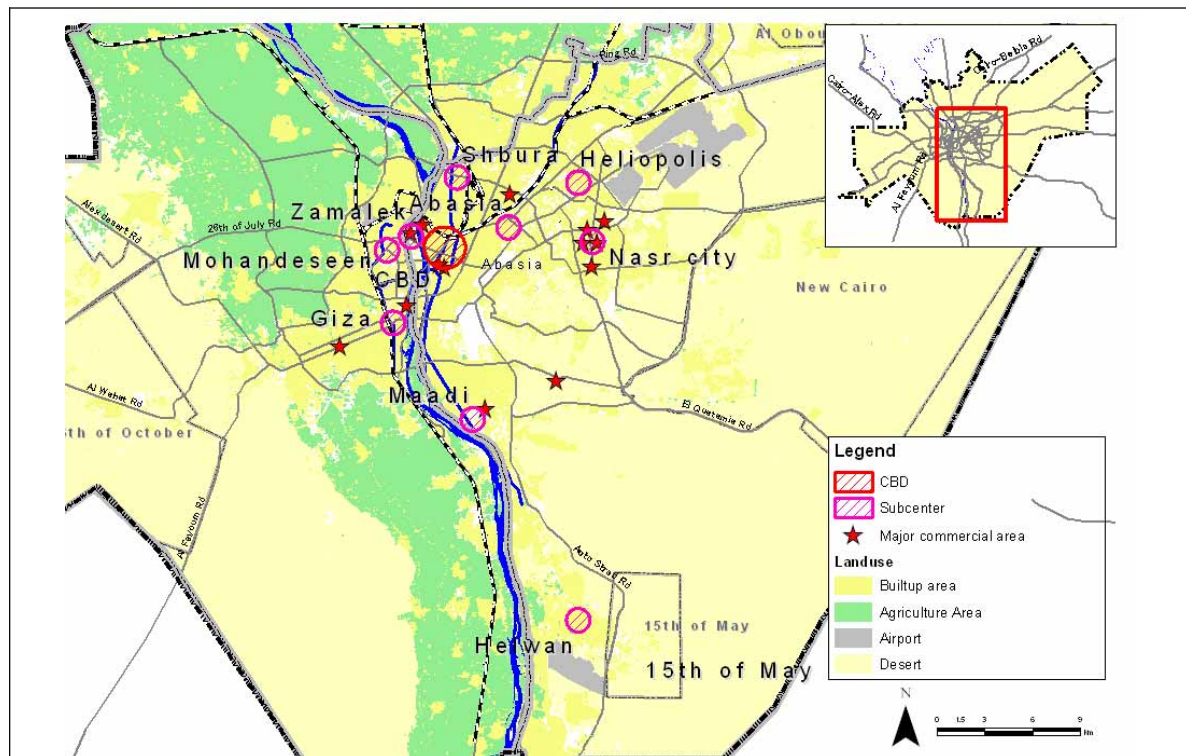


2.5.2 Characteristics of Specific Land Use Categories

(1) Commercial area

Commercial areas in GCR can be classified into three basic types: (i) the CBD; (ii) the sub-center which includes the mixed use for commercial/business and residential use; and (iii) major shopping malls such the large size commercial facilities in relatively new urban areas. The CBD is located in downtown areas, where there are mixed-use buildings that were established long ago and partly accommodate shops and stores. The major sub-centers in the main agglomeration are Shobra, Abasia, Zamalek, Heliopolis, Nasr city, Maadi in Cairo governorate and Mohandeseen, Dokki, Giza in Giza governorate.

The recent trend following the mid-1990's can be seen in the construction of shopping malls which are commercial complexes comprising a movie theater, restaurants, retail shops, and sufficient parking space or a parking building attached. These suburban shopping malls are mainly located in Nasr city, Heliopolis city, Maadi, Shobra, and Giza.



