Introduction

- The implementation of sustainable development is not only an environmental problem but also an economic and social development.
- Successful achievement of sustainable development requires a legal and institutional framework, organisations to coordinate all land and property-related activities.
- FIG included sustainable development as a topic in its long-term professional strategy.
- UN organisations also find it important to support developing world - African, Asian, Latin American countries - to accelerate economic growth and social development.

Common Interest

- UN organisations support FIG activities, establishment of working relations.
- FIG/UN joint events, workshops, publications on land related activities, land administration matters.
- FIG commission 7-UN/FAO, HABITAT joint workshop, Bathurst, Australia.
- Bathurst Declaration: "Land administration infrastructure for sustainable development."
- The process of sustainable development requires sustainable infrastructure, sustainable, operational land administration system.

Reasons of Increasing Importance of Land Administration

The world has been continuously changing and the speed of changes have been accelerated in recent decades, not only in the technical field but also in the economy and the world society as well.

New challenges to be solved, implemented worldwide

Changes and facts:
- Globalisation
- Revolution in IT
- Increasing gap between developed and developing countries
- Growing population in the developing world
- Rural population moves to urban area
- Lack of security in land tenure in many developing countries

(Bathurst Declaration)

New Challenges Related to Land

- Sustainable development
- Developing active land market in transition and developing countries
- Rapid urbanisation in Africa, Asia, Latin America
- Creating secure land tenure in developing countries
- Supplying sufficient food and drinking water for the world population
- Solving post-conflict problems
Changes extremely influence the land and property related activities
States responsibility to develop legal and institutional framework
Recognition the importance of solving land related problems and achievement of sustainable development
Well functioning land and property related activities require well operational, sustainable land administration

The Role and Function of Land Administration

- Land administration is the “process of determining, recording and disseminating information about ownership, value and use of land when implementing land management policies”
  (Ref. UN/ECE Land administration Guidelines)
- "Ownership" broad concept of land tenure- relationship between people and land- within various jurisdictions (statutory, customary, informal, etc.)
- "Land" includes construction at subsurface level, ground level and above land level (e.g. Buildings)
- Land management is the implementation of land policy by a wide range of land policy instruments (e.g. Land reform, land consolidation, land markets, land taxation, marine resource management, etc.)
  (Ref. FIG commission 7. Work plan 2002-2006 Paul van der Molen chairman)

The Definition of Land Administration Makes Clear

- "The land administration activity is not an end in itself, but that facilitates the implementation of land management policies”
  (ref. Dorine A. J. Burmanje - Paul van der Molen "Spatial data infrastructure and land administration in Europe")
- "Land administration serves various functions in a society. Documents like agenda 21, HABITAT etc. Relate the land issue very much to poverty reduction, sustainable housing, sustainable agriculture and the strengthening the role of vulnerable groups in society like women, farmers, indigenous groups. A land administration system not a purpose in itself. They are part of such a broader land policy"
  (ref. D.O.J. Burmanje - Paul van der Molen “Spatial data infrastructure and land administration in Europe”)

Land policy shows the way how governments want to deal with land matters in sustainable development
"Land policy consist of the whole complex of socio-economic and legal prescriptions that dictate how the land and benefits from the land are to be dedicated. That of course depends on the culture, history and attitude of people”
(Ref. GTZ 1998 guidelines)

Understandable, the development of operational land administration is an increasing importance and interest world wide
Creation of legal and institutional framework concerning land and property related activities is the most important steps towards the operational land administration but the existence of legal and institutional framework itself doesn’t guarantee the sustainable operation of land administration
There are many other conditions for the development and operation of sustainable land administration

1. legal and institutional framework (cadastre, land registry, valuation, taxation, etc.)
2. registration of all land and real estate properties
3. cadastral maps any kind
4. continuous updating of legal and cadastral mapping data
5. decentralised institutional network
6. sufficient number of educated staff
7. political decision to support land administration activities
8. innovative technical development, IT
9. sufficient financial sources for operating land administration activities
10. public awareness and acceptance of land administration activities
11. exercise of rights and performance of obligations by citizens

