



7th FIG Regional Conference
Spatial Data Serving People
 Land Governance and the Environment – Building the Capacity
 Hanoi, Vietnam, 19–22 October 2009



Capacity building in land management: The need for establishing a global academic partnership

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GLOBAL
LAND
TOOL
NETWORK

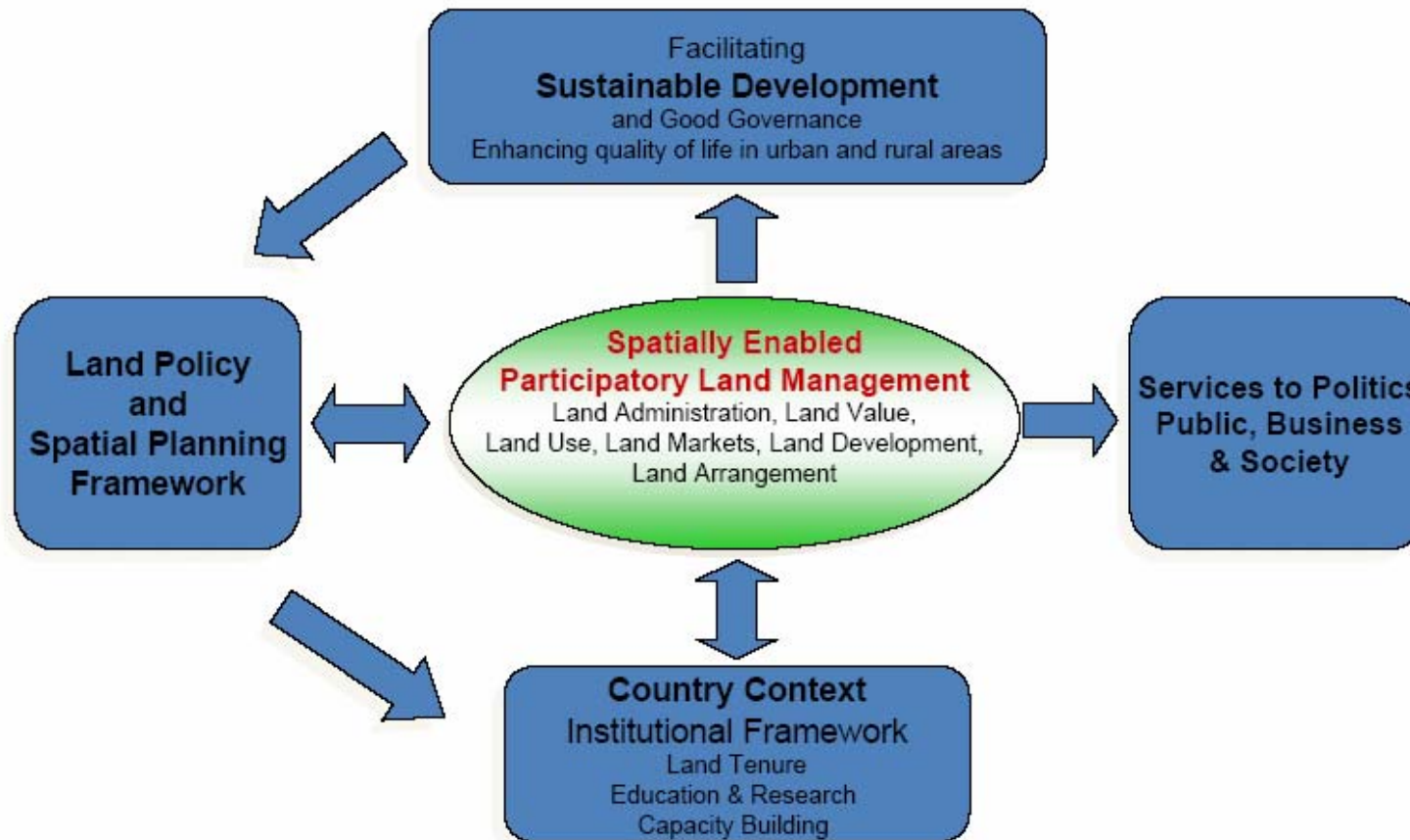


7 Key Factors of growing economy, sustainable wealth and of innovation

1. Natural resources (like land)
2. **Human resources**
3. Technical process
4. Capital
5. **Knowledge** and its marketing
6. **Institutional and political framework** (i.e. services, programmes, organizational structures)
7. **Values, ethics, paradigm of commitment**

