

Second High Level Forum on GGIM  
Seminar on Regional Cooperation  
in  
Geospatial Information Management  
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Overview on Geospatial Activities in Egypt

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# Agenda

- **Introduction**
- **Geospatial Activities at the Local Level.**
- **Geospatial Activities at the National Level.**
- **Capacity Building and Technical support Activities**
- **Challenges**
- **Future Trends**



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# Introduction

**The general department of Geographic Information Systems (GIS) was established in 1989 to perform the following tasks:**

- 1. Providing digital base maps of the Republic at scale 1:5000 and also, digital administrative boundaries maps with all encoded and periodically update.**
- 2. Providing maps and GIS for the censuses, statistics and researches which are implemented by CAPMAS.**
- 3. Establishing GIS projects and applications, using the Turnkey system for different authorities and ministries.**
- 4. Offering the consultations and technical support to government and private sector to build geographic information systems units from A to Z.**
- 5. Meeting the needs of universities and research sectors by providing papers and digital maps, thematic maps and various geographic data.**



## Geospatial Activities at the Local Level:

- 1. Periodically update of base maps 1:5000.**
- 2. Periodically update of administrative boundaries maps.**
- 3. Linking the statistics and bulletins which are implemented by CAPMAS to the geospatial information.**
- 4. Participation in CAPMAS's researches by providing paper maps for field work.**







# Geospatial Activities at the national Level

- **Egypt Health Map.**

The screenshots show the 'Map of Egypt Health' web application interface. The application displays a map of a specific area in Egypt, with various data layers and tables. The tables provide information about health facilities, including the number of hospitals, primary health care centers, and other services. The interface is in Arabic and includes a search bar and various navigation tools.

**إختيار إحدى المستشفيات**

**إختيار الادارة الصحية**

**عرض بيانات المستشفى التي تم إختيارها**



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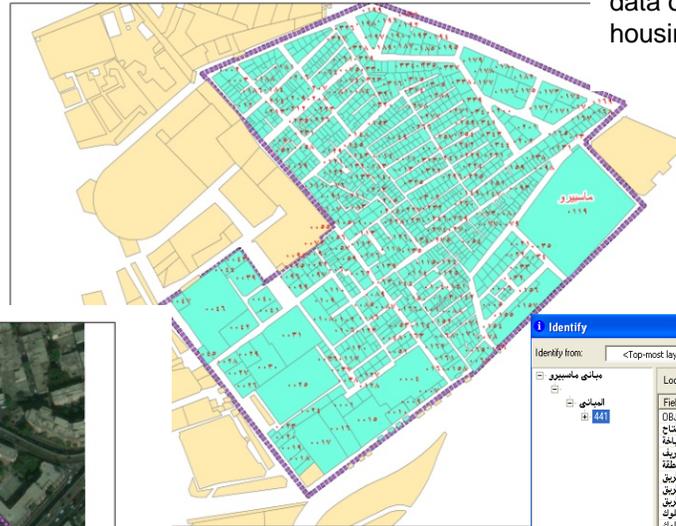
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# Geospatial Activities at the national Level

- National Map of Development Unsafe Areas**

The field work for Numbering the buildings in reality and on the paper maps. Also collecting the data of buildings, establishment, households and housing conditions.

The satellite image of Maspiro Region In Cairo Governorate and the field work to delineate the boundary of area on the ground And on paper maps.



