

9- Urban Expansion and Informal Settlements Phenomenon

1- Increased Urban Expansion

A- High Population Growth Rates

Censuses indicate that Egypt's population has doubled in fifty years (from 1897 – 1947) from 9.7 million to more than 18 million. The second doubling took almost thirty years (from 1947 – 1976) reaching around 36 million according to 1976 census. In 1986, population reached 48.3 million, and by 1996 it was 59.3 million. 2006 Census results indicate that population has increased to more than 75 million.

Despite decreased population growth rates in Egypt from 2.8 % (from 1976 – 1986) to 1.99% currently, they are still considered amongst the highest internationally. Egypt's population is expected to reach at least 96 million in 2020, with a 20 million increase on current population, which will in turn leads to the aggravation of the in-

creased Urban Expansion issue and the spreading of informal settlements phenomenon, hence, to the problem of agricultural land erosion and environmental degradation.

Population growth and distribution Egypt until 2020 warns of more depletion of agricultural lands in addition to the aggravation of environmental problems resulting from infrastructure weakness to face such increase. Figure (9-1) shows the expected population growth until 2020.

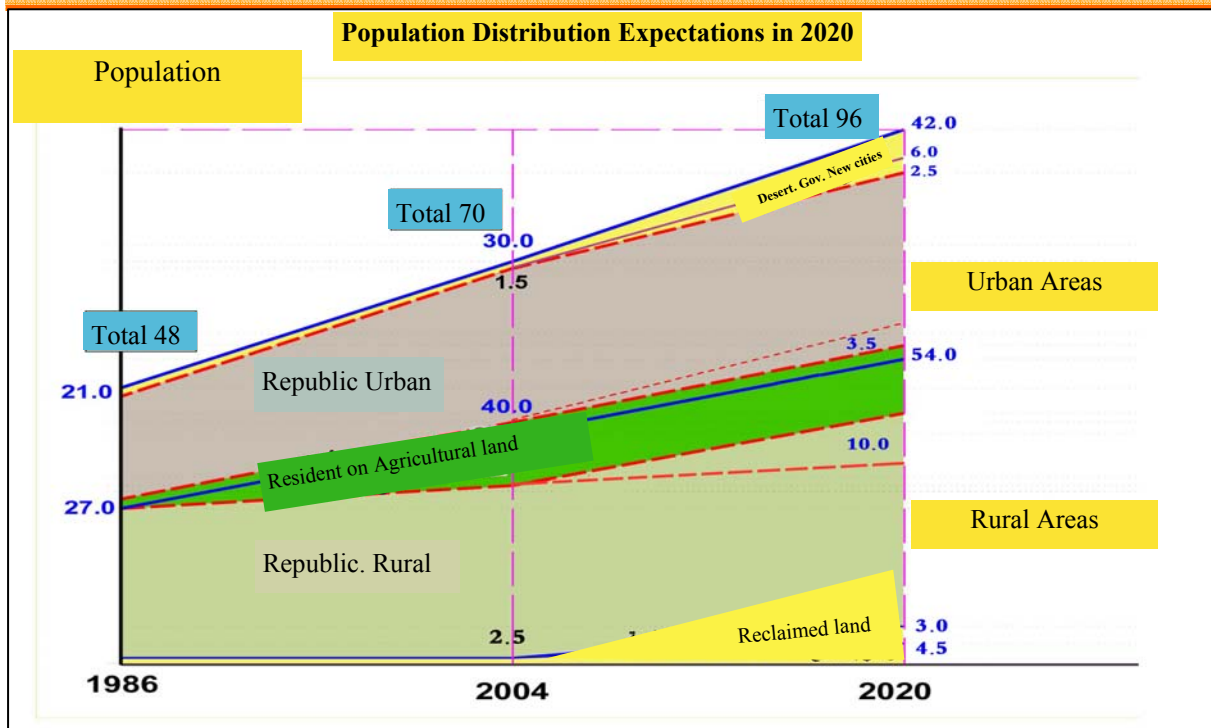


Figure (9-1) Expected Population Growth until 2020

B – Agricultural Land Erosion Rates and Future Risks

Sprawl of buildings, projects, services and the non-agricultural utilization of agricultural lands led to the loss of huge areas of agricultural land in Egypt reaching around a million feddans. Available numbers clearly show significant disparity in agricultural land depletion rates resulting from urban growth. However, they almost agree that 53% of such depletion is owed to residential buildings, 26% to services, and 21% to other projects and infrastructure projects.

