

UN HABITAT  
UNITED NATIONS  
WORLD URBAN FORUM

Fédération Internationale des Géomètres  
International Federation of Surveyors  
Internationale Vereniging der Vermessingstechnici

FIG  
Elevated Brygge 33-33  
DK-1785, Copenhagen V, Denmark  
Tel: +45 3388 5082; Fax: +45 3388 0252  
url: www.fig.net

**NETWORKING EVENT: LANTMATERIET, SWEDEN**  
"Land Administration and Sustainable Economic Development"

UN HABITAT  
UNITED NATIONS  
WORLD URBAN FORUM

"promote the 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"

(UN-Habitat Resolution GC23-17, 2011)

"Food and nutritional security are the foundations of a decent life, a sound education and the achievement of the Millennium Development Goals"  
UN Secretary-General Ban Ki-moon (2011)

Period	Undernourished Persons	Percentage
2006 – 2008	850 million	13%
2000 – 2002	836 million	14%
1995 – 1997	792 million	14%
1990 – 1992	848 million	16%
1979 – 1981	853 million	21%
1969 – 1971	878 million	26%

Number and percentage of Undernourished Persons (FAO)

One sixth of humanity undernourished (FAO, 2009)

Progress towards Millennium Development Goal 1: Hunger Target 2010

Most of the world's hungry live in developing countries, where they account for 16% of the population. While this figure marks an improvement compared to 2005, it is still well above the target set by the Millennium Development Goals.

Progress achieved (2005 to 2009-10)

- Subsiding towards 100% (on way to meeting the target)
- Progress sufficient to reach MDG1 (Exceeding target period)
- Progress insufficient to reach 100% (falling short period)
- No progress or deterioration
- Not relevant (population of target population 1% or less)
- Missing or insufficient data

World Bank:  
Food costs at record levels again!  
Prices now one per cent higher than previous peak in February 2011  
"threatening the health and well-being of millions"  
Jim Yong Kim (World Bank President, Aug 2012)

Global food prices spiked 10 per cent in July, the World Bank said on Thursday (30<sup>th</sup> August 2012) (EPA)

ACCESS TO LAND, FISHERIES AND FORESTS

TENURE FOOD SECURITY SECURITY

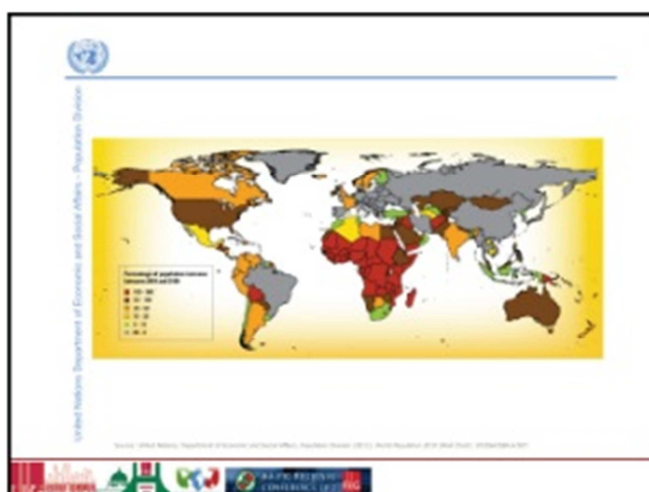
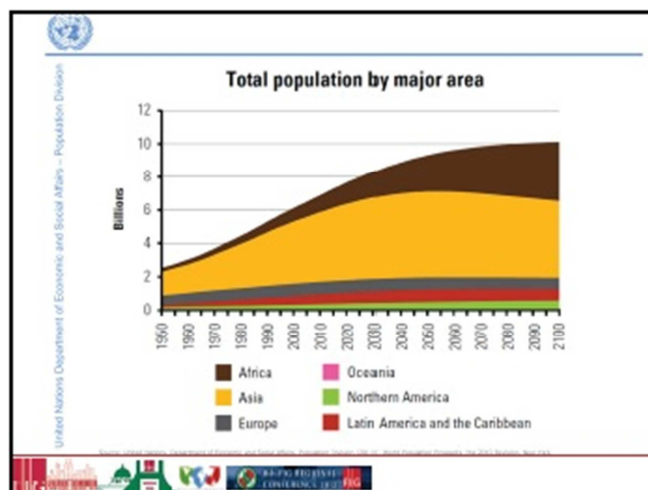
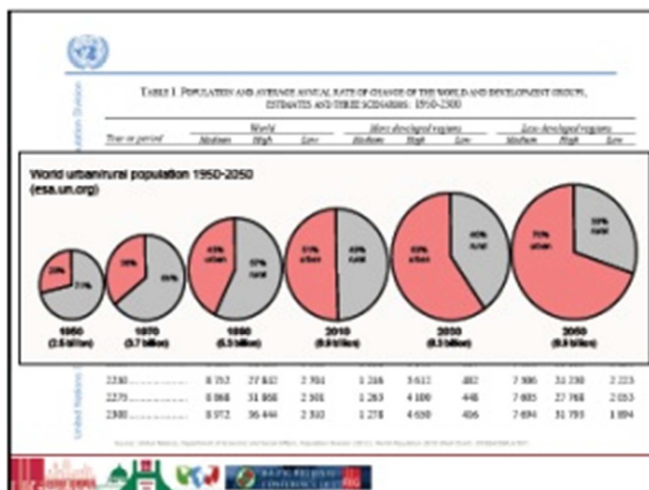