Linking the statistical data to the geospatial data at the level of buildings by using digital maps 1:500



Field	Value
OBJECTID	441
الملتاح	01640330045
رقم المنطقة	164
حضر ريف	حضر
رقم المنطقة	33
نوع روث الطريق	<null>
رقم الطريق	<null>
اسم الطريق	قصر الجبل
تكرار البلاك	0
رقم البلاك	45
تكرار رقم العداد المسقي	0
رقم رعداد المسقي	115
نوع روث التنظيم	<null>
رقم التنظيم	42
اسم مالك المسقي	حظفي حنفي ملاوي
اسم مالك الارض	الشركة للاستشارات
نوع المسقي	منزل
مكتبة الارض	أبلاك شركات عامة
السنن الاثاموي للارض	عقد
مكتبة المسقي	خاص
الوضع الاحادي للمسقي	مكتبل مشغول كاي أو جزئي
لاستخدام الاحادي للمسقي	للسكن
سنة بناء اقدم جزء بالمسقي	1950
طرق المسقي	طوب احمر اربدالله واصناف اخرى
عدد الادوار بالمسقي	4
حالة المسقي	مقبول
اتصال المسقي بالعمارة	متصل بالشبكة
اتصال المسقي بالعمارة المسقي	متصل بالشبكة العامة
اتصال المسقي بالكهرباء	متصل بالشبكة
اتصال المسقي بالغاز	غير متصل
اتصال المسقي بالانترنت	غير متصل
جهة المرفقات بالمسقي	رقم
رقم المرفقات	1
رقم منطقة المراجع	5
كود المسقي	016403305011900



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# Geospatial Activities at the national Level

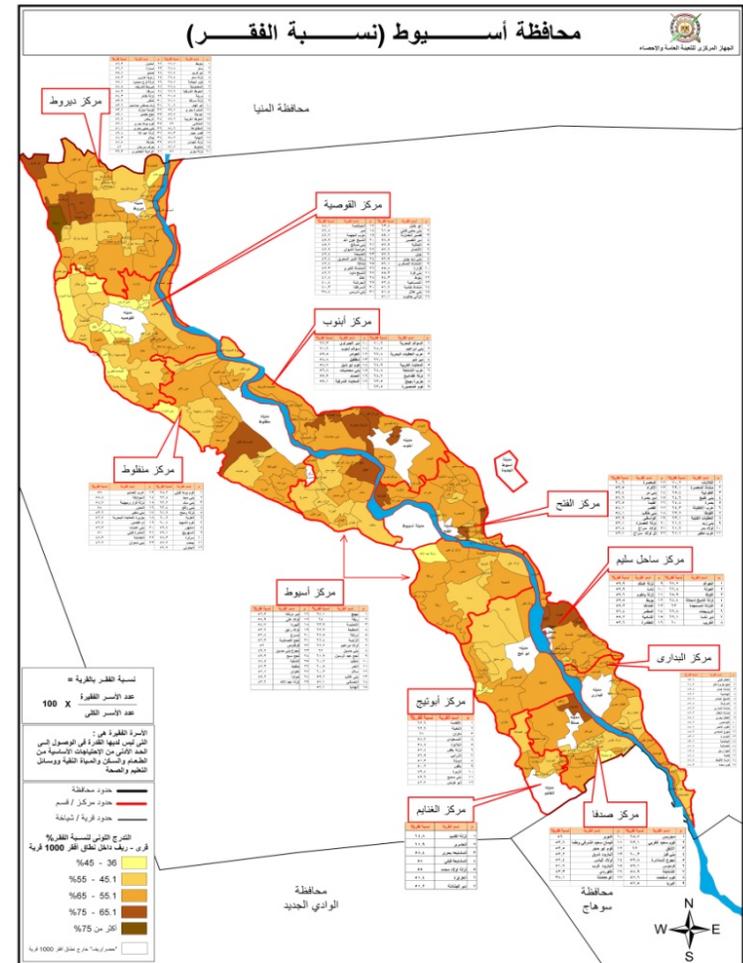
## • Poverty Map

Poverty map is part of the definition of poverty, but it is a geographical concept, referring to the places of concentrated poverty, including the administrative boundaries at the governorate level and sections and up to the level shiakha / village.

The image shows : the gradient color of poverty rate at the level of villages in Asuit governorate (one of the governorates of Upper Egypt).

The tables on the map represent the poverty rate for the villages of each center of governorate.

The poverty rate ranging from 36% to more than 75%.