It is however noticed that the expansion of villages, hamlets and satellites is horizontal using low buildings, thus with much less utilization of land than in informal urban growth, which is vertical with high utilization of land due to difference in living cir-

cumstances and lifestyles between urban and rural areas. Thus, informal growth in rural areas is much graver than in cities. This issue has not yet received due concern.

This led specialized national councils to develop two scenarios of the agricultural lands future in the Valley and Delta. One is pessimistic, based on slow movement towards the desert to the new cities and mega projects, with the inability of directing urban growth away from the Delta and Valley. While the second is optimistic, based on the speed and rise of settlement rates in new cities and mega projects and finding new policy alternatives, thus, preserving agricultural lands.

Figures (9-2) and (9-3) show the two alternatives for the continuous urban growth at the expense of agricultural lands; both showing significant agricultural land depletion. Both figures show complete loss of old agricultural lands, either within fifty years, if current policies sustain, or by the

end of this century if development efforts and expansion outside Egypt's populated areas succeed. This requires serious study of the issue and taking measures to ensure that such expectations do not come true.

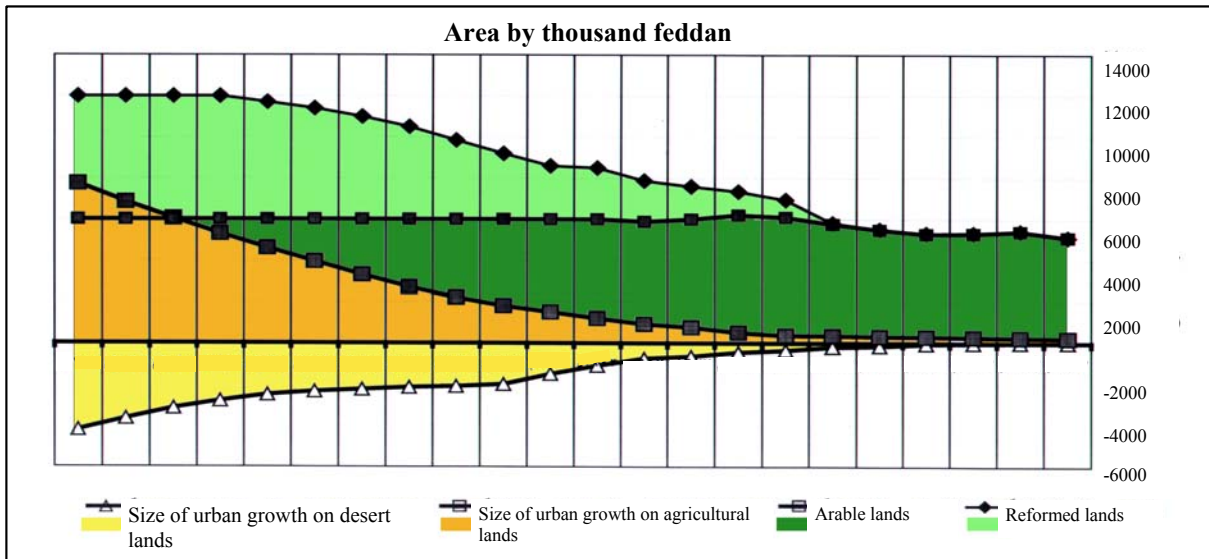


Figure (9-2) continuous urban growth at the expense of the agricultural lands (pessimistic alternative)

