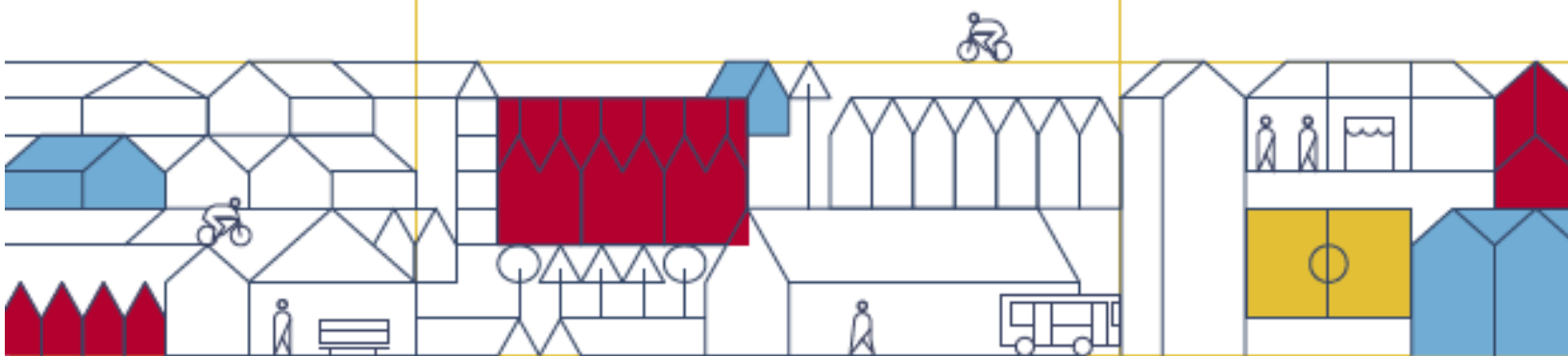


THE STATE OF ADEQUATE HOUSING IN EGYPT 2024



The State of Adequate Housing in Egypt

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1. Introduction to Sub-Region: North Africa

1.1 Background

North Africa, or Northern Africa, is a region comprising the northern portion of the African continent through seven countries: Egypt, Sudan, Libya, Tunisia, Algeria, Morocco, and Mauritania. In addition to the Western Sahara, which is a disputed territory between Morocco and Mauritania as it had been listed by the UN in 1963 as non-self-governance area. The region is surrounded by the Mediterranean Sea in the north, the Sahara Desert in the south, the Red Sea in the East, and the Atlantic Ocean in the west. As shown in *Figure 1*, Egypt exists in the northeast of Africa and at the southeast edge of the region. Spatially, the North Africa Region enjoys a distinct location as it is considered to exist at the world's center.



Figure 1: Map of North African countries

Source: <https://www.123rf.com/>

Table 1 presents several facts about the North African region regarding location, demographic information, socio-economic status, environmental issues, and urban development. Through this presentation, the region's global role is clear and vital. Also, it clarifies the economic, environmental, and urban challenges that should be considered to increase the standard of living inside the region.

Table 1: General Facts about North Africa Region

No.	DATA TYPE	INFORMATION	
1	Coordinates	Longitude	From (30°21'76" E) To (10°94'08" W)
		Latitude	From (31°79'17" N) To (8°47'60" N)
2	Total Area	14.6M sq km (10.25% of the world's landmass ¹)	
3	Population	269.44 M people (3.35% of the world's population ²)	
4	Households Number	48,027,121 ³	
5	Average Population Density	Forty-two people per sq km ⁴	

¹ WorldOMeter, "Largest Countries in the World (by area)". URL: <https://www.worldometers.info/geography/largest-countries-in-the-world/>

²WorldO Meter,(2023). "Countries in the world by population (2023)." URL: <https://bit.ly/49lewKp>

³ Sayeed, Zeinab, (2019). "North Africa Regional Profile: Africa Housing Finance Yearbook 2019," Center of Affordable Housing Finance in Africa-CAHF, URL: <https://housingfinanceafrica.org/documents/2019-housing-finance-yearbook-north-africa-regional-profile/>

⁴ WorldO Meter,(2023). *Ibid.*

6	Average Urban Population	66% ⁵	
7	Total GDP	959.21B USD (0.95% of the world GDP) ⁶	
8	Average GDP per Capita	3553 USD ⁷	
9	Average GDP Growth Rate	2% (N/A in Western Sahara) ⁸	
10	Average Inflation Rate	16.3% ⁹ (N/A in Western Sahara, Less than 10% in other countries except Sudan- 63.3%, and Egypt- 38%)	
11	Average Poverty Rate	22.6% ^{10 - 11} (N/A in Western Sahara)	
12	Average Unemployment Rate	12.65% ¹² (N/A in Western Sahara)	
13	Average Literacy Rate	63.25% ¹³ (N/A in Western Sahara).	
14	Average HDI	0.584 ¹⁴ (N/A in Western Sahara)	
15	Average Fragile States Index Score "FSI Score" ¹⁵	(71.94/ 120- N/A in Western Sahara) Overall Classification "Brackets": Warning	
16	Average Refugees and Internally Displaced Persons (IDPs) ^{16- 17}	6980862 people (N/A in Western Sahara). (6.44% of the total number estimated by UNHCR)	
17	CO2 Emissions ¹⁸ (N/A in Western Sahara)	Average CO2 Emissions Per Capita	2.91 ton
		Total CO2 Emissions	561.05 M ton
		Total Share of Global CO2 Emissions	1.69%
18	Average Temperature ¹⁹	24.02 ° C / 75.24° F (N/A in Western Sahara).	

⁵ WorldO Meter,(2023). *Ibid.*

⁶ WorldOMeter,(2023). "GDP by Country." URL: <https://www.worldometers.info/gdp/gdp-by-country/>

⁷WorldO Meter,(2023). *Ibid.*

⁸ WorldO Meter,(2023). *Ibid.*

⁹ Trading Economics,(2023). "Inflation Rate - Africa - By Country." URL: <https://bit.ly/3upo4EN>

¹⁰ World Population Review, (2023). "Poverty Rate by Country 2023." URL: <https://bit.ly/3usN2TN>

¹¹ poverty rate in Libya is based on an official declaration of the Libyan Ministry of Social Affairs, URL: <https://bit.ly/46NtQxp>

¹² The World Fact Book, (2023). "Unemployment Rate." URL: <https://www.cia.gov/the-world-factbook/field/unemployment-rate/country-comparison/>

¹³ WorldAtlas, (2023). "List of Countries By Literacy Rate." URL: <https://www.worldatlas.com/articles/the-highest-literacy-rates-in-the-world.html>

¹⁴ UNDP- Human Development Reports, (2023). "Human Development Insights." URL: <https://hdr.undp.org/data-center/country-insights#/ranks>

¹⁵ Fund of Peace- FFP, (2023). "Fragile States Index Annual Report 2023." The index depends on twelve indicators to measure fragility in countries: Security Apparatus, Factionalized Elites, Group Grievance, Economic Decline and Poverty, Uneven Economic Development, Human Flight and Brain Drain, State Legitimacy, Public Services, Human Rights and Rule of Law, Demographic Pressures, Refugees and Internally Displaced Persons, and finally External Intervention.

¹⁶ The World Fact Book, (2023). "Refugees and Internally Displaced Persons." URL: <https://bit.ly/3HQSz9J>

¹⁷ Tunisia data from Relifweb, (2023). "MMC East and Southern Africa Snapshot - August 2023: Refugee and Migrant Youth in Tunisia". URL: <https://bit.ly/49lu2Fs>

¹⁸ Ritchie, Hannah; Roser, Max; and Rosado, Pablo (2020) - "CO₂ and Greenhouse Gas Emissions". Published online at *OurWorldInData.org*. URL: <https://ourworldindata.org/co2-and-greenhouse-gas-emissions>

¹⁹ Trading Economics, (2023). "Average Temperature by Country." URL: <https://tradingeconomics.com/country-list/temperature>

		Overall Classification: <i>High (20^o - 30^o)</i> .
19	Average Precipitation	121.45 mm ²⁰ (N/A in Libya and Western Sahara).
20	Average Percentage of Population Access to Electricity	72.43% ²¹⁻²² (N/A in Western Sahara).
21	Average of Urbanization Rate	2.50% ²³
22	Average of Population living in Slums	20.15% ²⁴ (N/A in Libya and Western Sahara).

1.2 Urban Challenges and Affordable Housing In North Africa

Challenges facing the North African region, especially economic challenges, affect the efficiency of its urban environment. The region suffers from many urban problems, such as a substantial increase in congestion and pollution²⁵, deterioration in the physical environment and housing, lack of infrastructure and water, sanitation, and hygiene (WASH) facilities, the deficit in providing urban services, lack of secure property rights, and weakness in governance and social participatory²⁶.

These problems, in turn, influence affordable housing. Regarding affordability, several social groups whose income would be considered deserving of affordable housing, such as teachers and police officers, cannot meet the housing prices compared with their incomes, as shown in *Figure 2*²⁷.

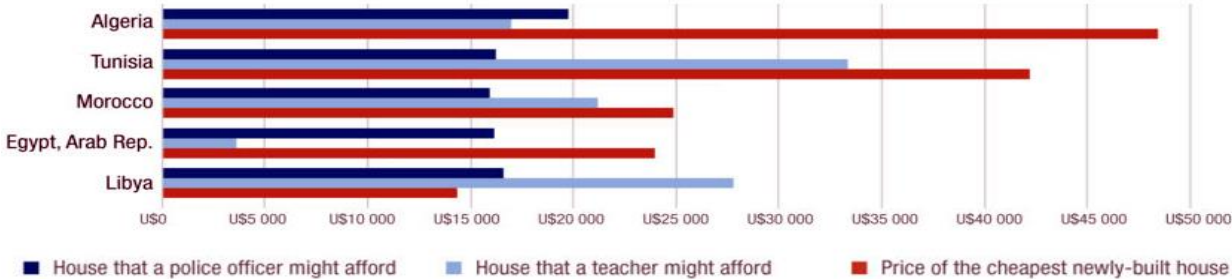


Figure 2: Typical teacher and police officer housing affordability in some North African countries

²⁰ Trading Economics, (2023). "Average Precipitation by Country." URL: <https://tradingeconomics.com/country-list/precipitation>

²¹ The World Bank Data, (2023). "Access to Electricity (% of Population) - Egypt, Arab Rep., Sudan, Libya, Tunisia, Algeria, Morocco, Mauritania." URL: <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=EG-SD-LY-TN-DZ-MA-MR>

²² According to the former reference, Egypt, Tunisia, Algeria, and Morocco have about 100% of access to electricity. However, Libya, Sudan, and Mauritania are categorized in descending order as countries with less access.

²³ The Centre for Affordable Housing Finance in Africa- CAHF, (2022). "Housing Finance in Africa: A review of Africa's housing finance markets- 2022 Yearbook."

²⁴ The World Bank Data, (2023). "Population living in slums (% of urban population) - Tunisia, Algeria, Morocco, Egypt, Arab Rep., Sudan, Libya, Mauritania." URL: <https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS?locations=TN-DZ-MA-EG-SD-LY-MR>

²⁵ Elgendy, K., and Abaza, N., (2020). "Urbanization in the MENA Region: A Benefit or a Curse?" Friedrich-Ebert-Stiftung," URL: <https://bit.ly/3ugLNah>

²⁶ Madbouly, Moustafa, (2009). "Revisiting Urban Planning in the Middle East North Africa Region," a regional study prepared for "Revisiting Urban Planning: Global Report on Human Settlements 2009," UN-Habitat.

²⁷ The Centre for Affordable Housing Finance in Africa- CAHF, (2022). "Housing Finance in Africa: A review of Africa's housing finance markets- 2022 Yearbook."

Regarding the conducted procedures of providing affordable housing, although all the region's countries make their efforts to solve this problem, such as providing housing mortgages as shown in *Table 2*, the problem of providing affordable housing is still a severe one, as will be shown in the discussion of affordable housing in Egypt in the following chapters.

Table 2: The status of housing mortgage in North African countries²⁸

Country	Number of Residential Mortgages Outstanding	Value of Residential Mortgage Outstanding	Mortgage To GDP	Number of Mortgage Providers	Average Mortgage Rate	Average Mortgage Term In Years
Egypt	437 631	3 514M USD	0.93%	16	7%	30
Sudan	6 250	938M USD	4.96%	15	17%	20
Libya	N/A	N/A	N/A	N/A	5%	20
Tunisia	N/A	4 413M USD	9.49%	30	9%	25
Algeria	N/A	32M USD	2.09%	N/A	7%	40
Morocco	75 321	3 005M USD	2.26%	9	13%	25
Mauritania	326 260	221M USD	2.85%	18	10%	10

²⁸ The Centre for Affordable Housing Finance in Africa- CAHF, *Ibid.*

2. Adequate Housing in Egypt

2.1 Country Overview

The Arab Republic of Egypt, commonly named Egypt, is a country in North Africa surrounded by the Red Sea in the east and the Mediterranean Sea in the north, occupying vast territories of the Eastern and Western deserts interrupted by the Nile Valley and Delta, from the south to the north. Egypt shares its borders with many neighboring countries, including Libya (1115 km), the Gaza Strip (13km), Israel/ Occupied Palestinian Territories- OPT (208 km), and Sudan (1276 km)²⁹. The government system is a republic, the chief of state is the president, and the head of government is the prime minister. The country includes 27 governorates, forming 7 regions. Egypt encompasses four primate cities, 231 secondary cities, 44 new cities, and 35,163 rural settlements varied from many scales (Naga'a, Ezbet, Kafr³⁰, and village)³¹. The local administration system depends on the centralization and hierarchy of power and responsibilities from the small rural settlement (*naga'*) reaching the administration level, as shown in Figure 3³².

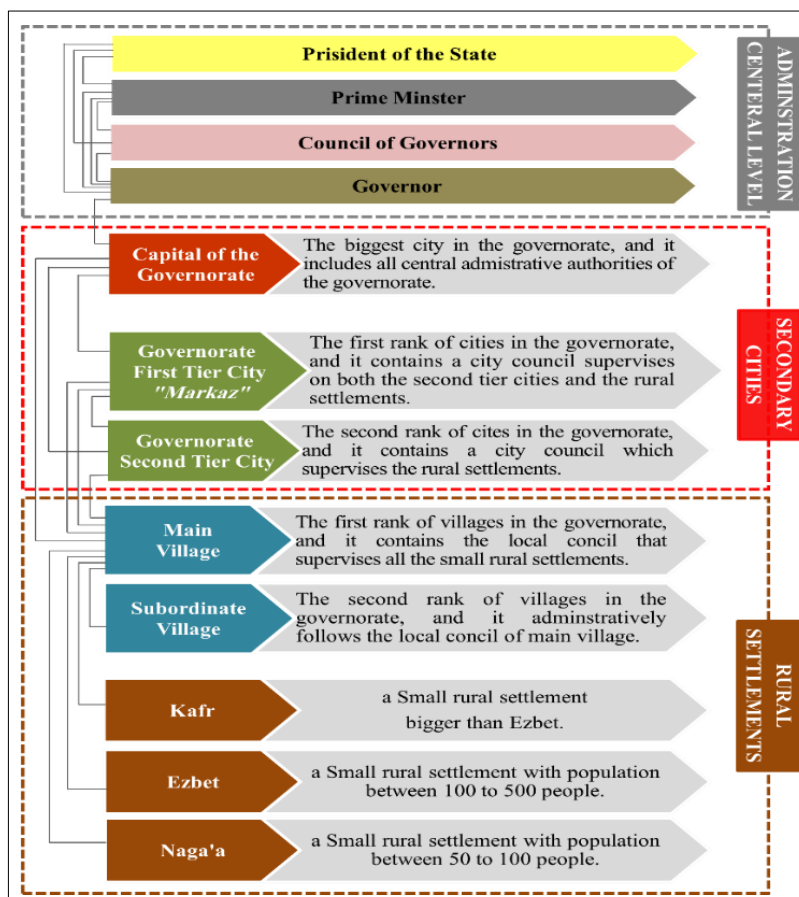


Figure 3: The administrative subdivision of Egyptian rural and urban settlements and their relationship

Egypt belongs to several organizations regionally and internationally. Regionally, Egypt is a member of the League of Arab States, the African Parliamentary Union- APU, and COMESA. Internationally, Egypt is a member of the United Nations (UN), the International Monetary Fund (IMF), the World Bank, the World Trade Organization (WTO), and the Organization of Islamic Cooperation (OIC).

Similar to the North African region, Egypt reflects many of the challenges endured by the region as a

²⁹ The World Fact Book, (2023). "Egypt." URL: <https://www.cia.gov/the-world-factbook/countries/egypt/>

³⁰ Naga'a, Ezbet, and Kafr are Egyptian names/ terms for the different classifications of rural settlements according to their size.

³¹ Based on "the Egyptian Ministry of Local Development" data for the Rural and Urban Local Units (2022).

³² Youssef, Akram, Mostafa, Ayman, and Amer, Ismail, (2022). "Redefining the Secondary Egyptian Cities: An Assessment Study for the Global and Local Definition to Achieve Balanced Development."

whole. Based on the country data shown in *Table 3*, Egypt faces to several challenges: economic, social, and environmental. In turn, these challenges have severe implications on the status of urban development and providing affordable housing in Egypt.

*Table 3: Egypt's Country Key Data*³³

No.	Data Type	Information	
1	Coordinates	Longitude	From (36°54'11" E) To (25°45'37" E).
		Latitude	From (31°38'14" N) To (22°00'07" N).
2	Total Area	1,002,450 sq km.	
3	Capital	Cairo.	
4	Population	112,716,598 people.	
5	Households Number	23 659 416.	
6	Population Density	113 people per sq km.	
7	Urban Population	41%.	
8	Total GDP	477B USD (0.47% of Global GDP).	
9	GDP per Capita	4295 USD.	
10	GDP Growth Rate	6.59%	
11	Inflation Rate	38%	
12	Poverty Rate	32.5%	
13	Unemployment Rate	9.3%	
14	Literacy Rate	72%	
15	HDI Value	0.731	
16	Fragile States Index Score "FSI Score"	-Score: (81.6/120).	- Rank: 50th.
		-Classification "Brackets": Warning.	
17	Average Refugees and Internally Displaced Persons (IDPs)	665500 people (0.6% of the total number estimated by UNHCR).	
18	CO2 Emissions	CO2 Emissions Per Capita	2.3 ton

³³ Data are from the former sources from (10) to (33).

		Total CO2 Emissions	249.62 M ton
		Total Share of Global CO2 Emissions	0.67%
19	Average Temperature	23.88 ° C / 74.98 ° F. Overall Classification: <i>High (20° - 30°)</i> .	
20	Average Precipitation	21.88 mm	
21	Percentage of Population Access to Electricity.	100%	
22	Urbanization Rate	2.05%	
23	No. of Population living in Slums	5.2%	

Urban Planning

Urban planning in Egypt takes place through formal and informal planning, and formal planning processes are led by different organizations. The planning of existing urban/rural settlements is mainly related to the existing rural villages and other secondary cities located inside all Egyptian governorates distinguished with the mixed land uses, and it is led by the General Organization of Physical Planning (GOPP), one of the official bodies of the Ministry of Housing, Utilities, and Urban Development (MoHUUD). In this case, GOPP designs and proposes the strategic planning of the settlement (rural/urban), which draws the map of urban development inside the settlement to deal with and upgrade the deteriorated zones and slums inside the Egyptian settlements for a specific period, commonly for the next 10- 15 years. The “Strategic Planning” determines the settlement’s Urban Growth Boundary (UGB) and its required future developmental projects based on the expected increase of the settlement’s population and surrounding dynamics and potentials. Afterward, the settlement’s “Strategic Planning” is officially authorized, and GOPP mandates the Ministry of Local Development (MoLD), represented by the settlement’s local municipality, to execute it. The local municipality may cooperate with other official bodies to execute related urban development projects related to strategic planning, such as the Urban Development Fund (UDF).

