs in 2015 is estimated to be 4.1 million units. Comparing this total to the estimated supply since the 2006 Census, it could be inferred that there is no quantitative shortage of housing in Egypt as of 2015, but probably an oversupply.

74 Peter Salins, “New York City’s Housing Gap Revisited,” Center for Civic Innovation, Manhattan Institute for Policy Research, Civic Report 25, February 2002, p.1-2

75 Based on figures provided in CAPMAS Statistical Yearbook 2014, p.182-182 and Egypt in Figures 2015, p.67

76 The Agency for the Technical Inspection of Building Works is quoted to report that the number of housing units produced illegally or informally over the last three years reached 6.5 million units. Al-Shorouk Newspaper, 8 February 2015: <http://www.shorouknews.com/news/view.aspx?cdate=08022015&id=7ec5376f-1514-4ad9-b508-00e7e60ff2a1>

77 CAPMAS, Egypt in Figures 2015, p.4

78 This growth rate surpasses the population growth rate between the 1996 and 2006 censuses and exceeds by far the UN estimates for the population growth rate in 2005-2010 (supposedly factual) and 2010-2015 (projected), provided by Population Division of the UN Department of Economic and Social Affairs – World Population Prospects: The 2012 Revision, <http://esa.un.org/unpd/wpp/index.htm>

79 The increase in the number of occupied dwellings ideally equal the increase in the number of households.

### 5.3 ESTIMATES OF FUTURE HOUSING NEEDS TO 2030

#### Population forecast and estimated housing needs

Future housing needs over the period (2016-2030) are estimated in a similar way to the one used for the period (2006-2015) but based on population forecast this time. Using estimates for 2015, the total population, as well as the number of persons in households, is realistically forecasted for each year of the period assuming annual growth rates of 2.10%, 1.88% and 1.65% for the

intervals 2016-2020, 2021-2025 and 2026-2030 respectively.<sup>80</sup>

The number of households is then calculated for each year using an assumed average household size, decreasing slowly by 0.01 every year – this means the size is 4.32 in 2016 and reaches 4.18 in 2030. Accordingly, the increase in the number of households is computed. The following table summarizes the results of population forecast to the year 2030.

Table 5.7: Egypt's projected population 2016-2030

Year	Estimated Population	Estimated no. of persons in households	Number of households	Increase in number of households
2015	87,963,276*	—	—	—
2016	89,821,055	89,276,097	20,666,097	476,525
2017	91,718,069	91,170,719	21,153,984	487,887
2018	93,655,149	93,105,548	21,653,507	499,523
2019	95,633,140	95,081,439	22,164,947	511,440
2020	97,652,905	97,099,262	22,688,593	523,645
2021	99,486,247	98,941,996	23,173,699	485,107
2022	101,354,007	100,819,700	23,669,310	495,610
2023	103,256,833	102,733,040	24,175,655	506,345
2024	105,195,383	104,682,690	24,692,971	517,316
2025	107,170,327	106,669,341	25,221,498	528,528
2026	108,920,625	108,443,986	25,702,301	480,803
2027	110,699,510	110,248,155	26,192,419	490,118
2028	112,507,446	112,082,340	26,692,035	499,617
2029	114,344,910	113,947,040	27,201,339	509,303
2030	116,212,383	115,842,763	27,720,520	519,181

\* CAPMAS, *Egypt in Figures 2015*, p.4

Using the population forecast above, housing needs for household formation, for replacement and for reserve are estimated.<sup>81</sup> As can be seen from the following table, the

total future housing needs for the period (2016-2030) amount to 8.2 million units, and the annual needs over this period average 547,249 units.

80 The suggested growth rates are based on the recent growth trend over the period (2006-2015) and assuming serious efforts will be undertaken to control the population growth on the short- and mid-term.

81 Overcrowding is equally disregarded.

Table 5.8: The 2016-2030 housing needs in Egypt

Year	Units for HH formation	Units necessary for replacement	Additional "reserve" units	Total needed housing units
2016	476,525	4,765	38,122	519,412
2017	487,887	4,879	39,031	531,797
2018	499,523	4,995	39,962	544,480
2019	511,440	5,114	40,915	557,470
2020	523,645	5,236	41,892	570,773
2021	485,107	4,851	38,809	528,766
2022	495,610	4,956	39,649	540,215
2023	506,345	5,063	40,508	551,916
2024	517,316	5,173	41,385	563,874
2025	528,528	5,285	42,282	576,095
2026	480,803	4,808	38,464	524,075
2027	490,118	4,901	39,209	534,228
2028	499,617	4,996	39,969	544,582
2029	509,303	5,093	40,744	555,140
2030	519,181	5,192	41,534	565,907
<b>Total housing needs (2016-2030)</b>	<b>7,530,948</b>	<b>75,309</b>	<b>602,476</b>	<b>8,208,733</b>

### Comparisons with government housing needs figures

The aforementioned "Study of Current and Future Housing Needs in Egypt (2007-2022)" estimated the future housing needs over the period (2007-2022) at a total of 7.5 million units, with average annual needs of 470,870 units. Meanwhile, the "Strategic Framework for Economic and Social Development Plans to Year 2022", published by the Ministry of Planning in November 2012, estimated the annual housing needs over a five-year period at 684,500 units. Comparing these estimates together, it is clear that the government calculations either under-estimate or over-estimate housing needs depending on the agency making the estimates. Even though a demand study has been done by the ministry of housing, still there is no unified government-wide methodology to calculate the future housing needs.

### 5.4 RELATED LAND REQUIREMENTS FOR NEW HOUSING TO 2030

There is no evidence that there is a "quantitative" shortage of housing in Egypt as of 2015. It can be thus concluded that housing needs in Egypt are mainly future housing needs due to population change.

Assuming the development of "standard" apartment buildings of five floors (G + 4), each comprising 20 units of 90 m<sup>2</sup> gross area, the total housing needs above will

translate into a total footprint area of 14,776 hectares or 35,180 feddans.

Currently, the housing footprint-to-land ratio is commonly in the range of 25 per cent in new towns for tracts ranging in size from 10 to 30 feddans. Using the same ratio to calculate the total land required means there will be roughly a need for a gross land area of 59,103 hectares (equivalent to 140,721 feddans). In other words, there is an average annual need to supply 3,940 hectares of serviced land to fulfil future housing needs to 2030.

### 5.5 RELATED GLOBAL INVESTMENT REQUIREMENTS FOR NEW HOUSING TO 2030

Not considering the price of land (comprising naturally the off-site infrastructure cost), the cost of the 90 m<sup>2</sup> economy housing unit constructed by the government (employing registered contractors) reached EGP 135,000 in 2015. Using the same figure, the global investment requirements for new housing to 2030 will amount to a minimum of EGP 1,108.2 billion in current prices, or roughly 66 per cent of Egypt's Gross domestic product (GDP) in 2012/2013. This implies that the average annual investments needed to construct new housing amounts to EGP 73.9 billion.

# HOUSING DEMAND AND AFFORDABILITY

In Chapter 5 we looked at gross housing needs in Egypt and focused on estimates of the numbers of housing units that are required to house Egyptian households now and in the future. Here we look at another and more important side of housing need question; that is, what is the demand for housing expressed in terms of what households can currently afford.

Methodologically, this analysis looked at six parameters: (1) **effective housing demand**, that is, the current financial resources that households and individuals can devote to purchase, build, or otherwise acquire housing units, expressed as assumed portions of household incomes that can be devoted to housing at different household income quintiles both for urban, rural, and total household in Egypt, (2) **housing supply**, that is, the current prices or costs of various inexpensive types of housing units that are available to households and individuals, (3) **price-to-income ratios** (the ratio of housing unit prices to household income by quintile), (4) **base case percentile coverage**, that is, the portion of households that can afford to purchase or build various types of housing units under base case assumptions, and (5) **sensitivity analysis**, which is included because it is important to test how varying assumptions will impact the affordability (percentile coverage) conclusions. There is also a short treatment of (6) **the affordability of rental housing**.

All price and income data in this Chapter relate to January to March 2015.

The analysis is described in the following sections. Throughout the analysis the focus is put on the cheapest types of housing that might be affordable to the poorer household income quintiles. Thus the resulting Price-to-Income Ratios and Percentile Affordability reflect “best case” scenarios in terms of affordability, and in reality most unit prices are higher, the stated surface area of a unit is exaggerated, units may need considerable work to make habitable, registration of the unit may not be possible, and there may be problems with utilities as well as hidden fees.

The conclusions cannot be considered definitive since a number of assumptions need to be made to carry the analysis. These assumptions are clearly stated. However, the results allow an approximate view of housing affordability.

## 6.1 EFFECTIVE HOUSING DEMAND

The first step is to establish urban, rural, and total household income levels by income quintiles. The basis for this is the Household Income, Expenditure, and Consumption Survey (HIECS) for 2012/13, the latest survey CAPMAS has carried out.<sup>82</sup> To project the results to 2014/15, levels have been increased by the observed increase of average household income (urban 2.9%, rural 6.4%, and total 4.8%) over the 2010/2011 to 2012/2013 period, on the assumption that the same rate of increase continued.<sup>83</sup> The results are given in Table 6.1.

82 CAPMAS, Income, Expenditure & Consumption Survey 2012/13, Volume V, Average Household Income & Percentage Distribution of Incomes According to Socio-economic Characteristics of Households, General Indicators first table in 20 income bands, January 2014.

83 CAPMAS, Important Indicators for HIECS 2012/2013, Table 25, November 2013.

Table 6.1: Estimated Household Income Levels by Quintile 2014/2015 in EGP

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
<b>Rural</b>					
Minimum	0	1449	1979	2350	3101
Median	1166	1687	2102	2650	3865
Maximum	1449	1979	2350	3101	100000+
<b>Urban</b>					
Minimum	0	1621	2135	2723	3833
Median	1261	1878	2422	3216	5256
Maximum	1621	2135	2723	3833	100000+
<b>All Egypt</b>					
Minimum	0	1528	1991	2437	3336
Median	1196	1773	2262	2856	4131
Maximum	1528	1957	2395	3279	100000+

These estimated household income levels are based the HIECS representative sample of 8326 rural and 6731 urban households and should accurately reflect household income. A comparison to confirm consistency with similar HIECS results for household expenditure was made. (For the median household income, expenditures are roughly 10% lower, implying a 10 per cent savings rate.)

It is important to note that these HIECS income levels are based on all sources of income. That is, they are made up of salaries and wages (44.7 per cent of the total on average), income from activities and enterprises (25.5 per cent of the total on average), income from properties and financial holdings (2.5 per cent of the total on average), transfers (16.7 per cent of the total on average), and also

the imputed rental value of housing ownership (10.4 per cent of the total on average). Due to this last factor the household income levels in Table 6.1 overestimate by a significant amount the disposable income of a family. And as we shall see in the discussion of eligibility for the Social Housing Program in Section 6.7 below, there is a huge disconnect between a family's certified salary and that of the family's total income from all sources.<sup>84</sup>

## 6.2 CURRENT HOUSING PRICES AND TYPICAL HOUSING TYPES

What are typical housing prices for inexpensive units that can be found today in Egypt? From various sources we have chosen units that represent both government and private sector production, as shown in Table 6.2.

Table 6.2: Selection of Typical Least Expensive Housing Unit Prices

Type	Unit Price (EGP)	Information Source
Informal unit of 40 m <sup>2</sup> in Boulaq al Dakroul (secondary market)	55,000	Local agents (simsars)
Flat of 110m <sup>2</sup> in informal tower in Al Haram area of Giza, no finishing	90,000	<a href="http://aqarmap.com/eg/ar/551124-apartment-for-sale-in-el-haram-greater-cairo">http://aqarmap.com/eg/ar/551124-apartment-for-sale-in-el-haram-greater-cairo</a>
Remaining NHP units of 63 m <sup>2</sup> being sold by GSF	103,000 to 112,000	<a href="http://www.mff.gov.eg/site/projects.aspx?s=1">http://www.mff.gov.eg/site/projects.aspx?s=1</a> (in Bourg el Arab and Tenth of Ramadan)
Current nominal price for SHP units of 75 m <sup>2</sup>	135,000	MHUUC Housing and Utilities Sector
Cheapest and smallest unit in the government's Dar Misr program	270,000	MHUUC data
Apartment of 145 m <sup>2</sup> in Shorouk new town	319,000	Ziad Company for Property Investment, Al Waseet, 24/04/2015 p 4
Apartment of 85 m <sup>2</sup> in City Flats 6 October	370,000	<a href="http://cf2.igi-realestate.com/">http://cf2.igi-realestate.com/</a>
Apartment of 175 m <sup>2</sup> in Shorouk new town	400,000	Al Masry Al Youm, 12/04/2015, p 10
Apartment of 135 m <sup>2</sup> in Beta Greens compound, Sixth of October	600,000	<a href="http://aqarmap.com/eg/ar/compounds/details/giza/220/beta-greens">http://aqarmap.com/eg/ar/compounds/details/giza/220/beta-greens</a>

<sup>84</sup> See *Ibid.*, Table 12.

To proceed with the housing affordability analysis, it is necessary to distil the above sampling of different inexpensive housing units available in early 2015 into

normative types. With the risk of overgeneralization, the following types have been constructed:

Table 6.3: Normative Cheap Urban Housing Units 2015

Type of Housing Unit		Unit Sales or Cost Price (EGP)
Type 1	Simple informal apartment unit of 40m <sup>2</sup> net in small walk-up block in existing urban informal area	55,000
Type 2	Informal apartment of 80 m <sup>2</sup> net in new informal tower in developing informal area (EGP 25,000 added for finishing)	110,000
Type 3	Apartment of 75 m <sup>2</sup> net as part of Social Housing Program in new towns (see also Section 6.7 below)	135,000
Type 4	Cheapest private developer apartment of 110 m <sup>2</sup> in new towns or other formal area	370,000
Type 5	Cheapest private developer apartment of 130 m <sup>2</sup> in a compound in new towns	600,000

### 6.3 PRICE-TO-INCOME RATIOS FOR TYPICAL UNITS

Housing price to annual income ratios give an overview of the affordability of a country's housing. (For example, a price-to-income ratio of 5 means that a unit represents 5 years of the median income family's income.) In Arab countries in 2015 the urban housing price-to-annual income ratio ranged widely between 10 and 20 for the median household, whereas for developed countries the ratio ranged from 2.6 to 9.7.<sup>85</sup> In countries similar to

Egypt a ratio of 5 to 7 can be considered "affordable" at the median annual income level, especially considering that loans for housing purchase are very difficult to access.

Table 6.4 presents housing price-to-income ratios by Egypt household income quintile that have been derived directly from Tables 6.1 and 6.3. They relate to housing units for sale under government programs or those on the market.

85 See [http://www.numbeo.com/property-investment/rankings\\_by\\_country](http://www.numbeo.com/property-investment/rankings_by_country) (2015)

Table 6.4: Price-to-Income-Ratios for Different Types of Inexpensive Housing 2015

All Egypt Household Income Position	All Egypt Annual Household Income	Type of Housing Unit	Unit Cost or Sales Price	Price-to-Income Ratio
Median Quintile 1	EGP 14,352	Type 1 Simple informal apartment of 40 m <sup>2</sup>	55,000	3.8
		Type 2 Informal apartment of 80m <sup>2</sup> in tower	110,000	7.7
		Type 3 SHP core program apartment of 75m <sup>2</sup>	135,000	9.4
		Type 4 Low-end private developer apartment of 110 m <sup>2</sup>	370,000	25.8
		Type 5 Private Developer apartment of 130m <sup>2</sup> in compound in new towns	600,000	41.8
Median Quintile 2	EGP 21,276	Type 1 Simple informal apartment of 40 m <sup>2</sup>	55,000	2.6
		Type 2 Informal apartment of 80m <sup>2</sup> in tower	110,000	5.2
		Type 3 SHP core program apartment of 75m <sup>2</sup>	135,000	6.3
		Type 4 Low-end private developer apartment of 110 m <sup>2</sup>	370,000	17.3
		Type 5 Private Developer apartment of 130m <sup>2</sup> in compound in new towns	600,000	28.2
Median Quintile 3 (also median of all households)	EGP 27,144	Type 1 Simple informal apartment of 40 m <sup>2</sup>	55,000	2.0
		Type 2 Informal apartment of 80m <sup>2</sup> in tower	110,000	4.1
		Type 3 SHP core program apartment of 75m <sup>2</sup>	135,000	5.0
		Type 4 Low-end private developer apartment of 110 m <sup>2</sup>	370,000	13.6
		Type 5 Private Developer apartment of 130m <sup>2</sup> in compound in new towns	600,000	22.1

As Table 6.4 shows, for the median household, small and inexpensive informal housing units are very affordable with Price-to-Income Ratios at 2.0. Even larger informal units in tower blocks are affordable at Price-to-Income Ratios of 4.1. And social housing units (Type 3) exhibit Price-to-Income Ratios that are acceptable for the median income household (5.0). On the other hand, anything produced by the private sector, even smaller and low-end units, have unfavourable Price-to-Income ratios.

The affordability situation for the first household income quintile is much less rosy than that for the third (and median) quintile. As can be seen, only informal Type 1 housing has a Price-to-Income Ratio of less than 5. And even the cheapest subsidized small social housing unit (Type 3) has a relatively high Price-to-Income Ratio of 9.4.

#### 6.4 PERCENTILE AFFORDABILITY OF UNITS

The percentiles (percentages) of urban households that can afford a particular type of housing are the most common method of housing affordability analysis. Such an analysis allows us to define the percentage of urban households that can afford to purchase such units under

different assumptions. In other words, this shows the housing affordability gap, i.e. the percentage of urban households that are currently not able to afford the most common types of housing.

To carry out such an analysis a number of assumptions need to be made. First is the percentage of monthly income that a household can devote to housing. The CAPMAS HIECS reports that expenditures on housing (including rents, utilities, and maintenance) only account on average for 11 to 15 per cent of total households expenditures, but such expenditure figures only capture common recurrent costs associated with housing and rarely reflect capital expenditures. Internationally, it is considered reasonable to assume that 20 to 40 per cent of household income may be devoted to pay for housing rents or for instalments on housing loans. In this analysis 25 per cent of household expenditures is used in the base case or all housing types.

The terms and conditions for housing loans, should they be available, are a second set of assumptions that must be made to arrive at effective demand for housing. We construct two possibilities:



- **Commercial collateral-based loans for housing purchase provided by government banks and mortgage companies.** These require between 15 to 20 per cent down payment, 12 to 14 per cent annual interest on loan principal, and a term of between 10 and 20 years. Eligibility for these loans includes proof of permanent income and legal residence and sometimes other stipulations. Obviously, there are a wide variety of potential buyers who cannot hope to meet all of these conditions, and in addition lenders require that the mortgaged property be fully registered, which severely restricts qualifying units mainly to new units in the new towns. Of course only registered properties can be mortgaged, and as discussed in Chapter 8 below the mortgage market in Egypt is extremely weak. Thus in this case the affordability analysis is largely theoretical but useful for comparative purposes. The base case assumes a down payment of 20% of unit value, an annual interest rate of 13 per cent on the principal, and a term of 20 years. It is applied to all types of housing except Type 3 (units under the Social Housing Program).
- **Housing purchase loans offered to qualifying individuals under the Social Housing Program.** Thanks to the Central Bank of Egypt's real estate stimulus package (2014), subsidized loans are now available for purchase of social housing units in approved projects only. These loans are accessible to beneficiaries at 7 to 8 per cent interest rates and a term of 20 years. Participating banks are given an attractive interest rate spread. Also, the SHP's GSF provides a variable up-front cash subsidy that ranges from EGP 5,000 to 25,000 depending on the beneficiary's income. Assumptions used here include a 20 per cent down payment, an annual interest rate of 7 per cent on the principal, a term of 20 years, and an average up-front subsidy of EGP 19,000. It is applied only to the social housing type (Type 3).  
Based on these assumptions, it is possible to calculate the urban household income percentile that can afford the different types of inexpensive housing identified in Table 6.3 above. This is done in Table 6.5.

Table 6.5: All Egypt Income Percentiles Reached for Housing Types (Base Case)

Type of Housing	Required Monthly Payments (EGP)	Implied Monthly Household Income (EGP)	Rough Household Income Percentile Reached
1 Simple informal apartment of 40 m <sup>2</sup>	522	2088	43rd
2 Informal apartment of 80m <sup>2</sup> in a new tower block	1044	4176	95th
3 SHP core program apartment of 75m <sup>2</sup>	753	3012	75th
4 Low-end private developer apartment of 110 m <sup>2</sup>	3511	14044	98th
5 Private Developer apartment of 130m <sup>2</sup> in compound in new towns	5690	22760	99th

Table 6.5 shows clearly that overall household affordability in Egypt is extremely dire. Only Type 1, the small informal unit, is affordable down to the 43rd percentile. Even the heavily subsidized current SHP unit is only affordable down to the 75th percentile.

If the base assumptions are relaxed, could the affordability picture improve? First, if it is assumed that households can devote a much larger portion of their monthly incomes to housing (40 per cent instead of 25 per cent), the situation improves significantly. The SHP

unit for example becomes affordable down to about the 37th percentile, but this implies a very heavy burden on family finances, especially those of 'limited income'. Second, if it is also assumed that the down payment were to be increased (from 20 per cent to 30 per cent of the unit cost) then the situation improves even more and the SHP unit would be affordable down roughly to the 25th percentile.<sup>86</sup> Yet can poor families be expected to mobilize such large amounts of equity (up to EGP 39,000)?<sup>87</sup>

<sup>86</sup> In fact, SHP literature frequently claims that its core ownership program will be affordable down to the 20th household income percentile, presumably by assuming very large down payments in addition to large portions of income devoted to monthly installment payments (at 35 percent). In addition, the SHP includes an escalator that increases the monthly installment that must be paid each year for the first six years (by between 2.5 and 6.5 percent per year). These manipulations definitely appear to make the core program more affordable in terms of percentiles of households reached. (See World Bank, Program-for-Results Information Document, Inclusive Housing Finance Program, 12 January 2015.)

<sup>87</sup> Another way to improve affordability for the core SHP unit would be to reduce the apartment size from 75 to 63 m<sup>2</sup> (as in the previous NHP program). And as shown in Table 6.1, urban households enjoy somewhat higher average incomes than their rural counterparts, meaning that the affordability picture improves if one only looks at these urban families.

In other words, there is no magic way to massage affordability assumptions and loan parameters to make even subsidized housing units affordable. The mass of Egyptian families are simply too poor, or don't have the steady incomes required to qualify for mortgage-linked loans. For most, only the informal housing sector provides any hope for a family to purchase a unit that is at all affordable, and this will require very considerable equity payments. It is no wonder that in Egypt renting under the New Rent law is becoming more and more popular.

## 6.5 AFFORDABLE RENTAL HOUSING?

In Chapter 9 below the behaviour of housing markets in urban Egypt is described. It shows that, based on the 2008 HSUE results, rental accommodation was remarkably affordable (at roughly 20 per cent of monthly income) across all income quintiles. However, this was the situation in 2008 and since then rents, at least in the major cities, have increased dramatically. Are rents today still affordable?

Without good data of rental prices it is hard to answer this question. Yet there is anecdotal information from various sources that indicates that rents for modest two bedroom apartments in informal areas are renting for between EGP 400 to 600 per month, and this would indicate that such prices are affordable down to the 25th to 55th percentile of all Egypt households (and down to the 20th to 50th percentile of urban households.)<sup>88</sup>

Such a situation means that families whose incomes are quite low, say below the 25th percentile, will find it very difficult to afford even modest rental housing. It is thus extremely important that subsidized and targeted rental systems that are being considered as part of the SHP (but which have not advanced much) be given highest priority.

## 6.6 THE CURRENT SOCIAL HOUSING PROGRAM: AFFORDABILITY AND ELIGIBILITY

Since almost all government efforts to provide affordable housing are now concentrated on the new Social

Housing Program (SHP), it is worth giving it some attention. A description of the program was presented in Chapter 4, and one of the flaws of the program was found to be the requirement that to qualify an applicant must prove to have a steady income or an official record from a registered accountant. This requirement makes ineligible at least half of all urban households, those who do not have formal jobs.<sup>89</sup>

The financial parameters for the SHP and its subsidies are directly linked to these proven income levels. Currently, a beneficiary's monthly salary must be between EGP 1200 and 2500, which exposes the SHP to two different distortions:

**(1) At the lower end of incomes:** There are many households, especially those in the private sector, whose 'proven' salary does not exceed EGP 1200 per month, thus these households would be excluded, even though it is precisely these families that are most in need of assistance and might very well be able to meet monthly instalment payments from other sources.

**(2) At the upper end of incomes:** As shown in Section 6.1 above, the average Egyptian family has many sources of income, and salaries and wages is only one. Thus the whole structure of the SHP relates to the fiction that a family's income level (and thus its ability to participate) is solely determined by proven salaries. Of course there are some households who have no other sources of income, but there are many many more whose total income is significantly higher than what is declared. These will have no trouble qualifying since they have proven salaries below the EGP 2500 per month ceiling, yet they are likely to enjoy many other sources of income that put them solidly in the upper middle class and can hardly be considered of 'limited' income. The question must be asked: Should these families benefit from the many government subsidies associated with the SHP?

The SHP is still a work in progress and aspects will inevitably evolve over the next four to five years. Thus it may be premature to make criticisms, but at least in terms of affordability and who benefits from the subsidies, the above points need to be taken into consideration.

<sup>88</sup> As shown in Chapter 9, it is common for a rental agreement to include a significant payment of rent up front, and this then reduces the monthly rental amounts to levels that are much more manageable by poor families, especially those with unsteady incomes.

<sup>89</sup> In the SHP criteria, a self-employed person (al-mehan al-hurra) may apply, but he or she would need to furnish income tax statements verified by registered accountants, an extremely difficult and bureaucratic task.

# LAND FOR HOUSING AND URBAN SPATIAL PLANNING

## 7.1 INTRODUCTION: OVERVIEW OF LAND SUPPLY FOR HOUSING

From the mid-nineteenth to the mid-twentieth century Egyptian cities grew and expanded under what could be called the capitalist-enterprise mode of land development, guided in part by State regulatory frameworks and favours. Private enterprises (frequently foreign controlled) bought up private agricultural land holdings on the urban fringes and land filled, subdivided, and serviced them, with revenues coming mainly from the sale of land parcels. These private companies also developed near-fringe desert lands through concessions from Government authorities. The most famous of this mode of development was suburban Heliopolis undertaken by the Belgian entrepreneur Baron Empain at the turn of the century. Inevitably most such development was aimed at the wealthy and the middle classes, although certain working class neighbourhood subdivisions intended for tenement housing blocks were also developed (e.g. Boulaq in Cairo, Moharram Bey in Alexandria, and the “Arab” quarters in Port Said and El Ismailia).

After the Revolution in 1952 and subsequent nationalizations, the conversion of land for urban purposes underwent drastic changes. The State became the main supplier of land and also the main means of financing land conversion. The private sector was totally eclipsed, and the former process of private subdivision practically ceased, only to begin to recover very recently. Except in the new towns, such opportunities for private developers hardly exist.

Today, it can be said that there are two distinct sources of raw land for urban use. On the one hand there is State owned/controlled desert and near-desert lands, and on the other privately owned/controlled agricultural land (including agricultural land nominally in State control but farmed by tenants). Although there are a few cases which blur this distinction, in general terms such a stark

dichotomy can be applied for all of Egypt’s supply of land for housing and other urban purposes.

Each land conversion process is discussed separately in subsequent sections of this chapter. Before continuing, however, it is important to look at evolving urban planning practices and their influences on the conversion of land for housing purposes.

## 7.2 OVERVIEW OF URBAN PLANNING SYSTEMS AND THE DESIGNATION OF LAND FOR HOUSING

Currently there are several entities within the MHUUC and other line ministries that are involved in urban planning at the national and regional levels. These include:

- Within MHUUC, the General Organization for Physical Planning (GOPP) and its seven regional centres are involved in preparing urban development plans at different levels. Since its creation, GOPP has prepared and issued 86 master plans for cities, 25 regional plans, scores of studies and detailed plans in cooperation with concerned local authorities. Recently it has prepared strategic development plans for over 100 small and medium size cities, including the identification of expansion areas. It has also set enlarged boundaries for over 4,000 villages (al-haiz al-‘omrani).
- Several other line ministries prepare urban and regional development studies and plans without coordination with GOPP. All major plans whether at the national, regional or local level must be reviewed and approved by the Ministry of Defence and Military Production (MODMP). The ministries of agriculture and land reclamation, Awqaf, and antiquities also directly affect the decision making in State land assignments for urban development.

- At the local level, according to Law 43/1979, Governorates have authority over most urban planning and management activities such as housing, land development and infrastructure. By law plans have to be reviewed and approved by both the local executive and popular (elected) councils and finally signed by the governor. In practice, few governorates have established an urban planning department to assume its stated roles according to the physical planning law. In governorates such as Cairo, Giza and Sharqia, such entities have started to perform their roles in preparing detailed urban plans. In several cases, decisions concerning urban development plans within governorates have been taken based on the personal vision of the Governor, which may contradict or be in conflict with urban planning norms, or national/ regional interests and lack the longer vision of overall development.

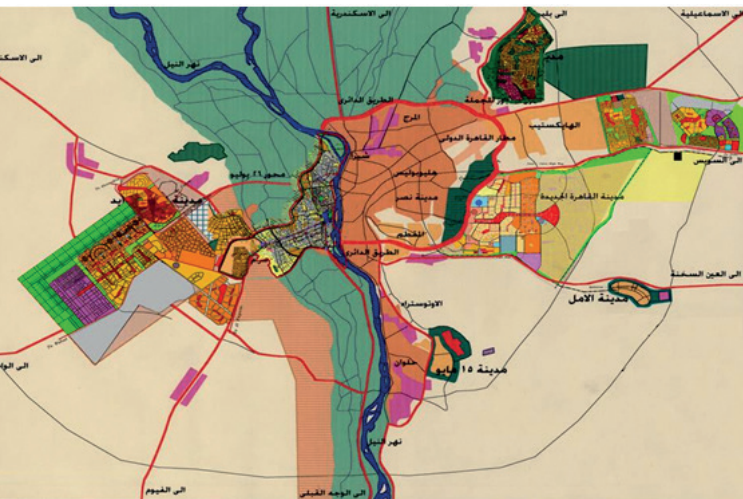


Figure 7.1  
1997 Greater Cairo Master Plan with New Towns (produced by GOPP). Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 56.

Urban planning in Egypt is regulated by the Unified Building Code (Law 119 of 2008). The standards articulated in this law and its executive regulations call for modern, high standard projects and subdivisions. Some specific elements of the law that may not reflect the practical needs and common use patterns of households include:

- Density.** According to the law no.3 (1982), gross population density in existing town and villages should not exceed 150 person/ feddan (312 person/ hectare) and in the New Towns, density should not exceed 100 person/ feddan (238 person/ hectare).
- Street Widths.** According to the unbified building law, the minimum width of streets in new areas is 10 meters. The average width of residential streets

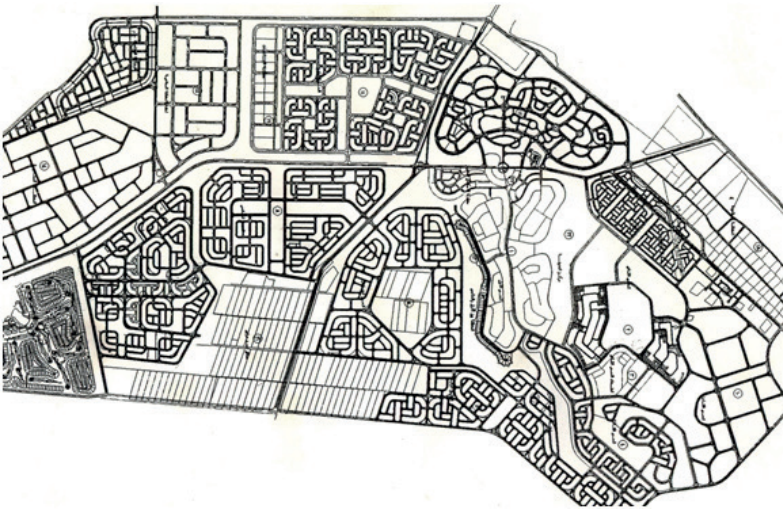
in existing cities is 6 to 8 meters and 3 to 4 meters in informal settlements.

- Minimum Lot Size.** The unified building law stipulates lots sizes that are not within the means of low-income households. Lot width is a minimum of 10 meters, with a lot depth that should not exceed two times the width.
- Building Heights.** The unified building law limits building heights to only 1.5 times the width of road, e.g. for a 10 meter road, building heights cannot be more than 15m (5 floors), with further unrealistic height restrictions in some areas, especially in the new towns. The set building heights will be prone to change in response to the local strategic plans.
- Lot Coverage.** A maximum of 60 per cent of lot coverage is currently allowed by the urban planning law. In the new towns this is usually only 40 per cent. Due to the scarcity and high cost of land, lot coverage is usually 80 to 90 per cent in cities and 90 to 100 per cent in informal settlements.
- Public Use Set-Asides.** Land subdivision laws require that 33 per cent of the land is set aside for public uses (amended in 2014 to 25 per cent). In informal settlements, the land set aside for public uses averages 10 to 15 per cent.
- Land Use.** Land use standards require spatial separation of residential, service and industrial areas, whereas in informal settlements small workshops and residential uses are integrated into the urban fabric. In the new towns land use segregation is even more extreme.

