GWP ToolBox:
Knowledge Sharing Tool

Danka Thalmeinerova, Global Water Partnership

Toward the 6th World Water Forum: Cooperative Actions for Water Security

Tashkent, May 2011

Challenges in Knowledge Chain

- **Processes**

- Knowledge Identification
- Knowledge Acquisition
- Knowledge Storage
- Knowledge Refinement / Analysis
- Knowledge Integration
- Knowledge Dissemination
- Knowledge Application

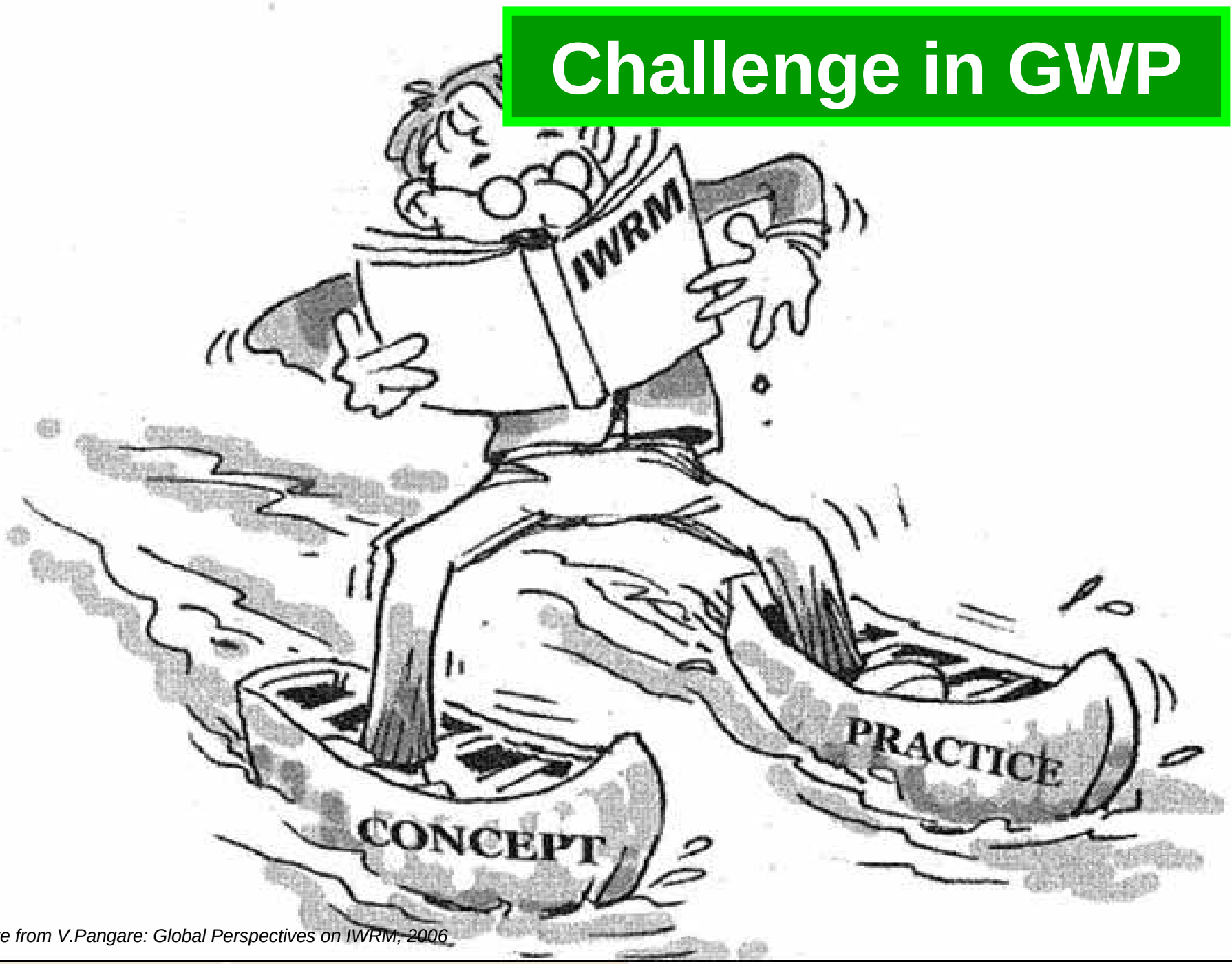
- **Enablers**

- Knowledge System
- Knowledge Culture
- Organizational Memory

…in cooperation with knowledge partners

Intervention of GWP

Challenge in GWP



Picture from V.Pangare: Global Perspectives on IWRM, 2006

Barriers in Knowledge Chain in IWRM

- Technical
- Administrative
- Bureaucratic
- Political

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ToolBox

Integrated Water Resources Management

What's new:
This is the 3rd
database on IW
Stockholm Worl

New publicatior
Governance (G
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IWRM

