

# CHALLENGES OF THE MODERN WORLD: GLTN AND INNOVATIONS

**Cyprian Selebalo – UN-Habitat**



FACILITATED BY:  
**UN-HABITAT**  
FOR A BETTER URBAN FUTURE



# PRESENTATION OUTLINE

## CONTENT

1. **GLTN facilitated by UN-Habitat - overview**
2. **Innovative response to challenges**
3. **Support for Global Geodetic Framework**
4. **Need for Young Surveyors leadership**

# UN-HABITAT

**UN-HABITAT, THE UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME, IS MANDATED BY THE UN GENERAL ASSEMBLY TO PROMOTE SOCIALLY AND ENVIRONMENTALLY SUSTAINABLE TOWNS AND CITIES. IT IS THE FOCAL POINT FOR ALL URBANIZATION AND HUMAN SETTLEMENT MATTERS WITHIN THE UN SYSTEM.**

# UN-HABITAT

## MAIN MANDATE DOCUMENTS

- **Vancouver Declaration on Human Settlements (Habitat I),**
- **The Istanbul Declaration on Human Settlements (Habitat II and the Habitat Agenda),**
- **The Declaration on Cities and Other Human Settlements in the New Millennium, and Resolution 56/206.**
- **Approaching Habitat III**

# UN-HABITAT

**BY 2020, TO HAVE ACHIEVED A SIGNIFICANT IMPROVEMENT  
IN THE LIVES OF AT LEAST 100 MILLION SLUM DWELLERS”  
NATIONS MILLENNIUM DECLARATION RESOLUTION - SEPTEMBER 2000**