Source: JICA study team

Figure 2.5.3 Location of Major Commercial Areas in main agglomeration

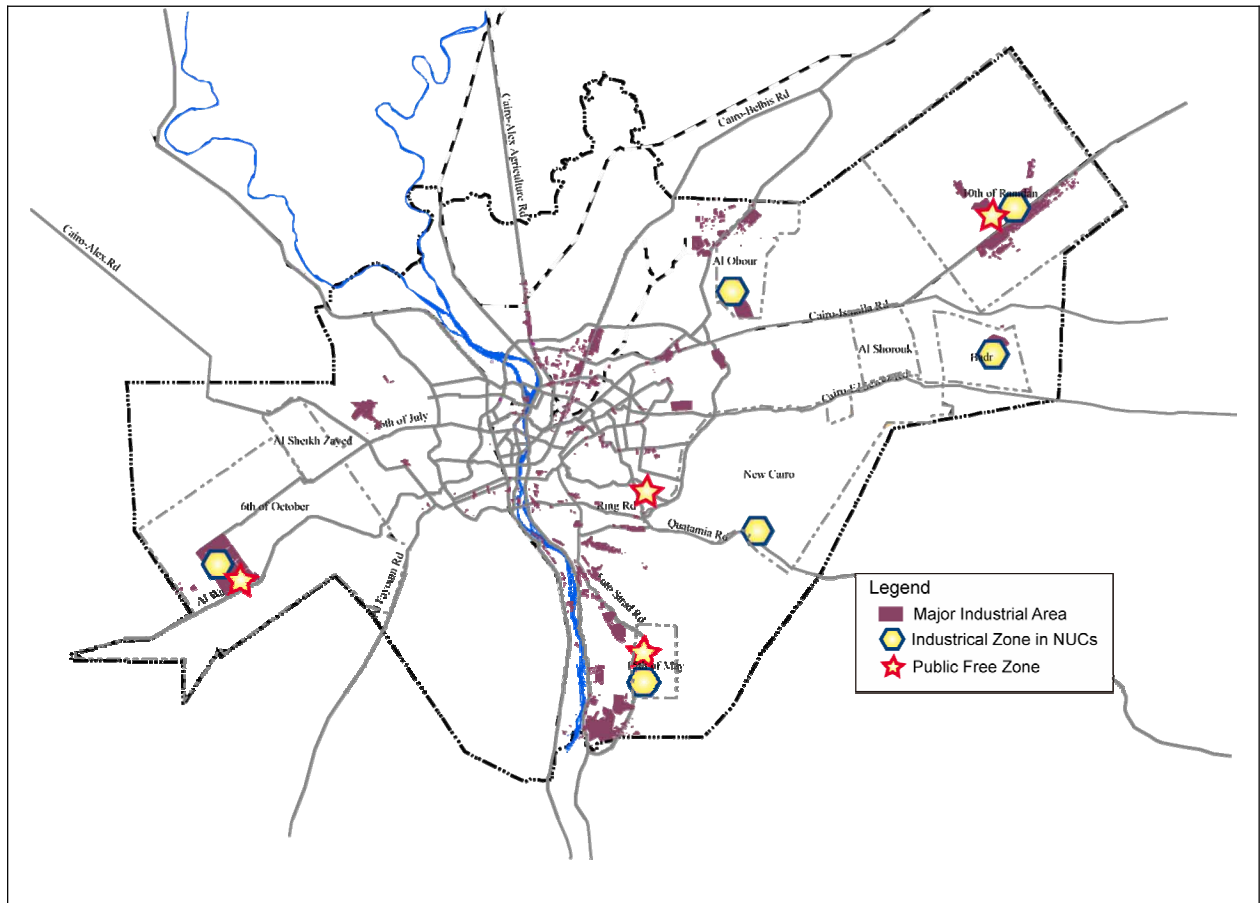
(2) Industrial area

The following map shows location of concentration of industrial areas in Study area. There are seven industrial areas in NUCs, five industrial areas under governorates, and two public free zones in the study area. The number of registered factories is 13,483 with a total area of 76,297 ha. Among those registered factories, 3 % of factories can be categorized as large-scale which have an investment cost of more than LE10 million, or more than 500 employees.

Table 2.5.3 Overview of Existing Factories Registered by MOTI

Item	Unit	Q'ty	Note
Registered factories	factories	13,483	
Total area of industrial zone	ha	76,297	
Large-scale factory	factories	419	Classified as investment cost of more than L.E.10 millions or workforce more than 500 personnel

Source: Report by Ministry of Trade and Industry, General Authority for Industrial Development (GAID), and Central Department for Industrial Scheme