### Urban Planning and the Dominant New Towns Policy

The new towns policy was launched in 1974-75 as an official recognition by the GOE that “the old inhabited areas along the Nile valleys are no longer able to absorb the increasing population and that Egyptians have to conquer their desert land in order to ensure the sustainable growth of the nation.”<sup>90</sup> The aim of the new towns was explicitly to attract population, create an industrial base outside the Valley, and attract public and private investments. The legislative underpinning for the new towns policy was Law 59 of 1979. This created the New Urban Communities Authority (NUCA) under MHUUC which was designated as the sole body responsible for establishing new communities, including the identification of sites, provision of on- and off-site infrastructure, setting standards, construction of housing and services, and distribution of land for investors. Individual new towns would be managed by “town development agencies” under and reporting directly to NUCA.

90 Madbouli, M. (2005), UN Common Country Assessment in Egypt, p. 59



**Figure 7.2**  
Typical low-density new town street layout; El Obour New Town, no date. Source: GOPP

The “first generation” of new towns were planned to be geographically and economically independent of major cities (Tenth of Ramadan, Sixth of October, El Sadat, El Obour, El Badr, and New Ameriya<sup>91</sup>) each with their own industrial base and large target populations. By the mid 1980s the concept of satellite settlements was launched, and this “second generation” of nine new settlements was planned in the desert around Greater Cairo. In parallel, a “third generation” of new towns were established in the near desert as sister towns or twins to provincial cities. Examples include New Assiut, New Thebes, New Minya, etc. In the early 1990s there was a fundamental shift in the concept of new towns and the associated land management policy. Up until this time new towns were largely developed to attract the working classes through the construction of State subsidized low-cost housing blocks. With the change of ministers and increasing criticism of the quality and aesthetic of social housing, a much more “capitalist” mode of development was applied. First, the boundaries of existing new towns and settlements were dramatically extended, particularly in those cities around Cairo that were considered to have development potential. Huge tracts of land were subdivided and sold at near market prices both to individuals and to developers. Three “second generation” satellite settlements were amalgamated and boundaries extended to create New Cairo in the desert east of the metropolis, the area of which alone equals half the built-up area of existing Greater Cairo, and has a target population of 3 million. Also, huge new settlements of Sheikh Zeid and El Shorouk (both

91 New Ameriya was subsequently renamed Bourg el Arab el Gedida.

92 Madbouli, M. (2005) UN Common Country Assessment, p 60.

with target populations of 500,000 inhabitants) were created. Massive amounts of land in these extensions and new areas were sold throughout the 1990s and more is currently being released. This has brought welcome revenues to the Ministry and the State Treasury. Also, this new policy signalled a fundamental shift, with new settlements around Cairo at least, becoming the preferred location for the new middle classes and the rich, with the creation of gated communities and up-market subdivisions.



**Figure 7.3**  
Entrance to Fayoum New Town, December 2013. As yet no inhabitants. Photo by D. Sims

The main criticism of the new towns, readily acknowledged by MHUUC, is that they are not attracting anywhere near the planned populations, which overall was set to be 5 million inhabitants by 2005.<sup>92</sup> In 2006 the Census enumerated only 766,000 inhabitants in all the new towns extant at that time, or 2.45% of the 2006 official urban population and a tiny 1.06% of the national population. Problems commonly identified with the new towns are as follows:

- New towns have been developed through typical supply-side processes, with little consideration of location dynamics, target beneficiaries, the economic underpinning of new towns, and effective market incentives.
- Creating new towns is an expensive endeavour, since all basic infrastructure must be provided from scratch.
- The new towns over-rely on State investments, and their continued development will require even greater budgetary commitments.
- In some cases proper soil and other studies were not undertaken, and designated lands could not be developed.

- Although the new communities law envisioned the eventual handing over of new towns to the respective local government authorities, this has not occurred, because either (1) local authorities are perceived as not having the management capacities to maintain the high standards of the new towns, or (2) because local authorities cannot assume the service debts and liabilities associated with these new towns.
- Many private sector developers hurried to develop up-market sites without regard for market demand, leading many schemes to fail.
- Many new towns, especially those with industrial areas, are experiencing some environmental problems.

Other criticisms of the new towns have come from various quarters. Most common are that the new towns are too expensive for average citizens. This is attributed to the high cost of housing units, the poorly developed shopping sector and resulting high food prices, and, especially, the high cost of public transportation and lack of fast links to and from the Cairo agglomeration. Also, the level of services (schools, health services, and entertainment facilities) is considered less than adequate. For most commentators the answer to these criticisms is, simply, that the government must provide more housing, cheap transport, and better services. However, the concept of the new towns themselves is rarely questioned.

A deeper analysis of the new towns will show that there are fundamental problems that have rarely been recognized by authorities and which bring into serious doubt whether the new towns will ever generate the huge population shifts for which they were intended. In terms of attracting people, it is clear that these towns do not offer the kinds of housing and livelihoods that would entice even a small portion of the growing mass of Egyptian families living in the Valley and Delta, especially those who continue to crowd into urban Egypt's huge informal areas. Take housing first. As noted above, over half of the government's various subsidized public housing programs, all of which are ostensibly aimed at those of 'limited income,' have been and continue to be sited within the new towns. Yet these programs rely on arbitrary and bureaucratic methods of unit distribution that take years, rarely relate to the needs of target families, attract considerable speculative intent, and result in housing units that are very poorly located and only conveniently accessible by private cars. Seen this way, it is no surprise that vacancies in newer public housing units in new towns commonly exceed 50 per cent.



**Figure 7.4 Entrance to Qena New Town, April 2014. As yet no residents. Photo by D. Sims.**

Another factor that discourages the majority of Egyptians from moving to the new towns are the high standards and restricted uses imposed by NUCA authorities on private housing developers. Allowed plot exploitation and building standards are extremely strict, which, combined with the large unit sizes, makes development of residential units very expensive and difficult to market to even the lower middle classes. As a result, virtually all privately built housing units available on the market are completely unaffordable to the large majority of Egypt's households, even if finance were to be available – which it is not. (See also Chapter 6 above.) Modest subsidized public housing units are commonly if extra-legally resold in the new towns, but even these smaller units fetch market prices that exclude the vast majority of Egyptians.

Furthermore, in the new towns it is prohibited in most buildings to open retail shops, services, or offices. Workshops and repair shops are almost unknown, and even street kiosks and stalls are discouraged.<sup>93</sup> These prohibited uses are precisely those that generate so much employment and so many business opportunities in urban Egypt. In effect, the vast micro and small informal business sectors, which account for at least 45 per cent of jobs in the country, are almost totally excluded from the new towns.

Finally, one of the most serious problems facing the limited-income family who might choose to move to one of the new towns is transport, and in fact, poor transport services have for years been identified as one of the major obstacles to the development of Cairo's new

<sup>93</sup> In the past few years such stipulations have been relaxed for the older worker housing areas of Sixth of October, and the result is the wholesale conversion of ground floor units in public housing blocks into a wide range of small shops and services. However, this much more 'liberal' policy has yet to be extended to all of Sixth of October or to other new towns.

towns. Most new towns are many tens of kilometres from existing urban agglomerations. Distance remains a crucial factor in urban Egypt, and good location and mobility are crucial. Good road links and rapid and affordable public transport are needed for the new towns to become fully connected, and over the years the government has made considerable efforts to develop major transport corridors out into the desert. These corridors have improved general traffic movement to the new towns, but the lack of inter-city public transit remains a serious problem. The long distances that must be covered not only represent a significant time loss, but more importantly they translate into transit fares that are hardly affordable to a struggling lower income family residing in the new towns. There have been a number of high-volume transport projects (bus rapid transit, light-rail, metro extensions, and super-trams) on the drawing boards that aim to improve public transport to new towns, but the economic costs of such ventures mean that either these fares will be unaffordable to the masses or that they will need to be heavily subsidized.

Even if somehow public transit to and from the new towns could be made convenient, fast and affordable, movement within the new towns is and will remain an intractable problem. The issue is, again, distance. The new towns are planned on such astronomical scales that traversing from one part to another involves journeys that exceed most trajectories to be found in existing cities such as Cairo or Alexandria. And since densities in the new towns are very low, potential ridership is so small that only with large operating subsidies could public transport within the new towns become affordable. Of course, such tremendous distances to and within the new towns would not be much of a problem if everyone could rely on the private car, and if more major highways could handle the huge extra loads. Certainly, most of those who live in the high-end residential compounds and some of those who work or study in the new towns will own cars, but the same cannot be said for the majority of more modest means. It must be remembered that, according to the 2012-2013 Household Income, Expenditure, and Consumption Survey (HIECS), only 11 per cent of families in urban Egypt own a private car (and the national average is only 6 per cent).

### **Policies to Preserve Agricultural Lands and the Negation of Logical Expansion of Existing Cities.**

In 1978 the GOE issued the first a series of progressively more strict decrees which prohibited construction on agricultural land. It had become apparent to decision-makers that urban development was spreading from towns and villages out into cultivated lands and that if left

to continue sizable amounts of Egypt's limited but very productive lands in the Nile Valley would be lost, with dire economic and social consequences. However, even with the preservation of cultivated land having become one of the government's highest priorities the process has continued, and government estimates in 2004 put the total agricultural area lost at over 1.2 million feddans (500,000 hectares)<sup>94</sup> since 1982.

It should be pointed out that over the same period Egypt's desert land reclamation efforts had added 2.5 million feddans of land under cultivation, although most of these lands have not achieved the same high productivity of the "old lands". Also, it is clear that the majority of the old lands lost were due to the expansion surrounding Egypt's thousands of villages and hamlets and not to the growth of the larger cities.

The result of official policies for the preservation of agricultural land has been dramatic in terms of urban management. Since urban growth around most cities was de facto illegal, it was simply out of local and central government control. No efforts were made to organize or guide such growth or to impose even the most rudimentary standards relating to street widths, public space, or land use, nor were any basic plans developed for transport corridors or infrastructure networks. The Ministry of Agriculture, charged with protecting agricultural land, maintained a policy of almost total inflexibility, even prohibiting the construction of most government establishments on agricultural land. And, over more than 25 years, the MHUUC and its agencies charged with urban plans and management refused to be involved in any areas where there were urban pressures on agricultural land. The increasing evidence that Egypt's cities were being forever shaped by random, unplanned expansion was simply ignored.

As a consequence, any formal urban expansion on the fringes of both Greater Cairo and Alexandria was prohibited. The sole exceptions to this were to be found on the desert fringes of eastern Cairo – on state land controlled by government housing companies in Medinet Nasr, Zahra' el Maadi, Muqattam, and Heliopolis. And these have been without exception residential districts with high-standards aimed at middle and upper segments of the housing market and certainly not for those of limited income.

Virtually all expansion around the majority of provincial towns in the Delta and Upper Egypt was proscribed and ignored. Only in towns such as Port Said, Suez, Ismailia, and to some extent Aswan and Qena, which

<sup>94</sup> The figure of 1.2 million feddans is stated in a National Democratic Party policy paper (2004). There seem to be widely different estimates of how much agricultural land is lost to buildings. According to the head of the Desert Development Center at AUC, 17,280 feddans of agricultural land are currently being lost each year, which he describes as "silent murder". (Al Misri Al Youm Newspaper, 24/07/2006, p. 3.)

could boast nearby State desert land, could central and local government agencies intervene to try to meet the demands of urban growth. In fact, it could be said that urban development policies only applied to these kinds of secondary towns with some desert hinterland in public hands.

### **Reform and Innovation in Urban Planning Practices**

The Unified Building Code (Law 119 of 2008) is made up of five chapters, the first of which deals with Urban Planning and Development. Although much of the older, top-down planning approach remains, there are a number of innovations.

The law calls for the setting up a National Council for Urban Planning and Development headed by the Prime Minister and including representation of the concerned ministries and government authorities. It also introduces a number of reforms that affect urban planning practices. GOPP's role will remain that of the apex body responsible for urban planning. In this regard, GOPP has undertaken strategic planning exercises in 100 small and medium sized towns in Egypt. These plans look at managing and mobilizing local resources, identify growth opportunities, and involve local authorities and communities in the planning process. While welcome, the resulting strategies remain largely land-use plans and are not operational (see also below).

The Unified Building Law calls for the establishment of an urban planning and development directorate in each governorate. This will imply an important improvement in the stature and capacities of urban planning at the governorate level, where until now there are only urban planning departments under the housing directorates, and most of these are dormant.

The Law also calls for changing the tools of urban planning from the traditional master plans and structure plans which were largely physical land use plans, to strategic plans and action plans which will incorporate socio-economic and environmental issues and also which will focus more on local economic development, environmental management and on promoting public private partnerships and at least some local community approval/endorsement.

In addition, operational procedures for dealing with slums, informal settlements, downtown areas, industrial zones, and historic urban areas were set. As part of these procedures, the law emphasizes the importance of regularization of poor people's tenure.

### **7.3 CONVERSION OF STATE DESERT LANDS FOR HOUSING AND OTHER URBAN PURPOSES:**

As explained in the preceding section, State desert lands have been the source for almost all formal urban development in Egypt since the 1970s, including those for housing. These have been mainly desert tracts.

The system of conversion of State lands for urban use could be described as one of "negotiated administrative fiat." At the heart of the process is assignment (takhsis) of land by an authority to a public, cooperative, or even private entity that, for large tracts, in turn subdivides and disposes to the end user. In the last twenty-five years, the takhsis process has evolved considerably. Regulations are now in place which require review of assignment by committees and nominal prices are to be set on some lands and market prices to others, as well as stipulations as to exploitation and build out within a certain period. These regulations have been progressively imposed in attempts to combat favoritism and land speculation, since it became clear that parcels of desert land, especially those under urbanization pressures, had the potential for tremendous windfall profits upon resale.

Unfortunately, these control systems have only partially been successful, and land speculation is still a major motive for desert development, especially for lands near to urban agglomerations or those perceived to have future urban potential. Much of urban development in the desert remains characterized by walled vacant tracts, empty subdivided plots, and buildings left unfinished. And in spite of attempts to control and coordinate desert assignments and to put them under the framework of master plans and structure plans, the results remain somewhat chaotic.

By far the largest conversion of desert land for housing is found in the new towns, all of which are managed by NUCA. There are presently 22 new towns operating or under construction at various locations in Egypt, of which 8 are located around Greater Cairo. The original land use plans for these new towns were prepared by consultants contracted by GOPP, and over time most of these new towns have had more and more desert land included within their boundaries in order to accommodate various public and private housing schemes.

Egypt's new towns have typically been composed of four kind of residential elements, organized into superblocks or mugawarat, that are the 'vocabulary' used by the Ministry's physical planners for residential areas.



**First**, there are social housing estates built by NUCA or other government agencies that have been an important feature of all new towns since their inception (see Chapter 4 for a description of these programmes.) These are typically composed of walk-up apartment blocks (with small units 42 to 70 square meters in area) arranged in sterile geometric patterns, with very ample space between buildings. Due to the lack of alternative sites, since 2000 well over half of all government-subsidized housing in the whole country has been programmed for the new towns. The latest incarnation of this type of housing is under the “one million unit” Social Housing Program. Cooperative housing, although built and allocated through a different system (see box in Chapter 4) and with slightly larger housing units, should be included in this category of social housing estates.

**Second**, all new towns have large areas devoted to individual plot residential subdivisions. These superblocs have been designed for purely car-oriented suburban living, with individual building plots that usually range from 500 to 1200 square meters and include ample public land for open areas, parks, and circulation. Building specifications allow individuals to construct three- or four-story garden apartment buildings with setbacks on each side that mainly result in very substantial apartment units (300 m<sup>2</sup> being common.)

**Third**, there are superblock concessions sold to real estate developers for walled and gated residential compounds and, more recently, for ‘integrated’ property developments. It should be noted that only the new towns around Cairo contain superblock compound concessions.

**Fourth**, there are Ibni Beita subdivisions that were introduced at a grand scale starting in 2007. These are composed of 150 square meter serviced land plots which individuals can acquire to build their own houses. The Ibni Beita scheme, a kind of sites and services program, is described below in Section 7.5.



**Figure 7.5**  
Low density neighborhood layout, Ibni Beita sites and services scheme, Sixth of October, July 2013. No inhabitants yet. Google Earth @ 2014, Digital Globe @ 2014.

In all of these housing areas physical standards are very high. In the roll out of Egypt’s new towns over the decades, the planning norms and associated layouts have exhibited very high standards and have been remarkably similar. All new towns have been established on huge tracks of empty and flat State-owned desert land, with low overall densities and large distances between the different elements and neighbourhoods.

Residential neighbourhoods in the new towns were designed for low gross densities, with as much as 60 per cent of the area devoted to open space, green areas, playgrounds, schools and other services. All major roads were exceptionally wide, and even the smallest local streets had widths that exceed those found in existing Egyptian cities. Residential street and block layouts conformed to standard street hierarchies, with main arteries buffered by green strips, restricted access points into neighbourhoods to discourage through traffic, and with traffic circulation within neighbourhoods limited to a confusing set of local street loops and bends, theoretically to discourage through traffic.<sup>95</sup> Land uses were strictly segregated, and in almost all neighbourhood commercial and service activities were limited to small shopping nodes located into areas centred within the neighbourhood block. Specific commercial areas or spines existed within each new town, and it is in these zones that all larger office and retail establishments as well as government offices were originally intended to locate. And all industry and warehousing were restricted to designated zones far from residential quarters. While such planning norms may represent the model in Western cities, they are questionable for an Egyptian urban culture that excels at diversity and compactness, and they are especially

<sup>95</sup> Government planners seem to have had a penchant for odd-angles for road intersections and also for laying out public housing blocks, 30 and 60 degree angles being preferred, which results in much of awkward and unusable land which, for lack of any better solution, are designated for yet more open space which, on plans at least, are verdant. A simple grid layout of streets, by far the most efficient, is never adopted in the new towns.

questionable in Egypt's new towns where a harsh desert climate prevails, shade should be given a premium, and where all greenery will require copious irrigation forever.

The rate at which more and more residential superblocks are planned and assigned by NUCA and MHUUC in the new towns is very impressive, and in the last couple years the process has sped up even more. The first three of the four main types of residential areas listed above continue to be added, and there are also a raft of newer housing programs that are being introduced at a large scale, each of which require their own superblocks. These include (1) **Al Iskan al-'A'ili (Family Housing)** scheme in almost all new towns, which offers land plots between 206 and 260 m<sup>2</sup> upon which four families are to construct together a G+3 building. Between 100,000 and 250,000 plots of land are planned; (2) **Dar Misr**, high-quality public sector middle income housing estates in many new towns promoted by MHUUC. Some 150,000 units are planned; (3) **Beit al Watan**, 700 to 1200 m<sup>2</sup> plots of land for high standard housing to be purchased by Egyptians working abroad, to be located in new towns around Cairo. Some 10,000 of these plots are said to be planned; (4) **Arabtec One Million Units**, a huge middle-income housing program in 13 new towns for which there have been many pronouncements since early 2013 but for which there are very few details. A protocol was signed with the UAE Company Arabtec in April 2015, and presumably funding will come from corporate sponsors. Arrangements for a first phase of 100,000 units are being made.



**Figure 7.6**  
Governorate public housing under construction on remote desert site in unplanned rural area, Al Tarif, Luxor, 2015. Photo by D. Sims.

One question begged by this pell-mell roll out of residential land in the new towns is: Are there funds and capacities to service all these new areas in a timely manner? Tardy trunk and on-site infrastructure provision (not to mention tardy construction of power, water, and wastewater plants) has constrained new town expansion in the past, and as the pace of land development accelerates it will be inevitable that infrastructure problems become more acute.

#### 7.4 CONVERSION OF AGRICULTURAL LANDS FOR HOUSING:

Except in extremely rare cases, all conversion of agricultural land for urban purposes over the last 30 years has been informal and prohibited by one or a host of laws, depending on the location. Paradoxically, over decades this process has resulted in what is now the single largest kind of urban residential land use that can be found around virtually every city and town and even village in Egypt.

##### **The mechanisms of informal urban development**

In the 1960s and 1970s the informal process was relatively straightforward, unconstrained by government prohibition.<sup>96</sup> A farmer would divide an agricultural strip into small plots and offer them for sale, usually through word of mouth although also through informal brokers or *simsars*. In some cases, a small entrepreneur would buy up field parcels and carry out the subdivision himself. In both cases, the tertiary canals and field boundaries became the small access lanes to the plots themselves, with widths of typically two to four meters. **In effect, the resulting urbanized patterns and geometries reflected precisely the former agricultural patterns.**

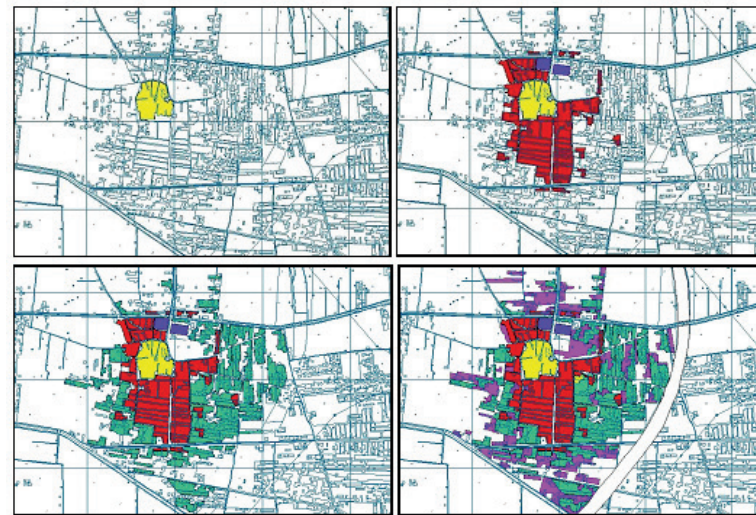


**Figure 7.7** Example of informal conversion of agricultural land along Cairo Ring Road (Giza). Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008, 26.

<sup>96</sup> It is interesting to note that with the construction of the High Dam at Aswan in 1964 the annual flooding of much of the agricultural plain in the Nile Valley ceased, making it much more convenient to build on such land.

Those who purchased plots would progressively build small footprint apartment blocks, always with total 100 per cent plot coverage (except for small light interior or side light wells). Apartment units would be small, averaging 50 to 70 m<sup>2</sup>, with ground floors often devoted to commerce and workshops. Floors would be added over time according to need and as finances permitted. This process would occur on the fringes of urban agglomerations and also at the edge of villages, especially those which were coming under urbanization pressures. Needless to say, areas subject to this conversion process were unplanned, had no subdivision permits, and structures needed no building permits. At first there would be no utilities, although a shallow tube well usually sufficed at the beginning for water supply, and wastewater was handled by septic tanks and soak-aways. Once the population of an area consolidated and gained a certain voice in local government, electricity networks would be introduced or extended by government power distribution companies. Also at some point the main agricultural canals and drains would be filled in to create main roads that might eventually be paved. In most cases water networks and, finally, sewerage lines would be introduced. However, these networks were usually of low quality and eventually became overburdened. And roads were mainly in poor condition.

Throughout the land conversion and build-out process, security of land tenure was extremely solid since the builder had bought the land from the legal owner-farmer, even though his land would most likely be unregistered. Even the threat of demolition of illegal structures, in spite of a host of laws, was very weak, since the local district or agricultural inspector would obligingly turn his eyes elsewhere for a small bribe. This process replicated itself time and again, creating in Greater Cairo and Alexandria huge informal settlements, each of which today contain hundreds of thousands of inhabitants. They and their smaller cousins on the peripheries of provincial cities and towns now suffer however from poor accessibility, extremely high residential densities, and insufficient schools and other government services. But, being well-located either in or on the fringes of urban agglomerations, these areas were close to markets, services, and – all importantly – the employment and enterprise opportunities generated by the vast informal urban economy.



**Figure 7.8**  
**Example of Informal Expansion on Agricultural Land, El Muatamiddiya Village, outside Cairo, Years 1947, 1977, 1993, and 2000.** Source: World Bank, *Egypt Urban Sector Update, Vol. 1, 2008, 27.*

In the 1980s and especially the 1990s government authorities became increasingly preoccupied with preventing the creation of more informal development on agricultural land, and there was a noticeable slowing of horizontal expansion, at least on the wide and exposed fringes, pushing the process into “out of sight” agricultural pockets and around peri-urban villages where control was less strict. Yet the financial incentive to convert agricultural land for urban use was still extremely high, and the price for building land would easily exceed that of agricultural land ten to twenty-fold.

After 2000 informal expansions on the fringes continued unabated, and older informal areas densified as additional floors were added. At this time a rather new phenomenon, the one-off tower of ten to fifteen floors, began to make their appearance. These tended to have a greater footprint and the housing units were larger. These towers first appeared in prime locations around Greater Cairo, Alexandria, and Delta towns where land prices were highest.

After the January 2011 Revolution informal construction on agricultural land, already the dominant mode of urban expansion, virtually exploded. The collapse of security and local government structures meant that the only constraints to the process had disappeared, and it was perceived that a golden opportunity to build presented itself and coincidentally, without the added cost of extra-legal payments. No one knows how extensive is new wave of construction, but anecdotal information suggests that the rate of conversion of agricultural land has at least doubled, and vertical expansion has also increased. The results of the 2016 Census of Buildings to be carried out by CAPMAS are eagerly awaited.

### Recent attempts to allow formal housing development on agricultural lands

Starting in 2004, the total prohibition conversion of agricultural land for urban use was recognized by government as unstoppable and a more nuanced policy towards this expansion started to be considered. (NDP policy paper.) Ways to allow some limited legal conversion were seen as the only way to compete with and limit informal development on agricultural land. This policy shift resulted in a number of initiatives:

*Expanding village boundaries (al-hayz al 'omrani):* GOPP, in coordination with local authorities and through special committees, prepared plans to define new boundaries which extend beyond the built up areas of villages and which would allow agricultural land owners inside these new boundaries to build housing or to sell the land to other builders. Most of the 4500+ villages in Egypt had their extended boundaries approved. On average an additional 15 to 25% of a village's old built up area has been so demarcated. The idea was that those wishing build or to sell for building purposes would pay a betterment tax at the point of applying for a building permit and thus contribute to paying the infrastructure costs, but such a mechanism proved totally impractical. In addition, a gargantuan task of preparing and approving detailed plans for all these additional areas (as required by law) has proven beyond the capacities of the under-resourced and unqualified local authorities. In addition, any new housing in these areas would have to conform to the building code and obtain building permits, raising costs dramatically. It is no surprise that in none of the thousands of villages for which boundaries have been expanded has a functioning, legal conversion system been established, at least to date.

*Expanding city boundaries (kordon el medina):* Over the 2009 to 2012 period GOPP, with assistance from UN-Habitat for half of them, has prepared strategic plans for over 100 secondary cities throughout Egypt, and many Egyptian consultants were engaged to carry out the necessary studies, assess needs, consult with local authorities and communities, and prepare strategic growth plans. An important element of these plans was to draw new city boundaries to allow a certain amount of urban expansion in the face of growing population pressures. The additional areas were to be selected according to pure planning principles, but considerable pressure to designate such areas came from landowners who correctly believed their land values would soar were they to be included. In any event, most strategic plans have been approved and the challenge is to prepare the detailed plans for the expansion areas. As with the village boundary extensions described above, preparing and approving these plans have proven extremely difficult, and the whole process has proven very unpopular. Probably the most daunting aspect is the imposition of standard street networks that have been drawn without any attempts to consider the existing very fragmented nature of the agricultural field holdings, many of which had already been subdivided and sold. One would say that this would be an ideal occasion to apply land adjustment and land assembly, as allowed in the 2008 Unified Urban Code. However, the mechanisms and legal powers for this have remained untried, and as a result not a single new neighbourhood identified by these strategic plans has seen the light of day.

*Containing informal areas (tahzim el manatiq el 'ashwa'iya):* Starting in 2006, general plans for areas around Greater Cairo, Alexandria, and other towns were prepared that allowed a certain amount of legal conversion of agricultural land into planned residential urban areas. The intension was to create belts or containment zones that would prevent continuing horizontal informal expansion into agricultural lands. The same legal, regulatory, and procedural obstacles problems encountered in expanding the city cordons, described above, also have confounded this initiative, and to date only one area – in Suez Governorate – has had the detailed plan approved by the local authority. And nowhere has the initiative been implemented.<sup>97</sup>



**Figure 7.9**  
Piecemeal informal housing construction on converted agricultural land, Waraq, Giza, 2011. Photo by D. Sims

<sup>97</sup> For a discussion of the tahzim initiative, see World Bank, Arab Republic of Egypt: Urban Sector Review, Vol. 2, 2008.



**Figure 7.10**  
Conversion of agricultural land for informal housing construction on agricultural land, Waraq, Giza, 2011. Photo by D. Sims

It may be that over time these initiatives will register some success and begin to offer a legal alternative to informal urban expansion on agricultural land. But success will only come with a wholesale reform and strengthening of the procedural aspects related to approving and implementing detailed plans and, crucially, a high degree of police power immune to the pressures of special interests and popular discontent. That Egypt finds itself in such a situation is largely due to the total preoccupation over decades with restricting urban planning practices to un-encumbered desert tracts of public land where simple land use plans and land allocation systems were sufficient mechanisms. The messy but necessary development control systems over privately held lands – something most countries have had to develop as part of their urban planning practices – were left to atrophy.



**Figure 7.11**  
Growing Informal settlement on public land on the Eastern Desert fringe, Al Wasta, Assiut Governorate, July 2013, Google Earth, Digital Image @2014

## 7.5 LAND TENURE SECURITY IN EGYPT

It needs to be noted that security of both urban and rural land tenure in Egypt is very good in almost all cases. The rights of those possessing private land are protected by the successive constitutions and by legislation, and the “taking” of private land for public purposes is strictly controlled by expropriation legislation that also specifies that compensation reflecting market prices must take place. The system of legal registration of land parcels and properties may be largely dysfunctional, as discussed below in Section 8.4, “Problematic registration of properties,” but the ownership of unregistered private land (including formerly agricultural parcels, upon which most informal settlements have been built) and even squatting rights on State (desert) land are de facto recognized by the government. Wholesale evictions of those living in informal squatter settlements is unknown in Egypt, and evictions that do take place are usually of small scale and are mainly related to slum-clearances in older and dangerous urban areas. (See also above, Section 3.10 “Demolition of the housing stock, resettlement, and forced evictions.”)

Land tenure systems and the issue of secure tenure in urban Egypt is fully discussed in Sims, David, “What is Secure Tenure in Urban Egypt,” 2002.<sup>98</sup> In the intervening years the situation has not appreciably changed.

## 7.6 ATTEMPTS AT SITES AND SERVICES PROJECTS

One form of land delivery for housing, especially low-cost housing, are sites and services projects where small plots are serviced and allocated to households to build their own housing. Proponents of this approach have argued that there are ways to harness the informal dynamic and guide it towards creating formal, legal neighbourhoods where poor and moderate income families, including small entrepreneurs, can progressively create affordable and appropriate housing at little cost to the State. Given that in urban Egypt the owner-builder mode of housing provision is overwhelmingly dominant, it would seem that adopting the sites and services approach would make ultimate sense.

In the late 1970s and 1980s a few demonstration sites and services projects were undertaken in Egypt (including in Helwan, Aswan, and Assiut). The largest and most successful of these was the Hay al-Salam and Abu Atwa projects executed by the Governorate of Ismailia.<sup>99</sup> These projects were developed on well-located State land on the immediate fringes of the city. With only a small amount

98 Sims, David, “What is Secure Tenure in Urban Egypt,” in: Payne GK (ed) *Land, Rights and Innovation: Improving Tenure Security for the Urban Poor*. 79-99. ITDG Publishing, London, 2002.

99 Other, smaller sites and services projects, none of which were particularly successful, were implemented in Helwan, Assiut, and Aswan.

of foreign technical assistance, the areas were planned and progressively developed for Ismailia citizens to build their own housing with only minimal controls and very few rules. Better called ‘sites and then services’ projects, they were a resounding success. The required infrastructure and services were largely auto-financed through land sales (generated mainly through the sale of 10% of the land in high-value locations by auction). Considerable individual investment in housing was attracted, and the areas grew to house over 100,000 inhabitants within less than 15 years. In spite of this, the Ismailia projects had virtually no subsequent demonstration effect in Egypt.

