

Ensuring the Rapid Response to Change

Ensuring the Surveyor of Tomorrow

FIG KICK-OFF EVENT -- JANUARY 24, 2015

GAVIN ADLINGTON - LEAD LAND ADMINISTRATION SPECIALIST, THE WORLD BANK

TOPIC:

PART 1 : CHANGES AT THE WORLD BANK

PART 2 : CADASTRAL SURVEY IN THE 21ST CENTURY AND WHY THE 19TH CENTURY MATTERS



The World Bank Group



	International Bank for Reconstruction and Development (IBRD)	1944
	International Development Association (IDA)	1960

	International Finance Corporation	1956
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	International Centre for Settlement of Investment Disputes	1966
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	Multilateral Investment Guarantee Agency	1988
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Over 10,000 employees

Over 5,000 consultants

120 country offices

The Bank's twin goals

Ending Poverty & Boosting Shared Prosperity

Part of the United Nations (UN) System

How The World Bank is organized

- **Six Regional VPs**
(AFR, EAP, ECA, LCR, MENA, SAR)

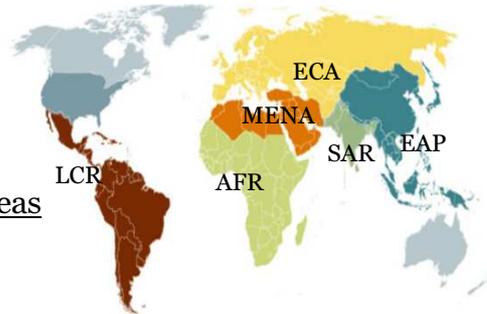
- Country Management Units
with Country Director

- **14 Global Practices &
5 Cross Cutting Solution Areas**

- Technical content of projects
- Several units led by Practice
Managers

- **Corporate Departments**

Office of the Chief Economist:
Research, Development Data
ICT Department (GIS expertise)



PART 1: Changes at the World Bank

From July 1, 2014 the Bank teams dealing with land issues have become a global unit – previously we were regionally based.

- Land Administration was too small an activity to have its own unit within a region when it was regionally based.
- Some regions had a strong portfolio and several specialists, others very limited.
- Regions with small capacity could not respond to client requests.
- As technology changed, individuals became more specialised and very useful experience was gained in one region that could be shared with another. It became clear that key people need to be more available to all regions.

Who and Where we are




New Hires

WASHINGTON, DC

- Jorge Muñoz
- Gavin Wilkinson
- Kathy Bell
- Lise Bouquet
- Camille Bourgaignon
- Emily Swartzley
- Mary Libbeth Gonzalez
- Kathrine Kohn
- Estroque Pantoja
- Caroline Flancon
- Victoria Stanley
- Mica Petteri Terhenen
- Jonghyun Yoon
- Heather Huckstep
- Leigh Hammill
- Aamchal Anand
- Paul Gardner de Beville
- Stamatia Kotsouza
- Andrea Palmer

MONTPELLIER (FR)

- Walter Jankowski
- Stefan Fehseberg

PHNOM PENH (KH)

- Munkhun King

PRETORIA (SA)

- Anna Corsi

HANOI (VN)

- Young The Nguyen

A truly global unit



Global engagements

Partnerships








Systematic review of WB experience (under preparation)



