

Integrated Land Management for the Society

- A Global Perspective

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Outline of Presentation

Land management is about managing interests in land. In generic terms this is about managing rights, restrictions and responsibilities in land.

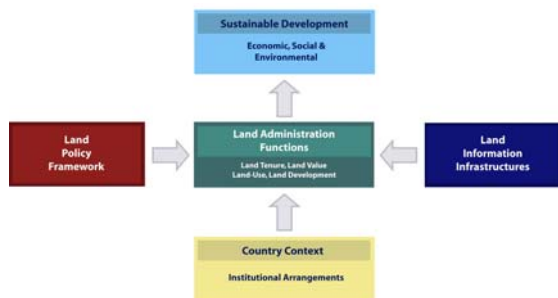
Underpinning Land Management

- Rights – Restrictions – Responsibilities
- Spatially Enabled Government

The Role of FIG

- Facing the Millennium Development Goals
- “Building the Capacity”

Understanding the Land Management Paradigm



Land Management includes all activities associated with the management of land and natural resources that are required to fulfill political objectives and achieve sustainable development.

Lack of an integrated approach

- In many countries there is a tendency to separate land tenure rights from land use rights
- Planning and land use control is not linked with land values and the operation of the land market.
- This may be compounded by poor management procedures that fail to deliver required services.
- This reveals a much deeper problem: the failure to treat land and its resources as a coherent whole.

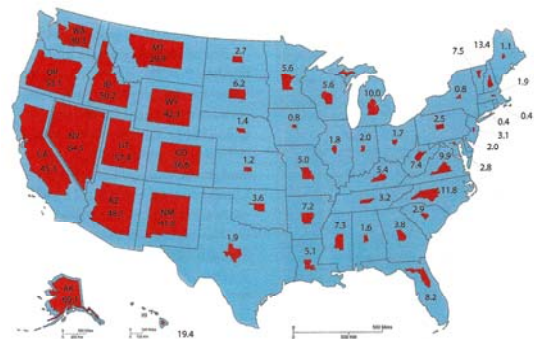
Land Management

Public Lands Managed by the Bureau of Land Management (BLM)

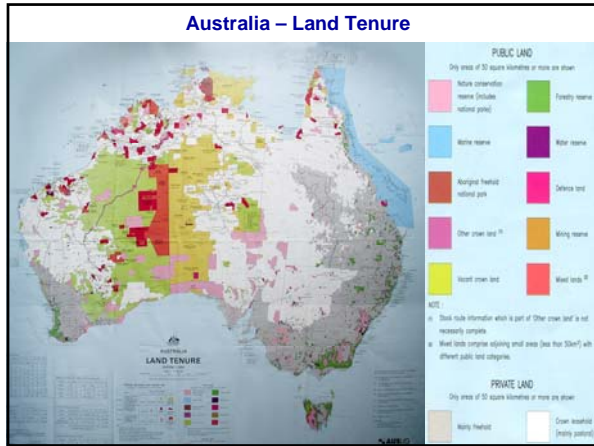


WHO OWNS THE WEST?

Federal Land as a Percentage of Total State Land Area

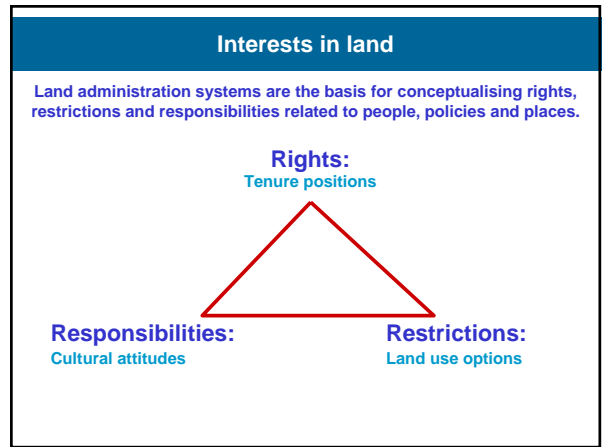


Data source: U.S. General Services Administration, Federal Real Property Profile 2004, excludes trust properties.



