# Capacity development indicators for Spatial Data Infrastructures in Africa

codi iv – addis ababa – april 2005

information as an economic resource
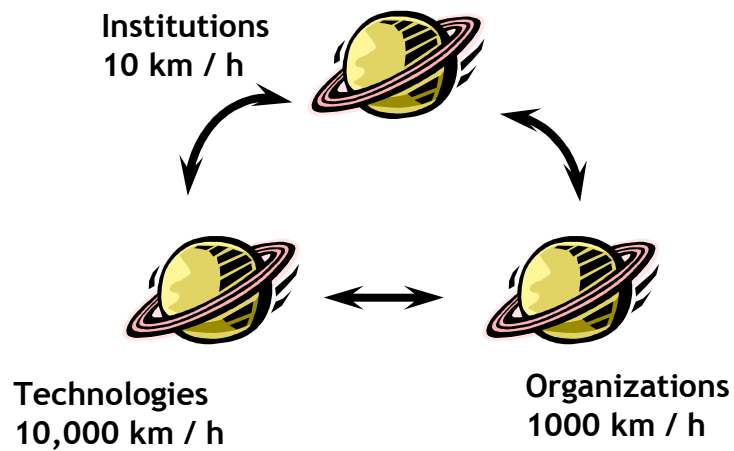
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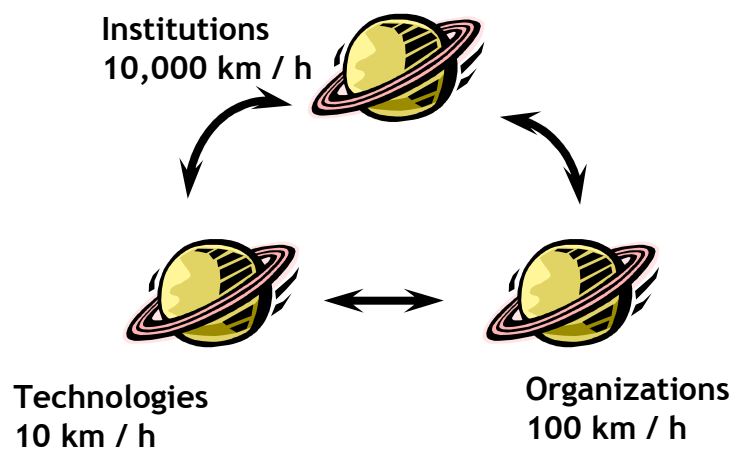
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# "velocities" in some countries

**Institutions
10 km / h**

**Technologies
10,000 km / h**

**Organizations
1000 km / h**

# After 45 years of civil war



# "velocities" in Central America

Institutions
10,000 km / h

Technologies
10 km / h

Organizations
100 km / h

## 3-tier capacity development

| | PURPOSE | FOCUS |
|---|---|---|
| **CAPACITY BUILDING FOR GEOINFORMATICS** | Human resources development | Supply of technical and professional personnel |
| | Organisational strengthening | Strengthen the management capacity of organisations |
| | Institutional strengthening | Strengthen the capacity for inter-agency coordination |

## The UNDP capacity assessment framework adapted to SDI

| Assess the capacity to … | |
|---|---|
| **1.** … conceptualize and formulate policies, legislations, strategies, and programmes | |
| **2.** … implement policies, legislation, strategies, etc | |
| **3.** … build consensus among all stakeholders | |
| **4.** … generate & mobilize geoinformation and knowledge | |
| **5.** … monitor, evaluate, report and learn | |

## The UNDP capacity assessment framework adapted to SDI

| Assess the capacity to … | SDI Capacity | | |
|---|---|---|---|
| | **Systemic** | **Organizational** | **Individual** |
| **1.** … conceptualize and formulate policies, legislations, strategies, and programmes | | | |
| **2.** … implement policies, legislation, strategies, etc | | example | |
| **3.** … build consensus among all stakeholders | | | |
| **4.** … generate & mobilize geoinformation and knowledge | | | |
| **5.** … monitor, evaluate, report and learn | | | |

## Example of Capacity Development Indicators

| 2. Assess capacity to implement policies, legislation, strategies, etc | |
|---|---|
| **Systemic** | |
| **Organizational** | **0** – There is no lead institution or agency with a clear mandate or responsibility for SDI; <br> **1** – There are one or more institutions or agencies dealing with SDI but roles and responsibilities are unclear and there are gaps and overlaps in the arrangements; <br> **2** – There are one or more institutions or agencies dealing with SDI, the responsibilities of each are fairly clearly defined, but there are still some gaps and overlaps; <br> **3** – SDI organisations have clear legal and institutional <br><br> mandates and the authority to implement |
| **Individual** | |

