



Schweizerische Eidgenossenschaft
Confédération suisse
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Federal Department of Foreign Affairs FDFA

Swiss Agency for Development and Cooperation SDC
Thematic and Technical Resources Department

Thomas Zeller, SDC June 5, 2008

Strategies, approaches, and methods in IWRM of International Development Cooperation



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35th Discussion Forum on Assessment of Water Use within LCA

ETH Zürich, June 5, 2008



Water for people

approx.
 10 %
 global
 uses

Human Right

Water for Industry

approx.
 20 %
 global
 uses



Climate changes

**risks of
 conflicts**

Water for agriculture

approx.
 70 %
 global
 uses



Water for nature

**Ecosystem
 Ground water**



These uses are in competition and require an integrated water resource management (IWRM)



Water is a common good with a cost, and also a human right

Water is a complex issue and the following four perspectives have to be considered, when allocating water:

- Economic point of view: Water should be charged at a price that reflects the full cost of its provision
- Environmental: water should be sufficiently priced to discourage wasting
- Social: Water is essential to life, therefore water must be priced so that all people, including the poorest, can afford it
- Human Rights: General comment No 15 states that “water should be treated as a social and cultural good and not primarily as an economic good”

The social perspective must be prioritised



Access to Drinking Water and Sanitation is a Fundamental Human Right

Access

Government must guarantee access to water in or near homes, schools or workplaces. Where this isn't possible due to lacking resources, an access within 30 minutes must be guaranteed.

Safe Water

Safe means absence of pathogenic microorganisms and chemical substances, no contamination through radiation, and an acceptable smell and taste.

Sufficient Water

Households need at least 20 liters of water per person per day. If sufficient water is available 100 liters per person per day should be provided.

Affordable for all

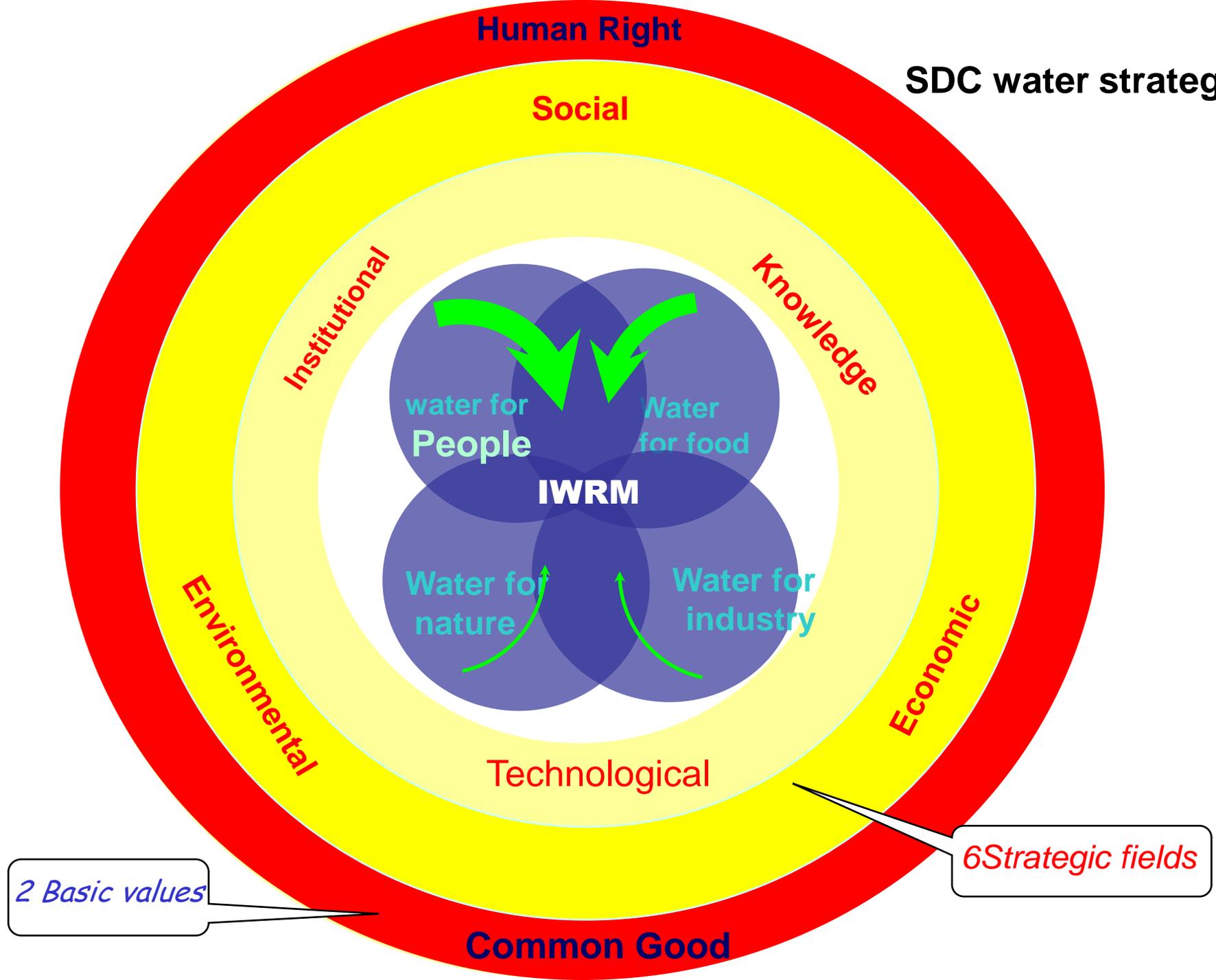
The price of water is too high if people must consequently refrain from other indispensable goods.