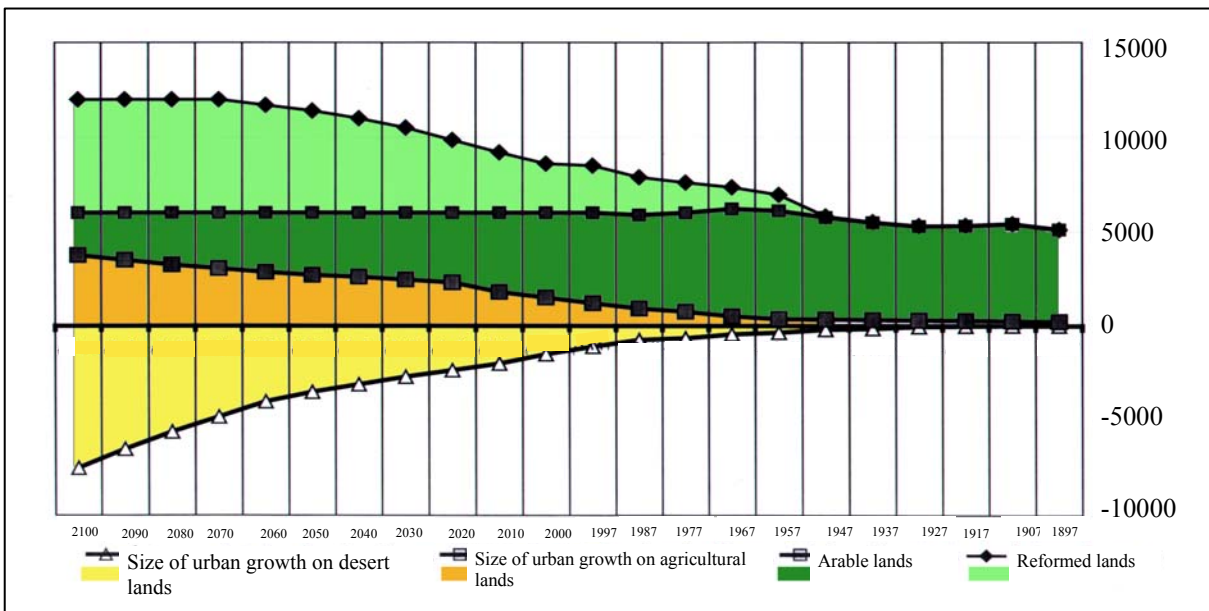


Figure (9-3) continuous urban growth at the expense of the agricultural lands (optimistic alternative)

Negative results of this unplanned urban growth are numerous:

1. Decreased agricultural production.
2. Environmental degradation resulting from many development activities implemented in urban growth areas, particularly unplanned industrial activities and its impacts on the Egyptian citizen.
3. Contribution in the spread of the informal pattern in all aspects of life along with the hard living circumstances, decreased society productivity and values, and disturbance in the Egyptian urban system and its adverse impacts.

This aggravated situation requires quick actions for developing an integrated urban policy that puts all State efforts in building new cities and desert hinterland villages, and developing informal settlements in the framework of a clear general plan that implements priorities.

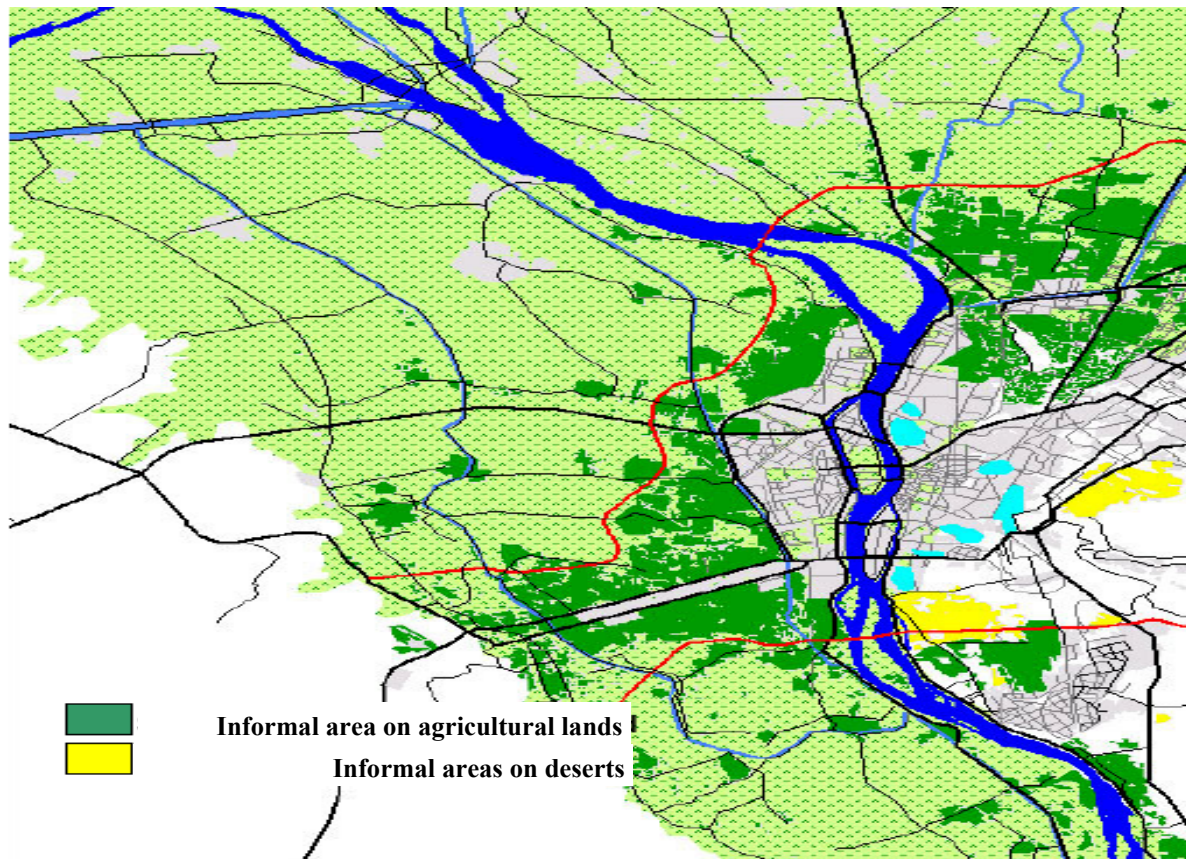
2- Spread of Informal Settlements Phenomenon

