

CAPACITY BUILDING IN EARTH OBSERVATIONS CONCEPTS AND METHODOLOGIES



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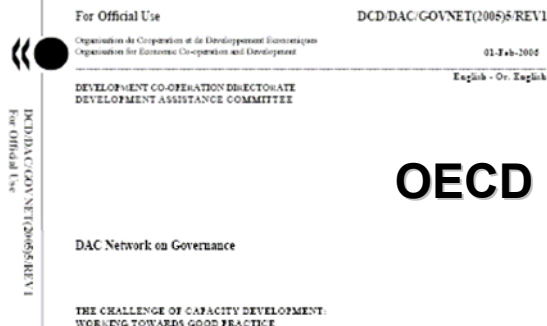
São José dos Campos. May 28, 2006





The giving a fish/teaching how to fish analogy





CARLOS LOPES AND THOMAS THEISOHN

OWNERSHIP, LEADERSHIP AND TRANSFORMATION

Can We Do Better for
Capacity Development?

Capacity Development PRACTICE NOTE



May 2006

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EXECUTIVE SUMMARY

www.capacity.undp.org

CAPACITY FOR DEVELOPMENT

NEW SOLUTIONS
TO OLD PROBLEMS

UNDP



Some questions to start

- What is capacity?
- Capacity for whom?
- Capacity for what?
- Capacity building or capacity development?





What is capacity?

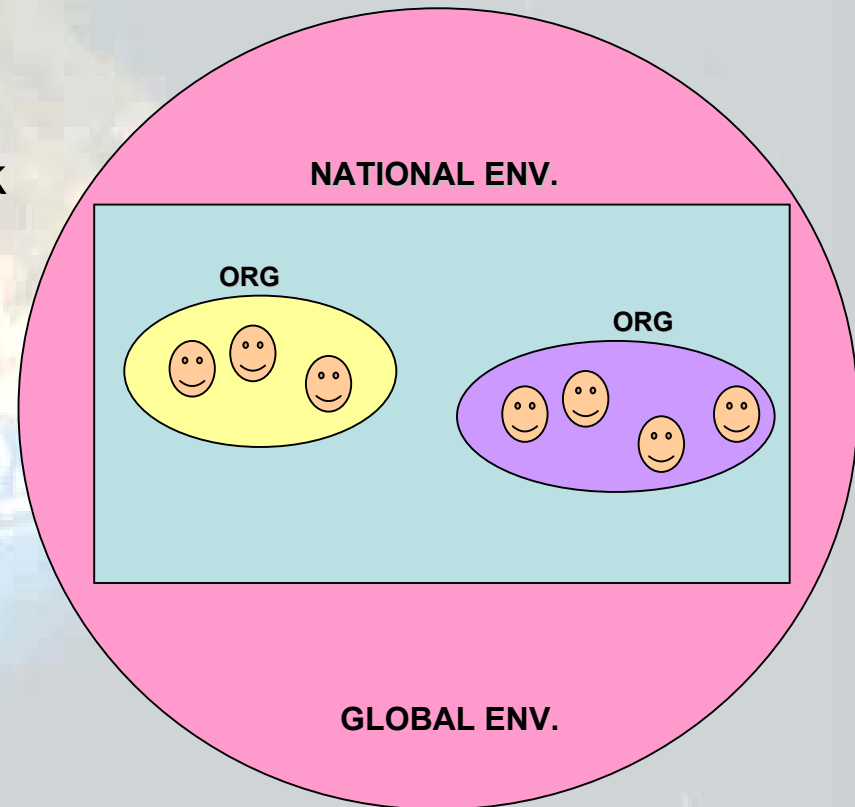
- Capacity is:
 - the ability of people, organisations and society as a whole to manage their affairs successfully (OECD)
 - the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner (UNDP)



Capacity for whom?