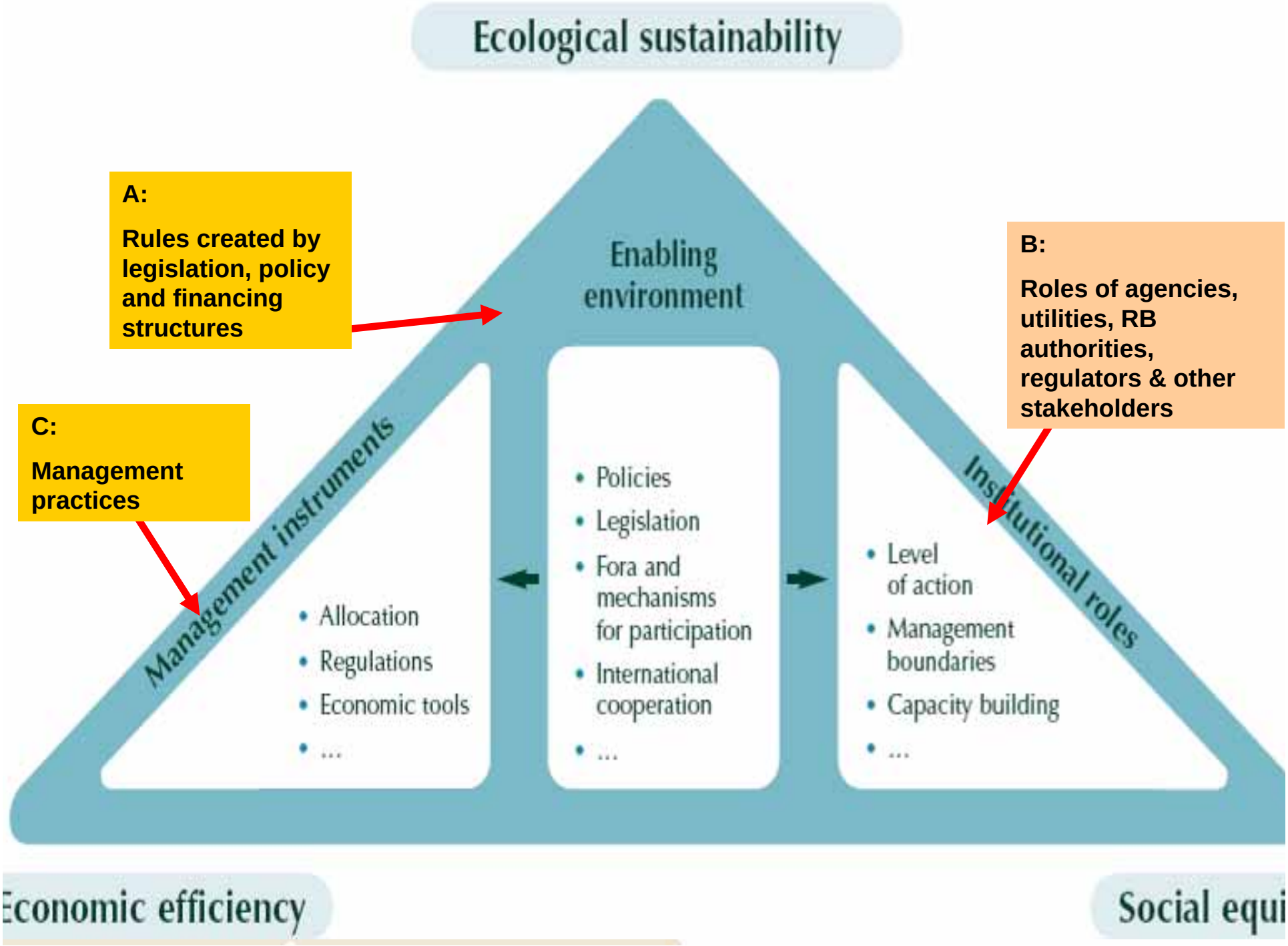
The extent of crisis in water resources management is well known, but how to deal with it is more difficult. If effective, long lasting solutions to water problems are to be found a new water governance and management paradigm is required. Such a new paradigm is encapsulated in the IWRM concept, which has been defined by GWP as 'a process which promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and

GWP ToolBox on-line IWRM library

water management are imposing unsustainably high economic, social and ecological costs on human societies and on the natural environment. Business as usual is neither environmentally sustainable, nor is it sustainable in financial and social terms. As a process of change which seeks to shift water development and management systems from their currently unsustainable forms, IWRM has no fixed beginnings and will probably never end. The global economy and society are dynamic and the natural environment is also subject to change, IWRM systems will, therefore, need to be responsive to change and be capable of adapting to new economic, social and environmental conditions and to changing human values.

IWRM is not an end in itself but a means of achieving three key strategic objectives.

- efficiency to make water resources go as far as possible;
- equity, in the allocation of water across different social and economic groups;


Ecological sustainability
A:
Rules created by legislation, policy and financing structures
B:
Roles of agencies, utilities, RB authorities, regulators & other stakeholders
C:
Management practices
Enabling environment
Management instruments
Institutional roles
• Allocation
• Regulations
• Economic tools
• ...
• Policies
• Legislation
• Fora and mechanisms for participation
• International cooperation
• ...
• Level of action
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• Capacity building
• ...
Economic efficiency
Social equi

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56 tools

CASE STUDIES BY REGION

- Africa
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WELCOME TO THE GWP TOOLBOX FOR IWRM

...ces related to the ... framework. The ... process and fa... improving the water governance and management. The IWRM ToolBo... studies submitted by external contributors which have been peer revie... to faciliate that professionals and specialists engage with a broader c... problems.

TOOLS: INDIVIDUAL POLICIES AND GUIDELINES ON IWRM

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Tools in ToolBox

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- A THE ENABLING ENVIRONMENT
- B INSTITUTIONAL ROLES
- C MANAGEMENT INSTRUMENTS
  - C1 WATER RESOURCES ASSESSMENT
  - C2 PLANS FOR IWRM
  - C3 EFFICIENCY IN WATER USE
  - C4 SOCIAL CHANGE INSTRUMENTS
  - C5 CONFLICT RESOLUTION
  - C6 REGULATORY INSTRUMENTS
  - C7 ECONOMIC INSTRUMENTS
    - C7.01 Pricing of water and water services
    - C7.02 Pollution and environmental charges
    - C7.03 Water markets and tradeable permits
    - C7.04 Subsidies and incentives
  - C8 INFORMATION EXCHANGE

CASE STUDIES BY REGI

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TOOLBOX PARTNERS

- AP Flood Management

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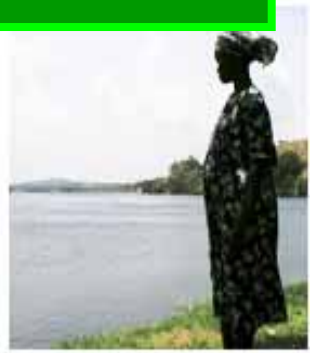
What is Toolbox?

What is ToolBox?

