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Land Administration Reform for Pro Growth Land Management

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Thank you for the honor of speaking here at the plenary session and a special thank you to the President, Chryssy Potsiou for this invitation.

I do not want to take the title of land administration reform for pro growth land management at face value. I rather want to talk about it within a broader framework by referring to statements by the Secretary General of the UN, the Sustainable Development Goals being developed by the UN for the world and some of the challenges facing us at a global level which are increasing massively the competition over land.

Recently the United Nations Secretary General's office put out a statement on its website saying "Improved security of tenure for land and property can make a critical contribution to ensuring social and economic progress in rural and urban settings, supporting poverty reduction and furthering gender equality and peace and security. Land tenure, including a range of tenure types appropriate to local conditions and needs, such as community of property rights and the protection of resource commons, creates certainty about what can be done with land or property and its use and can increase economic opportunities and benefits through investment, improving health, financial stability and personal safety." This statement by the Secretary General once again confirms the importance of land administration, which underpins land tenure.

Also, the 191 Member States which make up the United Nations system have been working to develop global goals for the next 20 years. The United Nations Sustainable Development Goals are currently being finalized. There are 17 goals and 169 targets. Land is mentioned in 5 of the Goals (poverty, food security, peace, gender and sustainable development). For the land indicators, the Global Land Tool Network, of which FIG is a prominent member, created a platform of 40 experts and partners called the Global Land Indicators Initiative. They have developed the land indicators for these different goals and the methodology associated with the indictors. These indicators will be used by countries to report to the UN on their achievements.

As further background, the conference title refers to the challenges of the modern world where we are facing serious challenges which will lead to even more massive competition over land at the transnational, national, sub-national, local and family levels. This competition will increase

over the next decades. We cannot simply focus on growth when these huge global challenges linked to land, which are deal breakers, could over turn economic development at the global and/or country level. I will quickly summarize them.

By 2050 the world's population will grow to around 9.6 billion people (UNDESA). Current rates indicate a global population growth of 1 billion every 12 years (UNDESA). More than 50 percent already live in urban areas (UNFPA). All these people will need shelter and have to be fed in a sustainable way. The impact of this growth will be the greatest in the developing world, and particularly in Africa, where large scale urbanization is expected (UN-Habitat).

We probably cannot feed 9.6 billion people. FAO estimates that 805 million people were chronically undernourished in 2012–14, particularly in Sub Saharan Africa and Asia. Average annual growth rates of yields (output per hectare) for grains have actually been slowing in both developed and developing countries since 1985. It now takes 2-3 times more fertilizers and 1.5 time more pesticides to produce 1 kilogram of food than it did 40 years ago (UNCTAD). Water is key to food security. Already two-thirds of global water supplies for irrigation are drawn from underground aquifers at unsustainable rates (FAO). The growing of crops is exacerbated by climate change according to the 2014 report from the United Nations Intergovernmental Panel on Climate (IPCC). Climate change could reduce food production growth by 2 percent each decade for the rest of this century. The IPCC concluded that "Global temperature increases of 4°C or more above late-20th" century levels, combined with increasing food demand, would pose large risks to food security globally." The UN Security Council noted its concerns in 2011 when the President stated "that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security." The increasing competition over land is demonstrated in the UN records. The United Nations wide system is making itself more Fit for Purpose in regard to land to take on the challenges in the next decades on land and conflict.

Against this background of challenges and the policy statement by the Secretary General and the SDGs, I must indicate that I do not understand the term pro growth land management just to mean that improving land administration should be solely to support economic development. Instead pro growth also means:-

- Sustainable development which in turn means that the economic, social and environmental dimensions are linked.
- That economic development is integrally tied to poverty reduction, especially in a globally inter connected world.
- In terms of the challenges I have outlined, pro growth must also take into account environmental degradation and balance this in a way that the stock of environmental assets is held constant to ensure economic growth, poverty reduction and social impacts are sustainable.