The planning of new settlements is mainly related to the new satellite cities designed from scratch, and it is led by the New Urban Communities Authority (NUCA), one of the official bodies of MoHUUD. The Egyptian government sought to establish new satellite cities around the Egyptian cities, especially Cairo, to solve its urban problems based on President Sadat's vision in the mid-1970s, as explained in his famous document "October Paper". Although Egypt, since the late 1970s, has built these cities to absorb the increase in existing cities' populations, these cities are occupied by 780,448 people. In comparison, they have been designed to be inhabited by 8,502,000 people³⁴. Accordingly, these cities are still at the "Growing" level, and their physical planning has not been informally altered due to the

³⁴ The Built Environment Observatory, (2016). “The Average Increase in Population Inside the Egyptian Satellite Cities,” URL: <https://marsadomran.info/2016/11/264/>

population growth. On the contrary, the government readopt this concept again in 2014 to deal with the increase in population, which is associated with the rise in demand for affordable housing, by building 36 new satellite cities, 26 of which have been planned to include 41.63M people³⁵, and they contain today about 777,011 housing units³⁶.

The new satellite cities in Egypt are classified as follows³⁷:

- First-Generation Cities, 7 cities, from 1978 to 1982.
- Second-Generation Cities, 6 cities, from 1982 to 1995.
- Third-Generation Cities, 10 cities, from 1995 to 2010.
- Fourth-Generation Cities, 36 cities, and they have started to be established since 2014 through three phases:
 - Phase One: 17 cities.
 - Phase Two: 14 cities, nine have been built, and 5 are under study.
 - Phase Three: 5 cities under study.

The physical planning of the Egyptian satellite cities depends on the single land use achieved by the "Neighborhood Model" that separates the housing and the other uses. To plan a new satellite city, NUCA mandates a consultancy body, commonly from the private sector, to plan the city. It supervises its construction, and after finalizing construction, NUCA technically and administratively manages the satellite city through its representative local administration inside the city, colloquially named "Al-Gehaz".

For more details about the organizations involved in formal urban planning in Egypt, see Annex A.

2.2 Availability of Affordable Housing on the Formal Market

Definition of Housing Affordability

Generally, affordable housing refers to housing units that are affordable by that section of society whose income is below the median household income³⁸. The combination of "Affordability" and "Housing" is vital as "Affordability" is a central component of the right to adequate housing. A house cannot be considered sufficient and accessible if its cost threatens or compromises the occupant's enjoyment of other human rights and satisfaction of needs such as food, healthcare, education, and transport³⁹. It is also essential to mention that other terms describe affordable housing and related projects, mainly "Public Housing" and "Social Housing." However, these two terms cannot holistically refer to affordable housing and all its types. They only relate to housing units and projects provided and managed by the state or nonprofit entities like housing associations and community housing providers, while there are

³⁵ Al- Youm Al-Sabea Newspaper. (2021). "By Numbers: the Plans of The Fourth-Generation Cities, Area, and Targeted Population for Each City," URL: <https://bit.ly/42zAAOG>

³⁶ Based on an online survey conducted by the authors for the 36 fourth-generation cities, through several web sites:

- Egypt Projects Map, URL: <https://egy-map.com/projects>

- Property Finder™ Egypt, URL: <https://bit.ly/42wfals>

- Aqarmap, URL: <https://bit.ly/4byGyTV>

³⁷ Al- Youm Al-Sabea, (2022). "How Egypt's Map have been Changed in the Era of President Al-Sisi," URL: <https://bit.ly/48f7TYu>

³⁸ The Economic Times, (2023). "What is Affordable Housing." URL: <https://economictimes.indiatimes.com/definition/affordable-housing>

³⁹ UN-Habitat, (2020). "Addressing the Housing Affordability Challenge." URL: <https://bit.ly/47ZSyuQ>

other bodies can participate in providing affordable housing like the private sector, cooperative sectors, and INGOs⁴⁰. The measuring of housing affordability can be conducted through three methods⁴¹: (a) *the Ratio Approach*: the amount of income paid for housing, (b) *the Residual Income Approach*: the income left to spend after paying for housing, (c) *the Quality-Based Approach*: the housing quality paid by the household.

Based on these methods, the determination of affordable housing differs from country to country, as shown in *Table 4*. However, all countries agree that affordable housing should address the housing needs of lower or middle-income households, as it becomes a key issue, especially in developing nations where most of the population can't buy houses at the market price⁴².

*Table 4: The recommended ratio between housing costs and income in some countries*⁴³

OTHER COUNTRIES		NORTH AFRICA COUNTRIES	
Country	The Recommended Ratio between Housing Costs and Household's income	Country	The Recommended Ratio between Housing Costs and Household's income
United States ⁴⁴	27% - 30%	Egypt	21.7% - 27.9%
Canada ⁴⁵	20- 25%	Sudan	23.5% - 25.3%
New Zealand ⁴⁶	20.3% - 21.8%	Libya	18.3% - 25.4%
U.K	23.5% - 25.3%	Tunisia	22.2% - 28.5%
South Africa	27.9% - 37.2%	Algeria	18.6% - 23%
India	30.9% - 39.9%	Morocco	22.1% - 29.4%
Philippines	24.5% - 27.4%	Western Sahara	N/A
Brazil	18.3% - 29.6%	Mauritania	22.9% - 25.4%

Like the general definition of affordable housing, affordable housing in Egypt is concerned with providing housing units for the low and middle classes. Also, the status of affordable housing in Egypt is similar to that at the regional level as it is affected by political, economic, social, and environmental

⁴⁰ Sisson, Alistair, and Rogers, Dallas, (2020). "International Encyclopedia of Human Geography."

⁴¹ Andoh, Akwasi B.; Ahadzie, Divine K.; and Kissi, Ernest, (2020). "Conceptualizing Affordable Housing Definition from The Perspective of Informal Low-Income Earners: Evidence from Three Urban Settlements In Kumasi, Ghana."

⁴² The Economic Times, (2023). *ibid*.

⁴³ All countries' ratios are calculated depending on *LivingCost.org* (2023), "Cost of Living," except for the United States, Canada, and New Zealand. URL: <https://livingcost.org/>

⁴⁴ National Association of Realtors, (2023) "Housing Affordability Index." URL: <https://bit.ly/3OtJA1W>

⁴⁵ Canada Mortgage and Housing Corporation- CMHS, (2023). "Rental Market Report."

⁴⁶ CoreLogic, (2023). "Housing Affordability Report."

issues, facing many challenges that translate this effect. Housing affordability is the cost of housing services and shelter – both for renters and owner occupiers – relative to a given individual’s or household’s disposable income⁴⁷.

Generally, housing in Egypt is essential for any political regime, and its efficiency is always associated with the state’s economic status. Like all global southern countries, the Egyptian economy has not reached the “Welfare Economics” level, which has abundant resources that can fulfill the inhabitants’ demand, including housing. Since the 1930s, the state has tried to support affordable housing and addressed its increased need due to population growth by conducting several interventions to make it available for a wide sector of its beneficiaries⁴⁸. Year by year, there has been an ongoing increase in population; in turn, this increase has caused an ongoing increase in population density, as shown in Figure 4.

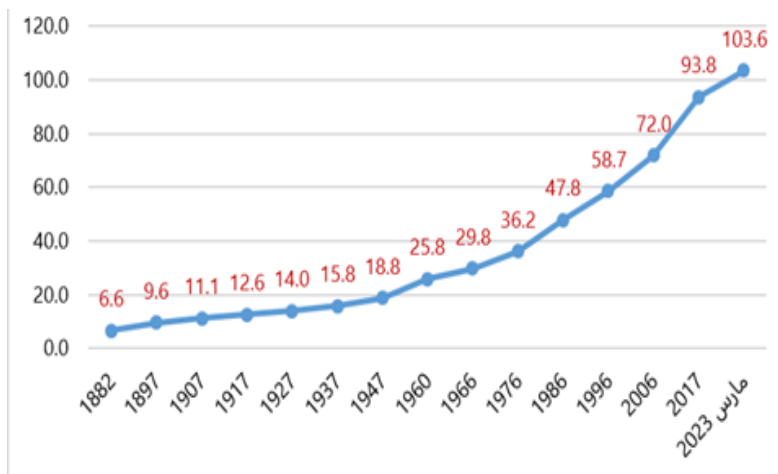


Figure 4: The Evolution of the Population Density in Egypt

Source: <https://marsad.ecss.com.eg/78244/>

The increase in population always generates an ongoing demand for affordable housing, requiring more efforts by the state to deal with it. Sometimes, the government achieved satisfactory results; sometimes, it did not. However, in the two cases, housing affordability is still a severe problem, especially in a current economic situation that includes severe economic issues like the weakness of local currency and inadequacy between incomes and housing cost.

Egyptians spend 19.2% of their income on housing, the second item in their expenditure after food and drink⁴⁹. Also, in the year of 2016, about 59.4% of households would have to pay more than 25% of their monthly income to rent the median-priced home (EGP 800/ USD 45), while almost half of the households (49.2%) would not be able to buy the median home at (EGP 225 000/ USD 12662)⁵⁰⁻⁵¹. Additionally, the economic conditions affect the quality of available housing units in rural and urban settlements. About 53.4% of Egyptian families suffer from inadequate sanitation, and 17% lack clean water⁵². Moreover, About 70% of Egyptian families don't have secure tenure⁵³, 3.2% live in non-durable

⁴⁷ David S. Bieri, (2014). “Encyclopedia of Quality of Life and Well-Being Research.”

⁴⁸ Naglaa Al-Meselhy, (2017). “The Social Dimensions for housing policies in Egypt: A Sociological Study,” In Arabic.

⁴⁹ Central Agency for Public Mobilization and Statistics- CAPMASS, (2019). “Income, Expenditure, and Consumption Survey.”

⁵⁰ 10 Tooba, (2016). “Built Environment Deprivation Indicators- BEDI: Affordability”, URL: <https://10tooba.org/bedi/en/affordability/>

⁵¹ According to the Central Bank of Egypt, The US Dollar equaled 17.77 EGP in 2017. Today, it equals 30.90 EGP in the formal market and 64.00 EGP in the informal one.

⁵² 10 Tooba, (2016). “Built Environment Deprivation Indicators- BEDI: Safe Water”, URL: <https://10tooba.org/bedi/en/safe-water/>

⁵³ 10 Tooba, (2016). “Built Environment Deprivation Indicators- BEDI: Secure Tenure”, URL: <https://10tooba.org/bedi/en/secure-tenure/>

housing⁵⁴, 54.3% are considered cost-burdened for housing⁵⁵, and 7.7% live in extremely crowded conditions (one two-room dwelling)⁵⁶. Therefore, considering the state's economic status in understanding housing in Egypt is key to increasing its capacity and finding efficient solutions for its problems.

Since 2016, the government has implemented a bundle of procedures to reform the Egyptian economy, like floating currency and diminishing fuel subsidies. Although this step has succeeded in decreasing governmental expenditures and the deficit in the general budget, it has many socioeconomic side effects on Egyptian citizens. The World Bank, in its document⁵⁷, warned the government that 60% of Egyptians are expected to be vulnerable due to the country's recent economic reform, and this case of vulnerability will reach many aspects, including achieving affordable housing and the government should follow these procedures to mitigate the effect on this domain as the following:

- Prioritizing housing projects for low-income groups to achieve social inclusion.
- Intensifying the housing supply in the existing cities and financially managing it to attain secure tenure and efficient land use.
- Assessing the return on investments to the affordable housing program, as one of the state's mega projects, to ensure the increase of capacity of the state's GDP.

Accordingly, at the level of policies, the state started from this date to encompass achieving affordable housing in its national medium-term and short-term plans to help low and middle-income citizens afford the cost of housing after these economic changes. On the medium-term level, "*Egypt Sustainable Strategy*" (SDS), colloquially named "*Egypt Vision 2030*," has targeted establishing 7.5M housing units by the end of 2030 to eradicate the problems of slums and informal settlements with their massive demands for affordable housing⁵⁸. In the short-term plan, due to hosting COP 27 in 2022, the state issued the "Sovereign Sustainable Financing Framework" to cope with climate change, referring to affordable housing as it has come up as one of its priorities.

The plan proposed renovating social housing projects to adopt concepts of dealing with climate change, besides furnishing housing units for slum dwellers with basic furnishings such as refrigeration, washing machines, stoves, heaters, and beds⁵⁹. At the Institutional level, the government issued Presidential Decree No. 93 of 2018 to establish the Social Housing and Mortgage Finance Fund (SHMFF) to provide appropriate housing units for middle- and low-income citizens suitable for their financial capabilities and guarantee a safe and decent life.

⁵⁴ 10 Tooba, (2016). "Built Environment Deprivation Indicators- BEDI: Durable Housing", URL: <https://bit.ly/3HUBBY8>

⁵⁵ 10 Tooba, (2016). "Built Environment Deprivation Indicators- BEDI: Affordability", URL: : <https://bit.ly/4byhsoo>

⁵⁶ 10 Tooba, (2016). "Built Environment Deprivation Indicators- BEDI: Crowding", URL: <https://10tooba.org/bedi/en/crowding/>

⁵⁷ The World Bank Group, (2015). "Egypt, Arab Republic of - Country Partnership Framework for the Period FY2015-19," Report No.: 94554-EG, Washington, D.C.

⁵⁸ Ministry of Planning, Monitoring, and Administrative Reform- MoPMAR, (2016). "Sustainable Development Strategy- Egypt Vision 2030."

⁵⁹ Ministry of Finance- MoF, (2022). "The Arab Republic of Egypt: Sovereign Sustainable Financing Framework."

Nevertheless, the situation on the action plan level/ detailed level has differed, and all the conducted procedures have moved towards the opposite way of the World Bank recommendations, which, in turn, has affected the individuals' ability to obtain affordable housing. The state's conducted affordable housing projects still cannot meet the demand for this type of housing, and the state's role will decrease in the future due to the critical economic situation⁶⁰. Furthermore, the expenditures for urban development in the existing cities have not equaled their population, compared with the new satellite cities, which have exceeded the existing cities in this domain and contain only 2% of the population, as shown in Figure 5. This conflict between policies and action plans was reflected in housing affordability when measured at the end of 2023 and compared with its values in 2016 before the economic reform was implemented.



Figure 5: Population vs. government expenditure on urban development in existing and new cities

Source: Alternative Policy Solutions- APS, (2020). "Urban Development and Housing Policies in Egypt"

Housing affordability is usually measured by the median rent to income ratio and the housing price to income ratio (HPI). In 2016, The Built Environment Deprivation Indicators (BEDI) established by 10Tooba⁶¹ measured housing affordability in Egypt through these domains. They found that the median rent-to-income ratio was 30%, and the HPI was 7.5. At the end of 2023, the authors conducted the same analysis depending on 10Tooba data, personal site surveys, and the official data from the Ministry of Planning and Economic Development (MoPED)⁶². Based on these data, the authors have found the median rent-to-income ratio today is 60%, which exceeds its value in other countries, as shown in Figure 6.

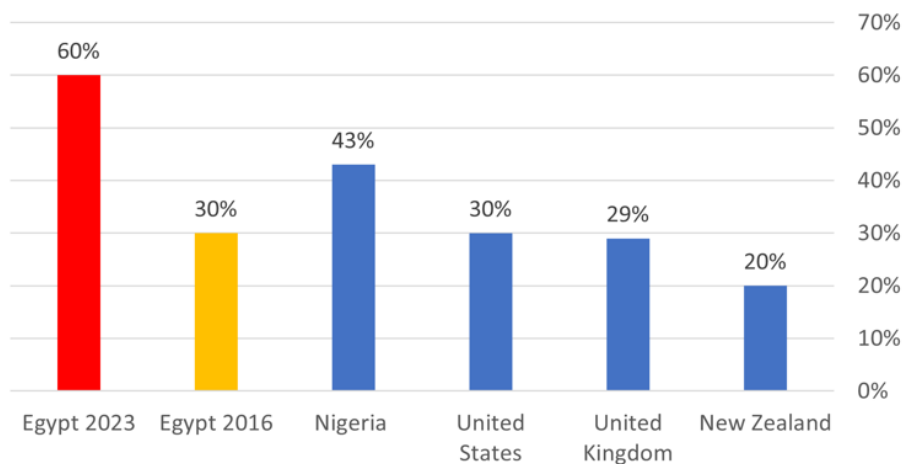


Figure 6: A comparison of median rent-to-income ratio between Egypt and other countries

⁶⁰ This Argument will be discussed in detailed in the next sector: "4.2 Gap Between Supply and Demand."

⁶¹ 10 Tooba is an Egyptian organization specialized in urban issues with common links in architecture and city planning.

⁶² The UNDP and MoPED- Egypt, (2021). "Egypt Human Development Report 2021."

Furthermore, the authors depended on the same data and measured the HPI, which reached 14.33. This measured value of HPI also exceeds those in other countries, even in other Arab countries like Jordan and Tunisia. However, Egypt’s value of HPI is still less than some other Arab countries, namely, Morocco and Algeria, as shown in Figure 7. This change of affordability measurements through seven years, from 2016 to 2023, signifies to what extent the economic situation has influenced affordable housing and clarifies the importance of making housing units more affordable for their beneficiaries.

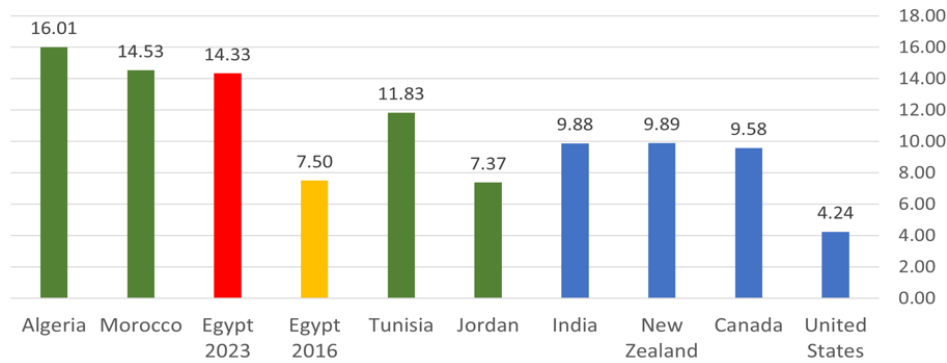


Figure 7: A comparison of housing price to income ratio (HPI) between Egypt and other countries

2.3 Affordable Housing Gap

There is a remarkable gap between supply and demand for affordable housing in Egypt. **Egypt needs about 500,000 affordable housing units per year⁶³**, while the overall housing production in Egypt for both public and private sectors is around this number, and sometimes it is less than this number. According to Figure 8, which illustrates the housing production in Egypt, the highest value of housing production in Egypt for both the public and private sector occurred in 2017- 2018, achieving 547,450 housing units for all housing types, including affordable housing⁶⁴. The lowest value occurred in 2021-2022, achieving

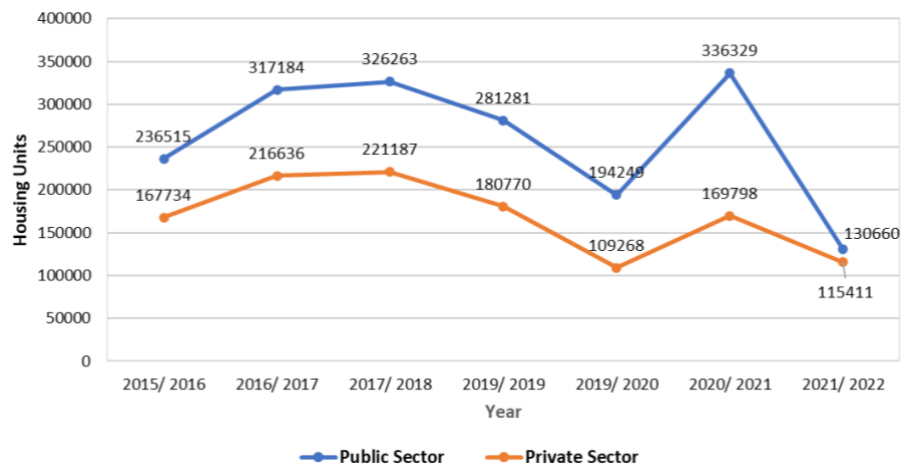


Figure 8: The production of housing in Egypt by public and private sector from 2015/16 to 2021/22
Source: CAPMAS

⁶³ The Centre for Affordable Housing Finance in Africa- CAHF, (2022). “Housing Finance in Africa: A review of Africa’s housing finance markets- 2022 Yearbook.”