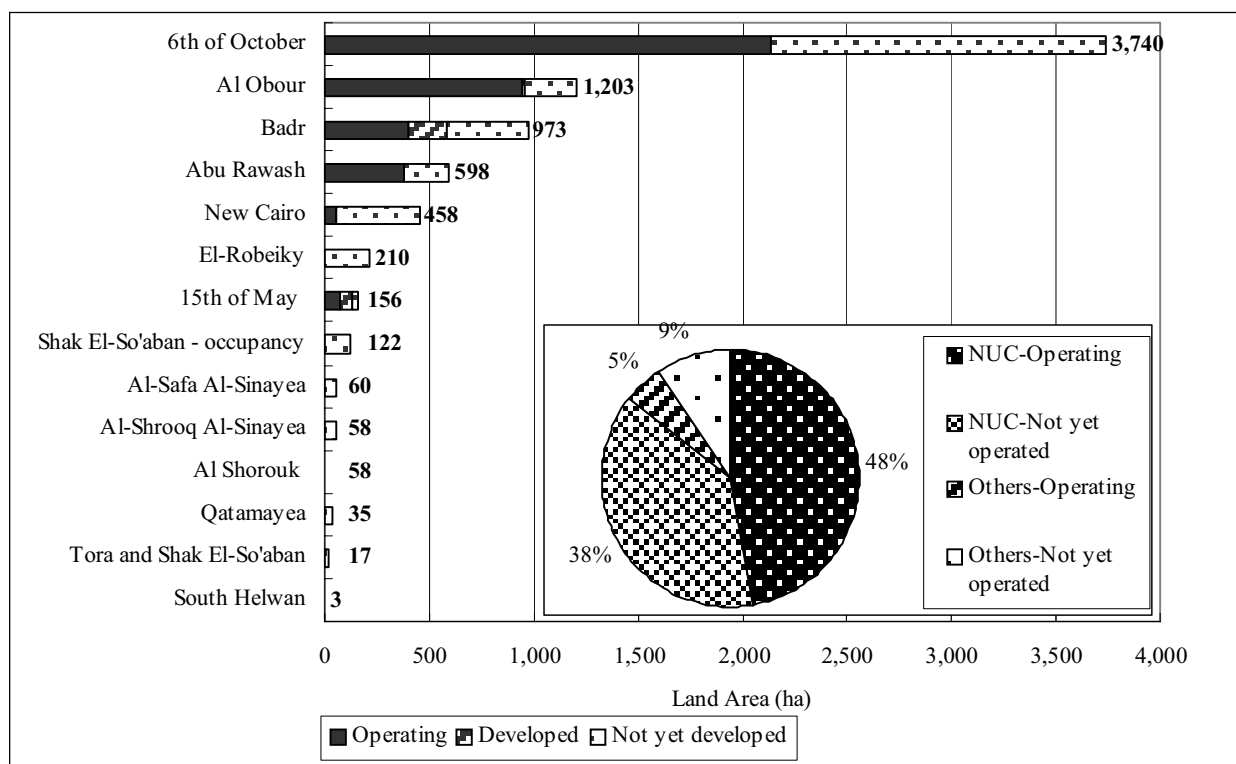


Source: JICA study team

Figure 2.5.4 Location of Industrial Areas

Figure 2.5.4 indicated details of industrial zones in the study area. Among three governorates, Giza governorate has largest share of industrial area at 56% of total area or 4,338 ha followed by Cairo Governorate at 25% of total area. Also, industrial area tended to concentrate on NUC as indicated in the share of 86% of total area located in NUC such as Badr, 15th of May, New Cairo, Obour, and 6th of October.

Regarding the condition of existing industrial area, industrial area under operation is 53% of total area or 3,991 ha and the other large amount of 47% to total area is still vacant for investors.



Source: Study on Transferring Large Factories from Greater Cairo Region-Results of the First Stage, Ministry of Trade and Industry, 2006

Figure 2.5.5 Land Area by Industrial Zone in the Study Area

In the recent statistics of NUCA, more than 2,500 factories created 264,000 job opportunities in NUCs by 2007. Total annual production value was estimated at LE 31 billion. Most of investment for the factories is concentrated on three NUCs: 6th of October, 10th of Ramadan, and Al Obour.

Table 2.5.4 Number of Constructed Factories and Work Opportunities in NUC in 2007

New Urban Communities	No. of Factories (factory)	Area of Industrial Area (ha)	Capital in million (million LE)	Annual Production Value (million LE)	Job Opportunities (workers)
10 th of Ramadan	1,252	1,115	16,364	17,526	143,747
15 th of May	76	15	124	155	4,796
6th of October	906	803	11,087	9,538	82,321
Badr	179	96	431	457	7,296
Al Obour	327	228	3,933	3,502	25,297
New Cairo	20	17	47	15	532
Total	2,760	2,275	31,984	31,192	263,989

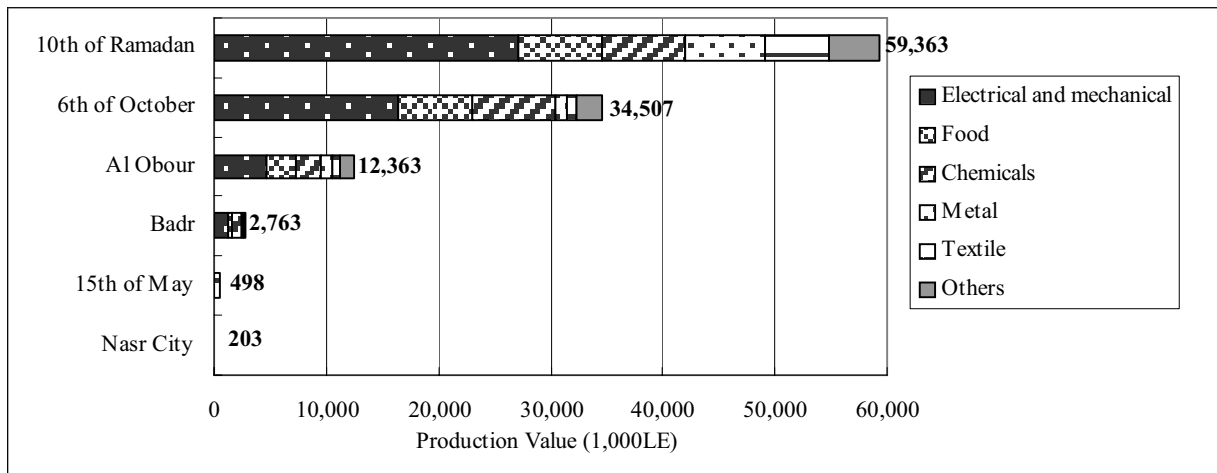
Source: NUCA as of March 31, 2007

Further investment for industrial development is in progress in NUCs. It will provide more than 1,300 factories for 56,000 job opportunities. The further investment will create the annual production amount of 4.6 billion LE. According to GAFI and IDA, the industrial area of 6th of October will be saturated and be extended by modification of planned green areas into industrial areas.