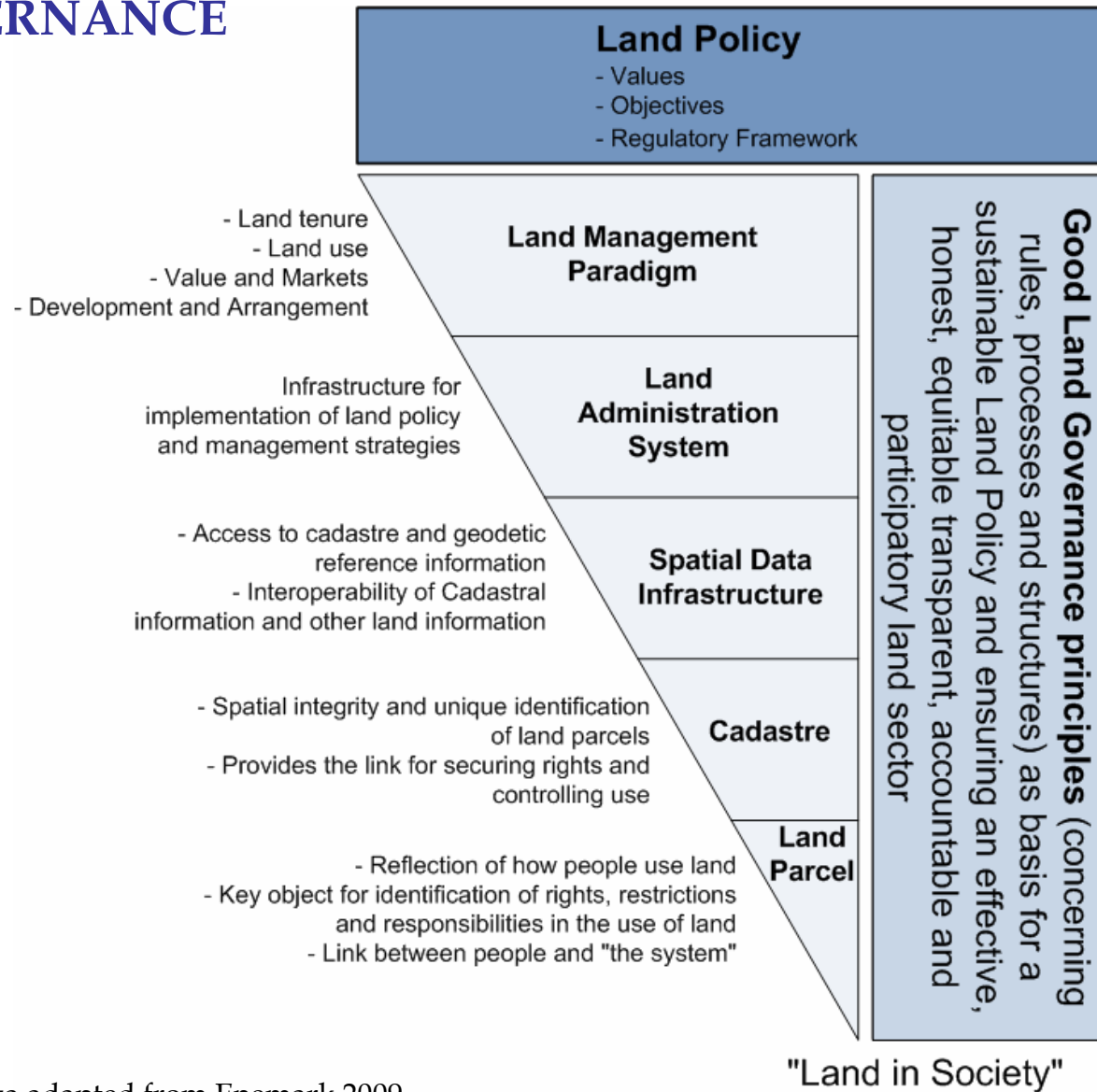
Source: Prof. Roland Berger, quoted in Magel 2005; 2006

A COMMON LAND MANAGEMENT VISION



Source: Magel (adapted from Expert Group Meeting 9 - 11 November 2005 at the University of Melbourne)

THE NEW HOPE : GOOD LAND GOVERNANCE



Source: Magel, Klaus and Espinoza adapted from Enemark 2009

Talking about Land Management is also talking about
Land Administration, Spatial Data Infrastructure and
Land Governance

WHAT IS CAPACITY BUILDING?

FIG is strongly committed to Capacity Building – It is part of its identity

- The basic idea of FIG is giving support for capacity building on global and via members on regional and local level
- Capacity building is the special motto and thematic priority of the current FIG presidency and president
- The topic of capacity building will be highlighted in Sydney 2010 again

Capacity Building for the whole world – Rio 92

- Specifically, capacity-building encompasses the country's human, scientific, technological, organizational, institutional and resource capabilities.
- As a result, the need to strengthen national capacities is shared by all countries....

Source: UN Agenda 21, Chapter 37, 1992

Williamson, Rajabifard & Enemark: Capacity Building for SDIs, 2003

CAPACITY BUILDING

- The term capacity has many different meanings and interpretations depending on who uses it and in what context it is used. It is generally accepted that capacity building as a concept is closely related to education, training and human resource development (HRD). This conventional concept has changed over recent years towards a broader and more holistic view, covering both institutional and country specific initiatives.
- The Workshop on Capacity Building in Land Administration for Developing Countries, held at the ITC, 2000 adopted the following definition of capacity building:

“The development of knowledge, skills and attitudes in individuals and groups of people relevant in design, development, management and maintenance of institutional and operational infrastructures and processes that are locally meaningful”.

This is a broader approach while still focusing mainly on education, training and HRD.

Human Resource Development is a primary task of academic capacity building

- Capacity building encompasses **human resource development (HRD) as an essential part of development.**
- It is based on the concept that **education and training** lie at the heart of development efforts and that without HRD most development interventions will be ineffective.
- It focuses on a series of actions directed at helping participants in the development process to increase their **knowledge, skills and understandings and to develop the attitudes** needed to bring about the desired developmental change.

