Central Agency for Public Mobilization And Statistics

Statistical Geospatial Framework - Egypt

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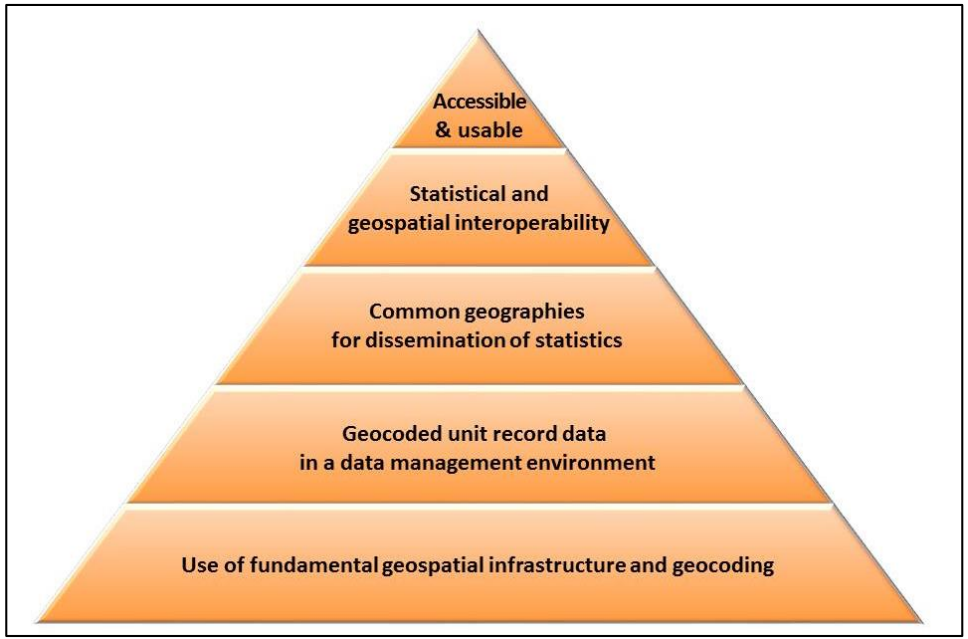
I.Five principles of Global Statistical Geospatial Framework



Principle 1:
Use of fundamental geospatial infrastructure and geocoding

❑ Egypt is working on establishing a National Spatial Data Infrastructure using a National Grid system with coordinate system MTM-WGS84 (Modified Transverse Mercator) which will be used to generate a unique numbering and geocoding system for each unit in a dataset, such as a building, household or business.

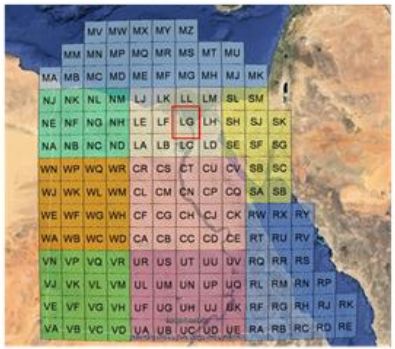
How this geocoding system is generated?

- First a grid based system was generated to cover the Egyptian land in different scale levels;
- First level is a grid each cell is 100 km * 100 km and by taking any cell of the m for example LG cell it is divided into cells each one of them is 10 km * 10 km and by taking any cell of them for example 72 this cell name is LG 72 and this cell it is divided into cells each one of them is 1km * 1 km and by taking any cell of them for example 46 this cell name is LG 72 46 and So on till

  reaching 1 m * 1m

Grid Based System

100 km X 100 Km

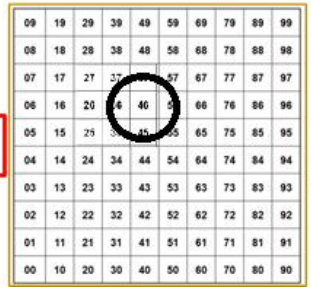


LG

10 km X 10 Km

09	19	29	39	49	59	69	79	89	99
08	18	28	38	48	58	68	78	88	98
07	17	27	37	47	57	67	77	87	97
06	16	26	36	46	56	66	76	86	96
05	15	25	35	45	55	65	75	85	95
04	14	24	34	44	54	64	74	84	94
03	13	23	33	43	53	63	73	83	93
02	12	22	32	42	52	62	72	82	92
01	11	21	31	41	51	61	71	81	91
00	10	20	30	40	50	60	70	80	90

LG 72



1 km X 1 Km

LG 72 46

Principle 2:
Geocoded unit record data in a data management environment

- All the geographical spatial data and statistical data in Egypt are identified with the smallest geographic boundary (Shyakha (Urban) - Village (Rural).
- Egypt is currently working now on putting a mechanism in place to facilitate th e integration and management of the geocode within a dataset including spatia l number identifier to geocode linking mechanisms.
- This method more flexible and useful to join the detailed statistical building, h ousehold and business data.