Table 2.5.5 Number of Factories and Work Opportunities under Construction in NUC in 2007

NUC	No. of Factories (factory)	Area (ha)	Capital (million LE)	Annual Production Value (million LE)	Work Opportunities (workers)
10 th of Ramadan	297	399	1,551	1,448	15,534
15 th of May	45	3	33	22	492
6 th of October	323	194	2,271	2,461	20,925
Badr	209	78	363	226	7,800
Al Obour	452	156	794	426	10,885
New Cairo	2	0.4	0.5	1	30
Total	1,328	830	5,012	4,584	55,666

Source: NUCA as of March 31, 2007



Source: Statistics, IDA, 2007

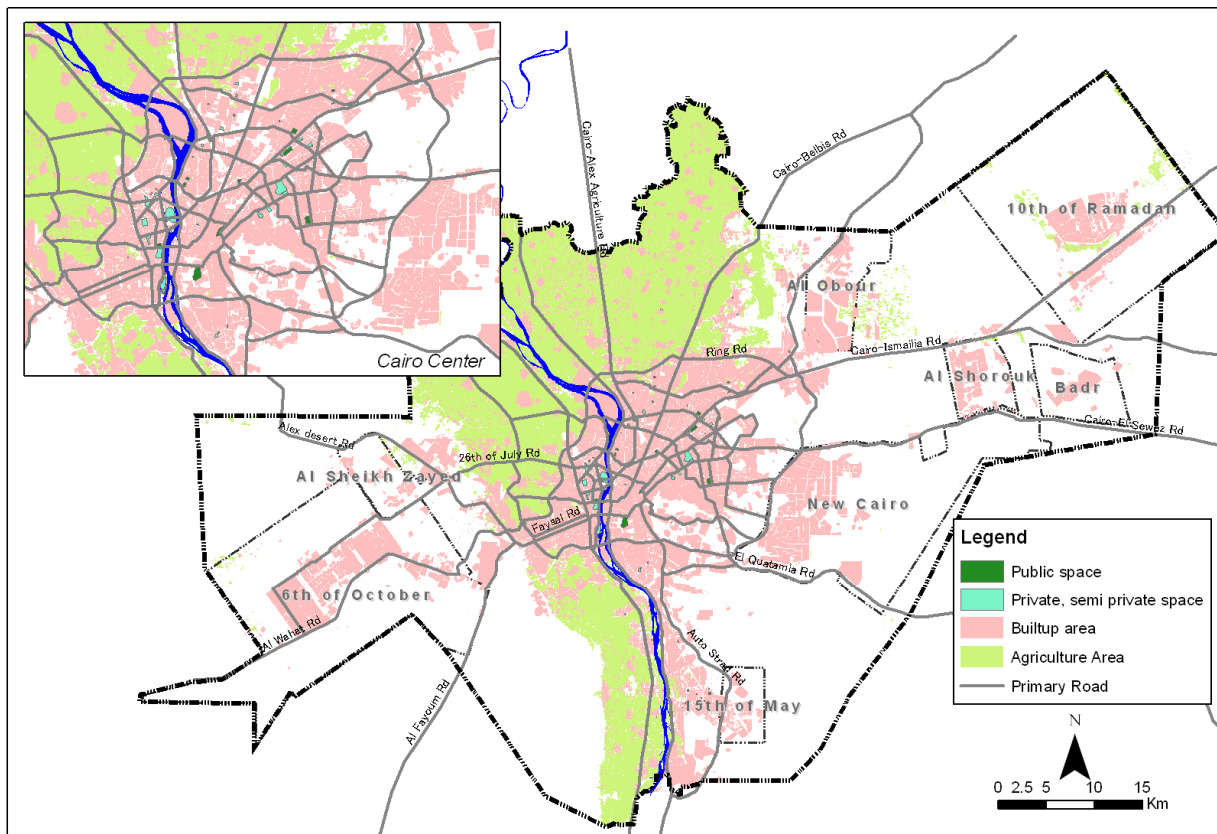
Figure 2.5.6 Production Value by Industrial Area in NUCs and Public Free Zone

(3) Green areas

Green areas in the study area can be categorized into two factors such as urban green and agricultural green.

Urban green is mainly observed as parks and green open space in built-up area. Besides public parks, there are a lot of private clubs which accommodate athletic fields and swimming pools located in residential area, but those facilities are not open to public. For generating more green areas in urban area, it is planned to install green belt along ring road. Also, in new urban communities, public parks and city forest are planned to be developed for public use.

Figure 2.5.7 indicates the existing condition of green areas and open space by zone.