⁶⁴ By Authors.

246,071 housing units built by the public and private sectors, which only reached a portion of the required value of affordable housing in Egypt.

The official role of housing providers are not sufficient enough to reduce this gap, including the role of formal public sector, the formal private sector, and the cooperative sector. Regarding the formal public sector, the state's performance still does not provide effective solutions for affordable housing. Although the Egyptian Presidency announced its ambitious project to build one million affordable housing units by the end of 2019, the state achievement of this project in 2023, five years after the project's deadline, is only 862,000 units⁶⁵. Also, the Egyptian Cabinet announced in February 2023 that it would remove all types of subsidies on social housing projects, and it will sell the future social housing units according to the free price of the market, as one of the procedures for austerity to meet the critical value of inflation and the shortage of foreign currency⁶⁶.

Regarding the formal private sector, its participation in producing affordable housing is also weak. The main interest of this sector is producing houses for the upper classes which entails that the housing units have high prices to help developers to achieve a profit. Finally, Regarding cooperative sector, it has suffered for a long time from many severe issues like conflict between laws, bureaucracy, and corruption⁶⁷, and these issues extremely minimized its role in producing affordable housing.

Due to this persistent gap between affordable housing demand and supply, the informal private sector has produced 54% of housing units, which provides affordable housing for a wide sector of users. Conversely, the formal private sector produces only 23% of housing units, and the same ratio exists for the public sector⁶⁸. This inconvenience in quantitative and qualitative housing production requires more efficient efforts from all parties to reduce this gap and provide adequate housing units, especially for the affordable housing sector.

2.4 Housing Vacancy

As discussed above, Egypt has a severe imbalance between the need for affordable housing and the available housing units. This problem can be determined as a massive demand for affordable housing from a wide sector of citizens versus an abundance of unaffordable housing units provided by the housing market. This problem has existed for a long time, and it started to be recognized at the end of the 1970s when the state adopted the neo-liberal economic concepts, as per the *Open Door Policy (Al-Infitah in Arabic)*⁶⁹. The problem was under control in the past, in the 1980s and 1990s, because the government's role was trying to decrease this effect usually caused by the private sector. However, since the beginning of the 2000s, the state's role has declined more than before. It moved to land speculation and commodifying houses to meet the demand of upper classes rather than the lower

⁶⁵ "Social Housing: Housing for All Egyptians," (2023). Al- Ahran News Paper, URL: <https://bit.ly/3T87Nhi>

⁶⁶ Al-Arabiya.net, (2023), "Egypt cancels subsidies on social housing units and adopts sales at the Free Price", URL: <https://bit.ly/3uOnLTE>

⁶⁷ Al-Masry Al-Youm Newspaper, (2023), "The Members of Senates Ask to Modify the Laws of Cooperatives," URL: <https://www.almasryalyoum.com/news/details/2914346>

⁶⁸ The Built Observatory- BEO, (2021). "Who Build Egypt's Housing 2021", URL: <https://marsadomran.info/en/2022/06/2394/>

⁶⁹ Milad Hanna, (1978). "I need a house: A Problem that has a Solution," in Arabic.

ones⁷⁰, causing many million housing units for upper-middle and upper classes versus an enormous need for housing by the poor classes⁷¹.

Using the Egypt Census 2017 data, the authors studied housing vacancy rates in Egyptian governorates by determining the total number of occupied units, besides three main categories of non-occupation to be used and functionalized for solving the problem of the non-availability and affordability of housing units. These categories are:

Unoccupied housing units, which are related to housing units that don't have tenure and are easy to reuse and re-function for affordable housing. This categories exists in the 2017 Egyptian census in two classifications:

- Housing unit complete but unoccupied: The construction of the housing unit was completed but vacant and had no tenure when the census survey was conducted.
- Housing unit unfinished and unoccupied: The construction of the housing unit was found uncompleted as its construction was in progress when the census survey was conducted. In addition, it was vacant and had no tenure.

Deteriorated occupation of housing units, which are related to housing units that are already occupied and tenured but suffer from physical and structural deterioration. These units, in their current case, are affordable but highly deteriorated. However, conducting some interventions to reform their physical and structural status may help decrease the demand for affordable housing. According to the 2017 Egyptian census this category exists through two classifications:

- Housing unit requires renovation: The housing unit is occupied and tenured, but it needs reforming and rehabilitating to be suitable for housing. However, after rehabilitation, it can be used as an affordable housing unit.
- Housing unit under demolition by decree: The unit is tenured and may be occupied or not, but it is in an unsafe condition and needs to be demolished. Consequently, the municipality has issued a demolition decree for the unit's housing block. This type of buildings has two options to be reused as an affordable housing solutions. The first option is to intensively reform the unit to be suitable for housing, and the second option is to benefit from the unit's plot land and its connection with various networks of infrastructure to create new affordable housing units.

Frozen occupation for housing units, which are arguably the category of vacant units that are the most difficult to convert to affordable housing units, as the units are legally occupied and tenured, but they are vacant and therefore frozen and not efficiently used. Dealing with this category of units would require a lot of negotiation to persuade the owners of the shared benefits of reusing their frozen housing units as alternatives to providing affordable housing. According to the 2017 census, this case exists through two classifications:

- Housing unit is closed and owners are abroad: The unit is vacant due to the owner traveling abroad for work, study, medical care, etc. Accordingly, the unit is legally occupied and tenured.

⁷⁰ Shukrallah, S., and Shawkat, Y., (2017). "Analysis: Government Policy Commodifies Housing," The Built Environment Observatory- BEO, URL: <https://marsadomran.info/en/2017/11/1218/>

⁷¹ UNDP, and GOPP, (2014). "The National Strategic Plan for Urban Development: Egypt Vision 2052."

- Housing unit is closed and household has alternate residence: The unit’s owner is living inside Egypt but does not use this unit as it already lives in another housing unit. Consequently, the unit is also legally occupied and tenured.

The Census has clarified that one-third of the housing units in Egypt are not efficiently used, and the most significant ratio of this inefficient use is constituted by the “Unoccupied Housing Units” category described above, making up 22% of total housing units in Egypt, as shown in Table 5, and Figure 9.

Table 5: The Details of Inefficient Housing Unit Usage, Based on the Data of Egypt Census 2017⁷²

UNOCCUPIED HOUSING UNITS		DETERIORATED OCCUPATION FOR HOUSING UNITS		FROZEN OCCUPATION FOR HOUSING UNITS	
Unit complete & unoccupied	Unit unfinished & unoccupied	Unit requires renovation	Unit under demolition decree	Closed & owner living abroad	Closed & owner has alternative residence
4,821,832	4,442,702	615,454	77,412	1,121,979	2,892,478
Total housing units				42,978,014	
Total occupied housing units			28,968,907	Percentage:	67%
Total unoccupied housing units			9,264,534	Percentage:	22%
Total deteriorated housing units			692,866	Percentage:	2%
Total frozen housing units			4,051,707	Percentage:	9%

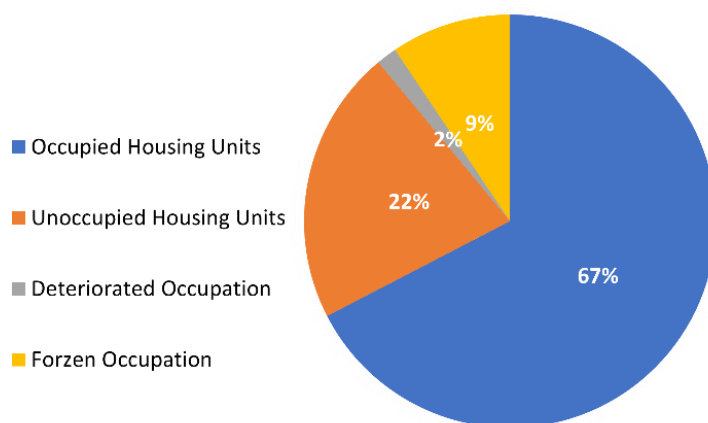


Figure 9: A comparison between the ratio of occupied housing units and the various types of inefficient housing unit usage

Source: Based on the Data of Egypt Census 2017

⁷² By Authors.

By studying in detail this inefficient use, as shown in Figure 10, the most significant value of inefficient housing unit usage comes for: “Housing Unit Complete but Unoccupied” and “Housing Unit Unfinished and Unoccupied.” The status of frozen housing units comes in second place. Also, the ratio of the case “Closed: Household has Alternate Residence,” which is 21% of the total unused units, gives a solid significance for using housing units as saving pots for many Egyptian families who invest their money in buying housing and benefit for its increased price in future.

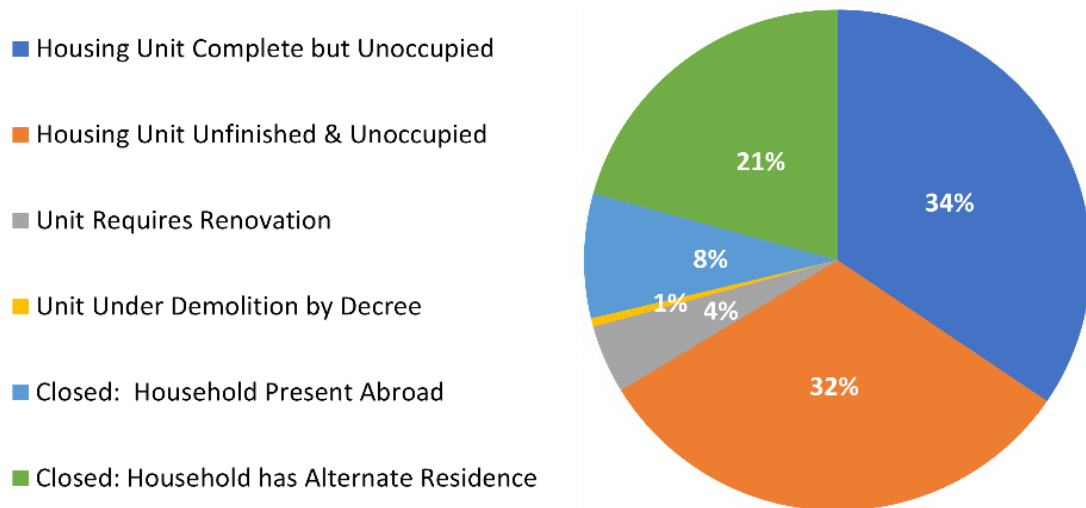


Figure 10: The details of inefficient housing unit usage

Source: Based on the Data of Egypt Census 2017

Although this ratio of unused units is enormous, it has some potential. It can be re-used as one of the solutions to mitigate the effect of a lack of housing units, including affordable housing units. Therefore, the government has recently cooperated with UN-Habitat to deal with this problem and manage this unused stock of housing units⁷³.

2.5 Subsidized Housing

Affordable housing in Egypt is provided through four main channels, namely: the public/governmental sector, the formal private sector, the cooperative sector, and the informal private sector.

The Public Sector/ Governmental Sector

For more than seventy years, the role of the public/governmental sector has been essential and principal in providing affordable housing in Egypt through what has been defined in different eras as “public” housing, “governmental” housing, and “social” housing.

⁷³ Al-Masry Al- Youm Newspaper, (2024). “Egypt Cooperates with the UN- Habitat to benefit from the Reusing of 13 Million Closed and Vacant Housing Unit,” URL: <https://bit.ly/49e10t9>

Since the 1950s and through all Egyptian presidential eras, providing affordable housing has been a priority in all development strategies. According to Table 6, about 27,559,091 affordable housing units have been built by the government during seven presidential eras, and they have cost 350.5B EGP from 1981 till now.

Table 6: Number and Cost of The Government Affordable Housing Units (1952-now) ⁷⁴

No.	Presidential Era	Period	Number of Achieved Affordable Housing Units	Total Cost (EGP)
1	Gamal Abdel Nasser	(1954-1970)	364,721	N/A
2	Mohammed Anwar Al-Sadat	(1970-1981)	16,675	N/A
3	Mohammed Hosni Mubarak	(1981-2011)	1,472,308	44.7B
4	Supreme Council of Armed Forces- First Transitional Period	(2011-2012)	40,287	5.8B
5	Mohammed Morsi	(2012-2013)		
6	Adly Mansour- Second Transitional Period	(2013-2014)		
7	Abdel Fatah Al-Sisi	(2014-Now)	862,000	300B
Total Number of Achieved Housing Units			27,559,091 Housing Units	
Total Cost (1981- Now)			350.5B EGP	

Moving to the current presidential era, President Al-Sisi launched “The Social Housing Project” colloquially referred to as the “One Million Housing Units Project”, to reduce the gap of providing affordable housing units by constructing one million housing units from 2014 to 2018, including 200K housing units per year. By the middle of 2023, the state succeeded in constructing 862,000 housing units. This result was achieved five years later than the planned deadline because of the instability of the state’s economic situation and the consequences of the pandemic of COVID-19 which froze the work of the construction sector for the public and private sectors⁷⁵. Architecturally, the government-built affordable housing units were almost entirely built in the new satellite cities and followed specific prototypes, which are described in more detail in Annex B.

Although the government has tried to make efforts to support affordable housing, Egypt’s experience of providing housing by the public sector has faced many problems⁷⁶.

There is an **challenge in providing an sufficient volume of affordable housing** for the targeted groups in the face of the increased affordable housing demands due to the population increase. This imbalance

⁷⁴ Al- Youm Al- Sabee Newspaper, (2014). “The Problem of Housing with Six Presidents,” URL: <https://bit.ly/3HIQMZU>

⁷⁵ Masrawy, (2020). “Business At Stake: How is the Contracting Sector Affected by Corona Measures?” URL: <https://bit.ly/421slVY>

⁷⁶ Yahia Shawkat, (2014). “Housing Policies in Egypt: Between Continuing the Policies of Past and Setting Fair Policies for the Future.”

makes the participation of the public sector still weak, compared with its owned potential of land availability, especially in the new satellite cities. Besides, it has the political, technical, and administrative power to produce massive numbers of affordable housing units.

The [functional inefficiency of the architectural design](#) of housing prototypes regarding space areas and their suitability for furnishing. Also, the unit has not met the demands of privacy and separation between different genders inside the single family, which is an essential housing need rooted in the cultural beliefs of the Egyptian household.

There is [spatial dysfunction in choosing affordable housing projects in desertic peripheral zones](#), which are far from the cities that include various work opportunities and urban facilities, compared to the newly planned zones that encompass affordable housing. Also, the adoption of the neighborhood form as a physical planning model for affordable housing zones, and this model separates residential zones and urban facilities. In turn, it negatively influences the functional efficiency of affordable housing zones as they compel their inhabitants to walk long distances to reach urban facilities in the absence of effective means of transportation that facilitate their access to the far-allocated urban facilities. Besides, it has opened the door for informal/unplanned interventions by individuals to illegally change the single land use of housing blocks into a mixed-land use by transforming the ground floor housing units into commercial shops to provide urban services near the residential zones.

The adopted [tenure system of government affordable housing has proved its unsuitability](#) for a large number of targeted beneficiaries as it provides affordable housing through ownership rather than renting. Although the government has supported the ownership by individuals through mortgages, the requirements to have this mortgage, financially and administratively, have eliminated many low-income groups as they can't meet these requirements to obtain a mortgage to have the housing unit through ownership. Accordingly, the upper-low and low-middle income groups were the only beneficial groups from the different affordable housing projects, which were actually designed and oriented to the most needed groups of poor and low-income.

Finally, the [absence of post-occupancy monitoring and evaluation](#) has led to the loss of the benefit of the state's affordable housing units as they have been oriented to real estate speculation instead of using them as homes. Many beneficiaries, after obtaining their housing units, sold them with their market prices to benefit from the difference in prices between their supported prices by the state and the market price, which is bigger than the state price. Subsequently, they got the price of the state's sold units and searched for other housing units that meet their demands of work, transportation, and urban services. Sometimes, they return to the unplanned/ urban-deteriorated zones as they give them the formerly mentioned privileges that do not exist in the zones of affordable housing projects.

The Formal Private Sector

The formal private sector is the second key actor in providing housing units in Egypt, with a ratio of 23% of overall housing production in Egypt⁷⁷. The formal private sector is produced by large developers, medium-sized developer contractors, and individuals using small contractors. Consequently, the role of the formal private sector is moderated by the building permit laws and the administrative procedures of the local municipalities⁷⁸.

At the beginning of the 1960s, housing production in Egypt was associated with several laws to reduce housing rents to benefit poor groups. This led to the reluctance of the formal private sector to invest in low-income housing rental units. Consequently, the state had to bear the burden of providing housing for poor society groups⁷⁹. From the mid of the 1970s to the mid of the 2000s, the state transformed from socialism to capitalism; however, the state has been the common provider for affordable housing as the former private sector has focused on building houses for upper-middle and upper classes as they can afford the cost of housing⁸⁰. By the mid of the 2000s, and with the dominance of neoliberal policies in Egypt like privatization, the government liaised with the formal private sector to establish a partnership for providing affordable housing units in the "National Housing Project- NHP" by involving the private sector in two sub-projects, "Build Your Home" (Arabic: *Ibni Baytak*) and "The Investors" (Arabic: *Al-Mustathmeron*), as shown in Table 7.

Table 7: The relationship between planned and achieved numbers of housing units in "Ebni Baytak" and "Al-Mustathmeron" projects⁸¹

No.	Projects Names in the National Housing Project- NHP	Planned				Achieved		Ratio of the Difference Between the Original and Achieved in 2012
		Original Plan, From October 2005 To September 2011		Modified Plan, Extending the Project Till September 2012		Implemented Till September 2011		
		No. of Units	(%) from NHP	No. of Units	(%) from NHP	No. of Units	(%) from NHP	
1	"Ebni Baytak"	89,000	17.8 %	93,756	15.4 %	93,405	24.3 %	+ 6.5 %
2	"Al-Mustathmeron"	100,000	20 %	85,050	14 %	25,511	6.6 %	- 13.6 %

Challenges facing private sector provision of affordable housing can be summarized as follows⁸²:

⁷⁷ The Built Observatory- BEO, (2021). "Who Build Egypt's Housing 2021", URL: <https://marsadomran.info/en/2022/06/2394/>

⁷⁸ The UN-Habitat, (2016). "Egypt Housing Profile."