Australia

Tenure Type	km ²	%
Private land	4,819,600	62.7
Aboriginal and Torres Strait Islander land	1,094,800	14.3
Public land		
- Nature reserve	524,100	29.6
- Aboriginal freehold	1,800	0.6
- National Park	960,700	54.3
- Vacant crown land	30,600	4.6
- Other crown land	148,200	8.4
- Forestry reserve(b)	11,000	0.6
- Water reserve	18,600	1.1
- Defence Land	5,000	0.3
- Mining reserve	8,900	0.5
- Mixed category lands		
Total public land	1,767,900	23.0
Total	7,682,300	100



- The RRR's**
- Property Rights**
 - Are concerned with ownership and tenure
 - Are normally available in the Land Registry
 - Property Restrictions**
 - Are concerned with controlling use and activities on land
 - Are normally available through planning documents or general land use provisions
 - Property Responsibilities**
 - Relate to a more social, ethical commitment or attitude to environmental sustainability and good husbandry.
 - The human kind to land relationship is dynamic.

The increasing role of property rights

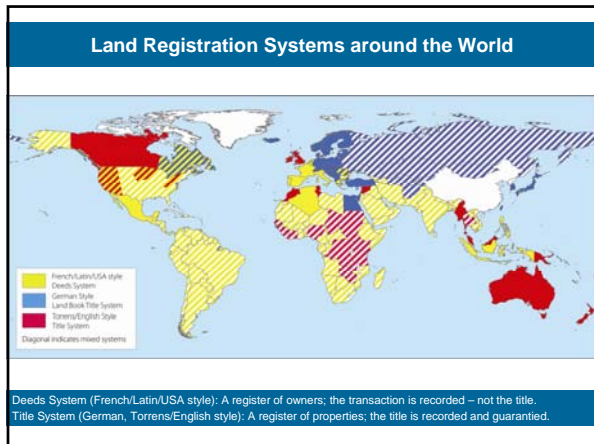
"Civilised living in market Economies is not simply due to greater prosperity but to the order that formalised property rights bring"

Hernando de Soto – 1993

Continuum of rights (GLTN-agenda)

From: illegal or informal rights

To: legal or formal rights



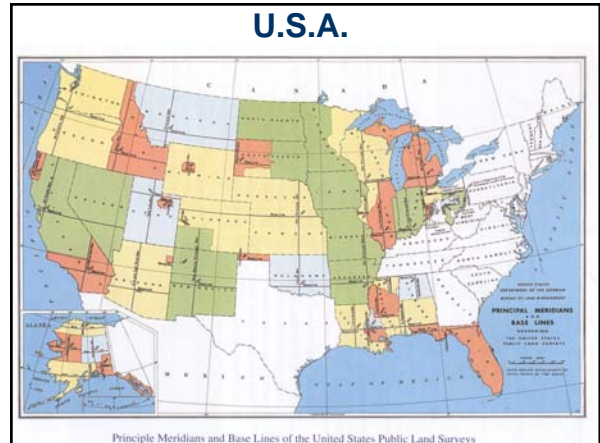
Deeds/Title Registration . . .

System	Deeds system	Titles system
Content	Who owns what	What is owned by whom
Register	A register of owners	A register of properties
Legal effect	Registration of the transaction The title is not guaranteed	Registration of the title Guaranteed by the state
Actors	Notaries/lawyers/registrars	Lawyers/surveyors
Role of the Cadastre	Taxation purposes	Identification and title purposes
Boundaries	Sketch for the deed	Surveyed (fixed) boundaries (general boundaries UK/IRL)