Source: JICA study team

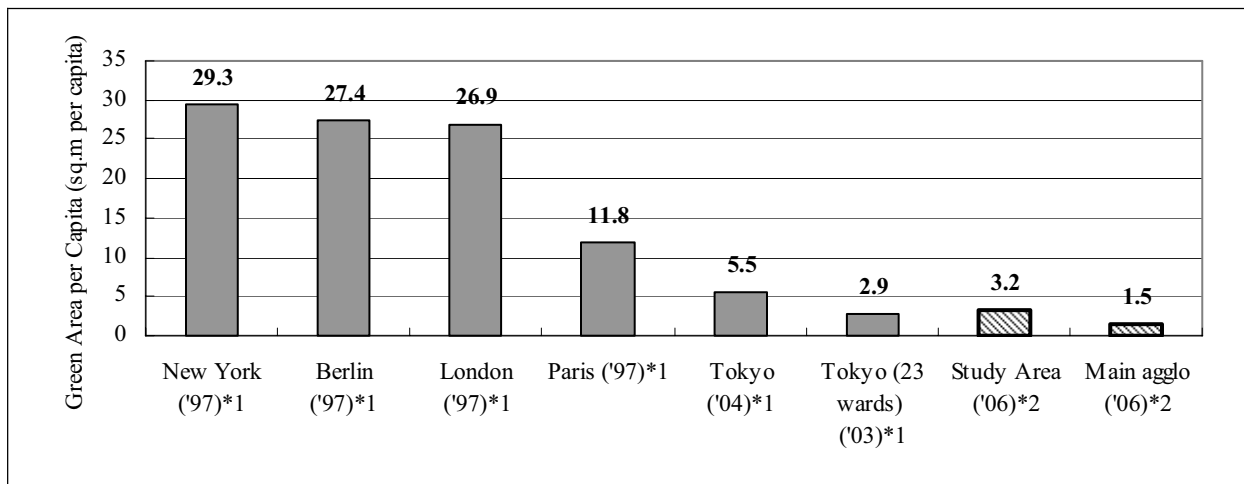
Figure 2.5.7 Location of Green and Open space

Agricultural green is observed in the northern and southern parts of the Study Area in Giza and Qaliobeya governorate. The area of agricultural green has to be protected with countermeasures against development activities including informal development in rural area.

As for issues that need to be recognized, the study area has very little green space that is open to public, especially in the main agglomeration. Green areas are needed for urban amenity, environmental mitigation, and for use as evacuation sites in case of disasters. The main agglomeration is fully developed with buildings but there are some spaces at railway shunting yards or old government buildings are planned to be relocated. These areas could be used for the creation of new green space. It is recommended to reuse these available land areas and convert them into public parks.

New urban community plans to install forestry area or green zone in their master plan but it is still recommended to have more green open space which is easy access to residents in walking distance.

Existing green areas are limited to 3.2 m² per capita in the study area and 1.5 m² per capita in main agglomeration. Both amounts are relatively at the low level in comparison to other major cities. NUCs increase the average rate of green area per capita in the study area.