⁷⁹ The UN-Habitat, (2022). "Egypt Housing Strategy."

⁸⁰ Naglaa Al-Meselhy, (2017). "The Social Dimensions for housing policies in Egypt: A Sociological Study," In Arabic.

⁸¹ Yahia Shawkat, (2014). "Housing Policies in Egypt: Between Continuing the Policies of Past and Setting Fair Policies for the Future."

⁸² The UN-Habitat, (2022). "Egypt Housing Strategy."

- Reluctance of the private sector to provide rental units due to the large profit gap between selling and renting units, the long rental return period, as well as the inadequate laws regulating the relationship between landlord and tenant. This trend is still persistent despite regulating renting by the issuance of Law 4 of 1996 and its amendment (Law No. 137 of 2006), as well as the increase in the number of rental units;
- Tendency to provide housing for the upper-middle and upper classes that have higher purchasing capabilities;
- Tendency towards ownership, and increase in the price of housing units in that category, lead to a significant surplus because of their unaffordability;
- Shrinkage in the role of the cooperative housing sector because of its reliance on limited public funding, as well as neglecting the sector's role in housing policies and programs.

The Cooperative Housing Sector

The cooperative sector has weak/insufficient participation in providing affordable housing units because of legislative and administrative conflicts, lack of funding, and absence of accountability.

The development of the housing cooperative movement In Egypt began in the 1930s as a component of the movement against colonialism. The emerging cooperatives were decentralized with self-governing organizational structures founded on the Raiffeisen legal framework and the British industrial and provident society.

The cooperative movement encompasses five distinct sectors: consumer, agriculture, fishery, housing, and production, comprising eighteen thousand democratic cooperative organizations⁸³⁸⁴. In Egypt, housing cooperatives emerged to furnish individuals with affordable dwellings. These endeavors emerged from personal initiatives with certain governmental backing. Before the 1950s, housing provision was primarily the responsibility of private developers. After 1952, the Government got involved in addressing the dire housing situation. From this juncture, the public sector and semi-public agencies, encompassing housing cooperatives, influenced housing development. The funding for these developments was sourced from personal and familial savings, and the General Authority for Construction and Housing Cooperatives (GACHC), which offered subsidies and loans at lower interest rates compared to those that commercial banks offered (CHC, 2022)⁸⁵, and the governorates' low-interest loans. Housing cooperatives developed administrative structures affiliated with the political regime to provide decent units at low prices to individuals without good self- management. Housing cooperatives were operational until the 1980s.

The State provided cooperatives with large areas of land to develop. Housing cooperatives continued to provide affordable housing units to their constituents. At the end of this period, several cooperatives were under investigation for financial corruption and administrative violations. The State imposed full control over housing cooperatives by issuing Law 14/1981. The Union of Housing Cooperatives emerged

⁸³ Aboud, S. S. (2005) Cooperatives as a tool for self-liberation, Civilized Dialogue. Translated by A. O. El- Kholei. Available at: <http://www.ahewar.org/debat/show.art.asp?aid=53317> (Accessed: 20 November 2013).

⁸⁴ El-Kholei, A. O. (2013) 'From Housing Cooperatives to Integrated Cooperatives: A Recipe for Sustainable Communities in Egypt', The International Conference for Cooperative Housing. Cairo, Egypt: Authority for Construction and Housing Cooperatives.

⁸⁵ CHC (2022) About CHC, The General Authority for Construction and Housing Cooperatives. Available at: <http://chc-eg.org/about-chc/>.

to include all housing cooperatives as members to oversee their activities. The role of cooperatives experienced a decline after the emergence of neoliberalism in the 1990s, as many cooperatives could not effectively compete with private sector entities due, in part, to several factors. Significant obstacles comprise the dearth of professionalism in governance and the absence of elected officials. Numerous cooperatives' organizational cultures and internal conditions were not conducive to advancing and enhancing cooperatives as commercial entities. Challenges include an antiquated legal framework, overbearing regulation, and State intervention. Diseconomies of scale⁵ are a significant constraint that cooperatives face because they limit their financial capabilities. Moreover, there is a deficiency in providing a structured framework that incentivizes and acknowledges innovative endeavors (El-Kholei, 2013).

2.6 Housing Informality

Informal urban planning is adopted by the individuals inside the settlements, with a complete absence of the state's supervision and management role because it fails to meet the individuals' increased needs for housing and urban services. The Informal planning was started to be adopted by the end of the 1960s through various patterns like sprawling illegally on arable land for constructing houses, densifying the old/ new building's floor area ratio by illegally adding more floors to it, and settling in inadequate houses/ zones like tin houses and cemeteries. The built-up environment resulting from this model suffers from a lack of basic services and infrastructure, non-hygienic conditions for lighting and ventilation, socio-economic fragility, and insecure tenure. Today, Egypt faces a severe problem due to the wide dependence on this model. There are about 364 zones described as (unplanned/ unsecured) ones and encompass the formerly mentioned features⁸⁶ of this model's built-up environment⁸⁶; besides, Egypt loses about 35K acres annually due to the illegal urban sprawl on the agricultural lands⁸⁷.

The informal private sector is the biggest producer of housing in Egypt, as it produces 54% of total housing production. However, this production is classified as an inadequate one. About 53.4% of Egyptian families suffer from inadequate sanitation, and 17% lack clean water⁸⁸. Moreover, about 70% of Egyptian families don't have secure tenure⁸⁹, 3.2% live in non-durable housing⁹⁰, 54.3% are considered cost-burdened for housing⁹¹, and 7.7% live in extremely crowded conditions (one two-room dwelling)⁹².

According to the Egyptian government, under the slogan of "Egypt without slums" through the relocation of all the unsafe areas through providing housing projects were established in several governorates⁹³. Although urban planning after the 2011 uprising has become more market-oriented, housing projects for the low-income classes are mostly carried out by the state as private sector

⁸⁶ Egyptian Cabinet, (2014). *"Informal Settlements in Egypt: Facts and Numbers."*

⁸⁷ General Organization of Physical Planning- GOPP, (2014) *"The National Strategic Plan for Urban Development- Egypt Vision 2052."*

⁸⁸ 10 Tooba, (2016). *"Built Environment Deprivation Indicators- BEDI: Safe Water"*, URL: <https://10tooba.org/bedi/en/safe-water/>

⁸⁹ 10 Tooba, (2016). *"Built Environment Deprivation Indicators- BEDI: Secure Tenure"*, URL: <https://10tooba.org/bedi/en/secure-tenure/>

⁹⁰ 10 Tooba, (2016). *"Built Environment Deprivation Indicators- BEDI: Durable Housing"*, URL: <https://bit.ly/3HUBBY8>

⁹¹ 10 Tooba, (2016). *"Built Environment Deprivation Indicators- BEDI: Affordability"*, URL: <https://bit.ly/4byhsoo>

⁹² 10 Tooba, (2016). *"Built Environment Deprivation Indicators- BEDI: Crowding"*, URL: <https://10tooba.org/bedi/en/crowding/>

⁹³ Elmouelhi, H., Mayer, M., Reda, R., Abdelhalim, A. (2021) *"Mediatizing Slum Relocation in Egypt: Between Legitimization and Stigmatization"* in Media and Communication (ISSN: 2183–2439) 2021, Volume 9, Issue 4, Pages 345–359
<https://doi.org/10.17645/mac.v9i4.4491>

investments in affordable housing for lower-income groups are considered risky for developers seeking high-profit margins^{94 95 96 97}. According to the ISDF's (later renamed as UDF) statistics, in 2014, 364 areas across Egypt were identified as unsafe⁹⁸. By June 2021, celebrating seven years of President El-Sisi, short national TV advertisements documented the regime's slum relocation projects: "The Egyptians have succeeded in developing 298 ashwa'eyat unsafe areas in different governorates [...] 177,5 thousand families have received new flats in safe and healthy areas"(Channel One, 2021). Represented as a major pillar and achievement among many other urbanization and construction projects, the reports carried an explicit message of progress and political potency.

The future of the majority of informal urban areas in Egypt, defined as unplanned areas or redevelopment areas, is not clearly foreseen. The upgrading efforts done by the government in the recent years is being selective and in most cases backed by an economic profit. A transparent vision or roadmap that deals with the majority of the existing Egyptian urban reality is missing, given the recent institutional changes, including for example the prolonged parliamentary discussions of the modifications within the unified Building law-UBL, and the change of the mandate of the Urban Development Fund-UDF becoming an economic entity, which started recently in 2024 to present itself as a governmental real estate entity that invest in housing projects.

2.7 Affordable Housing Finance

Housing finance means financing provided to individuals to construct and purchase residential homes or plots⁹⁹. The principal dependent tool to achieve housing finance is the mortgage, a loan financing the purchase or maintenance of a property, land, or other rental properties. The lender, which can belong to the formal or informal sector, agrees to pay back the loan over some time, generally in a series of regular installments divided into the principal of the loan and its cumulative interests through the period of its repayment. The property value protects the sum of the loan, and the borrower should apply for a loan with their preferred lenders and meet several criteria, including standard credit scores and prepayments¹⁰⁰. The formal channels for financing affordable housing in Egypt can be categorized into the macrofinance sector and the microfinance sector, detailed below.

The Macrofinance Sector

It relates to the governmental practices, policies, and programs that financially support affordable housing, one of the state's sectors of the overall economy and a vital pillar of its social structure,

⁹⁴ Elmouelhi, H. (2014). Culture and informal urban development: The case of Cairo's Ashwa'eyat (Informal Settlements). Berlin, Verlag Köster.

⁹⁵ Hendawy, M., & Stollmann, J. (2020). The entanglement of class, marriage and real estate: The visual culture of Egypt's urbanisation. *Urban Planning*, 5(2), 44–58.

⁹⁶ Shawkat, Y. (2020). Egypt's housing crisis. The American University in Cairo Press.

⁹⁷ Sims, D., & Abu-Lughod, J. L. (2010). Understanding Cairo: The logic of a city out of control (1st ed). The American University in Cairo Press.

⁹⁸ Maabady, B. E. (2015). Reviewing the ISDF strategy for dealing with slums in Egypt [Master's thesis, The American University Cairo]. AUC Knowledge Fountain. <https://fount.aucegypt.edu/etds/1110>

⁹⁹ Law Insider, (2023). "Housing Finance Definition," URL: <https://www.lawinsider.com/dictionary/housing-finance>

¹⁰⁰ The Economic Insider, (2024). "What is Mortgage," URL: <https://economictimes.indiatimes.com/definition/mortgage>

through subsidies and long-term low-profit loans¹⁰¹. Until the end of the 1990s, the state took it upon itself as the primary sponsor for financing affordable housing. Although the concept of real estate finance had existed since the establishment of banking system in Egypt by the late of 1800s, but it was oriented for the upper income classes¹⁰². Accordingly, the state tried to adopt the concept for the low-income classes to maintain social equity. In the Nasser era, the state had funded governmentally affordable housing by providing many housing units through the state's projects of "Popular Housing/Al-Eskan Al-Sha'abi in Arabic," which were offered through the tenured by cheap, unchangeable rent prices¹⁰³. The same situation of low-income housing finance was achieved in the Era of Sadat. The state established in 1976 "The Economic Housing Projects Finance Fund" as the centric governmental authority for financing housing projects for low-income groups¹⁰⁴. Later, in 1979, as a trial of the state to transform into decentralization, the state canceled the former finance fund. On the other hand, it made the housing finance fund an independent body for each governorate, as stated in *Article No. 36 of the Local Administration Law in 1979*¹⁰⁵. Although the finance mentioned above funds in the Nasser and Sadat eras do not exist today, their related housing units still remarkably exist in the Egyptian housing stock and are inhabited by low-income groups. However, the related housing units suffer from extreme deterioration due to their oldness and the lack of maintenance, which is quite expensive compared with their old unchanged rent value, as shown in Figure (11).



- Housing blocks in Marsa Matrouh City, Source: Al-Shorouk Daily Newspaper.



- Housing blocks in Fakous City, Source: Al-Youm Al-Sabee Daily Newspaper.

Figure 11: Physical deterioration of housing blocks benefiting from housing finance funds in Nasser and Sadat eras

On the other hand, the government financed the non-governmental sector of affordable housing in the same era by facilitating tenure by rent and enacting laws that protected and benefited the tenants

¹⁰¹ Investopedia, (2023). "Microfinance vs. Macrofinance: What's The Difference?" URL: <https://bit.ly/3TjurBO>

¹⁰² Mina Stefanos, (2015). "Demographics, Financials and Property related variables and their Impact over Mortgage Demand in Egypt: Borrowers' Perspective."

¹⁰³ Al-Mal Newspaper, (2018). "Understanding Housing Project in The Era of Gamal Abdel Nasser," URL: <https://bit.ly/3P6LFkF>

¹⁰⁴ The Official Newspaper, Issue No. 37, Published on 9 September 1976.

¹⁰⁵ The Official Newspaper, Issue No. 25, Published on 21 June 1979.

more than landlords, such as law No. 46 for the year of 1962, law No. 49 for the year of 1977, and law No. 136 for the year of 1981. However, this type of housing finance also faces dramatic problems as the value of housing rent has not equaled the housing market value that increases daily, and the laws did not consider this matter. In the 1960s, laws determined the tenant's rent value by three to five EGP, while the One US Dollar in this period equaled 0.4 of the One EGP¹⁰⁶.

Today, in the 2020s, many tenants' siblings inherited the housing unit and paid the exact rent value depending on the formerly mentioned laws. In contrast, today's One US Dollar equals 32 EGP in the formal market and 52 EGP in the informal market. Accordingly, more than two million housing units have been dealt with as dead capital¹⁰⁷ due to this old and unchangeable type of housing finance the state offered in the past and still works nowadays.

In parallel with the state's step to support affordable housing for each governorate in a decentralized way, the state also established "*The Finance Fund for Houses Built by The New Urban Communities Authority- NUCA*," according to presidential decree No. 487 for the year of 1979¹⁰⁸. From this date till the beginning of 1990s, this fund was responsible for financing housing projects in the Egyptian new satellite cities, with a strong interest in providing affordable housing units for the low-income and middle-income classes. The financing mechanism of this fund was providing long-term and low-interest governmental mortgages for these targeted groups to obtain affordable housing.

Moreover, the state afforded many related items of these housing units, mainly the land value and the infrastructure cost. The main target of this type of housing finance was giving massive amounts of units tenured through ownership rather than the old model of tenure by rent, which did not differ in terms of benefiting from the housing unit from tenure by ownership. This fund showed intensive interest in financing affordable housing projects in the first-generation cities of the Egyptian satellite cities¹⁰⁹, and remarkable numbers of households of the targeted group have benefited from this type of finance, especially in the early phases of establishing these cities. The prices of affordable housing units in this era were reasonable, and many beneficiaries were able to afford them. For example, the cost of 63 m² housing units (2 bedrooms + reception) in the 1980s was 800 EGP as a first installment deposit and a monthly installment of 34 EGP for 30 years¹¹⁰.

However, the beneficiaries of financing affordable housing units have finished their financial commitments and installments towards the financing fund. Consequently, they suffer from deterioration and the state's absence of repair and maintenance of their housing units, as they cannot afford them due to their weak economic abilities, as shown in Figure 12.

¹⁰⁶ Sada Al-Balad News Portal, (2021). "*Old Rent and Gamal Abdel Nasser, How did the Conflict between the Tenant and Landlord establish?*" URL: <https://www.elbalad.news/4926294>

¹⁰⁷ Al-Watan Newspaper, (2024). "*All about the Law of Old Rent in 2024*," URL: <https://www.elwatannews.com/news/details/7153342>

¹⁰⁸ The Official Newspaper, Issue No. 49, Published on 6 December 1979.

¹⁰⁹ According to the New Urban Communities Authority- NUCA, the first-generation cities are the core cities that established the Egyptian New Satellite cities. They were founded between 1977 and 1982. These cities are the 6th of October City, the 10th of Ramadan City, the 15th of May City, Sadat City, New Al-Salehya City, New Damietta City, and New Borb Al-Arab City.

¹¹⁰ Based on a personal interview with one of the residents of this type of housing, living at the 15th of May City.



- Affordable Housing Units that were built at the beginning of the founding of the 10th of Ramadan City, Source: Al-Youm Al-Sabee Daily Newspaper.



- Affordable Housing Units that were built at the beginning of the founding of the 15th of May City, Source: Al-Masry Al-Youm Newspaper.

Figure 12: Physical deterioration of housing units benefiting from governmental finance at the establishment of early phases of the first-generation cities

Later, at the beginning of the 1990s, “The Finance Fund for Houses Built by The New Urban Communities Authority—NUCA” changed to “The Social Housing Fund”. However, this fund continued to work with the same responsibilities and finance mechanisms for providing affordable housing units for low-income groups, which were named “Economic Housing Units,” and middle-income groups, which were named “Social Housing Units.” The Social Housing Fund provided several mortgage systems on a wide scale for obtaining affordable housing units in the three national projects mentioned above, as shown in Table 8.

Table 8: Methods of Finance for the State’s Affordable Housing Projects, From 1990 to 2012¹¹¹

Housing Finance	Affordable Housing Projects from 1990 to 2012			
	The Youth Housing Project	The Housing of Future Project	The National Housing Project- NHP	
			Buildings Blocks	Build Your Home "Ebni Baytak"
Method of Payment	The beneficent affords between 18K and 31K EGP, including a cooperative loan of 15K EGP. This loan will be repaid over 40 years at 5% interest, and the	The beneficent affords between 15K and 30K EGP, including a cooperative loan of 15K EGP. This loan will be repaid over 40 years at 5% interest, and the	The beneficent pays 5000 EGP as a deposit installment, followed by 160 EGP monthly installments, which increase by 7.5%	The beneficent afford all construction and finishing costs, Also, he pays a deposit installment 5000 EGP, followed by 160 EGP monthly

¹¹¹ Marwa S. Hamed, (2018). “Towards a Vision for an Effective Policy for Low-income Housing in Egypt: Evaluation of the Social Housing Program in New Cities.”

	installment does not exceed 73 EGP / month.	installment does not exceed 73 EGP / month.	per year for 20 years.	installments, raises by 7.5% per year for 20 years.
State's Offered Subsidies	The state pays 40% of the unit's total cost and provides a cooperative loan of 15K EGP repaid over 40 years at 5% interest.	A non-refunded sum of 15K EGP for each deserving person of the single housing unit.	A non-refunded sum of 15K EGP for each deserving person of the single housing unit.	A non-refunded sum of 15K EGP for each deserving person of the single housing unit.
Housing Unit Area	63 m ² , 70 m ² , and 100 m ² .	63 m ²	63 m ²	Housing Plot Area of 150 m ² .
Mandated Authority for Finance	The New Urban Communities Authority- NUCA	Al- Mostakabl Association ¹¹² + The New Urban Communities Authority- NUCA	The New Urban Communities Authority- NUCA	The Individuals + The New Urban Communities Authority- NUCA

By 2001, the state issued law No. 148, *“The Real Estate Finance Law,”* to open the domain for other authorities, principally the banks, to finance housing units, especially those related to affordable housing projects for low-income and middle-income classes¹¹³. Also, the state established the *“Real Estate Finance Activity Guarantee and Support Fund,”* according to the presidential decree No. 3 for the year 2003, to administratively supervise all the procedures financing the affordable housing projects¹¹⁴ funded by the governorate (Ministry of Housing) or other authorities like banks.