In 2006 the MHUUC came up with the Ibni Beitaik scheme as one element of the 2005-2011 National Housing Program (see Chapter 4.) The idea involved creating 150 m<sup>2</sup> plots allowing qualifying citizens to build on 75 m<sup>2</sup> up to three floors (with a net area per unit of 63 m<sup>2</sup>, the NHP standard for housing units for limited income families). The scheme was heavily subsidized, both in the very concessionary price of land (EGP 70 per m<sup>2</sup>) and in the provision of cash subsidies in stages amounting in total to EGP 15,000 per beneficiary unit. Initially 20,000 plots were to be built in various new towns, but due to an avalanche of applications the target was raised to 90,000 units, all of which have been assigned, with 40,000 plots in Sixth of October alone. NUCA, the executing agency, imposed onerous rules, regulations, and bureaucracy. In addition, Ibni Beitaik subdivisions were remotely located and huge, with military-style layouts, wide streets and strict land use segregation. Although considerable construction has taken place in most subdivisions, very few families have yet (2015) occupied the finished units.

There have been problems with infrastructure and insecurity in the Ibni Beitaik subdivisions and complaints from citizens have been numerous. In addition, illegal resale of plots has been very common, and it seems that the Ibni Beitaik experiment is not very successful. Other criticisms include the fact that beneficiaries of the program could hardly be considered to be of limited income given the sizable amounts of capital that would need to be mobilized. The government has adopted a policy to discontinue such an approach, at least as a housing scheme aimed at those of limited income, in the current Social Housing Program.

Probably the main reason for the failure of the Ibni Beitaik initiative, besides the huge scale, hurried execution, and bad management, is simply that the locations were remote. That is, Ibni Beitaik subdivisions were located

in mainly sterile and remote new towns at locations that were far from dense urban agglomerations and on the fringes of these new towns themselves.

In 2011 the Ibni Beitaik program was the subject of an exhaustive technical evaluation by the Housing Building Research affiliated with MHUUC. The main technical and procedural drawbacks of the program were identified in this study, but since it was carried out before substantial occupation and settlement in the projects, it could not assess the long range social and economic impacts.<sup>100</sup>

## 7.7 CONCLUSION: A COMPLETE DICHOTOMY IN LAND PROVISION FOR HOUSING AND URBAN PLANNING THAT IGNORES THE LOCATION FACTOR

Since the 1970s there has been a complete dichotomy in land provision for in Egypt. On the one hand, desert public land has been planned and distributed at low densities and high standards without regard to the housing dynamics that respond to the needs of the poor and modest income families. In the process, the importance of location and the costs of distance were lost. And in this process there seems to have been few lessons learned, and there are errors that keep repeating themselves. As a result, government-sponsored housing development in desert locations has failed to attract the numbers planned, and these desert areas are becoming the exclusive preserve of the car-owning well-to-do.

On the other hand, extra illegal and uncontrolled “organic” housing self-built on urban fringes and in peri-urban areas has been a resounding success. This housing may contravene all building and subdivision codes and be denied adequate infrastructure and services, and also suffers from high densities and problems with light and air, but it is a mode of urban development that produces socially mixed and economically vibrant neighbourhoods that for the most part are very well located and integrated into the larger urban agglomerations. In addition, housing developments in these areas can avoid the high construction costs imposed by rigid building codes. It is in these areas where affordable housing is found and where the majority can pursue their livelihoods. It is no wonder that it is in such “unplanned” areas housing is produced for at least two thirds of Egypt’s urban population, and probably much more.

Another reason for the success of informal land development is that government planning has not offered

100 Azza Sirry et al., Housing, Building Research Center, Housing and Architecture Institute, Evaluation of Urban Development of the Ibni Beitaik Project, 2 volumes, (in Arabic) December 2011.

formal alternatives. Urban planning mechanisms as practiced have remained rigid, top-down, and beholden to the lure of State-owned desert tracts where urban plans with inappropriate standards can be laid out on clean, un-obstructed space. Belated attempts to allow formal development in good locations on fringe agricultural lands have proven complicated and unrealistic.

Based on the most recent urban land development plans and schemes, it is predictable that the Egypt's dichotomy in urban development will continue and even accelerate.

# HOUSING FINANCE AND GOVERNMENT CREDIT SCHEMES

## 8.1 OVERVIEW OF HOW HOUSING CONSTRUCTION AND PURCHASES ARE FINANCED IN EGYPT

Overall, what were the main sources of funds that are used by purchasers when acquiring their units? To answer this, it is fortunate to have the results of the statistically representative 2008 HSUE, which asked this question as part of the sample survey of urban households, specifically those households who acquired a housing unit in the 2003-2008 period. According to those purchasers who responded in the HSUE, the single greatest source was of savings from regular income (65 per cent), followed by selling property or other assets (49 per cent), as is shown in Table 8.1. A total of 14 per cent of purchasers relied on any savings from working abroad, mainly in the Arab Gulf countries.<sup>101</sup> And, most significantly, only a tiny portion of purchasers, less than two per cent, relied at least partially on loans from banks.<sup>102</sup>

This needs to be phrased in another way. In urban Egypt over the 2003-2008 period all forms of formal credit represented only a totally insignificant part of housing finance.

Table 8.1: Sources of Financing for Urban Housing Purchase in the 2003-2008 Period

Sources of Financing (multiple responses possible)	% of households
Savings from regular income	65.0
Savings from working abroad	13.7
Selling property/assets	49.8
Contributions from relatives	10.8
Loans from individuals	4.7
Loans from work place	2.9
Loans from bank	1.6

Source: 2008 HSUE

This is sobering but not unexpected. In urban Egypt in 2005 individual and household income averages are higher than expenditures, indicating an overall savings capacity of surveyed households of 10.8 per cent of their total income. However, this savings capacity is not the same across all quintiles. Savings capacity is negative for the first quintile; is almost zero for the second quintile; is 3.6 per cent for the third quintile; is 8.2 per cent for the fourth quintile; and is 21.8 per cent for the fifth quintile. Thus saving for housing purchase is obviously a great challenge for all but the highest two quintiles of urban household income distribution.

101 Many housing market observers consider demand from expatriate Egyptians to be an important target for house marketing campaigns. This may be true for the higher end of the market, but in terms of national averages such demand is very small.

102 "Loans from Banks" does not include purchases of government housing units (some 22 per cent of all purchases on the primary market) nor does it include purchase of developer built units (some 4 per cent of all purchases on the primary market). Such purchases would have been considered cash payments from income, savings, or other sources.



According to the 2008 HSUE, only 13 per cent of all households in urban Egypt have household members who hold current financial dealings with banks, lenders, instalment sellers or financial institutions. 19 per cent of households reported that their members have had financial dealings in the past but not currently. Of the small minority of those who currently or formerly have had financial dealings, banks come on top of financial institutions household members have dealings with (67 per cent). Post offices come second with 25 per cent, while instalment sellers (for consumer loans) occupy the third place (9 per cent). Thus it must be recognized that the large majority of urban households remain totally outside the formal financial structure. In light of these facts, it is not surprising that recourse to formal credit systems for housing finance remains exceptionally weak in Egypt.

## 8.2 FINANCIAL AND CAPITAL MARKETS AS SOURCES OF HOUSING FINANCE

Egypt boasts a relatively large and sophisticated banking and finance system, especially when compared to other African and Middle Eastern countries. The banking sector consists of commercial banks, both local banks and foreign banks. It also includes specialized banks and financial institutions operating in the fields of investment and credit for industry, agriculture, housing and rural development. In addition, the postal service with its hundred of branches offers many retail banking services. The banking and finance sector is supervised by the Central Bank of Egypt and by a number of regulatory agencies.

Liberalizing reforms instituted in the 1997-2005 period improved the functioning, scope, and efficiency of the banking system as well as its regulation in line with international standards. Such reforms included an extensive privatization program and the opening of a prospering domestic bond market, and banks have been able to increasingly diversify their portfolios and lower their financial risks as well as expanding into non-traditional services such as brokerage, investment consultations, asset valuation and sales, and mutual fund operations which also helped improving capital market services. The Egypt stock exchange, which lists companies, bonds, and mutual funds and was capitalized at EGP 511 billion on 16/04/2015, has been and continues to be a backbone of the country's capital markets.<sup>103</sup>

Still, the banking and financial sector in Egypt continues to suffer from weaknesses. Macroeconomic policies combined with chronic inflation have kept the cost of

borrowing quite high. (The current CBE prime interest rate is 10.5 per cent and commercial and investment loans commonly carry interest rates in the 13 to 15 per cent range.) This, combined with low consumer market penetration, has led to banks to have high levels of liquidity. Because of Egypt's recourse to financing the huge and recurring government fiscal deficits through State bond issuance, banks prefer to reduce their liquidity by buying such bonds. The result is that investment credit, both for housing as well as manufacturing and other sectors, is expensive and hard to come by, especially for smaller firms. Also, consumer credit, especially for vehicles, has become an easy way for banks to recycle their portfolios.

As mentioned in Section 8.1 above, another problem with the banking sector is the continuing 'non-banking' profile of a huge majority of citizens (especially those of low and moderate incomes), who for cultural or other reasons have no dealings with banks or other credit institutions. And banks have few sources of long term deposits, meaning that they find it difficult to finance housing purchases that, by their nature, require loans with long maturities.

## 8.3 PRIVATE DEVELOPER HOUSING FINANCE SYSTEMS

Even though indicators show that corporate housing is largely aimed at the higher ends of the housing market (as discussed in Chapter 4), it is worth asking: How is this formal housing financed? There are obviously a wide range of mechanisms for financing the acquisition of land and construction of housing, including recourse to banks, capital markets, bond markets, and specialized housing institutions, as described in Section 8.2 above. One extremely common feature, which allows real estate companies to avoid recourse to the banking sector, is "off-plan" financing, also called pre-financing. The process is roughly as follows: Any formal developer must first purchase the land, normally with his own equity. In most urban areas this must be a pure cash payment, although in the new towns the formal developer or individual pays for the land in instalments that normally extend over seven to ten years. At this point the developer prepares a design for the project and promotes the designed units to potential buyers, mainly through advertising mechanisms that can become quite sophisticated, especially for the higher end of the market. A prospective buyer of a unit will be asked to make a payment upon reserving the unit, another on signing a preliminary purchase contract, and probably still other "bullet" payments. Some of these payments are made before construction even starts, and all of these

103 See the Egyptian Exchange <http://www.egx.com.eg/english/homepage.aspx>, accessed on 16/04/2015.

payments are made before the unit is finished. Another hefty payment is made upon occupation (taslim al-muftah). After possession, most developers will offer the remainder of the unit price (rarely more than 20 to 35 per cent of the total) to be paid in instalments over four to seven years. There are many variations in this format, but the key is that a developer can finance most if not all construction from pre-payments and clever phasing. Thus his need to invest his own equity is minimal, and hefty bank loans for construction can be avoided. Such a system has its faults, especially when a project falls behind or experiences cost overruns, and the purchaser of a unit can find himself in a terrible situation, having made substantial payments with little hope of ever possessing a livable unit. There is no legal protection for purchasers, thus the reputation of the developer is all-important.

## 8.4 HOUSING MORTGAGE SYSTEMS AND MARKETS

This section presents a review of the emerging mortgage market for housing in Egypt. It is important to note that the mortgage law only came into being in 2001 and that the mortgage system only received real support following the installation of the reformist Cabinet in 2004. Before this there were a number of laws and executive regulations on the books that made it extremely difficult, if not impossible, for a residential unit to be used as collateral for a loan. That is, foreclosure or repossession of a unit could not be made, and the courts would invariably rule in the favour of the occupant. This situation, which arose through socialist-inspired legislation in the 1950s and 1960s, meant that most households seeking housing ownership had to rely on savings or other means of amassing the purchase price for a unit, as has been explained in Section 8.1 above. Over the years a number of systems evolved to allow other, non-mortgage financing facilities for housing acquisition, which have become very common in the formal sector, and even to some extent in the informal sector. For example, a bank loan to purchase housing could be obtained by third party or employer guarantees, or the purchaser could sign blank checks as a kind of collateral, or the purchaser could have recourse to non-secured personal loans from relatives. Also, many developers would offer their own financing arrangements using pre-possession bullet payments combined with short term post-possession instalments to mitigate the need to assemble up-front equity.

The new mortgage system has had to compete directly with these other, well-established financing arrangements. This, combined with a high propensity to

save and otherwise mobilize equity for housing among Egyptian families, has made acceptance of the new mortgage system and its rapid expansion difficult.

It is thus no surprise that Egypt's mortgage sector remains tiny. In 2011 mortgage lending in Egypt was equivalent to less than half a per cent of gross domestic product (GDP), compared to 13 per cent in Morocco, and by comparison, mortgage lending in Britain is equivalent to about 80 per cent of GDP. Since 2011 the overall size of the mortgage market in Egypt has hardly grown at all.

### Legal framework

The basis of the legal framework for mortgages in Egypt is the Real Estate Finance Law 148 of 2001 and its executive regulations (frequently amended). This legislation allowed foreclosure through the courts and subsequent re-possession, and set the rules for the types of loan products which banks and mortgage finance companies could offer borrowers. Also, the law specified the setting up of important mortgage institutions, including the Mortgage Finance Authority (MFA),<sup>104</sup> the Guarantee and Subsidy Fund (GSF), and the creation of specialized mortgage finance companies (MFCs). These and other actors in the mortgage system are described below. In addition to the mortgage law, the Central Bank of Egypt has issued its own regulations. Together, the main legal parameters relating to mortgage loans were as follows:

- A ceiling was imposed on banks by CBE at 5% of their loan portfolios that can be in the form of mortgages. This ceiling does not apply to the Housing and Development Bank (HDB) and the Egyptian Arab Land Bank.
- Mortgage finance can only be for “registered” properties. This was changed in 2009 to read “registerable” properties to make it easier for mortgage systems to work on properties in the new towns.
- Maximum mortgage loan repayment is set at 40 per cent of documented income for regular mortgage loans and 25 per cent for “low income” borrowers. The percentage for “low income” borrows was raised to 35 per cent in 2014.
- A documented Income ceiling for “low income” borrowers who qualify for subsidies was set at EGP 1000 per month for individuals and EGP 1500 per month for married couples. (This was increased by a Prime Ministerial Decree in 2009 to EGP 1750 and EGP 2500 respectively.)
- It is not allowed to issue mortgage loans for uncompleted/under construction/without utilities housing units.

104 Note that by Law 10 of 2009 the Egyptian Financial Supervisory (EFSA) was created which subsumed the functions of MFA.

- A mortgage loan cannot exceed 90% of the value of the mortgaged unit.
- Mortgage finance companies cannot take deposits (which commercial banks can do).

A number of agreements and decrees in 2014 have eased the framework for mortgage financing somewhat. The Decree Law 55 of 2014 introduced a number of amendments and improvements to the 2001 Mortgage Law. The most important of these was to allow “low income” borrowers to devote 35 per cent of their incomes to mortgage instalment repayments (up from 25 per cent). Other improvements included the setting up of a special fund administered by the EFSA to improve mortgage operations.

### Growth of the mortgage market

The total portfolio of property loans under the mortgage system in Egypt grew from EGP 184 million in September 2005 to EGP 4,436 million in March 2010, according to the EFSA. Private banks held 60 per cent of these mortgages and mortgage companies the rest. Roughly, this represented a total of some 40,000 mortgage-linked loans, a 21-fold increase over five years, or an annual increase of over 80 per cent. However, the total amount as of March 2010 remained very low when compared to Egypt’s GDP, at less than 0.2 per cent.).

Growth of the mortgage market stalled due to the political uncertainties from 2011. By the third quarter of 2013 total outstanding mortgages were EGP 4.8 million, hardly any increase from 2010. What little growth that occurred was with bank portfolios, whereas mortgage companies registered negative growth. However, by the second quarter of 2014 a small recovery was registered for mortgage companies:<sup>105</sup>

- Total value of mortgage loan portfolios held by MFCs was EGP 2302 million, a modest increase of 29 per cent since 2010.
- Mortgage loans to “low income” borrowers represented 70 per cent of the total number of MFC loans, but in terms of total loan value this category only accounted for 19 per cent.
- The average MFC mortgage loan term was 16 years and average interest rate was 12 per cent., but over 4 years.
- The geographic distribution of mortgage loans has been very skewed. Data on MFCs show that a full 74 per cent of their mortgage loans went to just one location – Giza Governorate which contains the new town of Sixth of October. Another 22 per cent of loans went to other parts of Greater Cairo.

In other words, in 2014 the mortgage market in Egypt remained very small with only modest growth, and the market was segmented into (1) loans to “lower income” borrowers under subsidized government programs and (2) a few quite wealthy borrowers. Also, the mortgage system is almost exclusively restricted to Greater Cairo and was mostly concentrated in the new town of Sixth of October.

### Principle actors in the housing mortgage system

In spite of its still very small size, the mortgage system in Egypt has a large number of actors and its evolution has received considerable support from various quarters. The following are the main institutional actors and support programs, which together form the “building blocks” of the national mortgage system.

#### *Egypt Financial Supervisory Authority (EFSA) incorporating the Mortgage Finance Authority in 2009*

The enabling legislation for the formation of the Mortgage Finance Authority was the Real Estate Finance Law 148 of 2001, and it began operations in 2002. Its functions are to create and maintain a strong regulatory and supervisory environment for mortgage lending to protect the interests of lenders and consumers. It supervises the main actors in the mortgage and also licenses/regulates mortgage brokers, property appraisers, real estate agents and auditors. It also is charged with raising awareness of mortgage finance in Egypt and in consumer protection and financial education. In 2009 the functions of the MFA were subsumed under the new unified Egypt Financial Supervisory Authority, which also regulates the Egyptian stock market and other non-banking financial affairs in Egypt such as insurance companies and micro-finance companies. Mortgage affairs are handled by a deputy chairman of EFSA and his staff.

#### *The Ministry of Investment and the GSF (MFF)*

The Ministry of Investment has been in the forefront of efforts to create and expand a vibrant housing mortgage system in Egypt, assisting in the formation of the key institutions, sponsoring conferences, and proposing legislation. Among its achievements is building up of the Guarantee and Subsidy Fund (GSF) that had come into being by Presidential Decree 4 of 2003. The GSF aimed to channel housing subsidies to lower-income groups and to extend a short term (three month) guarantee for mortgage loan repayments. Starting in 2009 the GSF assumed the portfolio of the Affordable Housing Mortgage Program (with support

105 EFSA, Report for the Second Quarter of 2014

from the World Bank). In 2010 the name of the GSF was changed to the Mortgage Finance Fund (MFF). Currently, the GSF has become a pivotal part of the new 'one million' Social Housing Program.

#### *Egyptian Mortgage Refinance Company (EMRC)*

The EMRC was incorporated in June 2006 with support from the World Bank, as a joint stock, wholesale or second tier specialized liquidity facility. The CBE is the largest shareholder, and nine banks and six mortgage companies have participated in its capitalization. The purpose of the EMRC is to allow qualified mortgage lenders (MFCs and banks) to access longer-term refinancing for their mortgage loans and to better manage financial risks related to long-term mortgage lending. It is to raise long-term funding by issuing bonds and notes in the capital markets. It is understood to have committed all of its initial capitalization and also the WB loan. According to EFSA figures, by July 2010 refinancing of mortgages through EMRC had reached a total value of EGP 235 million

#### *Mortgage Finance Companies (MFCs)*

There are 13 registered MFCs, all of which were formed under the Mortgage Law. However, it is understood that only four or five are active with any sizable portfolios. It is said that the business of MFCs is constrained by the difficulties (1) to raise funds through bonds or on the capital markets and (2) their inability to lend for uncompleted units.

#### *Other Actors*

There are a host of other actors that have at least partial roles in the mortgage finance system. These include commercial banks and the three government banks (National Bank of Egypt, Banque Misr and the Housing and Development Bank). Also, many licensed appraisers, licensed brokers, and licensed real estate agents have begun operations in Egypt. In addition, some lenders have begun to use credit rating services such as I-Score, provided by the Egyptian Credit Bureau, a private company which started its business in Egypt in 2006 and which maintains a credit data bank of millions of borrowers.

### **Constraints to the expansion of the mortgage market in Egypt and attempts to address them**

Notwithstanding the many optimistic proclamations repeatedly made about the mortgage market in Egypt, there are formidable factors that constrain its expansion. As mentioned above, one factor is simply the inertia

of older means of financing housing purchase and the reliance of many Egyptians on savings and up-front equity. The following are the main constraints, listed roughly by what we perceive to be the most serious. Obviously, opinions vary widely on which factors are the most constraining.

#### *High interest rates*

Unsubsidized mortgage interest rates remain very high, currently ranging from 13 to 14 per cent. These rates have been roughly the same or higher since the inception of the mortgage regime. Inter-bank overnight lending rates of the CBE are currently at 9.5%, and the cost of borrowing by banks and MFCs is higher. Once risk and administrative charges are added, on-lending for mortgages at 14% is very understandable. The Egyptian consumer will seriously consider before taking a mortgage at such a rate. Even for a term of only 15 years the total amount of repayment on the loan will reach almost three times the loan value.

#### *Problematic registration of properties*

The law specifies that for a property to be mortgaged it must be officially registered or at least "registerable" (qabl li-tasgil) at the shahr al-'aqaria (Real Estate Registry) offices of the Ministry of Justice. It can either be deed-registered (sigil al-shukhsi) or object-registered (sigil al-aini) and requires documentation and inspection by the Egypt Survey Authority. Unfortunately, the system of property registration in Egypt is very complicated and has been for decades. No one knows the hard figures, but even the Minister of Justice is on the record of stating that only 10% of real properties in Egypt are registered under this system, and most of these are not up-to-date. Over the years other semi-formal systems of relatively secure property transfer have evolved which are applied to almost all new housing purchases as well as practically all transfers of existing units. These are inexpensive and straightforward, and they dominate in the formal as well as the informal housing sectors.

Attempts at reform of the property registration system pre-date the mortgage regime in Egypt. Most prominent were detailed proposals made by the Institute for Freedom and Democracy of Lima Peru (Hernando DeSoto) in 2002, which called for a massive block by block registration in urban Egypt using a simple cadastre and the principle of adverse possession. This proposal came to naught. Once the mortgage system came into being the registration problem was quickly recognized as one if not the

major constraint, and a number of attempts have been made to make registration easier and more attractive, at least for new units. Fees were reduced twice to a maximum fee of EGP 2000.<sup>106</sup> To facilitate real estate registration procedures applied to the new urban communities, a protocol was signed with the New Urban Communities Authority, allowing for transformation of the "allocation letters" into "recordable legal documents" and permitting partial registration of projects. Moreover, USAID's Egyptian Financial Services Project (2005-2010) spent considerable effort to improve registration systems and financed a model Real Estate Registration Office in Al-Mukattam (part of Cairo).

None of these initiatives have appreciably improved the situation. The labyrinthine procedures in the Property Registration Offices remain daunting, lengthy, and require numerous non-official payments. NUCA, in order to keep control of developers during project construction in the new towns, insists that land titles cannot be transferred until a project is completed and all land purchase instalments are finished (usually seven to ten years).

In effect, registration of property could be considered the "killer" in the whole mortgage process. Private developers don't see registration as necessary and neither do most of their clients. Were the other obstacles to a vibrant mortgage system removed (especially if the high rate of interest dramatically decreased).

#### *Foreclosure and eviction*

The Mortgage Law of 2001 allows for straightforward foreclosure of a mortgage, eviction of occupiers, and repossession of a unit for which repayments are seriously in arrears through civil court procedures. However, a handful of cases of foreclosure on mortgages have been completed through the courts. It seems that mortgage lenders are still very wary to proceed through the legal foreclosure route, preferring negotiated solutions with borrowers who are in arrears. For a mortgage market that sees very rapid expansion, the foreclosure issue remains troubling

#### *Cultural aversion to borrowing*

As mentioned below in Chapter 9, Egyptians in general have few dealings with banks and other financial institutions, there is a cultural reluctance to incur debt, and personal trust counts for more than formal financial agreements. For many Muslims,

borrowing which requires fixed interest rates is seen as usury. It is much more acceptable to either borrow at no interest from friends or relatives, or to enter into one of the common financing schemes offered by developers where a combination of down-payment, bullet payments, and instalment payments are made to purchase a unit. In these cases interest rates and payments are never specifically mentioned.

#### *Lack of long term funding*

The lack of long-term funds available to primary mortgage lenders is one obstacle to the flow of funds into the housing sector. Mortgages are typically of 10 to 20 year terms, but most lenders are commercial banks that have considerable short term deposits (the longest certificates of deposit are currently 3 to 5 years). Given inflation, liquidity, and interest rate unknowns, there is considerable risk in committing to long term lending, and most primary lenders do not have sufficient capacity to raise long-term funds on capital markets at attractive terms.

One major step to address this problem was the establishment of the Egyptian Mortgage Refinance Company, which started operations in 2008. However, the mismatch between short term funding and long term lending for housing remains an issue, especially in a country where macro-economic factors and inflation make it risky to look far into the future.

#### *Complicated rules and bureaucracy*

It should be added that many private developers as well as potential borrowers complain about the complicated rules and bureaucracy surrounding the government-supervised mortgage system. In fact, the headaches the system causes are mentioned by some developers as the main reason they prefer to offer clients their own form of bullet/instalment finance.

One rule – that only a completed unit can be mortgaged – is particularly onerous. Most private developers rely heavily on pre-occupation payments from clients to finance a part of a housing project's construction. To choose the mortgage finance route means that a developer will forego this very useful form of pre-finance.

## **8.5 FINANCING FOR THE CURRENT 'ONE MILLION' SOCIAL HOUSING PROGRAM**

106 However, in 2013 the fee for registration of titles at the shahr al-'qari was raised to 1.5 per cent of a property's value.

As discussed in Chapters 2 and 4, Egypt has had a long history of social housing programs, all of which carried explicit as well as implicit subsidies, and all of which involved long term financing mechanisms. The current ‘one million unit’ Social Housing Program (SHP) began in earnest in 2013, replaces all earlier programs, and it appears to represent the future path for organizing and financing all subsidized social housing in Egypt. Thus it is worth looking at the financing mechanisms of this program in some detail. (The non-financial aspects of the SFP are described in Chapters 4 and 6.)

The SHP is administered by MHUUC. On the supply side, initial funding for the construction of units is coming from central budget allocations, from the annual budget and from extraordinary transfers, as well as from international loans, sufficient to deliver and construct 50,000–60,000 units. Public land for SFP housing is being provided by NUCA and the governorates at no cost, as is the on and off site infrastructure needed to service these lands.

It is planned that future funding for housing construction under the SFP will come from the new Social Housing Fund (SHF), created under Law 19 of 2014 on May 2, 2014. According to this law, the SHF will have a number of earmarked sources of funding, including the state budget, 1 per cent of the state revenues from the sale of lands for any purpose nationwide and all fines imposed on construction companies for violating the construction law. It is intended that these sources of funds will begin to accrue from the start of the 2015/2016 fiscal year (starting July 2015).

On the demand side, an economic stimulus initiative of the Central Bank of Egypt (CBE) in March 2014 earmarked an initial EGP 10 billion to be lent to banks participating in the SHP at a concessionary 4.5 to 5 per cent interest, to be on lent to “low-income” beneficiaries at 7 per cent for a maximum twenty-year term. (As per regulations, “low income” beneficiary families are those whose monthly income does not exceed EGP 3,000.) This CBE initiative also allows lending to middle-income beneficiaries at 8 per cent interest up to 20 years also part of the SHP. (According to a CBE circular dated May 2014, middle-income beneficiaries are those with monthly incomes that do not exceed EGP 8,000 for individuals and EGP 10,000 for families.) It is not clear what is the allocation split of the CBE money between these two loan types. The CBE intends to earmark another EGP 10 billion for low and middle income housing when the first tranche is exhausted.

The targeting and selection of beneficiaries as well as marketing of units for ownership under the SHP is the task of the Guarantee and Subsidy Fund (GSF) with the Housing and Development Bank (HDB), building on the experience gained from the World Bank’s Affordable Mortgage Finance Program (AMFP) that started in 2009 with a loan of USD 300 million. The GSF has been utilizing the remainder of this loan as well as central budget allocations<sup>107</sup> to provide an upfront cash subsidy of between EGP 5,000 and EGP 25,000, which when combined with a small down payment (minimum 10 per cent of the value of the unit) from beneficiaries, will reduce the outstanding loan requirement. With the very soft loans from the CBE, this is said in World Bank documents to allow the program to reach down to the 20th income percentile of Egyptian households. (See also Chapter 6.) Qualifying households take out a maximum affordable mortgage loan with a participating lender and pay a minimum down payment to acquire a new or existing house according to their income level. If they choose, the beneficiary can use the upfront subsidy to lower the monthly instalment over a seven-year period. In theory the beneficiary can select any qualifying unit on the market, but in reality their choice is limited to units constructed by the SHP in the geographic areas the beneficiary lives or works.<sup>108</sup>

It seems that the direct subsidy elements of this housing ownership program will be quite large. At present they include state allocations for the construction of housing units, the cost of infrastructure to service the land, the upfront subsidy presently coming from the GSF, as well as the difference between the concessionary loans from participating banks and the prevailing cost of money (5 per cent interest versus about 14 per cent interest). Eventually the earmarked sources of funding for the SHF should come into play, but even so these heavy and multiple subsidy elements may compromise the financial sustainability of the SHP.

The above paragraphs describe what could be called the core housing ownership program of the SHP. There is another called the Family Housing scheme (Al Iskan al-‘A’ili) that offers land plots of 206 to 260 m<sup>2</sup>, upon which up to four families are to construct together a building with one unit per floor. Some 150,000 plots of land are planned, all in the new towns. Remarkably, the beneficiaries of this middle class housing program also enjoy concessionary loan financing from the CBE stimulus package for financing unit purchase (8 per cent interest over 20 years, with the maximum value of the unit EGP 500,000). The maximum family income

107 According to the Ministry of Planning, in FY 2014/2015 the ESF was allocated EGP 613 for housing subsidies; See Ministry of Planning. 2014. Economic and Social Development Plan for Fiscal Year 2014/2015 (Arabic). <http://mop.gov.eg/plan/NewPlan.aspx?ModID=2&MID=31>,

108 The information in this paragraph comes from World Bank, “Inclusive Housing Finance Program, Program-For-Results, Environmental and Social System Assessment,” Draft Report, November 2014, E4710.

allowed to qualify for these loans is EGP 10,000 per month.

Besides the ownership component of the SHP, it is envisioned that there will be a heavily subsidized rental component for very poor households who qualify, to be managed by the SHF as a separate fund. However, the design of such a program is still underway, in FY 2014/2015 no funds were allocated, and it is not yet clear how the funds for the construction of these rental units as well as for their operations and maintenance will be arranged.

It should be pointed out that the World Bank is providing considerable technical support to the SHF through the Inclusive Housing Finance Program that started in mid-2014 and is to trigger a Program-For-Results loan of up to USD 500 million.

Also, the details of the financing and mortgage arrangements for the SHP and the workings of the SHF are still a work in progress (as of April 2015), and it is inevitable that there will be modifications to the program.

## 8.6 FUNDING FOR OTHER GOVERNMENT HOUSING PROGRAMS

The MHUUC and its affiliates are currently undertaking or launching a number of housing and housing land schemes that are not strictly under the SHP. These include:

6. **Cooperative housing** which, under the General Authority for Construction and Housing Cooperatives, is gearing up to produce over 100,000 middle income units by 2017, and for which loan funding is said to come from the National Investment Bank at concessionary rates (see also Box in Chapter 4)
7. **The Dar Misr** (Egyptian House) scheme is being promoted for middle-income housing estates in the new towns. A huge number of 150,000 residential units are targeted, with a first phase of 30,000 units underway in seven new towns. Units range from 100 to 150 m<sup>2</sup> and prices per unit are said to range from EGP 255,000 to EGP 637,500. If a unit is under EGP 500,000 in price, the purchaser can benefit from the CBE subsidized loan.
8. **Beit al Watan**, 700 to 1200 m<sup>2</sup> plots land for high standard housing to be purchased by Egyptians working abroad in hard currency, to be located in new towns around Cairo. Some 10,000 of these plots are said to be planned.

9. **Arabtec One Million Units**, a huge middle-income housing program in 13 new towns for which there have been many pronouncements since early 2013 but for which there are very few details. A protocol was signed with the UAE company Arabtec, and presumably funding will come from corporate sponsors.

The sources of funding for these programs, many of which are quite large if not gargantuan, are not well defined if at all. Some are to be financed at least partly by the private sector. Some aim at cost recovery and thus only need construction finance, but others require concessionary loans and/or upfront subsidies to cover all costs including administrative overheads and land servicing. Presumably such subsidies will need to come one way or another from central budget allocations. It remains unclear what are the full financial implications of these programs, but it is certain that none of these will result in anything like affordable housing for those of limited income.

## 8.7 INFORMAL HOUSING FINANCE SYSTEMS

As mentioned in Chapter 4, informal housing systems are currently producing over two-thirds of new housing units in urban Egypt. This colossal amount of housing is normally financed from liquid family capital. This means savings, pooling of resources among relatives (and remittances from relatives in the Gulf countries), informal loans, and conversion of other family assets such as land. Bank loans or other formal forms of finance are practically unknown. One of the great attractions of informal housing production is its progressiveness, which allows the owner to build when and as his personal finances permit. This makes building one floor or even room or concrete slab at a time very attractive.