Source: Crowder 1996, "Human Resource and Institutional Capacity Building through Agricultural Education", Food and Agriculture Organization of the United Nations (FAO)

Institutional capacity building

Capacity-building efforts should focus also on **institutional** strengthening, including the design of new **organizational** structures to improve the "goodness of fit" between the policy context for sustainable development and enacting institutions in both the public and private sectors.

Source: Crowder 1996, "Human Resource and Institutional Capacity Building through Agricultural Education", Food and Agriculture Organization of the United Nations (FAO)

World Bank's definition of Capacity Building

- A coordinated process of deliberate interventions to **(i) upgrade skills (ii) improve procedures, and (iii) strengthen organizations.**
- Capacity building refers to the investment in people, institutions and practices that will enable countries to achieve their development objectives.

Source: World Bank's Poverty Net Glossary, URL: <http://go.worldbank.org/7BKU4R5560>
Accessed 15 October 2009

Building the Capacity

Education

Providing broadly based specialists
Land Professionals



Research

Developing the professional areas

Professional practice

Developing the profession

Building sound institutions
and supporting "the triple bottom line" in society

Three Levels of Capacity Building

- Human resources development and the strengthening of managerial systems (InWEnt : **individual**)
- Institutional development, including community participation (women in particular) (InWEnt : **organisation**)
- Creation of an enabling environment including appropriate policy, legal and regulatory frameworks (InWEnt : **system**)

Source: Symposium "A Strategy for Water Sector Capacity Building" (1991), UNDP and Institute of Infrastructural, Hydraulic and Environmental Engineering IHE, Delft. And InWEnt Capacity Building

New Book of
Williamson, Enemark ,Wallace & Rajabifard, 2009:
Land Administration for Sustainable Development

Chapter 11: Capacity building and institutional development

- 11.1 The modern capacity building concept
- 11.2 Capacity development
- 11.3 Capacity-building issues in land administration
- 11.4 Institutional capacity in land management
- 11.5 Education and training in land administration

"Organizations learn only if individuals learn something. Organizational learning is not guaranteed by individual learning, but without it there is no institution capable of learning."

Prof. Peter Senge
'Pope of Management'

Prof. C. Otto Scharmer, MIT

About future oriented capacity building.....

It is not enough to deliver to individuals technical knowledge in certain sectors.

To become also organisations innovative, changeable and more capable we should focus on 4 aspects:

1. Globalisation
2. Personalisation
3. Prototyping
4. Networking in social fields

Prof. C. Otto Scharmer, MIT

About future oriented capacity building.....

Globalisation

We need '**global classrooms**' with participants of many countries with different cultures, experiences and views of points. Working in small groups develops an unbelievable power. The participants recognize that they all are worldwide working on the same principle problems and that therefore they should support each other on the basis of functioning networks.

Who is responsible for Capacity building?

Capacity building is the task of employers (state, private sector) and employees or students as well as NGOs like FIG. They use/request special institutions for building the capacity by programmes like universities, private companies or own departments/commissions.

Capacity Building – TUM Center working definition

Capacity building is the process of transferring knowledge, skills and understanding of esp. societal systems to students and/or professionals and thus of developing required capacities and competences of an individual, an institution, a society or even a group of societies for the attainment of certain specific or general objectives (e.g. sustainable land management).

These capacities are developed through transfer of knowledge and skills at three levels, namely:

- Individual → design educational/training programmes
- Entity/organizational → institutional structures, strategies, processes..
- System/societal → policies, regulatory frameworks, resources management

(Magel et.al. 2009, based on UNDP (1998), Capacity Assessment and Development. Technical Advisory Paper No.3 and Williamson, I.P., A. Rajabiford and S. Enemark (2003). "Capacity Building for SDIs", in Proceedings, of 16th United Nations Regional Cartographic, Okinawa, Japan)

Contributions of TUM to international capacity building

- **People/Individual level:**

Education and short term training programmes (e.g. postgraduate Master's Programme and Summer Schools) ensuring professional competence of individuals for fulfilling the needs for qualified human resources (more than 30 countries)