A COUNTRY'S CAPACITY RESIDES IN THREE LEVELS:

- **Individuals**
 - Knowledge, experience, skills, work ethics
- **Organisations/Institutions**
 - Connection of individual capacities
 - Framework to achieve common goals, with pooling of resources
- **Enabling environment**
 - Overall rules, policies and norms
 - Values
 - Priorities and Incentives



A systemic approach for capacity



Capacity for what?

Technical Capacities:

Those specific to a particular field (in GEO, those related to Earth Observations)

Cross-Cutting Capacities:

- To Engage in Multi-Stakeholder Dialogue
- To Analyze a Situation and Create a Vision
- To Formulate Policy and Strategy
- To Budget, Manage and Implement
- To Monitor and Evaluate



Capacity and capacity building in GEO

The goals of capacity building in GEO will be to strengthen the capability of all countries, in particular developing countries, to:

1. Use Earth Observation data and products (i.e. process, integrate, model, etc.) in a sustainable, repeatable manner (both space-based and *in situ* sensors), with results or outputs that are consistent with accepted Earth observing standards.
2. Contribute *in situ* observations to global networks, and access and retrieve relevant data from global data systems useful for *in situ* applications.
3. Analyze and interpret data (both *in situ* and space-based) to derive nationally, regionally and globally relevant information and provide decision-support systems and tools useful to decision-makers.
4. Integrate Earth Observation data and information with data and information from other sources for a comprehensive and holistic view and understanding of problems in order to identify sustainable solutions.

With a view on improving infrastructures, especially *in situ* observation networks



Capacity building or development?

- Building
 - Starting from the ground
 - With pre-defined plans, ideas and sequences
 - A technical process, leaded by architects
- Development
 - Progressive process, starting from current situation
 - A learning process, with “try and error” cycles
 - An individually owned, “social sciences” process



What is capacity development?

- Capacity development: process whereby people, organisations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time

Box 1. Capacity development in the 2005 *Paris Declaration*

The capacity to plan, manage, implement, and account for results of policies and programmes, is critical for achieving development objectives from analysis and dialogue through implementation, monitoring and evaluation. Capacity development is the responsibility of partner countries with donors playing a support role. It needs not only to be based on sound technical analysis, but also to be responsive to the broader social, political and economic environment, including the need to strengthen human resources.

Partner countries commit to:

- Integrate specific capacity strengthening objectives in national development strategies and pursue their implementation through country-led capacity development strategies where needed.

Donors commit to:

- Align their analytic and financial support with partners' capacity development objectives and strategies, make effective use of existing capacities and harmonise support for capacity development accordingly.