The GWP ToolBox comprises an organized collection of case studies, reference do… resources management, whi… eviewed. The GW… to develop the b… to build water s… ource of knowl… o discuss and analyze … f actions aimed at improving water governance and …als and specialists engage with a broader community

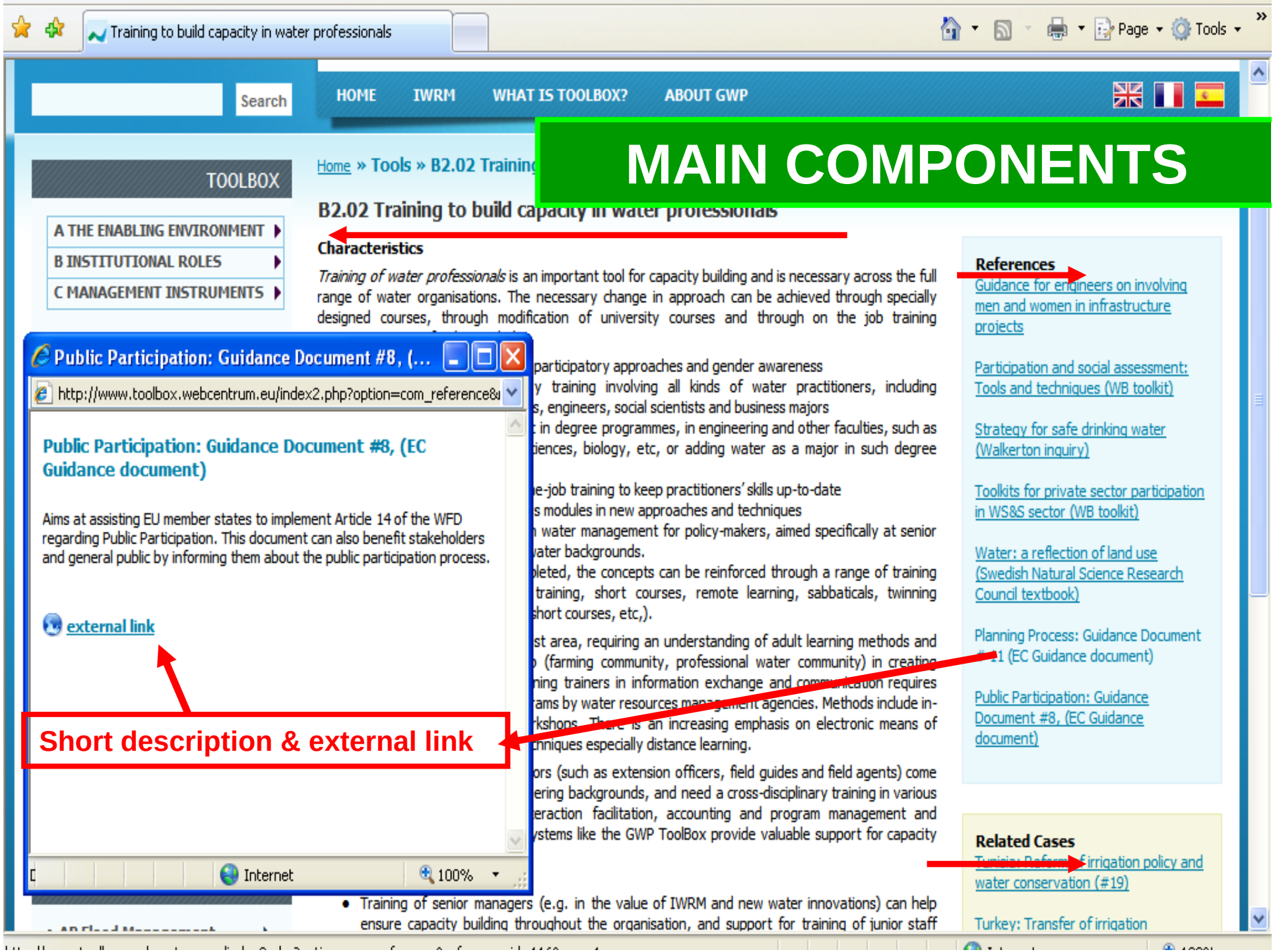


It is important to keep in mind that the IWR… small beginnings. There is no such thing as … lead to action atrophy. Policy makers shou… opportunities for reform as circumstances alter and use all windows of opportunity to nudge the reform process forward. A crisis may, for example, provide such a window of opportunity but it will be vital to ensure that the response to a crisis challenges rather than reinforces the status quo. For instance, after a major flood event it is easy to give in to demands for more investment in protection infrastructure, but a policy maker thinking in IWRM terms will want to ask whether there are alternatives such as improved land zoning. Clearly during the process of change sectoral developments will continue, but it is imperative to keep questioning whether such developments are compatible with IWRM and rigorously challenge those that are clearly incompatible.

Full text on How ToolBox helps

How to use the Tools

Water problems will usually need a combination of approaches – changes in policies, or new types of planning and information. The tools shown here give a wide range of the types of option available – but the list is probably not complete, and is certainly not prescriptive. The types of tools which can be used, and the way in which they can be combined will vary from place to place, from society to society.