Unfortunately, the workings of informal housing finance in Egypt have never been studied in any depth, and what we know comes from the 2008 HSUE or from anecdotal information. A small 2003 study in two different areas of Boulaq el Dakrou, a large informal area in Greater Cairo, asked those building housing what were their main sources of funding. Interestingly, personal loans and revolving credit associations (*gama'iat*) were named as the most important sources (46 and 50 per cent respectively), followed by cash savings (43 and 37 per cent), followed by joint financing with others (7 and 11 per cent). Only 2 and 4 per cent of builders mentioned recourse to bank loans.<sup>109</sup>

It is symptomatic of the lack of interest in informal housing in Egypt that there is so little information about how such huge investments are financed. Could it be

that the fact that such financing totally avoids financial institutions somehow makes it unworthy of study?

## 8.8 MICRO FINANCE FOR HOUSING

Although Egypt has a huge micro-finance sector supported by international and local donors as well as the Egyptian government (through commercial banks and the Social Fund for Development SFD), housing microfinance remains very much a nascent product in Egypt. While housing and home improvement microloans have interested microfinance institutions internationally, in Egypt the number and volume of micro-finance housing loans is very small. The following small and rather marginal initiatives are the only ones that are known to be practiced on the ground:

### *Habitat for Humanity (HFH)*

HFH is a branch of Habitat for Humanity International, and its work began in Egypt in 1989. It partners with a number of local NGOs and CBOs in 25 communities, through which it supports small home improvement loan programs, mainly in rural areas of six governorates (mainly in Minya and Beni Suef governorates). Through partnerships HFH has built or renovated over 20,000 homes (by 2012). Loan sizes currently range from EGP 1,000 to 11,000 with a nominal interest of 6 per cent, repayment is normally over 3 years, and average monthly repayments are EGP 240. Community networks, volunteer committees, peer pressure, and repeat small loans have made this program successful with very high repayment rates. However, administrative and organizational overheads must be quite high. Since 2006 HFH has expanded its activities to provide houses with community participation through its “Poorest of the Poor” program that by 2012 had delivered over one thousand houses.

### *First Microfinance Foundation Egypt (FMF-E)*

Established by the Aga Khan Agency for Microfinance in 2005, FMF-E grew out of local development work carried out in Darb al-Ahmar in historic Cairo. Its total micro loan disbursement by 2012 reached EGP 72 million to 32,000 borrowers, both in older parts of Cairo and also in Upper Egypt. It mainly targets SMEs and women entrepreneurs, and also provides business advice and support. Housing microfinance began in Darb El Ahmar, and by 2009 over 200 residential buildings had been completely renovated, using a grant-loan mix to beneficiaries, with the loan

component averaging USD 2,700 per beneficiary, with repayment over 3 to 4 years and a flat interest rate of 6 per cent. Repayment has been very good. FMF-E began a microfinance program in Aswan in 2006 and has begun a similar home improvement micro finance program that has remained small. In fact, housing loans represent only 2 per cent of FMF-E's portfolio (2009). [http://www.akdn.org/akam\\_egypt.asp](http://www.akdn.org/akam_egypt.asp)

### *Better Live Association for Comprehensive Development – Minya*

This community association began to include housing for the poor activities with the improvement of sanitary facilities in rural houses in 1995. It soon established a home improvement loan program tailored to the needs of poor households, with loans ranging from EGP 500 to EGP 10,000. To date some 1000 rural homes have been so improved.<sup>110</sup>

### *Dakahlia Business Association for Community Development*

This Association is active in microfinance, community development, and small and micro-enterprises and is partly funded by international donors. It is understood to have been looking at establishing a housing loan portfolio for low-cost housing and housing improvements since 2011 (with a feasibility study being carried out by consultants with finance from the International Finance Corporation IFC). However, no up-to-date information could be found about this portfolio.<sup>111</sup>

It needs to be added that in early 2015 the European Investment Bank and the European Union launched the Integrated Sustainable Community Development Programme with the Egyptian Government's Social Fund for Development. There is loan funding of Euro 45 million as well as grant funding for Euro 15 million, and among the intended activities being studied would be considerable micro and small credit for vacant housing unit completion and improvements in poor urban areas. It is worth monitoring this programme since the potential housing loan component could be a very important innovation to tackle the huge urban housing vacancy problem, as described in Chapter 3 above.

109 Madbouli, M., and Lashin, A. “Informal Zones of Greater Cairo: Study of the Situation in Boulaq al-Dakroul”, 2003, in Arabic, unpublished.

110 As described in UN-Habitat, *Parallel Urban Practices*, 2015.

111 See [www.dbacd-eg.org/](http://www.dbacd-eg.org/)



# DYNAMICS OF THE HOUSING MARKET

## 9.1 INTRODUCTION: UNDERSTANDING HOUSING MARKET DYNAMICS IN EGYPT

This section discusses housing market dynamics – how housing units are actually exchanged or acquired through market mechanisms, what are the main tenure types, who are the main suppliers and demanders, what are prevailing market prices, and how markets are segmented. This section relies heavily upon the results of the HSUE 2008 representative household survey, and in particular of a sub-data set of 4,062 urban households that moved into the current units over the five year period from 2003 to 2008.<sup>112</sup> This allowed, for the first time in Egypt, a statistically representative analysis of housing and generated results that throw considerable light upon housing market demand, supply, and prices over the five-year period.

Of course, as most information used here is based on the 2008 HSUE, these housing market findings relate only to the occupied housing stock and do not include un-occupied units, thus missing an important segment (some 28 percent of all Egypt's housing stock). Also, the 2008 HSUE only looked at housing in urban areas. Also, the 2008 HSUE is by now (2015) somewhat dated, and there have been significant changes in housing market features since then, particularly as concerns housing purchase and rental prices.

To overcome the limitation of the HSUE data to urban areas, a section appears below that discusses housing market and price behavior in peri-urban Greater Cairo, based on a special sub data set of the 2008 HSUE household survey. Although almost all of the households sampled lived in what were classified officially as rural areas, one cannot generalize from the data and make any conclusions about housing markets in all of rural Egypt. However, one can assume that what is gleaned from the HSUE for peri-urban Greater Cairo is more or less

representative of the situation in other peri-urban areas and urban hinterlands found around almost all cities in Egypt and which, as discussed in Chapter One, should be considered a very important part of the nation's overall housing dynamics.

An extra section was added in the end of the chapter to overcome the fact that the HSUE was carried out in 2008 and thus has rather dated, another section has been added at the end of this chapter to summarize what we know about housing market behavior as it exists today (2015), including what is known about the large un-occupied housing unit segment

## 9.2 RESIDENTIAL MOBILITY AND TENURE OF MOVING HOUSEHOLDS IN URBAN EGYPT

In urban Egypt, it can be inferred from the HSUE over the 2003-2008 period that 18.8 percent of households made a move from residence to residence. While such mobility rates are low when compared to those in Western cities, they are significant considering that a huge portion of the urban housing stock was under rent control in 2008 (27 percent of total occupied dwelling units) and was thus largely locked out of the processes of housing exchange. Also, movements were very localized. A full 80 percent of household movements within the five year period were within the same neighborhood, district, or city. Less than 10 percent moved from one governorate to another (and this included many households who moved from one of governorate to another within Greater Cairo).

Table 9.1 shows the form of tenure of the 4,062 households who moved in urban areas the five years 2003-2008. Of these, the New Rent Law was by far

112 USAID, Housing Study for Urban Egypt. Final, 2 December 2008. Technical Assistance for Policy Reform II. Washington D.C.; USAID/Egypt Policy and Private Sector Office.

the most frequent form of tenure of the acquired housing unit at 35.0 percent, followed by Ownership by Purchase on Market at 17.7 percent. Together these represented 53 percent of all moves, and these can all be considered "market" exchanges. Exchanges of housing units which can be considered non-market exchanges included Government Rent, Old Law Rents, Ownership by Purchase from Government, Ownership by Construction (land purchase and housing unit development), and Ownership by Inheritance, Gift, and In Kind Privilege.<sup>113</sup> Thus, overall 47.1 percent of moves in the 2003-2008 period did not exchange through market mechanisms. This is a surprisingly high incidence of unit transfers that do not take place on the open market, but rather through personal relations and rewards.

Table 9.1: Distribution of Households Moving in the Five Years 2003-2008 in Urban Areas by Tenure of Acquired Unit

Type of Tenure	Percent
Old Rent Law	9.3
New Rent Law	35.0
Government Rent	0.6
Furnished Rent	0.2
Ownership by Purchase on Market	17.7
Ownership by Purchase from Government	4.4
Ownership by Construction	8.5
Ownership by Inheritance	7.0
Ownership (Other)	0.3
A Gift	12.8
In Kind Privilege	3.7
Others	0.5
<b>Total</b>	<b>100%</b>

Source: Housing and Utilities Unit, MHUUC

How were household movements and their tenure related to household incomes? Whereas there was little variation overall (i.e. all household quintiles were more or less equally mobile), in terms of tenure, there were significant variations. For example, New Law Rentals were well spread over the four higher quintiles but under-represented in the lowest (poorest) quintile. "Ownership" (which includes inheritance and construction ownership)

was the tenure category which was best spread equally over all quintiles. "Gift" tenure was also well distributed into all quintiles, but with a slight concentration in the middle and lower two quintiles. Ironically, Purchase from Government, which offered highly subsidized units under easy installment payment arrangements and was aimed at limited-income families, appeared to be enjoyed almost equally by all income quintiles except those in the lowest income quintile. This fact certainly brings into question the success of government low cost housing programs in reaching those most in need (as is also discussed in Chapters 4 and 8).

A very important finding from HSUE data is that New Law Rental markets in urban Egypt were very large in 2008 and were expanding rapidly. Although New Rental Law tenure<sup>114</sup> only represented 8.8 percent of the total households surveyed in urban Egypt, this proportion was very significant since the New Rental Law had only been on the books since 1996. New Law Rentals represented by far the largest tenure category of all moves in the 2003-2008 year period at 35.0 percent. This eclipsed all forms of purchase, and as mentioned above, represented 66.5 percent of all moves which represented exchanges through housing markets. Thus the New Rent form of market exchange became dominant in urban Egypt in a single decade and can be expected to become even more so.

### 9.3 HOUSING MARKET INFORMATION, ITS EXCHANGE, AND DISTORTING FEATURES

Information on housing markets is obtained by households mainly through informal/casual means. The most common methods used to search for housing were consulting relatives and friends (60%), neighbors (16%) and co-workers (5%). Thus it can be concluded that the overwhelming majority of search methods depend on word of mouth. In other words, housing market information tends to be local, informal, and not dominated by the media or corporate intermediaries. In fact, only 3 percent of the units exchanged over the 2003-2008 period in urban Egypt were found through newspapers, advertisements, and real estate company promotion efforts. And it should be pointed out that "real estate agents" (15 percent of search means) were mainly informal brokers or simsars.

113 Government rents as well as Old Law rents are below market rates, that is why they are considered non-market exchanges. Ownership by Purchase from Government is considered also as a non-market exchange, as units provided by the Government for Ownership are heavily subsidized; conditions are put on who qualifies; and the selection of beneficiaries is lengthy, bureaucratic and rather opaque. Ownership by construction is not a market exchange as well, as the final product is not exchanged itself. Ownership by Inheritance, Gift, and In Kind Privilege are non-market exchanges due to the fact that they take place without direct compensation.

114 The new housing law issued in 1996 decontrolled new rents arrangements, allowing landlords to set market prices for new or vacant units under time-bound contracts.



**Figure 9.1**  
Some of the 3 percent of Egyptian households who find new units through advertisements and real estate promotion. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.

In urban Egypt in 2008, over 27 percent of all households enjoyed fixed rents under the Old Rent Law. Not only was this significant portion of the housing stock effectively excluded from market exchanges, the rents being paid under the Old Rent Law had absolutely no relation to market prices. Rent differences were striking. Almost 20 percent of Old Renters paid less than EGP 10 per month. And whereas a majority of Old Rental households (60.8 percent) paid less than EGP 50 per month, less than 1 percent of New Rental households enjoyed such low rents. The median rent for Old Renters was EGP 30 per month whereas the median rent for New Renters was roughly EGP 205 per month – more than six times the median Old Rent.

#### 9.4 HOUSING RENTS AND RENTAL MARKETS UNDER THE NEW RENT LAW

The following are features of the emerging New Rent Law form of tenure, which by 2008 was already the dominant tenure mode for recent moves.

First, of all urban households who rented under the New Law from 2003-2008, practically all had written contracts (94.3 percent), and of these, 96.4 percent of households had kept a copy of the contract. However, only in 15.2 percent of cases were the contracts registered or endorsed at the Real Estate Registrar (shahr el aqari).

The duration of New Rent contracts both in total and for those concluded in the 2003-2008 period varied considerably, but most tended to be of short to medium duration. Almost 42 percent of contracts had a length

of 3 years or less. The single most popular period was 5 years, which represented 32.2 percent of the total. Only 16.2 percent of contracts were for ten years or more. The average rental period was 8 years but the median was only 5 years.

In 72 percent of New Rent cases in the 2003-2008 period the landlord of the rented unit was the owner of the building (mainly who built it), and in the remaining cases the landlord was the owner of the dwelling unit alone.

In 32 percent of all New Rent contracts in the 2003-2008 period there was a clause in the rental contract which allowed for an annual increase in the rental amount. In these cases, the most common rent escalation was 10 percent per annum (36 percent), followed by 5 percent per annum (31 percent).

When the 2003-2008 New Rent tenants were asked about their plans at the end of the contract, 50 percent of tenants aimed to reach an agreement with the owner of the unit to renew the contract, and 22 percent aimed to search for another unit to rent. Another 24 percent had no plans.

For New Rentals households moving in the 2003-2008 period, 33 percent stated that they paid advance payment on the rental amount. This is understood to be quite common, where the monthly rent for the contractual period is agreed, and the landlord then asks for some portion of the total rental payment stream to be paid up front, and the actual monthly rent is then reduced proportionately. Of those respondents who paid advance payments, 38.4 percent paid EGP 1000 or less, 16.8 percent paid between EGP 1001 and EGP 2000, and 24.2 percent paid between EGP 2001 and EGP 5000. This arrangement fits well with family finances and, in particular, lowers the monthly rent paid to a very affordable level.

The values of monthly rents currently paid by New Rent tenants in urban Egypt show a considerable clustering of rents in the EGP 150 to 300 range (54.6 percent of the total), as the following list shows:

Monthly rent less than EGP 100  
5 percent of new rent contracts  
Monthly rent EGP 100 to EGP 149  
14 percent of new rent contracts  
Monthly rent EGP 150 to EGP 199  
22 percent of new rent contracts  
Monthly rent EGP 200 to EGP 299  
33 percent of new rent contracts

Monthly rent EGP 300 to EGP 399

16 percent of new rent contracts

Monthly rent over EGP 500

7 percent of new rent contracts

Rent-to-income ratios can also be calculated, as is done in Table 9.3. As can be seen, in the third income quintile (median monthly income of EGP 1000, median

monthly rent of EGP 200 per month) tenants are paying 20.0 percent of their income on rent. This ratio is lower for the two highest income quintiles, at 18.4 percent and 15.4 percent, and higher for the lowest two quintiles, at 22.2 percent and 24 percent. Such ratios imply that New Law rents are slightly more of a burden on poorer households, but that all ratios are well within international norms.

Table 9.2: Rent to Income Ratios for New Rent Contracts in the 2003-2008 period, by Urban Income Quintiles (in EGP)

Item		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	Total
Count		183	292	309	312	323	1,419
Median HH annual income	7,500	7,500	9,600	12,000	14,400	23,400	12,000
Median annual rent	1,800	1,800	2,130	2,400	2,640	3,600	2,400
Annual rent to income ratio	%	24	22.2	20.0	18.3	15.4	20.0

Source: 2008 HSUE

The median monthly rent under New Rent contracts for housing units acquired by renters in informal residential areas was EGP 200 per month, slightly lower than median rents in formal residential areas (EGP 250 per month).<sup>115</sup>

## 9.5 HOUSING PURCHASE SYSTEMS AND PRICES, 2003-2008

As mentioned previously, in urban Egypt 19 percent of households had moved to their current unit in the 2003-2008 period. Of these, 22 percent purchased their units either on the private market or from the government. And of these, there was a concentration among the highest two income quintiles (56 percent of the total incidences of unit purchase) as would be expected.

Of all purchasing households, 64 percent paid cash in full and 36 percent paid in installments. Interestingly, those paying in installments were better represented in the three middle income quintiles, whereas paying in cash was more represented in the first (poorest) and fifth (richest) quintiles.

Table 9.4 presents the median price for units bought by households in each quintile. As can be seen, median prices ranged from EGP 33,480 to 100,000. The median price-to-income ratio in each quintile varied between 3.3 and 4.3, with a general decline in the ratio as one moves towards higher income quintiles.

<sup>115</sup> Advance payment seems to have been required by landlords in both formal and informal sectors, as the percentage of renters making these payments is similar in both sectors.

Table 9.3: Prices Paid to Purchase Units Relative to Annual Income, by Quintile for Those Purchasing in the 2003-2008 period (in EGP)

Item		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	Average
Value of purchased unit	Median	33,480	39,670	48,000	54,900	100,000	54,000
HH annual income	Median	7,800	10,200	12,600	16,800	30,000	14,400
Ratio of unit price to HH annual income		4.3	3.9	3.8	3.3	3.3	3.8

Source 2008 HSUE

Table 9.5 below shows that there were considerable variations between informal and formal residential neighborhoods in the characteristics of the units purchased in the last five years. Only 28 percent of all purchases took place in informal areas (compared to 41 percent of urban households living in informal areas), implying that purchases of units is much less common in informal areas than formal areas.<sup>116</sup> Table 9.5 also shows that there were dramatic price differences, with the median price of purchased units in the 2003-2008

period in informal areas was EGP 40,000, where as the median price in formal areas was twice this at EGP 80,000. In price per square meter terms, informal areas were considerably cheaper (at a median of EGP 543 per m<sup>2</sup> versus EGP 741 per m<sup>2</sup> in formal areas). And the median size of units purchased in informal areas were only three-fourths that of units purchased in formal areas (72 m<sup>2</sup> versus 95 m<sup>2</sup>). For those paying by installments, the median down payment was EGP 13,000 in informal areas versus EGP 20,000 in formal areas.

Table 9.4: Prices and Payment Models in the Formal and Informal Sectors in the Last Five Years

Item	Informal sector N=224	Formal sector N= 569
% of Purchasers	28.2	71.8
Median price in LE	40,000	80,000
Median price per m <sup>2</sup> in LE	542.9	740.7
Median size of units in m <sup>2</sup>	72	95

Source 2008 HSUE

## 9.6 PROVIDERS OF URBAN HOUSING ON THE MARKET

By looking at the origins and sources of urban housing units which have been moved into over the 2003-2008 period, it is possible to gain insights into the nature of housing supply in Egypt's urban housing markets. This is done in the following paragraphs, looking first at the supply of housing for ownership and then looking at the supply of housing for rent.

Of the urban housing units purchased for ownership over the 2003-2008 period, 62 percent were purchased from the building owner or a developer and 38 percent were purchased from the previous owner of the unit (sometimes called the secondary market).

Table 9.6 shows the breakdown of housing units that were sold by building owners into type of building owner. It can be inferred that over the 2003-2008 period the government and public sector share of the housing ownership market in urban Egypt was relatively small, representing 23 percent of all purchases from building owners and 16 percent of all purchases (including the secondary market). It can also be inferred that the formal private sector share of housing supply on the market has been extremely small, representing less than 5 percent of housing units supplied by landlords for purchase during the five year period, and less than 3 percent of all purchased units over the last five years.

116 Some 20 percent of purchases were from government, and by definition all government housing is in formal areas, thus this may partly explain the higher incidence of purchase in formal areas.

Table 9.5: Purchased Urban Housing Units by Type of Building Owner 2003-2008

Type of Building Owner	In Last Five Years (N=556)
Individual or group of individuals	56.3
Informal "ahali" developers	15.1
Formal private sector companies and developers	4.7
Public Sector Companies	1.4
Government Bodies	22.3
Civil Community	0.0
Other and Don't Know	0.2
<b>Total</b>	<b>100%</b>

Source 2008 HSUE

In other words, of all units purchased on the market from building owners over the five year period, the large majority or 71 percent were purchased from building owners who were individuals or informal "ahli" developers. This further underscores the personal, individualistic and non-corporate nature of housing market supply in urban Egypt.

Such an individualistic or non-corporate nature of housing supply is further underlined by the fact that, of all moves into housing units over the 2003-2008 period, in 28 percent of cases this involved Ownership by Construction, i.e. the household itself constructed the unit, sometimes called the "owner-builder" or auto-construction mode of housing production. In other words, the owner-builder mode of housing production remains a very significant factor in housing supply in urban Egypt.<sup>117</sup>

As concerns rentals over the 2003-2008 period, of those renting units under the New Law 71.0 percent were rented from the building owner/developer and 29.0 percent were rented from the owner of the individual unit. Table 9.7 shows the breakdown of all housing units which were rented from the building owner into type of building owner. Individuals or informal developers are overwhelmingly the dominant type of building owner who supplies rental housing in urban Egypt, representing a huge 97 percent of the total. And individual building owners alone represented 79% of the total. Government bodies and the formal private sector play an almost non-existent role in housing rental supply, representing less than 3 percent of all building owners in the 2003-2008 period who provided rental accommodation. And it should be remembered that virtually all rentals in the 2003-2008 period who rented from the owner of the individual unit (29.0 percent of all New Law rentals) can be considered as being supplied by individuals. Thus, in total, the formal private sector and government together account less than 2 percent of rental housing supplied on the market in the 2003-2008 period. Conversely, a very large majority were supplied by individuals (85 percent) and another 13 percent were supplied by informal small developers.



Figure 9.2  
Some of the 5 per cent of Egyptian households who purchase housing units from real estate developers. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.

117 Historically, the proportion of all units purchased or built which were supplied by the owner-builder mode was a huge 46.8 percent.

Table 9.6: Rented Urban Housing Units Distribution by Type of Building Owner in 2003-2008

Type of Building Owner	Percentage of rented housing units
Individual or family	78.5
Informal "ahali" developers	18.6
Formal private sector companies and developers	0.5
Public Sector Companies	0.2
Government Bodies	1.6
Other and Don't Know	0.6
<b>Total</b>	<b>100%</b>

Source 2008 HSUE

## 9.7 REGIONAL COMPARISONS IN URBAN HOUSING MARKET BEHAVIOR

How do the various characteristics of housing market behavior described above for all urban Egypt over the 2003-2008 period vary across the different urban areas of the country? In this section housing variables in the five separate urban regions of Egypt – urban Delta, urban Upper Egypt, urban Canal Zone, Alexandria Governorate, and Greater Cairo – are compared to each other and to the all urban Egypt averages.

- New Rent Law tenure is dominant form of tenure in all regions, and is particularly dominant in Greater Cairo and the urban Delta. Old Law Rents represent a very small proportion in most regions, but are significant (representing 14% of all moves) in the two large metropolises, Greater Cairo and Alexandria. This is to be expected, since overall Old Rent tenure is much more predominant in the housing stock in these two cities.
- Ownership by purchase on the market is by far the highest in Alexandria at 30.7 percent, compared to a national average of 17.7 percent. Greater Cairo is the second highest at 18.4 percent.
- Purchase from Government is very low in all regions (ranging from 0.6 to 3.5 percent) except in the Canal Zone cities, where it represents 26.1 percent of all moves in the last five years, six times the national average. This can be explained by availability of vacant State land in the Canal cities and a long-standing policy following the 1973 war of providing subsidized housing in the area.
- "Gift" tenure is low in most regions, but is significantly high in the Delta (at 15.8 percent) and especially in Upper Egypt (at 22.5 percent). This may be due to the more traditional nature of the mostly small towns that make up these two predominantly rural regions. These two regions also register the highest incidences of Ownership by Inheritance (9.7 percent in the Delta and 11.0 percent in Upper Egypt, compared to a national average of 7.0 percent), probably for the same reason.
- Ownership by Construction (owner-builder mode of housing supply) has a national average of only 8.5 percent, and is particularly low in the two large metropolises of Greater Cairo and Alexandria. However, this form of tenure is relatively high in the provincial regions.
- In terms of methods of market exchange, word-of-mouth dominates in all regions (averaging 80.7 percent nationally). However, it seems that Greater Cairo has a higher incidence of more sophisticated methods (real estate agents and media), as do the Canal cities.
- For housing unit purchases in formal areas, as expected Greater Cairo registers by far the highest unit prices, the highest per m<sup>2</sup> prices, and the largest size of units. And in all of these indicators, Alexandria registers the second highest, also as expected. (The median price of a unit in Greater Cairo was EGP 100,000 versus an all urban average of EGP 80,000, and the median per m<sup>2</sup> price in Greater Cairo was EGP 923 per m<sup>2</sup> versus an all urban average of EGP 741.)
- For housing purchases in informal areas in the last five years, there is a remarkable similarity across all regions. In all regions informal median unit prices are much lower than formal prices (usually half formal unit prices), the median size of units is much smaller (averaging 75 percent that of formal units), and the median m<sup>2</sup> prices are significantly lower (averaging 73 percent that of formal units).
- Purchases by cash (versus by installment) form a majority of all unit purchases in all regions except in the Canal cities, where government housing purchases by installment dominate housing supply. Interestingly, Alexandria registers second highest incidence of payment by installment at 42.6 percent of total purchases.

- Of units purchased from building owners, the percentage of units purchased from government agencies is small in all regions (varying from 2 percent to 16 percent) except in the Canal cities, where purchases from government represents a staggering 90 percent of the total. Conversely, purchases from individuals and informal building owners completely dominate in all regions (ranging from 78.2 percent in Greater Cairo to 94.4 percent in Alexandria), except in the Canal cities.
- Of units purchased from building owners, the percentage of units purchased from the corporate private sector is very small throughout urban Egypt (averaging only 4.7 percent nationally). As expected, the highest incidence is in Greater Cairo at 7.9 percent. For some reason the incidence in the Delta is also high, at 6.3 percent. In other regions the corporate private sector share of purchases ranges from nil in Upper Egypt to 2.1 percent in Alexandria. And it should be stressed that these figures only relate to sales by building owners, and does not include sales by individual unit owners (the secondary market.)
- Median Old Law rents are consistently low across urban regions, with the median rent only EGP 30 per month nationally.
- Median New Law rents are consistently in the EGP 225 to EGP 250 per month range in all regions except Upper Egypt, where the median rent is EGP 185 per month. The difference between median New Law rents in formal versus informal areas is, overall, not so great (nationally, EGP 200 per month in formal areas versus EGP 150 per month in informal areas). Such slight difference is found in all regions, except in Alexandria where the median rent in informal areas is half that found in formal areas (LE 150 per month versus EGP 300 per month).
- The median rental period for New Law rents is 4 to 5 years in all regions except in the Canal cities where it is only two years. Similarly, the percentage of rent contracts that had rental increase clauses was similar throughout all regions except in the Canal Zone, where 40 percent of New Rent contracts had such clauses. For some unknown reason, in Canal cities rental arrangements are more favorable to landlords.
- There are no significant regional variations in New Rent contracts concluded in the 2003-2008 period in terms of (a) the percentage which contracts which require advance payments, (b) median rent to income ratios, and (c) percentage of all New Rent units which were rented from individual and informal developer building owners (practically all units).

- There is a remarkable consistency in rent-to-income ratios for New Rents, with the average ratio in each region confined to a narrow band between 20 percent and 22 percent. Looking into particular quintiles in individual regions, there is a weak inverse correlation between income quintile and rent-to-income ratio. Even so, the rent-to-income ratios are never more than 29.5 percent and never less than 15.0 percent. In fact, one can conclude that New Law rentals are remarkably affordable across all regions and income quintiles.

## 9.8 HOUSING MARKETS IN PERI-URBAN GREATER CAIRO

As mentioned at the beginning of this chapter, the 2008 HSUE had a special household sample that was statistically representative of peri-urban Greater Cairo.<sup>118</sup> (The total sample size was 2850 households, of which 509 moved into a housing unit in the 2003-2008 period.) Although almost all of the households sampled lived in what were classified officially as rural areas, one cannot generalize from the data and make any conclusions about housing markets in all of rural Egypt. However, one can assume that what is gleaned from the HSUE for peri-urban Greater Cairo is more or less representative of the situation in other peri-urban areas and rapidly expanding urban hinterlands found around almost all cities in Egypt.

How and to what extent do the various characteristics of housing market behavior described above for urban Egypt vary for those related to peri-urban Greater Cairo? To do this we go through the most salient characteristics and compare them, based in both cases on the results of the 2008 HSUE. Overall, there was not much difference, and in many ways peri-urban Greater Cairo mimics urban Egypt. The following paragraphs point out commonalities and significant variations.

First, in terms of forms of tenure for households moving in the 2003-2008 period, New Rent Law tenure was the dominant form of tenure in peri-urban Greater Cairo as elsewhere, but the incidence is slightly less than that in urban Egypt. Old Law Rents represented only 9.3 percent nationally, but were slightly higher in peri-urban Greater Cairo (and much higher in Greater Cairo proper). Peri-urban Greater Cairo had significantly higher shares of "Gift", "Ownership by Inheritance" and "Ownership by Construction" than the national urban average. The incidence of Ownership by Construction (i.e. the owner-builder mode of housing supply) was particularly pronounced in peri-urban Greater Cairo, reaching 15.1 percent of the total versus 8.5 percent nationally.

118 Peri-urban Greater Cairo was defined in the HSUE as being composed of 9 marakaz in the governorates of Giza and Qaliubia. The population of these areas together was 4.4 million in 2006, of which 85% were living in areas defined as rural in the 2006 Census.



Secondly, as can be seen from Table 9.8, residential mobility in the last five years is roughly the same in all three regions. The "localness" of mobility is high in all three regions (averaging 80.1% of all moves nationally in the last five years and 70.9 percent in peri-urban Greater Cairo). The median perceived market value of units

is the same throughout all three regions (LE 60,000). This is remarkable, as one would assume that perceived housing values would be higher in Greater Cairo proper. In terms of methods of market exchange, word-of-mouth dominates in all regions (averaging 80.7 percent nationally, versus 84 percent in peri-urban Cairo).

Table 9.7: Regional Comparisons: General Housing Market Characteristics

Item of Comparison	Peri-urban GC	Greater Cairo proper	All Urban Egypt
Mobility: % of Total Households Which Moved in Last Five Years	19.7	20.0	18.8
Mobility: % of Household Heads Moving within Same Neighborhood/Qism in Last Five Years	70.9	72.5	80.1
% of Units Exchanged in Last Five Years through Market	35.5	56.7	52.9
Median Perceived Market Value of All Occupied Units (EGP)	60,000	60,000	60,000
% of Exchanged Units Found through Word of Mouth in Last Five Years	84	74.3	80.7
% of Exchanged Units Found through Agents (simsars) in Last Five Years	15.7	20.3	14.6
% of Exchanged Units Found through Media in Last Five Years	0.3	3.9	3.1

Source 2008 HSUE

Table 9.8 also shows that peri-urban Greater Cairo has a very low proportion of units exchanged in the last five years through market mechanisms (only 35.5 percent compared to 52.9 percent nationally.) But of all market exchange mechanisms, peri-urban Greater Cairo has the highest dominance of New Rent tenure, at 70 percent versus 67 and 66 percent nationally.

Thirdly, for housing unit purchases in formal areas, as expected Greater Cairo registers by far the highest unit prices, the highest per m<sup>2</sup> prices, and the largest size of units. (The median price of a unit in Greater Cairo was EGP 100,000 versus an all urban average of EGP 80,000 and the peri-urban average of EGP 70,000. The median per m<sup>2</sup> price in Greater Cairo was EGP 923 per m<sup>2</sup> versus an all urban average of EGP 741.) Peri-urban Greater Cairo had by far the smallest median unit size, at 76 m<sup>2</sup> versus 105 m<sup>2</sup> in Greater Cairo proper.

Fourth, for housing purchases in informal areas in the last five years, there is a remarkable similarity across all three regions in terms of unit size (about 75 m<sup>2</sup>). However, the median price per unit and per m<sup>2</sup> was significantly higher in informal areas of peri-urban Greater Cairo than was the case in informal areas of Greater Cairo proper. Median price to income ratios for housing unit purchases are similar across all three regions, with peri-urban Greater Cairo and Greater Cairo proper being slightly higher (4.6 and 4.4 respectively versus a national average

of 3.8). Purchases by cash (versus by installment) form a majority of all unit purchases in all three regions, with the highest incidence (78 percent) in peri-urban Greater Cairo. Of units purchased from building owners, units purchased from individuals and informal developers dominates in all three regions, but is by far the highest in peri-urban Greater Cairo at 92.5 percent. Whereas nationally and in Greater Cairo proper purchases from government represent a significant minority of purchases (ranging from 16.6 to 23.7 percent), in peri-urban Greater Cairo the incidence is extremely low at only 2.5 percent of total purchases. Of units purchased from building owners, the percentage of units purchased from the corporate private sector is very low in all three regions, ranging from 4.7 to 7.9 percent. It should be stressed that these figures only relate to sales by building owners, and does not include sales by individual unit owners (the secondary market.)

