



Water & Nature Initiative

Initiative pour l'eau et la nature
Iniciativa del agua y la naturaleza



Mitigating Environmental Impacts

- Seeing The Bigger Picture -

Ger Bergkamp & John Dore

UN Symposium on Hydropower
and Sustainable Development
Beijing, October 2004



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Key Messages

- Multi-stakeholder engagement is critical: a wide range of **partnership options** need to be considered
- Mitigation of environmental impacts is complex and more know-how and experience is needed: a **social learning** approach is required.
- Establishing an appropriate **environmental flow** is essential: a flow regime that balances the needs of people and nature



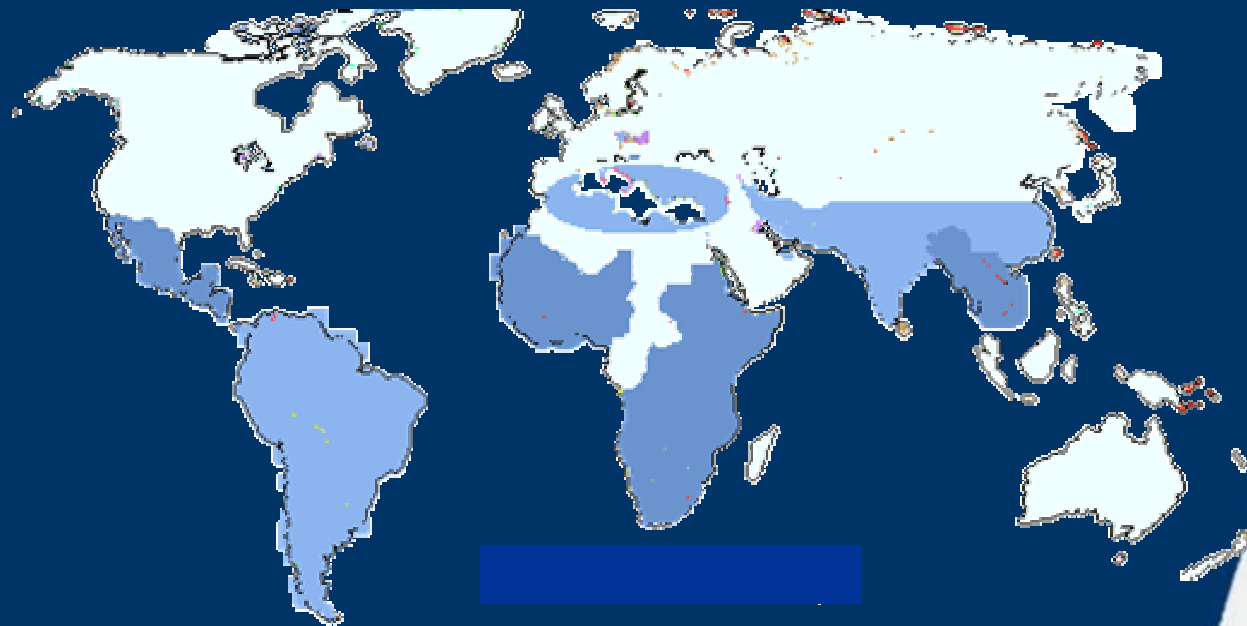
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A world of difference





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River Basin Support 1

- **River basin focus**

Mekong, Huong, Okavango, Pangani, Volta, Senegal, Komadugu Yobe, Pungwe, Tanganyika, Tacana, BASIM

- **Thematic focus**

Environmental Flows, Water Governance & Democracy, Environmental Economics & Finance, Climate Change

- **Products and services**

Toolkits, Expert & Practitioner Networks, Social Learning



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River Basin Support 2

- **Multi-stakeholder**

.gov / .com / .org / .edunet

- **Investments**

Start-up: USD 100,000

USD 2.5 – 70 million

- **Time-scale**

Start-up: 2-3 years

Implementation: 3-5 years



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1. Partnerships.....everywhere...

Task oriented

task force

consortium

alliance

working group

coalition

consultative group

dialogue **forum**

client-provider

team

network

Relationship oriented

KNOW WHAT TO USE .. WHEN ...HOW



M. ATENCION
Reuniendo
Juntas
2002 2004



UICN

**REUNION BINACIONAL
MEXICO - GUATEMALA
"MANEJO INTEGRADO DE CUENCAS
ASOCIADAS AL VOLCAN TACANA"
TAPACHULA CHIAPA
SEPTIEMBRE 26 DEL 2002**

Several individuals are seated at a long table covered with a green cloth, participating in the meeting. A woman stands on the right side of the table.