Urban growth of Egyptian cities takes place primarily on informal areas, i.e. un-systematic growth, where informal settlements grow at high rates that they have really become to represent connected cities where poor and middle classes adjoin. Informal settlements are a disgrace on the forehead of urban communities in Egypt, as their environments and communities lack many basic elements of accepted human life. The seriousness of the situation in informal settlements is exacerbated by the unnatural population density, which leads

to the deterioration of all their urban environmental components.

The informal settlements issue has gained increasing concern since almost fifteen years ago, receiving more political and security attention, media intensification and cultural activity. Concern with this issue has become the official drift announced by the State. The political/security obsession was what exploded this issue in Egypt. However, informal settlements, according to all definitions, have existed, settled and exacerbated as a phenomenon forming the urban/social weave long before that. Informal settlements have several, diverse, and extremely disparate types.

Cairo alone includes 81 informal settlements with eight million people living amongst 16 million inhabiting the capital. These informal settlements occupy 62% of Greater Cairo area. Map (9-1) shows informal settlements distribution in Greater Cairo region on desert and agricultural lands.



Map (9-1) Informal areas distribution in Greater Cairo on desert and agricultural lands.

Although features of the informal settlements problem are very clear in Cairo, this does not mean that it is limited to Cairo. Cities' Informal expansion is a phenomenon in all Egypt's cities. Available statistics show that the number of informal settlements in Egypt had reached 434 in 1993. However, in 2006 they reached 1,221 in 24 governorates. Around 15.7 million people are living in these informal settlements, representing 24% of total population in Egypt and 40% of total urban population, in addition to 8 million people living in rural areas.

Informal settlements in some cities reached 77% of city's urban growth (Bani Mazar – El Minya). They have even reached 87% of

Giza city urban expansions. Informal settlement population in cities to total city population is around 25% in Assyout and 62% in Giza. In Alexandria governorate there are 54 informal settlements with around 1.36 million inhabitants representing 35% of total Alexandria city population. Pictures 9-1, 9-2 and 9-3 show examples of informal settlements in Greater Cairo region and Alexandria city.



Pic. (9-1) Informal areas on agricultural lands



Pic. (9-2) Informal areas in Greater Cairo region



Pic. (9-3) informal area in Alexandria

The State adopts a long-term plan aiming at reducing informal settlements phenomenon and developing such areas. Total investments allocated for developing and improving informal settlements in 2005/2006 plan reached 157 million pounds that contributed in developing 349 informal areas.

The 2005/2006 plan aims at developing 120 informal settlements in different governorates. LE 300 million was initially allocated for implementing the plan. 50% of these appropriations (LE 150 million) shall be provided by the general budget, whereas donor agencies and civil societies and stakeholders' contributions shall be 15%, and 35% respectively. Informal Settlements Development Program includes the legalization of land ownership and real estate market activation through registering those buildings and linking the legalization process to utility and infrastructure connection. Credit facilities are also being provided to land owners for construction works and small projects

MSEA Efforts in Informal Settlements Environmental Development

Developing informal settlements is considered one of the major priority programs sponsored by Her Excellency the First Lady, Mrs. Suzan Mubarak. MSEA participates in achieving expected upgrading in these areas through implementing a series of environmental activities including: tree planting; removal of accumulations; beautification of houses facades; establishing parks; using cement bypass in paving side streets; establishing and operating Environmental Awareness centers including Green Corner activities for educating, training

and environmental awareness raising of children; an awareness raising unit for raising women's environmental, hygienic, and cultural awareness, and developing skills through handicraft activities using environmental materials; NGO units for exhibiting products and developing skills; and training halls for developing capacities of different levels of informal settlements inhabitants.