Although this step for double financing by the *“Social Housing Fund”* and *“Real Estate Finance Activity Guarantee and Support Fund”* was an optimistic one to provide more affordable housing units for the low-income classes, the results were unsatisfactory. The participation of other financing authorities, particularly the banks, was insufficient. The mortgage loans offered for all housing types, including affordable ones, represented a small percentage of banks’ overall balance sheets, and none of the banks achieved the regulatory maximum of 5% of their total assets in the housing sector, as the state planned from this step¹¹⁵. Furthermore, the most recognized participating banks in financing affordable housing projects were the state’s governmental ones: Banque Misr, National Bank of Egypt- NBE, Banque du Caire, and Housing & Development Bank- HD Bank, while the participation of private sector banks in this type of housing projects was very weak.

¹¹² *Al-Mostakabl Association* is a cooperative association that was established in the mid-1990s and worked under Cooperative Housing Law No. 32 in 1963. It included members from the real estate investment sector, the industrial investment sector, and the contracting sector, and all contributors who donate to *“the Future Housing Project”* enjoy membership in this association, which receives their donations and uses them for the construction of the project’s affordable housing units.

¹¹³ The Official Newspaper, Issue No. 25 (Repeated), Published on 24 June 2001.

¹¹⁴ The Official Newspaper, Issue No. 1 (Repeated), Published on 5 January 2003.

¹¹⁵ MEED: Middle East Business Intelligence, (2008). *“Housing Finance Fuels Egyptian Property Boom,”* URL: <https://www.meed.com/housing-finance-fuels-egyptian-property-boom/>

Another feature of this type of finance's unsatisfactory results is its beneficiaries and their relationship with the targeted groups of these housing projects. The most remarkable feature appeared in occupying these projects' most offered housing units with the upper-low-income and middle-income groups. In contrast, the poor groups who badly needed these units were few compared to their ratio of unit beneficiaries, and there are many dynamics responsible for this situation¹¹⁶.

The conditions to win this type of finance were administratively bureaucratic and encompassed many obstacles that hindered many needed groups from benefiting from the housing unit. For example, one of these conditions was giving an official statement about the income of the nominated person to obtain the unit, and this procedure was complicated for those who are poor and whose economic activities belonged to the non-registered informal economy, such as street vendors and non-professional labor. The same situation was also about providing a guarantor to be a responsible person in front of the authorities to pay the required installments of the unit in case the original owner fail to fulfill these commitments. Also, the absence of monitoring and accountability played an essential role in achieving efficient results in this type of finance. It appeared in many cases, such as administrative corruption in possessing housing units for persons who did not meet the required conditions, besides selling the housing unit after its occupation to other persons who economically belonged to other upper classes.

In 2014, after the end of the end of the National Housing Project (NHP), the Central Bank of Egypt (CBE) created its initiative for real estate finance to foster and intensify the bank's activities in investing in the housing sector, especially the affordable one for low-income and middle-income groups. Also, It reformulated the role of the Social Housing Fund to be compatible with this initiative, and it became *The Social Housing Finance Fund (SHFF)*, according to the Law of Social Housing No. 33 for the year 2014¹¹⁷. The CBE's initiative has sought to achieve structural reform to finance affordable housing by providing long-term mortgages for the targeted groups with low interest, as shown in Table 9.

Table 9: Details of Central Bank of Egypt- CBE Initiative for Financing Housing by Banks in Egypt, including the Categories of Affordable Housing¹¹⁸

	LOW-INCOME		MIDDLE-INCOME	UPPER-MIDDLE-INCOME
	First category	Second category		
CBE's Lending Price for Banks	0.5%	2.5%	4.5%	7%
Profit Margin for Banks	4.5%	4.5%	3.5%	3.5%
Final Lending Price For Individuals	5%	7%	8%	10.5%
Maximum Monthly Income	2100 EGP	3500 EGP Per Person, 4750 EGP Per Family	10000 EGP Per Person, 14000 EGP Per Family	15000 EGP Per Person, 20000 EGP Per Family

¹¹⁶ Yahia Shawkat, (2014). "Housing Policies in Egypt: Between Continuing the Policies of Past and Setting Fair Policies for the Future."

¹¹⁷ The Official Newspaper, Issue No. 25 (Repeated), Published on 24 June 2001.

¹¹⁸ Central Bank of Egypt- CBE, (2024). "Part Ten: CBE Initiatives, Chater Three: Real Estate Finance Initiative," Issued in 2014, URL: <https://www.cbe.org.eg/ar/laws-regulations/regulations/regulations-book/book-10>

Maximum Limit of Finance	The Limit is defined according to SHFF	700,000 EGP	950,000 EGP
Maximum Unit Price	The Price is defined according to SHFF	1,100,000 EGP	1,400,000 EGP
Maximum First Deposit Limit by the Beneficent	10 % of Housing Unit Price	15 % of Housing Unit Price	20 % of Housing Unit Price
Mortgage Term Period	30 years	From 20 years to 30 years	

Subsequently, the (CBE) depended on “*The Real Estate Finance Activity Guarantee and Support Fund*” to financially conduct its initiative, which cooperated with (SHFF) and determined several conditions for choosing the eligible applicants who will benefit from the real estate finance initiative. The resulting conditions from the cooperation between those two funds aimed to cover all related statuses of affordable housing units, whether the housing units were constructed by the public sector or the private sector, and whether their housing finance was provided by the public sector (the government) or the private sector (banks and real estate finance companies). The full list of conditions can be found in Annex C.

Subsequently, In 2018, the state merged “The Social Housing Finance Fund- SHFF” and “The Real Estate Finance Activity Guarantee and Support Fund” into one centric fund named “The Social Housing and Mortgage Finance Fund- SHMFF,” according to the Presidential Decree No. 93 for the year of 2018¹¹⁹. This merging aimed to increase the capacity of the mortgage sector in Egypt and widen its scope to large numbers of beneficiaries to provide more affordable housing units under the supervision of one body that works smoothly to facilitate its missions. Also, SHMFF seeks more affordable housing units that technically meet the international technical standards set by related organizations, such as UN-Habitat¹²⁰.

From 2018 till now, SHMFF has followed the same criteria of CBE’s initiative of housing finance, determined in *Table No. (8)*. It has also followed the same conditions for financing housing units, including affordable housing. Today, about thirty authorities work under SHMFF’s supervision, divided between twenty-four banks and seven real estate finance Today, about thirty authorities work under SHMFF’s supervision, divided between twenty-four banks and seven real estate finance companies that serve housing finance from the public and private sector¹²¹. This number of finance providers and five years of SHMFF’s work may imply that the problem of providing affordable housing has started to be solved, but the problem is still severe and massive. The provision of affordable housing for the needed groups is still a serious problem and the gap between supply and demand is still so big, as formerly discussed in section 4.4 of this report. Also, the ratio between mortgage and GDP in Egypt is the lowest in the North African region compared with the other countries, as shown in *Table (3)*. In parallel, It has recently started to decline, and the rate of beneficiaries has decreased due to the critical conditions of the Egyptian economy¹²².

¹¹⁹ The Official Newspaper, Issue No. 23 (Repeated- A), Published on 11 June 2018.

¹²⁰ The Social Housing and Mortgage Finance Fund- SHMFF, (2022). “*Fund Mission and Vision*,” URL: <https://bit.ly/3x4a5Fc>

¹²¹ The Social Housing and Mortgage Finance Fund- SHMFF, (2022). “*Mortgage Entities*,” URL: <https://bit.ly/49PzQYU>

¹²² Al-Arabia.net, (2023). “*A Significant Decline in Real Estate Financing Activity in Egypt*,” URL: <https://bit.ly/3wYaQic>

Another problem has also appeared in the SHMFF's performance and relates to the targeted groups it focuses on. From 2019 to 2022, and based on SHMFF's data of the benefited units of real estate finance, the housing units of 90 m² are in the first rank of the benefitted ones, achieving 225,952 units. The second rank goes to the housing units of social housing of 76-85 m², reaching 46,601 units. These areas are usually used for middle-income housing projects in Egypt. Consequently, these areas refer to the middle-income groups as the ones that benefit the most from the real estate finance of SHMFF. In comparison, at the top of the most needed groups, the low-income groups achieved only 16,697 units of economic housing of 55-75 m². Accordingly, there is an imbalance between the several housing groups and inequity for the low-income groups that are mostly needed for this housing finance, as shown in Table 10, Figure 13, and Figure 18.

Table 10: The Number/Type of Housing Units Benefiting from SHMFF's Finance From 2019 to 2022¹²³

Housing Type	Economic Housing	Social Housing	Middle Class Housing	Upper-Middle Class Housing	
Area	(55- 75 m ²)	(76- 85 m ²)	90 m ²	(105- 110 m ²)	120 m ²
No. of Units	16697	46601	225952	304	5112

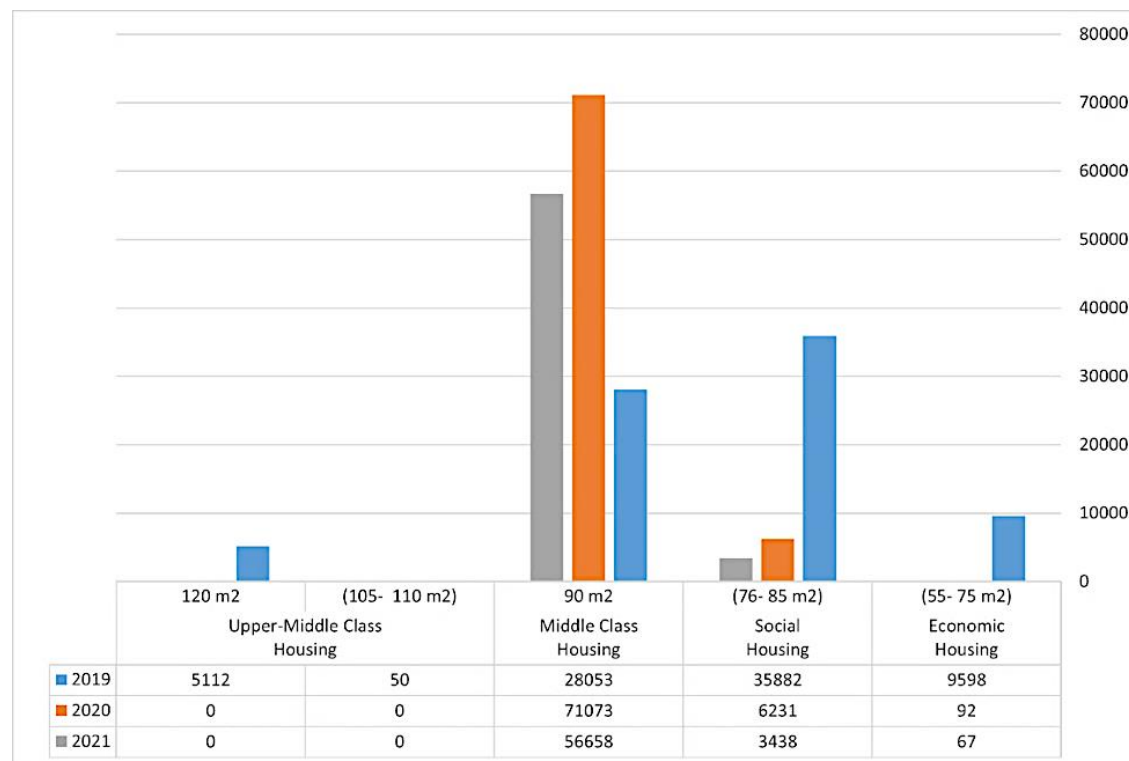


Figure 13: Detailed number & classification of units benefiting from SHMFF finance 2019-2021

Source: By authors, based on data of Social Housing and Mortgage Finance Fund (SHMFF), 2022.

¹²³ By Authors, Based on the Data of The Social Housing and Mortgage Finance Fund- SHMFF, (2022). "Reports and Researches," URL: <https://bit.ly/48Y3V6M>

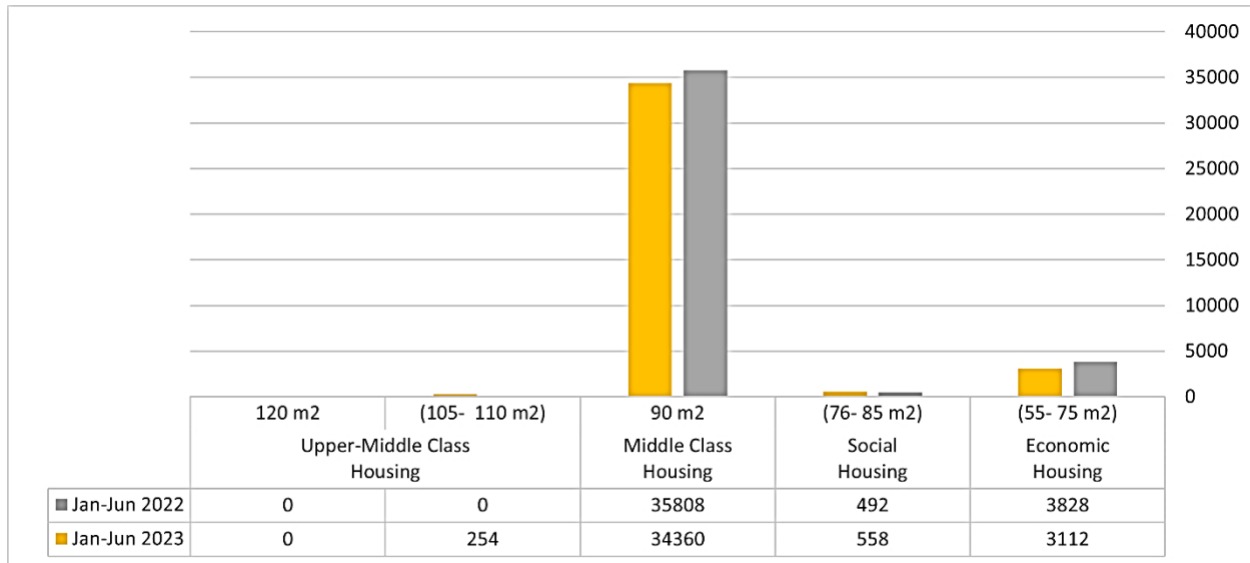


Figure 14: Detailed number & classification of units benefitting from SHMFF finance 2019-2021

Source: By Authors, Based on the Data of The Social Housing and Mortgage Finance Fund- SHMFF, (2022). "Reports and Researches," URL: <https://bit.ly/48Y3V6M>

The Microfinance Sector

The microfinance sector relates to the official other bodies that techno-financially support affordable housing through short-term actions. Accordingly, they don't stand at the same stage of power and effect as the macrofinance sector conducted by the government. Generally, although today SHMFF has the most remarkable ratio of housing finance in Egypt, especially for affordable housing, due to its powered affiliation with the public sector, it is not the only one. There are many housing financing bodies in Egypt. Regarding affordable housing, In addition to the individuals who represent the informal sector, there are also other formal bodies like the Micro Finance Institutions (MFIs), and the cooperative sector.

According to the "Housing Market Study in Egypt", commissioned by Habitat for Humanity in Egypt- HFHE in 2021, It was found that despite the diversity of funding sources available for housing in the Egyptian market, these sources differ in accessibility and cost¹²⁴. For example, banks provide housing financing products at a reasonable cost but are challenging to access due to legal requirements; sometimes, funding is insufficient. Informal sources also exist, but they are deemed high cost and short duration, such as local building developers offering loans for higher interest rates, which harm the borrowers. Families obtain financing for economic purposes from microfinance institutions and then divert it for housing, risking their ability to pay back their interests. On the other hand, the SHMFF and the cooperative sector stand in the upper ranks in supporting affordable housing in Egypt. However, as previously discussed, SHMFF's performance is still stagnating, and the cooperative sector is weak due to its legal and administrative problems, as shown in Figure 15.

¹²⁴ Raed Fares, and Safa Ashoub (2022). "Offering Affordable Housing in Egypt Through Microfinance," URL: <https://bit.ly/4afRa80>

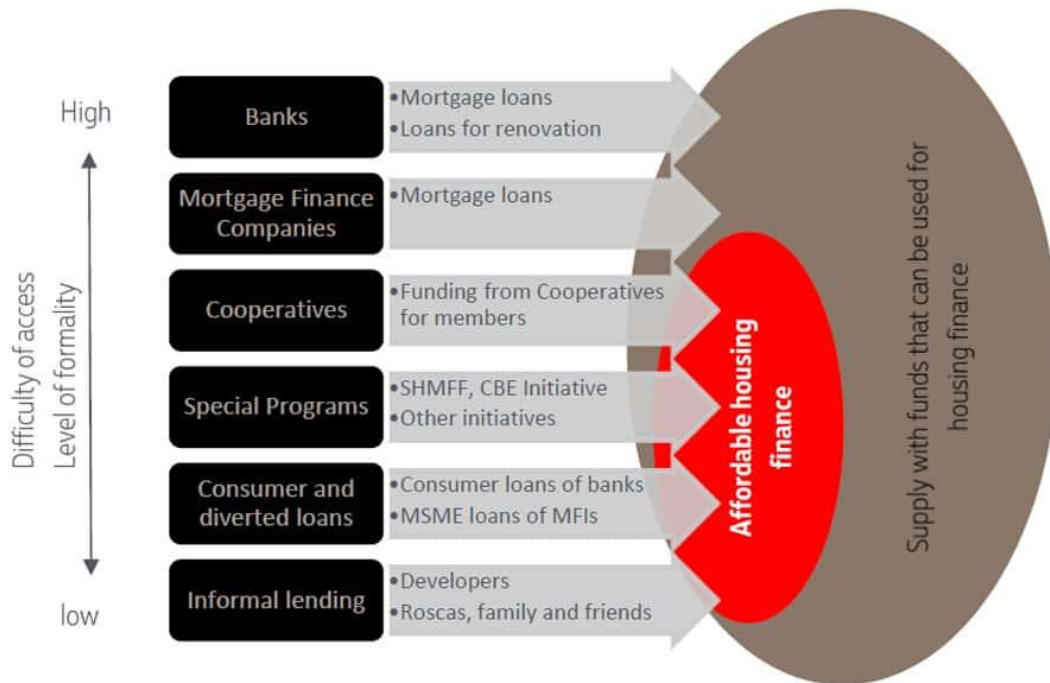


Figure 15: The multiple channels of housing finance in Egypt, their difficulty of access and level of informality

Source: Habitat For Humanity Egypt (HFHE)

The Micro Finance Institutions (MFIs) are also one of the sources that concern finance affordable housing in Egypt. Still, most of their works are concentrated in the vulnerable and marginalized rural areas outside the metropolitan cities. Besides, their work focuses mainly on financing the owners of the deteriorated houses to repair them or to enable their homes to access urban services like drinking water, sewage, and electricity. Also, MFIs can provide the owners with technical assistance through their technical staff in executing the previously mentioned domains, affording all materials and repair costs without any cost to the owner. To finance affordable housing, the MFIs depend on their capital from donations or benefit from the limited opportunities offered through Corporations' Social Responsibility (CSR).