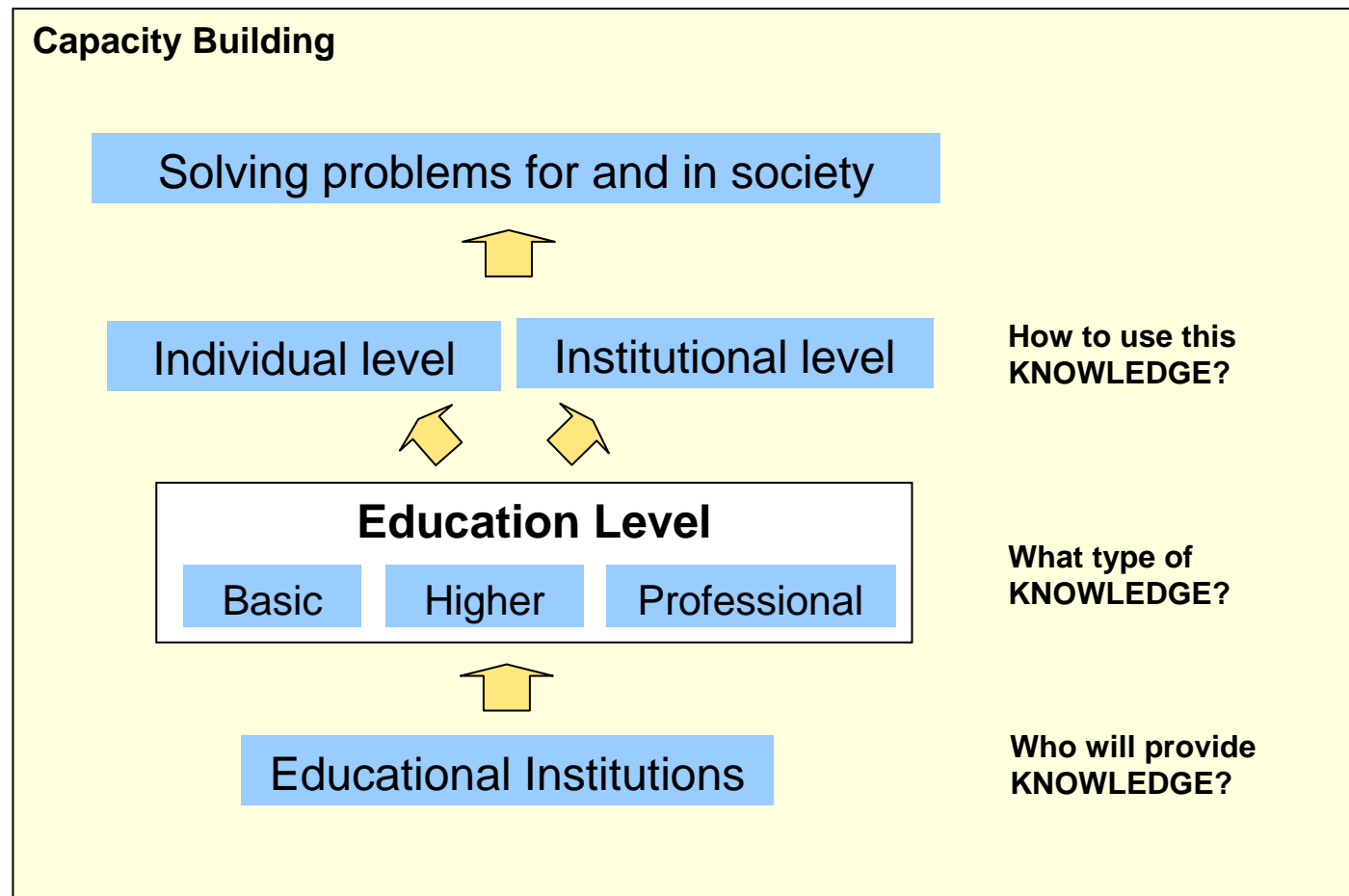
- **Entity/Organizational level:**

Short term training programmes (e.g. Summer Schools, which are interdisciplinary and faculty cross cutting and addressing all related ministries); advisory activities supporting development of adequate institutional capacities. For example, training of trainers through academic programmes and improvement of organizational capacities (e.g. curriculum and faculty development) through advisory activities (Cambodia, Philippines ,Namibia)

- **System/Societal level:**

Advisory activities for development and implementation of adequate policies and regulatory frameworks (e.g. Supporting development of land policy and spatial planning policy etc. in Cambodia)

CAPACITY BUILDING AND ITS RELATION WITH EDUCATION AND KNOWLEDGE



NEED FOR GLOBAL PARTNERSHIP

Millennium Development Goal 8

Strengthening the Global Partnership for Development in a Time of Crisis



UNITED NATIONS

MDG Gap Task Force
Report 2009

Need for a new initiative

- FIGs academic members don't foster a mutual academic partnership or even a network and they don't live a real cooperation in Land Management.
- One reason could be that most academic members are either too geodetically or technically oriented or too widespread without main focus.
- Academic voices in Land Management also within FIG are covered by (too much?) dominating UN and WB performances.

Dual nature of our profession

- Look at Space Geodesy and space geodesists: They have founded scientifically and academically based GGOS as global framework
- Whats about spatial (Reiner Rummel) or operational (Chris Rizos) Geodesy, i.e. Land Management and Land administration cooperation?

Global Academic Partnership (GAP) in Land Management is essential

There is a need for collaboration between institutions and networks at international level in which the partner institutions or network members share their own experiences, knowledge and capital (financial, social or technical) and undertake a collaborative approach with a view to accomplish the goal of capacity building.

Therefore, two important issues are involved here:

- a) to identify the right partners – who are the partner institutions?
and
- b) process of intervening – how to do it?

What should be the main focus of GAP

- Development of professional **education and training policy** to enhance the ability of individuals/practitioners which developing countries often lack strongly; and
- Simultaneously, **institutional development** (i.e. land administration) should be prioritized because highly educated experts can't bring any favourable results without functioning institutions and networks.