Misunderstanding! The Human Right to Water and Sanitation doesn't mean...

- **that drinking water and sanitation must be provided free of charge for all.** The access must be guaranteed for all, i.e those able to pay for it, should do so.
- that all households must be **connected to piped water and a sanitation system.** If there isn't enough water or its cost is prohibitively high, the right to water can be ensured through other systems such as wells and waste water treatment.
- **that a Government is violating Human Rights if it does not have the needed resources.** If there aren't sufficient resources the government may proceed progressively, but with a clear target.
- **that the Government must provide the services.** The Government may delegate these services to civil society organisations or to the private sector, but under government control and regulation.

SDC water strategy



2 Basic values

6 Strategic fields

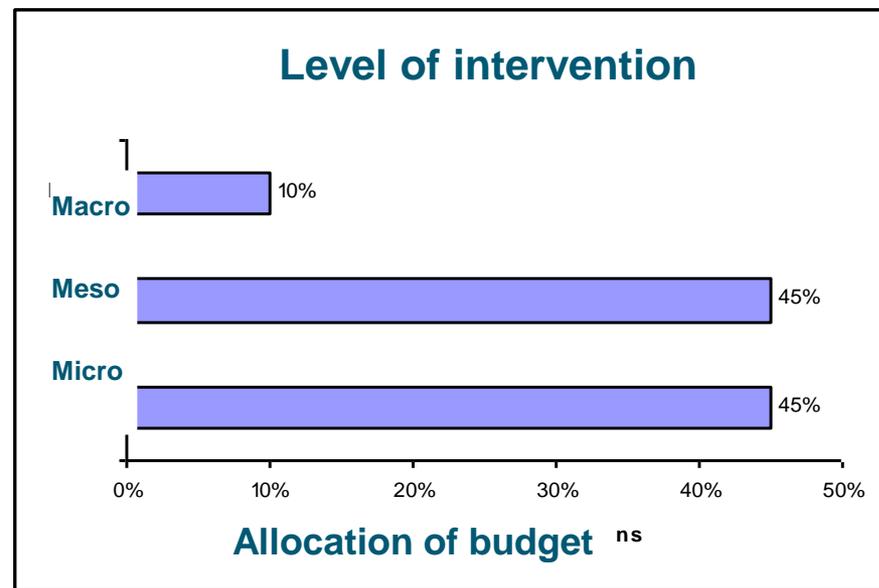
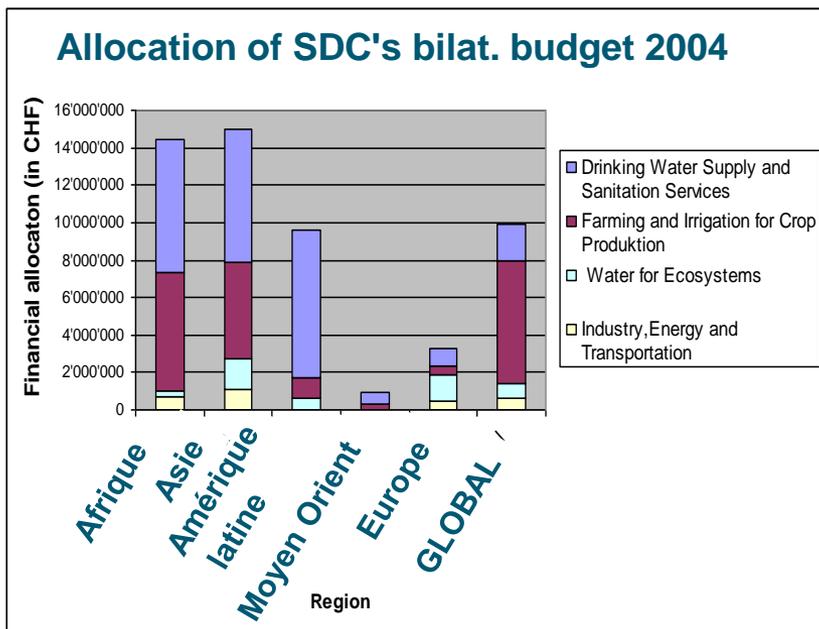