Training to build capacity in water professionals
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C MANAGEMENT INSTRUMENTS
Home » Tools » B2.02 Training
B2.02 Training to build capacity in water professionals
Characteristics
Training of water professionals is an important tool for capacity building and is necessary across the full range of water organisations. The necessary change in approach can be achieved through specially designed courses, through modification of university courses and through on the job training
References
Guidance for engineers on involving men and women in infrastructure projects
Participation and social assessment: Tools and techniques (WB toolkit)
Strategy for safe drinking water (Walkerton inquiry)
Toolkits for private sector participation in WS&S sector (WB toolkit)
Water: a reflection of land use (Swedish Natural Science Research Council textbook)
Planning Process: Guidance Document #11 (EC Guidance document)
Public Participation: Guidance Document #8, (EC Guidance document)
Related Cases
Tunisia: Reform of irrigation policy and water conservation (#19)
Turkey: Transfer of irrigation
Public Participation: Guidance Document #8, (...
http://www.toolbox.webcentrum.eu/index2.php?option=com_reference&
Public Participation: Guidance Document #8, (EC Guidance document)
Aims at assisting EU member states to implement Article 14 of the WFD regarding Public Participation. This document can also benefit stakeholders and general public by informing them about the public participation process.
external link
Internet
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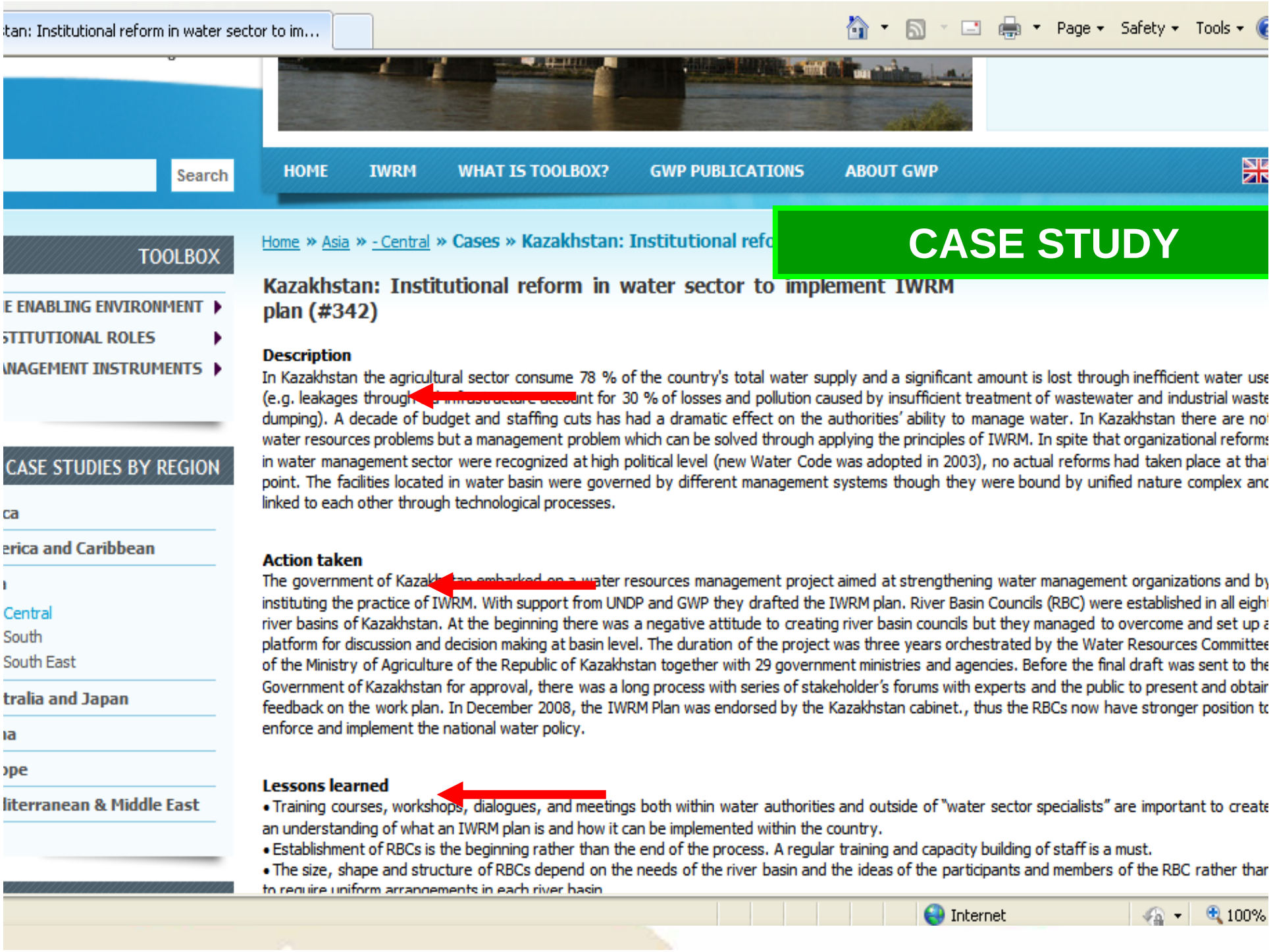
Short description & external link
participatory approaches and gender awareness
training involving all kinds of water practitioners, including
s, engineers, social scientists and business majors
in degree programmes, in engineering and other faculties, such as
iences, biology, etc, or adding water as a major in such degree
e-job training to keep practitioners' skills up-to-date
s modules in new approaches and techniques
water management for policy-makers, aimed specifically at senior
ater backgrounds.
leted, the concepts can be reinforced through a range of training
training, short courses, remote learning, sabbaticals, twinning
hort courses, etc,).
st area, requiring an understanding of adult learning methods and
(farming community, professional water community) in creating
ning trainers in information exchange and communication requires
ams by water resources management agencies. Methods include in-
kshops. There is an increasing emphasis on electronic means of
hniques especially distance learning.
ors (such as extension officers, field guides and field agents) come
ering backgrounds, and need a cross-disciplinary training in various
eraction facilitation, accounting and program management and
ystems like the GWP ToolBox provide valuable support for capacity
Training of senior managers (e.g. in the value of IWRM and new water innovations) can help ensure capacity building throughout the organisation, and support for training of junior staff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Home » Asia » - Central » Cases » Kazakhstan: Institutional refo
Kazakhstan: Institutional reform in water sector to implement IWRM plan (#342)
Description
In Kazakhstan the agricultural sector consume 78 % of the country's total water supply and a significant amount is lost through inefficient water use (e.g. leakages through infrastructure account for 30 % of losses and pollution caused by insufficient treatment of wastewater and industrial waste dumping). A decade of budget and staffing cuts has had a dramatic effect on the authorities' ability to manage water. In Kazakhstan there are not water resources problems but a management problem which can be solved through applying the principles of IWRM. In spite that organizational reforms in water management sector were recognized at high political level (new Water Code was adopted in 2003), no actual reforms had taken place at that point. The facilities located in water basin were governed by different management systems though they were bound by unified nature complex and linked to each other through technological processes.
Action taken
The government of Kazakhstan embarked on a water resources management project aimed at strengthening water management organizations and by instituting the practice of IWRM. With support from UNDP and GWP they drafted the IWRM plan. River Basin Councils (RBC) were established in all eight river basins of Kazakhstan. At the beginning there was a negative attitude to creating river basin councils but they managed to overcome and set up a platform for discussion and decision making at basin level. The duration of the project was three years orchestrated by the Water Resources Committee of the Ministry of Agriculture of the Republic of Kazakhstan together with 29 government ministries and agencies. Before the final draft was sent to the Government of Kazakhstan for approval, there was a long process with series of stakeholder's forums with experts and the public to present and obtain feedback on the work plan. In December 2008, the IWRM Plan was endorsed by the Kazakhstan cabinet., thus the RBCs now have stronger position to enforce and implement the national water policy.
Lessons learned
• Training courses, workshops, dialogues, and meetings both within water authorities and outside of "water sector specialists" are important to create an understanding of what an IWRM plan is and how it can be implemented within the country.
• Establishment of RBCs is the beginning rather than the end of the process. A regular training and capacity building of staff is a must.
• The size, shape and structure of RBCs depend on the needs of the river basin and the ideas of the participants and members of the RBC rather than to require uniform arrangements in each river basin
Internet
100%

