

# Proposal for the development of an Academic Network Americas



**UN-GGIM**

UNITED NATIONS INITIATIVE ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT

UN-GGIM: Americas, October 2016 México DF

# Background

- **Dec 2015, NY:** UN-GGIM Bureau at its meeting convened in New York in discussed the merits and establishment of an **Academic Network** under the auspices of UN-GGIM as a means to capture and include the role and contributions of academia in global geospatial information management.
- **April 2016, Addis Ababa:** an exploratory **UN-GGIM Academic Network** meeting was convened as a Side Event to the Fourth High Level Forum on UN-GGIM, in, Ethiopia, on Tuesday 19 April 2016. In this meeting it was anticipated that **the Academic Network operates along the same lines as the Joint Board of Geospatial Information Societies (JB-GIS)** and is able to "self organise" and contributes to the activities of UN-GGIM in a similar and productive manner.

# Background-2

- **April 2016**: referring to the Addis Ababa Declaration at the conclusion of the Fourth HLF, which endorsed **UN-GGIM facilitating the establishment of an Academic Network** as a strategic knowledge, research and training arm to assist its activities and objectives.
- **June 2016**: UN-GGIM Secretariat has formed an **Academic Network Task Team**, with members from different regions, and **has appointed Professor Abbas Rajabifard, from the University of Melbourne to Chair** the Task Team with a Mandate to start the process and consultation.
- **August 2016** : UN-GGIM experts meeting in New York endorsed the formation of an academic network and provided comments to the initial Terms of Reference
- **September 2016** UN-GGIM Academic Network elected inaugural officers and it is currently working on finalizing ToR

# Objectives of Academic Network

- The **UN-GGIM Academic Network will be a coalition of recognized universities, research and education centers** or equivalent involved in the research, development and training on geospatial and land information and related matters.
- The **Academic Network will be a platform** for the academic community to provide input and to support UN-GGIM in achieving its vision and goals by generating a platform for academic community to input to the UN-GGIM process in the form of strategic knowledge, research, education and training, and **will be a strategic arm** to empower UN-GGIM to achieve their vision and goals.
- The **Academic Network** will provide both **research and education capabilities** for UN-GGIM and affiliated members to identify and response to challenges and opportunities in which UN-GGIM and related UN offices can achieve their visions.

