



World Bank Group
Europe and Central Asia (ECA) Division



SDI IN SUPPORT OF CAPACITY BUILDING

Experiences in the ECA Region

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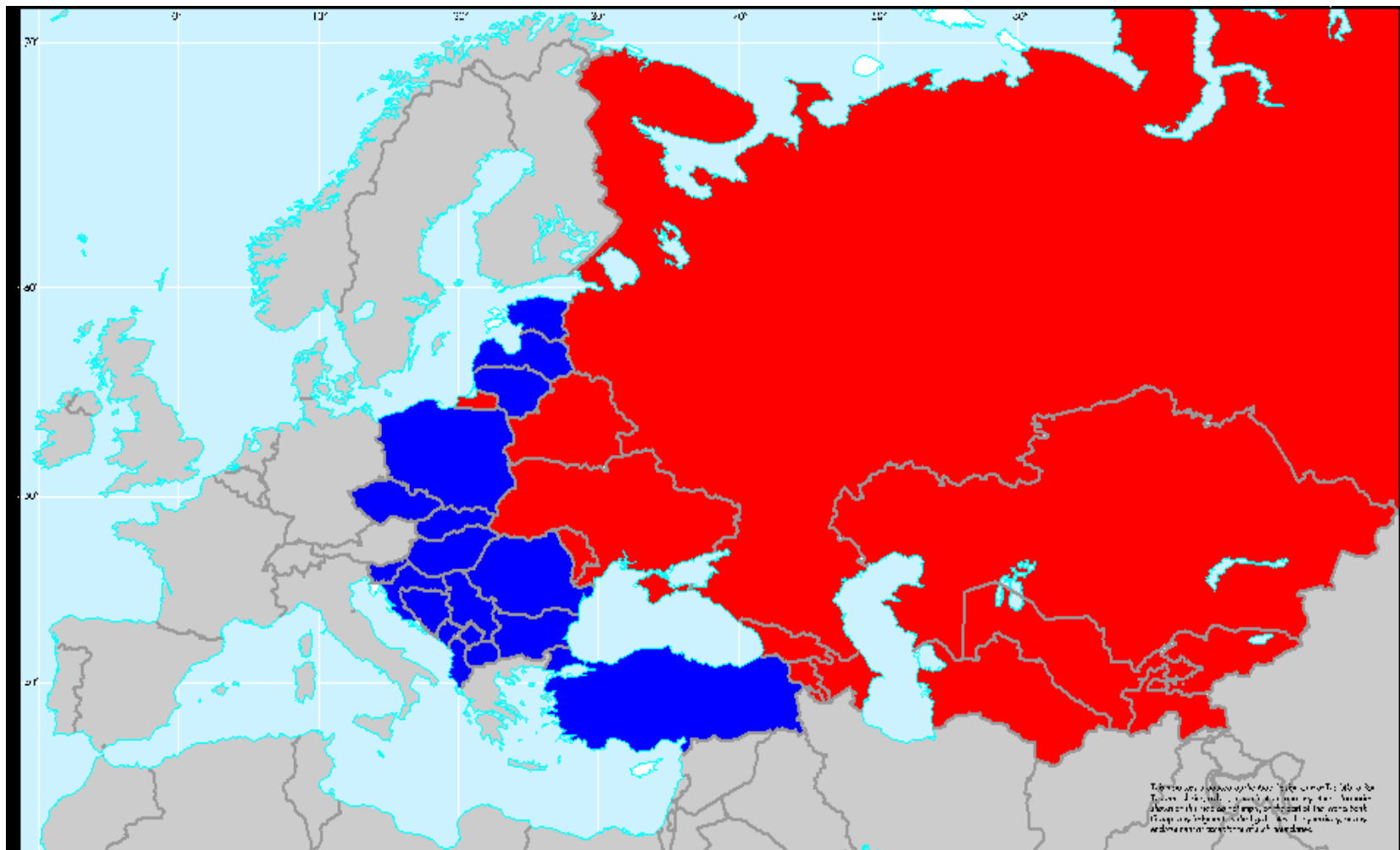
INSPIRE 2010 Conference, Krakow, Poland
June 23 -25, 2010