TABLE 2.3. General relationships between land registries and cadastres

Style of system	Land registration	Cadastre
French/Latin/USA style	<ul style="list-style-type: none"> -Deeds system -Registration of the transaction -Titles are not guaranteed -Notaries, registrars, lawyers and insurance companies (USA) hold central positions -Ministry of justice -Interest in the deed is described in a description of metes and bounds and sometimes a sketch, that is not necessarily the same as in the cadastre. 	<ul style="list-style-type: none"> -Land taxation purposes -The spatial reference or map is used for taxation purposes only. It does not necessarily involve surveyors. -Cadastral registration is (normally) a follow-up process after land registration (if at all). -Ministry of finance or a tax authority
German style	<ul style="list-style-type: none"> -Title system. -Land book maintained at local district courts. -Titles are based on the cadastral identification. -Registered titles are guaranteed by the state. -Neither boundaries nor areas are guaranteed. 	<ul style="list-style-type: none"> -Land and property identification. -Fixed boundaries determined by the cadastral surveys carried out by licensed surveyors or government officers. -Cadastral registration is prior to land registration. -Ministry of environment or similar.
Torrens/English style	<ul style="list-style-type: none"> -Title system. -Land records are maintained at the land registration office. -Registered titles are usually guaranteed as to ownership. -Neither boundaries nor areas are guaranteed. 	<ul style="list-style-type: none"> -Property identification is an annex to the title. -Fixed boundaries determined by cadastral surveys carried out by licensed surveyors (Torrens). -The English system uses general boundaries identified in large scale topographic maps. -Cadastral registration is integrated in the land registration process.

Source: Williamson, Eriksen, et al.: Land Administration for Sustainable Development, 2008 (in press).



USA: Linking a legal land description to the GIS Cadastre

LOCATED IN PART BY GOVERNMENT LOT 4, SECTION 9, T8N, R12E.

SURVEYOR'S CERTIFICATE

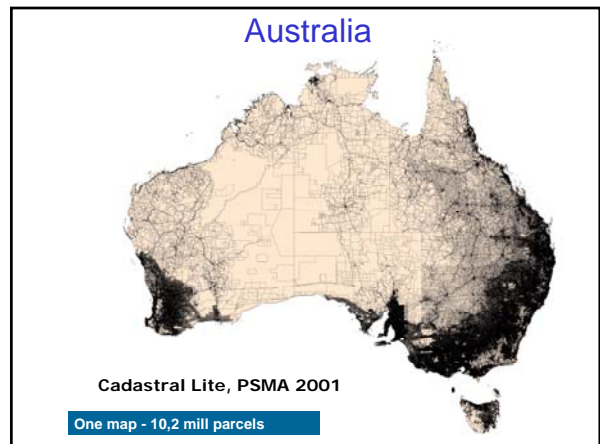
L&L Surveys, Inc. 2010

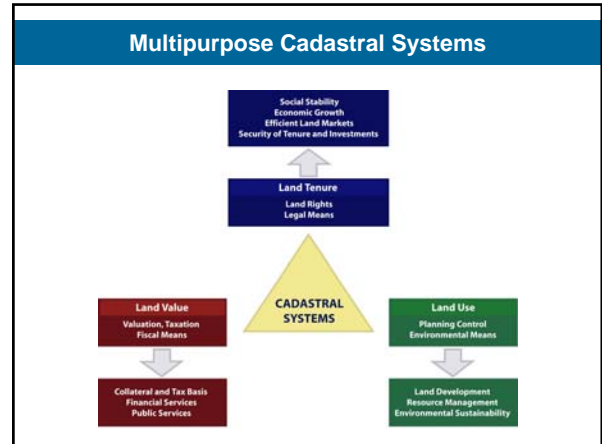
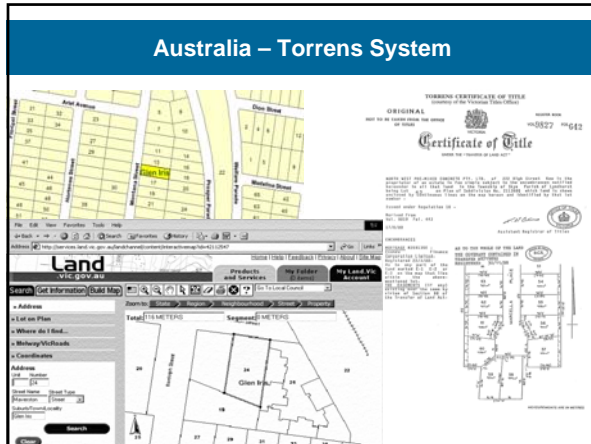
Filed to the Clerk of the County of Tarrant, Texas, on 10/12/2010.