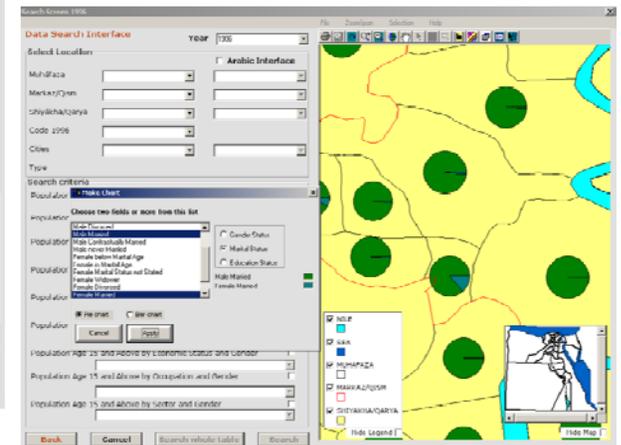
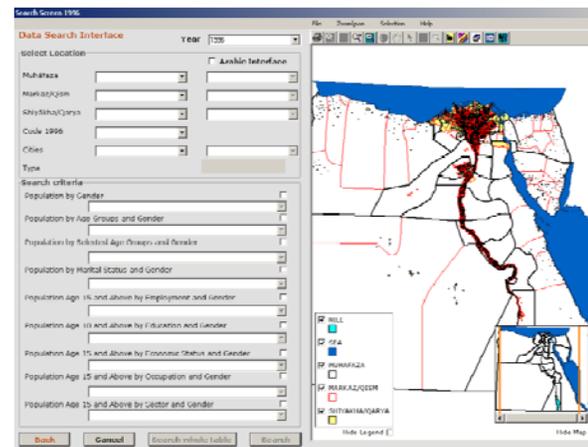
# Geospatial Activities at the national Level

## •Century Census

CAPMAS in collaboration with the Center for Economic Studies and documentation, legal and social construction of the French statistical system CEDEJ, has built a statistical geographical system containing a database of all the censuses taken in the Arab Republic of Egypt since 1882 until 1996, signed on the geographical maps of the administrative division.

### Century Census Project aims to :

- Process statistical comparisons for all demographics properties using spatial analysis for the different censuses.
- Study the administrative development of the Republic of the 12 census.
- Save time and effort of students, researchers and academics in the field of population development



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# Geospatial Activities at the national Level

- **Egyptian Information Society Indicators**

The Application in the form of Web Application.

The Application aims to:

- Establishment the telecommunications infrastructure maps as(exchanges, mobile sites, lased lines,..).
- Establishment a huge database including the all data of (census, indicators, infrastructure,...).
- Help and support decision-makers in planning for the development of the telecommunications sector.