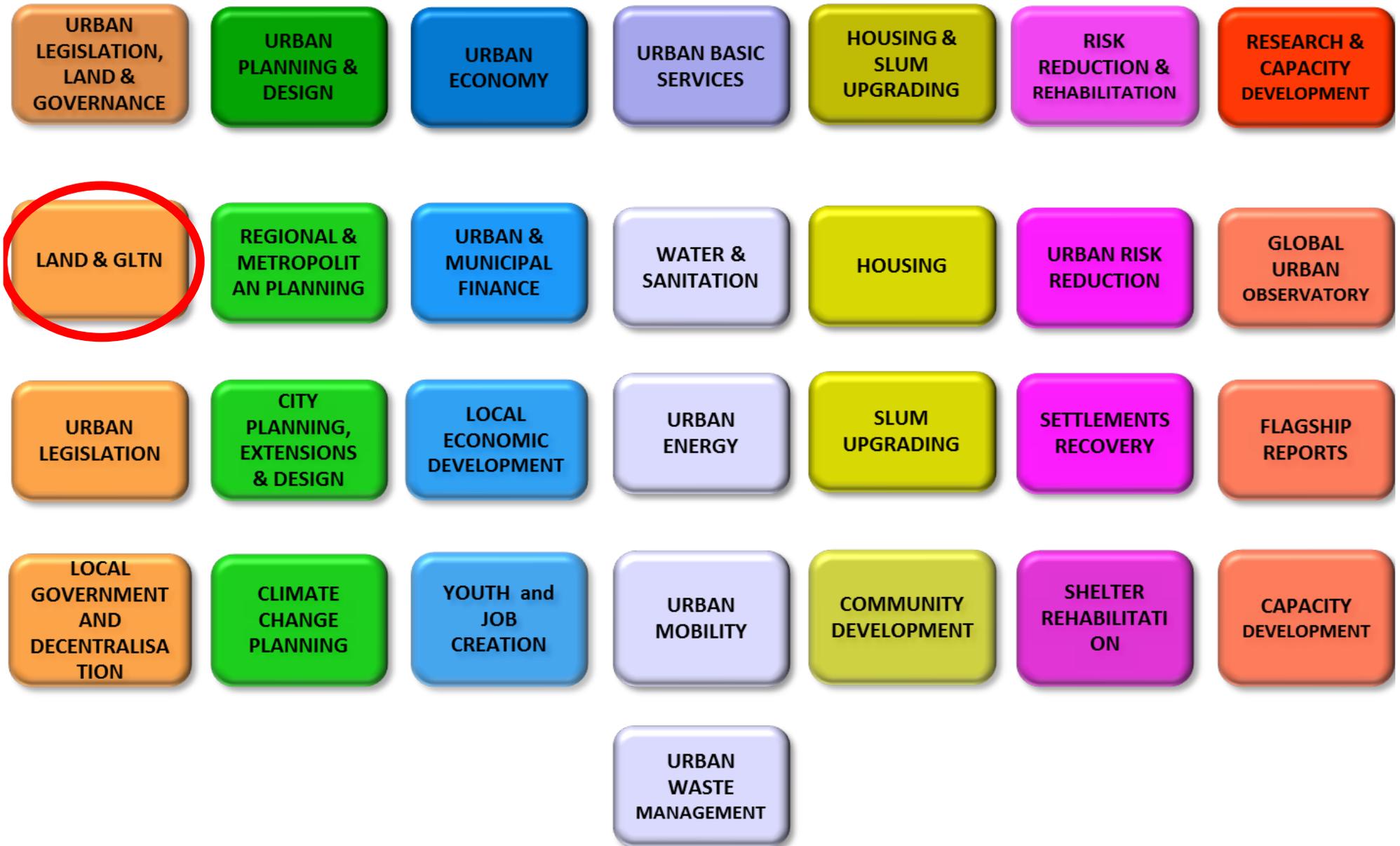


# UN-HABITAT

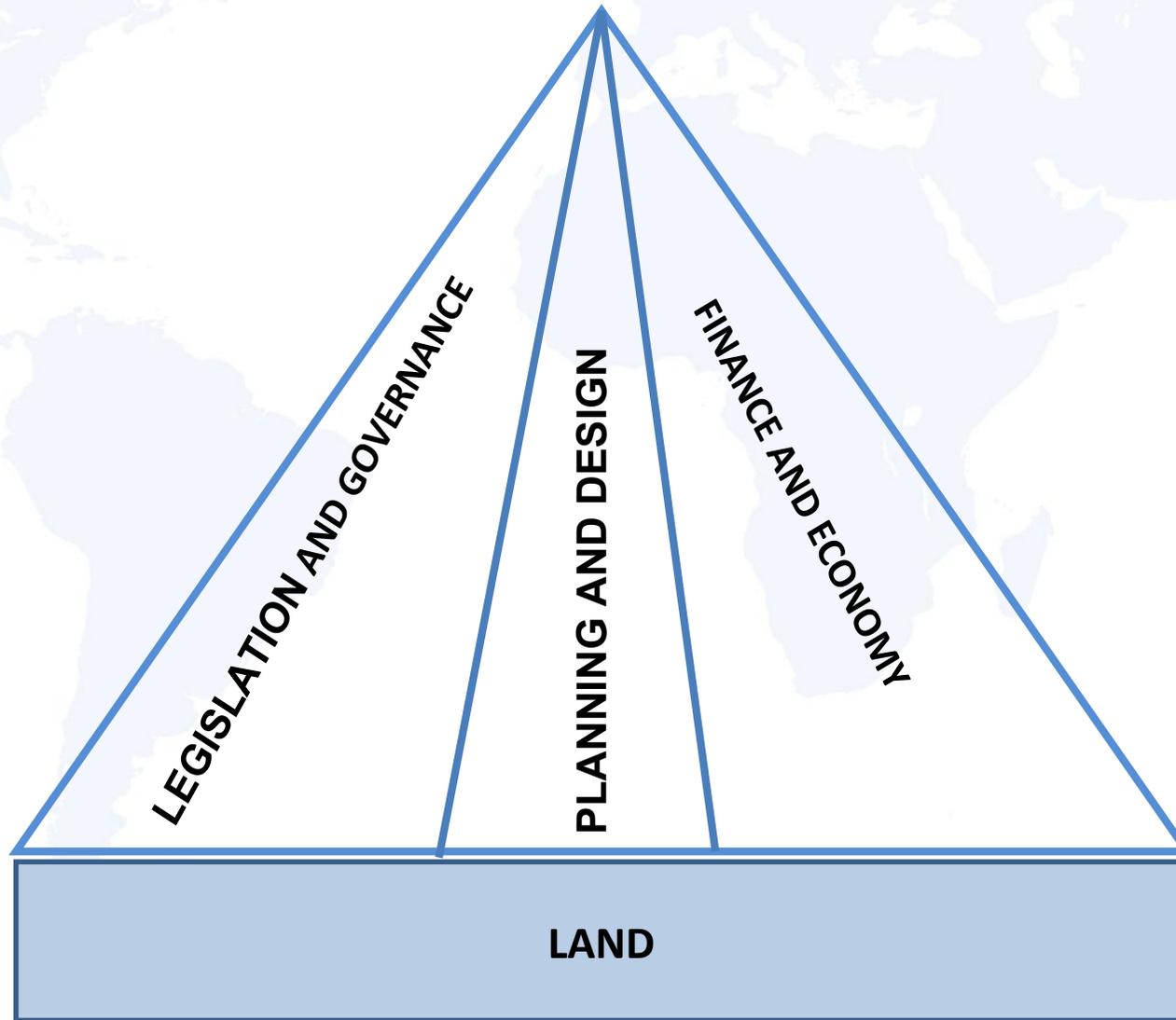
## PRIORITY AREAS



# UN-Habitat



## LAND IS CROSS-CUTTING



## LAND IS POLITICALLY & TECHNICALLY COMPLEX

### CONVENTIONAL

1. **Cadastre**
2. **Land information system**
3. **Valuation system**
4. **Planning system**
5. **Land readjustment**
6. **Owner based financial model**
7. **Technical training**

### INNOVATIONS

1. **Continuum of land rights/Pro poor land records**
2. **Social Tenure Domain Model (STDM)**
3. **System to value worth**
4. **Simple land use planning tied to land tenure**
5. **Participatory inclusive land readjustment**
6. **Land sharing including tenants, fair compensation**
7. **Capacity development**

# GC 23/17 RESOLUTION & ALTERNATIVE LAND TOOLS

*Resolution on Sustainable Urban Development through expanding equitable access to land, housing, basic services and infrastructure*

**7 (b) To promote security of tenure for all segments of society by recognizing and respecting a plurality of tenure systems, identifying and adopting, as appropriate to particular situations, intermediate forms of tenure arrangements, adopting alternative forms of land administration and land records alongside conventional land administration systems, and intensifying efforts to achieve secure tenure in post-conflict and post-disaster situations.**

**(c) To review and improve urban land governance mechanisms, including land/spatial planning administration and management, land information systems and land-based tax systems, so as to strengthen tenure rights and expand secure and sustainable access to land, housing, basic services and infrastructure, particularly for the poor & women.**

**(d) To create mechanisms for broadening land-based revenue streams...**

# GLOBAL LAND TOOL NETWORK

- The **Global Land Tool Network (GLTN)** is an alliance of global regional and national partners contributing to poverty alleviation through land reform, improved land management and security of tenure particularly through the development and dissemination of pro-poor and gender-sensitive land tools.
- Currently 66 partners : Land professionals, civil society, research and training institutions, multilateral and bilateral
- Develop tools collaboratively to implement pro-poor and gender sensitive land agenda
- The organizational arrangement of GLTN comprises the Steering Committee, the International Advisory Board, the Partners, the individual members and the Secretariat.