Fifthly, there is a remarkable consistency in rental market behavior between peri-urban Greater Cairo, Greater Cairo proper, and all Urban Egypt. For example, median Old Law rents are consistently low, with the median rent only EGP 30 per month nationally, but Old Law rents in peri-urban Greater Cairo are over twice the national average and twice the average for Greater Cairo proper. And New Rent rental values are slightly lower in peri-urban Greater Cairo than they are in either Greater Cairo proper or all urban Egypt (LE 150 per month

versus EGP 200 per month). Finally, in terms of rent-to-income ratios for households moving in the 2003-2008 period, peri-urban Greater Cairo enjoys a smaller overall ratio of 16.7 percent (versus 20 percent for both Greater Cairo proper and all urban Egypt). The rent burden is also lower across all income quintiles except in the highest quintile. The rent-to-income ratios in all areas are never more than 22.6 percent, and one can conclude that New Law rentals are remarkably affordable in urban Egypt, in Greater Cairo proper, and especially in peri-urban Greater Cairo.

### 9.9 CURRENT TRENDS IN HOUSING MARKET BEHAVIOR AND PRICES

In the six years since the results of the 2008 HSUE were published there has been no look at housing market behavior in Egypt that can be considered at all representative. There have been a number of analyses of certain segments of the market, but these have all related to the upper end of the real estate market and have been restricted to developer built housing, mainly in Greater Cairo and the new towns located around it. Trying to gain an understanding of market dynamics – and in particular market prices – by using these studies would result in a completely biased view of the sector. (This problem of lacking housing market information is discussed below in Section 9.12.)

What is certain is that prevailing housing prices and housing rents have increased dramatically since the 2003-2008 period. Anecdotal information, mainly from knowledgeable informal housing agents (*simsars*) in Greater Cairo, indicates that small and modest apartment units are being rented within the EGP 400 to EGP 900 per month range, over twice to four times prevailing rental rates in the 2003-2008 period.<sup>119</sup> In addition, purchasing a unit in Greater Cairo seems to have become very much more expensive. Modest units for sale are priced at not less than EGP 2000 per meter square, thus for a modest 70 m<sup>2</sup> unit the market value would exceed EGP 140,000 compared to an average of EGP 60,000 in the 2003-2008 period. In a recent review of housing for sale carried out by a newspaper in different parts of Greater Cairo, it was revealed that the only units available for less than EGP 200,000 were those that were located in informal areas or for which there was no building permit or assured utilities services.<sup>120</sup> On the other hand, a website listed in 2014 a large number

of apartments for sale in Greater Cairo for less than EGP 100,000, but most of these were in new informal unfinished towers (fully constructed).<sup>121</sup> To put current market prices in perspective, the government's Social Housing Program set the purchase price for 75m<sup>2</sup> units at EGP 130,000 in 2014, and this price does not include associated land and infrastructure costs (see also Chapters 4 and 8.)



**Figure 9.3**  
One of the very few affordable housing schemes promoted through formal media. Units in Haram City, Sixth of October, built by Orascom. Real estate exposition, International Conference Center, Cairo, May 2010. Photo by D. Sims.

It is not known if this anecdotal information on rents and prices also applies to other cities in Egypt.<sup>122</sup> But it must be kept in mind that over the 2008-2015 period general inflation has been high, with the CPI increasing by 61 percent from 2010 to 2015 alone.<sup>123</sup> Thus what are current average housing prices and average rents in urban Egypt is not known, pointing to a need for better, more systematic tracking of housing price and rental indicators.

There is also anecdotal information that new forms of rentals are being practiced, especially since housing purchase is becoming less and less feasible for a wide swath of urban households. Rental contracts for several decades (59 years is popular) are understood to be promoted, with half the rent payable up front. Such newer forms of rental need to be investigated.

119 The Informal Settlements Development Fund (ISDF) has carried out housing resettlement in many unsafe areas of Egyptian cities since 2009, and it has been giving affected households rent money for temporary resettlement. However, it has not assembled any information of the value of these rents.

120 "tahqiq – rihlat al-misry al-youm fi 60 maktaban wa shirka", Al Masry Al Youm, 12 April, 2015, page 10.

121 See Aqarmap [http://aqarmap.com/eg/ar/photo/cairo/all/apartment\\_for\\_sale/any-100000.egp/any-any.m2?utm\\_source=facebook.com&utm\\_medium=cpc&utm\\_campaign=SaleBelow100FbGallery](http://aqarmap.com/eg/ar/photo/cairo/all/apartment_for_sale/any-100000.egp/any-any.m2?utm_source=facebook.com&utm_medium=cpc&utm_campaign=SaleBelow100FbGallery)

122 The questionnaire-based survey of seven cities in Egypt carried out by GOPP's National Urban Observatory did not include housing rents or prices as one of the many indicators. See GOPP (with the Canada Mortgage Corporation), State of the Built Environment and Housing Indicators in seven Egyptian Cities, 2011.

123 <http://www.tradingeconomics.com/egypt/consumer-price-index-cpi>

### 9.10 IMPEDIMENTS TO HOUSING MARKET FLUIDITY: TRANSFER, REGISTRATION AND TITLING, AND FEES

Establishing a rental arrangement for housing units in urban Egypt is very straightforward, requiring only a signed civil contract between landlord and tenant as specified in the New Rent Law of 1996, and for which registration is optional for a small fee at the local shahr al-‘aqari offices. Getting a tenant out of a unit at the end of the contract period or for other reasons is, however, perceived as difficult. (This issue is discussed in Chapter 2.)

As with rents, transferring the ownership of a housing unit is usually quite simple and involves few costs or fees. However, predominant systems used for such transfers are what could be called semi-official and have evolved to avoid formal registration of transfers at the shahr al-‘aqari offices. To explain this state of affairs requires a short digression:<sup>124</sup>

From 1897 through the 1920s most rural lands in Egypt were surveyed and mapped and a cadastral registration system was set up. In 1946 and 1964 two laws were issued that set out the legislative framework for the current property registration system in Egypt. The first, the Deed Law No. 114 (al-sigil al-shukhsi) set up the notary deed system (based on individual ownership), which covers most of Egypt. The second, the Title Law No. 142 (al-sigil al-‘aini), allowed the registration of property which was based on the property itself, although this system has never seen its coverage extend beyond a few rural districts. It is the Ministry of Justice that manages property registration through its shahr al-‘aqari offices located throughout Egypt, and it is the Egyptian Survey Authority that carries out property surveying and inspection and is supposed to maintain cadastral mapping systems.

All properties (land and buildings) in Egypt are supposed to be registered under this legislative and institutional framework in order to be considered legally owned. The bureaucratic and clerical requirements of the property registration system are cumbersome and complicated, if not labyrinthine, and small bribes at the shahr al-‘aqari offices as well as at the Survey Authority are normal events.<sup>125</sup> In order for a property transaction to be registered, a clear chain of title from the last time the property was entered into the registry, usually when it had been part of a larger agricultural land parcel, is required. For all properties in informal areas of Cairo,

and even for most formal properties, establishing this chain, which usually goes back for decades, is simply impossible. In 2005 a USAID project began, aimed at improving property registration for mortgage purposes, and an early finding was that the system of registry was hopelessly flawed. One report summarized the situation as follows: “The current condition of Egypt’s real property registration system can best be described as onerous and complex for applicants, vastly underutilized, excessively bureaucratic and complex, misunderstood and unpopular with the public, and incapable in current form of promoting a real estate mortgage finance market.”<sup>126</sup>

The result has been that very few owners bother adhering to the property registration system, and over the decades the system has become less and less relevant. For example, a study by the Institute for Liberty and Democracy estimated that of a total of some 4.5 million dwelling units in Cairo existing in 1996, a full 57 percent were informal and unregistered and another 13 percent had been registered but had devolved into informality over time. Only 27 percent could be considered formal, and of these only a fraction had been kept up-to-date in their registration.<sup>127</sup>

How then are properties in Egypt transferred and how is ownership documented? A number of quasi-legal or informal procedures have evolved that conveniently sidestep the official registration system and allow for relatively straightforward, quick, and inexpensive means to conclude a property transfer. These mainly use ‘urfi contracts, which are simple two-party sales contracts that should be witnessed by two persons. For many, these simple paper contracts are sufficient, but for more security it is possible to have these contracts endorsed in the courts under the saha towqia or the da’wa saha wanafaz procedures, either of which any lawyer can arrange for a small fee. Alternatively, the seller of a property can issue a power of attorney (tawkil) to the buyer giving him all ownership rights over the property, and then this tawkil can be endorsed, just as in the case of the sale of a car, at a shahr al-‘aqari office. Such systems of transfer are used not only by individual buyer and sellers who dominate urban Egypt’s housing markets, but also even by government agencies and private companies that are selling new units.

Since 2005 tremendous efforts have been and are continuing to be made to improve official property

124 This digression is based in part on Sims, David, *Understanding Cairo: The Logic of a City Out of Control* (Cairo: AUC Press, 2012) pp. 152-153.

125 Up until recently those wishing to register a property transfer also had to pay a hefty official fee of 6 percent of the declared value, but this amount was reduced to a small flat fee in 2006.

126 Menelaws, Dougal, “Property and Registration Law in Egypt: Current Operations and Practice,” Task 2 Inception Report, Egypt Financial Services Project, Technical Report No. 3, Chemonics International, June 2005, 1.

127 Institute for Liberty and Democracy and Egyptian Center for Economic Studies, “Formalization of Egypt’s Urban Informal Real Estate Sector,” Institutional Reengineering Stage, Situation Analysis Report, October 2000, 17 and 18.

registration to facilitate the expansion of new mortgage-based housing finance. (For example, the fees for registration have been reduced dramatically from a percentage of the property value to a fixed sum of EGP 700 per property. And in the new towns, NUCA has instituted a system for rapid registration of new properties.) Even so, informal, sidestepping means of property transfer remain very much the norm. Formal registration of properties is a requirement of the mortgage finance system, and this aspect is taken up in Chapter 8.

### 9.11 TAXES ON HOUSING AND THE NEW PROPERTY TAX REGIME

There is no effective capital gains tax in Egypt, even though such a tax was introduced in 2014.<sup>128</sup> Rental income derived by landlords is considered part of individual income and is taxed at the standard personal income tax rates. In calculating taxable income, the maximum deduction allowed to cover operating expenses is 50% of the gross rent. Even so, non-declaration of rental income is extremely common by individuals.

In other words, there are few taxes that might influence or distort housing markets. However, a new property tax regime is being put in place, and this may have a considerable impact on housing markets in the future.

The Property Tax Law was promulgated in 2008 (No 196/2008), to be administered by the Property Tax Authority of the Ministry of Finance) but was not immediately implemented, mainly due to the difficulty of setting up a property registry and administration procedures. This draft stipulated that all rental units and second homes would be taxed, and that owner-occupied properties with a value under LE500,000 would be tax exempt. Property values were to be assessed every five years.

In September 2014 Presidential Decree 117/2014 amended the 2008 law. This amendment raised the exemption for owner-occupied units to EGP 2 million, and based on this amendment the Property Tax Authority began to send out tax papers for 1.5 million properties, with taxes to be collected by mid-2015, based on a formula that taxes the theoretical rental value of properties as determined by the Tax Offices in each locale.

It is too early to assess the impact of this new tax regime. The actual tax rates for specific properties are not clear, but they are considered to be quite low and, in any event,

the EGP 2 million exemption means that the large majority of residential units will not be taxed. However, the system being put in place means that there will be a systematic way to tax housing and, in the future, the rates may be raised and exemptions curtailed. If this is the case the property tax might have some influence on housing markets and, in particular, might discourage the holding of vacant housing units.

### 9.12 LACK OF INFORMATION ON HOUSING MARKETS

It is important to realize that consistent and representative information about the urban housing sector in Egypt is lacking. The following are the main sources which are currently available:

- MHUUC – annual production of housing units by the government and the formal private sector
- The Census of Population and Buildings, carried out every ten years by CAPMAS, the latest of which was in 2006. Also, the representative sample of Household Income, Expenditure, and Consumption Survey (HIECS) which is carried out by CAPMAS every two to five years.
- USAID's Housing Study for Urban Egypt 2008 (a large representative household sample survey) which gives a good picture of the occupied urban housing stock and market behavior, broken down into six regions
- MHUUC periodic data on details of government housing production
- EFSA periodic data on the emerging mortgage market
- Various partial and non-representative studies of aspects of the housing sector; some housing and land indicators are generated by GOPP's National Urban Observatory, but such data is neither collected periodically nor is it consistent
- Monitoring and evaluation of aspects of the Social Housing Program to be carried out by the Social Housing Fund (see Chapter 4.)

In general, there is a huge gap in information on the housing sector and confusion as to definitions. For example, there are no annual figures on housing unit starts or unit completions or their values whether for urban Egypt as a whole or for any geographical part (even the new towns). Likewise, there are no coherent statistics on housing units presently on the market, the number of new units purchased or rented per year, or the number and nature of vacant units.

<sup>128</sup> The law introducing capital gains taxes was issued in July 2014 and its bylaws in April 2015. These focused on taxing profits from the sale of stocks and stock dividends, and it remains unclear how the tax will be applied to capital gains from real estate transfers. (See Al Ahram Weekly, "Tax bylaws passed," 23-29 April, 2015, p. 6.

Even what information exists suffers from certain problems. One has to do with the unrealistic definition of urban areas (versus rural areas) as has been explained in Chapter 1 above. Another has to do with the existence of a huge informal housing sector in Egypt, for which there are practically no coherent statistics or even accepted definitions.

There is thus a pressing need for much improved housing information systems. The 2008 HSUE has made a significant contribution to the knowledge of the sector, but it only covered occupied units and is now somewhat out of date. The Framework for Housing Policy Reform in Egypt pinpoints the need for:

- Better housing market information
- Better credit and housing finance information
- A Management information system for MHUUC
- Creating systems for proper feedback on housing interventions

In this regard, USAID consultants elaborated a proposal for the creation of a national housing policy and information center that was presented to MHUUC in March 2008.<sup>129</sup> Such a center would:

- Provide real time data on housing supply, demand, prices, affordability
- Support GOE housing reform efforts and NHP
- Provide analytical “home” for follow-on periodic surveys modeled after the HSUE Housing Survey
- Provide timely statistical publications, policy reports and website
- Encourage private sector groups to strengthen their own organization & data collection

The data to be collected and managed would center on the housing stock, housing supply and vacancies, housing demand and transactions, housing finance, household data, and housing unit conditions. In addition, it was envisioned that there would be a real estate developers’ data base which would assemble information on housing starts and completions by category and geographical area.

Unfortunately, the idea of such a housing policy and information center has not yet been taken up seriously.

In Annex 1 there is an exhaustive list of information and documentation about Egypt’s housing sector. It shows that there is a considerable body of knowledge that, while incomplete, should be utilized and recognized as having considerable value.

129 Merrill, S. and Kamal, H., “Framework for Egypt’s Housing Information Center,” USAID/TAPRII, powerpoint, 9 April 2008.

# INFRASTRUCTURE AND BASIC URBAN SERVICES

This chapter presents a basic review of the provision of infrastructure in the housing and residential neighbourhood context. It covers water, sanitation, solid waste, roads, electricity, and solid waste management. (It does not however cover public facilities such as schools, health clinics, and youth centres, even though these can be considered part of the shelter package.)

## 10.1 BASIC URBAN INFRASTRUCTURE PROVISION IN A NUTSHELL

Indicators of coverage and percentages of the population serviced by potable water, wastewater, and electricity networks show very impressive achievements in the last three decades, to the point that coverage in urban areas is now nearly universal, and that coverage in rural areas is already high and increasing at very rapid rates.

These achievements are remarkable by any measure, and the coverage levels of these services exceed those of almost all other countries in the Middle East and North Africa Region. However, there are a host of network operational problems that consumers suffer from, as will be explained below.

The drive for improved infrastructure in Egypt has come mainly from the central government. There are centralized public organisations responsible for each main utility system throughout the country. These authorities cover both rural and urban areas. Each utility organisation has branches in each governorate/region, but investment planning and programming remain centralized. Relations between utilities organisation and local authorities vary depending on the type of utility. The main infrastructure organisations are as follows:

Infrastructure Sector	Key Responsible Organisation(s)	
Water and sanitation	HCWW	Holding Company for Water and Wastewater
	NAPWASD	National Organization for Potable Water and Sanitary Drainage
Electricity	EGELEC	Egyptian Electricity Holding Company
Roads	HOLDROADS	Holding Company for Roads, Bridges and Land Transportation Projects
	GARBLT	General Authority for Roads, Bridges & Land Transport
	NUCA MLD	New Urban Communities Agency Ministry of Local Development
Waste Management	MURIS	Ministry of State for Urban Renewal and Informal Settlements
	MLD	Ministry of Local Development

It should be pointed out that, with very few exceptions, the Egyptian government has not tried to privatise aspects of its infrastructure services so far. Each of the State organisations is monolithic in management and financing, and each has its own corporate and human resource development plans. Also, each carries out

research and studies. There have been some recent pilot attempts to outsource infrastructure elements (e.g. water treatment and power plants through Build-Operate-Transfer (BOT) arrangements, especially by NUCA in the new towns, but these remain few and far between.)

## 10.2 WATER AND SANITATION

The Government of Egypt has achieved impressive success in extending coverage of water and sanitation services, both in terms of house connections, networks, and plants over the last three decades. This section looks at the water and wastewater sector in Egypt in terms of population coverage, institutional setup, cost recovery and tariffs, and programmed investments.

### Expansion of coverage of potable water systems

Expansion of coverage of potable water systems has been dramatic since the 1970s, and as a result Egypt has now

achieved near-universal coverage in potable water. By 2012, a full 99.3 per cent of households in the country had access to improved water source<sup>130</sup>, and in urban areas this coverage was 100 per cent.<sup>131</sup> Almost all of this was piped water to the domicile, but for the whole of Egypt there were also a small fraction that relied on standpipes (roughly 3 per cent)<sup>132</sup>. Even though these average national figures shown above and in Table 10.1 are very impressive, the geographical extent of water services coverage in Egypt is slightly unbalanced, with provision levels higher in urban than rural areas.

Table 10.1: Water and wastewater infrastructure and capacity (2005-2014)

	2005	2014
<b>Water</b>		
Drinking water treatment plants	1005 plants	2705 plants
Design capacity of treatment plants	20 million m <sup>3</sup> per day	33.8 million m <sup>3</sup> per day
Average effective capacity of treatment plants	18 million m <sup>3</sup> per day	25 million m <sup>3</sup> per day
Length of water distribution networks	74,000 km	155,000 km
Subscribers	6.5 million	13.8 million
Coverage	95%	97%
<b>Wastewater</b>		
Wastewater treatment plants	149	382
Design capacity of treatment plants	8 million m <sup>3</sup> per day	13 million m <sup>3</sup> per day
Average effective capacity of treatment plants	6 million m <sup>3</sup> per day	9.5 million m <sup>3</sup> per day
Length of wastewater collection networks	28,000 km	42,000 km
Subscribers	-	6.7 million
Coverage	40%	50%

Source: HCWW Website 2015

### Water resources and uses

Egypt's principal source of freshwater is the Nile River. The river supplies about 97% of the annual renewable water resources in Egypt, which are estimated at 56.8 billion m<sup>3</sup>.<sup>133</sup> Average rainfall in Egypt is minimal at 18 mm per year, occurring mainly during autumn and winter time. Furthermore, Egypt has four different groundwater aquifers: the Nile Aquifer, the Nubian Sandstone Aquifer, the Moghra Aquifer and the Coastal

Aquifer. Egypt is classified among the countries with physical water scarcity.<sup>134</sup> Physical water scarcity refers to situations when water is not abundant enough to meet all demands.

There is no single overarching water resources law in Egypt. The main laws of relevance for water resources management include laws about irrigation and drainage on the one hand, and laws to protect the environment

130 'Improved drinking water sources' includes sources that, by nature of their construction or through active intervention, are protected from outside contamination, particularly faecal matter. It comprises piped water on premises such as piped household water connection located inside the user's dwelling, plot or yard. Other improved drinking water sources include public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection (UNICEF, 2015: [http://www.unicef.org/wcaro/overview\\_2570.html](http://www.unicef.org/wcaro/overview_2570.html)).

131 WHO / UNICEF Joint Monitoring Programme for Water Supply and Sanitation, April 2015, <http://www.wssinfo.org/data-estimates/tables/>

132 WHO / UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Egypt: Estimates on the use of water sources and sanitation facilities (1980 - 2012), April 2015, [http://www.wssinfo.org/fileadmin/user\\_upload/resources/Egypt.xls](http://www.wssinfo.org/fileadmin/user_upload/resources/Egypt.xls)

133 Ministry of Water Resources and Irrigation, Integrated Water Resources Management Plan, June 2005, p. 9

134 The United Nations World Water Development Report 4, Volume 1, Managing Water under Uncertainty and Risk, United Nations Educational, Scientific and Cultural Organization, 2012, p. 125

on the other hand.<sup>135</sup> Meanwhile, Egypt has developed and adopted numerous plans regarding its water resources, starting with the 1981 Master Plan for Water Resources Development and Use finalized with the support of UNDP and the World Bank.<sup>136</sup> In 1990, the government adopted its first national water plan covering the period until 2000. Beginning in 1998 the Dutch government provided technical assistance to prepare a second national water plan. The National Water Resources Plan (NWRP) was completed in 2003 with a time horizon until 2017. In June 2005, the Ministry of Water Resources and Irrigation presented an Integrated Water Resources Management Plan, which was prepared with technical assistance from the World Bank, as a "transitional strategy including further reform interventions" building on the NWRP.

At the national level, a full 62 per cent of water resources were allocated to the agricultural sector. Meanwhile, total domestic water use in Egypt is estimated at about 10 billion m<sup>3</sup> per year or 13% of total water use.<sup>137</sup> This corresponds to an average of about 300 litre per capita per day (l/c/d). However, actual domestic water use is lower because of network losses, and furthermore it varies considerably between different localities in Egypt.

#### Expansion of coverage of wastewater systems

The success of GOE in extending wastewater collection services throughout urban areas of Egypt since 1975 is quite impressive. By the mid-1970s, Egypt's wastewater system was severely overloaded. In 1970, Cairo's sewerage system, designed for a population of two million, broke down under the pressure of serving a population of six million. Cairo had two small wastewater treatment plants and five pumping stations dating to 1915. According to a 1978 USAID project paper, the wastewater treatment facilities on the east side of the Nile River were totally ineffective and those on the west side of the river were

also very limited in effectiveness. Consequently, raw sewage often flooded neighbourhood streets in more than 200 areas of Cairo. With the economic opening of Egypt under the government of Anwar Sadat in the 1970s, substantial foreign aid arrived. In particular, USAID provided assistance for water supply and sanitation in Greater Cairo, Alexandria and the Suez Canal cities. Assistance initially targeted the emergency provision of sewerage infrastructure to relieve the flooding of raw sewage in Cairo and Alexandria, and the replacement and rehabilitation of services in the war-damaged cities along the Suez Canal. As a result of massive investments, access to sanitation increased substantially during the next decades. Table 10.2 shows the advancement made over the period (2005-2014) in terms of infrastructure, capacity and coverage. The following table shows the expansion of wastewater services over the period of a decade based on two different random samples.

Table 10.2: Water and Sanitation Service Provision Levels

	2003 <sup>(a)</sup>		2012-13 <sup>(b)</sup>	
	Urban	Rural	Urban	Rural
Piped water	98.6	82.0	99.1	93.7
Public sewerage	84.6	21.7	91.5	25.8

Sources: (a) *Egypt Interim Demographic and Health Survey 2003*; (b) *CAPMAS Household Income, Expenditure, and Consumption Survey, HIECS 2012-2013*

As shown from Table 10.3, the geographical extent of wastewater services coverage in urban Egypt is substantially unbalanced between urban and rural areas and also that there are regional variations.

Table 10.3: Access to Water and Sanitation in Urban Egypt (2008): Regional Variations

	Greater Cairo	Alexandria	Canal	Delta	Upper Egypt	Urban Egypt
% of Households with Access to Running Water	98.7	99.0	97.7	97.8	97.7	98.3
% of Households with Access to Sewerage Lines	98.0	91.9	89.5	93.2	77.4	91.9

Source: *Housing Study for Urban Egypt, 2008, p.33*

135 Among the irrigation and drainage laws are: Law no. 12 of 1984 for irrigation and drainage, and its amendment by Law no. 213 of 1994. Among the laws and decrees for environmental protection are: Law no. 93 of 1962 for the discharge of liquid wastes, Law no. 27 of 1978 for the regulation of public water resources for drinking water and human use, Law no. 48 of 1982 regarding the protection of the River Nile and waterways from pollution, and Law no. 4 of 1994 for Environment Protection.

136 Rather than being an actual plan, the document aimed at introducing planning tools such as data bases and flow models that would allow better planning.

137 CAPMAS Egypt in Figures 2015, Water Resources, p. 176



### Wastewater networks and treatment

As of 2014, there were 382 wastewater treatment plants in full operation with 42,000 linear km of networks. The largest wastewater treatment plant in Egypt is located in Gabal el Asfar to the Northeast of Cairo, serving about 9 million people and treating 2 million m<sup>3</sup> per day in 2009. A contract for the expansion of the plant to 2.5 million m<sup>3</sup> per day is co-financed by the African Development Bank (AfDB) and the French Development Agency (AFD). The tendering began in 2011 and the Design-Build-Operate contract was awarded in October 2013. Completion is expected in 2015. A planned third stage would bring capacity to 3 million m<sup>3</sup> per day, serving 12 million people and making Gabal al-Asfar one of the largest wastewater treatment plants in the world. More treatment plants are under construction, under expansion, or planned.

Another large wastewater treatment plant is located at Abu Rawash in the western part of Giza governorate. It initially treated 0.4 million m<sup>3</sup> only at primary level. In 2005-08 the capacity was increased to 1.2 million m<sup>3</sup> per day. In 2013-2014, a tender was underway to upgrade the entire plant to secondary treatment and to increase its capacity to 1.6 million cubic meters per day with a possible loan funding from EBRD and Egyptian banks as part of a public-private partnership.



**Figure 10.1**  
Installing sewers in a mature informal settlement on State land (Ezbet Bekhit, Manshiet Nasser), financed by KfW, 2002. Photo by D. Sims

### Institutional set-up

All water and wastewater services in Egypt are run by and financed by the Egyptian Government (except tourist villages and enclaves, as well as a handful of residential

compounds which have independent systems). Central ministries plan and budget additions to system capacities and extensions to network coverage in order to keep up with urban growth.

Starting in 2004, the Government of Egypt commenced a set of reforms in the sector, comprising the setting up of a sectoral Holding Company under the Ministry of Housing, Utilities and Urban Communities (MHUUC) and the creation of affiliated local utility companies in governorates. The Holding Company for Water and Wastewater (HCWW) and its 25 affiliated companies are in charge of operation, maintenance and rehabilitation of both water and sanitation systems. Although an affiliated company was established in 2013 for the Canal governorates (Suez, Port Said and Ismailia), the Suez Canal Authority still operates, alongside the Suez Canal itself, the drinking water supply for the Suez Canal cities Port Said, Suez and Ismailia.

The sector reforms in 2004 were complemented by the creation of a regulatory body, the Egyptian Water/Wastewater Regulatory Agency. The National Authority for Potable Water and Sanitary Drainage (NAPWASD) remains the main planning, designing and implementing agency for major projects in the sector with finance from the State budget. NAPWASD operates throughout Egypt except in Greater Cairo and Alexandria, where there is a separate authority called the Construction Authority for Projects of Water and Wastewater (CAPWW), al gehaz al tanfizi l'mashruaat al miah wa al sarf al sahi.

The water and wastewater sector in Egypt has so far only seen limited private participation. The government's support for private sector participation in water supply and sanitation is focused on build-operate-transfer (BOT) for wastewater treatment plants, through which private finance is mobilized. This approach is limited to Cairo and Alexandria where external donors had become less keen to provide assistance. The first BOT wastewater for USD 160 million for the New Cairo wastewater treatment plant with a capacity of 250,000 m<sup>3</sup>/day was awarded in 2010. The lead advisor for the structuring of the transaction was the International Finance Corporation of the World Bank Group.<sup>138</sup> Contracts for another large wastewater treatment plant, the upgrade of the 1.2 million m<sup>3</sup>/day Abu Rawash plant for USD 500 million, was in under tendering in February 2014. The prefeasibility study of a third project, the construction, financing, operation and management of 250,000 m<sup>3</sup>/day Helwan Wastewater Treatment Plant, was commissioned in 2014.<sup>139</sup> The NAPWASD also plans to launch BOTs for seawater desalination on the Red Sea

138 IFC and DevCo, Public-Private Partnership Stories - Egypt: New Cairo Wastewater, February 2010, [http://www.ifc.org/wps/wcm/connect/b21864804983906081ecd3336b93d75f/SuccessStories\\_NCWWweb.pdf?MOD=AJPERES](http://www.ifc.org/wps/wcm/connect/b21864804983906081ecd3336b93d75f/SuccessStories_NCWWweb.pdf?MOD=AJPERES)

139 Ministry of Finance, PPP Central Unit, Wastewater Sector, April 2015, <http://www.pppcentralunit.mof.gov.eg/Content/Projects/Pages/Helwan%20Wastewater%20Treatment%20Plant.aspx>

and the Sinai, together with the government's Public-Private-Partnership (PPP) unit that would provide a sovereign guarantee.

### Tariffs and Cost Recovery

User charges and fees for water and wastewater are set centrally and, with few exceptions, are the same throughout Egypt. Due to reforms in 2004, water consumption charges were raised in certain localities. Increasing-block tariffs were also introduced for metered customers. However, charges remained very low (a highly subsidised EGP 0.23 per m<sup>3</sup> for the first tranche of consumption up to 10 m<sup>3</sup> per month), and sewerage fees were assessed as a 25% surcharge on water consumption. Although there is a program to install water meters, until now the vast majority of urban consumers are assessed a flat rate which is based on an estimate of a building's consumption.

Tariff changes are typically proposed by HCWW, studied by EWRA and are ultimately approved by the Cabinet, which has on occasions refused requests for tariff adjustments. Water consumption charges were increased again in 2014 with the exception of the first tranche of consumption. The surcharge on water consumption imposed to cover the costs of wastewater collection and disposal increased as well. However, the water and sewer bill remains affordable in international comparison.

Because of the low nationally-set water consumption tariff and a bloated civil service staff, water and wastewater companies are finding it increasingly difficult to operate efficiently and with financial prudence. The Holding Company for Water and Wastewater (HCWW), which is the umbrella organization under which the

governorate water and wastewater companies operate, provides technical and financial support, particularly to cover budgetary shortfalls. Also, most of the companies are being given technical assistance through different donor programs, particularly in re-training and capacity building, in cost- and leak-reduction, and in revenue-enhancement, including pilot projects.

System leaks, which are normally very high, have been dramatically reduced in some areas through these donor-supported pilot projects. Another initiative is the progressive installation of domestic household water meters, although functioning meters that are actually read and consumption billed remain very much a rarity.

The HCWW increased also the connection fees to the extent that they are currently a significant expenditure for households. In some poor areas, connection fees are reduced and can be paid in installments through a revolving fund established by the Holding Company, UNICEF and USAID.

### Financing and investments

The Egyptian government has made huge strides in the water and sanitation sector over the past decades, investing some USD 26 billion between 1977 and 2006 (excluding grants from donors).<sup>140</sup> Investments in water supply and sanitation for Egypt stood at USD 2.4 billion (EGP 13.4 billion) in 2009/2010, suggesting also a significant increase in investment over the previous years. Table 10.4 provides an overview of the governmental subsidies allocated for water and wastewater utilities over the period 2007/2008 to 2009/2010.

Table 10.4: Governmental subsidies allocated for water and wastewater utilities (2007/2008-2009/2010)

Fiscal Year	Investment EGP Billion	Operation Subsidy EGP Million	R&R Subsidy EGP Million	Total EGP Billion
2007/2008	13.0	410	634	14.00
2008/2009	15.7	750	742	17.20
2009/2010	13.4	660	1000	15.15

Source: Ministry of Water Resources and Irrigation, Water Policy and Regulatory Reform (WPRR) Project, Cost Recovery and Pricing Models Policy Paper, January 2012, p. 20-21

Investment was much lower at EGP 4 billion (USD 660 million) in 2011/2012 and 3 billion Egyptian Pounds (USD 430 million) in 2012/2013, mainly due to political instability following the 2011 Revolution. The National Master Plan for Water Supply and Sanitation

conservatively estimates the investment needs for the 30 years after 2007 at about EGP 173 billion (USD 30 billion), out of which almost two thirds will be required for sanitation.<sup>141</sup>

<sup>140</sup> AFD "Public Communication Brief on Operations, Egypt: Extension of the Gabal Asfar Wastewater Treatment Plant," 2009, p. 2

<sup>141</sup> University Consortium for the Socio-economic Research and for the Environment, "National Strategy for Water Supply and Sanitation: Compilation of Water and Sanitation Master Plans," Report for the European Commission, May 2009, p. 4.

