SEGS: A pro-poor agenda is paramount

Experts raise issues and highlight challenges on Spatially Enabled Government and Society (SEGS) in Land and Poverty Conference organized by World Bank during April 23 - 26, 2012 in Washington DC, USA

Good land governance would remain the key challenge



Keith Clifford Bell World Bank, Social, Environment & Rural Development, East Asia Pacific Region.

The theme of the 2012 Annual World Bank Conference on Land and Poverty was "Land Governance in a Rapidly Changing Environment". Significantly, this was the first annual conference that dedicated a specific stream to spatial information. The full day workshop convened by the International Federation of Surveyors (FIG) and the World Bank "Spatially Enabling Government and Societies (SEGS) for Sustainable Land Administration

and Management" was an excellent complement to the overall conference theme on land governance.

SEGS arguably represents the new paradigm for land sector engagement. Spatially enabling land administration and management allows land information to be more effectively used in all levels of decision making and allows land professionals to design and implement the next generation of land administration solutions that are fit-for-purpose, incrementally upgradable affordable.

All too often, government agencies refuse to share fundamental spatial information, especially maps and plan. Silos would seem to weaken SEGS initiatives and dilute the benefits of donor support and government investments. Silos may be an indicator for poor governance. Therefore the application of the Land Governance Assessment Framework (LGAF) could be very useful in SEGS.

Spatial enablement is especially important in the context of the continuum of land rights, which has developed under UN Habitat' Global Land Tools (GLTN) model. ESRI's Brent Jones has made a very good effort to further develop the land rights continuum by considering spatial, temporal and technological dimensions. Ownership is always about "Who", "Where" and "What". It is also about "When", as ownership may change over time. Of course, this continuum has not intended to expand past first registration. As such,

the discussion in the SEGS workshop and indeed throughout the overall conference this session, tended to focus on the issues around first time rights issuance and not the longer term issues of subsequent transfers due to inheritance, sales, subdivisions, mortgages and even foreclosures.

A key challenge for governments, land professionals and development agencies to look at SEGS through both the glass half full optic as well as the glass half empty. As was very apparent in the SEGS workshop, the primary focus tends to be on the positive side of spatial enablement (the Potential), and with less consideration being given to discussing the downside (the Challenges). These challenges and indeed risks to SEGS include:

- · Weak land governance and governance associated with geospatial information technology and spatial data infrastructure
- Spatial dependency over-reliance on systems that are already demonstrating outages and other failures. For example GPS failures due to Ionospheric Interference satellite signals or jamming. Errors in products such as Google maps due to poor ground truthing or quality assurance
- Outages with cloud-based geospatial applications.
- Personal privacy and confidentiality are all too frequently being perceived as being breached by products such as Google earth. Web-based products in the US such as Spokeo.com and Intellius.com are combining personal information with Google StreetMap arguably in breach of personal privacy. Legal reform is urgently required.

In order for SEGS to be effective and best meeting the needs of all, for both high-end and also developing economies, it had to address the above-mentioned risks and issues. For international development agencies such as the World Bank, the pro-poor agenda was paramount. Therefore, SEGS should be more focused on the millions just trying to make it (i.e. indeed billions of the poor struggling to survive and have a basic quality of life and human rights) rather than those trying to make millions (i.e. the wealthy). Good land governance would remain one of the key challenges for SEGS.

Fit for purpose



Stig Enemark
Past FIG President
2007-2010, Professor
in Land Management,
Aalborg University

"The spatial framework should be developed using a flexible and *fit-for purpose* approach rather than being guided by high tech solutions and costly field survey procedures. Accuracy can then be incrementally improved over time when relevant and justified by serving the needs of citizens and society. In relation to the concept of a continuum of land rights as mentioned above such a fit-for-purpose approach could then referred to as a "continuum of accuracy".

Radically rethink LAS



Robin McLarenDirector, Know Edge Ltd

The lack of effective, affordable and scalable LAS solutions conspires to limit access to land administration services by large sections of society, especially the most vulnerable, leaving them trapped in poverty. There is a pressing need to radically rethink LAS: simplify procedures, reduce the cost of transactions and

open new channels for participation. Crowdsourcing through mobile phones, for example, offers the opportunity for land professionals to form a partnership with citizens to create a far-reaching new collaborative model and generate a set of LAS services that will reach the world's poor.

Strong legal protections needed



Rachael Knight
Program Director,
Community
Land Protection
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Innovations in Legal
Empowerment

In the context of large-scale land concessions, strong legal protections for community lands and natural resources and the implementation of clear, simple and easy-to-follow legal processes for documentation of customary land rights are urgently necessary. In particular, efforts to protect common areas are critical, as common properties are often the first to be allocated to investors, claimed by elites, or appropriated for state development projects. Our research indicates that effective community land documentation processes may help to

protect rural communities' land claims, livelihoods, and way of life; resolve local land conflicts; improve intra-community governance; promote conservation and sustainable natural resources management, and foster community development.

Need for new approaches



Christiaan Lemmen Professor, Kadaster International, Netherlands

There is an urgent need for new approaches in Land Administration and Management. Conventional approaches, often of historical footings, proved to be inadequate in many jurisdictions. Flexibility is needed in relation to the way of recordation, the type of spatial units used, the inclusion of customary and informal rights, the data acquisition methodologies and in the accuracy of

boundary delineation. It is less important to produce accurate maps. It is more important to have a complete cadastral map and to know how accurate the map is. For instance, highly rigorous and accurate methodologies as practiced by registered or licensed surveyors are not pro-poor approaches. All these have to be discussed and further communicated within the International Federation of Surveyors urgently.

