

المدينة الصحراوية



DESERT CITY

NEW ASSIUT

The Urban Plan
Chronology
Infrastructure
Mobility
Housing Zones
Supplementary Zones
Obtaining a Home
City Economy

DEPENDANCE OR AUTONOMY?

Pressure on the Edges
Urban Tissue: Density
Incompatibility / Compatibility

CONQUEST OF THE DESERT

Reclamation
Chronology
The Four Generations
Problems of the New Towns
Actors

PROGNOSIS

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DESERT CITY

Sector 9: New Assiut is located 15 km northeast of Assiut, on the opposite side of the Nile; in 2000, the Government of Egypt implemented the city to be Assiut's sister town. New Assiut belongs to the third generation of the New Towns Program established by the government to fight growing demographic pressure in the Nile Valley. Settling across the desert's edge has become a necessity but demands tremendous effort and considerably serious consequences; New Assiut is therefore a case study—the unit of measure within a broader issue—that will unfold the significance of this conquest of the desert.



NEW ASSIUT

In the middle of the desert under the hot sun, dusty foundations of a new city emerge from the ground. Streets barren of urban dynamism lead into the desert, accompanied only by lamps. Between the roads, huge stretches of sand await construction. In the oldest area, a group of buildings already stands. Here and there, one can find traces of life from the clothes hanging outside and the trucks passing by, loaded with cement bags and construction workers. Yet, overwhelming emptiness belies the city's ambitions. Continuously in construction this city composes itself, longing for its future dwellers.



Population: 1,761 inhabitants [census 2006] | 5,000 [estimation 2009]

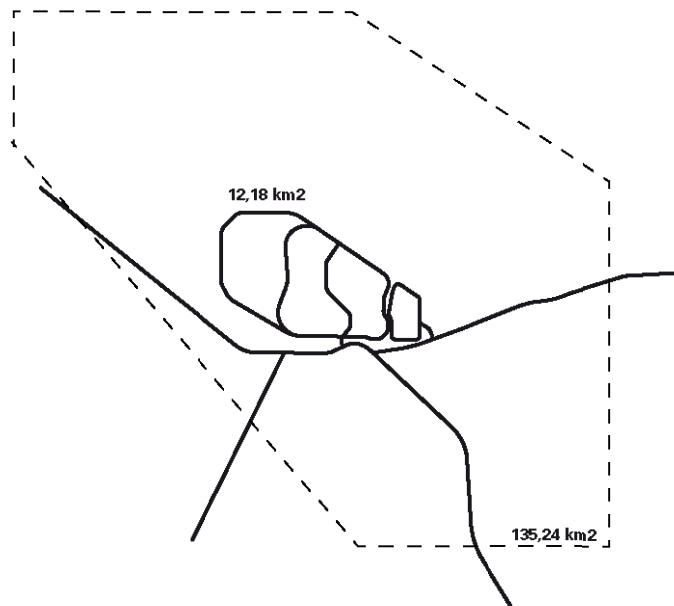
Plan Start: 1998

Planner: NUCA, Cairo

Construction start: 2000

Construction end: 2017

Investment so far: 500,000,000 LE



The Urban Plan

New Assiut was planned by the New Urban Communities Authority [NUCA] office, in Cairo. The plan shows evident influence of the so-called "New Urbanism," a movement that emerged in the United States in the early 1980s. The separation of functions (housing, services, industry, university, etc.), the guaranty of a "discernible center" for each neighborhood, the particular design of the roads to disperse traffic and provide a variety of pedestrian routes, the use of prominent sites to place civic buildings, the variety of dwelling types (houses, rowhouses and apartments) so that younger and older people, singles and families, the poor and the wealthy may find places to live are some principles one can find materialized in cities of the third generation such as New Assiut. The city has a domain of 135,24 km² of which 12,18 km² correspond to the area to be built by 2017. The city is divided in three major districts, each with its own centre of services that include governmental buildings, shops, company headquarters, churches, mosques, football stadiums, hospitals, parks, fireman and police facilities, health centers, etc. A major rule of composition is to surround a service centre with housing.

New Assiut Goals

1. Attract people to live outside the narrow valley.
2. Redistribute population within the province of Assiut.
3. Preserve arable farmland.
4. Raise living standards of province population.
5. Provide new employment opportunities which stimulate migration to the city.*

* From a governmental advertisement booklet about New Assiut



■ services



New Assiut Urban Life

During the day, New Assiut is a city without urban life. Everyone is in Assiut working or in the schools. Only the construction trucks cross the roads, and the construction sites are active. However, in the evening, children leave school, workers arrive in crowded buses, and the city returns to life.



New Assiut: A Construction Site

New Assiut is an immense construction site: a landscape of incomplete structures, piles of sand, gravel and cement.

1st
infrastructure

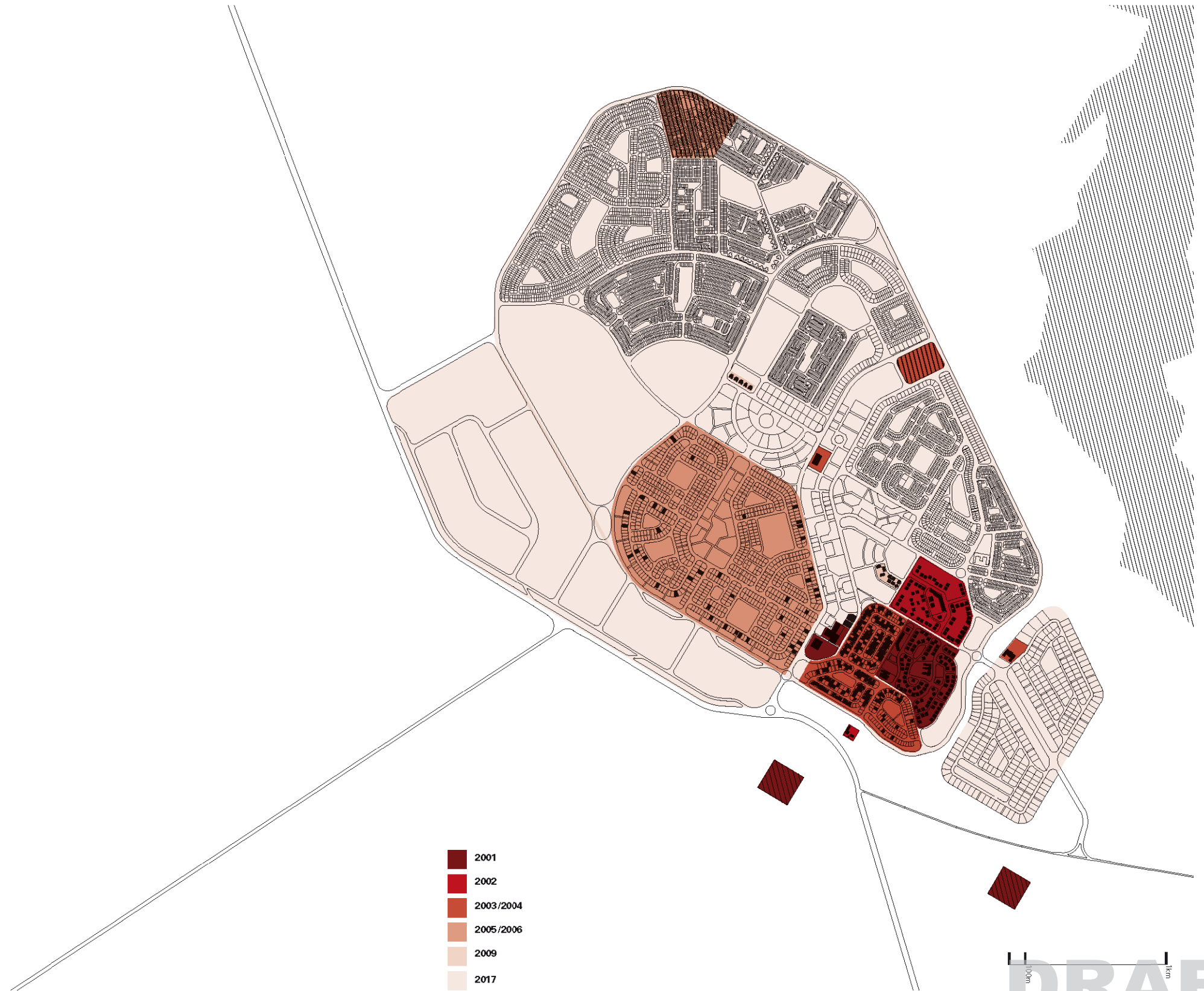
2nd
roads

3rd
buildings



Chronology

The first step in New Assiut's construction was the infrastructure: water and electricity, followed by roads and sidewalks, and finally the buildings. Although the main streets are already constructed, presently only 7% of the city is complete and inhabited.