Table 1. POPULATION AND AVERAGE ANNUAL RATE OF CHANGE OF THE WORLD AND DEVELOPMENT GROUPS, ESTIMATES AND THREE SCENARIOS, 1950-2050

Year or period	World			More developed regions			Less developed regions		
	Millions	%/a	%	Millions	%/a	%	Millions	%/a	%
1950	2 529	—	—	813	—	—	1 706	—	—
1975	4 068	—	—	1 047	—	—	3 021	—	—
2000	6 073	6 973	4 878	1 394	1 154	1 194	4 677	4 877	4 877
2025	7 853	8 365	7 334	1 241	1 282	1 199	6 610	7 082	6 135
2050	8 519	10 435	7 439	1 220	1 370	1 084	7 299	9 263	6 353
2075	9 223	12 494	4 461	1 253	1 467	904	8 048	11 027	5 494
2100	9 084	14 818	5 491	1 331	1 651	796	7 753	12 347	4 704
2125	8 124	15 294	4 338	1 217	1 883	679	7 897	13 416	3 877
2150	8 484	16 722	3 921	1 261	2 122	635	7 223	14 576	3 288
2175	8 454	18 496	3 481	1 285	2 454	585	7 169	16 242	2 809
2200	8 489	21 236	3 165	1 287	2 795	554	7 201	18 441	2 412
2225	8 423	24 901	2 893	1 258	3 179	517	7 165	21 127	2 085
2250	8 353	27 832	2 704	1 246	3 612	482	7 106	23 230	2 023
2275	8 288	31 958	2 501	1 243	4 100	448	7 045	25 768	2 053
2300	8 172	36 444	2 302	1 278	4 620	406	7 894	31 793	1 894

United Nations Department of Economic and Social Affairs - Population Division



	1950	1975	2007	2025	2050
World Urban Population (million)	737	1,518	3,254	4,384	6,396
Percentage	29.1%	37.3%	48.4%	57.2%	69.6%
More Developed Region (million)	427	702	916	995	1,071
Less Developed Region (million)	310	817	2,338	3,390	5,327

Close to 1 billion people, or 32 per cent of the world's current urban population, live in slums in inequitable and life-threatening conditions, and are directly affected by both environmental disasters and social crises, whose frequency and impacts have increased significantly during the last few decades. (UN-Habitat, 2006)

United Nations Department of Economic and Social Affairs - Population Division

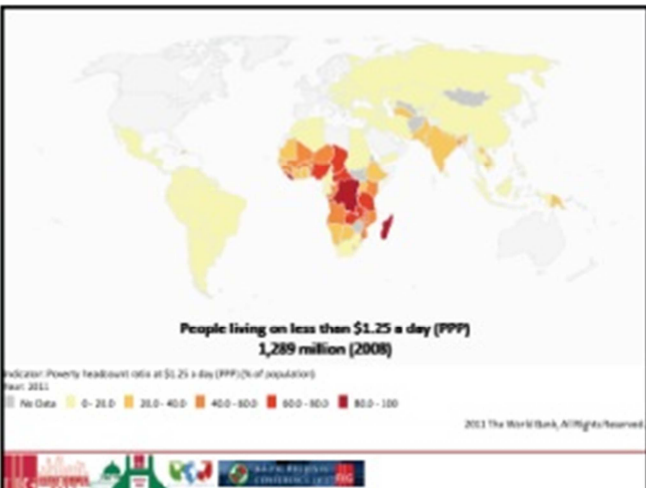


UN HABITAT  
 WORLD URBAN FORUM

**Land Governance for Rapid Urbanization**

"Managing the rapid expansion of cities will be a key challenge of the 21<sup>st</sup> century. Providing affordable and secure land and shelter for expanding populations is crucial to make this urban development sustainable"

(Clarice Augustus & Erik Sorkin, UN-Habitat)



