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**Towards Effective Collaboration Between FIG and PAIGH  
in the Context of Land and SDI in the Americas**



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Overview of this Presentation

- Introduction and recognitions
- PAIGH Essential Background
- SDI and the situation in the Americas (lessons from Aguascalientes)
- Role of capacity building for sustainable institutional progress in the context of sustainable development
- The evolution of the Geo related professions
- A look at the relationship between politics and land governance
- Climate change and social development
- Natural Disasters and opportunities for sustainable development: The situation in Haiti and Chile
- A final thought: A spatially enabled society, the decision making and the roles for political and technical leadership



## PAIGH: Basic Background

- Established in 1928, with headquarters based in Mexico City, PAIGH is a unique multidisciplinary organization in The Americas, combining spatial information, geography, geophysics, anthropology and history
- Oldest specialized agency of the Organization of American States - OAS and the Inter-American System
- PAIGH Assembly consists of Member States delegations; each one entitled to one vote. Each Member State has a PAIGH National Section, currently 21 are active, with four State Observers
- Four Commissions: Cartography (1941), Geography (1946), History (1946) and Geophysics (1969). Commissions are responsible for developing and executing the scientific programs of PAIGH
- The General Secretariat is the central unit of PAIGH and is responsible for the successful operation of the Institute

*PAIGH's contribution to capacity building in the region is significant. IN recent years PAIGH has sponsored 46 workshops; granted 396 grants. Funded 38 projects related to SDI and territorial planning.*



## Introduction: Meaning of the MoU to be Signed Today Between the FIG and the PAIGH

- This is not an isolated fact.
- Collaboration with FIG started years ago but it was until the Special Forum organized jointly in Aguascalientes (2004) when a more specific agenda and aims were foreseen and determined, with a focus on capacity building.
- Besides national gilders of surveyors the FIG has since been concerned about the formation of a regional body for LAC, in capacity to promote professional activities concerning land governance and more recently, to connect registries and cadasters with SDI and the areas of poverty reduction, climate change and disasters.
- Such priorities remain valid and given the dynamics operating in the region they will last beyond this decade.

*Recognitions: Outstanding contribution of Stig Enemark to the development of the "land issue" globally and in the Americas; The book on "Land Administration for Sustainable Development"; The activities of the Center for SDI and Land Administration at University of Melbourne*



Role of Capacity Building for Institutional Progress in the Context of Sustainable Development: The FIG Task Force on Institutional and Organisational Development, leaded by Iain Greenway

- Cooperation between organisations is a weak point: there is often suspicion rather than cooperation;
- The remits and skills of the different organisations involved in administering a land administration system are often not joined up effectively;
- The lack of effective working across sectors is a particular issue;
- There are skill gaps, particularly in the conversion of policy into programmes, the division of labour, and ensuring effective learning and development;
- Stakeholder requirements appear insufficiently understood or insufficiently balanced, leading to ineffective use of outputs;
- There is insufficient time and effort given to learning from past experience.

*The Task Force developed a list of key components which need to be in place in a sustainable organization, and which are often not in place. FIG is building the capacity through conferences, commission work, seminars, publications, standards and guidelines*



SDIs are Key to Spatial Enablement: The situation in the Americas  
(Lessons from Aguascalientes, 2004)

**“Creating awareness of the benefits of developing a shared platform for Integrated Land Information Management takes time. The Mapping/Cadastral Agencies have a key role to play in this regard”**

Five year ago in Aguascalientes, Mexico the UN, the WB, FIG and the PAIGH organized an Inter regional special forum on “Development of Land Information Policies in the Americas”. The three main conclusions of the Special Forum remain basically untouched:

- Foster modern land policies and associated SDIs so as to better support social, economic and environmental sustainability
- Determine policies and programs for educational, professional and institutional capacity building that will ensure the development of appropriate land administration systems and associated SDIs
- Develop appropriate institutional, legal and technical processes to integrate land administration, cadastre and land registration functions with topographic mapping programs within the context of a wider national strategy for SDI.