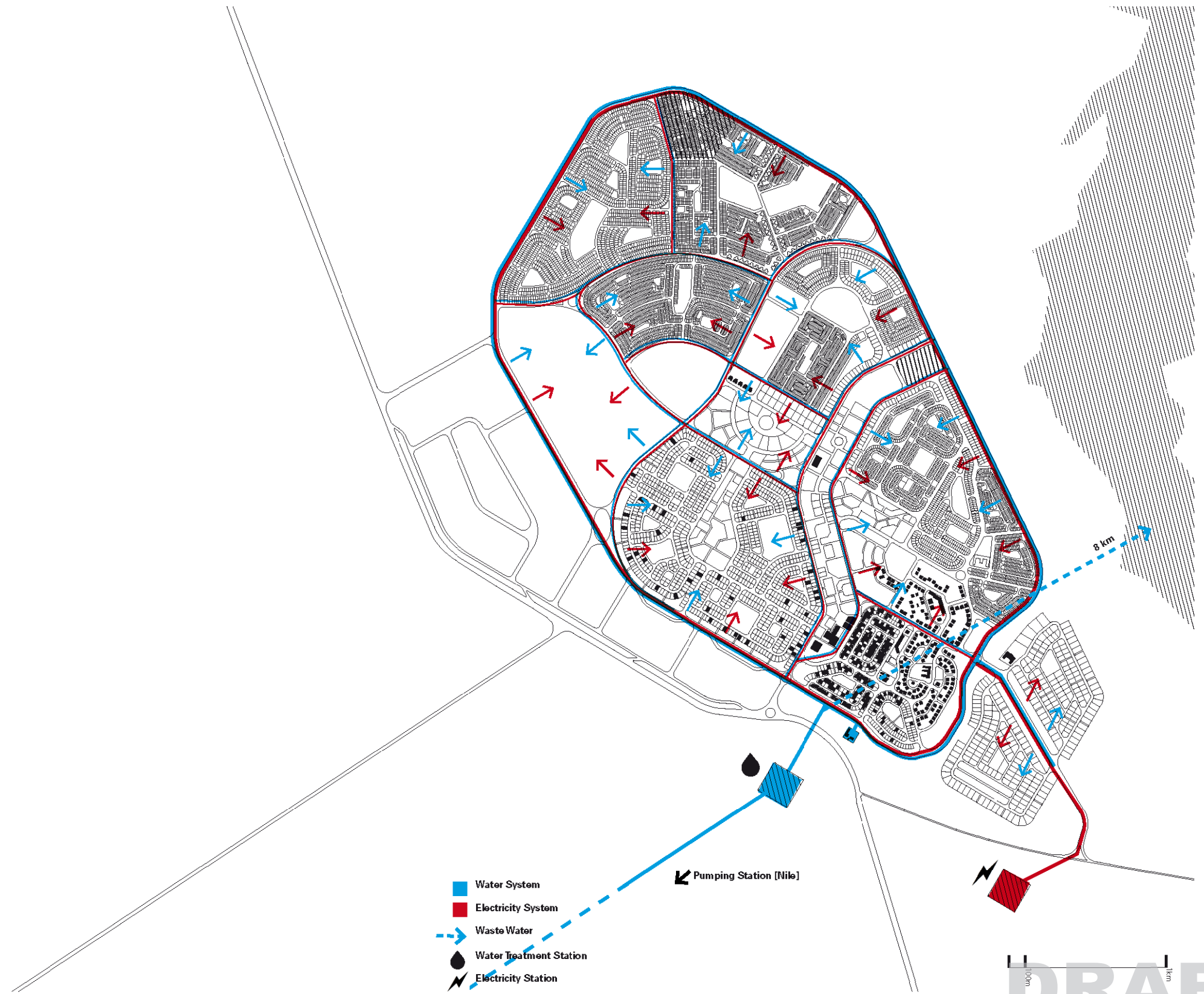


- 2001
- 2002
- 2003/2004
- 2005/2006
- 2009
- 2017



Infrastructure

A pumping station from the Nile provides the water to New Assiut. This station pumps 52,000 m³/day and exclusively serves New Assiut. The pipes follow the road to New Assiut where the treatment station sits. Once treated, the water is directed to the city ring road and from here ramifies itself, forming a grid. The same happens with the electricity; a station is reserved for the new town with power of 50 megawatts. Under each road there are three pipes: electricity, water and waste water. Although a sewage treatment station, with capacity of 40,000 m³/day, has already been built, the wastewater is not yet treated, but is dumped 8 km away, in the middle of the desert.





Mobility

As the major constructed and inhabited part of Assiut corresponds to social housing, few people own and drive private cars. Thus, the minibus functions as the main vehicle of mobility. These buses are provided and belong to Assiut's governorate. When questioned about connectivity for the future, Eng. Khalid el-Tayib (responsible for city transport and water) explained that New Assiut is expected to have an internal bus network when the city is complete.





Mubarak Youth Housing Project

The Youth Housing program was initiated, in 1995, by president Hosny Mubarak for "provision of modern domicile for youth at appropriate prices." Spread through several new towns within three phases of implementation. During the first phase 20,712 units were constructed with an area of 100m² per apartment, including a common room, two rooms, kitchen and bathroom. Although the composition was maintained, in the next phases, the areas were reduced to 37m². Empirically proven that the size of these apartments are not capable of fulfilling its inhabitants needs, nevertheless, the fourth phase is ongoing now with even smaller apartments (50-57m²)!

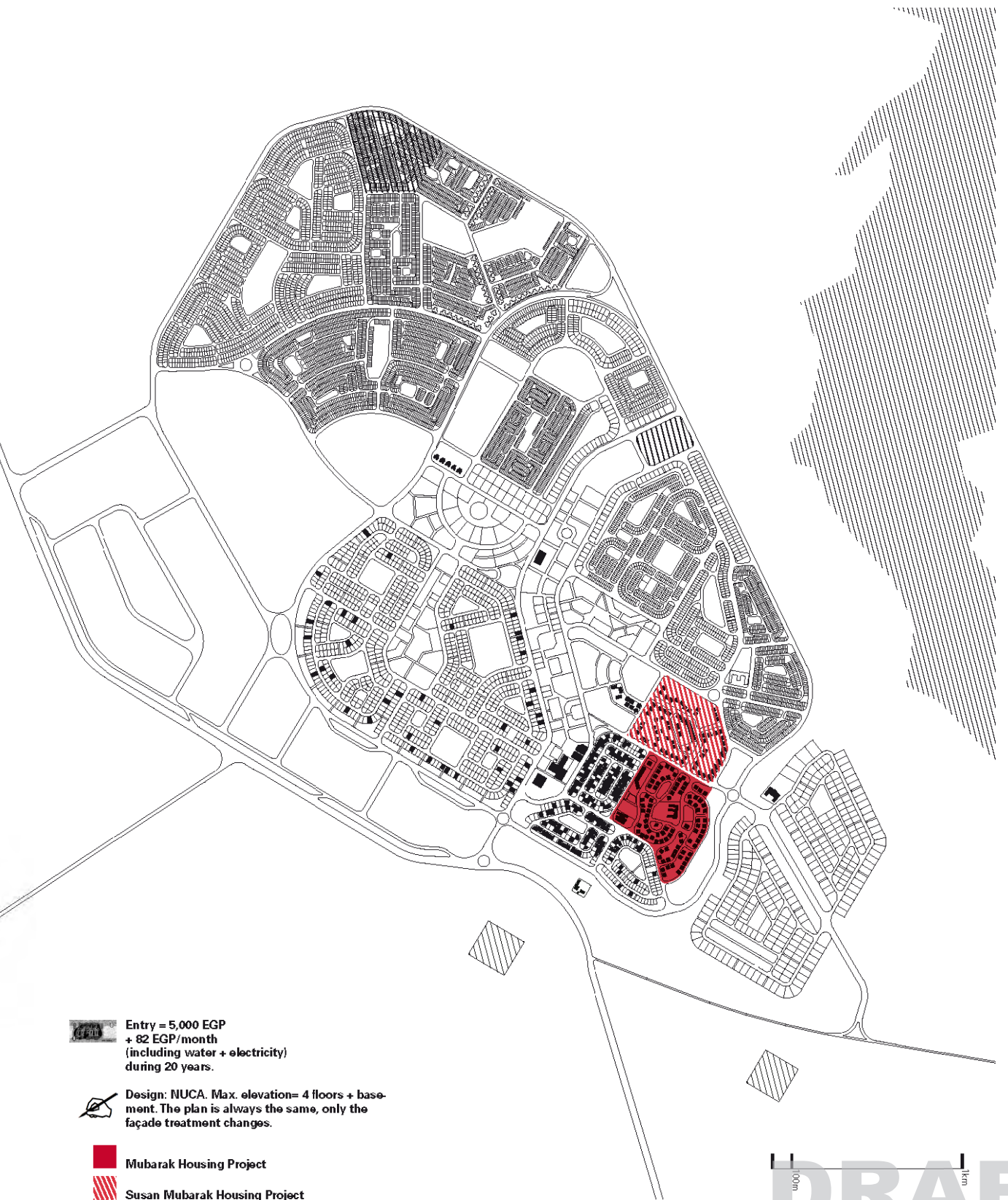
- 1st phase: 100m², 20712 units
- 2nd phase: 70m², 34931 units
- 3rd phase: 63m², 18690 units
- 4th phase: 50-57m², 10200 units

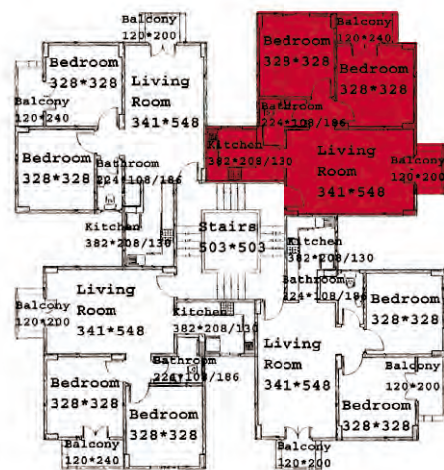


Suzan Mubarak Housing Program

The Future Housing program was enacted when Mrs. Suzan Mubarak called for a "prompt solution to the housing problem of a greater number of low income segments." This project is still in its first phase with 15,636 units to be constructed. The compartments and the size of the apartment are identical; what varies is the mode of acquisition and payment methods.