Viet Nam News

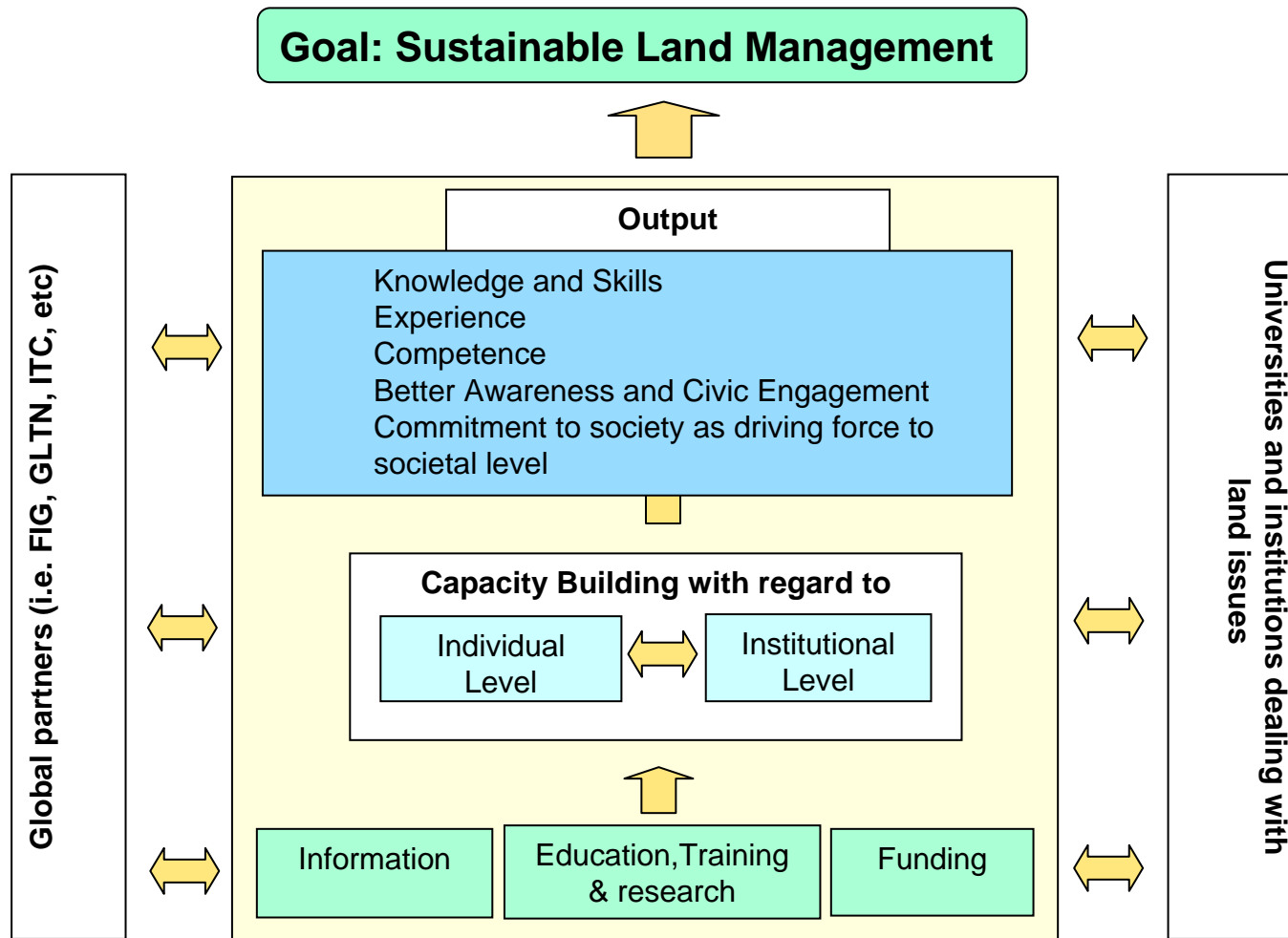
October 19, 2009

Headline :

Push in Education

'International collaboration will help Vietnamese universities to improve quality', experts say.

FRAMEWORK FOR GLOBAL ACADEMIC PARTNERSHIP



Academic partnership can bring drastic change

Some examples.....

- In **Cambodia** with the launch of the Land Management and Land Administration Project (LMAP) in 2002 a wide change came in capacity building in Cambodia both at individual and institutional levels:
- The establishment of the **education programme** at the Royal University of Agriculture has produced more than 160 experts in the field of land management and land administration
- The introduction of annual **summer schools for both students and professionals** has strengthened Capacity building in Cambodian Land Administration and Management sector
- Additionally a wide range of scientific **advisory in institutional and technical fields** has been started

COOPERATION OF TUM CENTRE WITH THE ROYAL UNIVERSITY OF AGRICULTURE IN CAMBODIA



Summer School in Cambodia, 2009



TUM alumni in Summer School in Cambodia, 2009



Summer School in Cambodia, 2008

O. Univ.-Prof. Dr.-Ing. H. Magel



Summer School in Cambodia, 2009 - partner GTZ

FIG Regional Conference Hanoi 21. Oct. 2009

Academic partnership can bring Complementing Support

Another example is the case of recent partnership initiatives between **ITC and TUM** for the development and implementation of various land management related modules (Geo-Information technologies, land policy, resource management, land conflict resolution, etc) within a master's programme in Land Administration and Management at the Visayas State University in the **Philippines**.