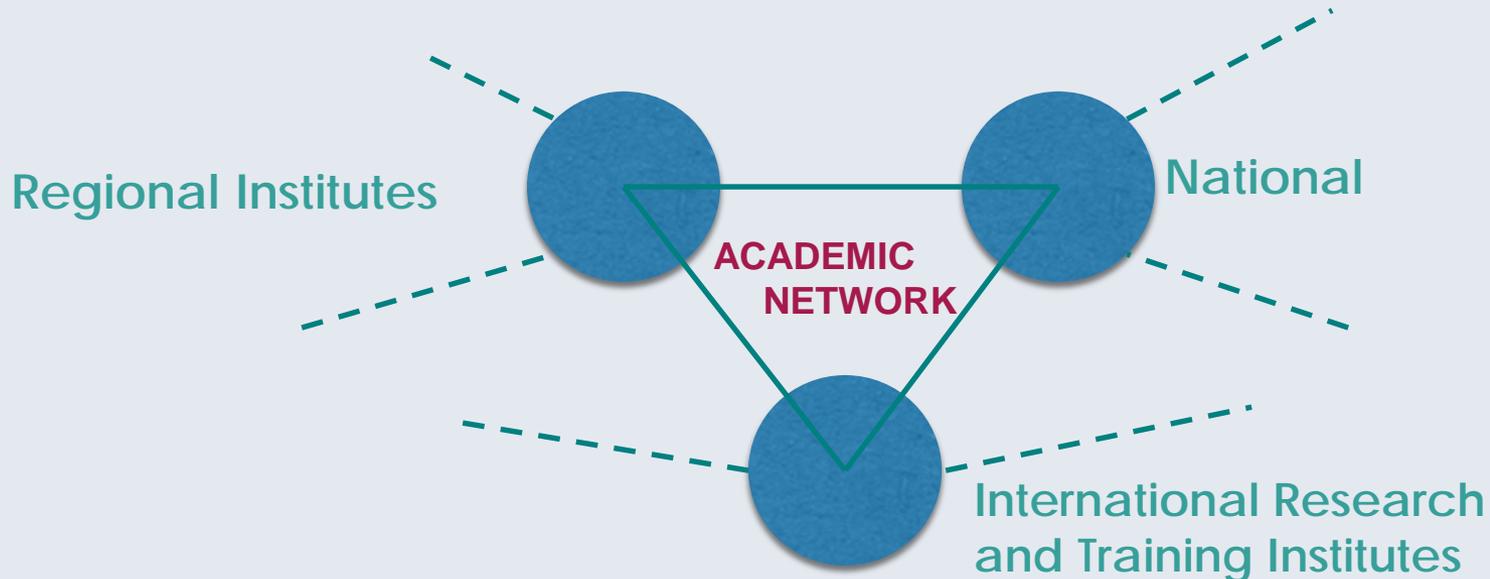




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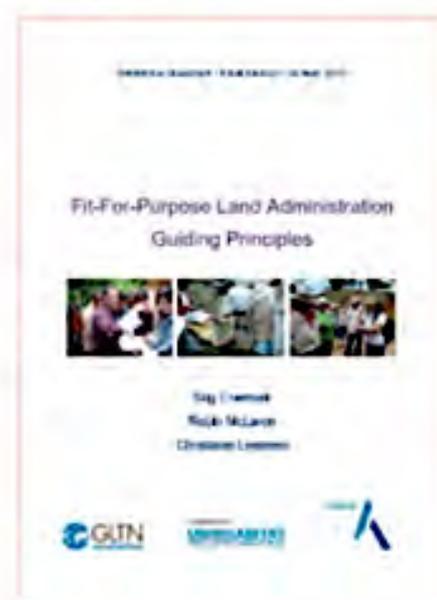
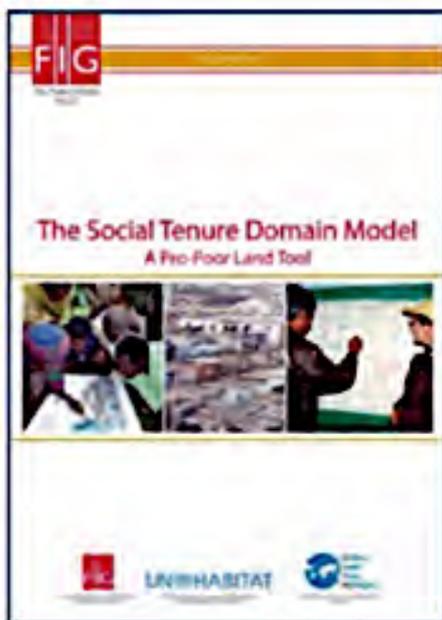
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# UN-GGIM academic network