- 1st phase: 63m², 15636 units





**Mubarak's Typology: 63 m²
Interview**

Zone: Youth Housing

Name: Jamil`Arabi Fu`ad

Age: 35

Family members: 4

Job: Mechanic Assistant, Assiut

In New Assiut for: 2 years

Payment: 5,000 pounds + 82 pounds/month

Original Residence: Assiut (El-Mujahidin)

Reason for Move: "It's more quiet, clean and comfortable.

The kids like to play outside. And it's cheaper then Assiut."

Problems in New Assiut: transport, lack of shops, services and jobs, government doesn't support maintenance.

Building Problems: too small, bad construction.

Transport: public bus



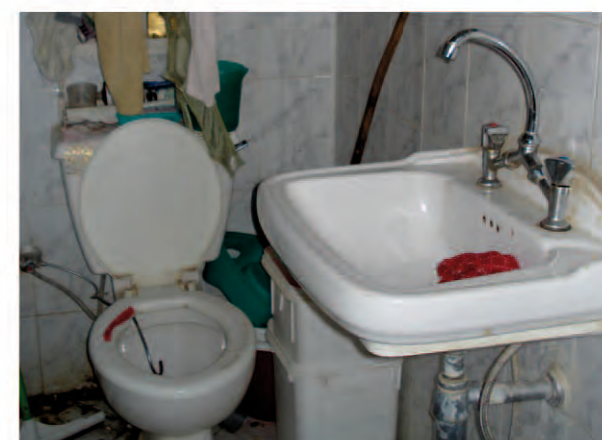
1



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4



5

- 1. Kitchen: 3.82 x 2,8/1.30 m
- 2. Common room + Balcony: 3.41 x 5.48 m + 1,2 x 2 m
- 3. Bedroom (children): 3.28 x 3.28 m
- 4. Bedroom (parents) + Bacony: 3.28 x 3.28 m + 1.2 x 2 m
- 5. Bathroom: 2.24 x 108/186 m



Mubarak Youth Housing Program

"This project is known for its architectural models for elevation of public taste." NUCA website



Mubarak Housing Projects

Although the plans are kept the same, outside the buildings express variety of forms and colours. The earth is brought from the valley and spread on the ground to reclaim some green spaces to the desert.



“Build Your House” Program

North of town, foundations rise up from the ground scattering through the landscape in the first phase of the project.




Self-Built Housing


The "Build Your House" program is directed toward low-income families. The Housing and Development Bank finance the project through three stages. The proprietary receives a low-priced plot, with 5,000 LE each stage to complete a story of the house. The project design is dictated by a catalogue of 5 styles determined by NUCA. The plot owner must find his own construction company and specialists (foundations, water, electricity, concrete, insulation, etc). Some companies offer their services and already have offices in New Assiut (ex. Cemex), however, the majority of the construction is done by the owner and relatives. To access a "Build Your House" plot is difficult and it is even harder to receive funding from HD Bank; the proprietary is likely to self-invest for years, and without money to proceed, the building can quickly deteriorate.

Interview

Zone: Build Your House
Name: Hamdi Mohamed Abdullah
Age: 45
Family members: 4
Residence: Assiut
Job: Employed by Assiut University
Date he purchased the plot: 2007
Price: 1050 LE (plot)
Date he received it: 2008
Date he received the first phase fund: Never received
How he applied: "I saw an advertisement in the newspaper from the HD Bank about the new plots available and I applied at the bank in Assiut."
Why he bought the plot: "For my future and my children."
Transport: public bus



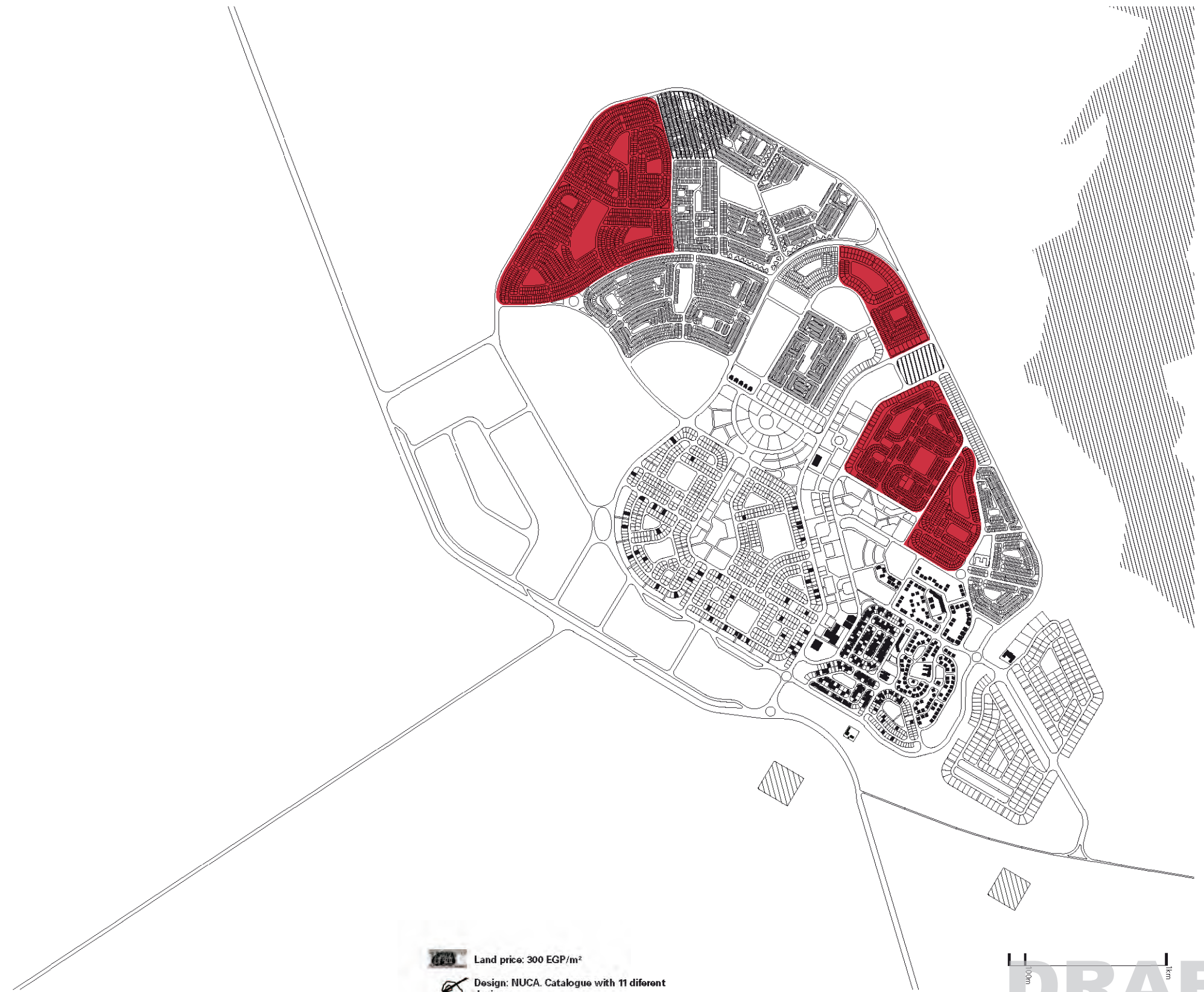
 Land price: 100 LE/m²
 + HD fund: 15,000 LE
 1st phase: 5,000 LE
 2nd phase: 5,000 LE
 3rd phase: 5,000 LE



 Design: NUCA. Catalogue with 5 different designs.



Family Housing Program

This program is destined to "fulfil citizens needs for an appropriate domicile for the whole family". Up until now, there aren't any exemplars of this program in New Assiut. But 342 units are to be constructed in the near future. The plots have areas within 150-350 m² to be built according one of the given models (11).



 Land price: 300 EGP/m²
 Design: NUCA. Catalogue with 11 diferent designs.