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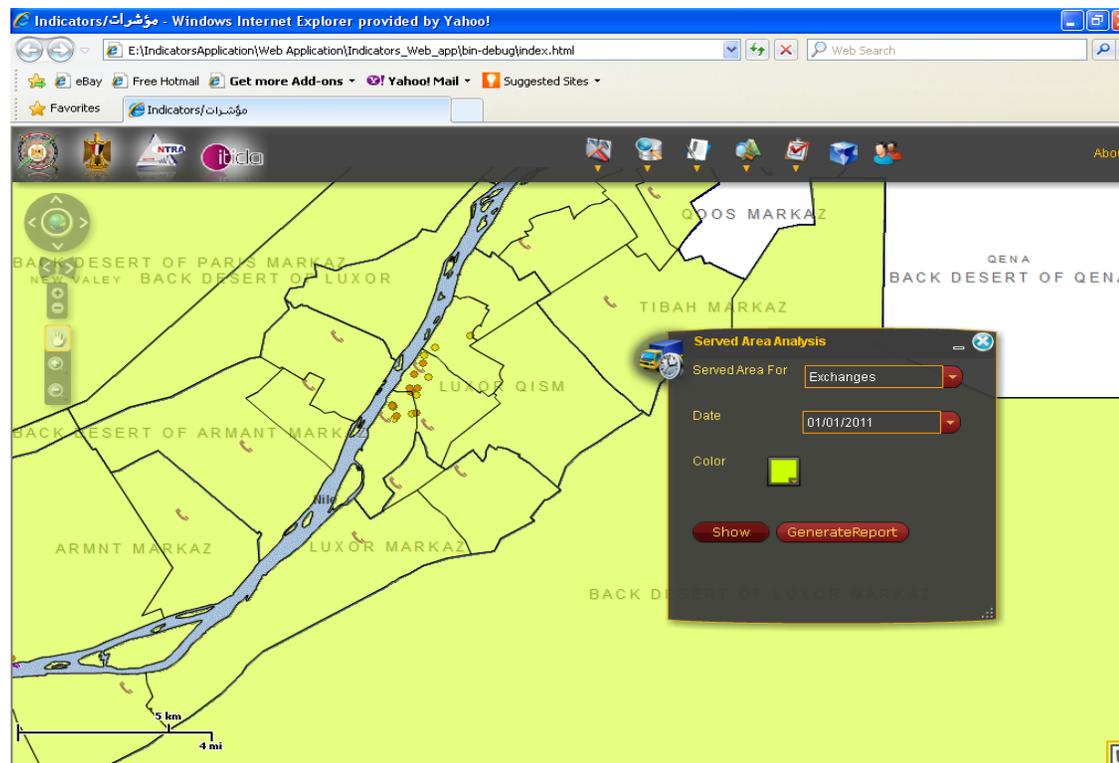
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# Geospatial Activities at the national Level