This type of affordable housing finance may help mitigate the problem of affordable housing, as the MFIs' work in home repair and renovation may reflect on decreasing the stress of supplying affordable houses in the zones where these bodies work. However, MFIs face two crucial challenges affecting the efficiency of financing affordable housing¹²⁵. The first is the lack of a legal framework regulating microloans for housing purposes for people with low incomes who are unable to prove their income. The existence of legislation would create both a market and opportunities for investors to enter this market, thereby creating a sufficient supply to meet the increased demand and expansion. The second challenge is the structure of the official administrative framework under which they work. The housing finance by MFIs in Egypt is classified as social protection. Consequently, they work under the Ministry of Social Solidarity (MoSS) regulation. On the other hand, MFIs' work regarding affordable housing is also techno-financial one. Accordingly, this interdisciplinary work needs to engage other related official

¹²⁵ Raed Fares, and Safa Ashoub (2022). "Offering Affordable Housing in Egypt Through Microfinance," URL: <https://bit.ly/4afRa8O>

stakeholders to support their work, especially the Ministry of Finance (MoF), Ministry of Housing, Utilities, and Urban Communities (MoHUUC), and Ministry of Local Development (MoLD).

2.8 Housing for Refugees

The existence of refugees in Egypt is remarkably recognized and affects all aspects of life, including housing. Egypt is unique in that it does not set up camps for the refugees but allows them to live within its cities and receive the same services offered to Egyptian citizens, like transport, schools, and medical services, adding to high pressure on these facilities. The number of refugees, asylum seekers, and internally displaced persons (IDPs) in Egypt has two statements, the first by the UNHCR and the second by IOM. According to the UNHCR, Egypt hosts around 460,142 registered refugees from 59 nationalities, and they comprised 198,377 Sudanese, 153,646 Syrians, 37,426 South Sudanese, 31,975 Eritreans, 17,479 Ethiopians, 8,345 Yemenis, 7,340 Somalis, 5,560 Iraqis, and refugees of more than 50 other nationalities¹²⁶. On the other hand, IOM has estimated the current number of international migrants living in Egypt to be 9,012,582 people originating from 133 countries, which is equivalent to 8.7% of the Egyptian population. The biggest groups from this estimation are Sudanese (4 million), Syrians (1.5 million), Yemenis (1 million) and Libyans (1 million). These four nationalities constitute 80% of the international migrants currently residing in the country. Furthermore, 56% of this number resides in five governorates: Cairo, Giza, Alexandria, Damietta, and Al-Dakhaleya¹²⁷.

The enormous disparity between the two statements comes from the difference between the considerable groups in the calculation by the UNHCR, which categorizes them as “refugees,” and the IOM, which categorizes them as “migrants.” A refugee is someone who has been forced to flee their home country because of persecution, war, or violence, and he most likely cannot return home, or their lives would be put at risk. On the other hand, a migrant is someone who chooses to move not only because of a direct threat of persecution or death but mainly to improve their lives through work opportunities, education, family reunification, or other reasons. Furthermore, migrants may sometimes be officially unregistered by any related bodies; in addition, migrants may illegally enter the country, and they need to reconcile their situations. Unlike refugees who cannot safely return home, migrants face no such impediment to return¹²⁸.

Accordingly, the existence of these displaced categories occupied a recognized appearance in Egypt, especially the refugees, and in turn, providing affordable housing for them is a crucial matter. In 2018, the UNHCR conducted the “*Egypt Vulnerability Assessment for Refugees- EVAR*” to collect information and identify vulnerabilities of refugees and asylum-seekers living in Egypt. The “*Unmet Needs*” in this assessment had gone to Support for rent and improved shelter/housing, which was the main unmet needs (48%), followed by food (39%). The unmet needs for support for rent/housing particularly affected South Sudanese (63%), Sudanese (57%), Yemenis (56%) and Somalis (51%)¹²⁹.

¹²⁶ UNHCR-Egypt, (2023). “*Refugee Context in Egypt*,” URL: <https://www.unhcr.org/eg/about-us/refugee-context-in-egypt>

¹²⁷ IOM- Egypt, (2022). “*IOM Egypt estimates the current number of international migrants living in Egypt to 9 million people originating from 133 countries*.” URL: <https://bit.ly/4bz44QL>

¹²⁸ UNHCR, (2022). “*What is the difference between a refugee and a migrant?*” URL: <https://bit.ly/3SCEdi8>

¹²⁹ UNICEF, and International Policy Centre for Inclusive Growth, (2021). “*Improving social protection for migrants, refugees, and asylum seekers in Egypt: An overview of international practices*.”

Based on the UNCHR's number of refugees, the Syrian and Sudanese refugees possess the most of this number due to the recent war crisis in Sudan and Syria, and they are the most influential groups in the demand for affordable housing by refugees. The Syrian refugees intensively settle in the Greater Cairo Region- GCR, mainly in Cairo, Giza, 6th October, and Sheikh Zayed. At the outside of GCR, they also exist intensively in some north Egyptian governorates: Alexandria, Damietta, and Al-Dakhaleya. The Sudanese refugees mainly settle in Aswan in the south of Egypt, as it is the first stop for their journey in Egypt. Then, they also settled in the east of Cairo in the following zones: Alf Maskan, Nasser City, Al-Zaitoun, Hadyek Al-Qubba, and Abdeen. At Giza city, Sudanese refugees settled in the western zones: Arad Al-Lewa, Al-Haram, and Faisal¹³⁰. According to UNHCR-Egypt, the vast majority of Syrian refugees (82%) are living in formal housing (apartment/villa/ house), while 18% are living in a separate room in a shared apartment. Marked differences are observed between Syrian and other refugees, where almost three-quarters (73%) of non-Arabic speaking refugees are living in a separate room in a shared apartment, while only 25% are living in formal housing. The crowdedness rate reached 1.3 members per room for refugees, with no marked differences between Syrian and other refugees. Decreased crowdedness is associated with increased welfare, as expected, where crowdedness reached 1.3 members per room among extremely poor refugees and decreased to 0.7 among non-poor refugees. Regarding unit furnishing, many Syrian families are accepting substandard housing arrangements, often in unfurnished rental apartments. Almost 62% of Syrian refugees are living in unfurnished rental apartments, while 32% are living in furnished rental houses¹³¹. Regarding rental prices, the authors depend on their investigations as there are no references to this topic. According to the authors' investigation in three governorates, Cairo, Giza, Damietta, and Minya, the rental price for Syrian refugees has increased by 30- 35% than the rental price for Egyptian citizens in the same housing unit.

The situation differs for the Sudanese refugees. The existence of Sudanese refugees in the formerly mentioned zones in Cairo and Giza, which are economically diversified between low-middle and up-middle zones, has caused a huge increase in rent prices and tripled them. This increase has occurred as the Sudanese refugees who settle in these zones are economically coming from the upper classes, and more than one family lives in a single housing unit; consequently, they can afford these increased rental prices. Taking some examples, the average rent prices in Faisal and Al-Haram have increased from (2000 EGP/ 65 USD) to (6000 EGP/ 165 USD) per month, and the rent prices in some sectors at Madinat Nasr have increased from (11000 EGP/ 355 USD) to (30000 EGP/ 968 USD) per month. Accordingly, this enormous increase, which many Egyptian families cannot afford, has turned many property owners into renting their units to the Sudanese refugees only and not renewing their renting contracts with the Egyptian households existing in their units¹³².

The situation is the same for the Yemeni refugees. They also affect the rent prices of housing units, the same as the effect of the Sudanese refugees, particularly in the Giza city. Since the 1960s, the Yemenis have been displaced in the Giza city, mainly in Dokki and Al-Manial zones, and also in Alexandria city¹³³. As these zones have been mainly for upper-middle and upper classes, there has been no problem with their rental prices, and both Egyptians and non-Egyptians have been able to rent and buy a housing

¹³⁰ Al-Jazzera, (2022). "80% from Sudan, Syria, Yemen and Libya: 9 million refugees in Egypt and controversy over their numbers and conditions." URL: <https://bit.ly/3NFCBTc>

¹³¹ UNHCR, (2018). "Vulnerability Assessment of Refugees in Egypt: Risks and Coping Strategies."

¹³² The New Arab, (2023). "Egyptian Working Class and Sudanese Migrants Exploited by Cairo's Bullish Rent Market." URL: <https://bit.ly/3uww6Mg>

¹³³ Yemen Peace Forum, (2021). "The Struggle Away from Home: The Yemeni Refugees in Cairo- In Arabic," URL: <https://bit.ly/41K4IA1>

unit inside their context, especially the Yemeni migrants who had come to these zones in this era had belonged economically to the upper classes. The situation has differed since the war in the North of Yemen between Saudi Arabia and the Houthis in 2015. Many poor Yemeni refugees have transited to Egypt, and the Saudi Arabian Embassy in Cairo has financially supported them. As the obtained financial support is not abundant enough, they have been resettled in the same zones for the Sudanese refugees in Giza city: Ard Al-Lewaa, Al-Haram, and Faisal, which are cheaper than Dokki and Al-Manial, where they used to be settled in the past. In turn, they participate in achieving an increase in the rental prices in these zones, similar to the Sudanese refugees¹³⁴.

On the other hand, the housing situation for the African refugees in Egypt is completely different than the Arabian refugees in Egypt. According to an interview with Mr. Ashraf Milad, a researcher of refugee affairs, he stated that the African refugees in Egypt have come from very low-income classes from Africa, and Egypt is a transitional station for them to complete their migration/ asylum to Europe and America. Therefore, they usually prefer not to be registered by any international organization of the refugees, mainly the UNCHR and IOM, so as to maintain their chance to migrate to the global north countries and reconcile their stay inside these countries through these organizations. Accordingly, a lot of them enter the country to work as cheap labor, like household servants, drivers, or any other related profession. This poor situation makes most of them settle in dense and low-economic zones in Cairo and Giza, mainly in Ain Shams, Ezbet Al-Nakhl, Al-Marg, Attaba (South Sudanese refugees), Hadayek Al-Maadi, Al-Haram, and Faisal. Milad continued that more than one family lives in the housing unit, which is usually non-furnished to be affordable. Besides, they may be provided with little financial aid from local Christian aid organizations, such as "All Saints' Cathedral in Cairo." However, according to a journalistic report by *Independent Arabia*, the African refugees face the same problem of duplicating the rental prices by the housing unit owners, even in the poor zones of Cairo and before the coming of Sudanese refugees in Egypt who play an important role in this problem. Accordingly, too many African refugees cannot afford these rental prices, similar to the Sudanese, Yemeni, and Syrian refugees. Sometimes, they resort to the streets as homeless persons¹³⁵.

Finally, the support for refugee housing by humanitarian and relief organizations in Egypt is still weak due to the weakness of their funds. Consequently, the other domains, like food and clothing, are prioritized over housing¹³⁶. However, some humanitarian organizations in Egypt consider housing through their work with the refugees, as stated in little information by the UNHCR¹³⁷.

2.9 Housing and Climate Adaptation

Since the mid-1990s, Egypt has suffered remarkably from climate change's effects¹³⁸. Regionally, Egypt has occupied a low rank for the Northern Africa region's total reported national disasters from 1982 to 2021. However, all disasters related to Egypt during this period resulted from climate change, such as

¹³⁴ Based on an interview conducted by the authors **with Mr./ Ashraf Milad**, the legal researcher, activist in the affairs of refugees in Egypt, and former member of the Habitat International Coalition- HIC, Egypt.

¹³⁵ Independent Arabia, (2020). "The African Refugees in Egypt: The Stalled File- In Arabic." URL: <https://bit.ly/3vsNUHX>

¹³⁶ Stated by **Mr./ Ashraf Milad**.

¹³⁷ UNHCR- Egypt, (2022). "Services For Refugees and Asylum-Seekers In Egypt."

¹³⁸ Sada El Balab, (2016). "From 1947 to 2016 : Years of Torrential Floods," URL: <https://www.elbalad.news/2470892>

storms, floods, and extreme temperatures, and it occupies a remarkable ratio of these disasters, as shown in Figure 16¹³⁹.

The effects of climate change have also moved to urbanization, which encompasses housing. For example, since the end of the 1990s¹⁴⁰, one of the most dramatic related problems has been the Sea Level Rise (SLR) in the Mediterranean Sea due to the global increase in temperature, which will cause an estimated minimal sea-level rise of 100 cm between now and the year 2100 at the Nile delta's coast¹⁴¹. This increase in sea level will influence the housing sector, including affordable housing. Between One-quarter Million housing units (in the optimistic scenario) and One Million housing units (in the pessimistic scenario) would be at risk due to this phenomenon, causing a damage of 3.83B EGP in 2060^{142 and 143}.

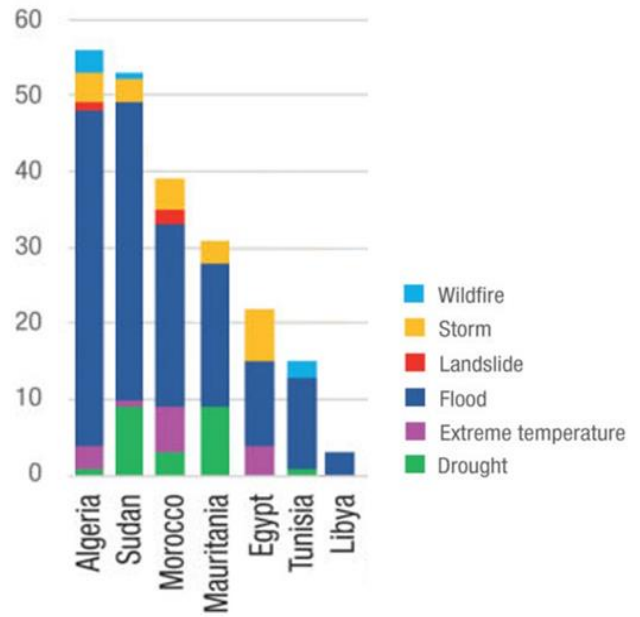


Figure 16: Total reported natural disasters in some North African countries 1980-2021

From the 1960s to the 2010s, the concept of mitigating the effect of climate change was ignored entirely in all affordable housing projects in Egypt for three reasons. The first reason is the awareness of the impacts of climate change. Egyptian architects and urbanists became aware of this problem by the mid-1990s, while the state began to consider it and take effective actions in the late of the 2000s and on a limited scale. Conversely, the state has started to build and support affordable housing since the 1960s; consequently, many affordable housing units that ignored this matter were built, and even the newly established affordable housing projects have not considered it either in the 2010s.

For example, the Al-Asmarat project, which targeted to provide affordable housing for the inhabitants of Cairo's slum, did not consider the effects of climate change regarding the extreme temperatures, providing thermal comfort for the inhabitants, and suitable vegetation to increase the quality of air¹⁴⁴.

¹³⁹ Mohamed El Raey, Khalid Dewidar, Mamdouh El-Hattab, (1999). "Adaptation to the Impacts of Sea Level Rise in Egypt."

¹⁴⁰ Kecia Rust, (2022). "Affordable Housing and the Climate Imperative," The Centre for Affordable Housing Finance in Africa- CAHF, URL: <https://housingfinanceafrica.org/documents/affordable-housing-and-the-climate-imperative/>

¹⁴¹ Mada Masr, (2017). "Nile Delta's Increasing Salinity and Rising Sea Levels May Make Egypt Uninhabitable By 2100," URL: <https://bit.ly/43Butd8>

¹⁴² UNDP- Egypt, (2013). "Potential Impacts of Climate Change on the Egyptian Economy."

¹⁴³ These financial calculations were in 2013 when the One USD equaled 6.75 EGP. Today, in 2024, One USD equals 47.41 EGP.

¹⁴⁴ Mohsen Aboulnaga, Amr Alwan, and Mohamed Elsharouny, (2019). "Climate Change Adaptation: Assessment and Simulation for Hot-Arid Urban Settlements- The Case Study of the Asmarat Housing Project in Cairo, Egypt," a Chapter book of "Sustainable Building for a Cleaner Environment," Edited by: Ali Sayigh.

The situation is also the same for the Bashayer Al-Kheir Project¹⁴⁵, which targeted to provide affordable housing units for the people of Alexandria governorate who live in slum areas, as shown in Figure 17.



Al-Asmarat Project, Cairo Governorate.



-Bashayer Al-Kheir Project, Alexandria Governorate.

Figure 17: Non-integration of climate mitigation measures in Egypt public housing projects (2010s)

Source: Egypt Projects Map, URL: <https://egy-map.com/>

The second reason for ignoring the mitigation of climate change effects in affordable housing projects in Egypt is related to the cost of projects when they attempt to implement adaptation measures. The building materials that consider environmental aspects are manufactured based on global environmental codes, such as LEED, and are still unaffordable and externally imported, necessitating foreign currency. Conversely, non-environmentally-friendly materials, such as Portland Cement, are cheaper and used on a wide scale as Egypt is the biggest producer regionally and occupies the ninth rank globally in its production, as shown in Figure 18.

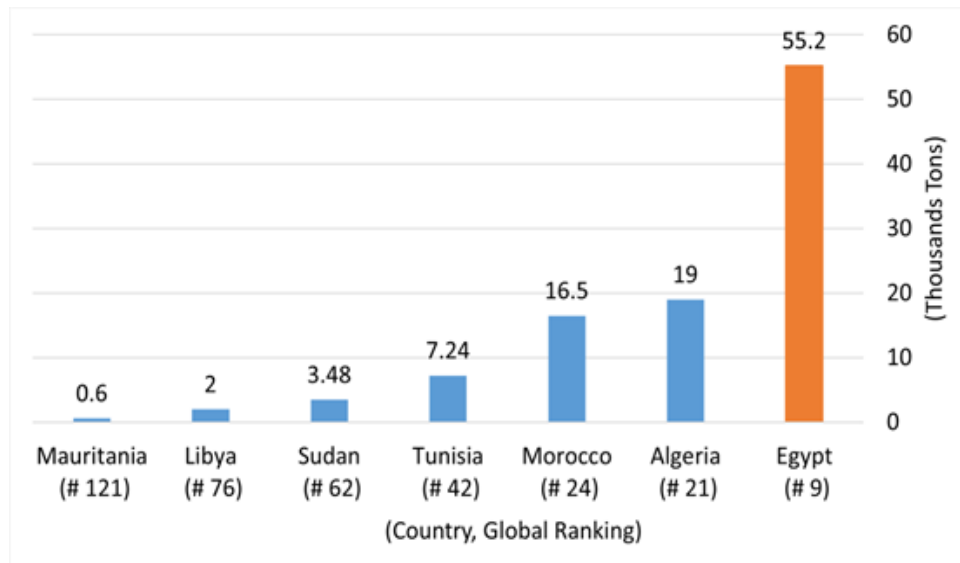


Figure 18: Portland cement production in North African Countries including Egypt

¹⁴⁵ Yousab Magdy, and Amr Atef Elhamy, (2023). "Energy Optimization for Affordable Housing via Microclimate and Energy Simulation, Case Study: Bashayer El Kheir 1, Alexandria, Egypt."

The third reason for ignoring the mitigation of climate change effects is related to the suitability of the building technique and treatments applied to the typical housing unit used in affordable housing projects. Since the mid-1960s, there have been several trials to adopt many building techniques that support coping with the climate change effect, like using compressed bricks from mud, silt, and sand, besides roofing using wooden panels and curved roofs. Also, architects have depended on many treatments to achieve suitable climatic conditions for the housing unit, like wind catchers and inner courtyards. Nevertheless, the utilized building techniques were usually applied in a housing unit of two stories as this is the maximum number of built stories, and the building cannot be higher due to the structural bearability of the used materials.