Investments in water and wastewater are financed by government with the support of external donors. The private sector makes only a very limited contribution to finance, and to date there has been only one BOT that has been awarded for a USD 160 million wastewater treatment plant. Between 2005 and 2010 Egypt received more than EUR 1 billion in external aid for water supply and sanitation, out of which 30% were grants and the remainder soft loans.<sup>142</sup> This corresponds to EUR 200 million per year, corresponding to only about 10% of the government's investment budget for the sector in 2009/10.

Financing of the recurrent or operating costs of HCWW and its subsidiaries comes from a combination of tariff charges, revenues from other services, and State subsidies. It is clear from the figures provided in Table 10.5 that cost recovery for water and wastewater services remains an issue.

### Problems facing consumers

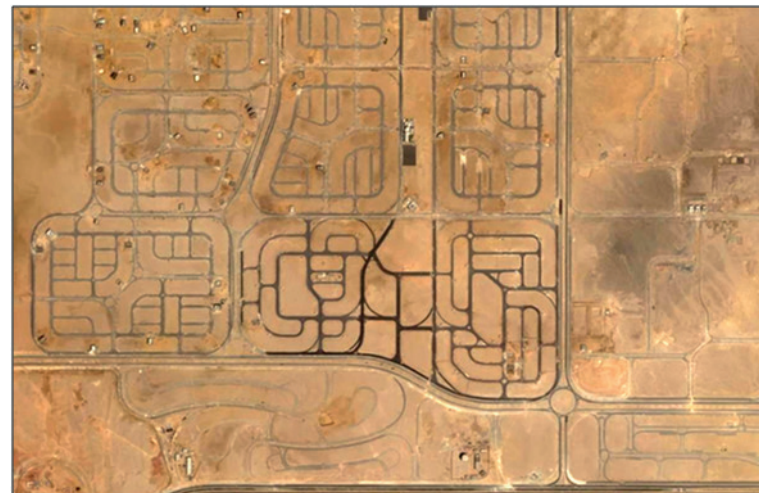
Both rural and urban consumers have to deal with water cuts and, infrequently, poor water quality (with occasional outbreaks of water-borne diseases). And water system pressures are usually very low, forcing consumers to install their own booster pumps. Also, in some areas sewerage systems commonly become blocked, or back up and overflow, causing inconvenience and a health hazard. Such problems with water and wastewater systems are much more frequent in poor areas, especially in informal settlements where the systems are poorly designed, neglected, and/or badly maintained.

## 10.3 ROADS AND PUBLIC SPACES

Main roads and highways in Egypt are the responsibility of the General Authority for Roads, Bridges & Land Transport and the Holding Company for Roads, Bridges and Land Transportation Projects, both under the Ministry of Transport (MOT). The General Authority for Roads, Bridges & Land Transport is the main planning, designing and supervising agency for major projects in the sector, while the Holding Company for Roads, Bridges and Land Transportation Projects constructs, improves, and maintains a hierarchy of roads throughout the country. The Holding Company has four subsidiaries, which are: the Nile Company for Roads and Bridges, the Nile Company for Road Construction, the Nile Company for Desert Roads, and the Nile Company for Construction and Paving. The General Authority and Holding Company are not the sole organisations responsible for roads and bridges. Their tasks overlap with the tasks of two other agencies: the Central Agency

for Reconstruction (al-gehaz al-markazi lil-t'amir) under MHUUC, and the Armed Forces Engineering Corps. The lowest roads for which each of the three organisations is responsible are sub-regional roads that may pass through urban areas. Some of the regional or sub-regional roads are toll roads.

In addition, NUCA builds both major roads and neighbourhood road networks in the new towns. In fact, it is the only authority in Egypt that undertakes the advance provision of urban road networks.



**Figure 10.2**  
Example of advanced road network provision by NUCA, New Cairo, 2005. Source: World Bank, Egypt Urban Sector Update, Vol. 1, 2008

Below this, at the level of urban distributor and local access roads, governorates are responsible for paving and maintenance of road and sidewalk surfaces. They are also responsible for other public spaces (like parks and squares). The capacity of a particular governorate to cover all of its road and public spaces responsibilities varies from one municipality to another, depending on financial and technical resources. There are no mechanisms for cost recovery from users of urban roads.

Overall, Egypt's road system is well developed, with about 60,000 km of roads in 2014. A plan to build 3,200 km of new roads, as part of the national developmental plan, was announced in mid-2014. The new roads include 15 new roads across the country and cost EGP 36 billion.

142 Ahmed Badr, Delegation of the European Union to Egypt, Water Sector Reform in Egypt (PPT), March 2011, p. 17.



Figure 10.3 Newly tarmacked major avenue, Shara' Tisa'in, New Cairo, 2009. Photo by D. Sims



Figure 10.4 Recently paved lane in an informal settlement, Boulaq al-Dakrou, 2009. Photo by D. Sims

#### 10.4 ELECTRICITY AND NATURAL GAS

Electricity was first introduced in 1895 by the French company Lebon (et Cie) which was granted thirty years earlier the concession to provide Alexandria (and later Cairo) with gas lighting. In 1948, the first government department to manage electricity and gas utilities was established in Cairo. Eventually, a Ministry for Electric Power was set-up in 1964 to integrate the electric power system. Soon after, the Egyptian Public Corporation for Electricity was formed in 1965 to be in charge of power generation, transmission and distribution under the supervision of the Ministry.

In 1976, the Egyptian Corporation for Electricity was converted into the Egyptian Electricity Authority. The 2000 reforms included the conversion of the Egyptian

Electricity Authority into the Egyptian Electric Holding Company and the reorganisation of Egyptian Electric Utility and Consumer Protection Regulatory Agency formed few years earlier.

Currently, the Egyptian electric power system is almost entirely integrated, with both thermal and hydropower stations feeding the grid. The system gone has through rapid developments since 1980, and subsequently, electricity production increased steadily between 1980 and 2010. As of 2012/2013, electricity output was 164.6 Trillion Watt Hours, of which 82.3% was from thermal (burning oil or gas), 8.0% from hydro (mostly from the Aswan High Dam) and 0.9% from wind and solar. Electricity produced by the private sector (under BOT contracts) represented 8.7% of the output.

Egypt is considering the use of nuclear energy. The Nuclear Power Plants Authority (NPPA) was established in 1977, and in 1983 the El Dabaa site on the Mediterranean coast was selected. Egypt's nuclear plans were frozen after the Chernobyl accident. In 2006, Egypt announced it will revive its civilian nuclear power programme and build a 1,000 MW nuclear power station at El Dabaa. In February 2015, Egypt and Russia agreed to jointly build Egypt's first nuclear power plant.



Figure 10.5 Electrical transformer and distribution box, New Cairo subdivision, 2009. Photo by D. Sims

The Egyptian Electric Holding Company has recently achieved near-universal coverage in electrical power in both urban and rural areas. As of 2010, the percentage of Egyptian households connected to the electrical grid stood at 99.6 per cent. In urban areas, this coverage was 100 per cent while it was 99.3 in rural areas. This

means that in 2010 only about 74,000 households were un-served by the electrical grid in the whole country, and these households were found almost exclusively in remote rural areas. In 2012/2013, EGELEC had a total of 21.1 million residential customers served by its low-tension network.<sup>143</sup>

The Egyptian Electric Holding Company is a joint stock company (société anonyme) wholly owned by the State. Its responsibility includes all aspects of electrical power (production, transmission, and distribution). The Holding Company controls sixteen subsidiaries or affiliated companies: six companies for electricity production, one company for transmission and nine companies for distribution. As of 2012/2013, the Holding Company and its subsidiaries had a total of 184,030 employees.

Financially, EGELEC is a growing concern, with operation expenditures usually exceeding revenues and shortfall made of State subsidies. As of 2011/2012, the total direct and indirect subsidies reached EGP 26.8 billion, of which subsidies to residential consumers represent about 72 per cent.

Due to the increasing demand for “subsidised” electricity and the resulting budgetary imbalance, Egypt has been suffering from an energy crunch. Under the plan to gradually eliminate power subsidies within five years (2014-2019), Egypt's government raised electricity prices in mid-2014. Consumers pay a graduated EGP per kilowatt hour depending on their level of monthly consumption.

It should be noted that metered electrical connections are an extremely important means for housing units to be officially recognized in both rural and urban Egypt. An electrical bill in the name of the unit occupier gives many advantages – such as proving residence for banks, for housing applications, etc. Having such a document also greatly helps an informal housing unit owner to solidify his or her tenure.

### Natural Gas

Natural gas has been exploited in Egypt since 1975, and production rose considerably especially in the 1980s and 1990s to feed both residential consumers and also energy-intensive factories. Until 2010 Egypt produced surpluses for export. The sector is managed by the Egypt Natural Gas Holding Company (established in 2001) under the Ministry of Petroleum.<sup>144</sup>

Work on natural gas distribution networks began in Cairo in 1981, and by 2012/2013 a total of 5.53 million residential connections had been made (half of which were in Greater Cairo). The Natural Gas Holding Company aims to extend its distribution networks to all urban households. In 2012/13 another 588,000 consumers were connected.

Natural gas tariffs for domestic consumers are set by tranches that give lower unit rates for low consuming households, and although there have been increases recently, most households see prices as being reasonable, and there is a strong demand for more distribution networks and new connections. The alternative for households is to rely on butane gas cylinders that are expensive and not always available. And the government also wishes to eventually do away with the butane cylinder system since butane gas must be imported and heavily subsidized.

## 10.5 SOLID WASTE MANAGEMENT

The annual amount of municipal solid waste generation in Egypt has increased dramatically, by more than 30 per cent since the year 2000, to reach 19.7 million tons per year in 2010.<sup>145</sup> Cairo has the greatest share of solid waste generation in the whole country. Cairo is the capital of Egypt and is considered the biggest urban settlement in Egypt with some peri-urban areas encircling it. It has a population of about 8.8 million inhabitants in 2012. The average rate of generation in Cairo is 1.3 kg per person per day with an average density of 350 kg per m<sup>3</sup>.<sup>146</sup> These figures indicate that Cairo alone generates waste of about 11,450 tons of waste per day.



**Figure 10.6**  
Solid waste collection containers in Sixth of October, 2009.  
Photo by D. Sims

143 Egyptian Electric Holding Company, Annual Report 2012-13 (English).

144 See <http://www.egas.com.eg/home.aspx>

145 SWEEPNET, “Country report on solid waste management in Egypt,” July 2010

146 Plan Bleu, Regional Study on Policies and Institutional Assessment of Solid Waste Management in Egypt, December 2000, p.33

The solid waste transport and collection efficiency in Egypt does not exceed 65%, which leads to daily accumulations of these wastes within the streets of the residential areas and at illegal dumping sites.<sup>147</sup> Furthermore, waste recycling is not acknowledged within a legal framework. Most landfills, where final disposal of such wastes takes place, are open and exposed. Instead of dealing properly with these wastes by recycling or sealing them within or in landfills, open burning is the common method to deal with such wastes, a method which has very serious negative impacts. Moreover, the necessary equipment for covering wastes is not available. This poor handling and accumulation of waste has serious impacts on the health of citizens and workers within the waste management sector. The main reasons leading to such MSWM problems are the non-professional methods of dealing with municipal solid waste, low environmental awareness, the deficiency in enforcing solid wastes legislations, and the absence of an integrated sustainable legal framework that deals with MSWM.<sup>148</sup>

There are many key players involved in MSWM in Egypt. The public sector is divided into national and local bodies working under the central government umbrella. The private sector is divided into formal contracting companies and informal/traditional garbage collectors or zabbaleen.<sup>149</sup>

On the national level, the responsibility for MSWM is held mainly by the Ministry Of State for Urban Renewal and Informal Settlements (MURIS), which was recently established in 2014. The Ministry liaises and cooperates with other organizational bodies such as the Ministries for Environmental Affairs; Local Development; Housing, Utilities and Urban Development; Health; etc. as needed.

On the local level, governorates or their Cleaning and Beautification Authorities, located in urban governorates such as Cairo and Alexandria, are responsible for MSWM handling either directly or through the formal private sector represented by some contracted international and national companies or the informal private sector represented by the traditional garbage collectors zabbaleen and some non-governmental organizations NGOs. However, the main responsibility of local

MSWM is held by the competent local administration unit within the governorate.

The private sector comprises a wide range of enterprises, varying from informal bodies such as the zabbaleen, to large international and national enterprises. Those different categories are mainly interested in profiting from their services such as collection, transfer, treatment, disposal and recycling. The formal private sector is contracted directly either by individuals and neighbourhood associations or business establishments. These formal service providers are obliged to work under contractual agreements with the government represented by the local administration units. The informal private sector, represented by the zabbaleen, is not contracted and comprises unregistered and unregulated activities and services carried out either by individuals and families or some small enterprises.

The public solid waste management is usually not efficient as it is a costly operation; the equipment used is highly subsidized. In addition, there are some legal issues in terms of raising additional fees from users. Based on that, there are many cases of subcontracting and subletting a considerable portion of waste collection and street sweeping services to the private – formal and informal - sectors, which are considered more efficient than the services provided by the local administration unit.

In 2000, the government started the privatization of the solid waste sector through contracting international and national companies. Fifteen-year contracts were signed in 2002 with four international MSWM companies to provide integrated MSWM services, such as collection, transfer and disposal, in parts of Cairo and Alexandria. One of these international companies stopped its services in 2006 due to some contractual issues with the government. In addition to this, some local and national private companies were contracted. In governorates other than Cairo and Alexandria, the local administration units delegate MSWM services to small private companies and NGOs or even to the zabbaleen. Moreover, the government has privatized some of their 49 composting plants with 88 production lines and leased all non-operating facilities to the private sector.

147 The Cairo Cleaning and Beautification Authority (CCBA) estimates the overall efficiency of solid waste collection in Cairo at about 80%. Only 40% of the total amount of waste generated daily is collected by the CCBA. The traditional waste collectors, the Zabbaleen, and the formal private companies collect another 40%. The remaining 20% are left on the streets for casual collection.

148 Egyptian Environmental Affairs Agency (EEAA), Egypt State of Environment Report, September, 2009

149 The development of the informal MSWM sector in Egypt goes back to the 1940s, when oasis migrants, the waahi, started their waste collection services for paper waste in Cairo. Later on, upper Egyptian migrants, today known as the zabbaleen, started garbage collection in Cairo. These migrants had escaped the poor conditions of Egypt's rural areas. They formed new settlements known as garbage villages or cities on the outskirts of Cairo. The zabbaleen and waahis provide residential areas with a daily door-to-door garbage collection service.

## 10.6 INFRASTRUCTURE SUPPLY TO INFORMAL SETTLEMENTS

Although each national utility organisation operates strictly sectorally, there have been a number of government programs that target specific urban areas with upgrading and rehabilitation projects, including basic infrastructure. These efforts, most of which could be called urban upgrading projects, are briefly described in Section 2.2 above.

In the 1970s and 1980s there were a few scattered urban upgrading projects in Egypt that mainly improved infrastructure services in informal areas. These included efforts in Ismailia, Helwan, and Aswan. In the Aswan project, funded by GTZ, inhabitants contributed to costs by their labour.

In 1998, two substantial urban development projects began in two areas – Boulaq el Dakroul (Giza Governorate) and Manshiet Nasser (Cairo Governorate) with support from GTZ. These two projects were geographic-specific integrated upgrading efforts, in which community participation was a very strong feature (to the extent that the projects were named “participatory urban development”). These two projects were in partnership with the respective governorates, and in addition there was a coordinating/advisory unit, supported by GTZ, in the Ministry of Planning called Participatory. The Manshiet Nasser Project, and later that of Boulaq el Dakroul, were closely linked to parallel KfW-financed infrastructure projects. In addition, each project had budgets for a limited amount of investments in local initiatives, community centres, training centres, workshops, school and youth centre renovation, etc.

Another area-specific upgrading intervention was supported by GTZ in two informal areas in Helwan in 2005, Ezbet el Walda and Arab al Walda, in partnership with the Integrated Care Society and with considerable high political involvement. A number of showcase public facilities were built in addition to infrastructure, all financed with army and ministry (of Planning?) contributions.

In 2012 an agreement was reached between the European Commission and PDP to manage a grant of Euros 20 million for the integrated upgrading of four areas: two in Giza Governorate and two in Cairo Governorate. Note that the newly established Ministry Of State for Urban Renewal and Informal Settlements (MURIS) is currently the counterpart of GTZ in place of the Ministry of Planning.

## 10.7 CONCLUSION: OVERALL INFRASTRUCTURE NEEDS, COSTS, AND COST RECOVERY

The urban infrastructure sector in Egypt has achieved much in the last three to four decades. Even in the face of rapid growth of the urban population, access to clean water is nearly universal, and coverage of sewerage networks is increasing. In addition, highways, roads and streets have been built. Moreover, wastewater treatment plants are finally being built to correct the previous environmentally unsound practice of discharging raw sewage into water bodies.

These achievements have been accompanied by reforms in the institutions and regulations that control infrastructure service delivery. State-owned enterprises, which are the main infrastructure builders and operators, have been created and given some autonomy. The tariff structures for water and electricity consumption have been allowed to rise, and they are designed to keep small the burden on poorer households. In these reform efforts the international community has and continues to play an important role.

However, much remains to be improved in urban infrastructure services to urban residential areas, and the expected costs are correspondingly great. Water and sewerage networks and the State enterprises that run them are still partly tied to the older “state finance and control” systems, and more needs to be done to make them financially independent going-concerns while at the same time preserving their social roles vis-à-vis poor households. The greatest difficulty will lie in the sanitation and sewage sub-sectors. Investments in reticulated sewerage systems and treatment plants are very expensive, and both the numbers of households connected and percentages of effluent treated remain only fractions of the total needed. This is not just an issue of household convenience – existing latrine and septic tank systems which are today used by a substantial portion of rural households pollute groundwater and also water bodies, thus the social and health costs are tremendous and rising.

Perhaps the biggest physical and social challenge relating to urban infrastructure lies in the dense and rapidly growing peri-urban areas surrounding major Egyptian cities, especially around Greater Cairo. It is here that the poor and lower middle classes are locating in great numbers because mobility is acceptable, employment is available in nearby areas, and also because housing solutions are affordable. But the unplanned, informal

patterns of development represent infrastructure challenges and call for inventiveness. Until now all infrastructure networks have been provided in these areas only after urban development has taken root, and thus designs and capacity considerations must adapt to emerging patterns and progressive densification. Much must be learnt, since the Egyptian engineering profession is trained to and oriented towards providing infrastructure for mega-projects on open greenfield sites where development is one-off and design capacities mainly involve mathematical calculations. This is the antithesis of suburban and peri-urban development in Egypt, where perhaps three-quarters of new urban housing units are being created.



# CONSTRUCTION INDUSTRY AND BUILDING MATERIALS

Building materials and the construction industry are obviously crucial components of any housing sector. This chapter investigates the state of these components in Egypt and assesses whether they represent constraints to affordable housing production and whether improvements could be made. In particular, focus will be put on the basic building materials used in housing construction and the main actors in housing construction.

## 11.1 THE CONSTRUCTION SECTOR IN A NUTSHELL

Egypt has a well-developed construction industry, which represents about 4.6 per cent of national Gross Domestic Product<sup>150</sup> and generates about 2.7 million job opportunities (some 11.4 per cent of the country's labour force)<sup>151</sup>. The country produces almost all of the basic building materials used in housing construction and even has export capacities. The building materials industry is, except for fired-brick, quite modern and capital-intensive. Overall there are currently some 2200 firms producing building materials in Egypt, with total investment of USD 7.8 billion.<sup>152</sup>

Housing construction is almost exclusively carried out by Egyptian contractors and Egyptian expertise and labour. There are hundreds of small and medium-sized licensed contractors, and the activities of foreign construction firms in Egypt are mainly limited to large and sophisticated construction projects, usually in joint venture arrangements. There are also an unknown but large number of informal builders and others self-employed in building trades, none of which are licensed.



**Figure 11.1**  
Cooperative housing blocks under construction, Sixth of October, 2010. Photo by D. Sims

The construction and building materials industries in Egypt have developed consistently since the 1950s, registering an impressive increase in building materials production and in the production of housing. Housing construction has grown out of a well-established traditional base, in terms of skills, use of local materials, and aesthetics, although new materials and styles were introduced with internationalisation and globalisation waves. In addition to housing, the Egyptian construction industry also has significant capacities to carry out institutional, commercial, and industrial projects. In particular, it has a growing market in the important tourism industry. In the last decade or large, integrated real estate projects funded mainly with Arab capital, most of which are aimed at the high-end residential and leisure property markets, have become extremely common. Costs of basic materials as well as costs of construction have been rising significantly since the beginning of the 21st century.

150 Ministry of Planning, Macroeconomic indicators of the Egyptian Economy: Gross domestic product (GDP) 1982/1983 – 2013/2014 (XLS), April 2015

151 As of 2013. CAPMAS, Statistical Yearbook 2014, September 2014, p. 80

152 General Authority for Investment & Free Zones (GAFI), Egypt for a Brighter Future: Investment and Sector Snapshots, December 2013, p. 56

## 11.2 INSTITUTIONAL AND REGULATORY FRAMEWORKS GOVERNING THE CONSTRUCTION SECTOR

The production of building materials and their performance standards are regulated by licenses issued to manufacturing firms by the Industrial Development Authority (IDA) affiliated with the Ministry of Trade and Industry (MTI), as well as by national standards issued by the Egyptian Organization for Standardization and Quality (EOS). It is understood that this licensing covers all major producers of building materials but that small scale informal producers (especially for clay bricks) are not covered.

Egypt has a well-developed building permit regime, based on the recently enacted Building Law 119/2008 and its executive regulations, and is frequently updated. Since the promulgation of the Building Law, this building permit regime, which is quite bureaucratic, is applied in all urban and rural areas. In each local administration unit (city councils, urban districts, and marakaz) an Engineering Department is responsible for reviewing and approving all building permit requests. In new towns, the Projects Department within each New Town Development Agency plays a similar role.

The building permit is valid for one year and can be renewed for another year upon payment of a fee. Before applying for the building permit, the landowner (or his/her proxy) has to apply to obtain the site validity certificate, deciding on the site suitability from the planning perspective and detailing the development conditions. The certificate shall be issued within one week of submitting the application. Article 19 of the Building Law sets a ceiling of EGP 200 (subject to an annual increase of 3 per cent) for the fee collected to provide the site validity certificate. The landowner (or his/her proxy) has also to contract an architectural or civil engineer registered with the Egyptian Engineers Association to prepare the license file and apply for the building permit. The license file must include the following: (1) an application, (2) title deeds of the land on which the construction is to take place, (3) a copy of the owner's national ID, (4) an official power of attorney from the owner (or his/her proxy) to the engineer applying for the building permit, (5) the construction cost form, (6) a certificate on validity of works for licensing, along with a copy of the site validity certificate, (7) three copies of the engineering drawings approved by the engineer, (8) where applicable, an insurance policy accompanied with structural drawings approved by the Office of Egyptian Association for Civil Liability Insurance against Construction Hazards, the study of soil and the structural calculation notes. The

commissioned engineer shall present the license file including all the required documents and drawings, together with a receipt attesting the payment of fees. The licence fees have a cap of EGP 1000 (subject to an annual increase of 3 per cent). A security of 0.2 per cent of the construction cost is also imposed to cover any potential incurred expenses (for the demolition or correction of violations, the removal of road obstructions and construction waste, the repair of damaged utilities or roads, etc.). As for the insurance premium, article 46 of the Building Law stipulates that it shall not exceed 0.2 per cent of the construction cost. The Building Law also establishes a 30-day statutory time limit for issuing building permits. However, this time limit can be extended in case the Engineering Department considers the file incomplete and notifies the applicant thereof.

The new reforms have reduced the cost and duration of issuing permits. It is difficult for owner-builders, who play an important role in housing supply in urban Egypt as explained in Chapter 4, to comply with all of the provisions of this process. This is particularly true of owner-builders of modest means. And due to two of the stipulations of the process – proof of land title and compliance with building and land development regulations– informal housing construction is de facto illegal.

A consistent regulatory framework for real estate developers is still lacking in Egypt. The Egyptian Financial Supervisory Authority (EFSA) includes in its strategy cooperating with the Ministry of Housing to establish a law on real estate development.<sup>153</sup> Yet, there is a host of other laws, decrees and decisions regulating building activities, building contractors, and engineering/architectural professions.



**Figure 11.2**  
Public housing blocks under construction, Al Tarif, Luxor Governorate, April 2015. Photo by D. Sims

153 Egyptian Financial Supervisory Authority (EFSA), 2015, [http://www.efsa.gov.eg/content/efsa\\_en/efsa\\_pages\\_en/strategy\\_en.htm](http://www.efsa.gov.eg/content/efsa_en/efsa_pages_en/strategy_en.htm)

### 11.3 CONSTRUCTION INDUSTRY ACTORS

There are an estimated 15,000 registered construction firms in the country, most of which are small to medium sized and concentrate on smaller housing projects or act as sub-contractors in large projects. Only few dozens of construction firms offer sophisticated services in all aspects of construction, and their clients tend to be private developers or large institutions, including government agencies. Construction firms are mainly general building contractors, although there are also firms that specialize in particular services such as concrete, infrastructure, foundations, etc. In addition, there are an unknown number of informal builders who provide services to the country's huge housing owner-builder sector. All construction contractors must be

registered with the Egyptian Federation for Construction and Building Contractors. According to the executive regulations of Law 104/1992 establishing the Egyptian Federation for Construction and Building Contractors, there are five divisions including 12 specialisations of contractors registered by the Federation. Specialisations include buildings, roads, electromechanical works, etc. Each contractor is assigned a grade in its specialisation (see Table 11.1) based on a number of set criteria (paid capital, turnover, experience, staff, etc.). Some contracting companies can be listed under more than one specialisation. In addition to construction firms, the industry is supported by a considerable number of engineering and architectural firms as well as firms that offer construction management services.

Table 11.1: Divisions, Specialisations and Grades of Contractors registered with the Egyptian Federation for Construction and Building Contractors

Grades		I	II	III	IV	V	VI	VII
Divisions	Specialisations							
First	Buildings	x	x	x	x	x	x	x
	Foundations	x	x	x	x	x	x	
	Metal Structures	x	x	x	x	x	x	
	Complementary Works	x	x	x	x	x		
Second	Roads, bridges, railways and airports	x	x	x	x	x	x	x
	Tunnels	x	x	x	x			
Third	Water and wastewater networks and plants, as well as gas and fuel networks	x	x	x	x	x	x	x
Fourth	Public works and power stations	x	x	x	x	x	x	x
	Marine and fluvial works and dredging	x	x	x	x	x	x	
	Land development	x	x	x	x	x	x	x
	Wells	x	x	x	x	x	x	
Fifth	Electromechanical and electronic works	x	x	x	x	x	x	

There are a number of active associations and unions in Egypt for professionals and specialised firms associated with the construction industry. These include:

- Egyptian Engineers Association (EEA, established 1946)
- Society of Egyptian Architects (SEA, founded 1917)
- Egyptian Society of Engineers (ESE, established 1920)
- Egyptian Society of Urban Planners (founded 1992)
- Management Engineering Society (MES, established 1970)
- Export Council for Building Materials (established 2008)
- Chamber of Real Estate Development Industry (established 2015)

- Export Council for Real Estate Investment Industry (established 2010)
- Egyptian Association for Real Estate Appraisers (EAREA, founded 2005)

### 11.4 BUILDING MATERIALS: TRADITIONAL AND INDUSTRIALIZED PRODUCTION AND COSTS

Traditional building materials in Egypt, used up to the twentieth century, were fired-brick, lime, sand, stone (in some areas) for masonry walls, and wood beams and tile for roofing. Mud-brick was used for walls in rural areas. In Upper Egypt, mud-brick vaults and domes were also used for roofing. Portland cement concrete (as well as its reinforced variation) was introduced in

the early twentieth century<sup>154</sup>, and has since become the predominant building material, especially in urban areas.

Today, in both rural and urban areas, and in both formal and informal construction, there is a very broad dependence on cement, fired-brick, and steel reinforcing bar (and, of course, on sand, aggregate, lime, ceramics, glass, and gypsum). The production of these three main materials is described in the following paragraphs. It should be noted that energy consumption in the production of all three of these materials is high. It should also be noted that the use of mud brick has almost disappeared in Egypt, and even the use of load bearing masonry walls has given away almost totally to reinforced concrete frame construction.

### Cement

Egypt is currently more than self-sufficient in Ordinary Portland Cement production, and over the last decade, its production capacity has increased greatly to keep up with rising demand. For example, over the 2007-2014 period, cement production increased from 38.4 million tonnes<sup>155</sup> to an estimated 54.8 million tonnes,<sup>156</sup> representing an annual increase of 4.5 per cent, due to the construction of new plants and the expansion of existing ones.

Yet, over the same period, cement exports fell dramatically from 6.6 million tonnes in 2007 to 503,201 tonnes in 2014,<sup>157</sup> a decrease of 92 per cent. This could be mainly due to three reasons: the successive export bans on cement during 2008-2010, the frenetic increase in informal housing construction since the January 2011 uprising, and the recent and ongoing energy crisis. The following table shows the changes in import and export values over the period from 2007 to 2013.



**Figure 11.3**  
Formal private housing under construction, New Cairo, 2009.  
Photo by D. Sims.

Table 11.2: Egypt's exports and imports of cement (2007-2013), in EGP millions

	2007	2008	2009	2010	2011	2012	2013
Exports*	2138	923	436	314	499	606	484
Imports**	5	165	892	1,322	335	215	829

Sources: \* *Export Council for Building Materials 2015*

\*\* *CAPMAS Statistical Yearbook 2014, p. 476-477*

Ordinary Portland Cement (OPC) is produced by twenty-two large capacity firms, the first of which was built in 1927. The government privatized five of its six cement plants from 1995 to 2000. During this period, eight companies were established in the private sector. In late 2007, the government granted licenses of six new cement plants, increasing the number of cement producers from 15<sup>158</sup> to 21. An additional plant was built recently by the armed forces (El-Arish Cement) in an apparent attempt to fight the monopoly imposed by

foreign cement facilities.

White cement is produced by four companies (Royal El-Minya Cement Co., CEMEX, Sinai White Cement Co., and Helwan Cement Co.). A number of cement firms also produce ready-to-use concrete. Also, some Egyptian firms produce cement and steel elements for the construction industry, mainly in the form of pre-cast and pre-stressed beams and fixtures.

154 The Tourah Portland Cement Company is Egypt's first cement company which was established in 1927 by Switzerland's Holderbank Cement and other investors.

155 U.S. Geological Survey (USGS), Mineral Commodity Summaries, January 2009, p. 41

156 Naeem Holding, Egypt Cement Sector, Stories untold!, September 2013, p. 1

157 Export Council for Building Materials, Total Cement Exports (2007-2014), 2015

158 Including one plant (SPEGCO) established in 1980 in Port Said Free Zone



**Figure 11.4**  
Typical informal housing construction, Waraq, Giza, March 2011.  
Photo: D. Sims

Prices of Ordinary Portland Cement have been increasing faster than general internal inflation in Egypt. In the fourth quarter of 2011, the average factory-gate price for a tonne of Ordinary Portland Cement was EGP 420, and this had risen to EGP 670 in the fourth quarter of 2014, an increase of 60 per cent in just three years. This is cause for alarm, since Ordinary Portland Cement is such an important component of Egyptian housing production, especially for low-cost housing.

The problems of the Egyptian cement industry began to come to a peak in July 2014, following rising energy costs alongside interruptions of natural gas supplies which caused cement production at several companies to grind to a halt. The price of an alternative used by some cement firms, fuel oil, had more than doubled from USD 180 to USD 375 a tonne<sup>159</sup> in 2012 but at least it was available, more than could be said for gas.

The cement industry had grown used to a supply of cheap gas – USD 2 per million British thermal units (mBtu) at first, or about one fourth of the price it had to pay by 2014. This is now forecast to rise again over the next few years, even if it is available for the industry. The figure of USD 8/mBtu is already higher than the USD 5.53/mBtu applicable in the US market but better than the USD 15.66/mBtu quoted by the Eurostat for the “European Union”. Cheap is a relative term.

