

Spatial Innovation and Good Practices in Land Administration Forum

March 28, 2014, World Bank, Washington DC

This one-day ‘Spatial Innovation and Good Practices’ forum was jointly convened by the World Bank and the International Federation of Surveyors (FIG) on March 28, 2014 at the World Bank’s headquarters in Washington DC as part of the ongoing collaborative activities between the Bank and FIG. The Forum was open to all registered participants to the annual World Bank Land and Poverty Conference. The Forum covered a number of themes focusing on the contribution of spatial technologies, innovation and practices to support the Post-2015 Development Agenda. This year’s Annual World Bank Annual Land and Poverty Conference attracted some 1,200 registrants from around the globe, making it the largest such conference in the world. For the past three years, FIG has collaborated with the World Bank to jointly convene a special side-event in conjunction with the Annual Conference, focusing on spatial enablement in support of land administration.

Spatial technologies and practices are becoming pervasive, affordable, linked and manageable and it is now in the hands of the citizens, the consumer and no longer confined to the domain of the professionals. The roles of the spatial professionals, innovators and technologist will always be there within the drive towards an environment that is spatially enabled. The fact remains that spatial capacities and capabilities are changing at an ever faster rate and co-evolving with allied technologies. Today we have better imaging satellites, global navigation satellite systems, aerial sensors, unmanned low altitude aerial sensors, terrestrials scanners and measurement systems providing us big spatial datasets into the petabytes,

exabytes and zettabytes, giving us global normalized digital maps as an example and more excitingly, providing a myriad of possibilities. The Forum was consistently reminded by speakers that it is time for the global development community to take advantage of these affordable and accessible spatial technologies and practices. The Forum recognized ongoing issues with standards, interoperability, authoritativeness and privacy and all these are being addressed and can be resolved over time. Today, there exist the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) and bodies such as the Open Geospatial Consortium (OGC) and FIG to address these issues collaboratively including that of global governance within this realm.

The Forum witnessed the launch of the joint World Bank and FIG *Declaration on Fit-for-Purpose Land Administration* providing the framework on getting the right data and information, the right processes and technologies, all for the right purposes. The World Bank and UN are also finally developing solid global indicators that can support the measurement and monitoring including that for the Post-2015 Development Agenda goals and targets, and will provide us all with the transparency and accountability that is needed.

The Forum observed a move beyond land administration to pervasive spatial integration of society. The partners and participants at the Forum are at the forefront, channeling these developments for progressive global change. Country level experiences shared at the Forum affirmed this good news, as there are good progresses.

At the same time, the Forum heard the challenge of the “two-speed” world we are in, where in one world, a technology savvy kid can use the marvels of global navigation satellite systems and mobile computing and communication to find the best cup of coffee and in another world, 80% of humanity live below US\$10.00 a day or where 75% of humanity do not have clear spatially and legally defined land or property rights and where communities have inadequate access to this global normalized digital maps. We have to accept that there exist this disconnect between spatial technological sophistication that is available today and the outcomes of decades of development initiatives and programs. However, the situation is definitely more complex than this, as there are probably three speeds on the dial covering Low-Income, Middle-Income and High-Income countries, each with different access to resources, capacity and priorities for land administration and spatial enablement. So it is definitely not a one-size fits all world. Closing the gap between the “haves” and the “have nots”, is no easy task, especially in spite of the rhetoric that technology is now affordable, for the have nots, access is often beyond reach.

The Forum concluded that the barriers to closing this gap are no longer technological, spatial technologies and practices are today pervasive, affordable and accessible, but rather political, institutional, and of capacity. It is now overdue to bring these worlds together, where it is deemed appropriate and fit-for-purpose. The partners and participants at the Forum have yet to make significant stride in political, institutional and capacity development at scale. This is the bad news!



Is it possible to change the paradigm where the “spatial” is fully integrated into human development and progress to realize “the Future We Want for All”, the world of Post-2015 UN Development Agenda? The Forum heard of current and future spatial technological envelope that is co-evolving with other technologies particularly that of mobile computing and communication, enabling and empowering citizens and communities and providing unparalleled possibilities. The Forum heard of good concepts (fit-for-purpose, easy-to-use, leapfrogging), great ideas (global campaign for secure tenure, massive global and spatially enabled private-public-partnerships) and of boldness to borrow from or linking up with playbooks from global public health initiatives, from global media and entertainment reach, from multi-national business, and learning from social phenomena inspired by the likes of Google and Facebook. Changing the paradigm to finally deliver the desired difference. Having said this, the Forum recognized that technology is an enabler of improving land administration and access to land rights, but it is not the solution. That is also fundamental to FFP. Specifically regarding spatial technology, we should reflect on the hierarchy of evidence of land ownership determination, which gives greatest weight to physical features and marks which define the limits or boundaries of individual or community rights. The evidence of least weight is measurement, which in modern spatial technology parlance, means coordinates. Further, the evidence of rights is enhanced through maps, or again in modern parlance GIS. But GIS, needs to be considered along with other forms of presentation of rights.

Citizen engagement in identification of land rights, often using affordable tools such as hand-held GPS- enabled

Declaration

Fig-World Bank Declaration on Fit-for-Purpose Land Administration

There is an urgent need to build cost-effective and sustainable systems which identify the way land is occupied and used and accordingly provide for secure land rights. When considering the resources and capacities required for building such systems in less developed countries, the concepts of mature, sophisticated systems as predominantly used in developed countries may well be seen as the end target, but not as the point of entry. When assessing technology and investment choices, the focus should be on a “fit-for-purpose approach” that will meet the needs of society today and that can be incrementally improved over time.

A fit-for-purpose approach includes the following elements:

- **Flexible** in the spatial data capture approaches to provide for varying use and occupation.
- **Inclusive** in scope to cover all tenure and all land.
- **Participatory** in approach to data capture and use to ensure community support.

cell phones holds great promise for closing the gap between those who have rights and those who don't. However, to take advantage of the power of collaborative land mapping or Volunteer Geographic Information (VGI) requires government protocols that cover standards for the acquisition and submission of these maps. The authority of government land agencies to validate all mapping and other information and provide access to assured land information is fundamental to good land governance.

The Partners and participants, most of who have been converging under the spatial sub-theme at the annual World

- **Affordable** for the government to establish and operate, and for society to use.
- **Reliable** in terms of information that is authoritative and up-to-date.
- **Attainable** to establish the system within a short timeframe and within available resources.
- **Upgradeable** with regard to incremental improvement over time in response to social and legal needs and emerging economic opportunities.

A country's legal and institutional framework must be revised to apply to elements of the fit-for-purpose approach. This means that the fit-for-purpose approach must be enshrined in law and that the information be made accessible to all users.

A fit-for-purpose approach will ensure that appropriate land administration systems are built within a relatively short time frame and affordable costs. The systems allow for incremental updating and upgrading. This approach will facilitate economic growth, social equity and environmental sustainability to be better supported, pursued and achieved.

Bank Conference on Land and Poverty since 2012 are the people who can close this gap, and bring this change in our lifetime, realizing the transformative potential that our unique position, as the “intersection” between the spatial and development community, creates.

The realization is that “business-as-usual” will not lead us to this bold new world and spatial technologies, innovation and practices may well be those disruptive elements needed within the transformation for which is called.

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