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Fast Construction Zone

The "fast construction" program was initiated with two goals: attract people to the new city by selling the plot by a low price, and quickly increase the density around the first implemented center, that corresponds also to the city front view; this was achieved by stipulating a term for the construction time. The plots are slated to become family housing units with no more than 4 floors. Except for the building height (max. 4 floors), the design is totally free but must be approved by the New Assiut governorate.



 Land price: 115-200 EGP/m²

 Design: Free! But the building must be complete within 5 years.

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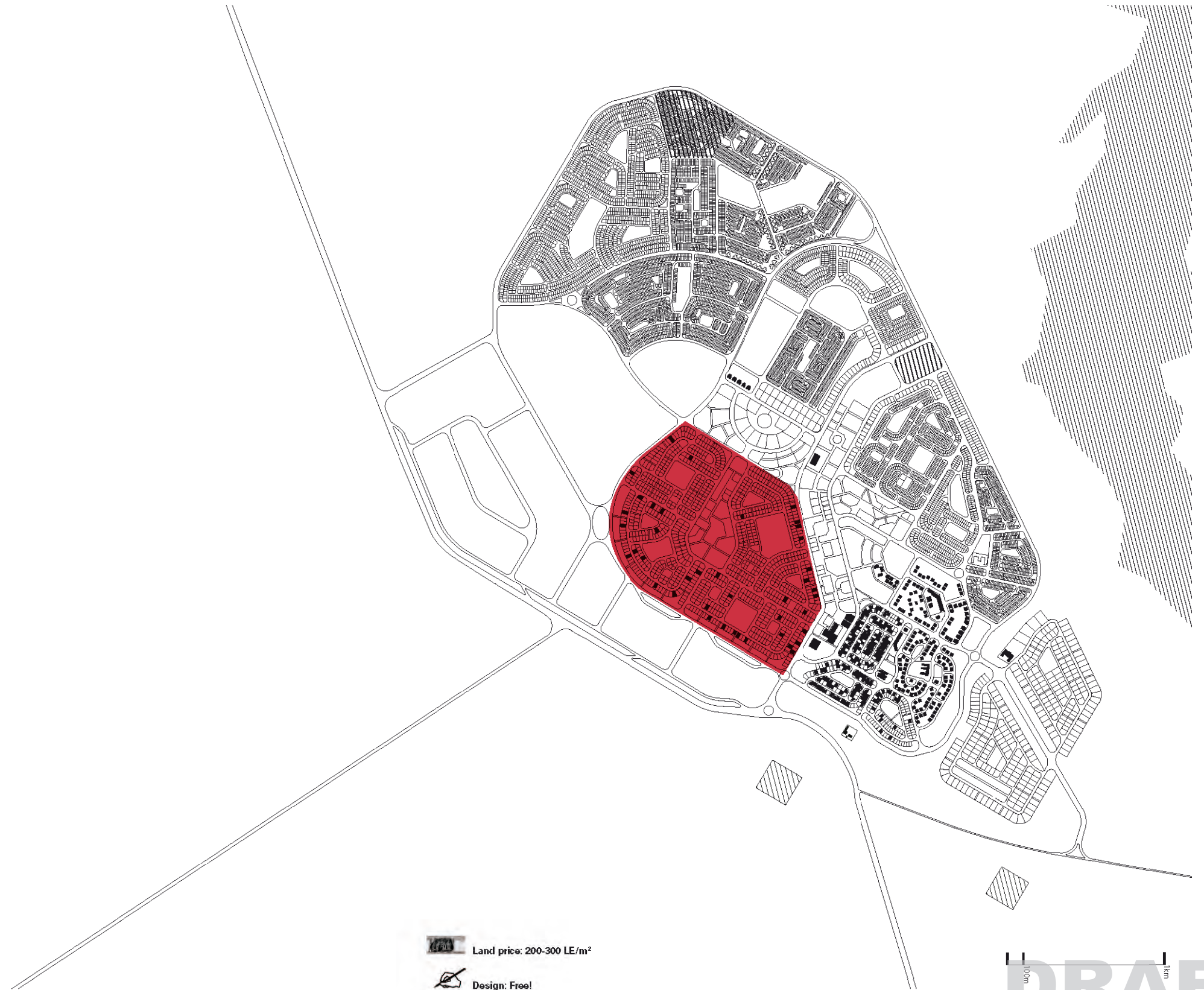
Construction and Addition

In most cases, the proprietary guarantees that the building is completely ready to a certain story to abide with the 5 years law. Later, he constructs more floors.



“Business Man” Zone

This housing program is reserved for a higher-income inhabitants and certainly is expected to contribute to the economical balance of the city. Apart from height restrictions (3-4 floors) the design of the building is free.



Land price: 200-300 LE/m²
Design: Free!





Industry Zone

Apart from the housing zones, New Assiut comprises three other zones with specific functions and locations. The industry zone is located in the south, so that pollution is blown away from inhabited areas. The area is divided into plots, to be sold to small/medium industries. Unlike some new cities, New Assiut is intended to be a heterogenous rather than industrial city.



University

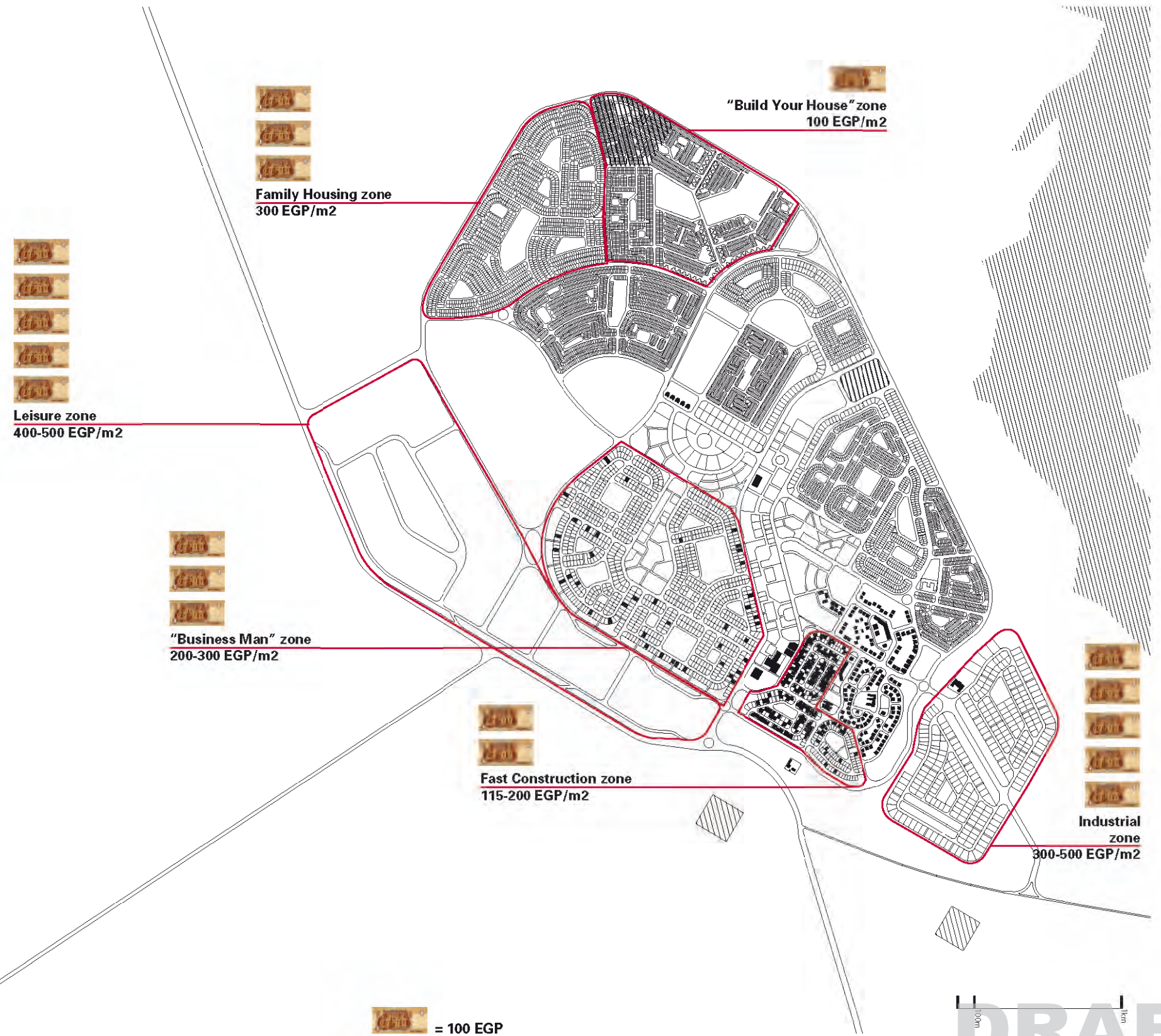
Assiut University will extend a branch into the new city.

Leisure Zone

Another zones planned was the "leisure" zone, reserved for malls, clubs, cultural facilities, museums, and cinemas. Its location at the city entrance intends outsiders to visit these spaces without crossing through residential areas.

Construction has yet to begin in any of these three zones.