Improving cadastral information gathering



Pierre Vincent M.Sc., D.S.A., Executive Vice-President, effigies

The recent improvements in satellite imagery in terms of information contents, precision and reliability can greatly contribute by providing the physical information needed for an integrated land information system. The use of this data source for cadastral information gathering is highly efficient and less costly than the conventional means of aerial photography or ground surveys for cadastral mapping

in areas surrounding highly urbanized zones for many countries dealing with land administration problems.

Legal framework is crucial



Juerg Kaufmann Swiss Land Management

For me two aspects were of special interest. On the one hand the importance to get reliable information not only on locations but also on contacts and concessions is an urgent need. To provide reliable information as base for sustainable land management measures to reduce poverty is one important aim of Cadastre 2014. On the other hand the development of a sound

basic legal framework in an early stage of projects is crucial.

SOLA: the solution to improve governance



Coordinator SOLA Project, NRC Land Tenure, FAO

Open-source software specifically designed to meet the needs of the cadastre and land registration systems are seen as part of the

solution that will make land administration automation available to all countries. The presentation on the UN FAO Solutions for Open Land Administration (SOLA) open source software was particularly timely. A complete version of the SOLA software had been released in March, pilot implementations had begun in two of the pilot countries (Nepal and Samoa) and the

negotiation of the Committee on World Food Security Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security had just been completed. SOLA could be part of the solution to improve governance, it is affordable and seriously addresses the need for a sustainable solution.

Deer in-the headlights look



Dave Dovle NGS Chief Geodetic Surveyor

The numerous excellent presentations and papers led to often intense discussions between the various disciplines represented including surveyors, land managers, lawyers, economists and

representatives from NGOs.

I was very impressed that the World Bank conference staff managed to balance the presentations in such a way as to engage these different communities which far too often do not sit in the same room together. On a personal note for me it was nice to see that terms like "geodetic networks" and "consistent reference systems" could be mentioned in such a diverse crowd without the audience having that deer in-the headlights look.



Tony Burns Managing Director, Land Equity International, Australia

The topics covered ranged from the tools and approaches to address specific land sector requirements through to broad topics such as land governance and ensuring that communities benefit from largescale investment in

agriculture. I feel that the conference again reinforced the importance of focusing on the needs of society as a

whole rather than what is technically possible – what Stig Enemark called in his presentation 'fit for purpose'. This focus was evident in papers focussing on low cost

technology and pro-poor approaches

and I see this as very positive.



Christopher **H** Barlow Director, Strategic Accounts & Marketing, **Thomson Reuters**

One issue addressed is how technology can support mapping and documenting land tenure and property rights. What's interesting about this conference is that it brings to the table a diverse range of practitioners including government leaders, development

agency thought leaders, researchers, investors, and technologist.

There were many good presentations by governments and also technology firms on the application of technology. NGOs also shared examples of projects with community groups to educate on land rights. UN Habitat estimates that 70 percent of people in the developing countries are outside the formal registry systems. So this is an important discussion point, and there is an appreciable ground swell of ideas coupled with pragmatic application to effectively map and document land and property rights.

Push for initial title creation from aerial imagery



Ian Harper Geodata Australia Ptv Ltd

The conference saw a strong push for initial title creation from aerial imagery or rudimentary mapping, which is reasonable to generate a

tangible document and a manual or digital register that provides public recognition of those rights.

Moving forward, particularly as urbanisation grows into peri-urban areas, planning and managing that growth will then benefit from an improved level of survey and spatial maturity. Surveyor's skills will then be vital to generating a pragmatic technical and economic spatial solution that generate greater security of title and lowering risk that will increase the availability and reduce the rates of funding.



19th United Nations Regional Cartographic Conference for Asia and the Pacific

29 October - 1 November, Bangkok, Thailand http://unstats.un.org/unsd/geoinfo/RCC/unrccap19.html

The next paradigm



Teo CheeHaiPresident,
International
Federation of
Surveyors (FIG)

A new generation of web and mobile services, such as online maps and location based applications, are stimulating a greater interest and use of location in society today. This location revolution in our personal lives is being mirrored in our professional lives.

Information, with both geographic and temporal context, is increasingly being used, for example, to ensure emergency services arrive at incidents in time, to support the formulation of policies to mitigate the impact

of climate change, to ensure that services are better targeted to citizens needs and to empower citizens and communities to manage their communities and administer their spaces more effectively. The delivery of the benefits associated with this location (spatial) revolution is dependent on the availability of spatial data that is readily accessible for re-use, has minimal restrictions, is affordable, has appropriate quality and can be easily integrated and linked into collaborative environments using common frameworks. It is therefore essential that land information managed within land administration and management

solutions is also spatially enabled to ensure that such information can be combined with other socio-economic information to derive wider societal, environmental and economic benefits.

In this era of competing demands on existing resources, there is the continued need to ensure the efficient and effective deployment of solutions, approaches and tools to achieve the desired outcomes. In this instance, anything that is cost-effective and affordable is welcomed and at the conference, presenters have demonstrated not only the creative and productive capacity to develop alternative but appropriate approaches, especially in the quest to secure tenure rights for all, but also the courage to tackle a highly technical and complex component within this quest.

Thus, spatially enabling land administration and management will allow land information to be more effectively used in all levels of decision making and will allow Land Professionals to design and implement the next generation of land administration and management solutions that are fit-for-purpose, more affordable, are citizen centric and can be improved incrementally when appropriate. This would be of distinct advantage to the poor and disadvantaged in the context of securing tenure rights for all.

