

NSDI as a tool for Secure land tenure

General Overview

To look at the progress in SDI development and its application in policy formulation and impact on land tenure.

INTEGRATION OF INFORMATION POLICIES AND TECHNOLOGY

The UN-ECA CODI initiative identifies 3 fundamental tools that would promote easy data access:

- § The library catalogue service protocol
- § Statistical Information collection and management strategies
- § ICT that offers the internet service as the rapid search engine for location of data in support of user requirements

PURPOSE FOR SDI

SDI development is to catalogue and promote access to geographical Information that use and extend Internet based data search and retrieval standards.

Assumptions in SDI development

- Sound fundamental data Framework, by NMA.
- The use of the Framework in combination with the 3 identified tools

Partnerships btw the private and public

In the development of the SDI, Governments need to recognize the practical opportunities offered by the private sector in the supply of extensive information that is generated through projects implementation.

PPP

Consultations btw Govnts and the Private sector be encouraged in the development of listed systems on principles of transparency and mutual trust.

- In ICT Framework
- Standards
- Metadata
- Statistical Data service

Millenium Development Goals(MDG) under NEPAD

- Realization of the NEPAD objectives require extensive documentation of geo-referenced information .
- SDI are a robust response to the constraints that inhibit the availability, access and use of GI
- Fundamental Datasets are crucial components for SDI and are generally missing in most AC
- Africa must therefore take ownership of its future by developing its own SDI.
- NEPAD initiative to promote AFREF as a solution to trans border programmes.

Capital investment in GI capture and NSDI development

Acknowledged that

- **Info is crucial for Gd Governance. Good Governance requires transparency and community participation in the decision process;**
- **Savings made throu use of GI by end user justify the investments in SDI development; and**
- **Production of GI capital intensive.**

Capital investment in GI capture and NSDI development

Recommended

- Govts to recognize GI inventorying as an investment and an asset, therefore allocate adequate funds to support Production;
- Priority be given in SDI development while allocating resources; and
- Encourage data sharing.

Awareness Raising

- General understanding of the concept behind NSDI formulation is poor;
- For the same reason presentation to lay people makes it appear too technical and therefore difficult to understand;
- Appreciation of how to make informed decisions by users of GI is still lacking making most Govts fail to embrace the Technology;
- There should be deliberate campaign to demystify the concept for acceptability by the majority.

Efforts made by ECA through CODI initiative to role out the programme

CODI-Geo through UN-ECA established several Working Groups to look into components of NSDI formulation:

Working Group	Convenor	Other Members
Standards	EIS- Africa	
AFREF	AOCRS and RCMRD	IAG (SC 1.3d)
Capacity Building	RECTAS	
Fundamental data sets	South Africa	AOCRS, RCMRD, ICA and MAFA

CODI- Geo Activities

EWG of CODI-Geo has promoted the programme in the following ways:

- § Champion and spearheading the campaign
- § Establishment of Sub Regional Units to steer the process;
- § Provision of guidelines in implementing NSDI;
- § Mounting several workshops within the continent to raise awareness and justify the programme;

CODI- Geo Activities

- § Sourcing for funds to finance the programme;
- § Promoting the use of Regional Centres in building country's capacities;
- § Periodic review of programmes undertaken in every region; and
- § ECA is running a full web mapping station, providing **Country space** for Metadata clearinghouse node for countries that lack capacity.
- § E: Discussion facility for EWG to exchange ideas
- § Organized workshops on metadata and clearing houses for the 5 sub regions in collaboration with UN water/Africa

EWG of CODI- Geo

In reference to the efforts made it is observed that many African Countries have made progress in the establishment of NSDI but there are still many more with little or no progress.

EWG of CODI- Geo

In this regard EWG resolved that Governments give priority to the establishment of NSDIs to fully participate in the Global and Continental mapping Programmes

Kenya's Initiative

The Government of Kenya and by consensus, has identified Survey of Kenya (SOK) as the focal organization for NSDI development.

SOK Mission:

To produce, maintain and distribute accurate geographical data to ensure security of land tenure and territorial integrity of the Nation.

SOK Reforms

Through Reforms under SAP SOK identified the following core functions

- q Maintenance of National Spatial Data Infrastructure (NSDI)**
- q Production and distribution of accurate geographical data**
- q Inspection and maintenance of national and international boundaries**

SOK Reforms

- q Preparation and maintenance of Registry Index Maps (RIM) and Preliminary Index Diagram (PID) to support land registration and controls
- q Quality control and assurance of geographical data produced by other organizations
- q Production of Photo enlargement
- q Mapping
- q Establishment of a National Digital Topographical Data Base framework

Kenya's NSDI development

NSDI development is one of the country's priorities

And therefore that of SOK since its mandates are in the production, maintenance and distribution of accurate spatial framework data or fundamental core geographical datasets

Progress made towards NSDI development

The following activities have been undertaken to achieve the above goal.