MSEA contribution in developing informal settlements in cooperation with Integrated Care Society (ICS) in Ezab and Arab El Waldah, and El Ma'asara is an example of environmental upgrading in other informal settlements where MSEA has implemented the following:

- (1) Paving 20 side streets in participation of local youths after receiving training acquiring skills in this field.
- (2) Beautifying and painting 948 building facades benefiting 30 thousand citizens.
- (3) Planting more than 1000 tree in main roads.
- (4) Establishing two parks; the first on 4 feddans including an environmental awareness center at Al Ma'asara, while the second on 7 feddans next to and environmental awareness center in Ezab and Arab El Waldah.
- (5) Providing the parks with children playgrounds, theatres, pergolas in the environmental awareness centers, and cafeterias.
- (6) Implementing awareness, capacity building and environmental skills development activities, in addition to

health awareness activities and computer training.



Pic. (9-4) A 7 fedans Park in Ezbet Al Waldah



Pic. (9-5) Solid wastes removal and treeplanting in Ezbet Al Waldah



Pic. (9-6) Establishing and operating EA center in Ezbet Al Waldah



Pic. (9-7) beautifying of houses facades



Pic. (9-8) Solid wastes removal and tree planting in Ezbet Al Waldah



Pic. (9-9) paving roads with cement bypass

Owing to the success of this model and the positive impacts on the local inhabitants, and in order to ensure ongoing implementation of these programs, an Informal Settlements Environmental Upgrading Unit has been established within MSEA, directly reporting to the Minister, with the mandates of continuing work through developing plans and programs, acquiring experiences, capacity building, identifying funding sources and encouraging community contributions with effort and money, in addition to developing mechanisms to ensure sustainability of activities and maximize their returns.

To ensure the implementation of desired objectives, a group of informal settlement development experts were selected to manage the unit and implement its activities.

3- Environmental Degradation as a Result of Urban Expansion and Informal Settlements Proliferation

MSEA's concern with this issue is due to extreme environmental degradation resulting from such increased urban expansion, particularly on agricultural land, and the proliferation of informal settlements phenomenon. Environmental degradation is seen in the following:

A- Solid Wastes and Unplanned Waste Disposal:

- Waste accumulations adjacent to residential areas.
- Open burning or self burning of accumulations.
- Spread of informal settlements around

dumpsites to benefit from waste unsafe scavenging and sorting by children and different age groups.

- Unsafe disposal of medical wastes in informal dumpsites exposing children and scavengers to hazardous diseases.
- Wastes accumulations in some areas in governorates near water ways directly impact water and vegetation quality when using such wastewaters in irrigation.

B- Sanitation

- Some city areas and most informal settlements lack integrated sanitation services.
- In such areas, wastewater is disposed of in unlined septic tanks or deep discharges to underground aquifers.
- Formation of wastewater pools and swamps in informal settlements.
- Adverse environmental impacts on water quality in waterways due to final disposal using emptying trucks which discharge in waterways, as well as environmental impacts on soil quality in case of disposed in open land.

C- Drinking Water

- Several informal and marginal areas lack water supply services.
- Some informal settlement inhabitants lacking drinking water use unhealthy pumps for pumping underground water, resulting in poisoning, diarrhea or any other health problems, in addition

to potential groundwater contamination.

D- Industrial activities

- Industrial activities such as potteries, smelters, brick factories, handicrafts workshops, medium size factories, quarries products storage areas and poultry and animal farms spread in some cities particularly informal settlements.
- Unplanned disposal of industrial solid and liquid wastes in adjacent lands and water ways, directly and adversely affecting soil and water quality.
- Existence of handicraft workshops amidst residential areas results in hazardously high noise levels.

E- Awareness and Environmental Education

- Extreme lack of awareness in these informal settlements with hazardous impacts of environmental degradation leads to more degradation.

MSEA efforts in this framework focus on significant participation in developing controls governing urban expansion, preventing informal settlements and participating in developing existing ones.

References

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