Source*1: Ministry of Land, Infrastructure, Transport Japan, 2006

Source*2: JICA study team, 2006

Figure 2.5.8 Green Area per Capita in the Study Area and Other Metropolitan Area

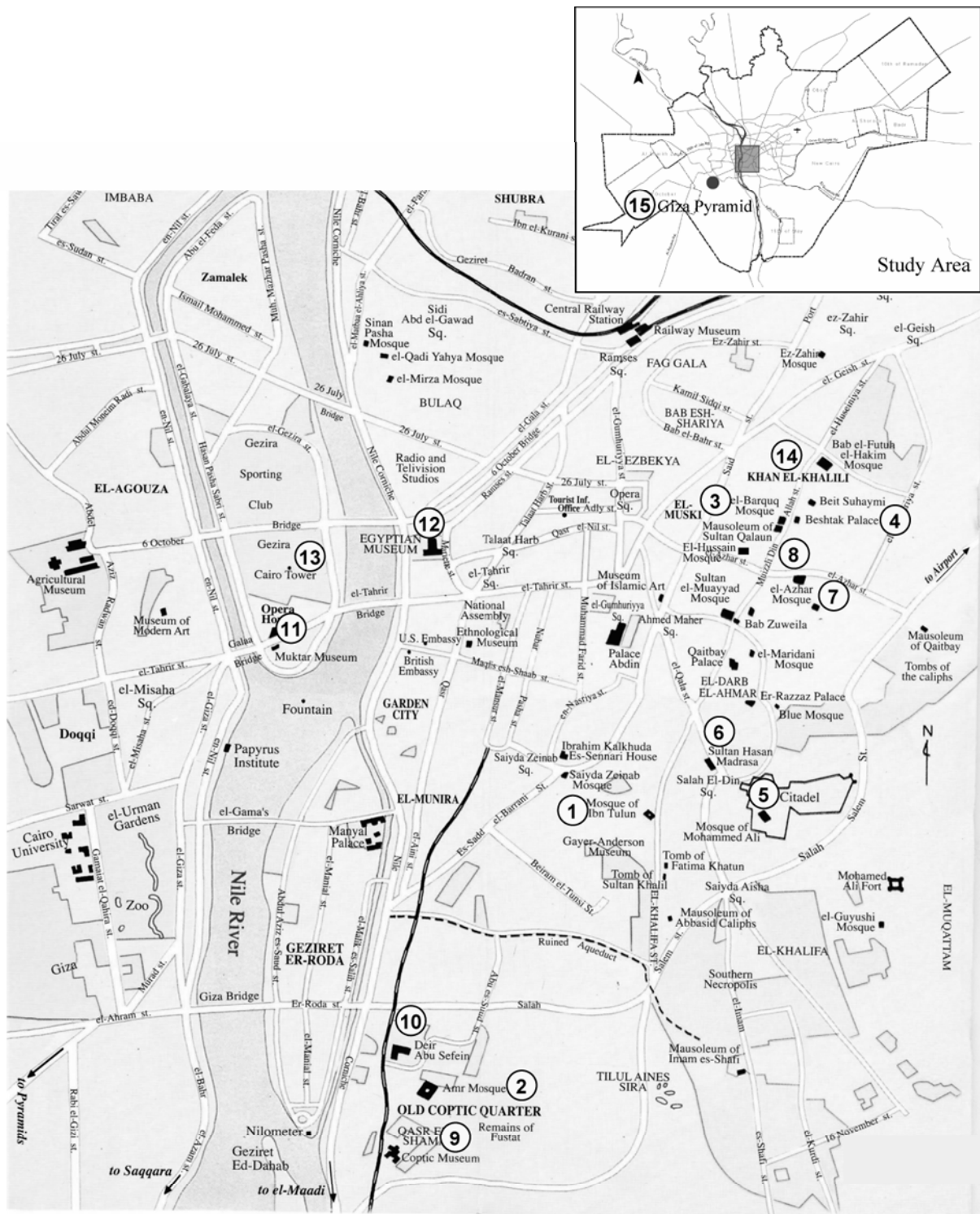
(4) Tourism facilities

Existing historical resources have been identified as shown in Table 2.5.5 and depicted in Figure 2.5.9. Among the tourism facilities, Giza pyramid area is defined as archeological protection area as shown in Figure 2.5.10.

Table 2.5.6 Main Historical Resources in Study Area

NO.	Name	Description
Islamic Monuments		
1	Mosque of ibn tulun	Built between 876 and 879 A.D. It is one of the oldest intact mosque in cairo ,characterized by its unique minaret and still in use nowadays.
2	Mosque of Amr ibn El Aas	It is the first mosque built in Egypt and Africa, founded in 642 A.D by Amr ibn El-Aas, which represents schools of architecture from different periods.
3	Al-Nasser.Al-Mansour Qalawun and Sultan Barquq complex	A medieval complex of mosques, mausoleums and <i>madrassas</i> (schools) built by three Mamluk Sultans.
4	Amir Bishtaq palace	It was established by Amir Sayef El-Din Bishtaq El-Nasserty, which dates back to 740 A.D. with a unique style in the civil architecture of the Mamluke era.
5	The citadel of saladin (Salah El-Din)	Built between 1176 and 1182 A.D. It provides panoramic view of Cairo from Al moqattam Hill. The citadel complex includes the Alabaster Mosque of Mohamed Ali,"Al Gawhara palace", the Military Museum and the citadel outdoor theatre.
6	Mosque and <i>Madrassa</i> (school)of Sultan Hassan	A masterpiece of Mamiuke architecture, which includes bronze door inlaid with gold, silver and marble panels. It has the grand entrance of the Islamic monuments in Egypt.
7	Al-Azhar mosque	The first fatimid mosque and the oldest islamic university in the world, founded in 878 A.D.
8	El-Hussain mosque	It was established in 549A.D. - 1154A.D during the region of the fatimid caliph El-Zaheir Beamr Allah, and was renewed many times.
Christian Monuments		
9	Old Cairo (Qasr El-shama'a) Al Moallaqa (the Suspended church)	Built on the remains of the Roman fortress of Babylon at the turn of the fourth century. It houses about ninety rare icons of basilican style.
	Saint Barbara church	Dates back to the early 5th century A.D. and it lies the eastern section of the fortress of Babylon and is considered one o f the most beautiful coptic churches of the basilican style.
	Greek Orthodox church of Mari Guirgis	Built on one of the towers of Babylon fortress. This basilica has a round structure with a domed roof.
10	Churches of Abu Seifein Monastery	It comprises three churches: Anba Shenouda church, Abu Seifein church (Sant Marcurius) which contains the cave of Saint Barsoum El Erian, the Church of the Virgin in El Damshirya.
	Saint Mark Cathedral	The largest cathedral in Africa, recently built in Abssiya district. The relics of Saint Mark, the Evangelist who first preached Christianity in Egypt, are kept in this cathedral
	The virgin's tree in Materia	The Holy Family rested next to the blessing tree, which is two thousand years old.
Landmarks of Modern Cairo		
11	The cultural center (Opera house)	It was inaugurated in 1988 A.D an artistic architectural masterpiece of Islamic style, equipped with the latest audio-visual facilities, which consists of three theatres.
12	Egyptian Museum	It is situated at Tahrir square and exhibits the national antiquities including statues, jewels, treasures, the mummies, and so on.
13	Cairo Tower	Over 187 meters high, which is the most outstanding attraction of modern cairo. There are two-story rotating restaurant and cafeteria. Visitors can enjoy a panoramic view of Cairo from the observation platform.
Townscape		
14	Khan El-Khalili Bazaars and Sagha	It comprises an array of shops dating back to the 14 th century A.D.
Ancient Monuments		
15	Giza Pyramids Area	On the west bank of the Nile facing Cairo, three pyramids which are one of the ancient seven wonders of the world surrounded by small pyramids and hundreds of mastabas(tombs) for kings and nobles.