SDC: Financing in Water and Sanitation

Bilateral budget CHF 60 Mio. p.a. (~10% of bilat. budget of SDC)

Multilateral budget CHF 35 Mio. p.a. (~7% of multilat. budget of SDC)

- **50% Drinking water and sanitation**
- **37% Water for agriculture (Irrigation)**
- **9% Water for nature**
- **Rest for other uses.**





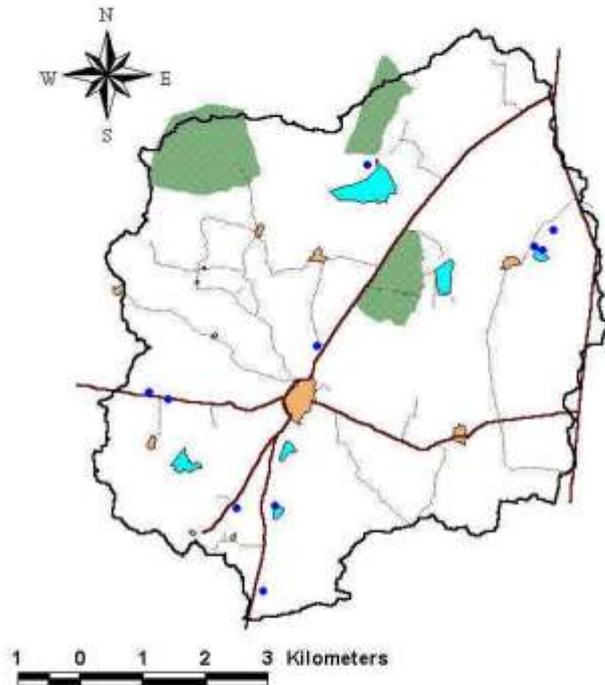
Financing trends in SDC

- Bilateral co-operation: +/- stable
- multilateral co-operation: + 1 Mio/year (GSF)
- Solidarit'eau suisse: + 300'000/year
- Climate change: + ???

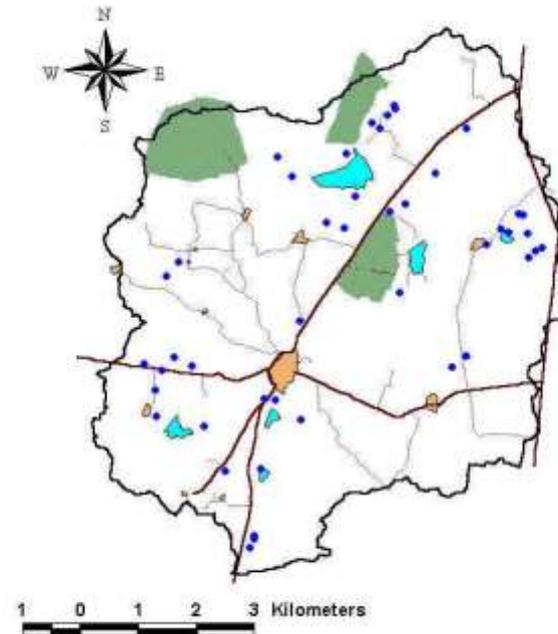


Expample: India boreholes (1)

