Steps Towards a National Spatial Data Infrastructure (NSDI) for Uganda

7th Sept. 2017

The 6th Utilities GIS Workshop
Kabira Country Club

By Joseph Tenywa
National Planning Authority
Outline

- Introduction to Spatial Data Infrastructure
- Prerequisite for Establishing NSDI
- Status of Spatial Data Infrastructure in Uganda
- Future Plans
- Concluding Remarks
Introduction to SDI

An umbrella/framework under which organizations cooperate to facilitate easy access and sharing of Spatial data for national development.

This creates inter-sector linkages and synergies for better planning and decision making.

When the SDI is established at National Level, it is called NSDI.
Components of NSDI

POLICY
- Institutional deals:
  - Identifying roles and data producers
  - Elaborate data sharing program

GEO-SPATIAL DATA
- Definition of thematic data
- Compatibility
- Dissemination

STANDARDS
- Metadata
- Data exchange

LEGAL
- Legal marks
- Institutional mandate
- Legal rights
- Rules and legislation

TECHNOLOGICAL ACCESS NETWORKS
- Protocols and interfaces for communication and search
- Server networks
- Service (Geo)

HUMAN RESOURCES
- Levelling knowledge
- Technical and managerial
Pre-requisites for Establishing NSDI (1)

• Policy / Law / Decree in place for guiding the process

• Designate a Coordination Agency/ Secretariat

• Establish a Coordination Committee, its sub-committees and Working Groups (e.g)
  • Standards, Financing, Education and capacity Building.
Pre-requisites for Establishing NSDI (2)

Decide on legal issues such as data ownership, custodianship, pricing, confidentiality and liability

Define fundamental datasets for the NSDI

Development of uniform consistent standards
Background of the UGSDI (1)

- In 2001: A study on Implementation of GIS in Uganda by the Swedish Consortium showed the need of a NSDI in Uganda as a means to improve accessibility and utilisation of spatial data for planning and national development.

- In August 2010, a feasibility study was conducted by ESRI Canada and GIC Ltd to prepare for the establishment of a NSDI in Uganda.
In a stakeholder workshop, the National Inter-Agency Spatial Data Infrastructure committee (NISDIC) was formed.

In the Stakeholder workshop, NPA was assigned the role of Coordinating /Lead Agency.
Current status of the UGSDI (1)

• NPA has drafted a National Spatial Data Infrastructure Policy:
  ▪ The policy provides for Governing Council, Technical Committee, Data Custodians, Fundamental, Priority Specialised datasets and Important specialised datasets, Pricing of spatial data, among other things
  ▪ Stakeholders will be requested to provide input before the policy is sent to cabinet.
Current status of the UGSDI (2)

- NPA has undertaken a stakeholders mapping
  - All stakeholders institutions are being consulted
  - We identify producers and users of datasets
  - We identify policies for sharing of data
- NPA is currently Developing a GIS web portal for the UGSDI
  - It will be possible to search datasets in the country
  - It will be possible to download datasets
  - All activities of UGSDI will be included on the website
Future Plans

- Standards Development – Initially, content standards will be developed for fundamental and government priority specialised datasets
- Meta data development – NPA will work with institutions to create catalogues for datasets in the above category
- NPA will provide a guide for developing content standards and documentation of datasets

Capacity building for GIS in MDAs, NGOs and participating private companies will be planned and implemented
Concluding Remarks

- Development of UGSDI is overdue
- UGSDI is expected to address issues of:
  - Variations in policies for access of spatial data
  - Inconsistencies in data formats making data integration difficult
  - Data duplication and wastage of resources

We request for Your cooperation
Thank You!