- **Egyptian Information Society Indicators**

**The functionality of the application:**

Served Area Analysis



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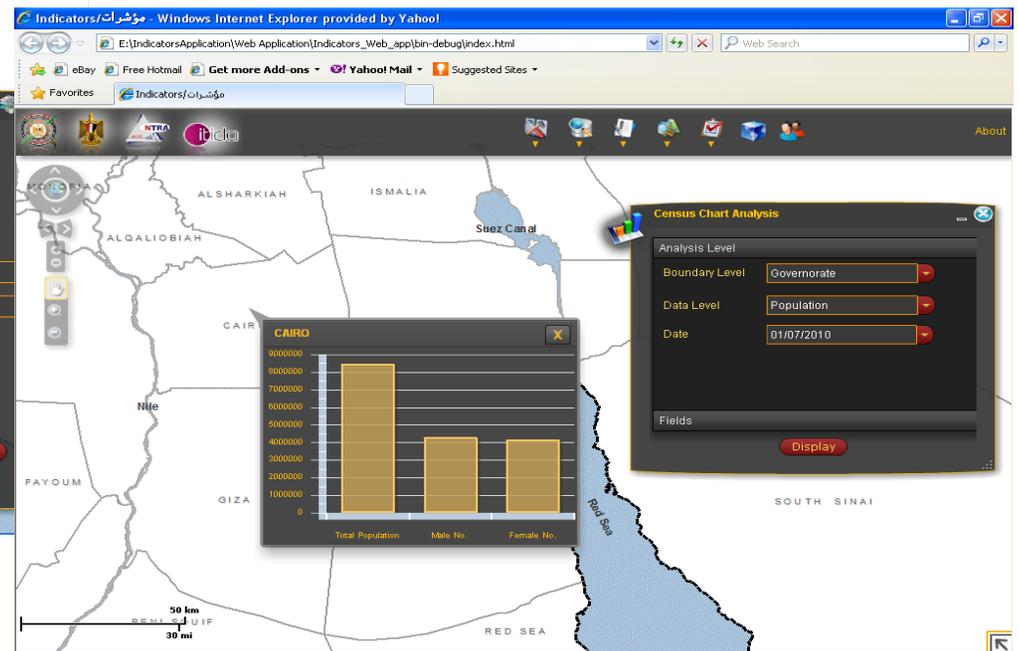
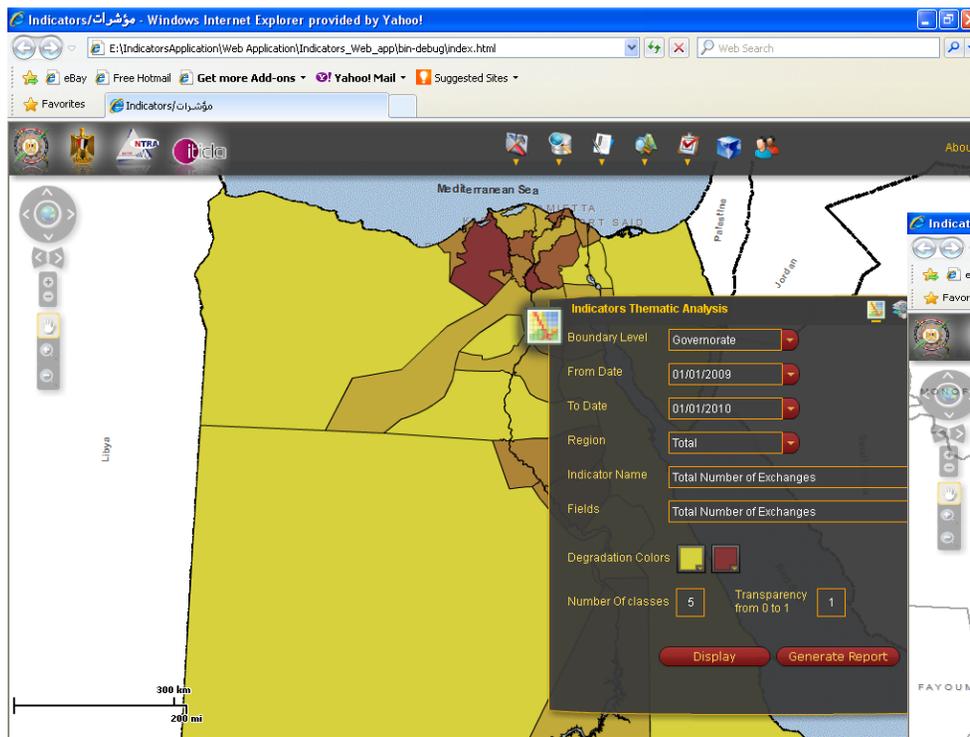
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# Geospatial Activities at the national Level

- **Egyptian Information Society Indicators**  
The functionality of the application:

## Thematic and Chart Analysis



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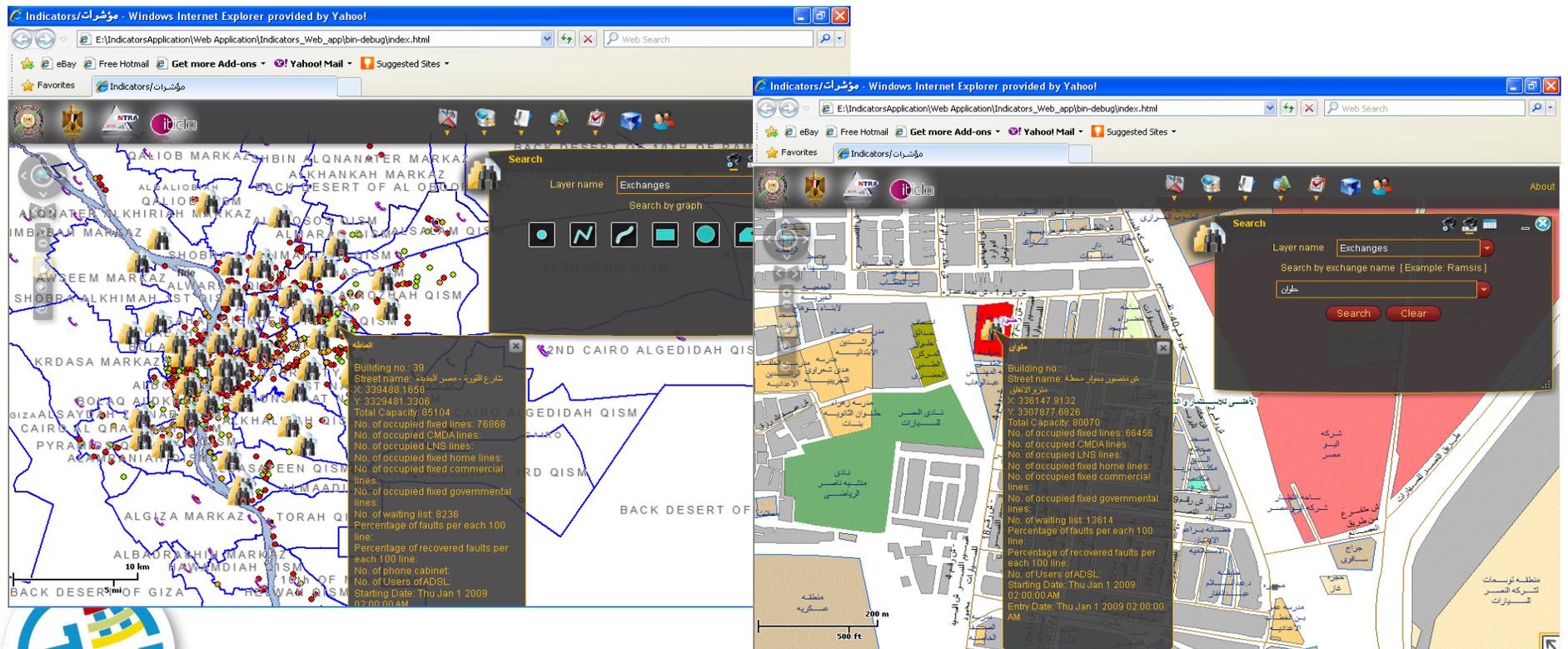
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# Geospatial Activities at the national Level

- **Egyptian Information Society Indicators**

The functionality of the application:

Spatial query



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# Geospatial Activities at the national Level

## Preparation of Census 2016

### The methodology of Census 2016:

1. Promote the use of maps in urban and rural of republic.
2. Achieve the maximum degree of inclusiveness (100% for all buildings,units,establishments,families) by updating maps on nature and filling the form attached with map and review the administrative boundaries of shiakha or village with specialists.
3. Developing ways to provide statistical information for smaller geographic area by dividing the subsection in urban and rural to statistical spatial areas ,each area consists of about 1500 units.
4. Dividing the statistical spatial areas to enumeration areas ,each area consists of about 200 families.





# Geospatial Activities at the national Level

## Preparation of Census 2016



المحافظة	القاهرة
القسم	أول مدينة نصر
الشيخة	
كود المحافظة	01
كود القسم	26
كود الشياخة	05
مستل	
رقم المنطقة	

بيانات المبني

الكود	الاسم	المتاح
01	القاهرة	المحافظة
26	قسم اول مدينة نصر	القسم
05	المنطقة التاسعة	الشيخة
0056		كود الشياخة
		مستل كود رقم
001		كود المعاون
0		رقم تكرر البلوك
8		رقم البلوك
0098		تكرار مسلسل المبني
0		عدد الوحدات
		اسم ملك المبني
		العنوان
		اسم الاستخدام
		ملاحظات
		عدد الادوار

نموذج (١ ت.س ٢٠١٦)

التعداد العام للسكان والإسكان والمنشآت ٢٠١٦

التجربة القبلية الأولى

محافظة: القاهرة / قسم: أول مدينة نصر / رقم الشياخة / المدينة: القوية / رقم المسكن: ٠٣٣٥