Let me give you an example of why pro growth cannot be treated as a stand alone. Our cities are the engines of national economies. Yet many of our cities, especially in the developing world, are dysfunctional and economic growth is being held back by traffic congestion, investor risk in regard to land acquisition, insufficient services for citizens and a consequent impact on their health and productivity. All of these have a land management dimension. A key reason why the cities are not performing at their peak is the burdens and benefits of urban development are not being shared between the public and private sector appropriately. We see too often that the private sector is capturing the city shape – land and built environment - and changing the city shape, partial plan by partial plan, plot by plot. They are also capturing all the land value increase created by urban development. Instead, the public sector needs to have firmer control over the city shape, as well as share some of the benefits, including funds, so that city plans are properly resourced and implemented, and the local authorities can afford the requisite mains infrastructure to give services like roads, water, sanitation to all of their citizens. Less traffic congestion will improve air quality. Improved sewage management will have a positive effect on our environment, particularly our rivers and our drinking water. All of this will improve the economic productivity of the city. This is an example of how the social, environmental and economic dimensions come together for sustainable development. Of course an appropriate land administration and land management system is in the critical path to their delivery.

I am now going to turn to the link between land management and poverty reduction. I do not have to tell this audience that land documents are key for security of tenure and for the aggregated spatial data to be used for land management. However, 70% of people in developing countries do not have land documents. This means they have little tenure security. It also means that there is no data for these areas. It will take 500 or more years to fill this data gap using conventional land administration systems. We cannot wait. We need to do this in our generation to be able to address the challenges facing the planet and to have economic growth, poverty reduction and sustainable development. This gap has been recognized and people are working to ensure that in the next decades we will have the data needed for land management.

To do this a new change management model is being used for the land sector by GLTN. Introducing new interoperable land administration tools at global and country level cannot be done through a 'fix the system' approach because of the complexity of the environment. Instead, we are using a change model which is based on 1/working with and through champions 2/identification and working with organisations who are open to new business models 3/the development and sharing of new knowledge with partners built on 21st century thinking 4/open debate and discussion about options and way forward 5/an emphasis on capacity development – which itself stresses change.

I am now going to switch to the story of how this change model is being used and the gap being filled and the role of land surveyors/land administrators and FIG in filling this gap. It is also a personal story. In 1993 the South African land industry wanted to know what their future was going to be under a new majority rule government. Professor John McLaughlin, a key mentor for

me, advised Professor Herman van Gysen of the (now) Surveying Department, University of KwaZulu Natal to hire me. I was given an industry grant to work with leading surveyors to think this through. Some of the essential questions we were trying to address were:- how can we scale the existing conventional land administration system to include customary tenure, informal settlements, poor people, women, deliver a million houses, including slum upgrading, give security of tenure to millions of formerly disadvantaged people, and at the same time preserve the integrity of the land administration system but make it user friendly. This was a period of intense discussion and debate as to best options and an incredible learning curve for all of us. This was the genesis of the pro poor land administration agenda which is now integral to the work of the Global Land Tool Network.

This kind of thinking was then expanded. I was invited to run a Masters Program in Land Management at the (now) University of KwaZulu Natal. Mature post graduate students from Africa built on these new ideas based on their own experiences and struggles with their land administration and land management systems and the land demands in their countries. We all together examined the land policies being proposed by African governments and tried to work out how the land administration and land management systems could implement these policies. So in the 1990s we identified about 15 missing pro poor land tools. Today these form part of the 18 missing land tools which GLTN partners are working on to fill the gap for the 70% of people in developing countries who have no land documents.

From about 1995/6 I started to attend FIG global meetings where I was given space to present some of the findings on this new pro poor approach. I was invited to key events such as what became the Bogor Declaration (1996) and the Bathurst Declaration (1999). I met some of the key FIG figures who were leaders and became Presidents of FIG who became involved with this pro poor land administration agenda over time. Here I am talking about Peter Dale, Ian Williamson, Holger Magel, Stig Enemark, Teo Chee-Hai, and of course more recently Chryssy Potsiou. The current President was recently the first to visit a slum area where one of the GLTN land tools is being implemented. All these people became involved in the debate about pro poor land administration instruments, and at different intensities, at different points in the history.

