Sustainable Drug Seller Initiative Partner Presentations

Situational Analysis for Pharmacy Council GIS Strategy

Joel Francis Monjares, Benedict Sanga &

Alex Mwijuka

GeoNetWork Limited

Stakeholders' Meeting, Tanga

17-19 September 2012

Background

Brief summary on Geo-spatial technologies:

- **Geographic Information System (GIS):** Tool for spatial data analysis and Visualization

- **Satellite Remote Sensing(SRS):** Source of input data in GIS

- **Global Positioning System(GPS):** Feature/location fixation and data acquisition devise

- **Database:** Data storage/Bank tool for GIS

Components of GIS

GIS Data Types

- **Spatial Data**

  - **Point data** (0 dimensional) **e.g.ADDO outlets**

  - **Line data** (1 dimensional) **e.g. Road networks**

  - **Area data** (2 dimensional) **e.g. Admin. boundaries**

  - **Continuous surface** (3 dimensional) **e.g. DTM**

- **Non-spatial data**

  - Describes spatial objects

    - Example: Outlet information: Name of outlet, owner.

What can GIS do?

GIS can answer questions more compressively. Examples:

- Where?

  E.g. Where can I find the ADDO outlet in Tanga?

- What?

  E.g. What is the distance & direction of the nearest pharmacy X in Tanga town?

- When?

  E.g. When did pharmacy X start to exist?

- Who?

E.g. Who owns pharmacy X? etc

Satellite Remote Sensing(SRS)

Remote Sensing is the process of collecting information about object(s) on earth surface, through the analysis of images acquired/recorded by satellite sensors in space.

- **SRS is the source of input data for GIS**

SAMUEL BAKINA

Name of outlet:SAMWEL MATIAS
,owner SAMUEL ,Type of Bussiness
Building Material Retailer,Phone no:
713332686 Kigoma ,ward: Mwanga
sikoni kigoma ,Street: Kigoma
mwanga sokoni ,Type of material:
twiga(Tanzania Port Land
Company),Tembo(Mbeya company)

ENOKIFANUELI

X ELIA HUNGU

ALIST FESTO MBOYOGO

ANTONY DOMISIA X NUHU NYAMWELU

ROBSON T

DOMINICKIMBANGUKA X

JAVAN MASAMBILO X EDWARD ENOCK

ADAM MKEYA

Global Positioning System(GPS)

GPS is a satellite-based navigation system made up of a network of 24 satellites placed into orbit.

GPS can be used to fix a location point on a map
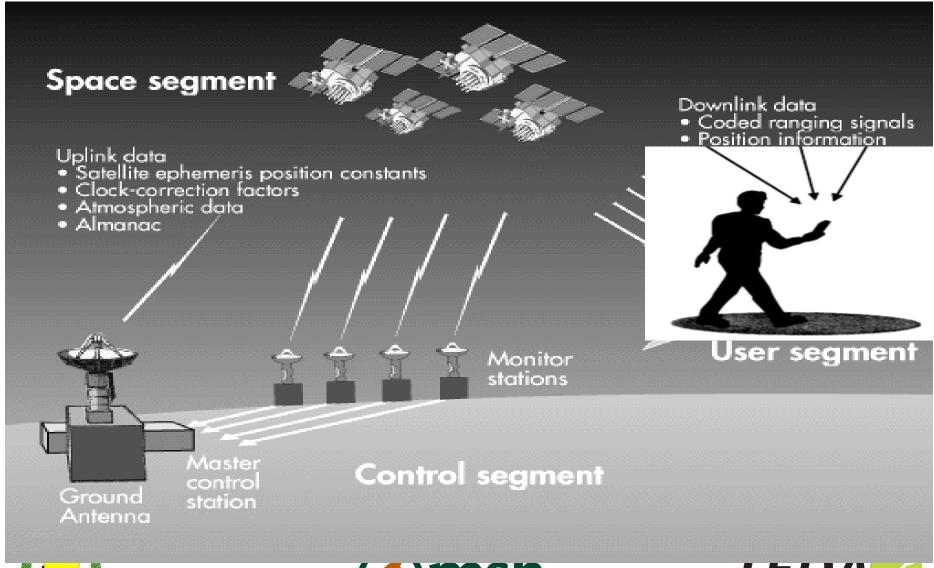•Example: Geographic location of an ADDO
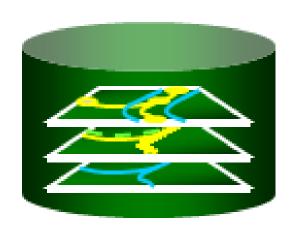

Handheld GPS

Components of GPS

Database

A collection of inter-related records.

Electronic databases mainly consist of:
- •Data entry forms
- •Data Storage tables
- •Queries: for data retrieval
- •Reports

In GIS, a database is important tool for storage and management of linked spatial and non spatial data.

Applications of Geo-spatial Technologies to PC Tanzania

- Survey and mapping of ADDO outlets, Pharmacies, Dispensing Sites and other health facilities
- Planning, better decision making and visual analysis
- Enforcement of licensing restrictions and accreditation
- Supervision and inspection of outlets and health facilities
- Preparedness and response: e.g. stockpiling large amounts of medicine and medical supplies for use in health emergencies

Situational Analysis Preliminary Findings

Objective of Assessment

- To develop a geographic information system (GIS) strategy for the Pharmacy Council in order to improve the regulatory and management information system of medicine outlets (Pharmacies and ADDOs)

- Desk review and interviews to assess six basic GIS components:
  - ✓ People
  - ✓ Hardware
  - ✓ Software
  - ✓ Data
  - ✓ Methods
  - ✓ Environment

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Preliminary Findings and Next Steps

Preliminary Findings:

- Based on initial discussions with the Pharmacy Council, have found that GIS capacity is low—with lack of GIS human resources, software, hardware, etc.

- Pharmacy Council expressed interest, however, in utilizing GIS to improve Monitoring and Evaluation

- ***TANSCOTT*** Associates have developed a web driven M&E system (to be presented next…)

Next Steps:

- Conduct interviews with National Bureau of Statistics to assess NBS GIS capacity and ability/willingness to support PC in GIS integration.
- Interviews with additional key stakeholders to assess their vision for GIS at PC and what support they may provide.

RECOMMENDATIONS

We strongly suggest that PC Tanzania develop an operational GIS technology for planning, monitoring, evaluation and decision making.

[The minimum requirement for establishment of GIS at PC Tanzania](#)

DEMONSTRATION

THANKS