Source: Tourism Development Authority



Source: Tourism Development Authority

Figure 2.5.9 Location of Main Historical Resources in the Main Agglomeration

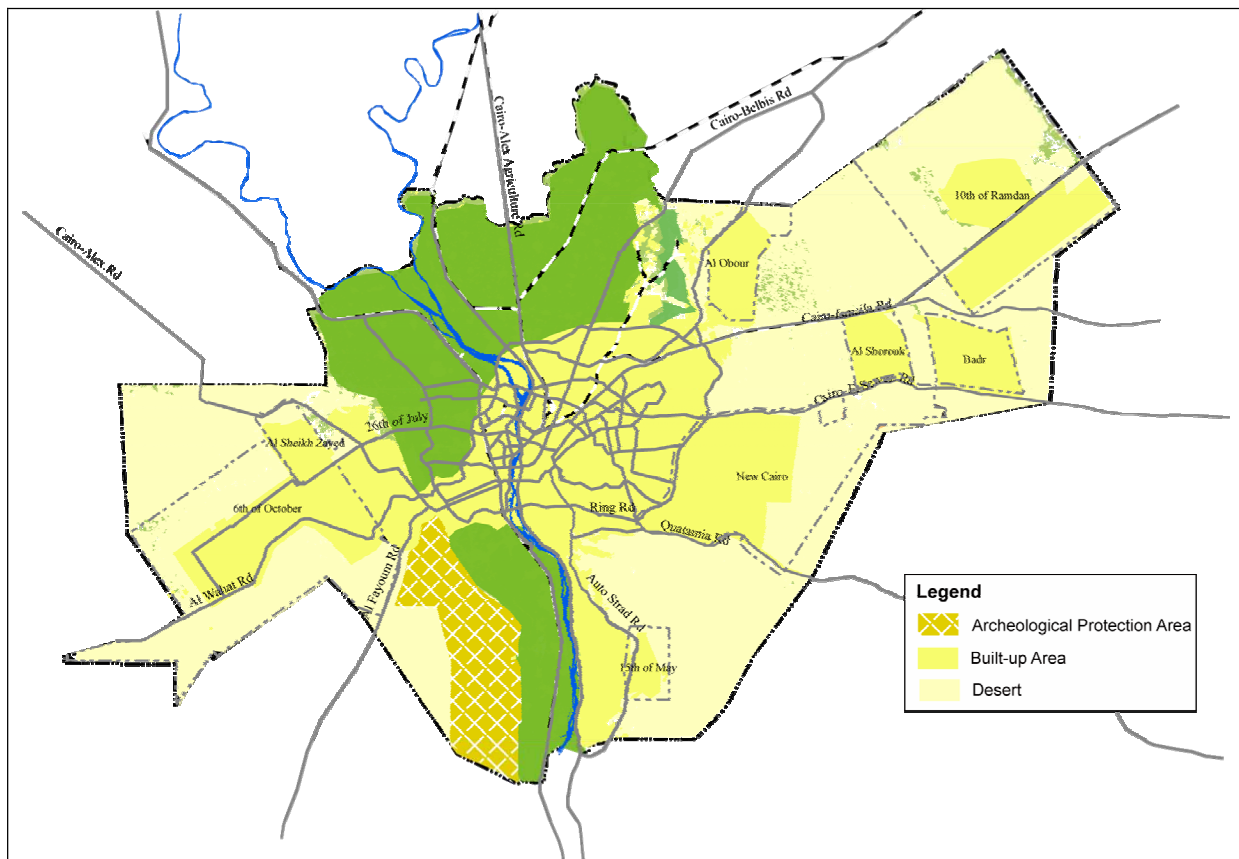


Figure 2.5.10 Location of Archeological Protection Area

(5) Ongoing and planned projects

There are several ongoing or planned projects in the study area as depicted the following map and table. Major investment zone for tourism and housing development are mainly located in the east boundary of 6th of October in Giza governorate and in the south boundary of ring road in Cairo governorate. Relocation of government buildings from the downtown area is planned to be in the west side of New Cairo border.

Table 2.5.7 List of Main Ongoing and Planned Projects

Project	Governorate	Status
Tourism Investment along Nile River (Landscaping)	Cairo, Giza, and Qaliobeya	Planned
Tourism Investment at Attaba (Hotel and tourism facility development)	Cairo	Planned
Qatamia Investment	Cairo	Planned
Shag Al-Thoaban Investment	Cairo	Planned
Urban Expansion at Maadi and Helwan	Cairo	Planned
Government Relocation	Cairo	Planned
Giza Investment Project	Giza	Ongoing
New Museum Development	Giza	Planned
Imbaba Redevelopment	Giza	Planned
Urban Expansion at Ismailia Corridor	Qaliobeya	
Urban Expansion at Marg	Cairo	