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Partnership Lessons 1

- **Patience**
 - Stakeholder identification & analysis
 - Willingness to collaborate...the weakest link
 - Licence to operate (convene, facilitate)
- **Trust building**
 - Small scale visible actions & results
 - Solving some smaller challenges
 - Transparency & process clarity
 - Creating a shared vision & ...values
- **? One size fits all ?**
 - Tailor to specific situations
 - Build from existing structures / mechanisms



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Partnership Lessons 2

- **Ownership**
 - Clarify stakes
 - Balance amongst stakeholders
 - Inclusiveness
 - Individuals matter
- **Exposure**
 - Double edged sword
 - Minimum critical size needed first
 - Coalitions for water policy reforms
- **Habitual patterns**
 - Stakeholders locked in
 - Overcoming stereotypes
 - Paradigm shift often needed – political



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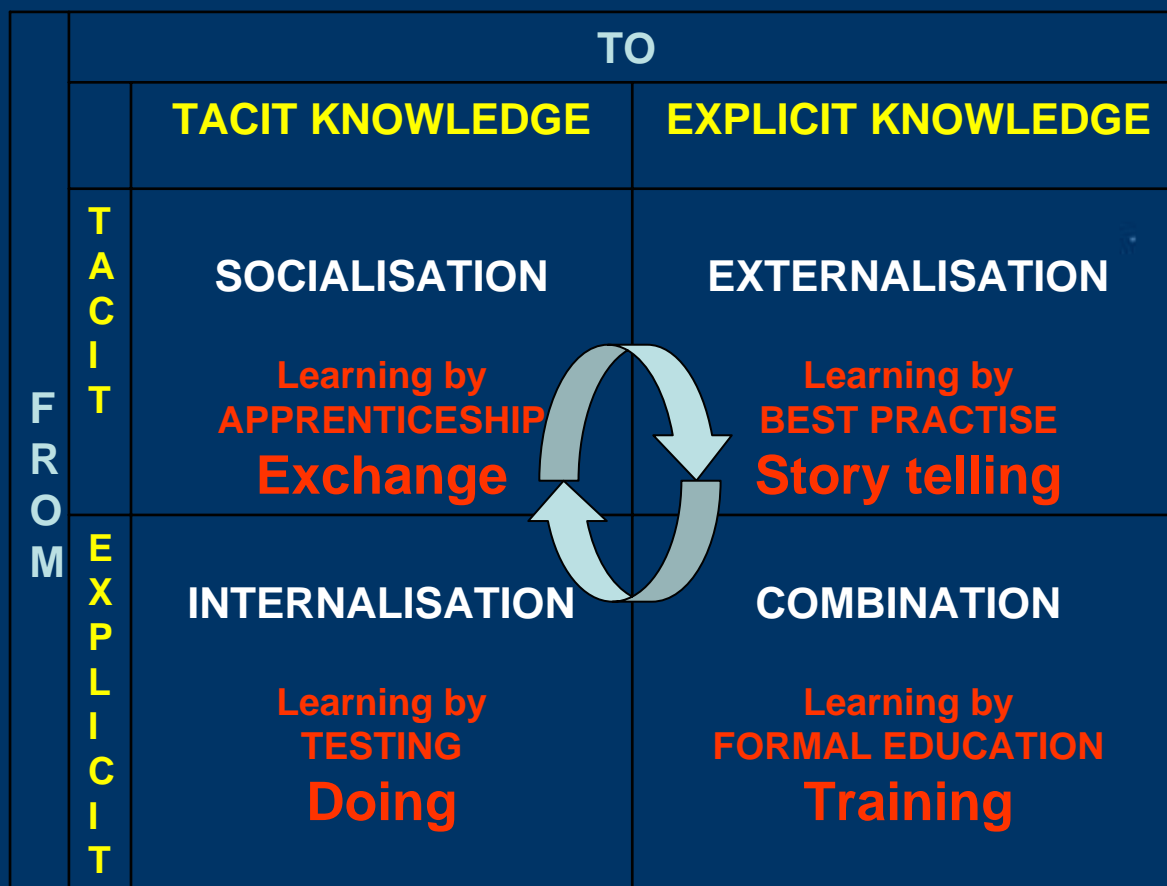
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2. Social Learning

Environmental Aspects - Drivers of Development





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Water and Nature Tool Series



CHANGE

FLOW

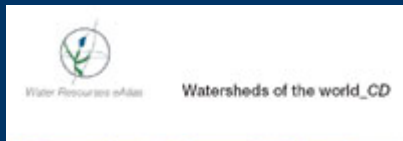
VALUE

POWER

RULE

PAY

FIX





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3. Environmental Flows (1)

Findings of promoting best practice:



Nyumba ya Mungu Dam
Pangani Basin - Tanzania
8 MW
25 – 45 kWh
40 m³ / s

www.waterandnature.org



IUCN
The World Conservation Union



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3. Environmental Flows - Case

Pangani basin – Tanzania
Training in Flow Assessments





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3. Environmental Flows (1)

Findings of promoting best practice:

- Environmental flow assessments: part of river basin planning
- No single best approach: tailored approaches required
- Implementation with new and existing infrastructure
- Existing incentives need to change to motivate actors



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3. Environmental Flows (2)

Findings of promoting best practice:

- Cost-Benefit / Multi-criteria analysis is critical
- Institutional set-up: river basin institutions / mechanism vital
- National legislation, policies & operating rules – framework
- Communication to stakeholders
- Coalition – building alliances with civil society, science, government and private sector



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Seeing the Bigger Picture 1

Issues, usually mentioned, sometimes addressed:

Environmental/ecological risks

Cumulative impacts

Transboundary impacts

Economics

- What is counted?
- How robust are assumptions?
- What is externalised?



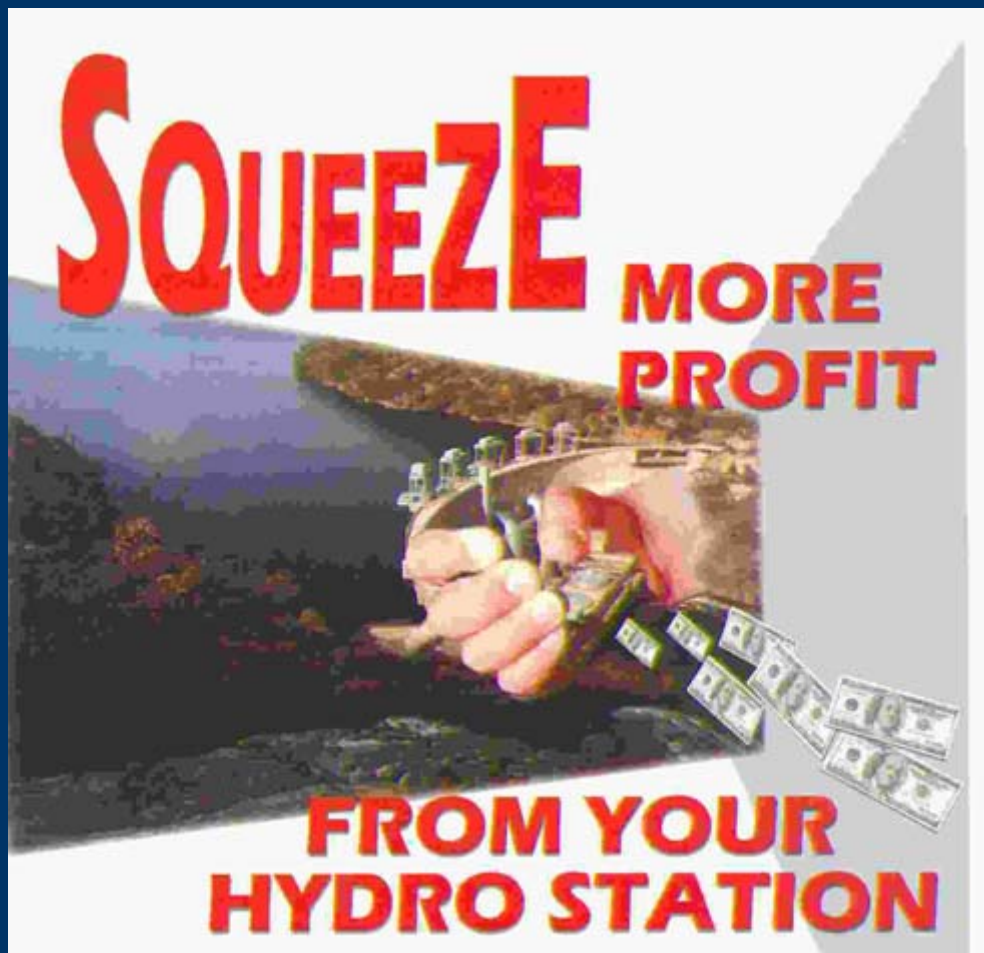
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Economic opportunity from upgrading ?





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Seeing the Bigger Picture 2

Bigger ENERGY picture

- Hydropower context of overall energy policy
- Energy security
- Demand projections
- Alternatives

Bigger POLITICAL ECONOMY picture

- How are decisions made in a particular country?
- Who has most influence? Why?
- National control versus provincial control
- Changing nature of public-private partnerships
- Changes with energy industry reforms?
- Regulatory role of the State? Is it keeping up?



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