COOPERATION OF TUM CENTER WITH ITC



Official visit of ITC representatives

(Chris Paresi and Walter de Vries in the middle) to TUM in March, 2009

Academic Partnership can bring inputs to the work of UN, FAO, UN Habitat, WB and other Donors

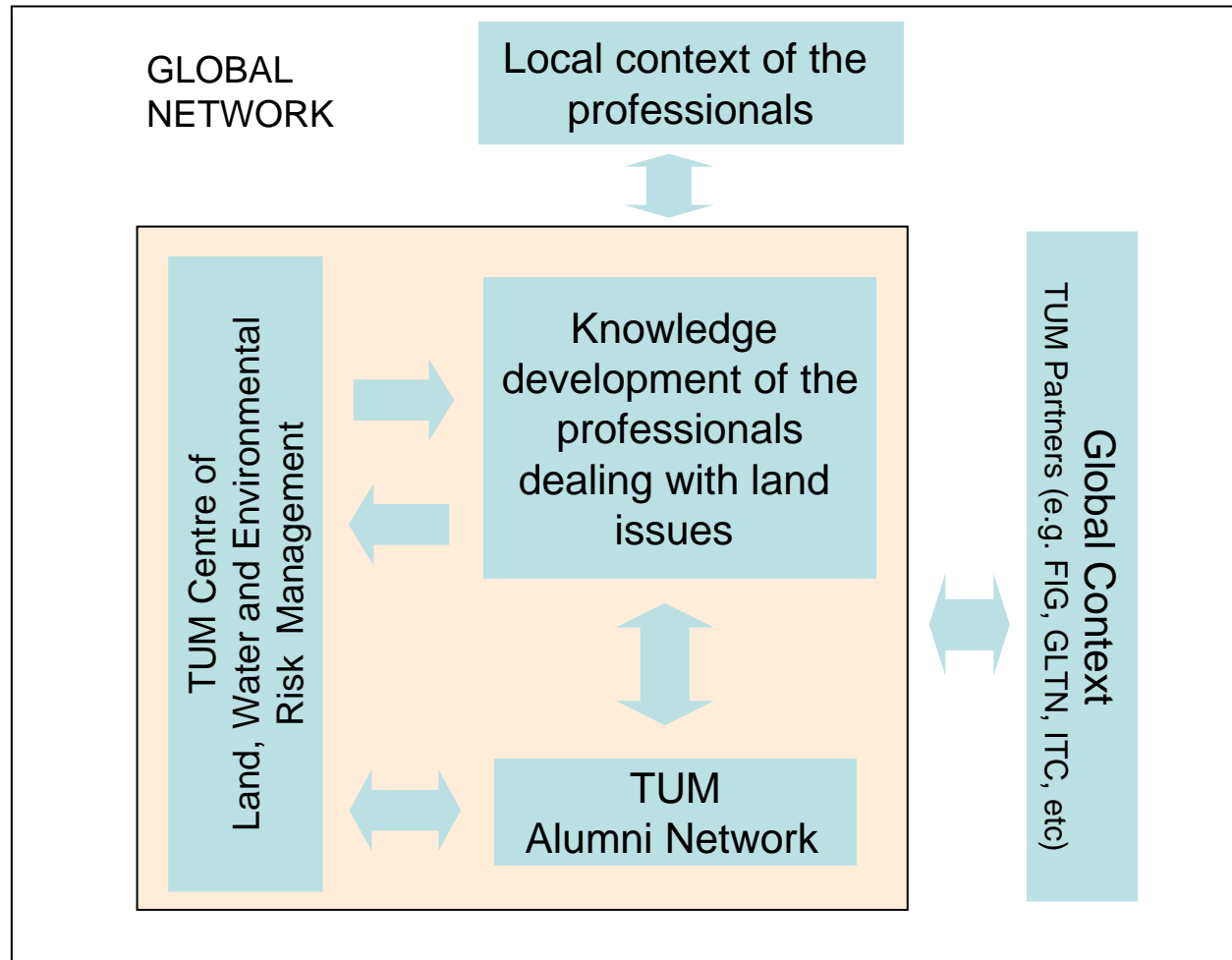
- A further example is the case of **Palestine's** Birzeit University, which with support of TUM, the University of Dortmund and international donor organizations, is developing a Master's Programme in Land Management and Land Administration as part of the Land Administration Project.
- Academic partnership is once again crucial in this case as the requirements of developing capacity for allowing the Palestinian National Authority to manage an effective land administration and management system can only be met if the appropriate knowledge and skills are transferred to the experts who are to take over the system in the long term.
- **The establishment of Master Programmes improve the mutual understanding and cooperation between donors and the country.**