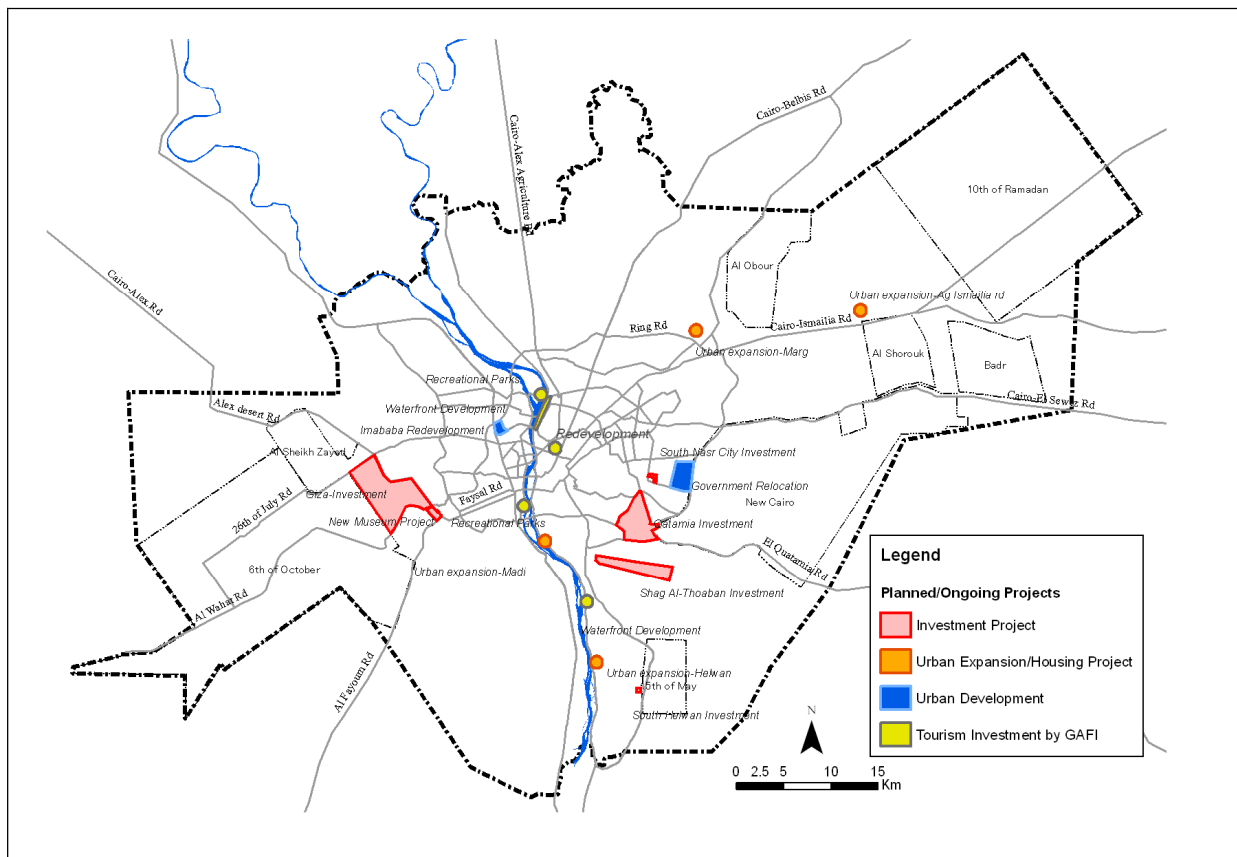


Figure 2.5.11 Location of Ongoing or Planned Projects

2.5.3 Conclusion Related to Land Use

The major points discussed in this section are summarized in the following.

- 1) Factories that are polluting environment need to be relocated to areas outside the agglomeration. Existing industries occupy an area of about 10% or 2,400ha of the built-up area within the main agglomeration. Some of the large-scale factories cause environmental pollution in and around their premises. According to a study by MOTI, there are 21 large and environmentally unfavorable factories that are nominated for relocation. A total of 57,000 job opportunities are provided by these nominated factories.
- 2) Existing cemeteries occupy an area of 879 ha within the main agglomeration. These cemeteries are located on the fringes of the built-up areas, and use up the precious lands of the main agglomeration. To enhance the efficient use of limited land resources, the development of new cemeteries will be allowed outside the main agglomeration, while the expansion of existing cemeteries need to be prohibited in the main agglomeration.
- 3) There are substantial area of land set aside for transport, such as large railway freight stations and bus terminals. Due to changing demands and roles for transport, some of such facilities may have lesser function and necessity today as compared with

previous times. Relocation or redevelopment of such facility may be considered for the restructuring of the main agglomeration.

- 4) Relocation of the central government offices from the city center to suburban location, such as the one discussed at the high level in the government, shall contribute to the restructuring of urban pattern of the study area. The relocation, once carried out in full, shall raise the potential of land in their new location as well as provide opportunity for redevelopment at the present site within the center of the study area.
- 5) The area of public parks and green areas is very limited in the main agglomeration. In addition, substantial part of the green area, such as clubs for a closed membership, is not open to public. More green space should be allocated throughout the main agglomeration. There are limited public parks or green space in the north part of the main agglomeration compared with other areas. Where possible the green space that is currently not open to the public should be opened at least to the people in the neighboring communities.