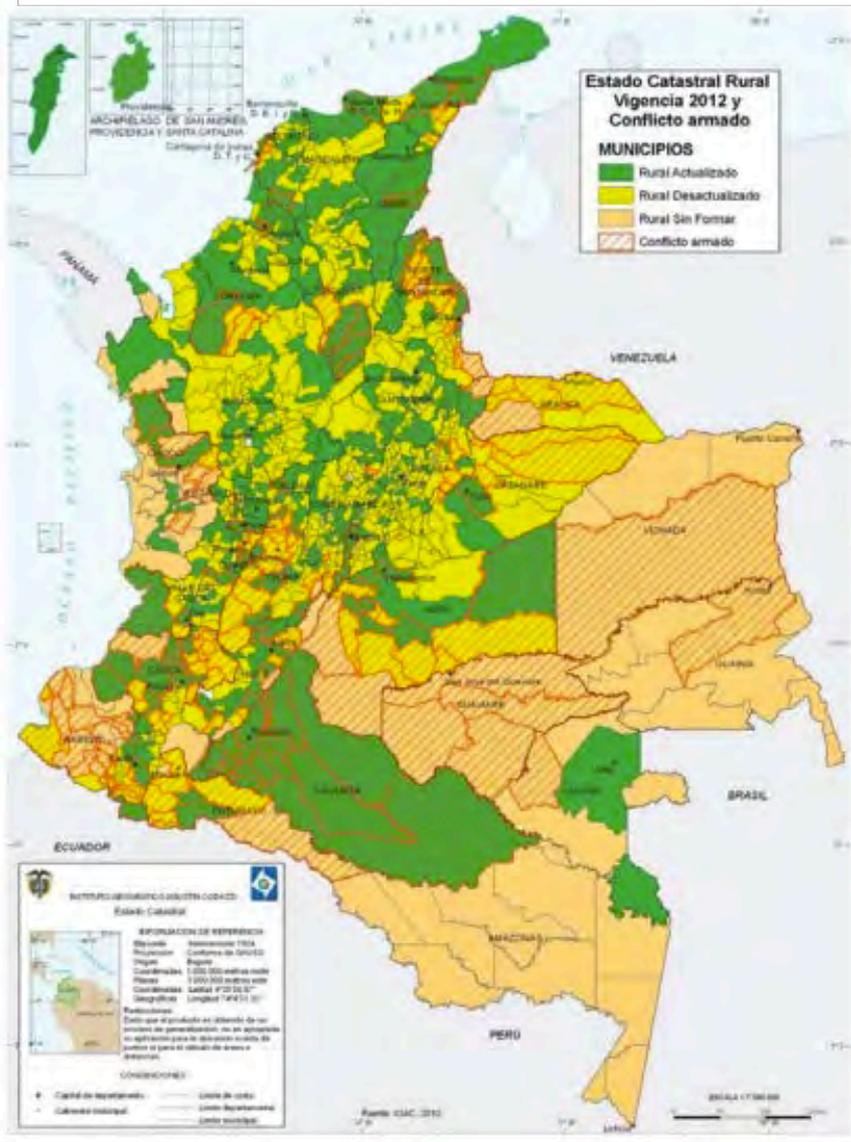




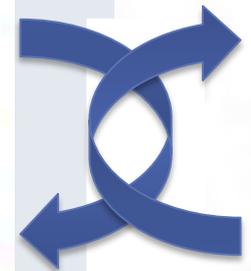
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# There is a direct correlation between poverty and cadaster problems