UN HABITAT  
 WORLD URBAN FORUM

**Land Governance for Rapid Urbanization**

"Managing the rapid expansion of cities will be a key challenge of the 21<sup>st</sup> century. Providing affordable and secure land and shelter for expanding populations is crucial to make this urban development sustainable"

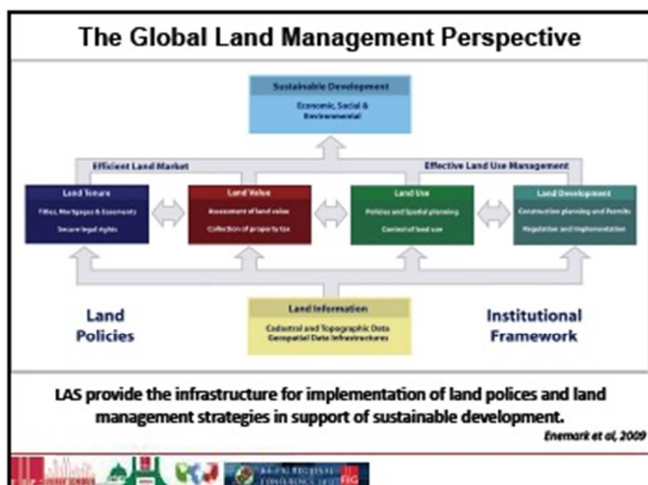
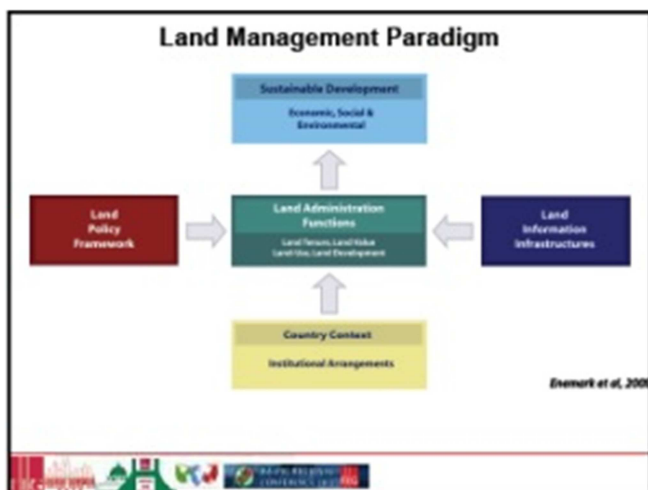
(Clarice Augustus & Erik Sorkin, UN-Habitat)

**ACCESS TO LAND, FISHERIES AND FORESTS**

TENURE → FOOD

SECURITY ← SECURITY

Author: M. K. ... / 2012



UN HABITAT  
UNITED NATIONS  
WORLD URBAN FORUM




*"As new discoveries are made, new truths discovered, and manners and opinions change with the change of circumstances, institutions must advance also to keep pace with the times"*

(Thomas Jefferson)



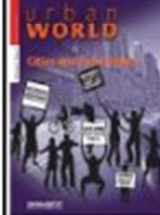


UN HABITAT  
UNITED NATIONS  
WORLD URBAN FORUM



**URBAN WORLD**  
Global Urban Observatory

*"Land is a scarce resource involving a wide range of rights and responsibilities. When poorly managed, it can become contentious often leading to disputes, conflict, degradation and other problems, all of them drivers of slum development and poverty in urban areas."*

(UN-Habitat)

WELCOME BY THE LIFE OPERATIONS DIVISION  
16-19 SEP 2011

UN HABITAT



Perceived tenure approaches, Occupancy, Adverse possession, Leases

Informal land rights, Customary, Anti evictions, Group tenure, Registered households, Formal land rights

Global Land Tool Network, UN-HABITAT (2010)

The Social Tenure Domain Model  
A Pro-Poor Land Tool  
FIG Publication No. 62



UN HABITAT  
UNITED NATIONS  
WORLD URBAN FORUM

Perceived tenure approaches, Occupancy, Adverse possession, Leases

Informal land rights, Customary, Anti evictions, Group tenure, Registered households, Formal land rights


Global Land Tool Network, UN-HABITAT (2010)

Least Rights, Least Segmented, Least Accurate

Continuum of Approaches, Continuum of Technology, Continuum of Measurement

Slow Rights, Slow Segmented, Slow Accurate, Land Value & Taxation, Land Development, Property & Land Market

The Social Tenure Domain Model  
A Pro-Poor Land Tool  
FIG Publication No. 62



VOLUNTARY GUIDELINES ON THE  
**Responsible Governance of Tenure**  
OF LAND, FISHERIES AND FORESTS IN  
THE CONTEXT OF NATIONAL FOOD SECURITY

Endorsed on 11<sup>th</sup> May 2012 by the United Nations Committee on World Food Security

Governance of Tenure

"We now have a shared vision. It's a starting point that will help improve the often dire situation of the hungry and poor"

Jose Graziano da Silva  
(FAO Director General)




GGIM has a vision to migrate to a paradigm of managing all information spatially

Spatially enabled Government and Societies, recognizing that all activities and events have a geographical and temporal context, make decisions and organize their affairs through the effective and efficient use of spatial data, information and services.