This is to certify that the within and foregoing plat of Survey is a true and correct copy of the original as the same appears on file in the office of the Surveyor.

Surveyor, Tarrant County, Texas

(Meets and bounds description)





Characteristics of traditional Cadastral Systems

CAD. NO.	AREA	WAY	NO. OF PARCELS
8th	826r	ONE	1

The Cadastral register identifies the land parcels by number and area

The Cadastral map identifies the land parcels geographically

CAD. NO.	OWNER	MORTGAGE	BASEMENT
8th	DATE	DATE	DATE
826r	DATE	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

The Land Book secures the legal rights based on the cadastral identification

The cadastral measurements identify the position of the property boundaries

What is a good property system ?

- People in general can participate in the land market; widespread ownership; everybody can make transactions and have access to registration
- The infrastructure supporting transactions must be simple, fast, cheap, reliable, and free of corruption.
- The system provides safety for housing and business, and for capital formation

Only 25-30 countries in the world apply to these criteria.

Comparing Cadastral Systems

Parameters for comparison:

- **Property Definition**
 - Where and how is it defined
 - Legal/economic/physical concept
- **Property Determination**
 - General/fixed boundaries
 - determination process
- **Property Formation**
 - Process, institutions and actors - who does what
 - Role of the surveyors
- **Property Transfer**
 - Process, institutions and actors - who does what
 - legal consequences

A worldwide Comparison of Cadastral Systems

Cadastral Template

A Worldwide Comparison of Cadastral Systems
Cadastral country reports based on a jointly developed PCADP-FIG template.
Established under UN mandate by Resolution 4 of the 16th UNHCC-AP in Chongqing, Japan in July 2003.
UN endorsement for cooperation with UN-ECE WPLA, UN-ECA CODL and PCIDEA.

Data per Country
See country: 21 Dec 2010: 42 countries
as of: as of:

Field Definitions
See country: 4 Jan 2010: 42 countries
Select a Field:

I. Data per Data Fields
See country: 4 Jan 2010: 42 countries
Select a Field:

II. Principles and Statistics
See country: 4 Jan 2010: 42 countries
1:1 Cadastral Principles
2:2 Principles
2:3 Parcels
2:7 Professionals

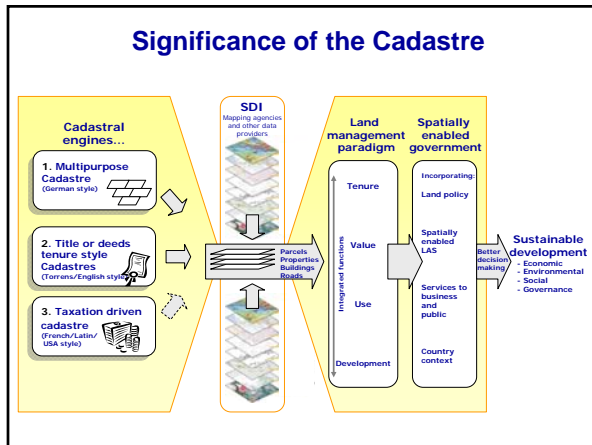
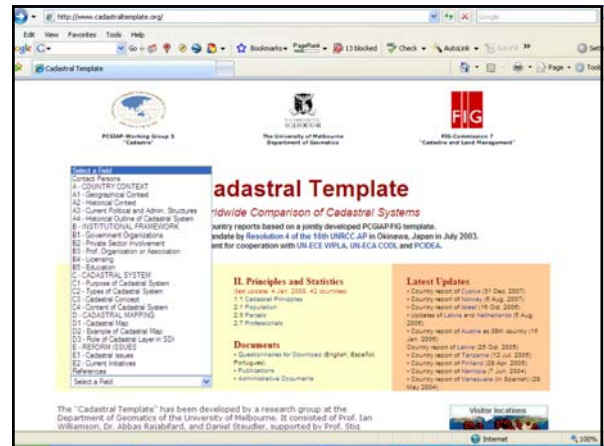
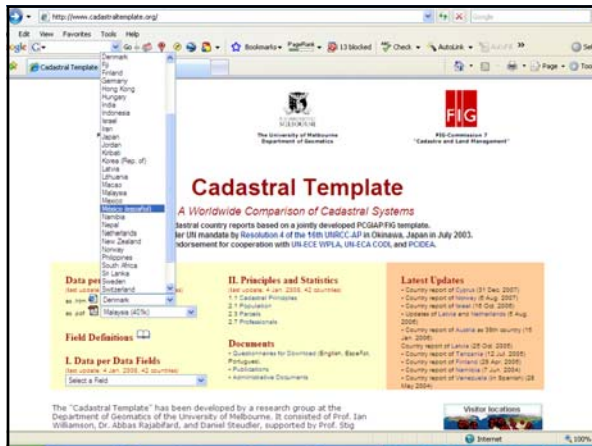
Documents
• Questionnaire for Download (English, Basque, Portuguese, ...)
• Publications
• Administrative Documents