By this time, 2003, I had joined the United Nations – UN-Habitat, and I realized that the UN has incredible convening power and is able to attract funding. The idea of developing a network of people coalesced, to develop the 15-18 pro poor land tools we needed for the 70% of people without land documents. The Global Land Tool Network (GLTN) was launched in 2006 and started with a group of partners who had recognized that the conventional land administration system could not be scaled to cover the majority of people in the rural and urban areas. FIG was one of the founding partners. The 18 pro poor missing land tools became the agenda of this network. The 15 land tools of the 1990s postgraduate students had been expanded to 18 by new partners coming into the coalition. Sweden and Norway, as funders joined this coalition as they also had come up against barriers in delivering land to the poor. The GLTN agenda was not a dream by a single person. Rather it was a group of people and organizations who over time

recognized the importance of having a land administration system which could serve the majority of people and support economic development and poverty reduction for all; and that we would have to find more affordable and user friendly way of doing business so that we could do sustainable land management. In more recent times the Netherlands and IFAD have joined in the funding of this journey to developing pro poor gender responsive land tools.

By 2014, after 9 years, it was clear that the GLTN agenda was not just a dream but that it was practical and could be implemented. New champions emerged to take the vision even further. In 2014 FIG and the World Bank launched the 'Fit for Purpose Land Administration' publication. A key sentence in the foreword reads, "concerns were raised by stakeholders that the current procedures and requirements for mapping and boundary delineation were often too cumbersome and expensive and did not comply with actual needs of most citizens for achieving security of tenure.. and are costly to maintain and operate and do little to improve service delivery and access to land information…(Instead) land administration should be designed to meet the needs of people and their relationship to land (and) the concept 'fit for purpose' (land administration was established). For me, this meant the coming of age of pro poor land administration as one of the important viable options for delivering land management and security of tenure for the majority. GLTN is funding the development of Fit for Purpose Land Administration guidelines to take it to the next practical level. There is a reference group associated with this new thinking and if you are interested in being part of the thinking please let us know.

Today in 2015 the GLTN partners have developed many land tools which are inter-operable with the conventional land administration system. New tools are still being developed. I have been fortunate to be part of the tool development of many of them. FIG continues to be a key land tool developer – either as lead or as support, and has been over many years.

The most well know one of course is the Social Tenure Domain Model. When GLTN partners decided that we could not scale freehold tenure and we should also support the documentation of the land of millions of people living under other tenure arrangements, we adopted the continuum of land rights. What this proposed was that a range of rights, not just freehold tenure, should be documented. This approach immediately challenged the conventional land administration system as it did not fit the cadastral evidence requirements and instead required a range of spatial units. Also, cadastral parcels are unique polygons. With a range of rights it is common to have overlapping and ambiguous rights so it was not possible to have unique polygons as the unit of analysis also for GIS attributes. The problem was solved by the Social Tenure Domain Model information management system which allows all these aspects. It is a subset of LADM and an ISO standard developed by Chrit Lemmen and taken forward by other land surveyors in the GLTN team. It took 7 or more years to build, but now it is robust and going to scale in over 6 countries and in many projects. FIG played a major role in the creation of this concept, model and software.

This is one example. I cannot tell you about each of the tools (see www.gltn.net) – all I will do is list some of those where FIG has been engaged: - Continuum of land rights; Social Tenure Domain Model (STDM); Costing and Financing of Land Administration Services; Valuation of Unregistered Land (first phase still to be completed); Gender Evaluation Criteria; Transparency in land administration; Youth and land evaluation criteria; Support to regional land platforms.

As you can see we have come a long way in 9 years. Of course we have a way to go. Now we are rolling out the tools at country level, trying to see how they can be inter-operable with government systems. Assessing how they can deliver security of tenure and data for poor people and local authorities. We already have some quick wins. I only have time for 1 example. A number of municipalities in Kenya and Uganda are already using STDM to create data for land management for informal settlements, give them roads and services, such as water and sewerage. But also to fill the data gaps in their maps so that they can undertake city wide planning and management.

The work GLTN partners, including FIG, have being doing on pro poor tools is to meet the demands of the 70% of people in developing countries for land documents and for government and local government for data. Linked to the conventional land administration system, it will underpin economic growth, poverty reduction, and planning and land management for sustainable development. Finally these tools will help us address the land competition challenges faced by the planet and make the planet more sustainable.