(Aguascalientes Statement, 2004)



"I always felt that the most fascinating feature about the surveying profession is its multidisciplinary profile" (S.Enemark)

- Evolution of the surveying profession and the SDI
- "Land management requires inter-disciplinary skills that include technical, natural, and social sciences"
- "Increasingly, multi-professional groupings are being created to generate holistic complete life cycles solutions, of which the surveying profession can form an integral component" There is need for the surveying profession to recognize this trend" John Hannah, New Zealand in Coordinates.
- The American Geophysical Union recommends more research of an interdisciplinary nature on any proposals to geo-engineer climate.
- The English name of GSI Japan was changed effectively this past April 1st, 2010, from Geographical Survey Institute to "Geospatial Information Authority" of Japan. This is not an isolated decision and it reflects a trend.

*"And capacity building refers to activities carried out by organizations in one or more countries to help those in others do better. Has capacity building worked? Not really... Because they are initiated and designed on the drawing boards of Brussels, New York and Washington..." (M. Lemmens, GIM)*



#### The Evolution of the Geo Related Professions

- Land information should be organized as a spatial data infrastructure at national, regional and local levels: an Educational, Professional and Institutional Capacity Building Challenge (FIG, 2004)
- "The profile of the land management profession in the third millennium will include a mix of technical surveying and mapping professionals, business practitioners, spatial data managers, land and environmental resource managers and legal and financial consultants on land management matters" (Enemark, 2004)
- "There is need for a new profession, in view of the increasing complexities of managing human natural resources and the need for multipurpose land and resources records from local to global scales, dedicated to foster social and economic growth out of the local and national SDI and the subsequent development of a community knowledge base" (Pethersohn, 1997)

*To support decision making at all scales for multiple purposes, there is need to encompass the policies, organizational remits, data, technologies, standards, delivery mechanisms, and financial and human resources necessary to ensure that those working at the global and regional scale are not impeded in meeting their objectives" (GSDI, 2001)*



### A Look at the Relationship Between Politics and Land Governance

- “FIG must be able to interact with politicians at national level to promote and improve the basic conditions for surveyors and their role in society”
- “Land Management needs high-level political support and recognition”
- “In a global perspective the areas of surveying and land administration are basically about people, politics and places”
- “Land management is a key activity of both government and the private sector”
- “Land governance is about the policies, processes and institutions by which land, property and natural resources are managed. This includes decisions on access to land, land rights, land use and land development”
- “Recognize and embrace technical and political leadership. The ability to affect change and embrace new ideas relies on technical and political leadership. Technical leaders, including planners, provide fact-based information that undergirds sound decision making and policy. Technical expertise also includes the ability to bring together diverse stakeholders to participate in decision making activities that affect them. Political leadership is required to advance the public good”(Gavin, 2010).

*“There is a general vacuum of spatial understanding in the current political and senior bureaucratic levels of government” Gary Nairn, former Australian Special Minister of State & e-Government Minister. Spatially Enabling society through e-government, A Political Imperative –GSDI 11, Rotterdam*



### Climate Change, Natural Disasters and Social Development

*“In Short: Sustainable Development is not Attainable without Sound Land Administration” (S. Enemark).*

- “It is clear that land registers and cadastres in themselves cannot induce mitigation and adaptation of climate change. However, they must serve as a sound information base for the implementation of land management policies”. (P. Van der Moelen, “Cadastral and Climate Change, 2010)
- I would add, it too demands the availability of greater and structured data sets, standards and interoperability.
- In the Americas there is need for a regional organization to efficiently connect land to sustainable development with priority to the direct relationship between climate change and disaster risk. Current regional and subregional efforts are not enough. This is even more relevant when looking at the poor results attained at the Climate Summit of Copenhagen.