Squeezed by the on-going fuel shortage and rising energy prices, cement factories are estimated to operate 10% to 20% below capacity.<sup>160</sup> Cement companies are currently looking to alternative fuel sources such as coal and better waste management systems in order to stay afloat, but it will take some time for new technology

159 Prime Minister decision no. 1273 of 2012

160 Capacity is 60 million tonne

161 Oxford Business Group, The Report: Egypt 2014, p. 200

to be implemented to diversify their energy sources. The decision to allow cement producers to use coal as an alternative to the cheap, if now unreliable, gas was announced in June 2014. Since then (and maybe even before), the conversion to coal-fired lines has been in full swing – at about EGP 135m (USD 19.2m) a line – and the cost of energy produced this way is forecast to be around USD 5.50/mBtu, or perhaps USD 6/mBtu if a carbon tax is imposed.<sup>161</sup>



**Figure 11.5**  
Informal residential tower under construction, Boulaq al-Dakrou, 2009. Photo by D. Sims

Yet, the energy change will not be total, with the government, the producers and the Ministry of Environment all suggesting an energy mix. The proportion of each kind of energy to that mix has not yet been decided, but it is estimated that it would probably be around 55-60% coal, 25% gas and the remaining 15-20% using direct waste from agriculture.

### Fired-brick

Today in Egypt, fired-brick is extensively used in housing construction at all levels, from modest self-built house extensions to infill walls in sophisticated reinforced concrete frame construction. The most popular type of fired brick is the clay hollow brick (manufactured by the soft mud method), which weighs little, is relatively cheap, and maintains fair insulating properties. Production of this type of brick is both a low volume and a labour-intensive industry. Few factories use the extruded method, as it requires relatively capital-intensive equipment and large-volume production. As of 2014, there were reported to be 2,000 red brick factories in Egypt with a production capacity of 50 million bricks daily. Around 1,000 of these red brick factories and workshops are located in south-eastern Cairo and southern Giza; employing an estimated 200,000 brick workers.



**Figure 11.6**  
Example of red brick infill in informal construction. Note the small light well provided. Al Bairat, Luxor Governorate, 2015. Photo by D. Sims

Like cement factories, red brick factories are amongst Egypt's most highly polluting industries.<sup>162</sup> Traditionally, Egyptian factories create bricks by burning a heavy, low quality fuel oil. Unfortunately, burning this fuel creates both heavy smog and high levels of greenhouse gas emissions. The Canadian International Development Agency, through a project entitled the Climate Change Initiative, agreed to fund part of the internal infrastructure needed for a pilot project to convert 50 brick factories to natural gas. The Egyptian Ministry of Petroleum and a local gas distribution company funded the remainder of the infrastructure costs. The pilot project, which completed in 2006, showed promising results. Converting to natural gas not only offered enticing environmental benefits for Egypt, but importantly, also translated into economic gains for the brick industry. The initiative aimed ultimately to convert over 200 brick factories to natural gas.

Times change. Hundreds of factories are currently threatened to close as a result of the successive increases in heavy fuel oil and natural gas prices over the last three years. Brick prices have increased accordingly from EGP 260 per 1000 bricks in the fourth quarter of 2011 to EGP 470 per 1000 bricks in the fourth quarter of 2014 (excluding transport cost in both cases); an increase of 81 per cent in three years only.

Brick factories are also amongst the most dangerous workplaces nationwide. Approximately half-million workers may be seasonally employed in this industry, and they are frequently subjected to life-threatening injuries. Several thousand children are reportedly employed in these factories as assistants; they are typically overworked and paid less than their adult co-workers, something that definitely contravenes the Convention on the Rights of the Child, to which Egypt is a signatory. The government does not inspect all these brick factories; as many are not registered, and operate within the informal sector.



**Figure 11.7**  
Rare example of mud brick residential construction, Al Bairat, Luxor Governorate, 1982. Photo D. Sims

### Steel reinforcing bar

As is the case of cement, the production of steel reinforcing bar in Egypt is capital and energy intensive and is carried out in a limited number of factories. The Egyptian steel sector relies heavily on rebar, which account for around four fifths of all steel sales in Egypt.<sup>163</sup>

By the early 1970s, Egypt's construction industry was highly dependent on imported steel reinforcing bars which, despite some domestic production by the integrated steel plant at Helwan<sup>164</sup> and other mini-mills. The discovery of natural gas in the 1970s created a new opportunity for Egypt to meet its domestic requirements for reinforcing bars by constructing a steel mill based, instead of scrap, on directly reduced iron (DRI or sponge iron) which would be produced using natural gas. Eventually, the Alexandria National (Iron and) Steel Company - El Dekheila's was established in 1982,

<sup>162</sup> According to a World Bank Energy-Environment review conducted in 2003, Egyptian industry accounted for over twenty per cent of the damage costs resulting from air pollution in the country, a much greater proportion than what is caused by transportation or by the burning of biomass.

<sup>163</sup> Tarek H. Selim, "Monopoly: The Case of Egyptian Steel", *Journal of Business Case Studies*, Third Quarter 2006, Volume 2, Number 3, p. 86

<sup>164</sup> The Egyptian Company for Iron and Steel was established in 1954. With technology provided by the German "Demag", its plant in Helwan became operational in 1958

as a joint venture between a number of public sector organisations and a Japanese consortium.<sup>165</sup> The plant started operation in 1986 and since then the technical performance of the plant has been truly outstanding.

Currently, Ezz Steel holds a 55% stake in the Company after it went through partial and gradual privatisation since the late 1990s. The Company was renamed Ezz Al-Dekheila Steel Company in 2006.

Table 11.3: Rebar production over the period (2002/2003-2011/2012)

02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12
<b>5848</b>	<b>5368</b>	<b>6105</b>	<b>5936</b>	<b>5688</b>	<b>4400</b>	<b>6491</b>	<b>4500</b>	<b>3044</b>	<b>3105</b>

Source: CAPMAS Statistical Yearbook 2014, p. 172-173

Ezz Steel is reportedly the market leader in Egypt for long steel products, which consist principally of rebar and wire rods used for strengthening concrete in building and other construction applications. Ezz Steel is said to have a production capacity of about 3 million tons of long products. As of 2000, Ezz Steel controlled a share of about 61 per cent of the rebar market.<sup>166</sup> This market share might have decreased with licenses awarded to build new plants since 2008.

Due to the growing demand for steel products, the Industrial Development Authority (IDA) awarded in 2008 four producers – Ezz Steel, Suez Steel Company, Taybah steel and Egyptian Sponge Iron & Steel (Beshay) – licenses to expand their current operations. Moreover, the IDA has also awarded local, regional

and international firms (e.g. ArcelorMittal, Kharafi Group, Al-Tawairky Group, National Port Said Steel, IIC Steel<sup>167</sup>, etc.) licenses to establish new plants in Egypt. Earlier, in February 2007, the Ministry of Trade and Industry imposed an export duty on steel products which amounted to EGP 160 per tonne.<sup>168</sup>

The increase in demand for rebar and the corresponding hikes in its prices forced the Ministry of Trade and Industry open the door to rebar imports in September 2008. Consequently, the steel rebar prices dropped sharply. The price of rebar of Ukraine origin reached USD 630 per tonne. The following table shows the jump in Egypt's imports of long products (mainly rebar) between 2008 and 2009.

Table 11.4: Egypt's exports and imports of long products (2008-2013), in thousand tonnes

	2008	2009	2010	2011	2012	2013
<b>Exports</b>				119	61	102
<b>Imports</b>	330	3089	1015	584	784	446

Source: Worldsteel's Steel Statistical Yearbook 2014

Conversely, in October 2014, the Ministry of Trade and Industry imposed temporary tariffs to protect domestic steel rebar manufacturers from foreign imports (mainly from Turkey, China and Ukraine). The tariff of 7.3 per cent of the value of cost, insurance and freight per tonne (with a minimum of EGP 290 per tonne) was to last for a 200 days,<sup>169</sup> but was later extended.

As can be seen from Table 11.3 above, the rebar production dropped in 2011 and 2012, possibly because of a slowdown in construction following the Egyptian Revolution. Yet, the decrease was not dramatic - in slow times for the official industry, rebar and cement demand had been maintained by illegal building activity, and this was the case after the ouster of Mubarak in February 2011, when informal building virtually exploded.

165 In 1976, the idea of creating a steel plant at El Dekheila using the gas-based DRI process was proposed, in an IFC report, to the Government of Egypt. This report suggested the formation of a joint venture company with an expatriate operating steel company (OSC) for the construction of the proposed steelmaking plant

166 Ahmed Farouk Ghoneim, "Competition Law and Competition Policy: What Does Egypt Really Need," The Economic Research Forum Working Paper Series, Paper no. 0239, 2002

167 Later, National Port Said Steel, IIC Steel, and Egyptian Steel for Building Materials Trading joined forces under the name of Egyptian Steel, and this has become the country's second-largest steel manufacturer.

168 Decision of the Minister of Trade and Industry no. 142 of 2007, issued on 27 February 2007

169 Decision of the Minister of Trade and Industry no. 765 of 2014, issued on 14 October 2014



**Figure 11.8**  
Use of soft limestone block as a cheaper alternative to red brick for wall infill. Al Bairat, Luxor Governorate, 2015.  
Photo by D. Sims.

As of May 2014, the steel prices were about EGP 4850 (USD 689) a tonne, after some mild rises due to an increment in the exchange rate with the dollar<sup>170</sup> and an increase in the international price of steel billet. Meanwhile, slightly cheaper Turkish imports were priced at around EGP 4200 (USD 596). However, the price of reinforcement steel bars increased again in September 2014 due to electricity shortages and the gradual removal of subsidies on energy. The prices rose to an average for the domestic product to EGP 5315.50 (USD 755) per tonne, compared with EGP 4900 (USD 696) a tonne for imported steel.<sup>171</sup> However, both these prices are still much higher than the world's lowest prices.<sup>172</sup>

The high level of input costs, along with currency depreciation and the slower growth of recent years, have prompted Egyptian steelmakers to request that the government impose anti-dumping measures on rebar and wire rod imports from Ukraine, as well as China and Turkey. Most recently, in April 2015, the Ministry of Trade and Industry has imposed an eight per cent import tariff on rebar for the next three years<sup>173</sup>, extending thus tariffs introduced in 2014, in an attempt to protect domestic industry.

## 11.5 CONSTRUCTION SKILLS AND CAPACITY NEEDS ASSESSMENT

Construction skills in the formal construction industry are said to be good and evolving due to the relative sophistication of the industry. Basic skills development takes place largely within firms, mainly through on-the-job training. One of the largest construction firms has even a training institute dedicated to building technology and construction management (See Box 11.1). There are some vocational schools providing formal education in the construction sector (one is located in Dar el-Salam, Cairo). Training and capacity building services are also offered by the various building trades, professional associations and government organisations (e.g. the Training Centre for Construction and Building Crafts, under the Central Agency for Reconstruction, al gehaz al markazi l'el taamir).

### **Box 11.1: The Management and Technology Training Institute (MTTI) of Arab Contractors**

*The idea of establishing the Management and Technology Training Institute MTTI started in 1979 when the Urwick Management Centre of UK was assigned to carry out a need analysis for management development in the Arab Contractors. Based on their findings, the MTTI was created. The MTTI continues to benefit from the technical assistance extended by UN agencies (UNIDO, UNDP and ILO) in order to enhance the training provided by the MTTI, especially in the areas of marketing, corporate management, corporate planning, information systems, electromechanical works, and vocational training. The activities of the MTTI extend beyond Egypt to serve the construction industry in Africa and Middle East as well.*

*Source: Arab Contractors Website 2015.*

170 The value of the Egyptian pound is crucial to the industry because around 95% of steel costs, excluding energy, are from imported materials.

171 Oxford Business Group, Op. Cit., p. 200

172 On September 22, 2014 China booked out a shipment of rebar waiting to load in Tangshan at USD 426.50 a tonne (or EGP 3050). Since China is vastly overproducing and is frequently accused of dumping, a simple comparison may not be fair.

173 Decision of the Minister of Trade and Industry no. 287 of 2015, issued on 18 April 2015



Meanwhile, it is understood that the traditional system of apprenticeship still operates among the small and informal builder sub-sector.

Although the skill level within Egypt's formal construction sector is adequate, the recent appearance of large, trans-national real estate projects has created demand for highly-specialized construction expertise and management, which cannot be easily met from the domestic labour market. However, these constraints are only felt in luxury housing schemes and do not affect affordable housing markets.

## 11.6 ENERGY COSTS AND EFFICIENCY IN HOUSING CONSTRUCTION

As has been described above, the main building materials used in construction in Egypt, and in particular those used for basic housing production (cement, reinforcing bar, and brick), all have high energy inputs. The costs of these materials have also been rising in the last decade at rates that are above that of general price inflation. In addition, construction processes themselves can be energy consuming, and building design in Egypt has, until now, put little value on thermal insulation, orientation, and other energy-efficient measures. The building sector in Egypt is the third biggest sector that consumes energy after industry and transport sectors. This means that it accounts for a substantial portion of the country's total energy bill, and that its share might be even increasing. Thus it could be said that energy-efficiency and sustainability in the Egyptian construction industry is a crucial issue, and that it is worthwhile to look at Egypt's energy profile and to review what efforts are being launched to make the housing sector more "sustainable."

Egypt's total primary energy consumption was 1.7 million barrels per day of oil equivalent in 2013, according to the British Petroleum 2014 Statistical Review of World Energy. Natural gas and oil are the primary fuels used to meet Egypt's energy needs, accounting for 94% of the country's total energy consumption in 2013. The government continues to fund fossil-fuel subsidies. According to the Middle East Economic Survey, Egypt spent USD 26 billion on fossil-fuel subsidies in 2012, ranking as the eighth-highest spender of fossil-fuel subsidies in the world. Fuel subsidies, which account for 20 to 25% per cent of government spending, have contributed to rising energy demand, a high budget deficit, and the inability of the Egyptian General Petroleum Corporation, the country's national oil company, to pay off its debt to foreign operators.

Egypt is the largest non-OPEC oil producer in Africa and in the same time is the largest consumer on the

continent. One of Egypt's recent challenges is to satisfy increasing oil demand amid falling production. Total oil consumption grew by an annual average of 3% over the past 10 years, averaging almost 770,000 barrels per day in 2013. Egypt's oil consumption has outpaced production since 2010. Although Egypt has the largest oil refinery capacity in Africa, it operates well below capacity. The country's refinery output declined by 28 per cent from 2009 to 2013, despite growing domestic oil consumption. As a result, Egypt must import petroleum products to make up for the shortfall.

In Africa, Egypt is also the largest natural gas consumer while being the second-largest dry natural gas producer, behind Algeria. However, Egypt's dry natural gas production has dropped by an annual average of 3 per cent from 2009 to 2013. Substantial gas discoveries in the deep offshore Mediterranean Sea and in other areas in Egypt remain undeveloped. Egypt's natural gas exports have declined since 2009 because of increasing consumption and declining production. Egypt's government has been diverting natural gas supplies away from exports to the local market. Egypt produced almost 2.0 trillion cubic feet (Tcf) of dry natural gas in 2013, of which almost 1.9 Tcf was domestically consumed. Much of the natural gas consumed in Egypt is used to fuel electric power plants. The government used also to encourage households, businesses, and the industrial sector to consider natural gas as a substitute for petroleum products and coal. The share of natural gas consumed in the transportation sector also increased since the development of compressed natural gas infrastructure and vehicles.

It should be pointed out that Egypt has limited use of renewable energy resources. For example, the majority of Egyptian electricity is generated by fossil fuel plants. As indicated previously in Chapter 10, Egyptian overall power generation capacity was 30,803 megawatts. Of that capacity, only 11 per cent came from hydroelectric plants, wind farms and photovoltaic systems. The government intends to expand wind capacity over the coming years as part of a plan to increase wind generation to 7.2 gigawatts by 2020, but the prospects of any significant shift away from almost total reliance on hydrocarbons are questionable. And it is almost certain that the costs of energy derived from hydrocarbons will continue to increase.

Is Egypt beginning to face the challenge of energy efficiency and sustainability in the building industry? It appears that there are a number of recent initiatives that at least begin to tackle the problem. The following are worth mentioning:

- The MED-ENEC Project on Energy Efficiency in the Construction Sector, a regional project funded by the European Union, aims to increase the use of energy efficiency measures and renewable energy systems in buildings in southern and eastern Mediterranean countries, including Egypt. Apart from policy advice and business development, special emphasis is placed on the support of large building programmes as multipliers of climate friendly and cost-saving technologies and measures. During the first phase (2006 – 2009), the MED-ENEC Project supported, as a pilot project, the refurbishment, including solar cooling, of the South Sinai Governorate Building. The second phase of the MED-ENEC project started its activities in January 2010.
- The Egyptian-German Committee on Renewable Energy, Energy Efficiency and Environmental Protection (JCEE) offers a platform for energy policy discussion, for developing initiatives for investment as well as institutional projects, awareness and capacity building activities and establishing contacts and exchange between Germany and Egypt. The Committee is supported by a bilateral technical cooperation project. This project, spanning the period 2008 to 2015, is financed by the Ministry of Electricity and Energy of Egypt and the Federal Ministry of Economic Cooperation and Development and provides resources for the activities and operations of the Committee. In May 2009, MED-ENEC and JCEE jointly organized a national consultation on policies for energy efficiency in buildings, with the focus on energy efficiency codes.
- Egypt is one of the early adopters of Building Energy Efficiency Codes among developing countries. These were introduced in Egypt between 2005 and 2009. They impose mandatory energy performance requirements for residential, commercial, and public buildings in three different code documents. On the implementation side, the MHUUC tries to push the construction sector toward more sustainable practices by requiring that developers abide by minimum EE standards for large-scale residential developments, especially in new cities.
- In 2009, the “Egyptian Green Building Council” (EGBC) was established under MHUUC. One of the objectives for establishing this council is to encourage building investors to adopt energy efficient building code as well as other sections of existing codes that satisfy both energy efficiency and environmental conservation. Also, by focusing on new construction, the EGBC can use its leverage as a professional organisation to develop tools, programs and demonstration projects to help building owners and operators be environmentally responsible and

use resources efficiently. Among the demonstration projects is the first Productive, Low-cost and Environmental friendly Village in the Fayoum.

Energy efficiency in the housing sector has also been given emphasis in the “Strategic Framework for Economic and Social Development Plans to Year 2022” developed by the Ministry of Planning in 2012.

### 11.7 ISSUES RELATING TO BUILDING MATERIALS AND CONSTRUCTION AND AFFORDABLE HOUSING

Costs of basic materials are high and increasing at rates that are very much higher than increases in wages and incomes and even higher than general inflation. This is making the production of all types of housing units more and more expensive in Egypt, further complicating the already difficult housing affordability equation, particularly for lower-income families (as described in Chapter 6). Rising building materials costs hit the individual builder (owner-builder) particularly hard, especially those who must struggle over years and even decades to amass the necessary finances.

Thus it would seem that efforts at developing alternative materials and at minimizing the use of expensive, energy-intensive materials in construction would be a welcome initiative.

The construction sector itself is very bureaucratic and regulated. This control/regulation from the government add to overall costs of construction which makes building informally much more attractive for the individual housing producers. This is a crucial issue since a large portion of housing, particularly affordable housing, is produced by individuals. In turn, this suggests that there should be very straightforward and simplified regulations and standards for small energy footprint buildings.

Another issue relates to enforcement of energy-efficiency codes. As an example, for decades Egypt’s successive building codes have stipulated that external walls for housing be of a minimum 25 centimetres width, a straightforward means of ensuring at least some building insulation. However, today it is almost impossible to find buildings that conform to this stipulation, and half-brick (12 centimetre) widths are the norm for both formal private sector and public sector housing. If such a simple measure cannot not enforced, how will all the efforts to create energy-efficient codes (as described above) be translated into reality?

# CAPACITY BUILDING AND CROSS-CUTTING ISSUES FOR THE HOUSING SECTOR

These topics help round out the Housing Profile to make it as comprehensive as possible. Some of these topics have already been addressed in previous chapters and are only recapped here.

## 12.1 CAPACITY BUILDING

### **Capacities for understanding and managing the housing sector**

There is a need for a much better understanding of Egypt's housing sector, and hopefully this Housing Profile will help to show some of the ways that the sector should be analysed. Through simple training and orientation programs, government staff that steer and monitor the sector could be exposed to these means of analysis and to M&E techniques. Targeted staff would include higher-level officials within MHUUC (especially the Housing and Construction Sector and its Housing Studies Department), GOPP, NUCA, and directorates of housing in the major governorates. One catalyst would be the setting up of M&E operations within the new Social Housing Fund, as is planned.

Staff of GOPP in particular could benefit from basic training on how to collect information and monitor the housing sector. GOPP has had for years a National Urban Observatory and a housing indicators program, but both could benefit from a complete restructuring.

The Housing and Building Research Center (HBRC, an affiliate of MHUUC) has a large professional staff at the Architecture and Housing Institute (one of nine institutes at HBRC) and this staff would be another target for such orientation and training. The Architecture and Housing Institute has already commissioned a good review of the

Ibni Beitaq program (see Chapter 4), and more such efforts should be encouraged.

### **Capacity Needs in the Construction Industry**

Construction skills in the formal construction industry are said to be good and evolving due to the relative sophistication of the industry. Basic skills development takes place largely within firms, mainly through on-the-job training. Training and capacity building services are also offered by various building trades and professional associations, as well as through government vocational institutes and vocational secondary schools. It is understood that the traditional system of apprenticeship still operates in the small and informal builder sub-sector.

Thus there is little needed in the way of capacity building in the construction industry in Egypt, at least as it concerns the construction of modest and affordable housing. This having been said, there is scope for simple training and production of pamphlets on how to reduce costs and guarantee building integrity for small contractors and builders active in the informal housing sector.

### **Capacity needs in infrastructure planning and implementation**

As pointed out in Chapter 10, the largest challenge relating to water and wastewater networks as well as urban roads is provision and upgrading of these services in informal urban areas, particularly in the fast growing peri-urban areas. Engineers and staff in the relevant authorities need training to be able to be innovative and flexible in tackling such provision and its operations and maintenance.

## 12.2 CROSS-CUTTING ISSUES

### Energy and Sustainability in Housing

The energy situation in Egypt is reaching a crisis point, with both imports and prices of fossil fuels increasing rapidly, and with the State having to devote huge sums to subsidize the consumption of vehicle fuels as well as electricity. Egypt has made significant strides to introduce renewable energy sources (especially wind turbines and, more recently, solar panels) but the overall energy equation still relies heavily on sources that produce greenhouse gases. Thus it is important to ask as a cross-cutting issue: Is Egypt beginning to face the challenge of energy efficiency and sustainability in the building industry? (See also Chapter 11 for a discussion of the energy equation as it relates to housing construction.)

It appears that there are a number of recent initiatives that at least begin to tackle the problem and raise awareness, among them activities of institutes of the HBRC and of the Egypt Green Building Council (established in 2009). Regional and international agencies have also begun to support environmentally-friendly housing and community development in Egypt. Efforts have so far concentrated on developing green building codes and setting up demonstration projects. A major problem is the lack of enforcement of building codes in Egypt. And so far there are few efforts to develop alternative low-energy materials.

However, these initiatives will only address the energy equation as it relates to housing design and production. Another problem with energy relates to the location of housing and the dominant government promotion of low-density new towns in the desert. This means that energy consumption in transport and water conveyance to serve housing in these areas is great and will become even greater as more remote desert locations are developed for urban purposes. On the other hand, informal settlements around existing agglomerations and in peri-urban areas are much better located and are very compact. Thus ironically, the informal housing mode of production – although illegal and unplanned – scores high in terms of energy efficiency and sustainable urban development.

### Human rights and housing rights

Among both activists and NGOs, the human rights field in Egypt is large and quite active. And housing rights, as a dimension of human rights, has been given considerable attention. But as has been discussed in Chapter 3, emphasis has been mainly centred on resettlement and forced evictions. Civil society has not, by and large, approached equity and rights issues associated with government programs for new housing. The exception to this is the admirable work of Yahia Showkat at

the Egyptian Initiative for Personal Rights, which has published important reviews of former housing programs and also government budget allocations for housing subsidies. In particular, he has pointed out the geographical mismatch between government social housing provision and centres of population at the governorate level. (See Annex One for references.)

### Refugees

Egypt has been host to large numbers of economic and political refugees from Arab countries as well as from Sub-Saharan Africa for decades. And since the Arab Spring in 2011 it has had to accommodate large numbers of Syrian refugees. The numbers of these refugees are not known, but they put pressure on housing markets, especially in Greater Cairo and Alexandria. They tend to cluster in specific areas. For example, poorer refugees can be found in informal areas such as Ard El Liwa and Ezbet El Haggana, whereas more fortunate refugees can be found mainly in the new towns around Cairo.

Since the main cities of Egypt are very large, the overall impact on housing markets and rental prices has probably not been very great, although there is no data on this, and some anecdotal information shows that rents in some new towns have climbed due to the arrival of Syrian refugees.

### Gender

In Egypt women have equal rights as men in terms of holding and transferring property, and women ownership of housing is high. (However, as concerns inheritance, according to prevalent practices Muslim women only receive half the share as their brothers). For example, in the recently launched Social Housing Program (SHP), of approved applications to date women represent almost one third of the total.

It should be added that access to suitable housing is very important for a woman's status in the community, and a woman's security is intimately tied to making a home and rearing children.

### Youth

The government puts great emphasis in its development policies in meeting the needs of the country's very large number of youth, especially given that unemployment rates among the young (especially the educated) are extremely high, as pointed out in Chapter 1.

Most government subsidized housing programs reflect this policy, and youth and newly weds have been targeted for decades. For example, the new Social Housing Program the age of applicants must be between 21 and 45 years (recently raised to 50 years).

**HIV/AIDS**

HIV/AIDS is not very prevalent in Egypt and cannot be considered a weighty cross-cutting issue.<sup>174</sup> Much more important from health point of view is the extremely high prevalence of Hepatitis C (spread through contact with contaminated blood). Another is diabetes (mainly a life style issue).

174 According to UNICEF, in 2010 there were only 11,000 known cases of AIDS among a population of almost 80 million. Most transmission is sexual. [http://www.unicef.org/egypt/hiv\\_aids.html](http://www.unicef.org/egypt/hiv_aids.html)

# TOWARDS A NATIONAL HOUSING STRATEGY

The previous chapters of this Housing Profile have described the many facets of Egypt's housing sector and identified weaknesses and strengths of the government's explicit and implicit housing policies. Hopefully this Housing Profile will serve as a base for information and point of departure for deliberations leading to a comprehensive Egypt housing strategy that will incorporate opinions of all relevant stakeholders.

## 13.1 HOUSING POLICIES TODAY AND THE NEED FOR A STRATEGY

Egyptian families, including youth and newlyweds, are finding it increasingly hard to secure adequate housing. And this housing problem falls most alarmingly on the poor (households below the 30th percentile of household income distribution).

Housing policies in Egypt are preoccupied with the 'supply side,' that is in supporting the production of subsidized new units. Targeting deserving families is poor but improving. Yet there is currently a worrying trend in this supply side approach that increasingly focuses on the needs of the middle and even upper classes (above the 50th percentile of household income distribution.) And all government programs are based on the continued availability of costless remote desert land either in the new towns or in governorates. And the idea that new towns represent Egypt's urban future continues to dominate urban planning policy

There have been almost no successes in shifting housing support and subsidies to the 'demand side,' that is, to help the poor and modest income families have the financial power to own or rent modest units, whatever and wherever they choose. The new Social Housing Program (SHP) had previously noted to be doing this, but the reality is that, due to problems finding units that

would qualify for ownership, only units financed and/or built by the government on public land are accessible under the program. And although the SHP is to have a large and effective housing rental program for the poorest families, this component is facing many difficulties and may not materialize at the scale required.

Also, there have been almost no initiatives or market interventions that attempt to influence wider housing markets, such as efforts aimed at improving the functioning of housing rentals, mobilizing the dynamic of the informal sector, or reducing the very huge portion of the housing stock that is vacant. There are laws that affect the whole housing sector (such as the building code, the mortgage law, and the real estate tax law) but none of these have explicitly aimed to make housing more accessible or affordable to the poor or even the modest income household.

Finally, there are other large government-sponsored housing programs at the conception stage or already running in parallel to the SHP. Virtually all of these are supply-side approaches that are located only in the new towns. (Examples include Dar Misr, Beit al-'Aila, Arabtec, and cooperative housing). Also, all of these schemes are building sizable units (105 to 200 m<sup>2</sup>) that are definitely aimed at the middle classes and are also directly or indirectly subsidized. Can it be said that government housing policy in the current period aims more to satisfy middle class housing needs than those of the lower income households and the poor?

Looking at these disparate programs, laws, and interventions in the housing sector, it is clear that they lack cohesive purpose or coherence in their planning and programming. Thus there would seem to be a pressing need to begin to think strategically about housing and the proper role of government. Should government

continue to be a direct housing provider, or should it become more of an enabler? Should government limit its efforts and resources to stimulating the supply of housing for the poor, or should it continue to address what are mainly middle class needs? These and other questions need to be asked, and through them a process can be initiated towards developing a cohesive and inclusive housing policy for Egypt.

### 13.2 MAIN ISSUES SURROUNDING A HOUSING STRATEGY

A process leading to the development of a cohesive and inclusive housing strategy inevitably should start with a dialogue among specialists and other stakeholders in Egypt's housing sector. Here we list a number of strategy issues in order to stimulate discussion. Some of these issues relate to the whole housing sector and its performance, and others are restricted to government-supported and financed housing programs. As will be seen, some of the issues listed below are inter-connected. And, of course, this list is not exhaustive and more issues could and should be added

#### **Issue 1: Reducing vacancies in the housing stock**

The number of unoccupied and vacant units in Egypt's housing stock is enormous and represents a shocking economic waste in the form of 'dead capital.' Vacancies are found everywhere – in older urban areas, in informal areas, and especially in the new towns. How might measures be designed or strengthened to reduce this phenomenon?

#### **Issue 2: Improving rental markets**

More and more Egyptian families and newly-weds are resorting to housing rental markets. But there are flaws in the system, and many landlords hesitate to rent out vacant units. What measures could be adopted to improve rental systems that protect both the landlord and tenant? Is a new law needed?

#### **Issue 3: Avoiding unsuitable and remote locations for government housing**

All government-supported housing systems are located on public land, both in the new towns and in governorates. More and more these locations are remote and poorly located, and this means that poorer families find it very difficult to establish themselves and prosper, as recent research confirms.<sup>175</sup> The result is under-utilized and wasted public investment. In parallel with this, there is a significant increase in the housing units' costs in alternative lands. This issue is perhaps the most serious flaw in all government housing programs. What

might be done to tackle this issue?

#### **Issue 4: Avoiding subsidized housing for the middle classes**

There is a trend for government to support programs that produce housing for the 'middle classes,' that is, those who are definitely not poor. And in parallel the sizes of housing units in government programs are increasing.

Should the State be involved in producing and subsidizing such housing? After all, this is what the private sector is already producing.

#### **Issue 5: Supporting social inclusion and mixing of social classes in housing**

Most government-supported housing projects in Egypt currently aim at creating large monolithic superblocks (mugawarat) where all housing units are of the same design and size. There is very little 'mixity' in terms of trying to have a range of social classes living in the same neighborhoods. Also, land uses are very segregated. The same could be said of most private developer housing projects, although some try to offer a range of models and sizes.

Is this rather rigid approach acceptable in terms of social cohesion and in terms of creating an inclusive society? Should government try to promote more residential mixity? And if so, how?

#### **Issue 6: Targeting housing subsidies to those who deserve them**

Although the new Social Housing Program improves the targeting system to select deserving applicants, there are still many flaws. And this only relates to one aspect of housing. How, given Egyptian society, can subsidies implicit in housing policies be directed to those in need with a minimum of 'leakage'?

#### **Issue 7: Investigating the feasibility of sites and services**

Egyptians have shown a very strong desire to build their own housing. Can sites and services, aimed at harnessing this dynamic be made to work? Or should it be dropped from the vocabulary of affordable housing?

#### **Issue 8: Supporting 'Demand-side' support for poor families**

Currently government programs only address the 'supply side' of the housing equation. Are there not programs that could be designed that give support – including subsidies – for poor families to find both rental and

175 See Abouelmagd, et al, 2013 and 2014.

ownership housing wherever they choose?

For example, could systems be designed to give qualifying poor families rental subsidies or ‘rent vouchers’? How would the system work to ensure that only deserving families receive these subsidies? Can links be made to the Ministry of Solidarity and the new system of cash transfers to the very poor?

#### **Issue 9: Promoting micro-credit for housing**

Until now micro-finance for housing expansion and improvement has not been developed to any scale in Egypt, whereas it is becoming mainstream in many countries. How might this type of housing support be promoted in Egypt?

#### **Issue 10: Improving existing informal housing systems and preventing their further horizontal expansion**

Informal housing represents the majority of housing production in Egypt. All attempts in the past to prevent it offer alternatives have failed. So what should be government policies and actions? Could there be ways to improve, guide, and “formalize” informal development?