رقم منطقة المعاون: ١ / اسم ورقم التابع: رقم الصفحة: ٥ / ١

رقم مسكن	رقم مسكن داخلي	رقم مسكن منطقة المعاون	الرقم التنظيمي وأسم الطريق	أسم مالك المبني	المواصفات والمعاليم الإحصائية (أول مبني داخل البلوك)	ملاحظات
١	١				سور السيارات	
٢	٢			محمد عبدالعزیز زامل - شارع جمال لبيوطي		أرض مسورة
٣	٣			قطعة رقم ١٨ ببولك ٥٤		
٤	٤			٥٤ - ١٧ - ٥		
٥	٥			٥٤ - ١٦ - ٥		
٦	٦			قطعة رقم ١٤ ببولك ٥٤		
٧	٧			قطعة رقم ١٤ ببولك ٥٤		
٨	٨			٥٤ - ١٣ - ٥		
٩	٩			٥٤ - ١٣ - ٥		
١٠	١٠			٥٤ - ١١ - ٥		
١١	١١			٥٤ - ١٠ - ٥		
١٢	١٢			٥٤ - ٩ - ٥		
١٣	١٣			٥٤ - ٨ - ٥		
١٤	١٤			٥٤ - ٧ - ٥		
١٥	١٥			٥٤ - ٦ - ٥		
١٦	١٦			٥٤ - ٥ - ٥		
١٧	١٧			٥٤ - ٤ - ٥		
١٨	١٨			٥٤ - ٣ - ٥		
١٩	١٩			٥٤ - ٢ - ٥		
٢٠	٢٠			٥٤ - ١ - ٥		

أسم الباحث: محمد عبدالعزیز زامل  
أسم المراجع: محمد عبدالعزیز زامل  
التاريخ: ٢٠١٦/٠٣/٠٥