Several features of the web site

- America
- As
- Au
- Caribbean
- China
- Europe
- Japan
- Mediterranean
- Middle East

Cases sorted by Region

Altogether 54 different tools are presented in the GWP ToolBox. Structurally, the ToolBox is organised in a

CASES: EXAMPLES OF PRACTICAL IMPLEMENTATION OF IWRM

submitted by professionals from all over the world and offer realistic lessons for others by giving examples of how a tool has worked in a given combination and context. Cases are at varying levels of detail and include references to sources of further information. Case studies are peer reviewed through the GWP network.

REFERENCES: SUPPORTING MATERIAL AND BACKGROUND INFORMATION ON IWRM

In addition, the GWP ToolBox contains references. All the Tools and Cases are linked to reference materials. These range from policy papers, articles, briefing notes, results of research projects, summaries of assistance programs. They also refer to external links and web sites of organizations working in the area of IWRM

TOOLBOX PARTNERS

- AP Flood Management
- CapNet
- EU NeWater
- Ground Water - MATE
- INBO
- WHO
- Other organizations

Contributions from GWP Partners

TOOLBOX PARTNERS

ToolBox Partners are institutions and organizations that have played a variety of roles: some have had a leading role in creating the knowledge that is housed in the GWP Toolbox. Others have added significant value to existing content. Others have trained people in how to use the GWP ToolBox. And still others have been keen promoters of the Toolbox's usefulness. GWP is grateful for the contribution of each of these Toolbox Partners.

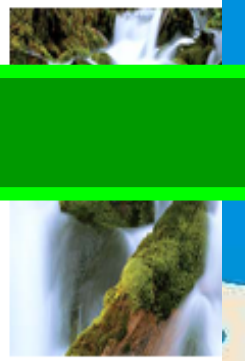
Toolbox textbook in other languages to download (pdf):

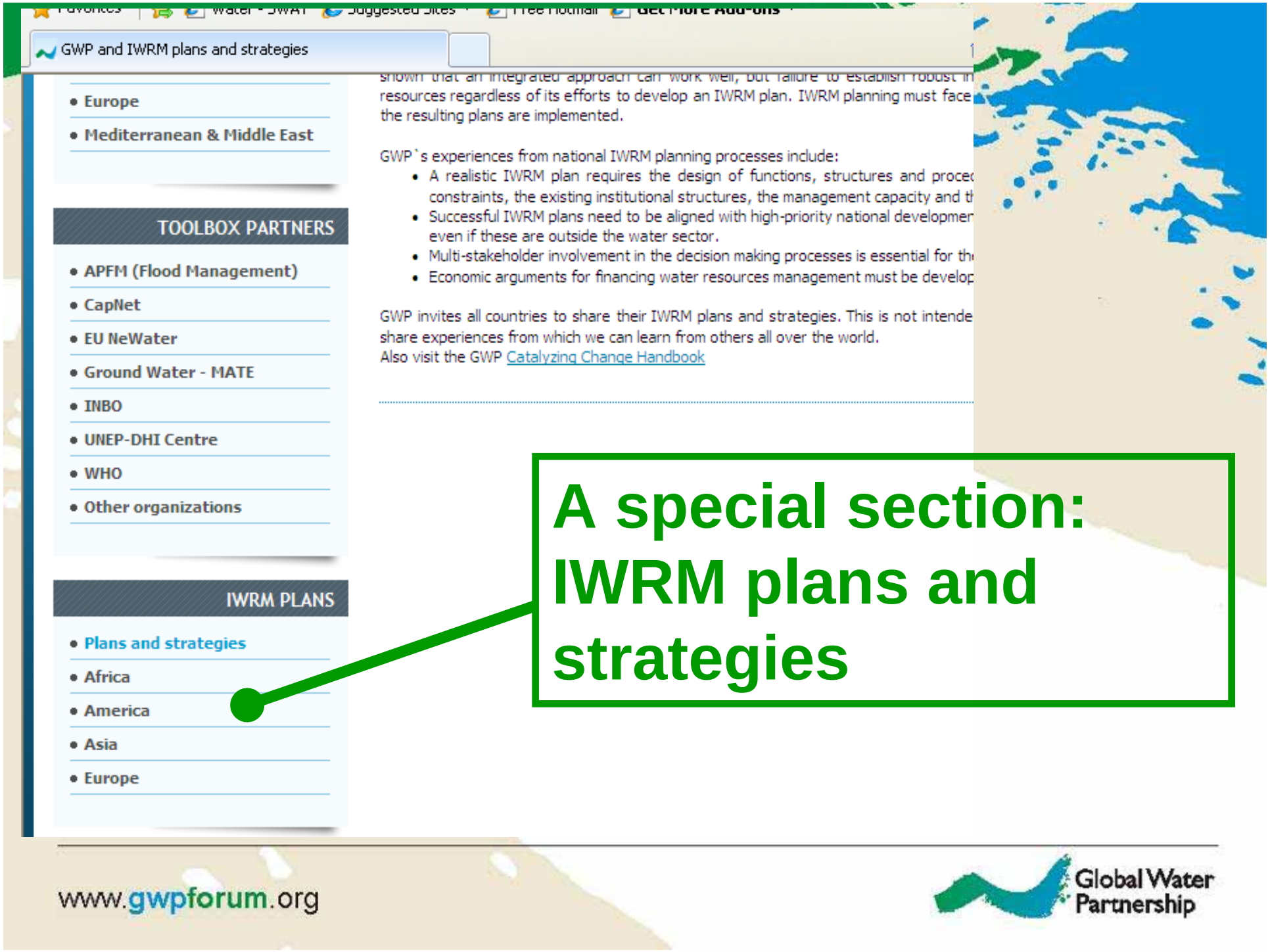
French (447KB) - Chinese (1MB) - Portuguese (1.27MB) - Russian (1,82MB) - Spanish (720KB)