#### **Issue 11. Promoting efficient upgrading of informal urban areas**

So far urban upgrading has been limited to particular areas (such as unsafe areas) and is nowhere near the scale required to improve these areas, in which probably a majority of the housing stock is located. How could more upgrading be carried out and financed. How could upgrading become more mainstream? Is the establishment of a MURIS (The Ministry of State for Urban Renewal and Informal Settlements) a good first step?<sup>176</sup>

#### **Issue 12: Understanding and monitoring the housing sector**

This profile attempts to advance the understanding of Egypt’s housing sector, something long overdue. It has found that there are a number of information weaknesses and constraints: For example, there are no annual figures on housing unit starts or unit completions or their values whether for urban Egypt as a whole or for any geographical part (even the new towns). Likewise, there are no coherent statistics on housing units presently on the market, the number of new units purchased or rented per year, or the number and nature of vacant units. Also, there is practically no information or even case studies of

the huge informal housing sector.

There is thus a pressing need for much improved housing information systems that include:

- Better housing market information
- Better credit and housing finance information
- Management information systems for MHUUC
- Creating systems for proper feedback on housing interventions to inform government policies

How should these information gaps be filled? Should there be a “national housing information center” or “housing observatory”? Where would it be located? How would it be staffed? And how could it be well financed? Should universities play an important role?

#### **Issue 13: Promoting the need for a comprehensive national housing strategy**

Finally, is there a need for a comprehensive national housing strategy that puts priority on housing the poor and those who cannot house themselves? What should be its timeframe, principles, objectives, scope, legal status, and paths or components?

If a housing policy document is needed, who should prepare it and under what process? Should it be in the form of a national housing act or law?

#### **Issue 14: Improving social housing design**

Government-supplied social housing is very uniform. It is almost always apartment blocks of five and six stories, and the size of units are almost always the same. As can be seen from Chapter 4, innovative and mix of unit design has been very meager. There needs to be more innovation in social housing design to improve social mixity and mixed land use to create more vibrant housing estates.

### **13.3 FORMULATING A NATIONAL HOUSING STRATEGY**

Following on from this Housing Profile, UN-Habitat has been asked by the MHUUC to help develop a draft National Housing Strategy, based on consultations and deliberations with a wide range of stakeholders, that can serve as the basis for the formulation of a national consensus strategy document. Such a document has been prepared and discussed as a draft and will be made available to all stakeholders.

<sup>176</sup> Note that during Cabinet changes in September 2015 MURIS was dissolved and its functions (including that of ISDF) were incorporated into MHUUC.



# ANNEX 01

## THE HOUSING SECTOR PERFORMANCE CONSTRAINTS MATRIX FOR EGYPT

(Based on the format found in UN-Habitat, A Practical Guide for Conducting Housing Profiles, 2011, p 95.)

	1. Land	2. Infrastructure	3. Housing Finance	4. Building Materials and Construction	5. Labour and Employment
A Institutional and Organisational Framework	A1 Formal land supply limited to new towns (NUCA) and governorates without clear plans for mixed use and mixed social groups	A2 All infrastructure provided by public agencies, with no private sector involvement	A3 Despite improvements under SHP, housing finance remains limited to supporting supply side public housing on public land	A4 The formal construction sector is regulated, but no attempt to organize the informal building sector.	A5 Bias in government housing construction for large, labour-intensive contracting (improved under SHP)
B Regulatory and Legal Framework	B1 No clear legislation to use public land for affordable housing	B2 Standards and tariffs are the same nation-wide. Cost recovery very difficult.	B3 Micro-finance for housing not encouraged by legal framework	B4 Energy conserving stipulations of building code not enforced;	B5 No protection for labour in traditional building materials industries
C Supply	C1 Formal land supply limited to remote public lands unsuitable for livelihoods of low income households	C2 Infrastructure supply limited by State budgets. Poor costing. Bias in supply to new towns and prestige areas, with informal areas acutely underserved.	C3 Subsidized housing finance limited to access of SHP units; the vast majority of low income households cannot access affordable finance	C4 Reliance on high-energy-consuming materials; local production of cement and steel not always sufficient	C5 No attempt to train construction workers in the informal housing sector. Traditional apprentice system dominates
D Demand	D1 No affordable serviced plots for owner-builders (sites and services)	D2 Demand not calculated by area, and high-density informal areas poorly served.	D3 SHP housing finance limited to proven wage earners; considerable down-raiding by middle income households	D4 No policy to encourage traditional materials	D5 Bias in hiring towards those with diplomas, not real skills
E Policy	E1 Housing land policy distorted by total reliance on remote public lands	E2 No overall infrastructure delivery policies and poor coordination among suppliers	E3 No housing finance policies to reduce vacancies in existing stock or to stimulate secondary market. No accounting of SHP subsidies	E4 No effective "green housing" policy, and bias towards desert new towns implies heavy energy consumption	E5 Little link between housing policy and urban planning that creates good, nearby employment opportunities

F Implementation Arrangements and Instruments	F1 Public land re- lease non-transparent and captured by middle class housing developers	F2 Serious delays in infrastructure provision and poor contractor perfor- mance	F3 Eligibility and screening of SHP applicants is biased toward salaried beneficiaries	F4	F5
G Institutional Capac- ity	G1 Poor land plan- ning capacities at governorate level, and land standards too high in new towns	G2 Poor manage- ment of existing infrastructure networks, with O&M ignored, especially in popular urban areas and rural villages	G3 Capacities of SHP programme are improving. But very poor capacities for housing policy at MHUUC	G4 Research on cheaper materials and techniques not pursued	G5 Little coordina- tion between hous- ing sector needs and construction skills development and techniques
H Affordability and Price-to-income Issues	H1 Land is provided at no cost (implying heavy subsidies) for SHP programs only	H2 Subsidies are inherent in all infra- structure provision, but well-off projects capture most.	H3 SHP cannot reach the poorest, and no rental subsidies system as yet	H4	H5

# ANNEX | 02

## THE HOUSING SECTOR PERFORMANCE PRIORITY ACTION PLAN FOR EGYPT

(Based on the format found in UN-Habitat, A Practical Guide for Conducting Housing Profiles, 2011, p 96.)

	1. Land	2. Infrastructure	3. Housing Finance	4. Building Materials and Construction	5. Labour and Employment
A Institutional and Organisational Framework	A1 Improved local level urban planning coordination for well-located, mixed residential districts on public land	A2 Promote private sector partnerships for affordable land schemes	A3 Introduce demand side housing finance schemes that target affordable units in existing housing stock and in secondary market	A4 Introduce simple guidelines for improved construction/finishing for informal housing	A5 Stipulate reliance on smaller contractors
B Regulatory and Legal Framework	B1 New legislation to promote private land subdivision adjustment on designated expansion areas. Also, creation of relaxed standards for special popular housing zones.	B2 Allow variable tariffs and standards to reflect real land servicing costs	B3 Improve regulatory framework to allow massive introduction of housing micro-finance. Also, introduce legislation to allow massive property registration under adverse possession	B4 Put priority in regulations that promote enforcement of energy conservation	B5 Legislate and enforce protection of labour in dangerous building materials industries (e.g. red brick and limestone block) and prohibit child labour
C Supply	C1 Promote affordable sites and services schemes.	C2 Full costing of public land servicing; shift priorities to popular areas	C3 (see D3)	C4 Develop low-energy building materials	C5 Offer simple manuals and training of workers in informal construction trades
D Demand	D1 (see C1)	D2 (see C2)	D3 Develop housing finance products that can target demand side and benefit poor and disadvantaged households, including especially for secure rentals	D4 Encourage traditional and labour-intensive construction methods	D5 Institute more effective hiring policies, where on-job experience is given emphasis

E Policy	E1 Shift policy to promote relaxed standards for land development	E2 Promote integrated infrastructure provision for informal areas	E3 Prioritize finance packages that reduce vacancies of affordable housing units	E4 Revise planning standards in new towns to allow higher densities and less energy consumption; Encourage new and innovative design for public housing with emphasis on higher densities, mixed use and mixed incomes	E5 Institute planning policies that require social housing to be located in areas close to employment and micro-enterprise opportunities
F Implementation Arrangements and Instruments	F1 Shift to more control of public land for housing to local authority levels	F2 Better contract management of infrastructure tenders	F3 Introduce SHP schemes that target non-salaried and informal workers	F4	F5
G Institutional Capacity	G1 Improved planning capacities for affordable land for housing	G2 Better management of O&M, especially in informal areas, with full cost recovery	G3 Improve MHUUC capacities and funding for steering the housing sector	G4 Orient research institutes and universities to concentrate on more affordable and appropriate housing design	G5 Better coordination between affordable housing sector needs and construction skills and techniques
H Affordability and Price-to-income Issues	H1 Subsidies for serviced land only targeted at low-income households	H2 Shift infrastructure provision priorities to large, high density informal areas	H3 Develop subsidized rental packages for qualifying poor and destitute beneficiaries	H4	H5

# ANNEX 03

## LIST OF STAKEHOLDERS CONSULTED (February – June 2015)

### **Ministry of Housing, Utilities, and Urban Communities and its affiliates**

Eng. Nefisa Hashem  
First Undersecretary and Head of Housing and Utilities Sector  
Ministry of Housing, Utilities, and Urban Communities

Eng. Hussein al-Gebali  
Advisor to the Minister for the Housing and Utilities Sector  
Ex-First Undersecretary for Housing and Utilities  
Ministry of Housing, Utilities, and Urban Communities

Eng. Mohamed Anas Mahmoud  
Housing and Utilities Sector  
Ministry of Housing, Utilities, and Urban Communities

Eng. Mustafa Mohamed Ibrahim  
Director, General Administration for Housing Research  
Housing and Utilities Sector  
Ministry of Housing, Utilities and Urban Communities

Salah Hassan  
Head of the Executive Branch of the National Housing Project (NHP)  
Ministry of Housing, Utilities, and Urban Communities

Eng. Mamdouh Abdel Hamid al-Sayed  
New Urban Communities Authority  
Ministry of Housing, Utilities, and Urban Communities

Eng. Mohamed Seif al-Nasr Hussein  
Director of the Central Department for Construction  
New Urban Communities Authority  
Ministry of Housing, Utilities, and Urban Communities

Eng. Samia Galal Osman  
General Organization for Physical Planning (GOPP)  
Ministry of Housing, Utilities, and Urban Communities

Ms. May Abdel Hamid  
Chairman  
Mortgage Finance Fund (MFF)

Prof. Dr. Khalid M. El Zahaby  
Chairman  
Housing and Building National Research Center (HBRC)

Dr. Baher El Shaarawy  
Technical Assistant to the Minister  
Liaison with the World Bank  
Ministry of Housing, Utilities, and Urban Communities

### **Other government agencies**

Mr. Abdel Hamid Sharaf al-Din  
Head of the Central Administration of Census  
Central Agency for Public Mobilization and Statistics (CAPMAS)

Dr. Hossam Risk  
Chairman  
General Authority for Construction and Housing Cooperatives (GACHC)

Dr. Ahmed Darwish  
Assistant Minister  
Ministry of State for Urban Renewal and Informal Settlements (MURIS)

Dr. Sherif al-Gowhari  
Director  
Informal Settlements Development Fund (ISDF),  
MURIS

Ms. Manal Shahin  
Ministry of State for Urban Renewal and Informal  
Settlements (MURIS)

Eng. Hisham Sayed Gohar  
Director, Information Center  
Ministry of State for Urban Renewal and Informal  
Settlements (MURIS)

Eng. Medhat Massoud  
Head of the Central Sector for Human and Community  
Development  
Social Fund for Development (SFD)

Dr. Walid Darwish  
Head of the Environment Department  
Social Fund for Development (SFD)

Eng. Khaled Fathy  
Public Projects Sector Head  
Social Fund for Development (SFD)

Eng. Ibrahim Farag  
Director of the Housing Directorate  
Giza Governorate

Dr. Nasrin Baghdadi  
Director  
National Center for Social and Criminal Studies

Dr. Mohamed Fathi El Subai  
Chairman of the Board  
Housing and Development Bank (HDB)

#### **Academics and advisors**

Prof. Dr. Abdel Mohsen Barada  
Professor of Urban Planning  
Cairo University

Prof. Dr. Ahmed Mahmoud Yousry  
Professor of Urban Planning  
Cairo University

Prof. Dr. Ghada Farouk Hassan  
Professor of Architecture and Urbanism  
Université Française d'Égypte

Prof. Dr. Ahmed Mounir Soliman  
Professor of Architecture  
Alexandria University

Prof. Dr. Abu Zeid Rageh  
Former Chairman of Housing and Building Research  
Center (HBRC)  
Member of the Supreme Council for Urban Planning  
and Development

Eng. Salah Higab  
Consulting Engineer  
Advisor to the MHUUC

Prof. Dr. Hany Serageldin  
Research Professor of Housing  
Housing and Building National Research Center  
(HBRC)

Prof. Dr. Azza Sirry  
Research Professor of Urban Planning  
Housing and Building National Research Center  
(HBRC)

Dr. Dina Al-Shehayeb  
Institute of Architecture and Housing  
Housing and Building National Research Center  
(HBRC)

Dr. Sawsan Bakr  
Department of Architectural Engineering  
Cairo University

Dr. Dalila El Kerdany  
Center for Architectural and Engineering Design  
Support  
Cairo University

Dr. Ahmed Shalaby  
Department of Architecture  
Cairo University

Dr. Magda Mostafa  
Department of Construction and Architectural  
Engineering  
American University in Cairo

Dr. Doaa Abouelmegd  
College of Beaux Arts  
Department of Architecture  
Helwan University

Dr. Ahmed El Kholi  
Department of Urban Planning  
Mansoura University

### **Civil society and consultants**

Mr. Kareem Ibrahim  
Associate  
Takween Integrated Community Development

Mr. Yahia Shawkat  
Ex-Housing and Land Rights Researcher  
Egyptian Initiative for Personal Rights  
10 Tooba Applied Research in the Built Environment

Omar Nagati  
CLUSTER

Mr. Ahmed Mansour  
Legal Researcher  
Habitat International Coalition (Egypt)

Ms. Emily Maattheisen  
Program Officer  
Habitat International Coalition

Eng. Ahmed Zaazaa  
MADD Platform  
10 Tooba Applied Research in the Built Environment

Manal El Tibbi  
Egyptian Center for Housing Rights

Dr. Wafaa Amer  
Omran (Planning and Engineering Consulting)

Dr. Essam Badran  
4-D Architecture and Planning

Dr. Hashem El Bermalgi  
BSC Consultants

Dr. Khaled Sami  
Sketches Consulting

### **Private sector developers**

Ahmed Helmi  
Managing Director  
Blu-Realty  
Real estate advisor

Rami Yasser Zeid  
Business Development  
Projacs International  
Egypt

### **Development agencies (not including UN-Habitat)**

Khalil Shaat  
Water and Wastewater Management Programme  
(WWMP)  
Senior Policy Advisor  
Deutsche Gesellschaft für Internationale Zusammenarbeit  
(GIZ) GmbH

Mohammed Fangary  
Participatory Development Program in Urban Areas  
Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH

Dr. Roman Stadnicki  
Head of the Urban Studies Department at CEDEJ  
(Centre d'études et de documentation économiques,  
juridiques et sociales)  
Cairo, Egypt

# ANNEX | 04

## REFERENCES

A full list of references to Egypt's housing sector is presented here. Most entries refer to sources used in the text of this Housing Profile, but there are others also listed of general relevance to the sector in Egypt.

Abouelmagd, D., and Abouelmagd, S., "Accessibility to Livelihood Resources in the Egyptian Housing Upgrading Program, the Rehabilitation Approach Verses the Eviction Approach, The Case Studies of Suzan Mubarak Public Housing Project in Manshiet Nasser and Nahda City," Cairo University Symposium, 25 – 27 November, 2014.

Abouelmagd, D., Corijn, E. and Kesteloot, C., "Housing projects for low-income groups and modes of economic integration: a comparative study in Greater Cairo," The International Journal of Social and Economic Geography, Online, 2013.

Agence Française du Développement, "Public Communication Brief on Operations, Egypt: Extension of the Gabal Asfar Wastewater Treatment Plant," 2009.

Ahmed Badr, Delegation of the European Union to Egypt, "Water Sector Reform in Egypt" (PPT), March 2011

Alexbank, Sectoral Survey: Egypt's Real Estate Industry, January 2012

Amnesty International, 'We are not dirt: Forced evictions in Egypt's informal settlements,' 23 August 2011, Index number: MDE 12/001/2011. <https://www.amnesty.org/en/documents/MDE12/001/2011/en/>

Arandel, Christian, and Manal El Batran, "The Informal Housing Development Process in Egypt," Working Paper No. 82, July 1997.

Aref, Hisham, "State versus civil society: An approach to affordable housing in Egypt: Policy and Practice," Adequate and Affordable Housing for All Conference, Centre for Urban and Community Studies, University of Toronto, 24-27 June 2004.

Azza Sirry et al., Housing, Building Research Center, Housing and Architecture Institute, Evaluation of Urban Development of the Ibni Beitaq Project, 2 volumes, (in Arabic) December 2011

Bayat, A., and Denis, E. (2000). "Who is Afraid of Ashwaiyyat?" in Environment and Urbanization, Vol. 12, #2, October 2000, pp. 185-199.

Booz & Company, "Egypt Economic Recovery Plan – Housing Sector," Cairo, May 2014.

Bredenwood, Jan et al. (editors), Affordable Housing in the Global South: Seeking Sustainable Solutions, 2014,

CAPMAS, Preliminary Results of the Census for Population and Housing and Establishments, volumes for relevant governorates, March 2007

CAPMAS, Census for Population and Housing and Establishments 1996 and 2006, final results, [www.capmas.gov.eg/](http://www.capmas.gov.eg/)

CAPMAS, "Study of Current and Future Housing Needs in Egypt (2007-2022)", November 2008.

CAPMAS, "Important Indicators, Income, Expenditures, and Consumption Survey for Year 2012/13, November 2013 (in Arabic.)

CAPMAS, Income, Expenditure & Consumption Survey 2012/13, Volume V, Average Household Income & Percentage Distribution of Incomes According to Socio-economic Characteristics of Households



- CAPMAS, "Statistical Year Book," September 2014.
- CAPMAS, "Egypt in Figures," 2015
- Chiquier, Loic, and Michael Lea, editors, *Housing Finance Policy in Emerging Markets*, World Bank, 2009.
- Egyptian Environmental Affairs Agency (EEAA), *Egypt State of Environment Report*, September, 2009
- Egyptian Financial Supervisory Authority, *Report for the Second Quarter of 2014*
- Egyptian Initiative for Personal Rights (EIPR), *siasat al-iskan fi masr – bein istimrar siasat al-madi wa wada' siasat 'aadala lil mustaqbil*, (Housing policy in Egypt – between continuing yesterday's policies and setting down just policies for the future), Cairo, December 2014
- Export Council for Building Materials, *Total Cement Exports (2007-2014)*, 2015
- Ghoneim, Ahmed Farouk, "Competition Law and Competition Policy: What Does Egypt Really Need," *The Economic Research Forum Working Paper Series*, Paper no. 0239, 2002
- GOPP (with the Canada Mortgage Corporation), *State of the Built Environment and Housing Indicators in seven Egyptian Cities*, Comprehensive Report, 2011.
- Hassan, Ghada, "Review and re-evaluation of the successive housing policy in Egypt," *Urban Planning Dept.*, Ain Shams University, no date.
- HBRC, Architecture and Housing Institute, "Evaluation of Urban Development of the Ibni Beitaq Project," (taqiiim al-tanmia al-'amrania l-mashrua' ibni beitaq), first report, December 2011.'
- Housing Sector, MHUUC, "Draft Document towards Strategies and Policies for Housing in Egypt." (al-wathiqat al-marga'ia l-istratagiat wa siasat al-iskan fi masr), April 2013.
- IFC and DevCo, *Public-Private Partnership Stories - Egypt: New Cairo Wastewater*, February 2010, [http://www.ifc.org/wps/wcm/connect/b21864804983906081ecd3336b93d75f/SuccessStories\\_NCWWweb.pdf?MOD=AJPERES](http://www.ifc.org/wps/wcm/connect/b21864804983906081ecd3336b93d75f/SuccessStories_NCWWweb.pdf?MOD=AJPERES)
- Information and Decision Support Center, "Definitions Used in Census 2006," April 2007.
- Information and Decision Support Center, "Al-'ashwaiyat dakhil muhafazat gomhuriya misr al-'arabia," May 2008. (Slums inside governorates of the Arab Republic of Egypt: Analytical study of the existing situation and the preferred approaches.)
- Institute for Liberty and Democracy and Egyptian Center for Economic Studies, "Formalization of Egypt's Urban Informal Real Estate Sector," *Institutional Reengineering Stage, Situation Analysis Report*," October 2000
- Magued Osman, "Rapid Population Growth Imperils Egypt," 16 December 2013, *The Cairo Review of Global Affairs*, <http://www.aucegypt.edu/gapp/cairoreview/pages/articleDetails.aspx?aid=484>
- Madbouli, M., and Lashin, A. "Informal Zones of Greater Cairo: Study of the Situation in Boulaq al-Dakrou", 2003, in Arabic, unpublished
- Madbouli, M. (2005), *UN Common Country Assessment in Egypt*,
- Menelaws, Dougal, "Property and Registration Law in Egypt: Current Operations and Practice," *Task 2 Inception Report*, Egypt Financial Services Project, Technical Report No. 3, Chemonics International, June 2005,
- Merrill, S. and Kamal, H., "Framework for Egypt's Housing Information Center," *USAID/TAPRII*, powerpoint, 9 April 2008
- Milad Hanna, "Uridu maskan – mushkila laha hal (I need housing – a problem with a solution)", Cairo: Rose al-Youssef, 1978.
- Milad Hanna, "Studies and Working Papers on Housing Issues in Egypt" published by Parliament in 1985.
- Milad Hanna, "Al-iskan wal-masyada (Housing and the Trap)," Cairo: Future House, 1988.
- Ministry of Electricity and Energy, *Annual Reports 2007/08 and 2011/12*, (English)
- Ministry of Finance, PPP Central Unit, "Wastewater Sector," April 2015
- Ministry of Health and Population, *Egypt Demographic and Health Survey 2014, Main Findings*, El-Zanaty and Associates, Cairo, Egypt, the DHS Program ICF International, Rockville, Maryland USA.

- Ministry of Planning, "Strategic Framework for Economic and Social Development Plans to Year 2022," November 2012.
- Ministry of Planning, Macroeconomic indicators of the Egyptian Economy: Gross domestic product (GDP) 1982/1983 – 2013/2014 (XLS), April 2015
- Ministry of Water Resources and Irrigation, Water Policy and Regulatory Reform (WPRR) Project, Cost Recovery and Pricing Models Policy Paper, January 2012
- Mitlu, Diana, and David Satterwaite, *Urban Poverty in the Global South*, 2012.
- Nasr, Sahar, "Access to finance and economic growth in Egypt," World Bank, MENA Region, 2006.
- Naeem Holding, *Egypt Cement Sector, Stories untold!*, September 2013
- Oxford Business Group, *The Report: Egypt 2014*
- Plan Bleu, *Regional Study on Policies and Institutional Assessment of Solid Waste Management in Egypt*, December 2000
- Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2012 Revision*, <http://esa.un.org/unpd/wpp/index.htm>
- Salins, Peter, "New York City's Housing Gap Revisited," Center for Civic Innovation, Manhattan Institute for Policy Research, *Civic Report 25*, February 2002
- Selim, Tarek H., "Monopoly: The Case of Egyptian Steel", *Journal of Business Case Studies*, Third Quarter 2006, Volume 2, Number 3,
- Showkat, Yahia, "EIPR Housing Policy Papers III: Budget Analysis of Government Housing Projects for Fiscal Year 2014/2015," Egyptian Initiative for Personal Rights, July 2014.
- Shehayeb Consult, *Working Paper for NGOs to Pressure Housing Policy Makers Concerning Marginal Groups (waraqa 'amal muwagaha lil-munazimat gheir hukumia lil-dught 'ala sana'i al-siasat al-iskania al-muwagaha lil-fi'at al-hemishiya)*, 2013.
- Shehayeb, Dina (principle author), Arab Women's Center for Training and Research (CAWTAR), *Marginal Groups and the Right to Suitable Housing, (al-fi'at al-hemishiya wa al-haq fi al-sakin al-lahi)*, 2013.
- Sims, David, *What is Secure Tenure in Urban Egypt*. In: Payne GK (ed) *Land, Rights and Innovation: Improving Tenure Security for the Urban Poor*. 79-99. ITDG Publishing, London, 2002.
- Sims, David, *Understanding Cairo: The Logic of a City Out of Control* (Cairo: AUC Press, 2012)
- Sirry, Azza, "Unoccupied Neighbourhoods between Dreams and Reality: Study of the Situation in Yasmine Village, Sheikh Zayed," unpublished paper in Arabic, no date.
- Soliman, Ahmed, "Urban Informality in Egyptian Cities: Coping with Diversity," Fourth Urban Research Symposium, 2007.
- Soliman, Ahmed, "The Egyptian episode of self-build housing," *Habitat International* 36 (2012) 226-236.
- Soliman, Ahmed, "Collective planning process: a driving seat for formalising urban informality in Egypt," *International Journal of Urban Sustainable Development*, online, June 2015.
- State Information Service (government of Egypt) <http://www.sis.gov.eg/Newvr/Dustor-en001.pdf>
- SWEEPNET, "Country report on solid waste management in Egypt," July 2010
- UN-Habitat, "Concept Note, Experts' Workshop Egypt Housing Policy," 21-22 May 2014.
- UN-Habitat, *Global Housing Strategy Framework Document*, no date, [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SHS/pdf/Workshop-Social-Inclusion\\_UN-Habitat.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SHS/pdf/Workshop-Social-Inclusion_UN-Habitat.pdf)
- UN-Habitat, *Sustainable Housing for Sustainable Cities: A Policy Framework for Developing Countries*, Nairobi, UN-Habitat, 2012.
- UN-Habitat and UNEP, "Green Building: Interventions for Social Housing," 2015.
- UN-Habitat, *Parallel Urban Practice in Egypt*, First Egypt Urban Forum, Principal author 10 Tooba, 2015.
- United Nations, *Decision and resolutions adopted by the Governing Council of the United Nations Human Settlements Programme at its twenty-fourth session (resolutions 24/1 through 24/15)*, 19 April 2013.

UN News Centre, “Hunger, poverty rates in Egypt up sharply over past three years – UN report,” <http://www.un.org/apps/news/story.asp?NewsID=44961#.VOXtL8Zw3LU>

University Consortium for the Socio-economic Research and for the Environment, “National Strategy for Water Supply and Sanitation: Compilation of Water and Sanitation Master Plans,” Report for the European Commission, May 2009

USAID and Ministry of Investment, Housing Demand Study for the Arab Republic of Egypt, TAPR II, June 2006,

USAID/TAPRII, “Review of Egyptian Subsidized Housing Programs and Lessons Learned”, February 2007.

USAID, Housing Study for Urban Egypt. Final, 2 December 2008. Technical Assistance for Policy Reform II. Washington D.C.; USAID/Egypt Policy and Private Sector Office. Seven separate volumes.

U.S. Geological Survey (USGS), Mineral Commodity Summaries, January 2009

Volait, Mercedes, Architectes et Architectures de l’Egypte Moderne 1850-1930; Genese et essor d’une expertise locale, Paris, Maisonneuve et Larose, 2005.

WHO / UNICEF Joint Monitoring Programme for Water Supply and Sanitation, April 2015, <http://www.wssinfo.org/data-estimates/tables/>

World Bank, Arab Republic of Egypt: Urban Sector Review, Vols. 1 and 2, 2008.

World Bank and USAID/TAPRII, “A Framework for Housing Policy Reform in Urban Areas in Egypt: Developing a Well Functioning Housing System and Strengthening the National Housing Program,” 30 June 2008, Report No. 45114-EG

World Bank, “Arab Republic of Egypt: Next Step Recommendations for Affordable Housing Policy and the National Housing Program,” 2 June 2008

World Bank, “Implementation Completion and Results Report for a Mortgage Finance Project,” No. ICR2014, January 2012.

World Bank, “Arab Republic of Egypt, Building a Platform for Urban Upgrading in the Greater Cairo Region,” SDD/MENA, draft version, June 2012

World Bank, Arab Republic of Egypt, Inclusive Housing Finance Program Program-For-Results Information Document (PID) Concept Stage, 8 August, 2014.

World Bank, “Inclusive Housing Finance Program, Program-For-Results, Environmental and Social System Assessment,” Draft Report, November 2014, E4710.

World Bank, “Program-for-Results Information Document (PID) Appraisal Stage”, PID0018128, January 2015.

World Bank, Republique Tunisienne, MEATDD, Vers une nouvelle strategie de l’habitat en Tunisie, January 2015.

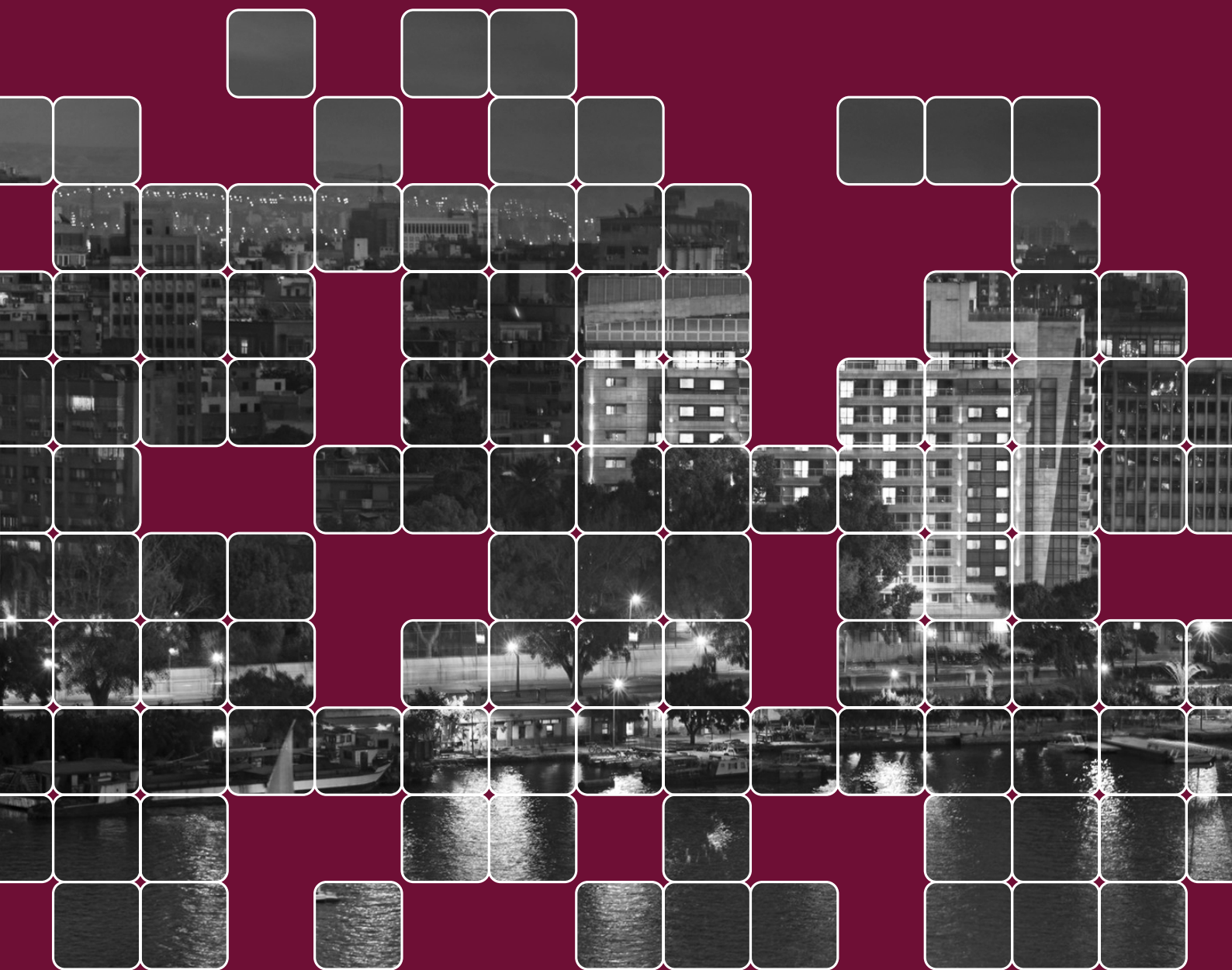




HS/078/15E

ISBN(Series): 978-92-1-131927-9

ISBN(Volume): 978-92-1-132686-4



# UN HABITAT

United Nations Human Settlements Programme

Egypt Project office

1 Ismail Abaza Street, Cairo, Egypt

Tel. /fax: +2 02 27 92 30 86

Unhabitat.cairo@unhabitat.org,

[www.unhabitat.org](http://www.unhabitat.org)