Housing Price Zones

Each zone has its own defining characteristics, with corresponding prices, which compose the city economy.



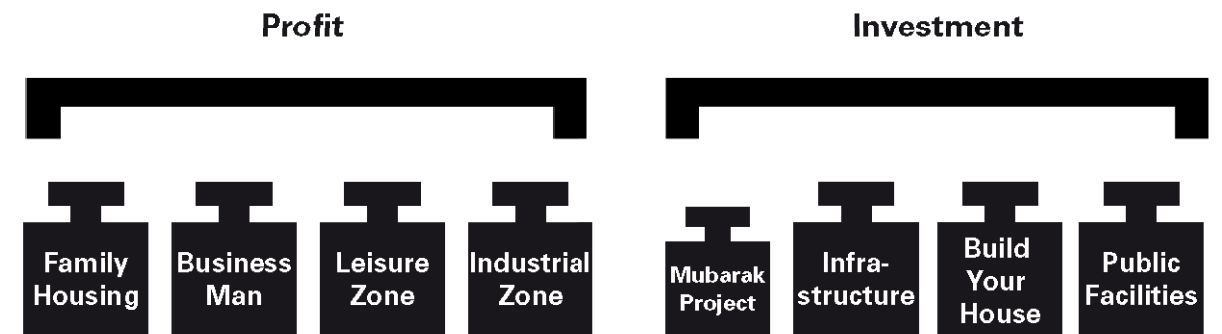
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Obtaining a House

1. An advertisement is made by the Ministry of Housing, Utilities and Urban Development (MHUUD) or NUCA in newspapers and websites.
2. An application downloaded at NUCA's website is sent to New Assiut's governorate. In cases of free design, the project is submitted for evaluation.
3. The applicant signs a contract at governorate facilities.

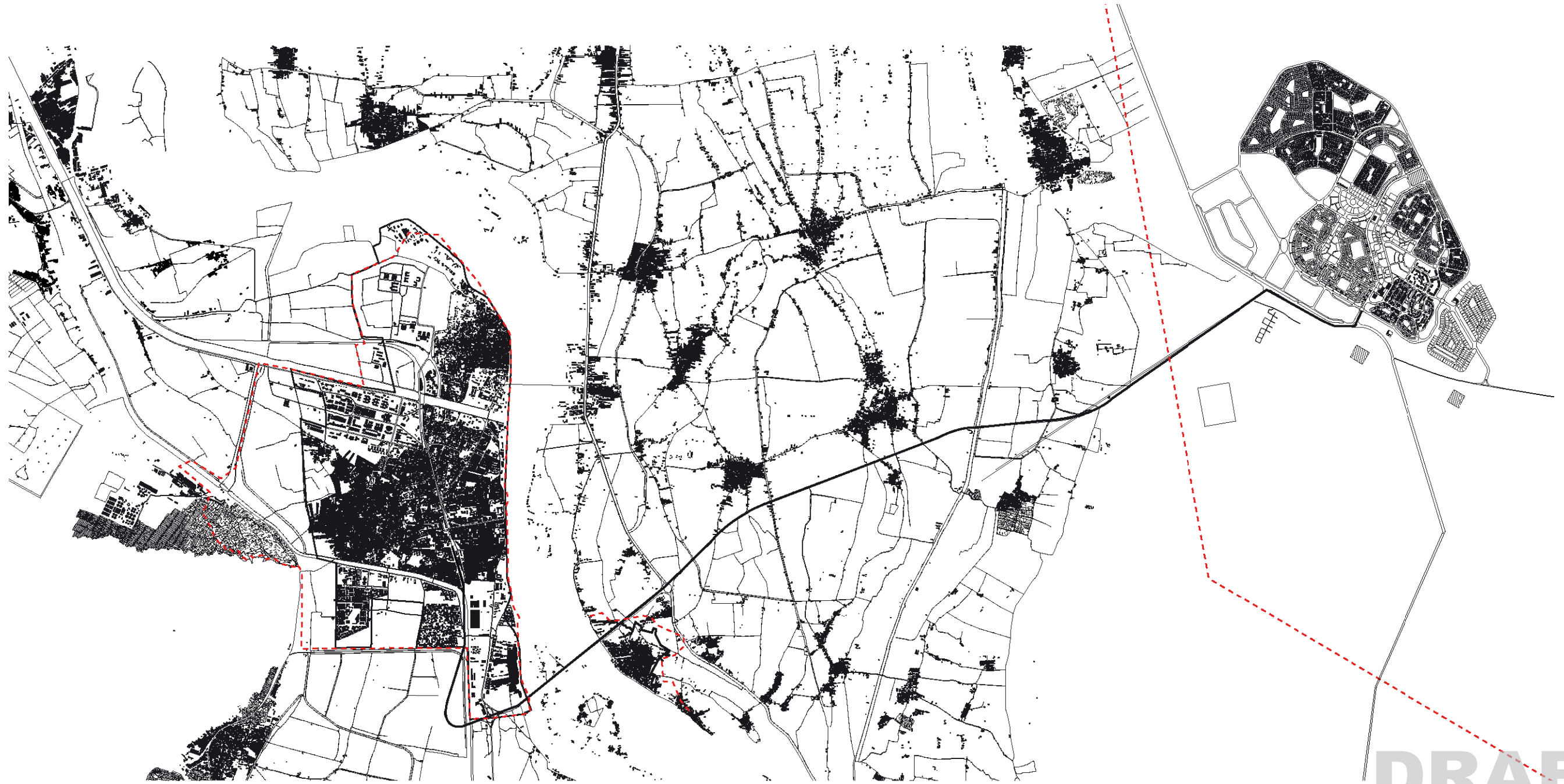


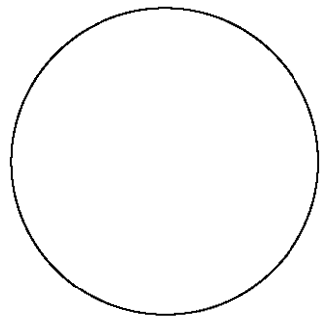
City's Economy

Each zone has its own conditions and prices but the procedure is the same. The economy of the city is obviously based in these differences.

DEPENDENCE OR AUTONOMY ?

New Assiut was planned to be Assiut's sister town, capable of an independent urban structure and dynamic within its limits. However, up to now, the city remains more like an urban offspring, depending on Assiut in numerous ways. Clearly, the city requires time for development and diversification. But will New Assiut ever be capable of being what was meant to be, as an autonomous town?