Visit local versions of the ToolBox:

Malaysia - Philippines

Language and local versions under development




GWP and IWRM plans and strategies
• Europe
• Mediterranean & Middle East
TOOLBOX PARTNERS
• APFM (Flood Management)
• CapNet
• EU NeWater
• Ground Water - MATE
• INBO
• UNEP-DHI Centre
• WHO
• Other organizations
IWRM PLANS
• Plans and strategies
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• America
• Asia
• Europe
resources regardless of its efforts to develop an IWRM plan. IWRM planning must face
the resulting plans are implemented.
GWP`s experiences from national IWRM planning processes include:
• A realistic IWRM plan requires the design of functions, structures and proce
constraints, the existing institutional structures, the management capacity and t
• Successful IWRM plans need to be aligned with high-priority national developmer
even if these are outside the water sector.
• Multi-stakeholder involvement in the decision making processes is essential for th
• Economic arguments for financing water resources management must be develop
GWP invites all countries to share their IWRM plans and strategies. This is not intende
share experiences from which we can learn from others all over the world.
Also visit the GWP Catalyzing Change Handbook
A special section: IWRM plans and strategies
www.gwpforum.org
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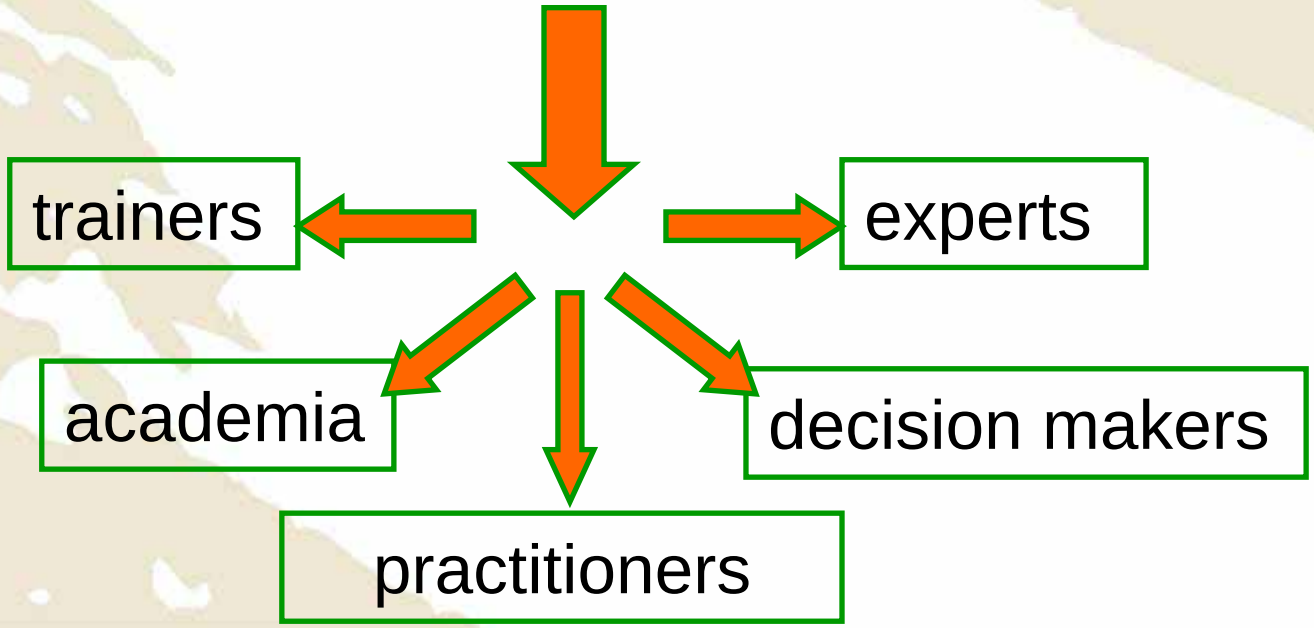
For Who is this ToolBox?
Why we would like to share it?