Global Academic Partnership: A Platform of Mutual Learning

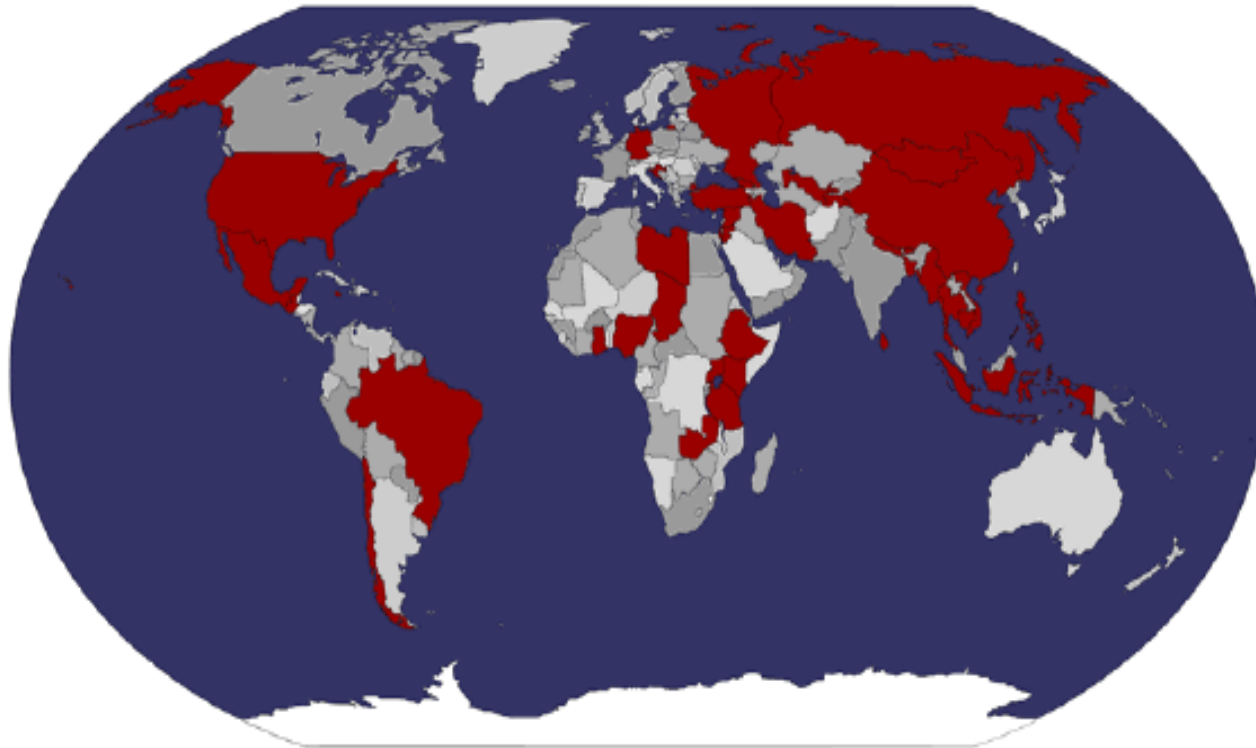
The university and the research organizations do not only deliver the input to the partner organizations but also learn from every activity and gain the local context experiences in relevant fields through the partner organizations.

Actually global academic partnership transforms the local knowledge to global level and the opposite.