Principle 3:
Common geographies for dissemination of statistics

- One of the most important roles of the National Spatial Data Infrastructure is to unify the administrative geographic boundaries between all the Egyptian agencies. It is also used as a mechanism for data dissemination using the National grid mer ged with the geographic boundaries.

Principle 4:
Statistical and geospatial interoperability

- Egypt applies standards for statistical and geospatial data, and agrees with Australia on the need to seek international agreement.
- One of the main target of Egypt NSDI is to create a standard unified base map for Egypt to be used by all the governmental authorities.
- Now we are working on building this base map using a recent pho to with a high resolution and applying the Spatial ID which produce d by CAPMAS to integrate with the census data

Principle 5:
Accessible and usable geospatially enabled statistics

- Now CAPMAS starts the dissemination stage using the Egyptian Geoportal a nd Egyptian development atlas by disseminating the results on the Egyptian Grid system in different results (100KM*100Km, 10KM*10Km, 1KM*1Km, and 200m*200m) Which guarantee high accuracy and precision for the data analysis

II.National Spatial ID

- Is a unique number for each unit within the building.
- Is produced automatically from digital maps.
- Giving a fixed number for the unit linked to its geographical location which does not change with the administrative boundaries change.
- To organize, evaluate and follow-up of local government services such as electricity, natural gas, sewage

III. NSDI challenges:

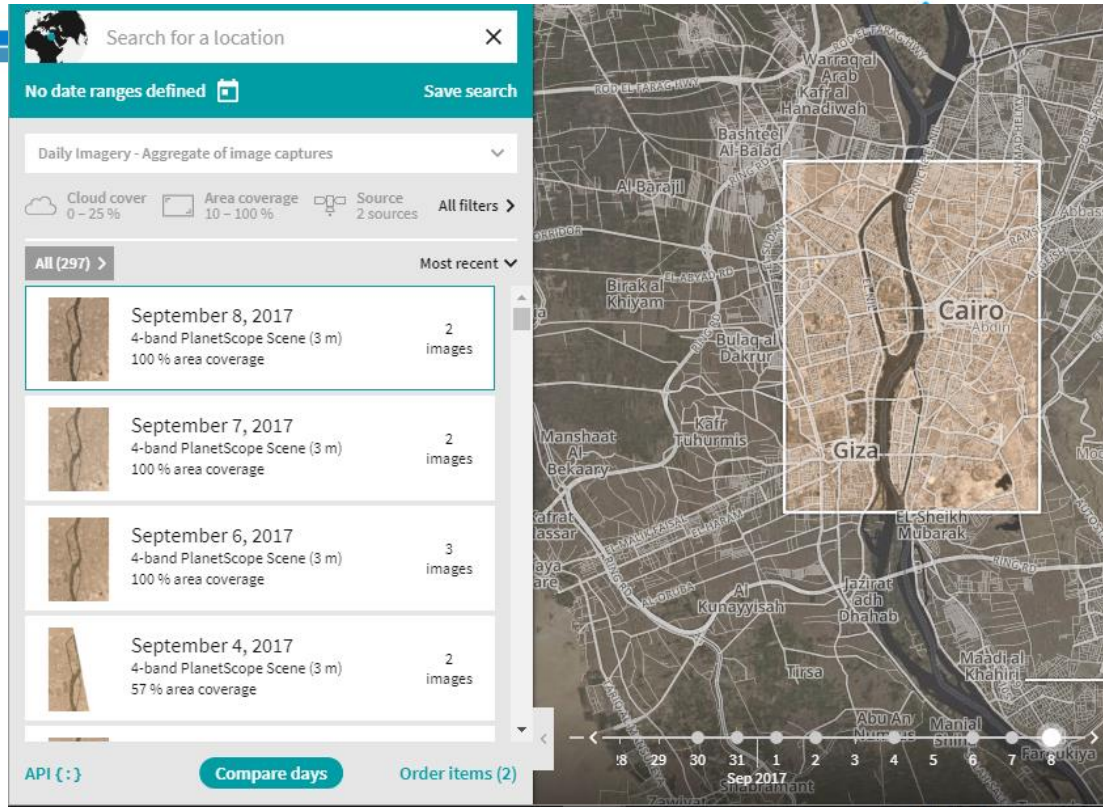
- **NATIONAL SPATIAL DATA INFRASTRUCTURE Challenges**

  - **Unified Base-map**
  - **Geocoding system**
  - **Integration between Public sector organizations**

IV.Next Step

- **Frequent update for the Base Map using**

Aerial photos by MESA
(Military Egyptian Survey Authority)



Thanks

we have pleasure to receive your feedback ,comments and questions

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