1985



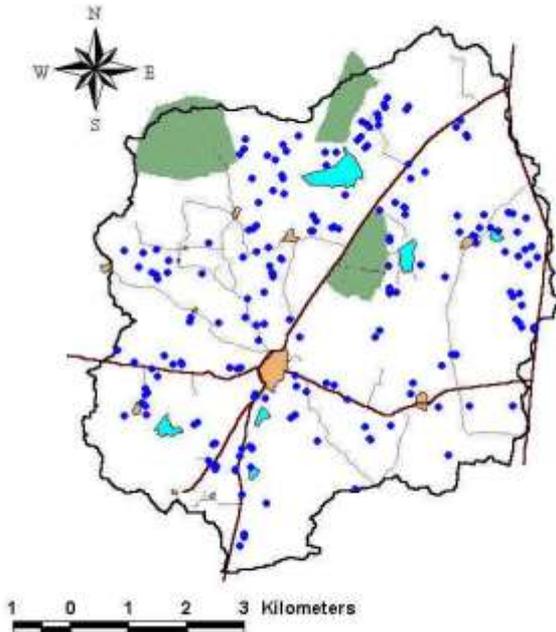
1990



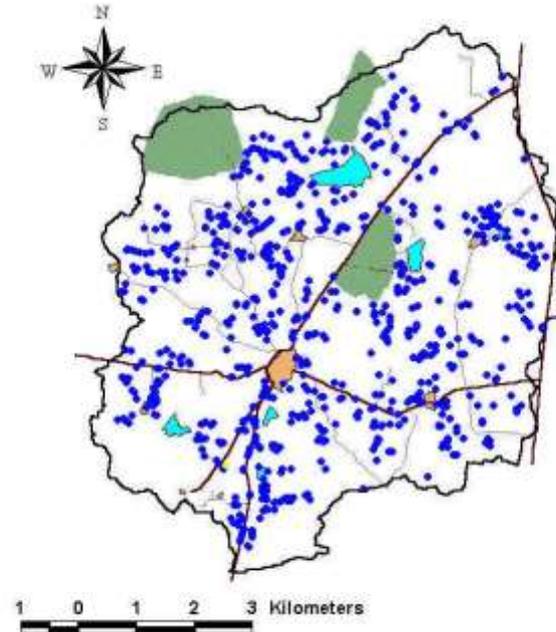


Example India: boreholes (2)