FRAMEWORK OF KNOWLEDGE TRANSFER OF TUM MASTER'S PROGRAMME



TUM ALUMNI NETWORK - Element of Global Academic Partnership



It's all about
curricula



STUDY HANDBOOK

**MASTER OF SCIENCE (MSc)
LAND MANAGEMENT AND LAND TENURE**

2009/10

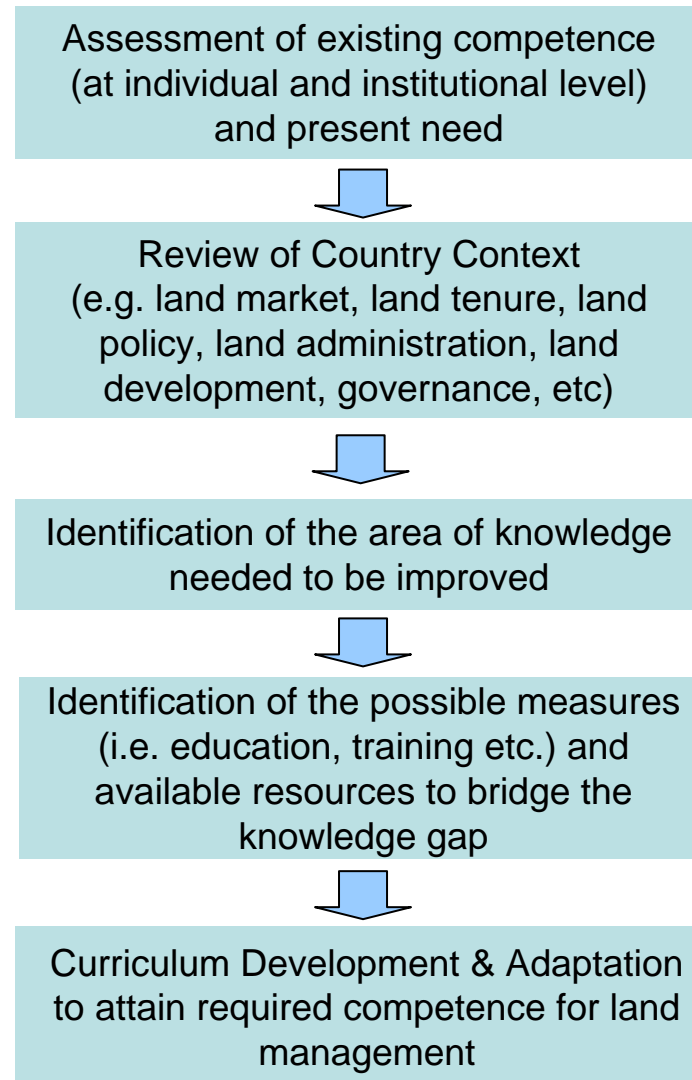
**AS MUCH THEORY AS NEEDED
AS MUCH PRACTICE AS POSSIBLE**

Knowledge, skills, experiences, ability of understanding systems and ethical attitudes are delivered by tailor made curricula which in case of TUM master programme are both accredited by independent external auditors and permanently evaluated by the students, lecturers and hosting institutions like survey or rural development authority etc.

Main focus should be given on CURRICULUM DEVELOPMENT

- In order to reduce or eliminate the gap between existing capacities and those actually required, academic and other professional institutions have to carry out target-oriented capacity building measures through **global, national and local context oriented curricula**.
- The implementation of these capacity development measures will have an impact in how the country context changes.
- Curriculum development projects for the improvement of the land sector should consider these interrelationships and allow for dynamic approaches.

DYNAMIC CURRICULUM DEVELOPMENT FOR SUSTAINABLE LAND MANAGEMENT



FROM IDEAS TO ACTION

Doing the right things
at the right time
by the right people or institution

For example???

Direction for the future: A new strategy for building A WORKING GROUP WITHIN FIG?

..... FIG

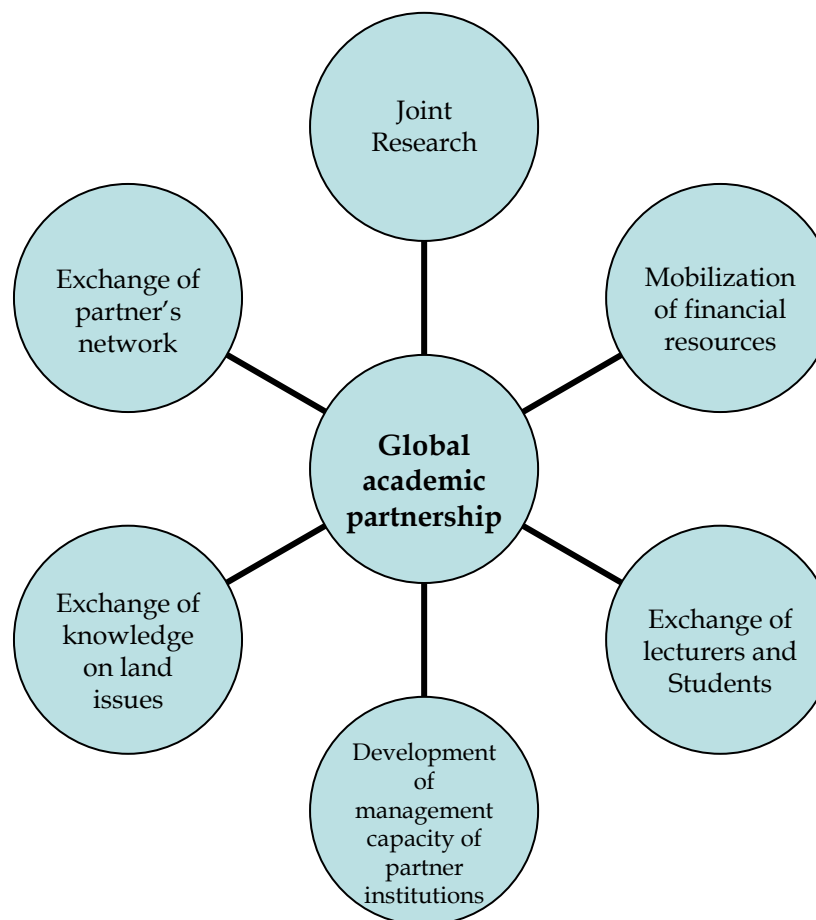
As one of the most prominent and institutionally capable global players in land management issues should play a decisive role in building partnership.

FIG as Global Umbrella?

It is therefore recommended that a special Working Group on
'Global Academic Partnership for Sustainable Land Management'
should be established in the near future for this purpose.

COMPONENTS OF WORKING GROUP ON GLOBAL ACADEMIC PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

The partnership and proposed Working Group should be constructed or started on the basis of six main interrelated targets.



GAP enables better cooperation of international donors

Unfortunately Land Management , Land Administration etc. issues and definitions are in contrast to mathematical formulas not absolutely clear to everybody and everywhere.

The Global Academic Partnership (GAP) embedded in FIG umbrella should/could therefore hopefully contribute to minimize or even harmonize the sometimes very confusing, time wasting and energy consuming differences between and discussions on different concepts and theories of international donors and their academic or professional experts working in developing countries.

Special Thanks for important contributions go to
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Dr.-Ing. M.Sc. Land Management Fahria Masum

Dr.-Ing. Dipl.-Ing. Michael Klaus

and

Dipl.-Ing. M.Sc. Land Management Jorge Espinoza

THANKS
FOR YOUR ATTENTION