International Institute for Geo-Information Science and Earth Observation
ITC

“From Capacity Building to Building on Capacity”

Martien Molenaar
Rector
An institute for international education since 1950

The knowledge field of ITC is Geo-information Science and Earth Observation

The activities of ITC aim primarily at capacity building and institutional development

The focus is on LDC’s

Annual budget ~ 21 + 8 M€,
Staff 250 FTE - 280 persons (Ac staff: 130 FTE)
Geo-information for governance
Elements of governance

- Multi level policy implementation
- Multi actor policy implementation
- Multi facetted character of problems and objectives
- Multi instrumental character of policy strategies
- Multi resource base for policy implementation

Bressers and Kuks, 2003
Required business strategies

Business & Geo-ICT environment
Institutional Setting

Business strategy
Geo-ICT strategy
Organisational infrastructure
Geo-ICT architecture

GI PROVIDER

Courtesy Yola Georgiadou
## Capacity building

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>FOCUS</th>
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<tbody>
<tr>
<td><strong>HUMAN RESOURCES DEVELOPMENT</strong></td>
<td>Supply of technical and professional personnel</td>
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<tr>
<td><strong>ORGANIZATIONAL STRENGTHENING</strong></td>
<td>Strengthening the management capacity of organizations: embedding GITC (systems and processes) embedding strategic management principles</td>
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<tr>
<td><strong>INSTITUTIONAL STRENGTHENING</strong></td>
<td>Strengthening the capacity to develop and negotiate appropriate mandates and modus operandi as well as appropriate legal and regulatory frameworks</td>
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Groot & Georgiadou, 2001
Three major groups of GI-professionals

1. Experts in the field of spatial information handling (or specialists in certain aspects of this field),

2. Users of geo-information and

3. Professionals and policy makers, aware of the importance of geo-information for Civil Society.
Two types of focal problem areas:

- Problem areas should where geoinformation science and earth observation play an essential role to find solutions.

- Problem areas that need solutions to guarantee relevant, economic, timely and reliable information provision.
<table>
<thead>
<tr>
<th>ITC Scientific departments:</th>
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<tbody>
<tr>
<td>Earth Observation Science (EOS)</td>
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<tr>
<td>Geo-Information Processing (GIP)</td>
</tr>
<tr>
<td>Urban Planning and Geo-Info Management (PGM)</td>
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<tr>
<td>Natural Resources (NRS)</td>
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<tr>
<td>Water Resources (WRS)</td>
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<tr>
<td>Earth Systems Analysis (ESA)</td>
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</table>
Research themes

Geo-information provision for:

1 strengthening civil society
2 the multifunctional use of space
3 natural disasters and environment
4 food and water security
5 global change monitoring.
Education at ITC

PhD program 42 months

MSc Program 18 months
*MSc in Geo-information Science and Earth Observation*

(Professional) Master Program 12 months
*Master in Geo-information Science and Earth Observation*

Short tailor-made courses
MSc program

Geoinformatics  GFM
Geo-information Management  GIM
Urban Planning and Management  UPM
Natural Resources Management  NRS
Water Resources and Environmental Management  WREM
Applied Earth Sciences  AES

Environmental Modeling and Management  GEM

ITC leads *Erasmus Mundus* program with universities of Lund, Southampton, Warsaw
MSc program (in preparation)

Land Administration

Governance and Spatial Information Management

(Professional) Master program

Geoinformatics GFM

Geo-information Management GIM

Natural Resources Management NRS
Total course participants 1950 – 2005: 17,000*

Total countries 1950 – 2005: 165
PARTNERSHIPS FOR EDUCATION

National and/or regional market: Organizations with a need for capacity building and/or institutional strengthening

Local or National Universities or other Educational Institutes

ITC Possibly with other European partners
PARTNERSHIPS FOR EDUCATION

Joint Education Partnerships: Status

- Implementation
- Development
- Pre-feasibility
- Identification
- To be identified

December 2005
Cooperation with international organizations

United Nations University

ITC is associated organization of UNU

- Capacity building program for Land Administration
- Capacity building program for Disaster Management

UN-Habitat
UN-OOSA
UNESCO
FAO

GEO Capacity Building Program
Every morning in Africa

Every morning in Africa, a gazelle wakes up
It knows it must run faster than the fastest lion or will be killed.

Every morning a lion wakes up.
It knows that it must outrun the slowest gazelle or it will starve to death.

It doesn’t matter whether you are a lion or a gazelle.

When the sun comes up, you better start running.
Thank you
Good Governance requires Good Geo-information
Cooperation with Dutch Universities

- University Twente (penvoerder)
- University Utrecht
- Technical University Delft
- Wageningen University and Research (WUR)
### Urban Planning and Land Administration

#### Context

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#### Primary subject

- Primary subject

#### Secondary subject

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#### Tertiary subject

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### Natural Resource Management; Water Resources and Environmental Management; Earth Resources and Environmental Geosciences

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# Geoinformatics

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Geoinformation management

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