- **As water is everybody's business……**

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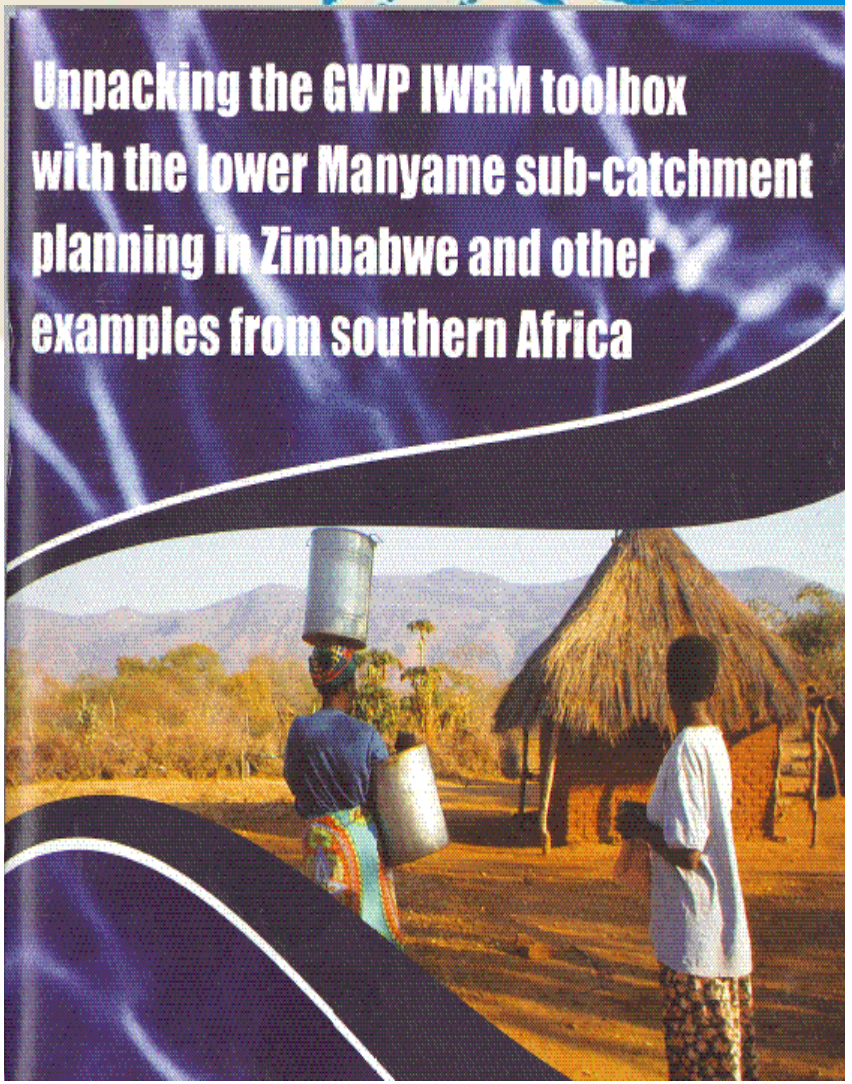
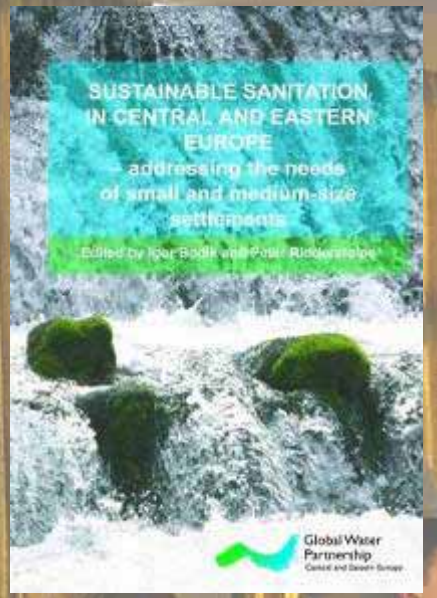
Home » Tools » B1.02 Transboundary organisations for water resource management
B1.02 Transboundary organisations for water resource management
Characteristics
Transboundary organisations provide a framework for managing water resources across international boundaries, where there are issues about the management of common (cross-jurisdiction) property
commissions. Traditionally, international organisations have been set up to address a given problem – navigation, flooding; but their remit can be and often has been expanded to tackle wider water problems in the basin. While ministers in each country often wish to retain ultimate responsibility for decisions, it can be helpful to establish some kind of consultative body to broaden the range of stakeholder involvement.
The type of agreement underlying these organisations varies greatly around the world, from ad hoc
References
Getting the private sector involved in
What to do in the poorest
(DSE, 1998)
nal watercourses: Enhancing
on and managing conflict
(WB, 1998)
Transboundary water management as an international public good (Swedish Ministry of Foreign Affairs, 2001)

Example of use

- Project: Unpacking the IWRM tools in a demonstration project (Zimbabwe)
  - Lessons learned in developing IWRM Plan
  - Discussion how each tool is applied in the IWRM plan
  - Publication disseminated to other basins
- ToolBox training for WaterNet students
  - Regular training for MSc IWRM students