The WB ECA Land Team



The World Bank ECA Region





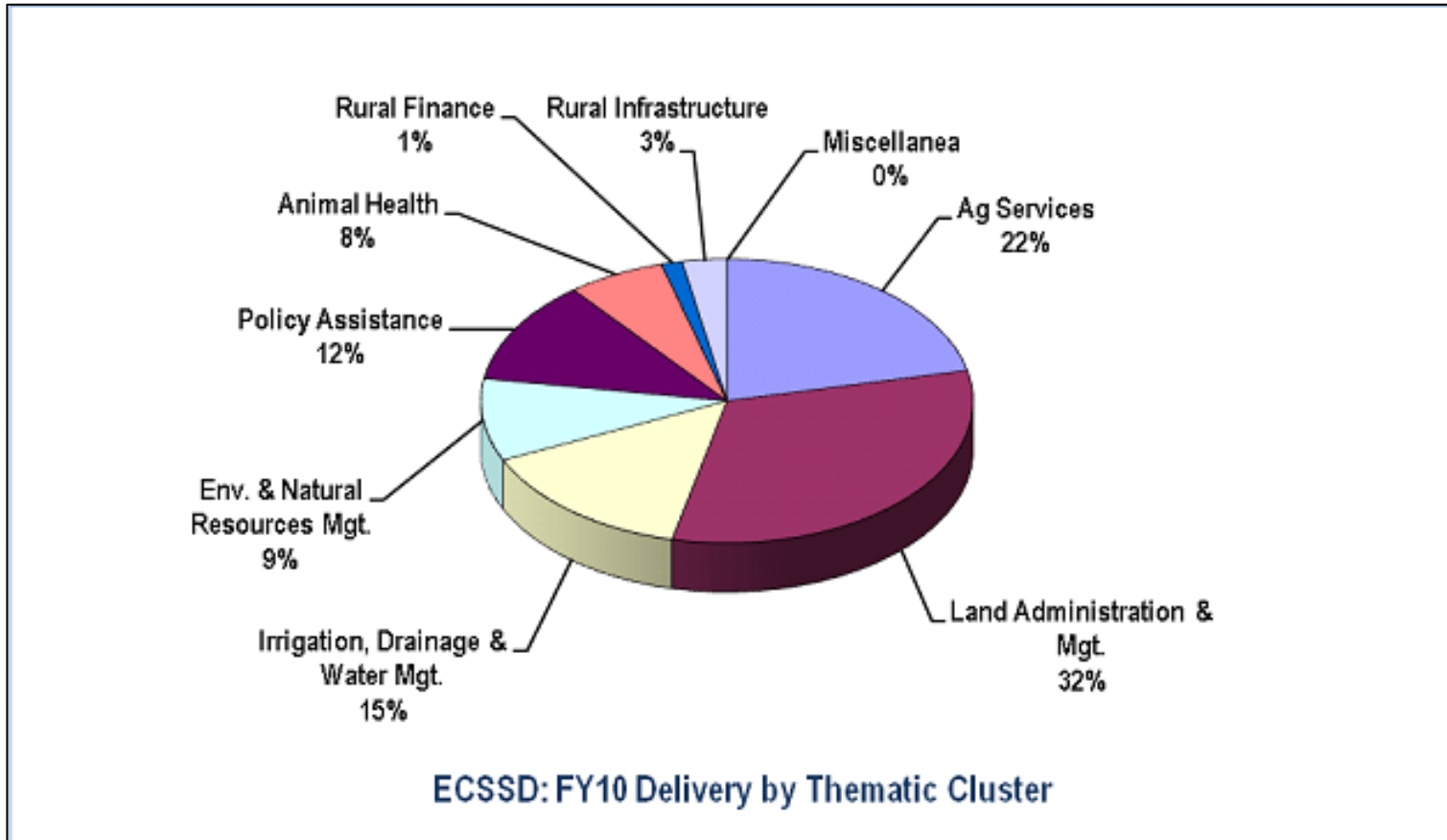
How ECA Land Team Works?



- ▶ World Bank staff, ECA Division - Land Team;
- ▶ FAO staff, Climate, Energy and Tenure Division (NRC) within the frame of the WB/FAO Cooperative Programme (CP);
- ▶ Consultants under bilateral agreements between the WB and various donors;
- ▶ Other consultants hired using Bank funds;
- ▶ Cooperation with other donors: EC, GTZ, kfw, SIDA, ADA, USAID, Norway, SECO, DFID...