Latest Updates

- Country report of Guinea (17 Dec 2007)
- Country report of Nigeria (8 Aug 2007)
- Country report of Niger (18 Dec 2006)
- Country report of Latvia and Moldavia (8 Aug 2006)
- Country report of Austria as 30th country (19 Jun 2006)
- Country report of Latvia (25 Oct 2005)
- Country report of Tanzania (22 Jul 2005)
- Country report of Finland (28 Apr 2005)
- Country report of Somalia (7 Jun 2004)
- Country report of Tanzania (11 September) (28 May 2004)

The "Cadastral Template" has been developed by a research group at the Department of Geomatics of the University of Melbourne. It consisted of Prof. Jan Willemson, Dr. Abbas Rajabfar, and Daniel Steudler, supported by Prof. Stig Enehaug from Aalborg University, Denmark.


www.cadstraltemplate.org



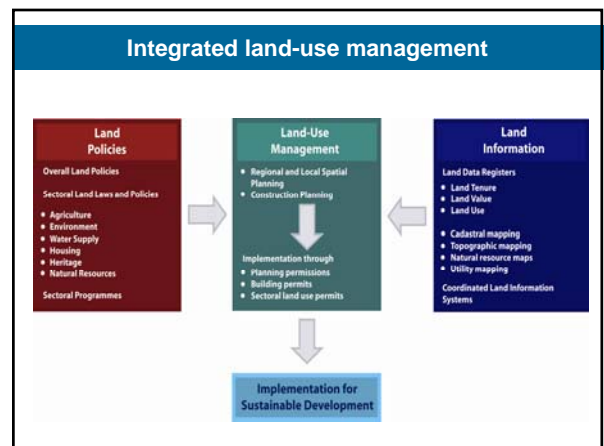
Property Restrictions - two conflicting approaches

- The free market approach** (current debate in the US)
 - Land owners should be obligated to no one and should have complete domain over their land.
 - The role of government to take over, restrict, or even regulate its use should be non-existent or highly limited.
 - Planning restrictions should only be imposed after compensation for lost land development opportunities
- The central planning approach** (European perspective)
 - The role of democratic government include planning and regulating land systematically for public good purposes.
 - A move from every kind of land use being allowed unless it was forbidden to every change of land use is forbidden unless it is permitted and consistent with adopted planning regulations and restrictions.

Three core principles



- Decentralisation of planning responsibilities**
 - Local representative democracy responsible for local needs
 - Combining responsibility for decision making with accountability for economic, social and environmental consequences.
 - Providing monitoring and enforcement procedures
- Comprehensive planning**
 - Combining aims and objectives, land-use structure planning, and land use regulations into one comprehensive planning document covering the total jurisdiction
- Public participation**
 - Providing awareness and understanding of the need for planning regulations in respond to local needs.
 - Legitimising local political decision making



The European Perspective

A joint vision for development of the European territory

A compendium comparing the systems of planning control

Responsibilities: A cultural map of the world

Uncertainty avoidance:
The preference of structured situations over unstructured or flexible ones

Power distance:
The degree of inequality among people accepted by the population

Geert Hofstede (2001). Professor of Organizational Anthropology and International Management (1985-93), Maastricht University, the Netherlands

An Overall Conceptual Approach

Land Policy determines values, objectives and the legal regulatory framework for management of land as the key asset of any society.