Assiut population:
395,000 inhabitants



New Assiut Target Population:
100,000 inhabitants



New Assiut Population:
10,000 inhabitants



Assiut



New Assiut



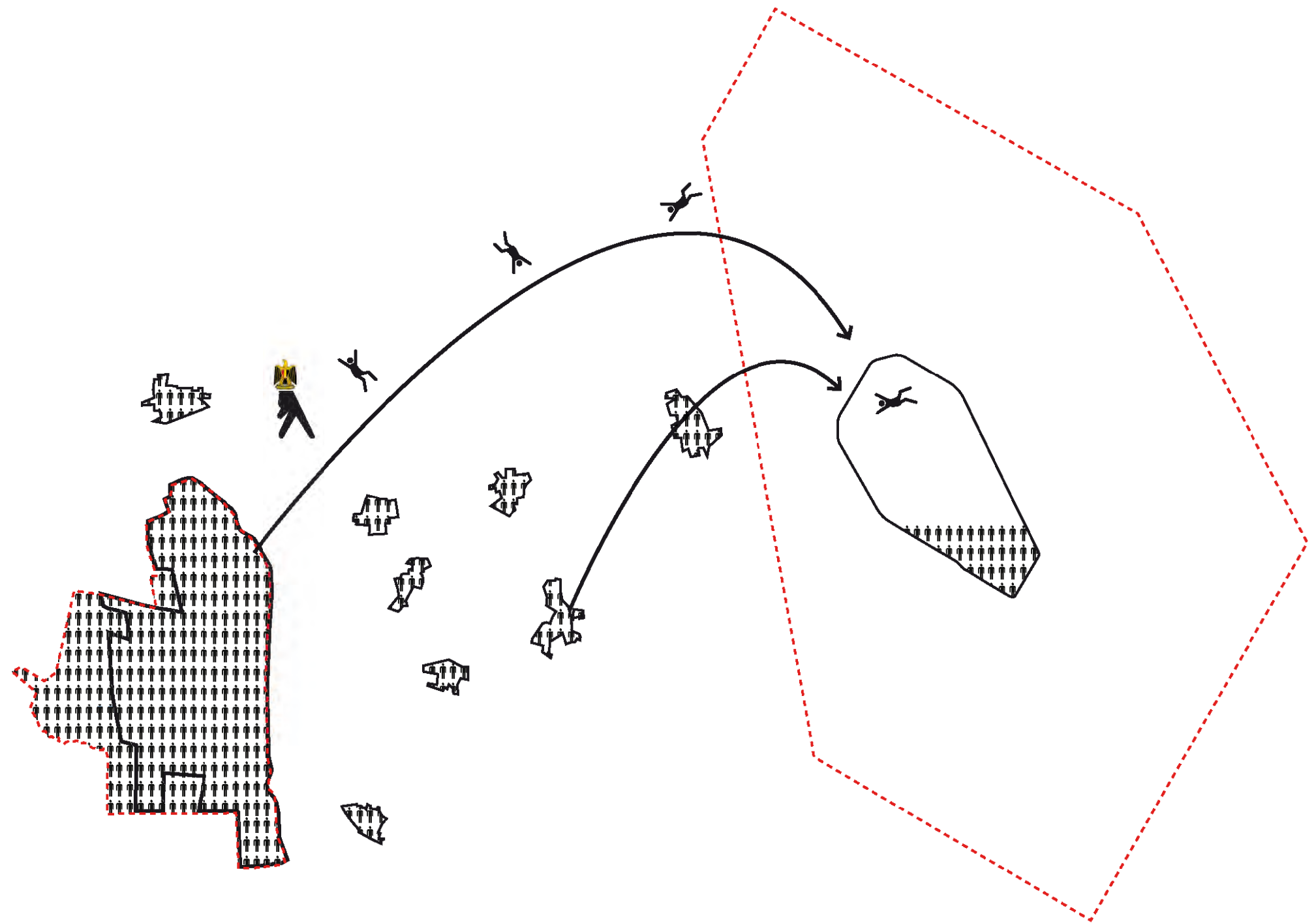
Assiut

This urban structure is dense and complex, resulting from long-term development. The specificity of Assiut urbanism does not easily translate to the New City.



New Assiut

Once each house is inhabited by a single family, the density of New Assiut will still be much lower than that of Assiut. The distance between the buildings in a street fails to emulate the complexity of social and special relations one can identify in Assiut. The street is no longer a second layer of privacy (after the house); it belongs completely to public domain. This certainly has consequences in the maintenance of public space and the limits of ownership.



Pressure on the Edges

The government draws a limit to the growing city and villages, in an attempt to spare arable farmland. However, the new city is not yet suitable for inhabitants, due to prices and remote location. Living in the city core becomes increasingly more expensive as the density grows. So the best alternative is informal building. The conflict between government goals and inhabitants needs is increasing pressure on the city edges.

CONQUEST OF THE DESERT

“Leaving the narrow Nile Valley and fanning out, in a planned and organized manner, throughout the country, has become an unavoidable necessity. In view of these facts, the conquest of the desert is no longer a slogan or dream but a necessity dictated by the spiralling population growth. What is required is not a token exodus into the desert but a complete reconsideration of the distribution of population throughout the country.” President Mubarak reported in Al Ahram Weekly, 14-20 November 1997



The New Towns Program Goals

1. Creation of new civil centers for achieving community stability and economic prosperity.
2. Redistribution of inhabitants from the narrow Nile Valley.
3. Development of attractions beyond existing cities.
4. Extension of urban spines to desert and remote areas.
5. Curbing urban infringement upon agricultural areas.
6. Achieving goals of urban development strategy.

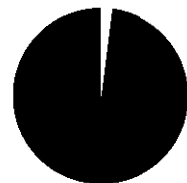
New Cities planning and development was based upon the latest planning techniques. Land sale rates were for the actual cost of basic utilities to serve as a nucleus for investment attraction. Various privileges were granted for the investor (custom & tax exemption). NUCA's primary goal was the provision of housing units for low income segments that were convenient to economic and community conditions. To subsidize low-income households, NUCA launched various housing projects in compliance with different conditions and facilities. For realizing the urban development strategy goals, the Ministry prepared the National Development Map Until 2017, where the optimum locations were highlighted for the development of the new urban communities and their priorities through new development spines, where number of new communities (44 urban agglomerations) are to be established with diverse economic bases according to the physical and economic capabilities of each respective area, where job opportunities are generated.



43% of Egypt's population live in urban areas.



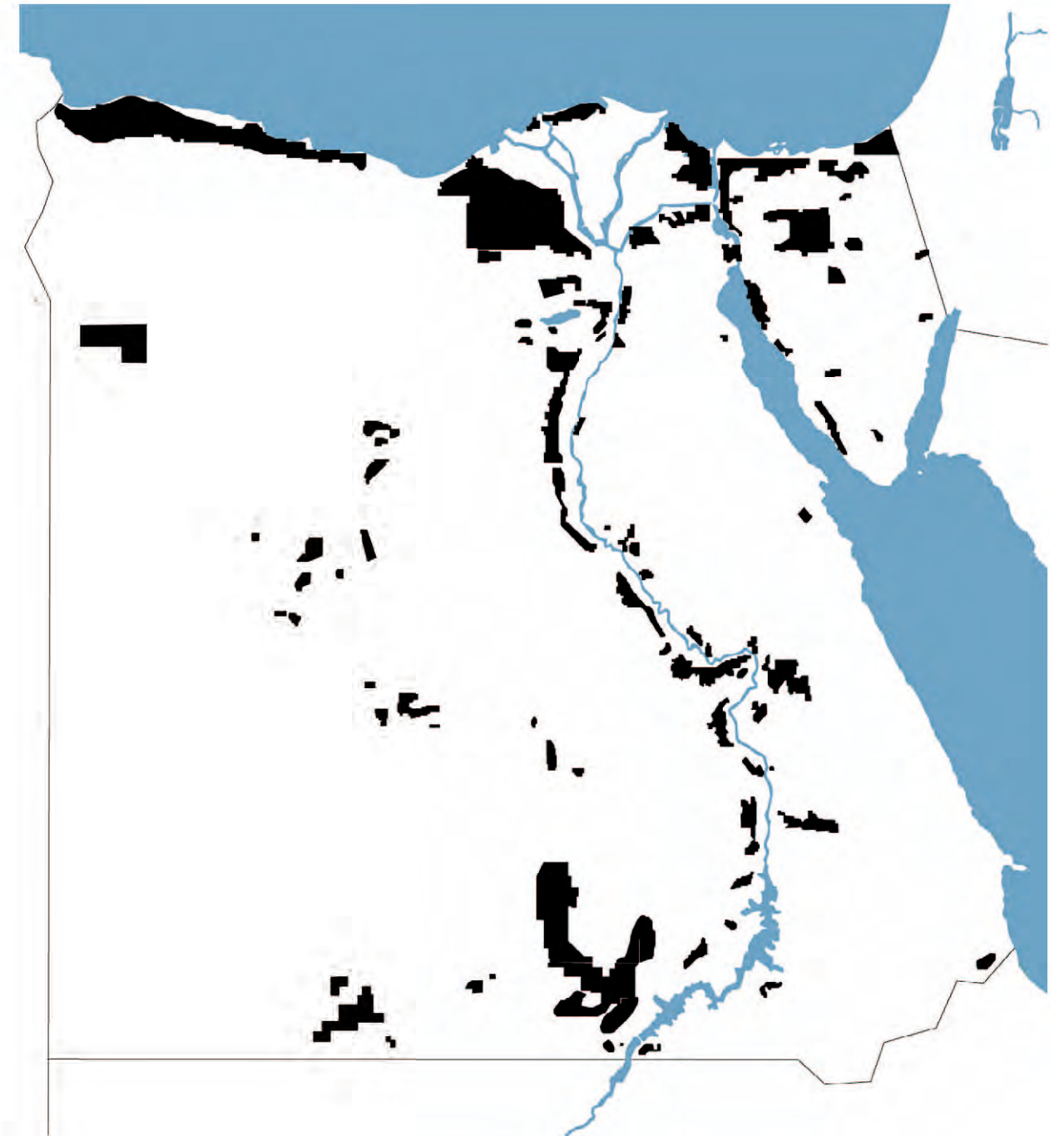
55% of Egypt's population live in rural areas.



98% of Egypt's population live in the Nile Valley including the Delta.