*“It is clear that those who suffer the most from the increasingly signs of climate change are the poor”. Mr. Ban Ki-Moon, UN Secretary General.*



## The Situation in Haiti and Chile after Recent Earthquakes (1)

### Lessons from the US (Gavin Smith, "Planning for Post-Disaster Recovery...). 2010

- “Following a disaster it is unclear who is in charge of community recovery”
- “Land use planning tools and collaborative techniques are underutilized”
- “The collection of data and analysis of data is not effectively linked to the creation of policy options”
- “The application of these processes remains largely unrealized”
- “The nexus between hazard mitigation, sustainable development and disaster resilience remains uncertain”

*Quite frequently relief efforts begin while disaster management systems are not properly in place... (C. Lemmens, GIM)*

*Measures for adaptation to climate change and disaster risk management in Developing Nations must be integrated as part of national strategies for integral and sustainable development and in particular, in the poorest ones, for poverty reduction. (P. Van der Moelen)*



## The Situation in Haiti and Chile after Recent Earthquakes (2)

- Need for a more comprehensive integral plan for the development of Haiti (the case of reforestation, urgent attention of trauma and multiple societal needs). Earthquakes, inland flooding and landslides are the biggest hazards for Haiti.
- Need for simple guidance concerning seismic risk and seismic construction codes. “Maps have to be understandable” Menno Jan-Kraak, in Geo informatics, 2010
- The fact is there is need to focus on disaster risk reduction and mitigation in the context of the needs of the Haitian People and their communities
- Long-term data needs and capacity building
- Climate change associated to vulnerability in Haiti: Hurricanes, coastal subsidence, droughts

### The USGS report on Haiti

*Scientific data and analysis clearly indicates that another earthquake of similar magnitude could strike at any time directly on the south of Port-au-Prince... and all reconstruction must take this hazard into account... (USGS/EERI Advance Reconnaissance Team Report, 2010)*



## The Situation in Haiti and Chile after Recent Earthquakes (3)

### Some of the US lessons:

- Develop pre-event plans for post disaster recovery
- Invest the necessary time to build a diverse coalition of support for disaster recovery planning
- Incorporate land use planner and land use planning principles into the recovery plans. "The unfortunate reality remains that planners are often excluded from the pre and post –disaster recovery activities"
- Institutionalize sustainable development and disaster resilience through planning for disaster recovery. The post recovery environment provides unique opportunities to link disaster resilience to ongoing sustainable development initiatives.
- Capitalize on technical and political leadership and support. The need to collaboratively address natural hazards and disasters has never been greater as we increasingly face challenges that are global in scope but as land people knows well "all planning is local". (Gavin Smith, "Planning for Post-Disaster Recovery..."). 2010

*"a great deal would already have been gained had more politicians acknowledged the suitability of geo-information technologies as a means for disaster management".*

*The OAS priorities for Haiti: Transparent elections, governability and... the cadastre*



## GSDI, GEOSS and the UN Role

- "Geo and GEOSS must now be regarded as the authentic way ahead for Earth Observation"
- "I don't think we are all much nearer the "system of systems" than we were a few years ago... The effort to develop a global observation system of systems has been disappointing ..."
- "GEO needs to be linked more directly to the political institutions that are responsible for making, so to say "global decisions" on the environment and particularly, climate change."
- "Success will only come when the political deciders clearly designate responsibilities...If the UNFCCC manages to reach some measure of international agreement; it would be wise for them also to articulate Earth observation efforts both in the provisions of the necessary data on a continuing and sustainable basis as well as in helping to ensure compliance of commitments".

*"Much of what I have said referred to organizations, bodies, agencies and institutions – but within each of them are people, individuals"*

*Roy Gibson, GEOSS, 2009*



## In Conclusion: A Spatially Enabled Society, the Decision Making and the Roles for Political and Technical Leadership

- In the words of Stig Enemark “A Spatially enabled government is achieved when governments use place as the key means of organizing their activities in addition to information, and when location and spatial information are available to citizens and business to encourage creativity” and I would add, development.
- Today we have signed this agreement for cooperation between the FIG and the PAIGH. From the original ideas and goals, concerning development goals in the Americas, we are giving priority to capacity building in the context of improved land governance, climate change and disasters preparedness.
- Capacity building of Institutions and in the end, of individuals, should play a key role in this framework for collaboration.
- To succeed we know that it requires to bring together technical and political leadership at multilevel and for this we need this to be much more than a statement, one that we can look at it as a reflection more than an action, a capacity building key point.
- Recent situations like the big scale earthquake affecting the entire nation and the peoples of Haiti are, once more, indicating the need for harmonization between the efforts of those providing data and analysis arising from a geographical point with those responsible of the public good.



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