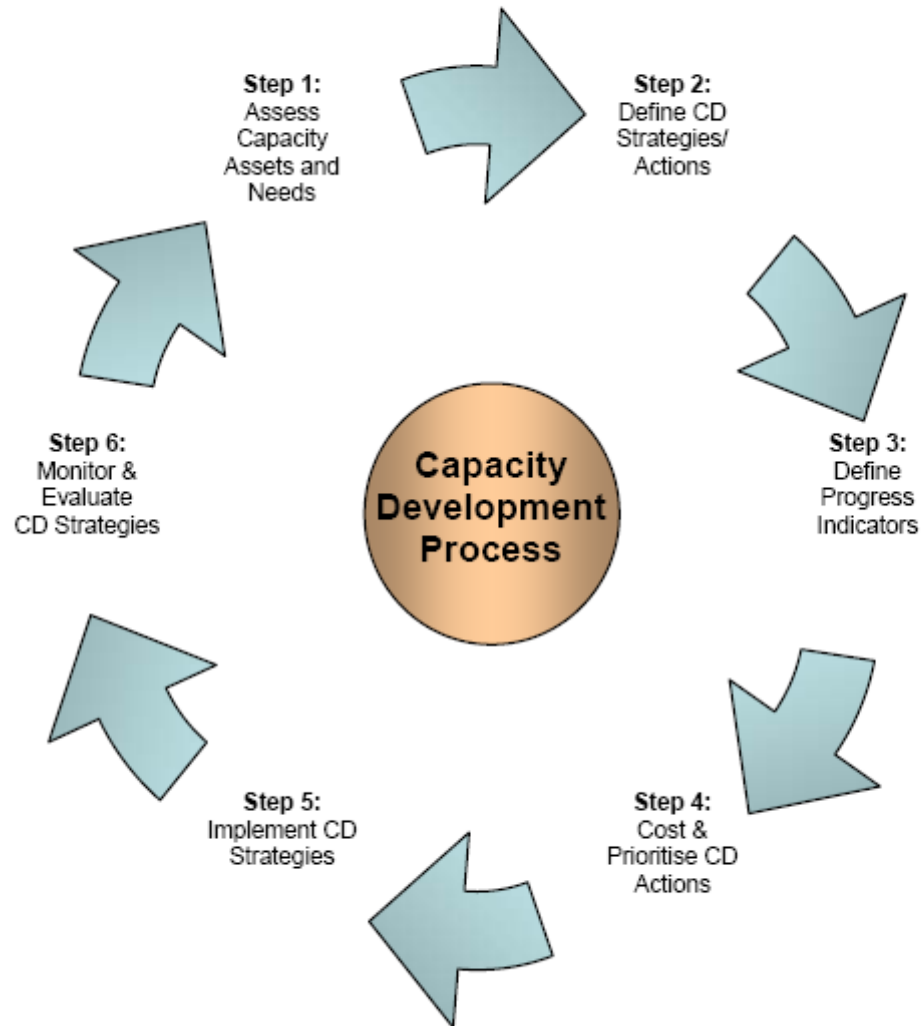


New paradigms in CD

Current paradigm	New paradigm
Good policies and best practises externally prescribed	Good policies home-grown or customised (“best fit”)
Human resources development + institutional strengthening	Three layers: individuals, institutions and society
Knowledge transfer (technical focus)	Knowledge acquisition (social focus)
Knowledge developed in the North and exported to the South	Local knowlegde combined with knowledge acquired from other countries (North and South)
Donors + recipients environment	Partnership environment
Competition among actions (aid business environment)	Coordination and harmonisation of actions