Land Management encompasses all activities associated with the management of land and natural resources that are required to achieve sustainable development. These activities include the core land administration functions: land tenure, land value, land use and land development.

The **Land Administration System** provides the infrastructure for implementation of land policies and land management strategies, and underpins the operation of efficient land markets and effective land use management. The cadastre is at the core of any LAS.

The **Cadastre** provides the spatial integrity and unique identification of every land parcel usually through a cadastral map updated by cadastral surveys. The parcel identification provides the link for securing rights in land and controlling the use of land.

The **Land Parcel** is the key object for identification of land rights and administration of restrictions and responsibilities in the use of land. The land parcel simply provides the link between the system and the people.

The role of FIG

What is the role of **FIG** in this regard?

98 FIG Member Associations from 80 Countries

28 affiliates, 34 corporate, 15 correspondents, 80 academic members

Member associations
Affiliates
Corporate members
Correspondents
Academic members

FIG Members

The International Federation of Surveyors Organizational Structure

Annual General Assembly
98 member associations (80 countries)

FIG Office | Council (President and 4 Vice-Presidents) | ACCO (Advisory Committee of Commission Officers)

Com1 Practice, Com2 Education, Com3 Spat. Inf. M, Com4 Hydrography, Com5 Posit. & M, Com6 Eng. Surveys, Com7 Cad. & Land, Com8 Spat. Plan. & Dev, Com9 Valuation, Com10 Quantity Surv.

Chairman, vice-chairs, national delegates, work plan, working groups, seminars etc

www.FIG.net

The Global Agenda



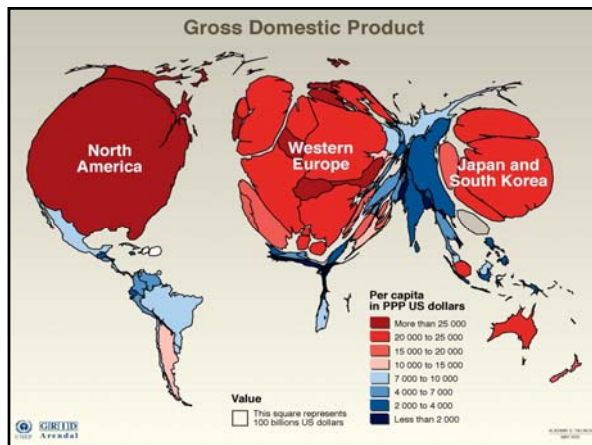
Is strongly committed to the MDGs and the UN-Habitat agenda on the GLTN

The UN Millennium Development Goals

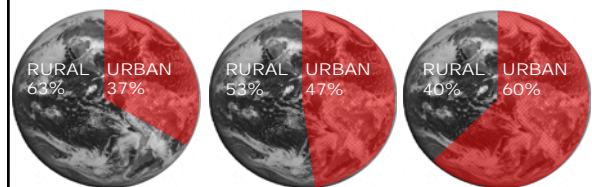
- Goal 1: Eradicate extreme poverty and hunger
- Goal 2: Achieve universal primary education
- Goal 3: Promote gender equality and empower women
- Goal 4: Reduce child mortality
- Goal 5: Improve maternal health
- Goal 6: Combat HIV/AIDS, malaria and other diseases
- Goal 7: Ensure environmental sustainability

Goal 8: Develop a Global Partnership for Development

The framework includes 18 targets and 48 indicators enabling the ongoing monitoring of annual progress