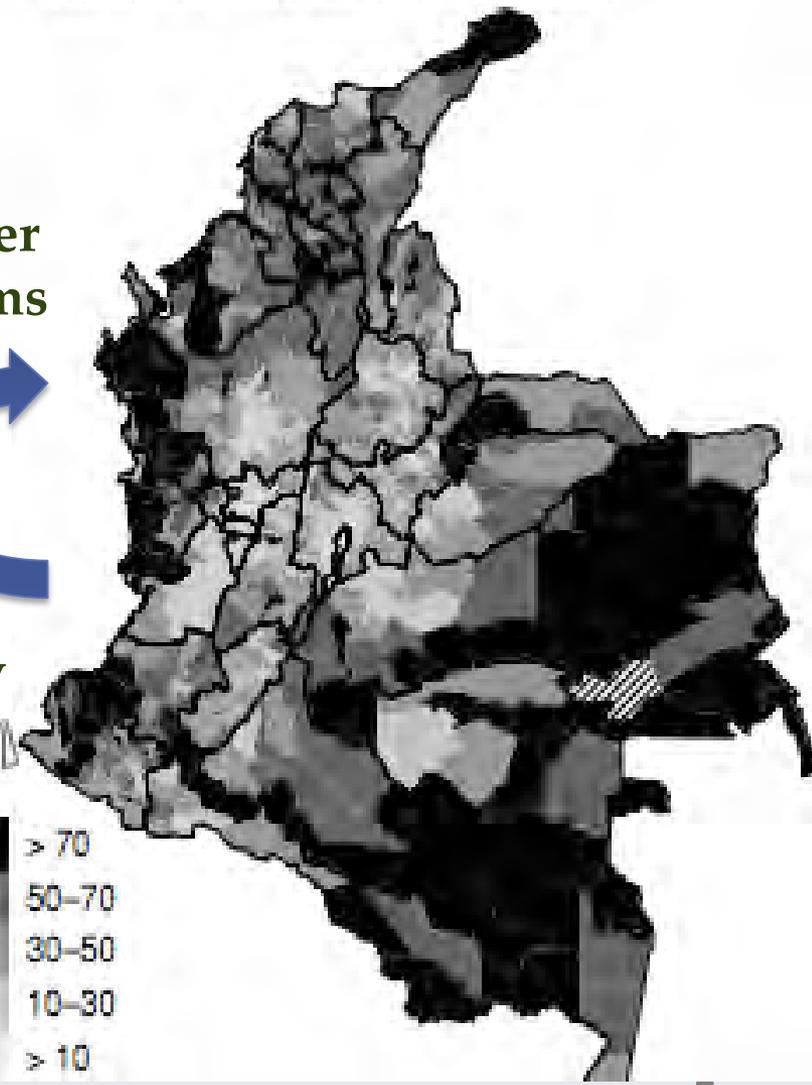


Cadaster problems



Poverty

Gr. Porcentaje municipal de personas con necesidades básicas insatisfechas





**Mapping the most vulnerable**  
*Mapas de los mas necesitados*



# Cadaster 4.0

## Cadaster for people made by people.

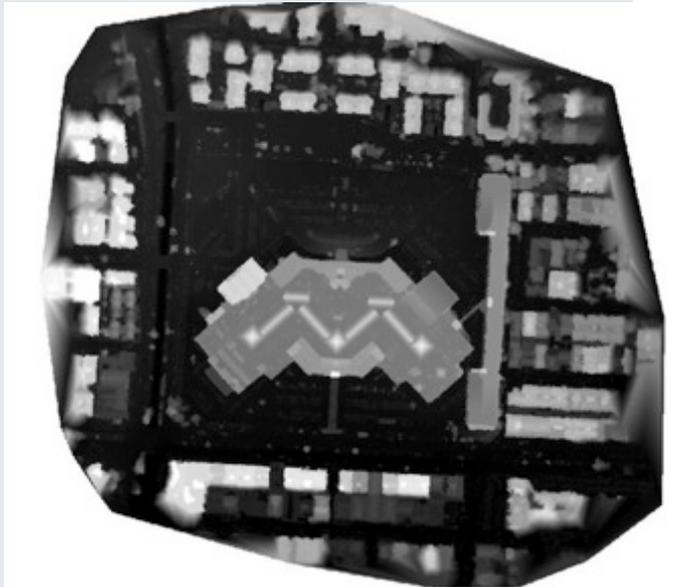
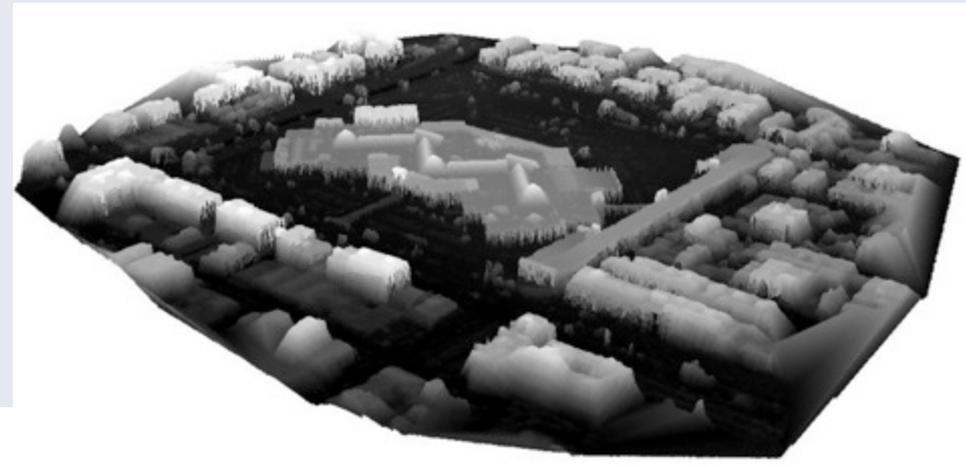
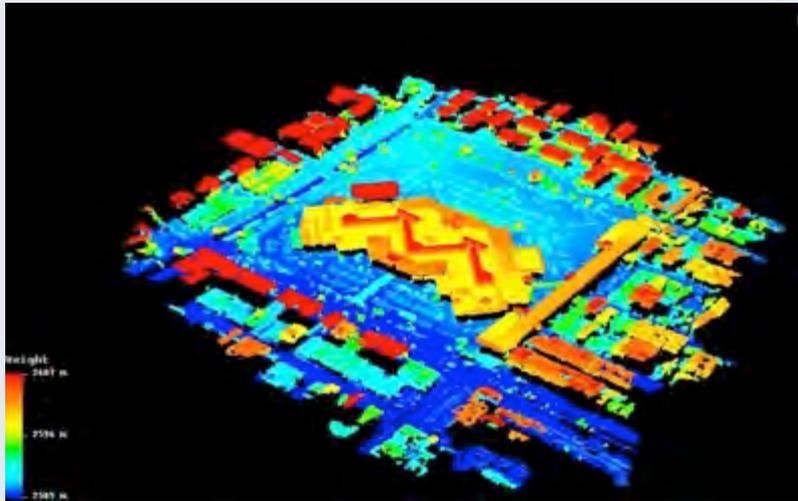
- Cadastre 4.0 as a **paradigm**
- **close the circle** between new technologies and automatism of processes, products and services and stakeholders, including citizen and land owners as essential partners at equal level.
- It is a **partnership model** building coalitions /symbiosis between professionals in private and public service, between citizen and users and public authorities and between technology and society.
- Cadastre 4.0 establishes **links between the virtual and real world** securing interests of land owners, society, governments and economy.
- It sets the scene for permanent communication between **people, procedures and products**. The Internet of Things is amended by a social aspect.
- Cadastre 4.0 if implemented, will help to **save resources** and at the same time will provide solutions in a more flexible, a more efficient and a more social way.