Also, the applied treatments in the housing unit are required to make the unit occupy more horizontal areas than vertical to conduct these treatments efficiently. Consequently, these two characteristics are incompatible with the standard housing units used in the affordable housing projects in Egypt, which are usually built in multi-story apartment buildings of more than three floors and intensified vertically to achieve as many housing units as possible in small plot areas, to make them more affordable for their beneficiaries ¹⁴⁶, as shown in Figure 19.



- Affordable housing unit built in 1967 at New Bariz oasis, The New Valley Governorate, designed by Hassan Fathy, Photo by: Viola



- Affordable housing unit built in 2024 at Al-Kharga city, The New Valley Governorate, designed by Dr. Nermine Abdel Gelil.



- Affordable housing project built by the state in 2016 at Al-Kharga City, the New Valley Governorate, Source: Akhbar Al-Youm Newspaper.

Figure 19: A configuration-based comparison between affordable housing units that integrate climate mitigation measures and non-integrating units in the New Valley Governorate

¹⁴⁶ Abdel-Wahab El- Kadi, (2022). "The Influence of Hassan Fathy Architecture on Modern Housing Trends within the City Pattern."

Although the general status of climate change adaptation for affordable housing is still insufficient compared with the related challenges, some recent procedures have started, and they should be considered to support this concept for affordable housing in Egypt. At the level of policies, the state issued the 2020 “*Egypt Housing Strategy*,” which recommended some actions for supporting climate change adaptation for housing in Egypt, including affordable housing. In this strategy, the sector recommends some interventions for the housing blocks' urban forms to cope with climate change. For example, the strategy proposed re-ordering the housing blocks to increase shading on them and mitigate their thermal loads, intensifying the vegetation for the housing blocks' in-between spaces to absorb solar radiation and improve the quality of air, increasing the thickness of outer walls to prevent the entrance of extreme temperature into the housing unit, and using the inner courtyards to achieve a cooling ventilation flow inside the housing block¹⁴⁷.

At the scale of detailed projects, in parallel with hosting COP27 in Sharm El-Sheikh, the Egyptian state announced that it has started, in association with the World Bank, to establish housing units that will be environmentally friendly and based on climate change adaptation.

The housing units have been designed and executed according to the Green Pyramid Rating System (GPRS), which rates at least seven domains when constructing a building. These domains are sustainable site and design quality, building materials and resources, water efficiency, energy efficiency, health and wellbeing, management, and innovation. Compared to existing housing buildings, those under the GPRS certification will result in energy savings of about 30%. Each building will have photovoltaic solar panels for its utilities, generating enough power to light upstairs and surrounding areas and power the motors for water pumps. The initial investment in solar panels will be recovered in less than five years¹⁴⁸. Also, the thickness of the outer walls will be 25 cm instead of 12 cm as usually executed, and the used mortar will be the “White Mortar” that is made from special type of cement to reduce carbon dioxide emissions¹⁴⁹, as shown in Figure 20.



Figure 20: A GPRS-compliant housing block constructed by the State in the City of Hadyek Al-Asama

Source: Masrawy.com

The state claimed that it would conduct this type of housing project for low-income and middle-income groups by constructing about 1041 housing blocks with 25K housing units varying between 75 m² and 90 m² in four new satellite cities¹⁵⁰. The units have implemented in the cities of New Aswan, Hadyek Al-Asama (402 block/ 9K housing units¹⁵¹), New Al-Obour (402 block/ 9K housing units¹⁵²), and the

¹⁴⁷ The UN-Habitat, (2020). “*Egypt Housing Strategy*.”

¹⁴⁸ The World Bank, (2022). “*Egypt’s Green Social Housing Supports Climate Efforts and Improves Quality of Life for Citizens*,” URL: <https://bit.ly/3TYnojB>

¹⁴⁹ Investigate, (2023). “*(Al-Gazzar) is following up on the Implementation of the “Green Housing” Project in the City of Hadyaek Al-Asama*,” URL: <https://bit.ly/3vyhyw1>

¹⁵⁰ Al-manasa, (2023). “*Ministry of Housing- MoH Implements 1,041 Environmentally Friendly Buildings in 4 Cities, Funded by the World Bank*,” URL: <https://manassa.news/node/10841>

¹⁵¹ Masrawy, (2022). “*9,000 Environmentally Friendly Housing Units: Ministry of Housing- MoH Announces Details of Low-Income Housing in the city of Hadyek Al-Asmaa*,” URL: <https://bit.ly/3JiTTCZ>

¹⁵² Al-manasa, (2023). “*Ibid*.”

10th of Ramadan (433 block/ 8258 housing units¹⁵³). Although the state will execute another 25K housing units of the same type of ambitious type¹⁵⁴, the essential problem of this type is economic rather than environmental. The areas of the housing units that were conducted had the same disadvantages as formerly discussed above. They targeted only the low-middle and middle-income groups and ignored the low-income ones, although the low-income groups are the most needed of such these units.

3. Case Studies: Adequate Housing in Focus

3.1 Kafr Saad (Damietta Governorate)

Kafr Saad city-region/markaz¹⁵⁵ is located west of the River Nile, achieving one of the five administrative city-regions of the governorate of Damietta governorate. For more details on Kafr Saad's location, administrative division, and population distribution, see Annex B.

The status of affordable housing in the city-region does not substantially differ from its overall status in Egypt, as the city-region has the same influential dynamics and challenges that happen in Egypt in general. The authors tried to trace affordable housing in the city region depending on official/governmental-related data and self-site visits. Also, the authors interviewed officially related officers to deepen their investigation and trace the problem from several perspectives. The interviews were with:

- **Eng./ Abeer Al- Azab**, Head of the urban planning unit, Engineering Administration of the Local Municipality of Kafr Saad City.
- **Eng. Fatma Abdelhalim**, Director of Engineering Administration of the Local Municipality of Mit Abou Ghaleb City.

In the following sections, the authors will investigate affordable housing in the city-region in the light of the formerly discussed housing challenges in Egypt).

Based on the site visits and desktop research, the authors have collected some data that elaborate on the housing affordability rate in the city region, compared with Damietta Governorate and the overall average in Egypt, as shown in Table (12).

¹⁵³ Al-Youm Al-Sabaa, (2024). "The Details of Constructing 443 Environmentally Friendly Green Buildings in the City of 10th of Ramadan," URL: <https://bit.ly/3xi01sq>

¹⁵⁴ Al-Watan, (2023). "With Areas of up to 120 m², 50,000 Green Housing Units were Offered in the New Cities," URL: <https://bit.ly/3PHLP2i>

¹⁵⁵ As described in Figure (4), The "Markaz" is an administrative classification by the Egyptian local administration system. It represents the secondary cities considered first-ranking in the governorate, including its capital city. The "Markaz" contains a central city council that supervises the second-tier cities and the rural settlements. Kafr Saad is not the capital of Damietta governorate, and metaphorically, the authors use in this report the term "city-region" to refer to the "Markaz" as it exists in the Egyptian local administration system.

Table 11: The Comparison of Housing Affordability Data between Kafr Saad City-Region, Damietta Governorate, and Overall Average in Egypt¹⁵⁶

Housing Affordability Data	Zones		
	Kafr Saad City- Region	Damietta Governorate	Overall Average in Egypt
Average Monthly Income(US\$)	97.02	91.49	125.14
Average Gross Annual Income (US\$)	1165	1097.88	1501.68
Average Housing Unit Price (US\$)	14,553	31952	21519
Average Housing Unit Rent (US\$)	38.81	71.15	47.94
Percentage of Rent from Income	40%	77.77%	59.99%
House Price To Income Ratio (HPI)	12.49	29.10	14.33

Revising the former table shows a significant disparity in housing affordability between Kafr Saad city region and Damietta governorate regarding the percentage of rent from income and the housing price-to-income ratio (HPI). This disparity comes from the economic situation in the city-region. There is no remarkable economic diversification in the city-region compared with the whole governorate, where there is a variety of economic activities in the governorate coming from industrialization, agriculture, fishing, and large-scale trade from Damietta port on the Mediterranean Sea. In turn, this less diversification makes the housing market in the city-region stagnate, similar to the economic situation. On the other hand, it does not remarkably affect the governorate as the population of the city-region is only 17.69% of the governorate’s total population, even though it is the largest city-region in Damietta.

It is also crucial to refer to the significant disparity in housing affordability between Damietta governorate and the average in all of Egypt regarding the percentage of rent from income and the housing price-to-income ratio (HPI). This disparity comes from the governorate’s good economic conditions compared to other zones in Egypt due to the economic diversification in the governorate from agriculture, trade, fishing, large-scale trading, industrialization, and tourism. Furthermore, Although the average monthly income in Damietta may be like other zones in Egypt, the governorate has come in the third rank of the lowest governorates of the population’s poverty rate in Egypt, achieving 14.6 % while the overall average is 32.8%¹⁵⁷. This situation has made the housing markets in the governorate flourish and increased the demand for housing, which, in turn, raises the value of housing cost-overburden in the governorate.

¹⁵⁶ By Author. Related data to Kafr Saad City-Region are based on the authors site visits and interviews, and the data of Damietta Governorate and Egypt are from:

- The UNDP and MoPED- Egypt, (2021). “Egypt Human Development Report 2021.”
- 10 Tooba, (2016). “Built Environment Deprivation Indicators- BEDl: Affordability”, URL: : <https://bit.ly/4byhsoo>. Data change from 2016 to 2023 are considered in calculations.

¹⁵⁷ Central Agency for Public Mobilization and Statistics- CAPMASS, (2019). “Income, Expenditure, and Consumption Survey.”

Housing Supply, and Demand in Kafr Saad

Overall, the formal private sector in Kafr Saad is mainly responsible for housing supply in the urban and rural zones, whether through rent or ownership. The residents of the city-region's urban zones prefer housing tenure through rent rather than ownership, and vice versa in rural zones. The other sectors of housing provision, such as the governmental sector, cooperatives, and informal private sector, participate in a limited scale of housing provision in the city-region. Consequently, housing finance in Kafr-Saad primarily depends on the individual's self-finance, with no dependence on housing mortgages or micro-finance sources, , as shown in Figure 21.



(A)- Apartments Housing Buildings, Sample of the formal private sector housing provision in the city-region's urban and rural zones. Photo Source: Google Maps.



(B)- A Housing Complex for Engineering Electricity Authority of Damietta Governorate, An Example of Cooperative Housing . Photo Source: Google Maps.



(C)- Economic Housing Building, an example of Governmental housing provision. Photo Source: The Strategic Planning of Kafr Saad City.

Figure 21: Samples of sources housing provision in Kafr Saad city-region

The state has focused on developing the housing sector in the city region to meet the future demand for housing units. The General Organization of Physical Planning- GOPP, and the local municipalities representing the Ministry of Local Development- MoLD had authorized the local urban development plans for several urban and rural settlements (*Colloquially named the Strategic Plans*), and each settlement's plan has considered meeting the future housing demands. The settlement's local urban development plan has determined the targeted future population, required housing units, and required areas until the plan's end year, as shown in Table 13.

Table 12: Required Housing Units, Targeted Population, And Their Required Areas, As Determined In the Strategic Plans for All Rural And Urban Zones in Kafr Saad city-region¹⁵⁸

Urban/ Rural	Local Municipality	Settlement	Number of Required Housing Units	Targeted Population (People)	Required Area (Feddan)	Local Plan End Year
Urban	Kafr Saad City Municipality	Kafr Saad City	910	3276	25.26	2031
	Mit Abou Ghaleb City Municipality	Mit Abou Ghaleb City	1250	4396	14.90	2033
Rural	Kafr Soliman Al-Bahary Municipality	Kafr Soliman Al-Bahary	2590	9295	10.6	2021
		Ezbet Al-Louzy	420	1482	5.8	2021
	Kafr Saad Al-Balad Municipality	Kafr Saad Al-Balad	2233	7535	22.67	2026
	Kafr Al-Manazla Municipality	Kafr Al-Manazla	607	2500	6.54	2021
	Kafr Shehata Municipality	Kafr Shehata	395	1479	8.65	2021
		Dar Al-Salam	77	384	2.11	2021
	Al-Zahraa Municipality	Al-Zahraa	328	1405	5.25	2021
	Al-Sawalem Municipality	Al-Sawalem	715	2870	5.08	2021
	Umm Al- Razek Municipality	Umm Al- Razek	1865	6643	7.38	2021
	Al-Abbasiya Municipality	Al-Abbasiya	833	3635	4.3	2021
		Al-Ebrahimya Al- Bahariya	417	1723	0.22	2021
	Al-Muhammadiya Municipality	Al-Muhammadiya	375	1497	1.81	2026
		Al-Ebrahimya Al-Qebliya	375	1497	1.81	2026
		Taftesh Thani	290	1165	10.8	2026

¹⁵⁸ By Authors, Based on the Strategic Plans for all mentioned rural and urban settlements, Supervised by : GOPP.

	Kafr Al-Westtani Municipality	Kafr Al-Westtani	754	3269	28.58	2021
		Al-Badrawi	89	1514	0.61	2021
		Abou Rashed	158	680	0.44	2021
	Kufur Al-Ghab Municipality	Kufur Al-Ghab	215	989	0.6	2021
		Manshiyat Nasser	126	580	0.15	2021
		Al-Dahayma	344	1480	0.97	2021
	Kafr Al-Merabeen Al-Sharkiya Municipality	Kafr Al-Merabeen	131	692	0.6	2021
		Al-Sharkiya				
		Abou Aiyyad	229	1203	0.12	2021
TOTAL			15726	61189	165.25	(2021-33)

On the other side, and with their power of housing subsidy and availability, the governmental housing interventions were only referred to and implemented locationally in the urban zones, particularly in Kafr Saad city, not even in Mit Abou Ghaleb. On the contrary, the rural zones where the most significant population ratio exists do not mention governmental intervention in the housing sector within the strategic plans, except for Kafr Soliman village, which has been referred to only through the authorization level. Furthermore, at the implementation level, there is no implementation for governmental housing projects in any village in the city-region. Accordingly, although the local plans of the city-region's settlements have authorized to fulfill the future demands of housing, especially affordable housing, the actual on-site actions have differed and have not followed them, achieving quantitative and qualitative deficiency in housing supply in the city-region.

Quantitative Deficiency

There is no concurrency between the planned projects in the Local Plans (Strategic Plans) and the implemented ones. A case of inefficient resource mobilization appears in the local plan of Kafr Saad city that determined the number of government housing units, which targeted affordable housing as 375 units. On the other hand, the formal private sector was mandated to construct about 702 housing units for the rest of the housing groups. On the contrary, the implemented governmental ones have been 967 units (Social Housing Project), excessively exceeding the planned units, as shown in Figure 27. Another case in the local plan of Taftesh Thani village was that it did not mention the need for a government housing project. However, the government allocated a plot area of 0.33 feddans in 2018 to construct a government housing project. On the other hand, the village of Kafr Soliman's strategic plan referred to the need for a government housing project. However, it has not been implemented yet.



(A)- The Outskirts Social Housing Project in Kafr Saad City (400 Units). Source: Google



(B)- Social Housing Project at the Center of Kafr Saad City (567 Units). Source: Google Maps.

Figure 22: Housing Units Projects conducted by the Governmental Sector in Kafr Saad City

Qualitative Deficiency

Like the same problem in the government's affordable housing projects, the area of the housing prototype implemented in Kafr Saad city is between 75 m² and 90 m², which is allocated for the lower-middle and middle-income classes. On the contrary, the units between 55 m² and 63 m², usually assigned to the low-income groups, have not been constructed, even though these groups are the most fragile classes that have priority for governmental intervention.

Like the other affordable housing projects in Egypt, government-provided housing groups in Kafr Saad City have been used in real estate speculation due to the absence of governmental monitoring and post-occupancy assessment for these projects. According to the interviews, There are many consequences after these interventions, as the required housing stock is nearly fulfilled through the governmental contribution and has become cheaper than the real estate market. Consequently, many inhabitants sold their houses at the same high prices to find another outside the city of Kafr Saad, such as New Damietta City or the surrounding villages, as they could find cheaper and more spacious houses than they sold. Also, one of the incentives for this phenomenon is that Kafr Saad City suffers from a severe problem of soil weakness due to construction stresses, affecting the housing blocks' structural durability. Therefore, the residents devised this solution to escape the soil structure problem in the city.

Housing Finance in Kafr Saad

Housing finance in the Kafr Saad city-region depends mainly on individuals' finances without other sources, such as mortgages or microfinance provided by CBOs and NGOs. Although all the local plans of the city-region's settlements highly recommend finding indifferent sources for housing finance other than the governmental sector and individuals, no actions or procedures have been taken to support housing and provide affordable units. According to the interviews with the mentioned official officers in this study, the housing mortgage initiative sponsored by SHMFF and supported by the banks to

enable individuals to get affordable housing is not applied in the city region, and housing landlords prefer to have the total unit cost before selling it. Regarding cooperative housing, there was an old, limited trial conducted at the beginning of the 2000s by constructing a housing cluster of fifteen housing blocks for the Engineering Electricity Authority of Damietta Governorate, as shown in Figure (22)/(B). All units are provided by the mentioned authority and inhabited by their official officers due to the authority's firm monitoring for not using the housing units as commodities in the real estate market.

Refugees in the City-Region

Only Syrian refugees exist in the Kafr Saad City-Region and at a limited scale in the urban zones. Accordingly, they obtain their housing units by rent and at the same price as the local residents. It is essential to note that Syrian refugees are the only type of refugees in Egypt that exist in the Damietta governorate, and they intensively live in Damietta City and New Damietta City.

Climate Change Adaptation

According to the site visit and the interviews, the housing units of the Kafr Saad city-region do not depend on any alternative technique to mitigate the effect of climate change. Residents in the city-region still rely on the common construction techniques of building housing units using reinforced concrete and masonry brick blocks as they can afford these techniques.

4. Brief Recommendations

This section outlines some tentative recommendations based on the above analysis, that can be used as a general guide for future policy papers on the issue of adequate and affordable housing in Egypt.

- **Establish Control and Stabilization Mechanisms:** Implement programs to manage and control severe price fluctuations in housing markets, including rents and ownership costs, to mitigate year-over-year increases.
- **Develop Efficient Growth Poles in Egyptian Satellite Cities:** Create integrated relationships between (Housing, Employment, and Facilities) within the Egyptian satellite cities to promote resettlement and alleviate pressures on major urban centers.
- **Promote the Reuse of Vacant Housing Units:** Maximize the use of existing housing stock to reduce the need for new construction and leverage current infrastructure resources effectively.
- **Foster Collaboration for Affordable Housing Production:** Engage diverse stakeholders, including the private and cooperative sectors, in producing affordable housing to balance the informal sector's contributions.
- **Expand Housing Finance Sources:** Strengthen the mortgage sector, incentivize private and cooperative sector financing for affordable housing, and reassess microfinance's role in supporting affordable housing initiatives.

- **Undertake Comprehensive Administrative and Legislative Reforms:** Address regulatory gaps by establishing clear, monitored, and accountable legislative and administrative frameworks.
- **Enhance the Capacity of Affordable Housing Construction Participants:** Provide interdisciplinary training programs to contractors and workers to elevate skills and capabilities in affordable housing construction.
- **Implement Climate Change Mitigation Strategies:** Translate climate change mitigation strategies into actionable plans within the affordable housing sector to address environmental impacts.