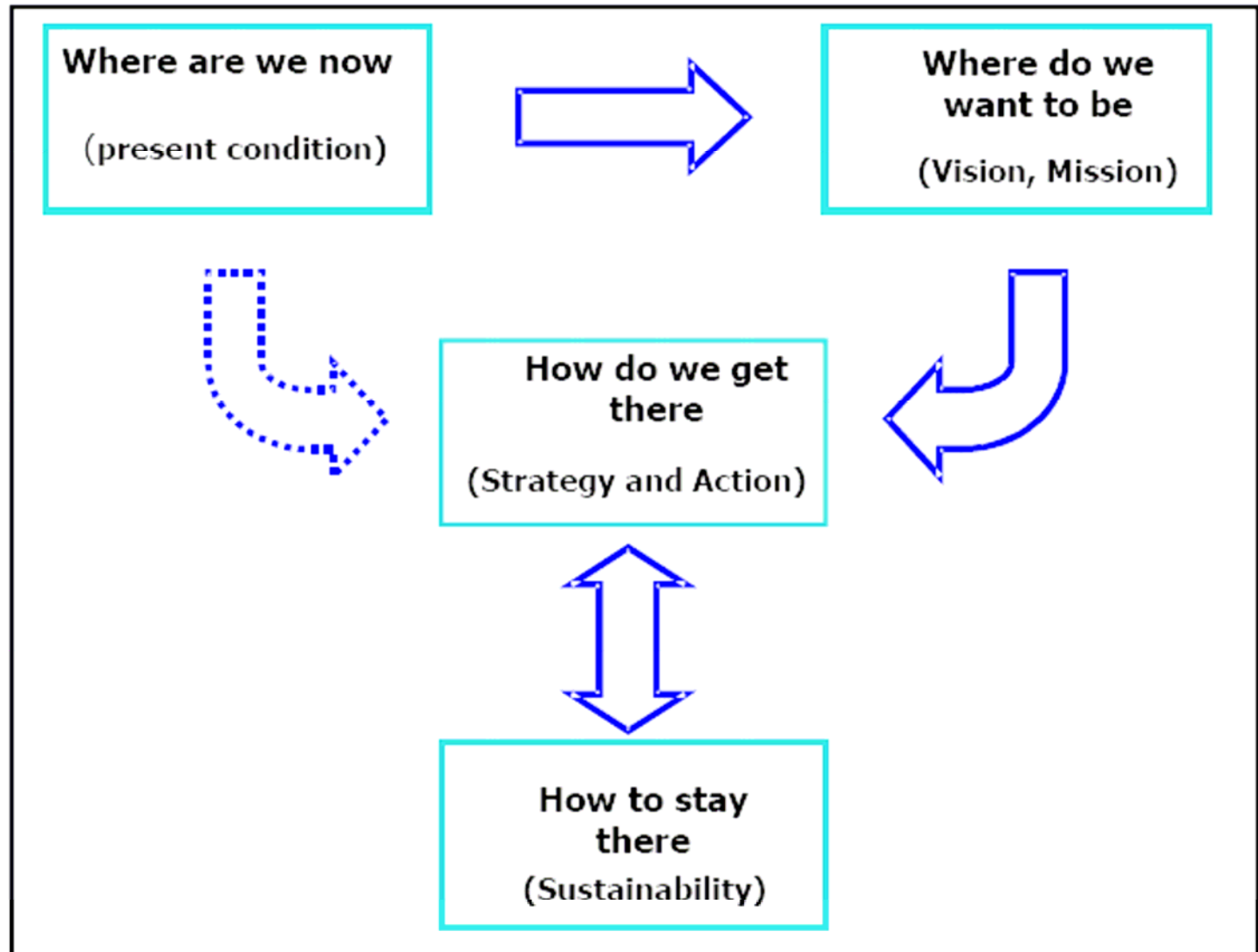
The CD Cycle

UNDP Capacity Development Process Steps



classical strategic framework

Strategic Framework for Capacity Building





Capacity building strategies Key recommended characteristics

- Systemic approach and country/region focus
- Endogenous processes (including assessment of endogenous capacities)
- Engagement of multiple stakeholders
- Results-based management approach
- Use the “glocal” approach
- Long term results: patience and sustained efforts



Some final recommendations for GEO CD strategy

- Don't forget the “classics” (such as education and training)!
- Don't forget the “environment”!
- Don't forget the Information Society!
- Don't forget any player!



Example of strategies helping create an enabling environment

- Establish “guidelines” to:
 - Assess national EO capacity
 - Develop and implement national EO plans and policies (a national EO strategy)
 - Identify national goals and priorities in EO
 - Align EO activities with national goals
 - Organise EO activities via multiple stakeholders involvement
 - Create incentives
 - Careers in EO
 - Use expert EO advise in national policies definition
 - Establish partnerships Government/Industry/Universities



Examples of ICT contributions

- IC Technologies facilitate:
 - Dissemination of information to the public
 - Creation of and access to Digital Information
 - Sources (both national, regional and global)
 - Distant education and training
 - Creation of knowledge and experts networks (communities of practise)



Players required in a robust CD strategy for EO

- Countries (Gvmnts), with their specific profiles and needs
- UN agencies and International organisations
- Education and Training institutions
- Aid organisations, Financial Institutions and Foundations
- Private sector (both for profit and non for profit)
- Academies and Scientific organisations
- Media



A final thought

*Successful development transformation affects not only what we do, but also **how** we do it...*

*in the end, successful development must come from **within the country** itself, and to accomplish this,*

*it must have **institutions and leadership** to catalyse, absorb, and manage the process of change, and the changed society.*

Joseph E. Stiglitz (Prebisch Lecture, 1998)

Thank you!