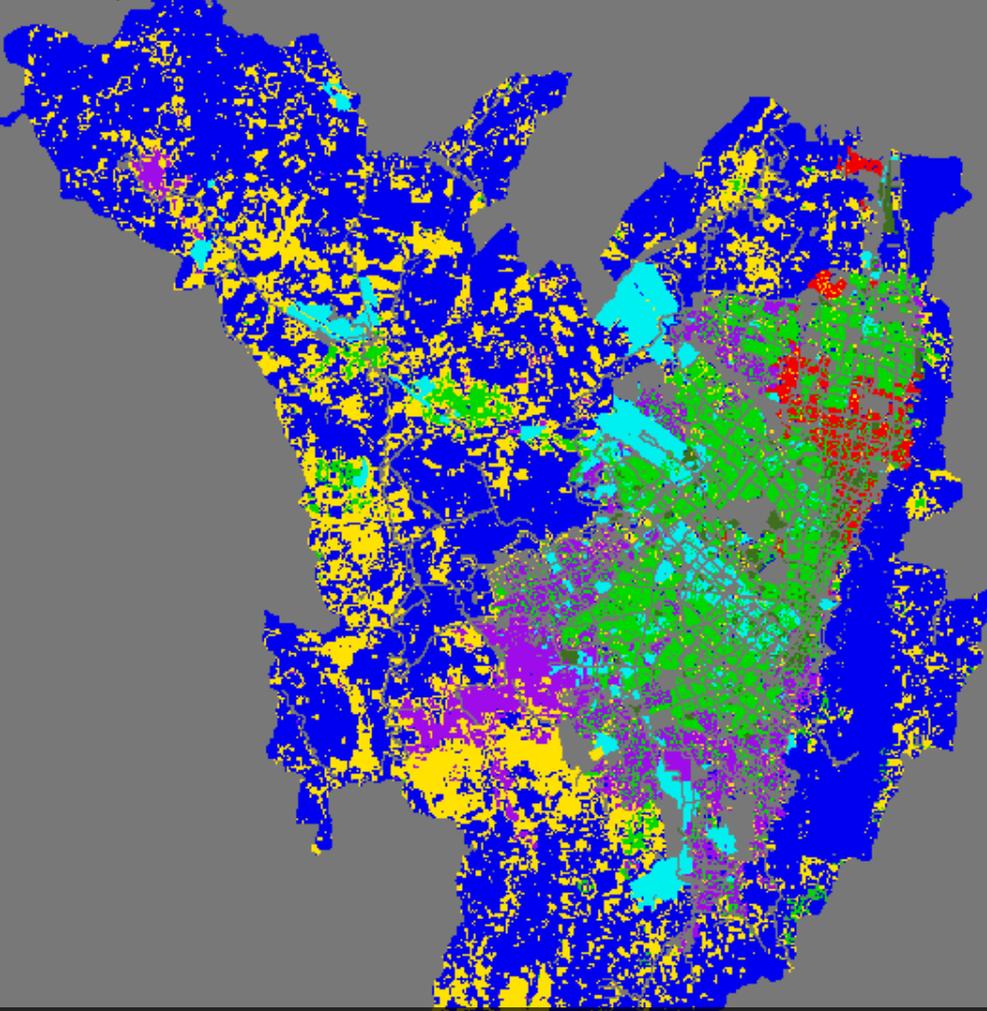
## THIS TOOL ESTIMATES LAND VALUE INCREASES BASED ON ROAD INVESTMENT

*Esta herramienta ayuda estimar incrementos en los valores de la tierra dependiendo de las inversiones en infraestructura*

# DEM- DSM -DTM



X, Y Z COORDINATES



**WE HAVE DEVELOPED A GEOGRAPHIC TOOL TO IMPROVE UNDERSTANDING RELATIONSHIP BETWEEN RURAL LAND AND INFRASTRUCTURE**

*Nosotros hemos desarrollado herramientas para tratar de unir estos dos factores*

# Academic Network Inaugural officers

- Prof Abbas Rajabifard,  
The University of  
Melbourne, Australia  
**(Chair)**
- Prof Daniel Páez,  
University of Los Andes,  
Colombia **(Secretary)**



# Academic Network Task

## Team Members

- Prof Abbas Rajabifard,  
The University of Melbourne, Australia (**Chair**)
- Prof Daniel Páez,  
University of Los Andes, Colombia (**Secretary**)
- Prof Huayi Wu, Wuhan University, China
- Prof Joep Crompvoets, KU Leuven, Belgium
- Prof David Coleman, University of New Brunswick, Canada
- Prof Harlan Onsrud, University of Maine, USA
- Prof Menno-Jan Kraak, University of Twente, Netherlands
- Prof Josef Strobl, University of Salzburg, Austria
- Prof Maria Antonia Brovelli, Politecnico di Milano, Italy



# UN-GGIM Americas

After conversations with multiple academic members in the region and by initiative of Prof Beshem Rarlal we propose UN-GGIM Americas to:

- Support the Formation of a task team to develop the ANA (Academic Network America)
- Request the Task force to:
  - Provide advice on an appropriate relationship of ANA to the UN-GGIM academic network
  - Create a database of interest researchers in the region
  - Report back to UN-GGIM Americas on its recommendation

October 2017 Cartagena – Colombia

# COMM 717

## FIG Annual meeting and First meeting ANA



Universidad de  
los Andes