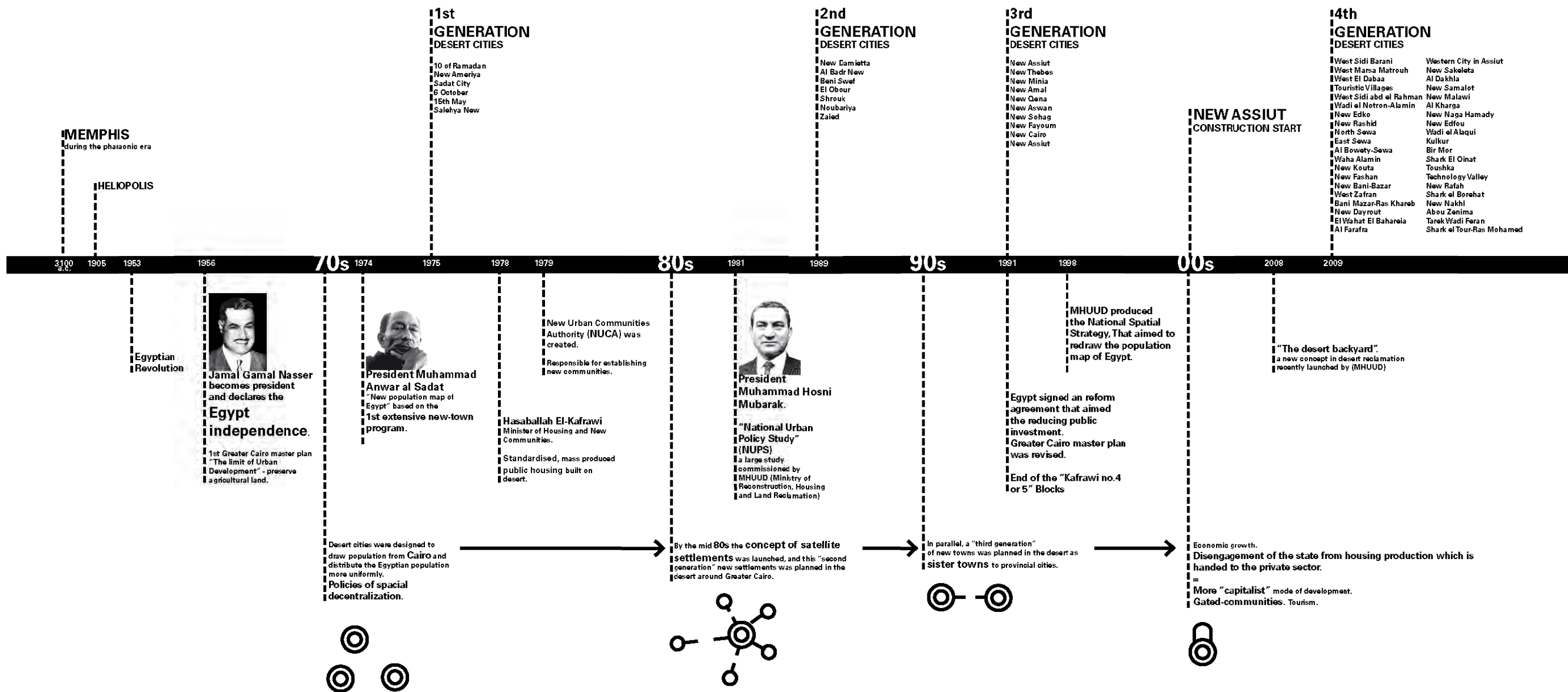
The Nile Valley represents 4% of Egypt's territory.



Reclamation Map

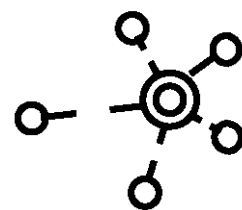
National Development Map project until 2017
Total: 3,387,200 feddans to be reclaimed

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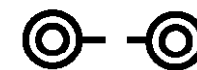


10th Ramadan
 The first generation of new towns was the government's first attempt to resolve population density around Cairo, by establishing strategic cities in the Delta territory.
 Politics of decentralisation!
 Influences: Modernism (Brasília)



2nd Generation: Satellite Cities

New Damietta
 In the mid-80s, once again in an attempt to draw population from Cairo, various cities were founded in the desert around Greater Cairo. This cities were not meant to be completely independent and some have more specific functions (i.e. industrial). The satellite city plan should improve connections to Cairo, yet, the lack of connectivity has contributed to the failure of some satellites.
 Influences: Mix between Modernism and "New Urbanism" (i.e. Seaside, Florida)



3rd Generation: Sister Cities

New Menia, New Assuan
 The third generation is the first to attend to city demographic problems. A sister town was established to each of the main provincial cities, expanding the new towns program along the Nile.
 Influences: "New Urbanism"



4th Generation: Forbidden Cities

Serrania
 The 4th generation spreads the New Towns through all Egyptian territory, truly advancing into the desert. The government uses the private sector for desert reclamation. These city plans no longer concern NUCA; investors hire world-famous architects (i.e. Norman Foster). However, the price of housing in this cities make them inaccessible to the majority of the Egyptian population and do not resolve the demographic density in the valley. Only accessible to tourists and a small Egyptian elite, these cities remain utopic/desired/ and forbidden to the common Egyptian.
 Influences: "New Urbanism", Dubai



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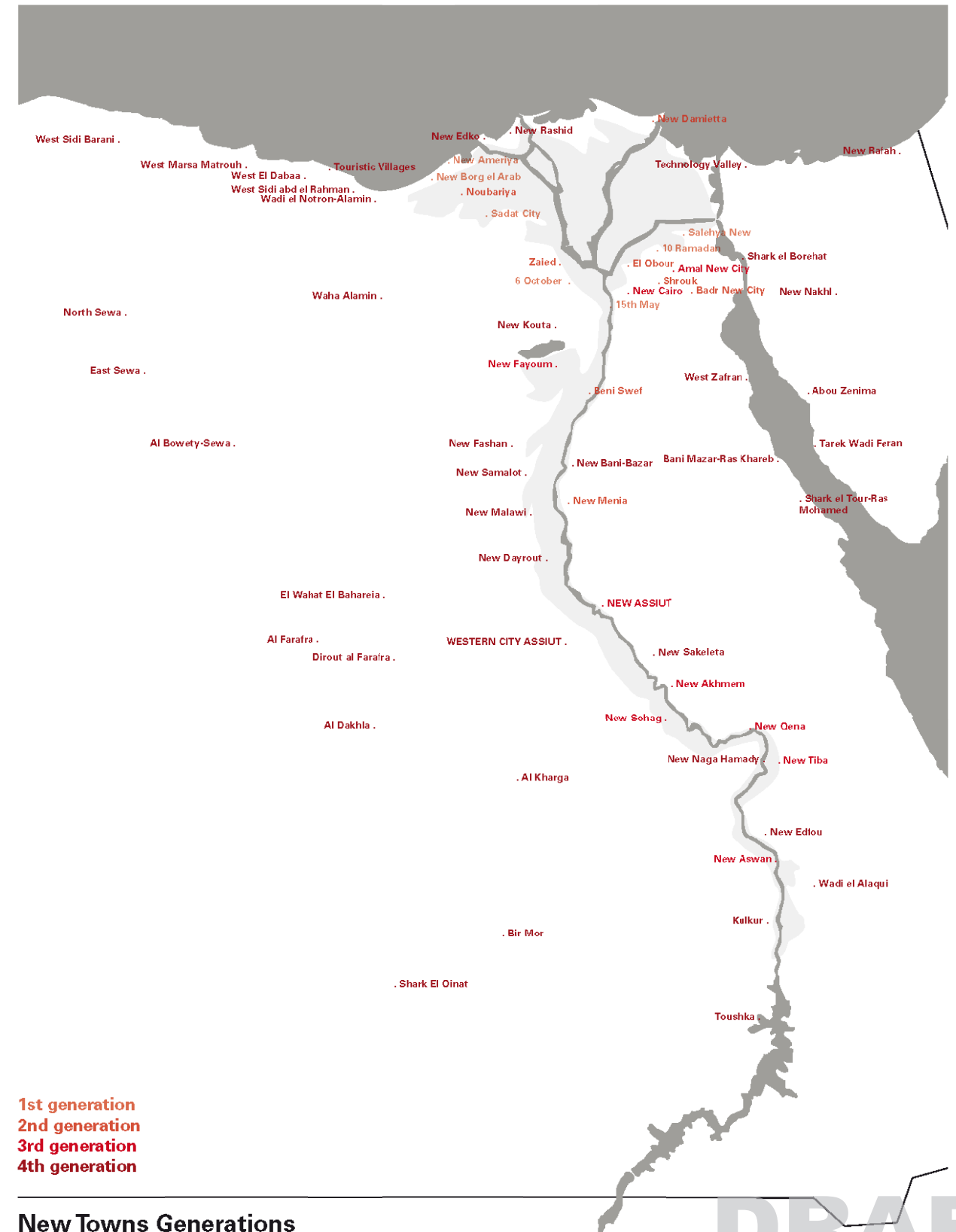


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1. 10th Ramadan, Egypt | 1st Generation
2. Brasília, Brazil
3. New Damietta, Egypt | 2nd Generation
4. Seaside, Florida
5. New Menia, Egypt | 3rd Generation
6. New Assuan, Egypt | 3rd Generation
7. Serrenia, Egypt | 4th Generation



New Towns Generations

New Towns Problems

1. New Cities are not attracting anywhere near the planned populations. In 2006 census 2.45% urban population lived in the new cities.
2. Have been developed by side processes with little consideration of location dynamics, target beneficiaries, economic underpinning of the new towns and effective market incentives are not quite achieved.
3. Creating new towns is an expensive endeavor, since all basic infrastructure must be provided from scratch. The New Towns are overly dependent on State investments.
4. Proper studies (soil, population, etc.) were not undertaken, and the result is a land that is not arable.
5. Although the new communities law envisioned the eventual handing over of the new towns to the respective local government authorities, this has not occurred because local authorities are perceived as not having the management capacities to maintain the high standards of the new towns.
6. Many private sector developers hurried to develop up-market sites without regard for market demand, leading to the failure of many schemes.
7. Many new towns, especially those with industrial areas are experiencing severe environmental problems.