Annex A: Egypt's Urban Planning Institutions

The urban development process is the highest level of urban planning process, as it deals with city planning in an interdisciplinary and multi-dimensional way, not only through the physical level. Accordingly, this process is achieved by many bodies from different disciplines, and they are involved in this process through several missions like official supervision and sponsoring, technical consultancy and advisory, funding, technical execution, and supporting the civic society.

A large number of governmental organizations and official bodies are involved in different aspects of urban planning and development, namely, the below:

- Ministry of Housing, Utilities, and Urban Communities- MoHUUC. The ministry is the principal supervising body on the urban development process in Egypt, besides it mandates its three organizations to share the supervision on the same process:
 - The General Organization of Physical Planning- GOPP.
 - The New Urban Communities Authority- NUCA.
 - Social Housing and Mortgage Finance Fund- SHMFF.
- The Cabinet. Also it mandates the Urban Development Fund (UDF) to share the participation in this process, especially in slum upgrading and rehabilitation.
- The Presidency, through two bodies:
 - Tahya Misr Fund.
 - Hayaa Karima- The Presidential Initiative for Developing the Egyptian Countryside.
- Ministry of Local Development- MoLD.
- Ministry of Defense- MoD. The ministry participates through three organizations:
 - National Services Projects Organization- NSPO.
 - Land Projects Authority of Egyptian Armed Forces.
 - Engineering Authority of the Egyptian Armed Forces.

In addition to official governmental organizations, a number of other organizations also play a role in Egypt's urban development, including local NGOs, bilateral organizations, INGOs, and even some private sector organizations.

Annex B: Prototypes of Government-Built Affordable Housing Units

Architecturally, the affordable housing units built by the government, usually in the new satellite cities, are limited to two prototypes. The first prototype is oriented to low-income classes with their variation between poor and upper-low-income, and sometimes, it encompasses the low-middle classes among its beneficiaries. This includes two bedrooms, a living room, and services, and its built-up area varies between 55 m² and 75 m² according to the classification of the targeted group, as depicted in the figure below. Additionally, the housing block includes a ground floor in addition to three or four floors with four or six housing units on the single floor.



(A)- Housing clusters and the Plan of the Youth Housing Project, 2 Bedrooms Housing Prototype- Area 63 m². Photo from: The Arab Contractors Co., Egypt, and the Unit Designer: Dr./ Hazem Kouedi.

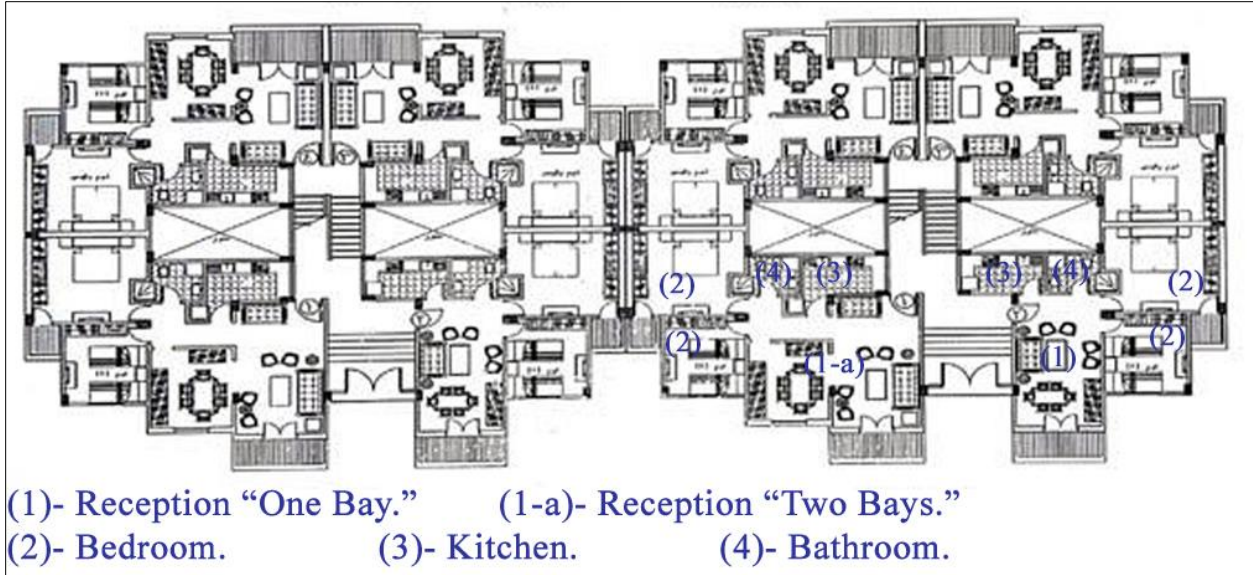
(B)- 2 Bedrooms Housing Prototype, Area= 70 m², Plan and Exterior Design. Photo from the Designer: Dr./ Hazem Kouedi.



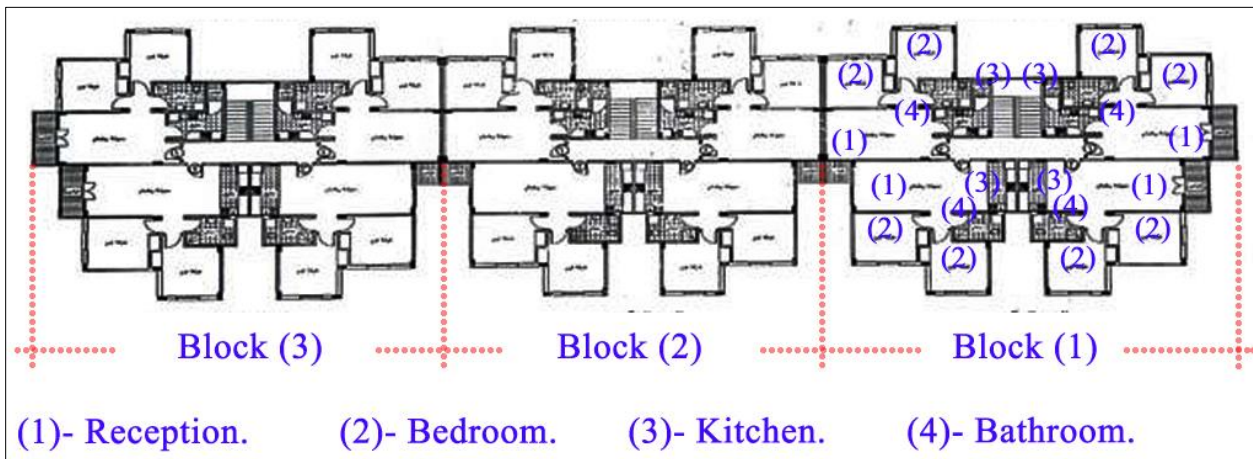
Different designs for 2 bedroom housing prototype offered by the government/public sector

Source: Photos from the designer Dr.Hazem Kouedi, figure by authors

The second prototype was oriented to the middle-income classes, and it included three bedrooms, a living room, services, and its built-up area was usually around 90 m². The housing block for this prototype is also a ground floor and three or four floors, with four housing units on the single floor. It is also important to say that each prototype may have existed in a specific project in a specific zone and repeated in another zone and another project, keeping the same unit area and number of spaces. Still, it differed in the architectural design of external facades, as depicted in the figures below.



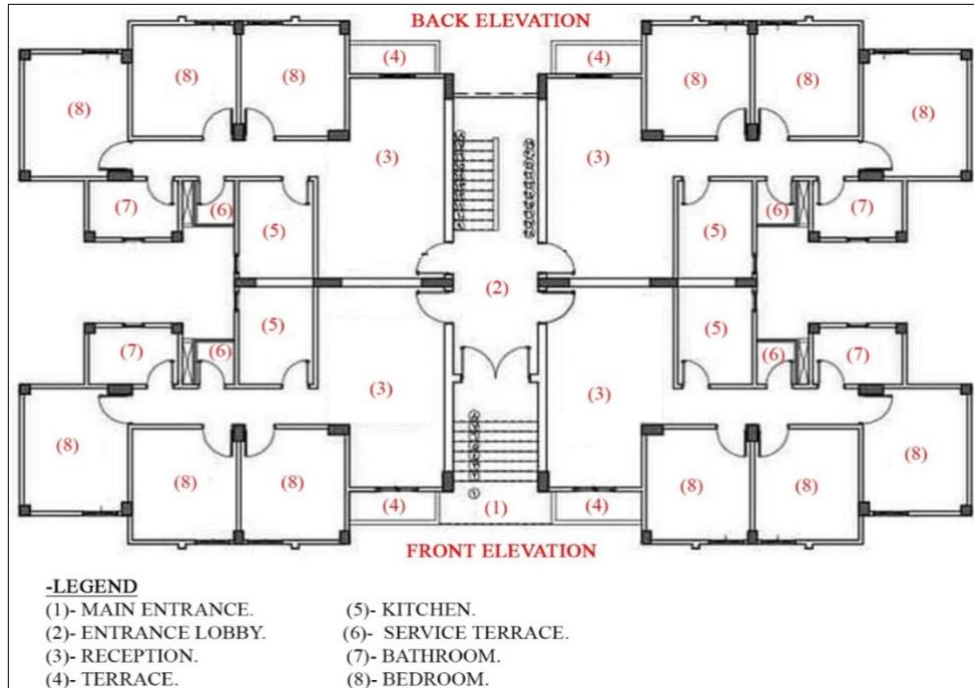
- Two attached housing blocks of two bedrooms housing prototype, implemented in 10th of Ramadan city. The prototype includes two options for the living room (1 Bay, 2 Bays). Source: *Masrawy.com*



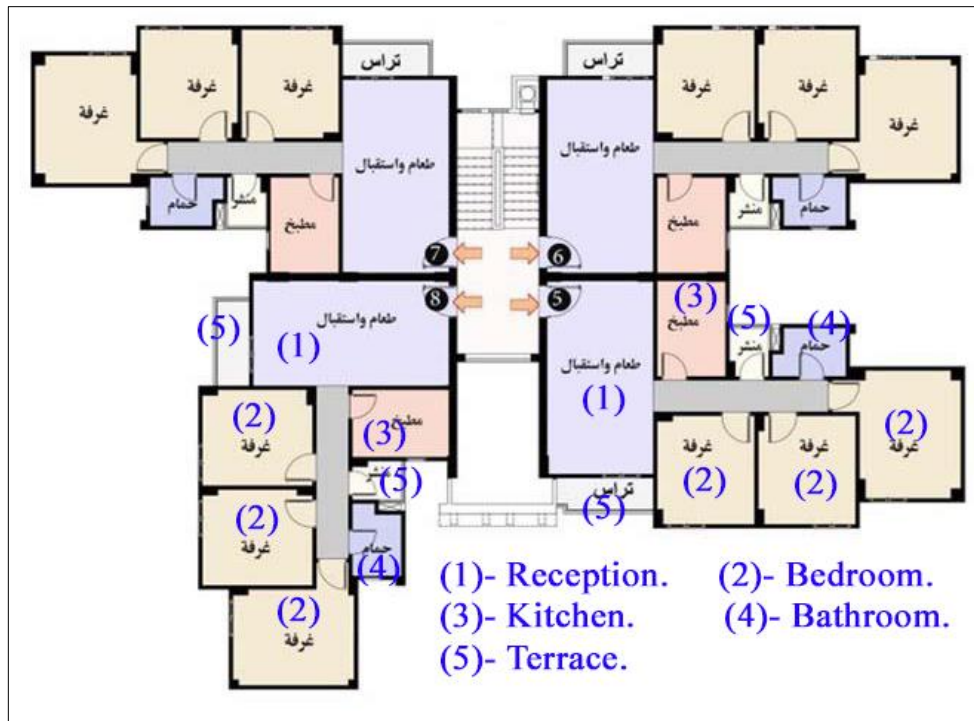
- Three attached housing blocks of two bedrooms housing prototype, implemented in New Fayoum City.

Various types of housing blocks agglomeration for the two bedrooms housing prototype

Source: *Photos from Masrawy.com, figure by authors*



The Housing Block for three bedrooms prototype, Area= 90 m2, Implemented in Kafr Saad City, Damietta . Source: Akram Youssef



The Housing Block for three bedrooms prototype, Area= 90 m2, Implemented in New Al-Alamain City . Source: NUCA.

Various types of housing blocks agglomeration for the three bedrooms housing prototype

Source: Figure by authors

Annex C: Conditions for applying for public housing unit

These conditions for applying to a public housing unit are¹⁵⁹:

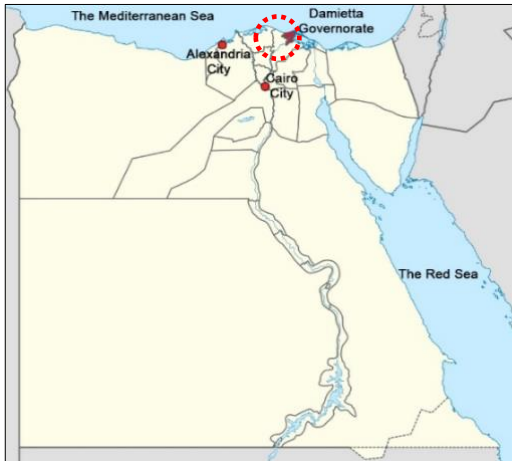
- The applicant and his family must hold Egyptian nationality.
- The applicant is between 21 and 50 years old at the time of announcement.
- The applicant does not exceed 75 years old at the end of the housing unit installments.
- The applicant or his family do not tenure any housing unit through any type of ownership.
- The applicant or his family are not entitled to apply to reserve more than one housing unit.
- The applicant or his family did not formerly obtain any housing units offered by the government through national housing projects.
- The applicant or his family did not formerly benefit from subsidized housing loans or housing finance provided by the state.
- The applicant or his family did not formerly benefit from “*The Real Estate Finance Law*,” released in 2001, and obtain mortgages from any accredited mortgage providers of this law.
- The applicant's monthly income must be compatible with the CBE and SHFF's criteria of salaries that meet each type of housing (as per Table 9).
- The applicant must commit to paying the required first deposit installments for each housing category according to CBE and SHFF's criteria (as per Table 9).

Annex D: Location, Administrative Division, and Population Distribution of Kafr Saad

Damietta contains one first-tier secondary city, Kafr Saad, whose local municipality supervises five villages . Moreover, the city-region includes one second-tier secondary city¹⁶⁰, Mit Abou Ghaleb, and twelve central villages whose local municipalities oversee sixteen subordinate villages, as shown in the below figure and table.

¹⁵⁹ Central Bank of Egypt- CBE, (2024). “*Part Ten: CBE Initiatives, Chater Three: Real Estate Finance Initiative*,” Issued in 2014, URL: <https://www.cbe.org.eg/ar/laws-regulations/regulations/regulations-book/book-10>

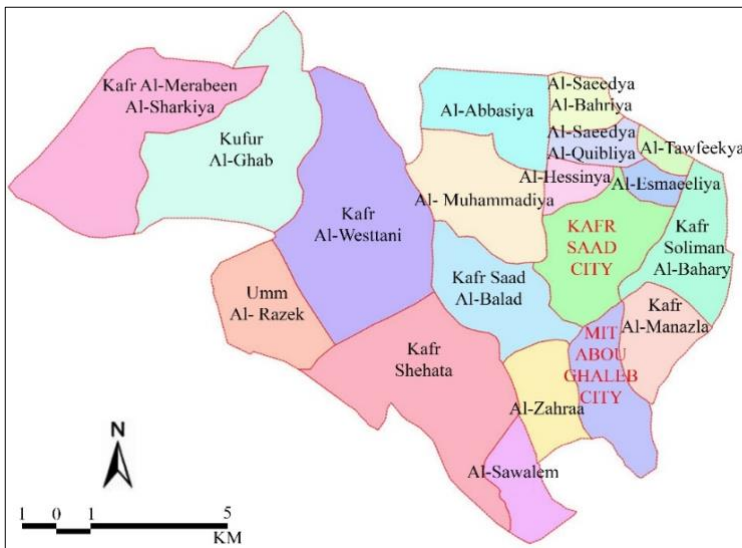
¹⁶⁰ By Authors. Maps are from General Organization of Physical Planning- GOPP’s Atlas Maps.



(a)- The Location of Damietta Governorate in Egypt.



(b)- The Administrative Division of Damietta Governorate, including Kafr Saad City-Region.



(c)- The Administrative Division of Kafr Saad City-Region.

The location of Kafr Saad city-region and Its administrative division

Rural/ Urban	Main Settlement	Subordinate Settlement	Gender			Families Number	
			Male	Female	Total		
Urban	Kafr Saad "Central Local Municipality"		8456	8213	16669	4193	
	Mit Abou Ghaleb		9713	9122	18835	4773	
	Total Urban Population			18169	17335	35504	8966
	The Percentage of Population to City-Region			13.46%	13.36%	13.41%	13.41%

Rural	Subordinate Villages for Kafr Saad City "Villages are administratively supervised by the Local Municipality of Kafr Saad City"	Al-Saeedya Al-Bahriya	2932	2802	5748	1393
		Al-Saeedya Al-Qebliya	2775	2644	5419	1389
		Al-Tawfeekya	5618	5394	11012	2608
		Al-Hessinya	515	498	1013	234
		Al-Esmaeeliya	4354	4403	8748	2170
		Al- Nawaseriya	1072	1021	2093	501
	Total Rural Population of Kafr Saad City.		17266	16762	34033	8304
	Kafr Soliman		10101	9750	19851	4844
	Al-Bahary					
		Ezbet Al-Louzy	828	802	1630	438
	Kafr Saad Al-Balad		10801	10333	21134	5327
	Kafr Al-Manazla		7137	6972	14109	3500
	Kafr Shehata		4827	4657	9484	2490
		Dar Al-Salam	2934	2698	5632	1380
	Al-Zahraa		3430	3329	6759	1656
	Al-Sawalem		6166	5803	11969	2957
	Umm Al- Razek		6643	6183	12826	3188
	Al-Abbasiya		4678	4490	9168	2122
		Al-Ebrahimya	2588	2405	4993	1197
		Al-Bahariya				
	Al-Muhammadiya		2296	2239	4535	1096
		Al-Ebrahimya	3720	3523	7252	1877
		Al-Qebliya				
		Taftesh Thani	2367	2183	4550	1268
	Kafr Al-Westtani		10548	10160	20708	5257
		Al-Badrawi	2284	2075	4359	1181

	Abou Rashed	2090	1834	3924	960
	Kufur Al-Ghab	5116	5078	10194	2752
	Manshiyat Nasser	940	949	1889	517
	Al-Dahayma	3731	3656	7396	1976
	Kafr Al-Merabeen Al-Sharkiya	2524	2581	5105	1454
	Abou Aiyyad	3810	3899	7709	2103
	Total Rural Population	116823	112386	229209	57870
	The Percentage of Population to City-Region	86.54%	86.64%	86.59%	86.58%
Total Population of Kafr Saad City-Region		134992	129721	264713	66836
Total Population of Damietta Governorate		769505	727260	1496765	378219
The Percentage of City- Region to Governorate		17.54%	17.84%	17.69%	17.67%

The Population of Urban and Rural Settlements of Kafar Saad City-Region¹⁶¹

¹⁶¹ Table By Authors based on: Central Agency for Public Mobilization and Statistics- CAPMASS, *Egypt Census*, (2017). The main villages are indicated in the grey-colored cells. These villages include local municipalities supervising the subordinate villages, and also, they are supervised by the central local municipality of Kafr Saad City.