Urban population growth



1970

2000

2030

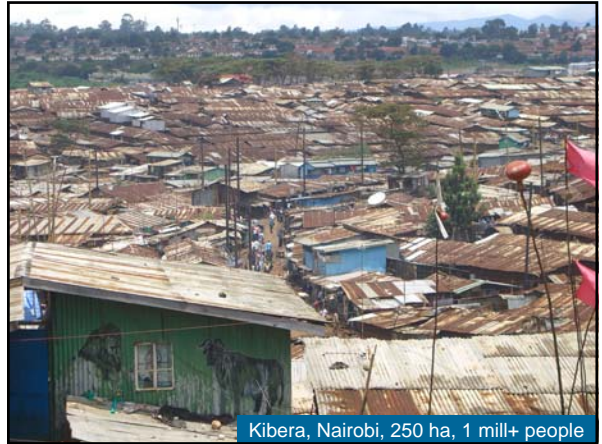
Total world population : 6.5 billion
 Total urban population : 3.3 billion
 Total slum dwellers: 1.1 billion (100 million to be improved by 2015)

Mega cities of the world 2015

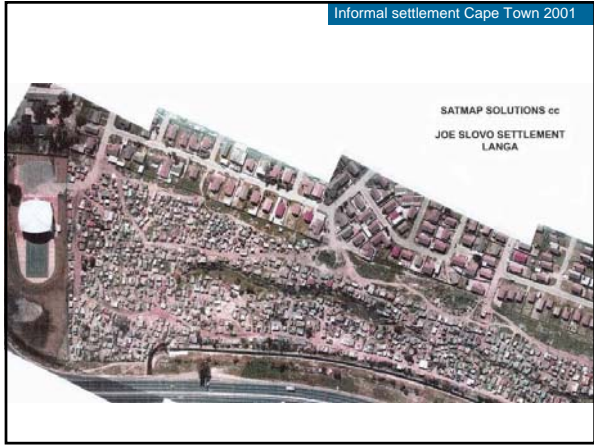




Mexico City



Kibera, Nairobi, 250 ha, 1 mill+ people

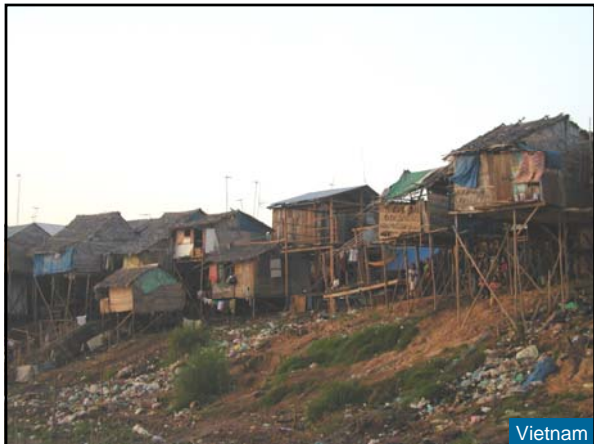


Informal settlement Cape Town 2001

SATMAP SOLUTIONS cc
JOE SLOVO SETTLEMENT
LANGA



Eviction, Cape Town, 2006



Vietnam



North Ghana

It is all about:

People, human rights, engagement and dignity
Politics, land policies and good governance
Places, shelter, land rights, and natural resources
and Power, decentralisation and empowerment



FIG Global Partnership with

- **FAO**, projects on capacity building, good governance, land economics, etc... .
- **UN-HABITAT**, partner in the GLTN network, projects on informal settlement, informal development, gendered land tools, etc....
- **World Bank**, joint conference on Land Governance in support of the MDGs

The role of FIG



“Building the capacity”

The role of the surveying profession

The MDGs is a powerful concept towards development, security and human rights for all.

The surveying profession plays a key role by providing:

- Geographic information in terms of mapping and databases on the natural and built environment
- Secure tenure systems
- Systems for land valuation, land use management and land development
- Systems for transparency and good governance

The Role of FIG

- **Professional Development**
 - Global forum for professional discussions and interactions
 - Conferences, symposia, commission working groups,
- **Institutional Development**
 - Institutional support for educational and professional development at national and international level
- **Global Development**
 - Cooperation with international NGO's such as the UN agencies, World Bank, and sister organisations
 - Joint activities and common policy-making to reduce poverty and enforce sustainable development

FIG publications



WWW.FIG.NET



**Thank you
for your attention**