UNRCC-PCGAP Kuala Lumpur Declaration on Spatially Enabled Government and Society, 2012



**FIG Publication on  
«Spatially Enabled Society»**  
(FIG Publication No. 58, Editors: Steudler and Rajabifard)

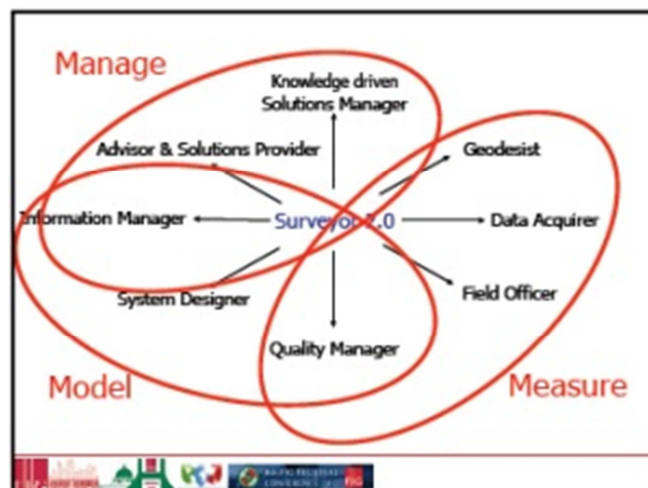
The image shows the cover of the FIG Publication No. 58, 'Spatially Enabled Society', edited by Steudler and Rajabifard. The cover features a photograph of a cityscape and the FIG logo. The title 'Spatially Enabled Society' is prominently displayed. Below the cover, there is a list of contributing organizations and a table of contents.

*"30% of all decisions made by humans have a spatial element"*  
(Abarbaki, G, 1992)

**Spatial enablement**, that is the ability to add location to almost all existing information, unlocks the wealth of existing knowledge about social, economic and environmental matters, and can play a vital role in understanding and addressing the many challenges that we face in an increasingly complex and interconnected world.

**Spatial enablement**, by definition, requires information to be collected, updated, analysed, represented, and communicated, together with information on ownership and custodianship, in a consistent manner to underpin effective delivery systems, good governance, public safety and security towards the well being of societies, the environment and economy.

UNRCC-PCDAP Kuala Lumpur Declaration on Spatially Enabled Government and Society, 2012



This will require changes in the institutional, legislative and professional domains to allow this paradigm to be successfully and quickly implemented.

**In addition, this will require embracing Open Standards; interoperability (systems, institutional and legislative); culture of collaboration and sharing; avoiding duplication (map once – use multiple times); encourage the incorporation of volunteered information; develop enabling platforms – by locating, connecting and delivering information from different scales, purposes and origins.**

This diagram illustrates the flow of information from data to knowledge and finally to informed and sustainable decisions and actions. It is overlaid on a background image of a cityscape and a map. The layers are: Data (innermost), Information, Knowledge, and Informed & Sustainable Decisions & Actions (outermost). At the bottom, there are three categories: Measure, Model, and Manage.



8th FIG REGIONAL  
CONFERENCE 2012  
"Surveying towards Sustainable Development"  
Montevideo, Uruguay, 26<sup>th</sup> – 29<sup>th</sup> November 2012  
[www.fig.net/uruguay](http://www.fig.net/uruguay)



10th FIG REGIONAL  
CONFERENCE 2013  
"Environment for Sustainability"  
Abuja, Nigeria, 6<sup>th</sup> – 10<sup>th</sup> May 2013  
[www.fig.net/fig2013](http://www.fig.net/fig2013)



11th FIG REGIONAL  
CONFERENCE 2014  
"Engaging the Challenge: Enhancing the Relevance"  
Kuala Lumpur, Malaysia, 16<sup>th</sup> – 21<sup>st</sup> June 2014  
[www.fig.net/fig2014](http://www.fig.net/fig2014)



*"promote the security of tenure for all segments of society by recognizing and respecting a plurality of tenure system, identifying and adopting, as appropriate to particular situations, intermediate forms of tenure arrangements, adopting alternative forms of land administration and land records"*

(UN-Habitat Resolution UG23-17, 2011)