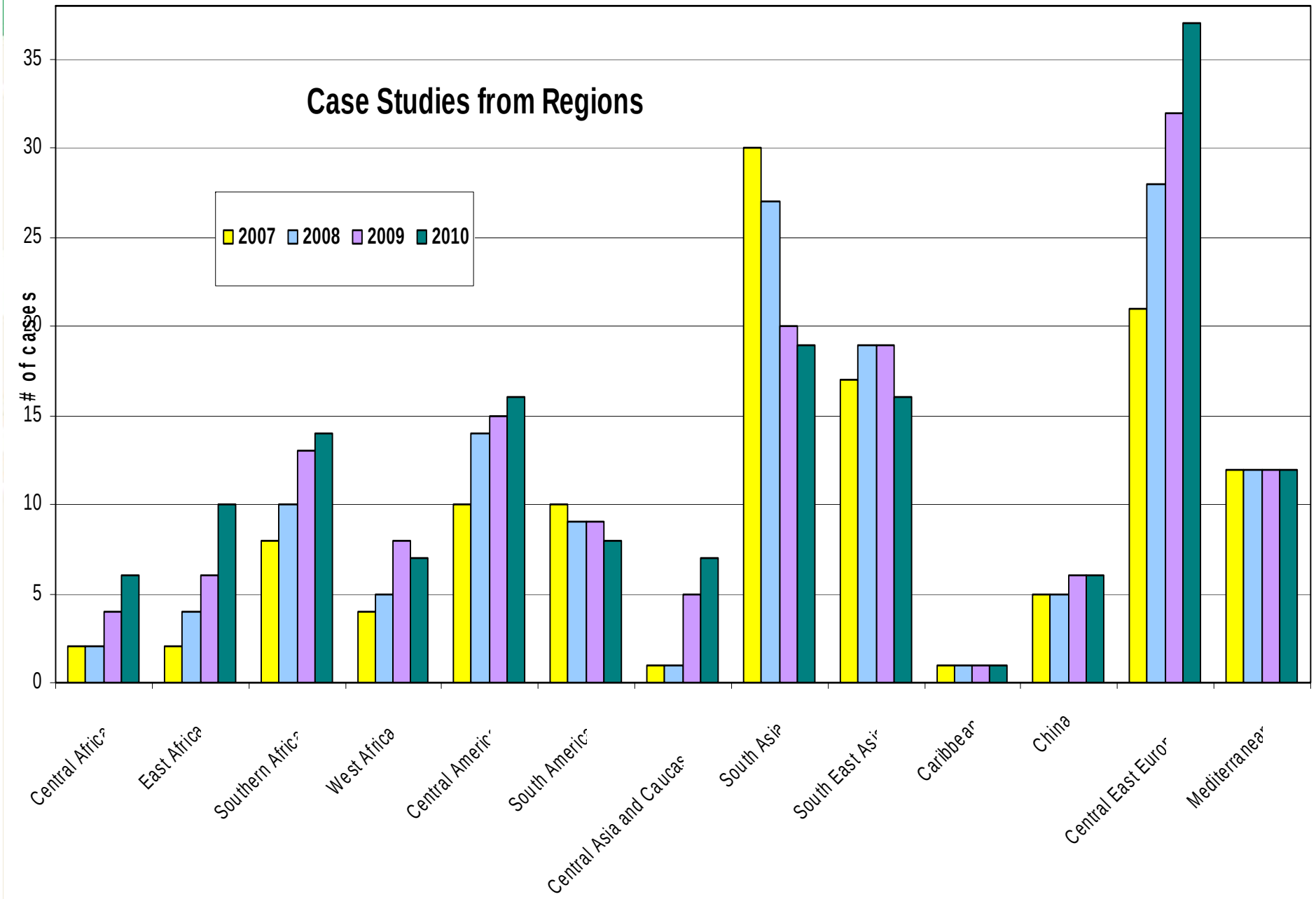


Inter-regional cooperation of CEE and CACENA



Lessons learnt from CACENA

- Understanding that ***river basins are units*** for water resources planning
- Increased awareness that ***different sectors*** have to work together (including water sectors!!!!)
- ***Participatory approach*** is not a “break” but “accelerator” of future actions committed


Case Studies from Regions
2007
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0
5
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Central Africa
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Southern Africa
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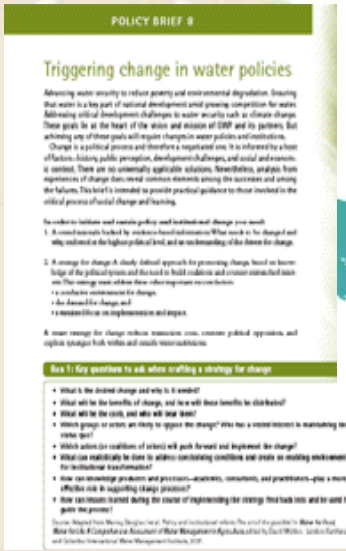
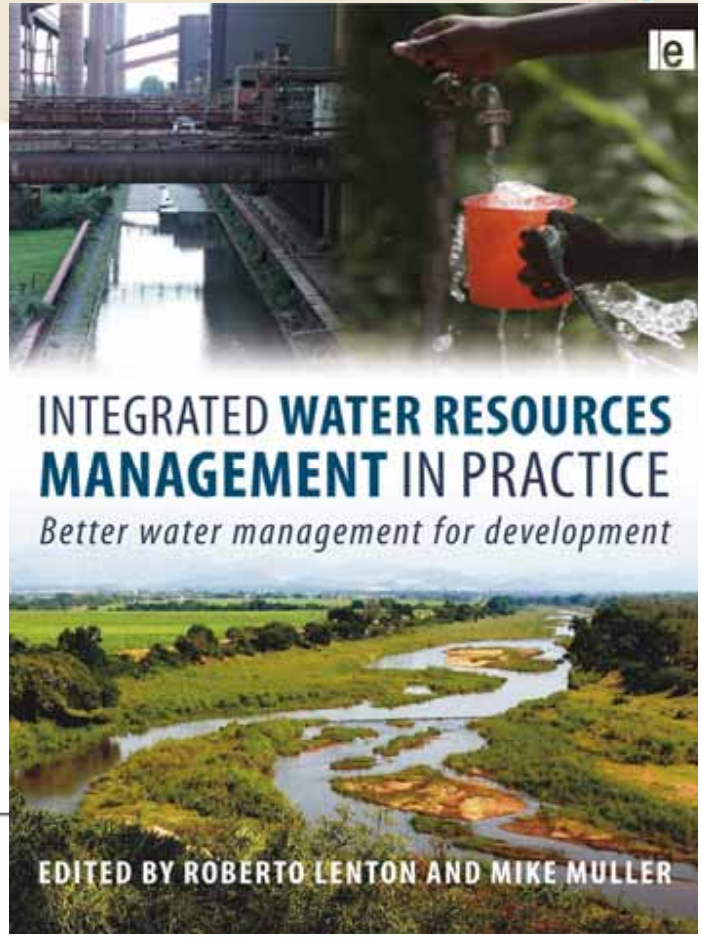
Central Asia and Caucas
South Asia
South East Asia
Caribbean
China
Central East Europ
Mediterranean

Lessons learnt
- captured in GWP publications





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- **Thank you for attention**