Country Engagements in ALL regions

Investment projects




Analytical work



Policy Advice & Technical Assistance



Reimbursable Advisory Services



A truly global unit

Cross-sector engagements

Social & Urban



Agriculture



Environment



Governance

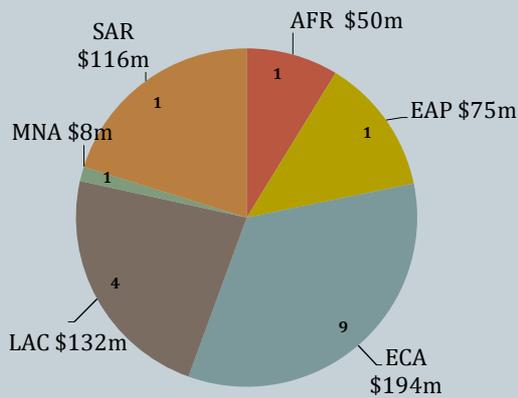


Trade and Competitiveness

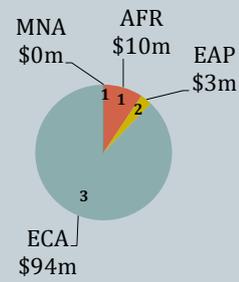
Finance and real estate markets

Local Government finances

Stand-alone Land Projects for Investment



Active
 \$575m; 17 projects



Pipeline
 \$147m; 8 projects

Other work involves



- Land component of other projects: 30 projects with US\$250-300 million for the land components
- Approximately 60 Research and analysis works
- LGAF (Land Governance Assessment Frameworks) underway or due to start in 19 countries
- Reimbursable Advisory Services in 3 countries.
- Our Research and Development Unit is also working in 20 countries.

Projects and AAA work





Analytical Work

GLOBAL	<ul style="list-style-type: none"> Bank's experience Indicators Governance Framework Best Practices Training Tools
COUNTRY	<p>Examples:</p> <ul style="list-style-type: none"> Land and the investment climate – Serbia Land Administration Methodologies in LAC Land and links to Mining in Peru
THEMATIC	<ul style="list-style-type: none"> Land & Gender in Balkans Valuation & Taxation in ECA Forest Tenure Land Markets Tribal issues in India

WORLD BANK GROUP
Global Access, Shared Growth

What does a typical land project do? It assists client countries with...



Policies, law & regulations



Institutional development – including training and IT

from



to



Geodesy, Surveying
and Mapping



Field-level verifications,
Inclusion and Awareness



Emerging issues

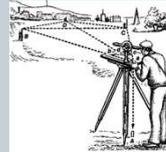


- National/spatial data infrastructure
- Rural to urban land conversion
- Property Valuation & taxation
- Municipal financing
- Address registration
- Mapping physical infrastructure
- Urban planning
- Management of state (or municipal) owned lands and assets
- Use of geospatial information for Disaster Risk Management
- Land tenure clarification for agri-investments
- Climate change and carbon rights
- Integrated landscape approaches to territorial development

PART 2 : Cadastral Survey in the 21st Century And Why the 19th Century matters

- Historically the way of defining property boundaries has changed from:

- Descriptions in deeds only – ‘metes and bounds’, etc.
- Simple surveys using compass, rods, chains, plane table, etc.



- The use of more precise surveying using control networks, theodolite and tape



PART 2 : Cadastral Survey in the 21st Century And Why the 20th Century matters

- Photogrammetric methods



- The introduction of EDM (electronic distance measurement)
- The total station
- GPS



PART 2 : Cadastral Survey in the 21st Century

- High resolution satellite imagery



- Drones, LIDAR,



- Big Data, Big Firms and Crowd Sourcing



Use of the
Cloud



3D/4D
visualization



The role of the cadastral surveyor in the 21st century

- **The Big Advantage and the Big Problem**
 - The Public are now used to using maps and images on-line
 - The public now understand coordinates
 - Other professions use GIS regularly
 - Anyone can measure accurately!!



Some Dangers

- A few examples
 - Must understand past technologies and accuracies: some examples where things can go wrong.
 - What are you sitting on?
 - The lost chain
 - Networks and coordinate systems
 - Flood prediction maps
- Interconnection with other professions – e-government initiatives and multi-functional centres.
- Constantly up-to-date.



The Challenge For Us

- Continue to teach young surveyors about the history of the profession and how we got to this stage.
 - Understand the history of geodetic networks and cadastral surveying methods
 - Understand Errors and how they occur
- Understand the Business of Others and their Geospatial Needs
- Communicate and Get Involved – e-government and multi-service centers.