FAO/WB Cooperative Programme (CP) 1/7/2009 -30/4/2010



Land Administration and Management is recognised as the leading example of collaboration between FAO and the World Bank through the CP



Changes in ECA Region



Changes in the ECA region...



▶ Pre-1989

- ▶ State ownership very common
- ▶ Private ownership in some Central European countries, but transfers of ownership discouraged.
- ▶ Mortgages generally unavailable.

▶ 1989 – 2000

- ▶ Various programs to privatize land and property, and establish registration systems.

▶ 2000-2010

- ▶ Building on the reforms.



Doing Business 2010



According to Doing Business 2010, 9 of the top 20 performers in registering property Worldwide are ECA countries:

2. Georgia

4. Lithuania

5. Armenia

9. Azerbaijan

10. Belarus

11. Slovakia

13. Estonia

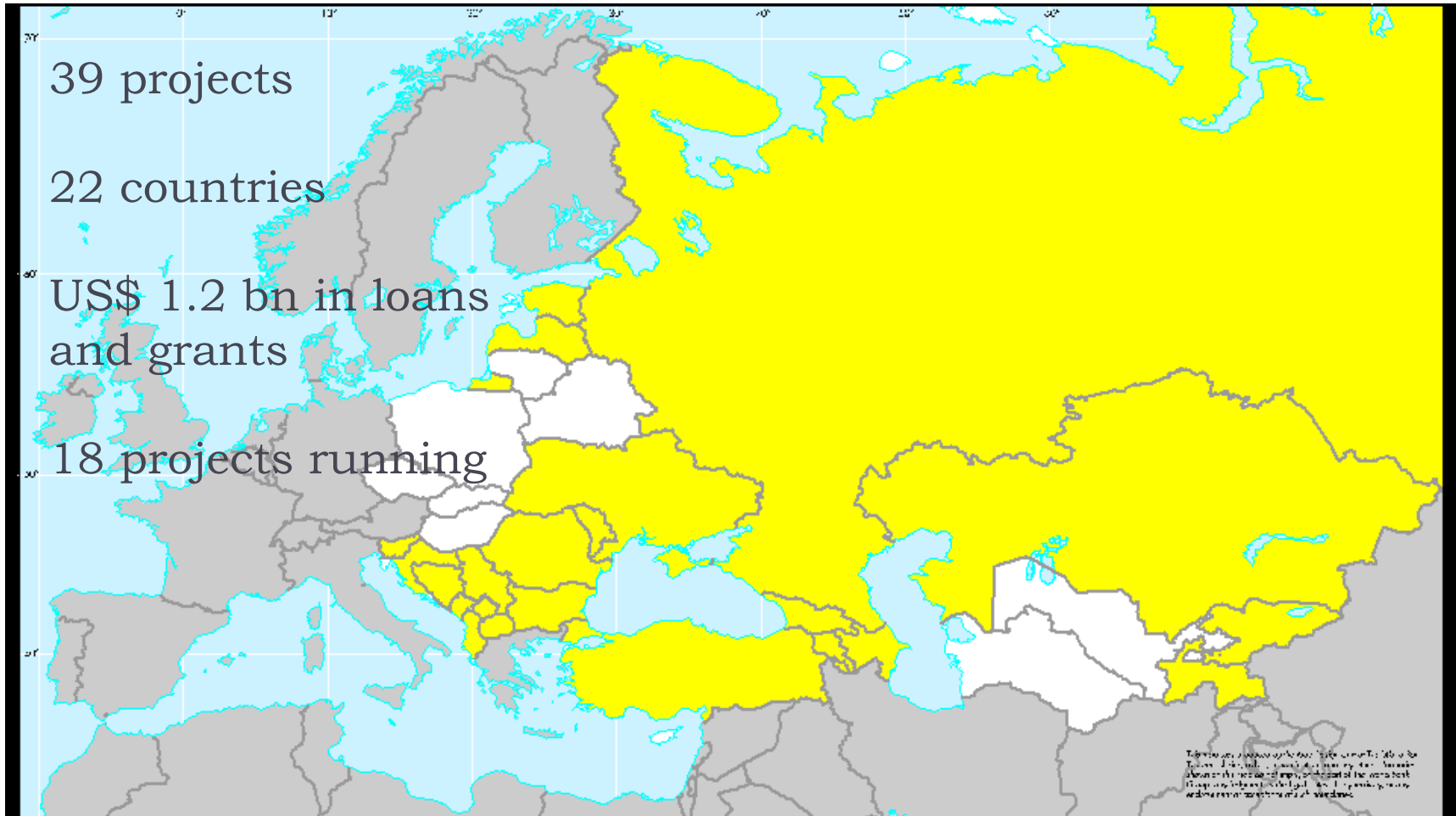
17. Moldova

19. Kyrgyzstan

And countries of the region have generally annually increased GDP by 2% more than the World average increase.



