Geographical Information System (GIS) for spatial planning
Case Study for SSC

Omar ABOUEIICH
Ministry of Foreign Affairs
Egypt

I. Population growth and Spatial Planning

II. Introduction of ICT to tackle the Spatial Planning Constraints

III. Impact on Socio Economic Development

IV. Promoting South South Cooperation
Population growth and Spatial Planning

- Rapid expansion of the Egyptian population doubling twice in less than 58 years.
- Government's Institutional structures unable to prevent this explosion of undesirable land use.
- Establishment of the GPPO to attain the well-planned land use that make optimal use of resources for social, economic and environmental well-being
- Introduction of new methodological development and preparing strategic plans.

II- Introduction of ICT to tackle the Spatial Planning constraints

- The Creation of a National Plan to build up 7 GPPO regional centers through establishing a network of Geographical Information System (GIS) for spatial planning on a national scale.

- This plan covered studies to establish the needed volume and types of Data, software, hardware and training.

- 3 phases of implementation were envisaged
First Phase 1999-2003

- Exploring technological advances in mapping and physical planning and matching these with Egyptian requirements and capabilities.
- Introducing new technologies to three of GOPP's Regional Centers.
- **The outcome of this phase:**
  - raising awareness of the necessity of revising and updating planning methodologies.
  - This new awareness shaped the formulation of the second phase.

Second Phase 2004-2008

**This phase was consisted of:**
- developing a participatory urban planning methodology
- extending GIS capabilities to the other four Regional Centers

**The outcome of this phase**
- exposed the need for Regional and Governorate Plans in order to get the full benefit of the spatial planning. (Existing procedures do not have mechanisms for integration between towns and cities.)
- The new awareness of the need for multi-level integration shaped the development of the 3rd phase.
Third Phase 2009-2013

This phase is consisted of:
• Consolidating the new Strategic Urban Planning methodologies and technologies
• Adapting participatory and sustainability process to higher levels of planning
• Producing Regional Planning Guidelines, contributing to national spatial development.

The outcome of this phase
• Addressing the preparation and testing methodologies for multi-level strategic planning.
• Enhancing participatory mechanisms at the local and national levels.

III – Impact on Socio Economic Development

A- Direct Impact on the Socio-Economic Development:
• Integration between physical planning and economic planning which helped delineating growth areas, development corridors, and socioeconomic services.
• Decline of National Poverty Rate, from 19.6% in 2005 to 14.5%% in Lower Rural Egypt and to 5.7% in urban governorates in 2010. (1st phase 3 Regional Centers)
• Egypt is a country of moderate inequality, comparing with the 1990s. The value of Gini's coefficient has decreased from 36.1/2000 to 31/2010 in these areas.
Direct Impact on the Socio-Economic Development

- Initiating the comprehensive integrated package to develop the poorest 1000 villages, mostly in Upper Egypt. The first batch included 151 of these villages;
- Preparatory steps to introduce the «conditional cash transfer» programs to direct subsidies to the poor and ensure linkages with public service utilization;
- Expanding friendly/mobile schools to reach out for marginalized children and reintegrating out-of-school and drop-out children;

- The number of urban population living in slums decreased during the period 1990 to 2007 by about 1.9 million people, thus contributing to achieving the MDG global target.
- The new approach helped Egypt to ensure the developmental dimension of the Population problem in its National Strategy for the period 2013-2017
B- Impact on Local Development

- Promoting local development by integrating regional and governorates plans, to urban and villages plans.

- Building on the methodology development and knowledge gained in pilot projects, GOPP has supported decentralization, enhancing Local Authorities Capabilities in urban planning.

- Upgraded physical information network linking the headquarters with all regional centers in the form of Local Areas Networks LAN connecting all the central departments in each RPPC, and a Wide Area Network WAN connecting these region centers with GOPP.
IV- A Model for South-South Cooperation

• SSC offers viable opportunities for developing countries in their individual and collective pursuit of sustained economic growth.
• Egypt’s participation in SSC is well seen in the information and communication technology sector.
• Egypt is represented on the NEPAD e-Africa Commission Executive Committee; participating in 11 flagship projects belonging to the African Regional Action Plan on the Knowledge Economy and, is leading the African ICT Leadership Training Programme.

A Model for South-South Cooperation

• Egyptian comprehensive National South-South cooperation Strategy outlined a series of goals in line with Egypt’s foreign policy as well as a comprehensive system to systematically capture, document and report South-South cooperation initiatives and activities that Egypt engages in.
• GIS in Spatial Planning as well as other relevant IT experiences were chosen to be one of the main Egyptian success stories and experiences that will be shared among the SSC platform.
• The first Regional South-South Expo next summer, is a convenient opportunity to share more experiences among Arab states to promote ICT positive impact on Socio-Economic Development.
Thank You