

# Observation and Conclusions



## International Conference on Enhancing Land Registration and Cadastre for Economic Growth in India 30 January - 1 February

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Fédération Internationale des Géomètres  
Internationale Vereinigung der Vermessungsingenieure

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# ESRI India

ESRI India



ESRI India



BAE SYSTEMS

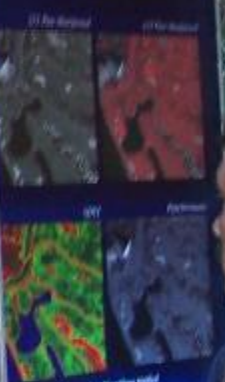
SOCET SET

ArcGIS  
Family of Products

Desktop GIS

Enterprise GIS

ESRI Image Server



Key features of the ESRI Image Server include:

- Access to extensive imagery
- On-the-fly server-based image processing
- Generates multiple imagery products from a single source
- Platform GIS/CAD/Web client access
- Fully scalable enterprise deployment architecture
- Direct access to multiple data sources
- High security and access control
- High availability and disaster recovery

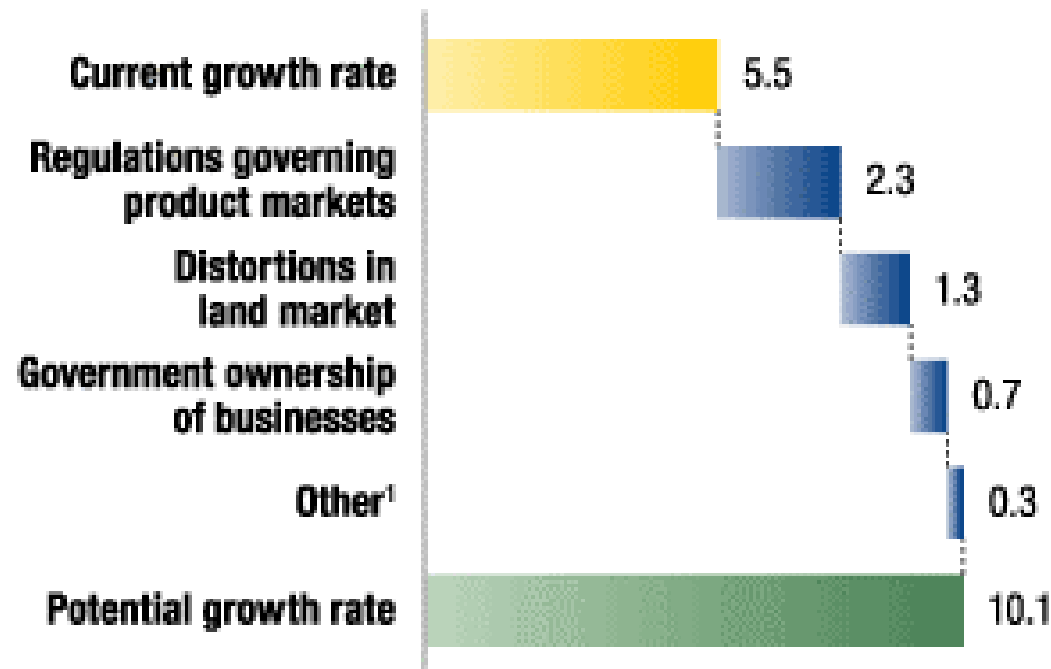


# McKinsey Global Institute Report 'The Growth Imperative' (2001)



## What's slowing India's economic growth?

Percent



<sup>1</sup>Includes transportation infrastructure and labor laws.



# World Bank



- § 'Land Policy for Growth and Poverty Reduction' (2003): investment in improving land records and land access
- § During a conference organised by the World Bank and the Ministry of Rural Development, the participants agreed that improving land administration should be a top-priority for India



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# 2 Day Conference



§ GIS Development,

§ Centre for Science, Development and Media Studies (CSDMS) and

§ FIG Commission 7

organised a conference on Enhancing Land Registration and Cadastre in India, as part of the bigger event MapIndia 2006



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# Statements by the speakers



- § majority of disputes in rural areas is land related, sometimes generations
- § chaotic situations for cadastral authorities, they fail to act
- § urban areas: heavy pressure on land can be observed combined with a violation of land laws



# Statements by the speakers



- § Slow decision making; when decisions are made the population did already heavily increased
- § Establishment of proper land management
- § Maintenance of data is an issue; Resurveys which are scheduled are not happening in reality





# Statements by the speakers



- § Not only private but also collective, use rights and women's access to land are relevant
- § The costs of implementing an online cadastre are estimated to be 2 USD billion
- § .. 1% loss in GDP comes to USD 73.8 billion per year



# Statements by the Speakers



- § streamlining and simplification of land records maintenance process
- § e-conveyancing
- § use of GeoICT
- § procedures needed to be revised for digital scenarios
- § integration between different departments involved into one environment



# Pilot Project

- § Updating to be integrated with transactions
- § The system would operated by a dedicated, self-financing agency



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# Observations



- § Low transaction costs is a must, otherwise people will not register
- § Cost recovery? There are cost reductions in other areas! What are the costs of a messy cadastre? (e-Gov)
- § Participatory approaches
- § Implementable systems based on user requirements
- § Low cost surveying and mapping systems
- § LA is base for SDI
- § Data modeling & process design



# Observations



- § Acquisition methods (orthophoto, satellite imagery, LIDAR, GPS, video)
- § Combined with existing methods
- § Quality labels



# Conclusions



- § Innovations urgent, joint effort, both from professionals and organisations
- § Willingness to co-operate in favour of the citizens
- § First take care that the data are there: consistent, reliable, complete



# Conclusions



- § Public land to be surveyed & Registered
- § Establish an integrated cadastral information society: facilitate the change
- § Implementation will take one generation...
- § Evaluate the legal meaning of digital data - eGovernment



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# Conclusions



- § Determination of illegal buildings is relevant, establishment of a proper basis for spatial planning too
- § Capacity building in (low cost) surveying and land registry
- § GNSS based survey has the future
- § Develop PPPs, government has to be ready for that
- § Try to standardize as much as possible





# Conclusions

- § integration of LA organizations, start with the database integration and harmonisation
- § reference system upgrade
- § learn from good practise (Bhoomi)
- § separate court for trial of land disputes



# Conclusions



- § the court is not a good environment for providing services, judgement delays economic growth
- § economic growth for all - also the poor
- § this means LA for all, all people registered
- § revenues from proper LA are substantial: there is a solid basis for investments
- § start the developments



# Final Remark



- § It is very easy to make it very complex,  
it is complex to keep it easy
- § The government is there for the people,  
not the other way around



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# Publication



Slides and papers:

§ [www.oicrf.org](http://www.oicrf.org)

§ [www.fig.net](http://www.fig.net)



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