Countries in ECA with WB funded projects in Land Administration



The largest program of land reform the world has ever seen.



Staged Approach



In the early 1990's many countries did not have basic laws, institutions, trained personnel or even a vision of what they wanted to achieve in Land Administration – let alone SDI.

And climbing a mountain is done “one step at a time”





Land Administration Projects in ECA

Stage 1 and Stage 2



Stage 1

- Focused on Land Privatization
- Business, housing and enterprise privatisation
- Restitution of property rights
- Institutional development and Legal base

Stage 2

- Registration of property rights and encouraging land and property markets to operate. Including
- Cadastre and Systematic registration
- Improving services through changes in work flows, procedures, IT systems, introducing service standards



The World Bank Land New Agenda in ECA - Stage 3



The World Bank support for the next five to ten years in ECA region will be focused on the following five broad objectives:

- Objective 1:** Completion of property registers and cadastres to provide safe and secure property rights, and facilitate privatization and land reform;
- Objective 2:** Development of a more integrated approach to land management through land policies that reflect environmental and sustainable development concerns;
- Objective 3:** Encouraging innovation and the use of SDI or spatial information underpinning new products and services;
- Objective 4:** Improving the management of the organization and use of space data;
- Objective 5:** Supporting governance and quality and method of services provided



Linking Land Administration, Geoinformation, SDI and INSPIRE



EuroGeographics' Vision Statement on Cadastre and Land Registration in Europe 2012:

Cadastre and Land Registry organisations in Europe to 'provide state of the art services to the Real Property and land information market within the e-government framework by cooperating in the building of National and European Spatial Data Infrastructures'.



...Linking Land Administration, Geoinformation, SDI and INSPIRE...



The information produced and distributed by Cadastre and Land Registry organisations is an integral part of the National Spatial Data Infrastructures.

The computerized multi-purpose cadastre is one tool for the efficient handling of land and property-related data that has potential to provide many benefits across all sections of the community by adding value through the combining of data sets and making these widely available.



...Linking Land Administration, Geoinformation, SDI and INSPIRE...



INSPIRE, ANNEX I THEMES (2011 / 2016)

- ▶ Coordinate reference systems*,
- ▶ Geographical grid systems*,
- ▶ Geographical names*,
- ▶ Administrative units*, Addresses*,
- ▶ Cadastral parcels*,
- ▶ Transport networks,
- ▶ Hydrography,
- ▶ Protected sites

*Data produced by the Surveying and Cadastral
Administration



...Linking Land Administration, Geoinformation, SDI and INSPIRE...



INSPIRE, ANNEX II THEMES (2014 / 2019)

- ▶ Elevation*,
- ▶ Land cover,
- ▶ Orthoimagery*,
- ▶ Geology

ANNEX III THEMES (2014/2019)

- ▶ Statistical units,
- ▶ Buildings*,
- ▶ Soil,
- ▶ Land use*,
- ▶ Human health and safety,
- ▶ ...



New Requests from ECA



New Requests for World Bank Financing in ECA - Land Management and Cadastre



The countries in the ECA region are requesting World Bank support in two key areas:

- ▶ Improving the quality of services and reducing corruption through e-government initiatives. The E-Cadastre;
- ▶ SDI and meeting the requirements of the INSPIRE Directive.