- ❑ Mobilization and engagement of GI scientists in dialogue through sensitization workshops;
- ❑ Seminars to review existing scientific problems related to the process;
- ❑ Prototype project on Digital mapping of Nairobi based on GIS models representing different utility themes; and
- ❑ Conduct of various training programmes in field related to NSDI.

Mobilization of scientists in NSDI development

Several workshops took place to sensitize the GI scientists and stakeholders in the role played by SDI in decision making and emphasized the:

- § Need for information sharing
- § Methodology in data capture and presentation so as to minimize duplication of efforts.
- § Need for partnership to satisfy the country's requirement.

Components of NSDI

Fundamental core geographical datasets, that forms a basis for all other thematic data users. These include:

- q National Geodetic Control networks,
- q National Digital Topographic Data Bases (NDTDB) for digital mapping framework; and
- q National Cadastre Data Bases (NCDB) for registration framework.

National Cadastre Data Framework (NCDF) as the basis for Registration

This is the framework that in Kenya's case is used by C/L to process title to land

§ It is the basis for land rights Registration;

§ Registration document usually in the form of DP under the RTA and RIM in the case of RLA.

Features of Registration Doc under RTA

Legend

Nothings

#####

Height in m

Area in ha

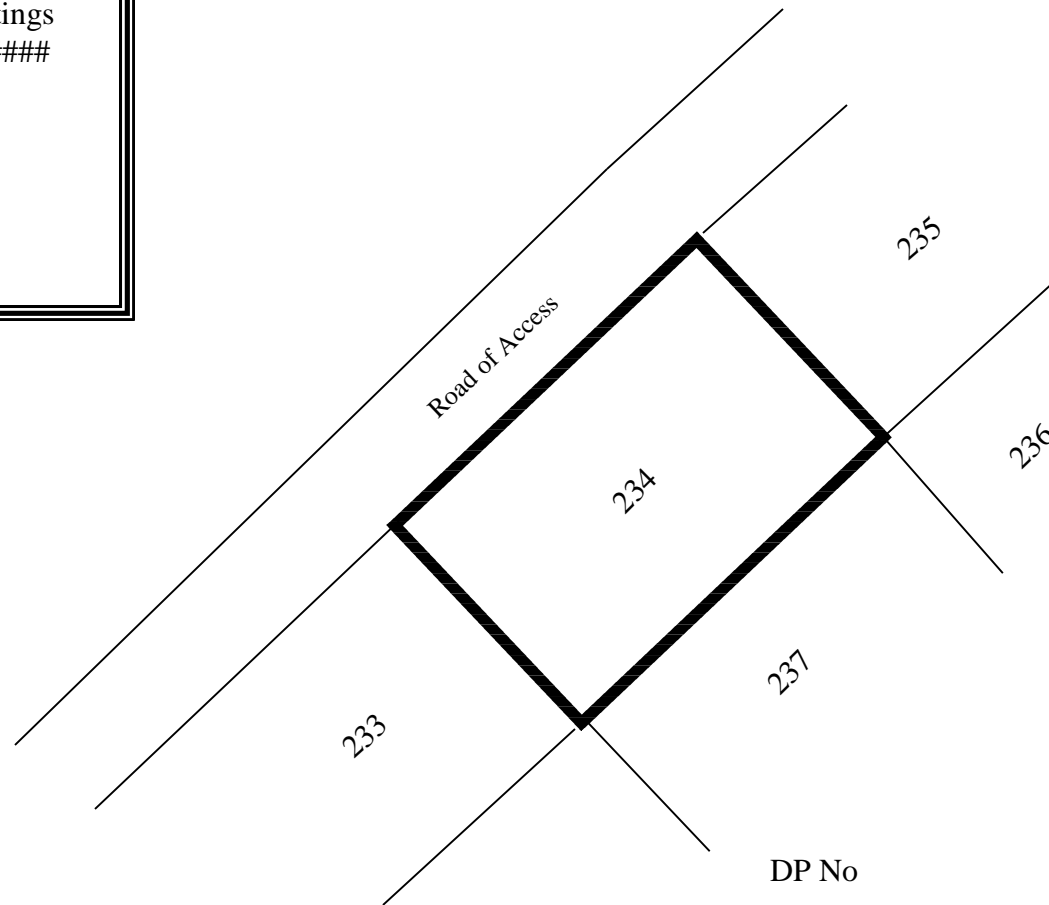
Locality

Block No

Parcel No

Eastings

#####

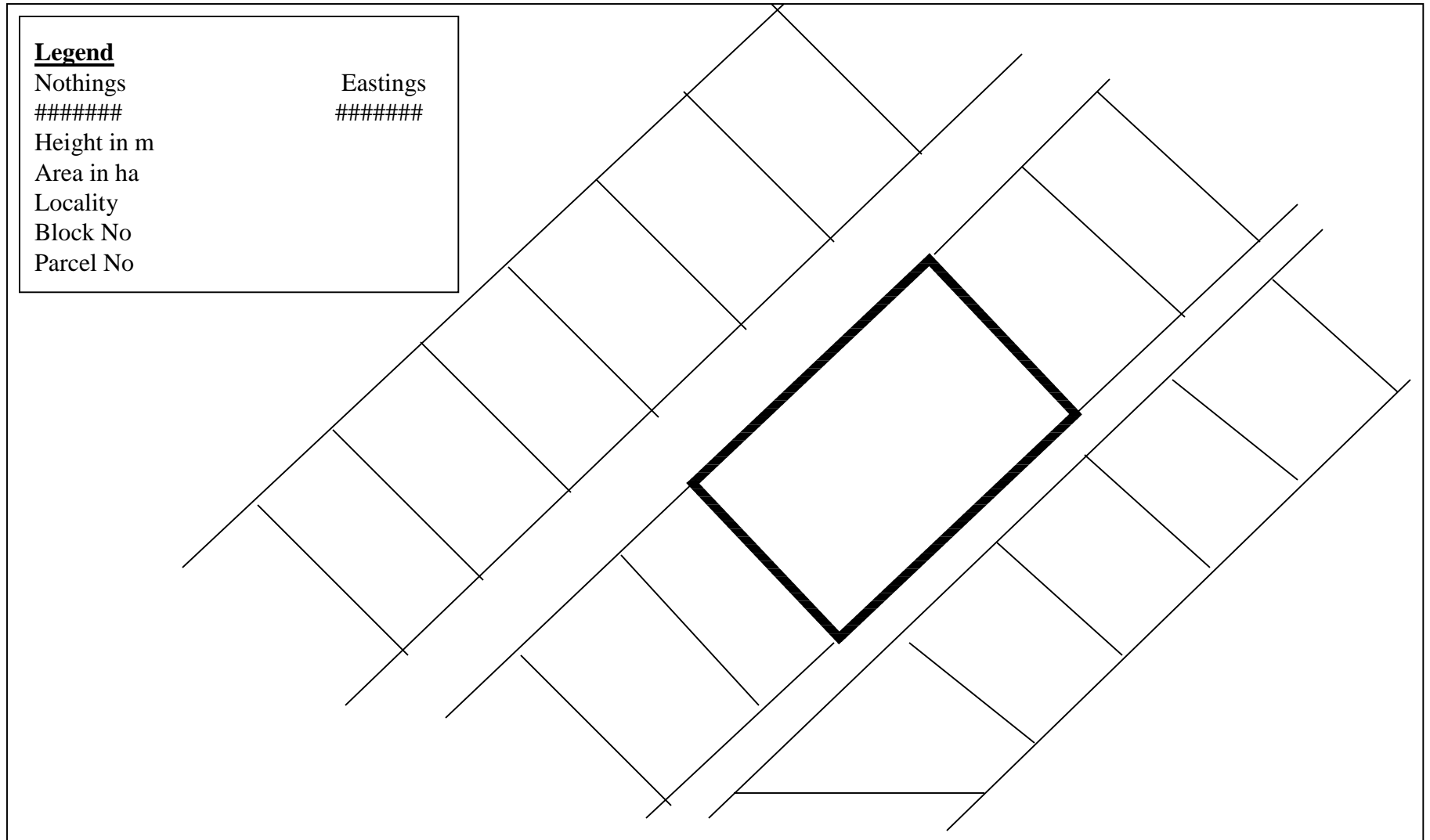


Authentication Officer

DP No

Date

Features of Registration Doc under RLA



LIMS

- ownership particulars added;
- Land Rent;
- Valuation; and
- Term of lease.

ICT

- With the use of ICI it is possible to avail the Infrastructure for use by public;
- Access provides a window to allow monitor any form of irregularities in the management of the Land Information.