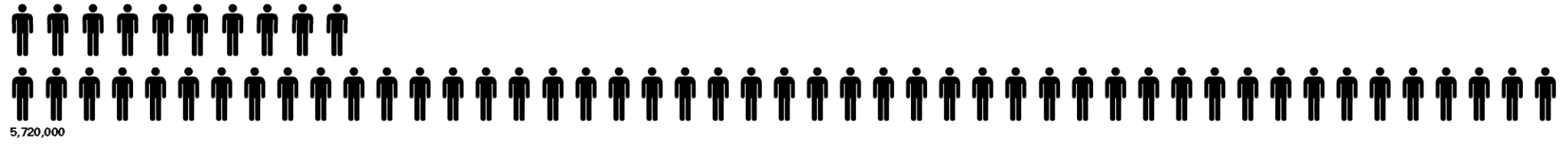
World Bank | Arab Republic of Egypt: Egypt Public Land Management Strategy | Volume I & II | 2006



Population in 2006

Target Population in 2015

All the new cities



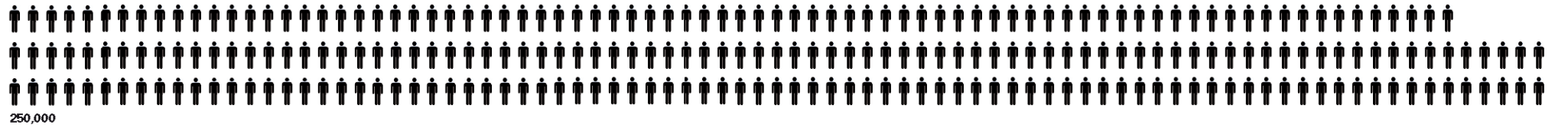
Greater Cairo
New Towns



15th May



Shorouk



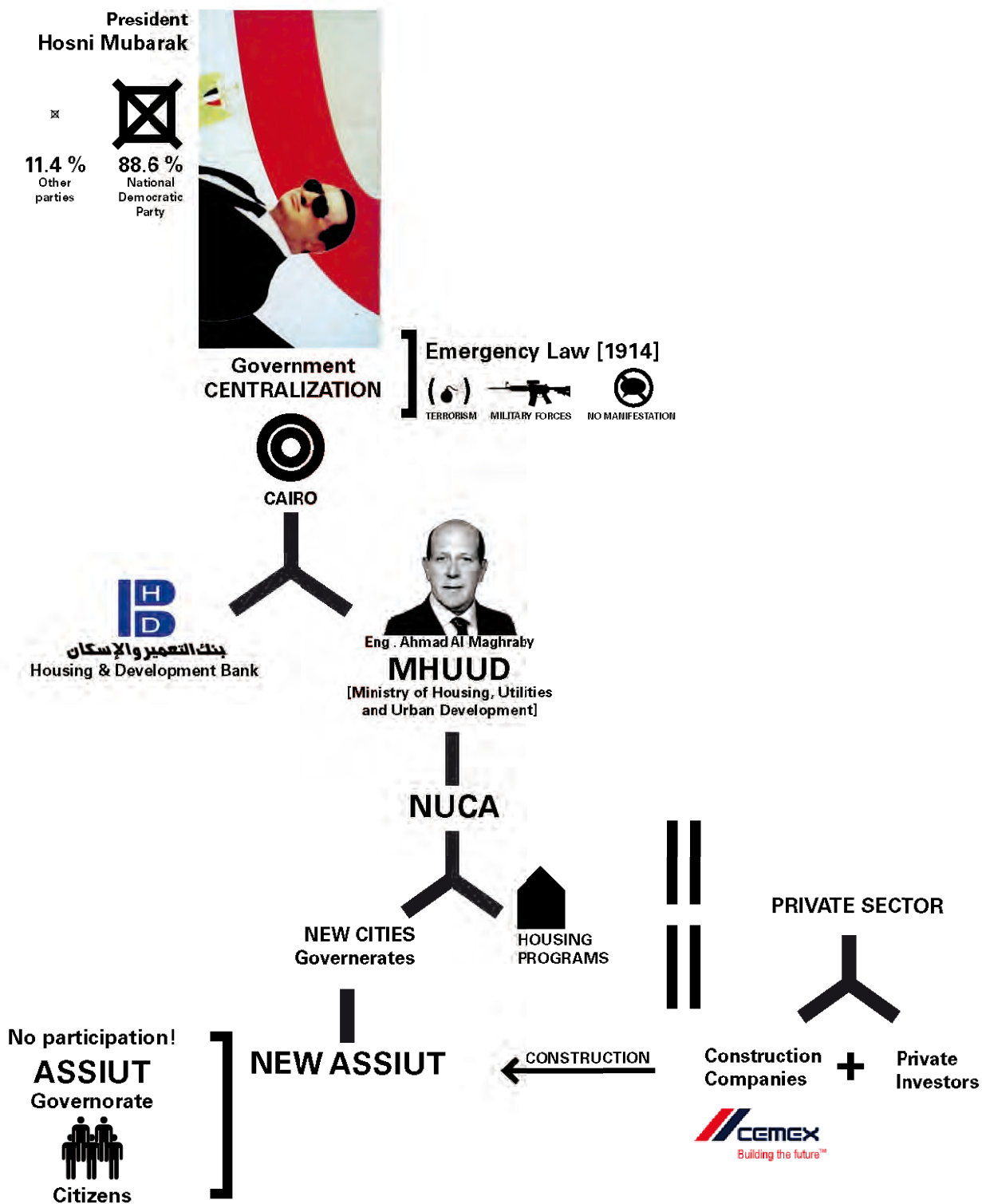
New Menia



New Assiut

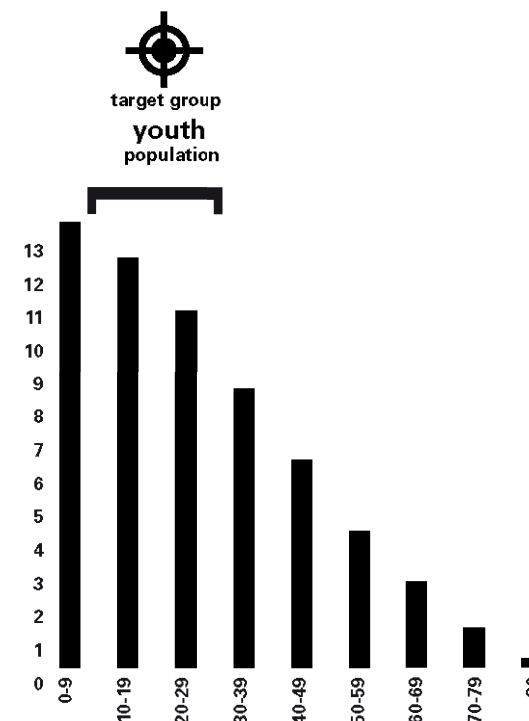


= 100,000 inhabitants



Actors

Many facets of public legislation are at work with the private sector to develop desert cities. Whether these collaborations are successful has yet to be determined, but administrative commitment is high.



Population in millions / age
U.S. Census Bureu, International Data Base, 2005

Housing: A Key Political Issue

“Unemployment, housing, prices, transport and the cost of private tuition and health treatment, the problems of disorganizaed urban planning faced by breadwinners, in addition to other issues that must be dealt with in the next period....I am committed to building a modern and developed society....I vow before you to complete the building of the economic and social system which offers jobs to our sons and raises the standard of living and income of every family, guarantees a respectable life to every pensioner, and provides every citizen with the daily services they require in terms of education, health, housing and transport.”

President Mubarak Speech for the Elections Campaign
Al-Misriyah TV, Cairo, 28 July 2005



President Mubarak and the delivery of titles to twenty young men and women: “Our goal is to built 5,000,000 houses to the youth and limited income people. President Hosni Mubarak said that the State attaches great importance to the provision of housing for low-income youth and said: do the impossible and the maximum effort to do so. The President added that the electoral program aimed at building 500 thousand housing units for low-income youth. The President expressed his delight with the private sector and the business sector to create housing for low-income young people and praised the fast performance and achievement.”

Akhbar ElYom Newspaper Cover | 24 September 2007

PROGNOSIS

Considering the conditions of older new cities and analysis of New Assiut, what can we preview for this city's future? Will New Assiut ever be the sister-town it was meant to be? The city currently depends on Assiut on every level, fed by the umbilical cord that is the main road of connection between the two cities. This road corresponds to a continual flood of products, food, water, electricity, and people. Lack of identity is also a recognized factor in new urban settlements. People who live in New Assiut keep Assiut as a point of reference and identification. New Assiut can be compared to a transplanted organ which tissues have very low compatibility with Assiut's, and will consequently take time to be absorbed if, in the worse hypothesis, not rejected. This incompatibility subsists on the differences between the densities, on the (non)potential of the urban complexity, and on the capacity to suit the population needs in terms of housing and living. Although New Assiut is just nine years old, it lacks the internal features that would allow the city to gain complexity and develop the urban processes. Assiut's new sister-town will probably remain as a daughter-town.



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IMAGE CREDITS

All images by the author, except the following:

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fig. 7

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Diane Standen, Egypt 0 026

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