SDI in World Bank Funded Projects in ECA



Still Early days - and work is part of larger government programs that often also involves other donors:

- ▶ **NSDI Legal/ regulatory base commenced:** Croatia, Macedonia, Moldova, Serbia, Turkey. Planned in Kosovo and Montenegro.
- ▶ **NSDI Coordination mechanism established:** Croatia, Moldova, Serbia, Turkey. Planned in Montenegro, Macedonia, Kosovo.
- ▶ **NSDI Strategy:** Serbia (Gov. approval is expected by the end of June 2010), Turkey. Planned in Croatia, Macedonia, Montenegro.
- ▶ **Geoportals:** Croatia, Serbia, Montenegro, Turkey, Moldova. Planned in Macedonia



SDI in World Bank Funded Projects in Other Regions



East Asia and Pacific Region

- ▶ Included within Projects in Indonesia, Vietnam, Philippines, Laos and Thailand.
- ▶ Early stages as the regulatory framework is under development and steering committees are being established. Cross sector awareness programs underway.

Africa

- ▶ Included in the preparation of a new project in Ghana
- ▶ South America
- ▶ Early stages in a project underway in Bogota, Colombia



New SDI Projects in ECA World Bank Financed NSDI Component Croatia (2011-2013)



- ▶ Development of second phase of the Cadastre Geoportal;
- ▶ Development of National Geoportal to organise and distribute information of at least 5 institutions in line with the NSDI concept and the ISO standards;
- ▶ Making spatial information available to the users (LPIS, physical planning, others);
- ▶ Streamlining the institutional organisation to improve the efficiency of work and the services provision;
- ▶ Build up institutional and human capacities to manage the reform in line with the principals of e-business and open access to the information;
- ▶ Infrastructure improvement – LAN/WAN improvement (continuation of Phare 2005 project)



**...New SDI Projects in ECA
World Bank Financed NSDI
Component Macedonia (2010-2012)**



- ▶ Preparation of legal framework and other policy studies.
- ▶ Development of NSDI standards;
- ▶ Development of NSDI Strategy;
- ▶ Development of a new data model and data migration;
- ▶ Development of Web-GIS
- ▶ Development of Government GeoPortal (NSDI)
- ▶ Hardware/communication equipment for the Web-GIS and the Government GeoPortal
- ▶ Training and awareness



...New SDI Projects in ECA World Bank financed, GTZ, Norwegian funds Montenegro (2009-2013)



- ▶ Preparation of legal framework and other policy studies
- ▶ Development of NSDI standards;
- ▶ Development of NSDI Strategy;
- ▶ Development of a new data model and DB and data migration;
- ▶ Development of Government GeoPortal (NSDI)
- ▶ Hardware/communication equipment
- ▶ Training and awareness



...New SDI Projects in ECA World Bank, Norwegian funds Serbia



- ▶ Legal framework completed in September 2009 (legal framework is a part of the Law on State Surveying and Cadastre)
- ▶ NSDI strategy, metadata standards and organizational model approved internally by Republic Geodetic Authority in November 2009.
- ▶ GeoPortal started officially in November 2009 (www.geosrbija.rs)
- ▶ NSDI committee established January 2010.
- ▶ Government approval of NSDI strategy for the 3 years period is expected by the end of July 2010.
- ▶ Underway: Development/Improvements of NSDI standards; Development/Improvement of the data model; Hardware/communication equipment; Training and awareness.



...New SDI Projects in ECA...

World Bank Financed NSDI Component Turkey (2008-2013)



- ▶ Initial study completed in December 2004
- ▶ Geographic information system infrastructure installation has commenced – includes a government portal, standards and data conversion standards
- ▶ Cadastre modernization project helps create the basic data (orthophotomaps and cadastre data) to integrate into the NSDI.
- ▶ E-cadastre to be developed and integrated into NSDI.
- ▶ Training and awareness programs funded.



...New SDI Projects in ECA
EU IPA Multi-Beneficiary Programme
Regional SDI Project in Western Balkans
(2011-2014)



Main Beneficiaries

National Mapping and Cadastre Authorities of:

Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro
and Serbia

Key Activities

- ▶ SDI legal framework
- ▶ Capacity building of NMCA officials and NSDI users
- ▶ Awareness

The World Bank has ongoing Cadastre projects in all seven beneficiary administrations.



Future Challenges



- ▶ Coordination and cooperation among all key players at all levels;
- ▶ Collaboration with the private sector;
- ▶ Institutional and human capacity to implement the NSDI;
- ▶ Infrastructure capacity;
- ▶ Establishment of national standards for digital data;
- ▶ Data quality;
- ▶ Creation of digital data in various strategic sectors – and data conversion where digital data does exist;
- ▶ Geodetic networks and secrecy of the coordinate systems in some countries.



THANK YOU!