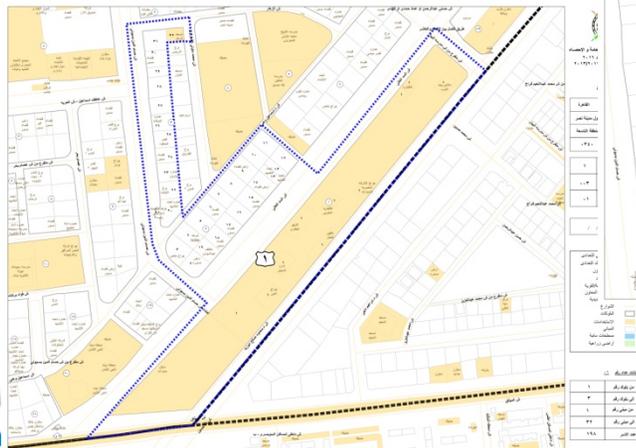
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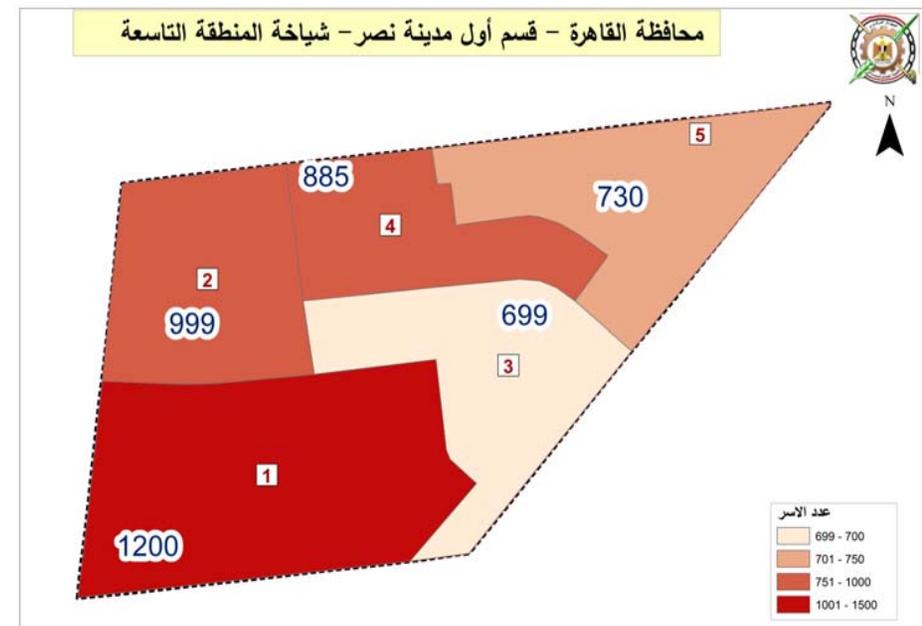
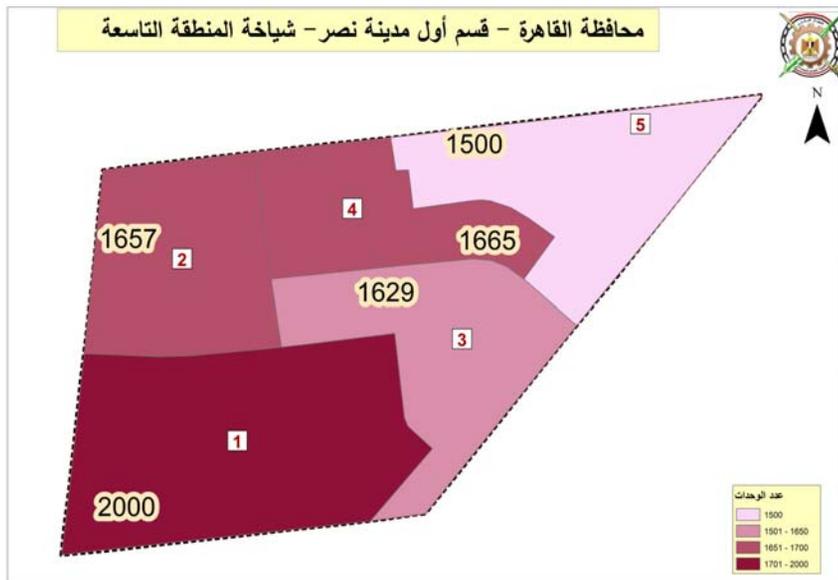
# Geospatial Activities at the national Level

## Preparation of Census 2016



# Geospatial Activities at the national Level

## Preparation of Census 2016



# Capacity Building and Technical support Activities

- **Regular Training for employees in what's new in ARC GIS and its applications.**
- **Capacity building of staffs from various ministries as Health Ministry and others.**
- **Summer Training Program for university students from various faculties such as :Faculty of Arts Department Geography, Faculty of Arts Department Libraries ,Faculty of Science and Faculty of Policies and Economics.**
- **Capacity building of staffs from national statistical agencies such as: Iraq Statistical Agency, Palestine Statistical Agency, Yemen Statistical Agency**
- **And Mauritania Statistical Agency.**
- **Sharing in National Exhibition to disseminate the awareness of the important of GIS such as: Book Exhibition and Information Technology Exhibition.**



# Challenges

- **No standardization of spatial data , many producers, redundancy of spatial data, waste the effort, time and money.**
- **There is no integration between governmental authorities ,ministries and private sector produced spatial data.**
- **Geospatial capabilities are fragmented, inconsistent, and duplicated.**
- **Lack of response to share spatial information.**



# Future Trends

- **CAPMAS has GIS Units in 8 Governorates and it will complete the remaining Governorates.**
- **Complete the base map of rural republic at scale 1:2500.**
- **Produce statistical enumeration areas for urban and rural of republic to field work for census 2016.**
- **CAPMAS will share Tax Authority of Estate to issue National number for each Estate in Egypt.**
- **CAPMAS will be the leader of the NSDI initiative by establishing national geospatial data center to Promote data sharing, accessibility, and dissemination the spatial data infrastructure between the relevant .**





CAPMAS

*THANK YOU*

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