# How to conduct assessments?

- Qualitative and quantitative research methods:
  - Surveys
  - Semi-structured interviews
  - Observation
  - Scrutiny of minutes, memos, etc

# SDI capacity assessment completed !

| Assess the capacity to … | SDI Capacity | | |
|---|---|---|---|
| | Systemic | Organizational | Individual |
| **1.** … conceptualize and formulate policies, legislations, strategies, and programmes | ☑ | ☑ | ☑ |
| **2.** … implement policies, legislation, strategies, etc | ☑ | ☑ | ☑ |
| **3.** … build consensus among all stakeholders | ☑ | ☑ | ☑ |
| **4.** … generate & mobilize geoinformation and knowledge | ☑ | ☑ | ☑ |
| **5.** … monitor, evaluate, report and learn | ☑ | ☑ | ☑ |

## Example of SDI capacity development indicators

| Assess the capacity to … | SDI Capacity | | |
|---|---|---|---|
| | Systemic | Organizational | Individual |
| **1.** … conceptualize and formulate policies, legislations, strategies, and programmes | 0 | 1 | 1 |
| **2.** … implement policies, legislation, strategies, etc | 1 | 1 | 1 |
| **3.** … build consensus among all stakeholders | 2 | 2 | 2 |
| **4.** … generate & mobilize geoinformation and knowledge | 1 | 2 | 1 |
| **5.** … monitor, evaluate, report and learn | 1 | 2 | 2 |

## What is the purpose of the assessment?

- It allows to determine the right mix of capacity development interventions, eg:
  - Information dissemination
  - Education
  - Joint Research
  - Facilitation of strategic workshops
  - Others? Mentoring
- If done at a regional level, capacity development interventions can be spread judiciously across nations
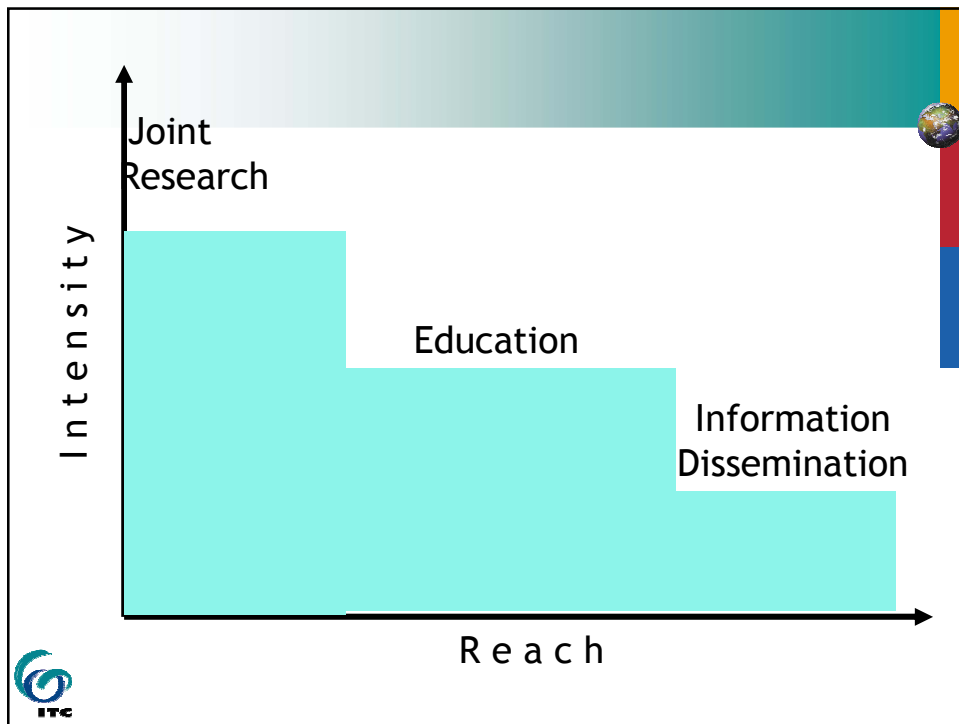
## conclusion

- Currently research is being done with this instrument in Central America (MSc)
- There is a need to refine the capacity assessment framework (PhD)
- Plan to adapt this framework in ITC project in Rwanda
- The time is now right to conduct SDI capacity assessment research in concert with the NICI capacity assessments