# HOW DOES PARTNERSHIP OPERATE IN GLTN

- **Agreement with objectives and core values**
- **Contribute substantively and/or financially to develop and/or**
- **Engagement through:**
  - Sharing of knowledge and information
  - Advocacy and awareness building
  - Joint activities (e.g. events, publications, tools)
  - Tool development and implementation process
  - Capacity development initiatives
  - Resource mobilization efforts
  - In-country pilots and activities
  - Tool implementation at national and/or local levels

# GLTN-FIG PARTNERSHIP

- Support GLTN tools developments by piloting, reviewing and leading implementation using the global professional networks.
- Support GLTN's capacity development initiatives targeting young surveyors network, civil society organisations, land professionals and other GLTN/FIG network partners.
- Support GLTN's knowledge management and awareness building activities targeting land professional organisations, FIG/GLTN network partners and member-organisations of GLTN's land professional cluster



# Chengdu Forum on GGIM, China, October 2013

“Development and Applications in Urban Hazard Mapping”

“Geospatial information needs to contribute much more to the post-2015 sustainable development agenda: disaster risk reduction; sustainable development; and the global trend towards urbanization. You, as a global professional community, must decide and determine if and how this will happen”

*Wu Hongbo  
Under-Secretary-General for  
Economic and Social Affairs*



United Nations Initiative on  
Global Geospatial Information Management

Positioning geospatial information to address global challenges

[ggim.un.org](http://ggim.un.org)

# A/RES/69/266 - A GLOBAL GEODETIC REFERENCE FRAME

[HTTP://WWW.UN.ORG/EN/GA/SEARCH/VIEW\\_DOC.ASP?SYMBOL=A/RES/69/266](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/69/266)

1. ***Notes with appreciation*** the establishment of a working group by the Committee of Experts on Global Geospatial Information Management to develop a global geodetic road map ....
2. ***Encourages*** Member States and relevant international organizations to enhance global cooperation in providing technical assistance, especially for capacity development in geodesy for developing countries...
3. ***Urges*** Member States to implement open sharing of geodetic data, standards and conventions, on a voluntary basis, to contribute to the global reference frame...
4. ***Invites*** Member States to commit to improving and maintaining appropriate national geodetic infrastructure...
5. ***Also invites*** Member States to engage in multilateral cooperation that addresses infrastructure gaps and duplications...
6. ***Further invites*** Member States to develop outreach programmes that make the global geodetic reference frame more visible and understandable to society...

# CHALLENGES – LESOTHO EXAMPLE

## PREVAILING SITUATION

1. **Geodetic network est 1950s by Directorate of Overseas Surveys (DOS)**
  - Approx 32 primary (BP), 65 secondary (BS) and 81 tertiary (BT) pillars built
  - Precise bench marks (BMs) were constructed. These BMs were built on rock for stability and buried for protection



# CHALLENGES – LESOTHO EXAMPLE

## PREVAILING SITUATION

2. **Lesotho Highland Water Project network - Main aim was to provide control to cover the project's sites for the different engineering activities. The control tied to the 1992 adjusted South African control.**
  - Mostly new points were placed at suitable locations, but some DOS points were used where possible.
  - Altogether, 23 new points were built, 8 being added at a later stage.
  - Pillars were built to the same standards as the DOS pillars.



## PREVAILING SITUATION

### 3. GPS points

- Built between 1991 and 1993
- 34 new points, all at ground level
- 27 existing DOS pillars were incorporated into the adjustment
- Are all easily accessible (*near roads, airstrips*)
- Are spaced at approximately 30km
- Cover the country fairly well



# EXAMPLES OF CHALLENGES

- The 3 sets of coordinates are not in sympathy and need to be readjusted so that the country has one homogeneous network.
- There is need for constant maintenance.
- The mostly used set is that of DOS, as economy and technology is not very sound.
- Need for active stations for support developments.
- A case for concerted efforts for actualization of African Geodetic Reference Frame (**AFREF**)

## PROFESSIONAL LEADERSHIP NOT OVERBEARING

- **Innovative approaches to respond to land challenges – “fit for purpose” approaches**
- **Inclusive consultations with stakeholders to agree on solutions**
- **Improved communication to enhance policy decisions – technocratic language discourage engagement.**
- **Establish partnerships and networks to learn from other successes.**
- **Be able to accommodate change.**

***Explain to political leaders the rationale  
for prioritising investment in  
Geodetic Network***

***Thank you for your attention.***