Sustainable Land Administration

1. Legal and institutional framework
   - Fundamental which is one of the guarantees of the sustainability of land administration system
   - The legal framework “rules of the game” represents the land policy of the state
   - Must be accepted by the entire society
   - Equal rights for all to access land and property, access to information
   - Individual rights - public law
   - In many countries - besides written law - customary, informal laws are parallel existing
• **Basic laws**
  - Land law, land registry law, survey and mapping law, building law, land consolidation law, etc.
  - These rules define how governments’ land policy should be implemented
  - Institutional system equally essential to achieve land policy and operate the system
  - The well operational institutions should guarantee the sustainability of land administration system

• **Fundamental institutions**
  - Cadastre, land registry, valuation institution, financial institutions (land and property taxation), town and land use planning

2. **Registration of all land and real estate properties**
  - The full registration of land and real estate properties is fundamental to develop sustainable land administration
  - Inventory of state assets
  - The registration means the description, registration of owners and rights related to land and properties
  - Mortgage of properties - basic demand for investors

3. **Cadastral maps any kind**
  - Cadastral surveying and mapping creates the descriptive data, define boundaries, identity numbers, surveying buildings, objects
  - Many technologies of cadastral mapping
    - accurate, field survey-expensive, time consuming
    - simply, low cost mapping
  - producing cadastral maps any kind, covering the whole country

4. **Continuous updating of legal and cadastral mapping data**
  - Continuous maintenance of legal and mapping data is a critical question
  - Requires well operational decentralised institutions, sufficient number of educated staff
  - Full registration, cadastral mapping is meaningless without continuous updating
  - Uptodate information, data are extremely important in cadastre and land registry but in other institutions as well

5. **Decentralised institutional network**
  - The existence of decentralised land administration institutions, especially cadastre, land registry offices are essential in many countries
  - The state must guarantee equal possibility for all to access to institutions, services, concerning land and property related activities
  - This question is crucial in less developed countries due to lack or poor quality of telecommunication network, less educated population

6. **Sufficient number of educated staff**
  - To guarantee the continuous updating of land and real estate related data, operating land administration institutions, sufficient number of educated staff is required
  - Special education and knowledge
  - Besides school, university educations, special courses, practical experience is essential
  - Operation of IT systems also requires educated staff
7. Political recognition and decision to support land administration activities
   - The importance of fully operational, sustainable land administration - as a fundamental infrastructure for the market economy and sustainable development - has been recognised in developed countries since years
   - Recognition in less developed countries is increasing – tool for developing the market economy, supporting economic growth
   - Investors require legal security, sustainable land administration
   - Political decision makers responsibility

8. Development of IT and other innovative technology
   - Revolution in IT is one of the biggest changes in recent years worldwide
   - Land administration activities have been very much affected by the IT development
   - Computerisation of databases, cadastral maps
   - Integration of different databases
   - IT development and operation is very expensive task, requires continuous, long term financial sources
   - In less developed countries low cost, innovative solutions are needed due to poor financial sources

9. Sufficient financial sources for operating land administration systems
   - To develop, operate land administration institutions sustainably, long term financial support and investments are required
   - Governments responsibility and interest of the entire society
   - Good quality and reasonable price of land administration services should generate income contributing for financial support

10. Public awareness and acceptance of the importance of land administration activities
    - The political will and support by decision makers to develop the legal and institutional framework is not enough to operate land administration systems
    - Public awareness and acceptance of law and institutions are equally important
    - The sustainability of land administration institutions also depends on citizens behavior
    - The citizens recognition and acceptance of benefits, using land administration services can increase financial sources
    - The public awareness should also result obligation by citizens to report changes in rights and data of land and properties to keep database up to date

11. Exercise of rights and performance of obligations by citizens
    - In countries where well operational land administration is existing, is compulsory according to law - to report changes in rights and data of land and properties
    - This obligation helps to keep legal and mapping database up to date
    - The states effort to keep land administration operational is one of the conditions only, but positive behavior and obligation to abide law can contribute to develop and operate sustainable land administration and for the implementation of sustainable development

Issues in the near future
    - There are different tasks in developed and developing countries to be achieved towards the sustainable land administration
    - In the developed countries, the conditions are existing, the task is to keep sustainability for long term.
    - Harmonisation, integration of land related data and geospatial databases
    - In developing countries
      - Develop conditions for sustainable land administration
      - Step by step approach for low cost solutions
      - It is advised to start even in analogue environment and the technical development can be achieved gradually
Thank you for your attention!