1995

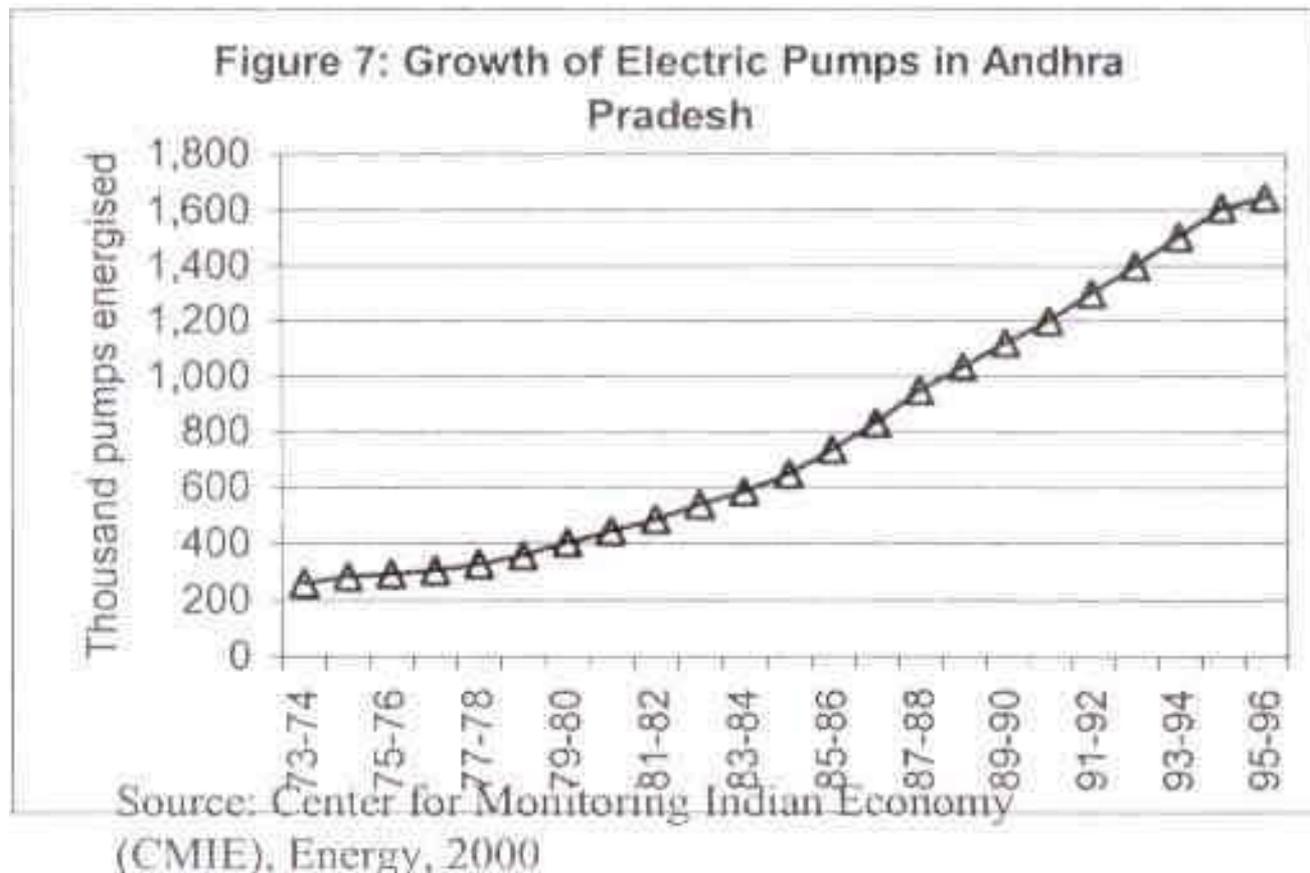


2002





Example India: boreholes (3)





Example India boreholes: social regulation

- Futile investments, conflicts, suicides → community solution
- 1. Stock taking of water resources
- 2. Prioritization of water uses
- 3. Focus on water conserving crops and crop rotations
- 4. Restoring/build water harvesting structures
- 5. Participatory ground water monitoring and publishing of ground water level data at the market place
- Research can support such processes with data/knowledge
- Take into account: social dimensions, power relations etc.



Example: IWRM Fergana Valley

(Kyrgyzstan, Uzbekistan, Tajikistan)

- Improvement of canal-management → better efficiency, less stress, social mobilization for the canal
- Improvement of governance at all levels (capacity development) → more confidence
- Improvement of irrig. technology → less water losses
- Improvement of agri. technology → better produce
- Improvement of information systems → transparency, confid.
- Water metering → better equity
- 3 countries → regional integration
- ➔ IWMI accompanies with monitoring and research
- ➔ True IWRM application



Example: Tiquipaya (Bolivia)

- Growing populations and changes in the use of land generate conflicts due to water access
- Water rights based on uses and customs can hamper IWRM, that also satisfies new/legitimate multiple use (pop. growth)
- A shared vision is needed to make progress towards IWRM
- To achieve shared planning processes for IWRM a balanced empowerment of different actors is needed.
- Evidence based decision making requires data, information, options, understandable for politicians
- ➔ Research can play important role (evidence for decisions)
- ➔ Research should feed-in evidence in discussions, negotiations



Example: Bangladesh Arsenic

- Water every where, but no safe water
 - River mouth: inherent danger of arsenic in sediments
science knew problem, not so gov., dev. org. etc.
 - More bore holes, more pumps → more arsenic
 - Research to seek solutions
- ➔ Research knowledge was not "pro-actively" available
when and where needed!



Example Niger: CC overtakes project

Quote from impact report of SDC/seco regarding water:

"In Niger the project had improved strongly access to water for animals. Climate change is drying out traditional wells → concentration on deeper wells → overstocking, erosion around deeper wells."

- Climate Change is outdating many data collections and a lot of knowledge → research to update knowledge needed.
- Research to take proactive role



Gender and water

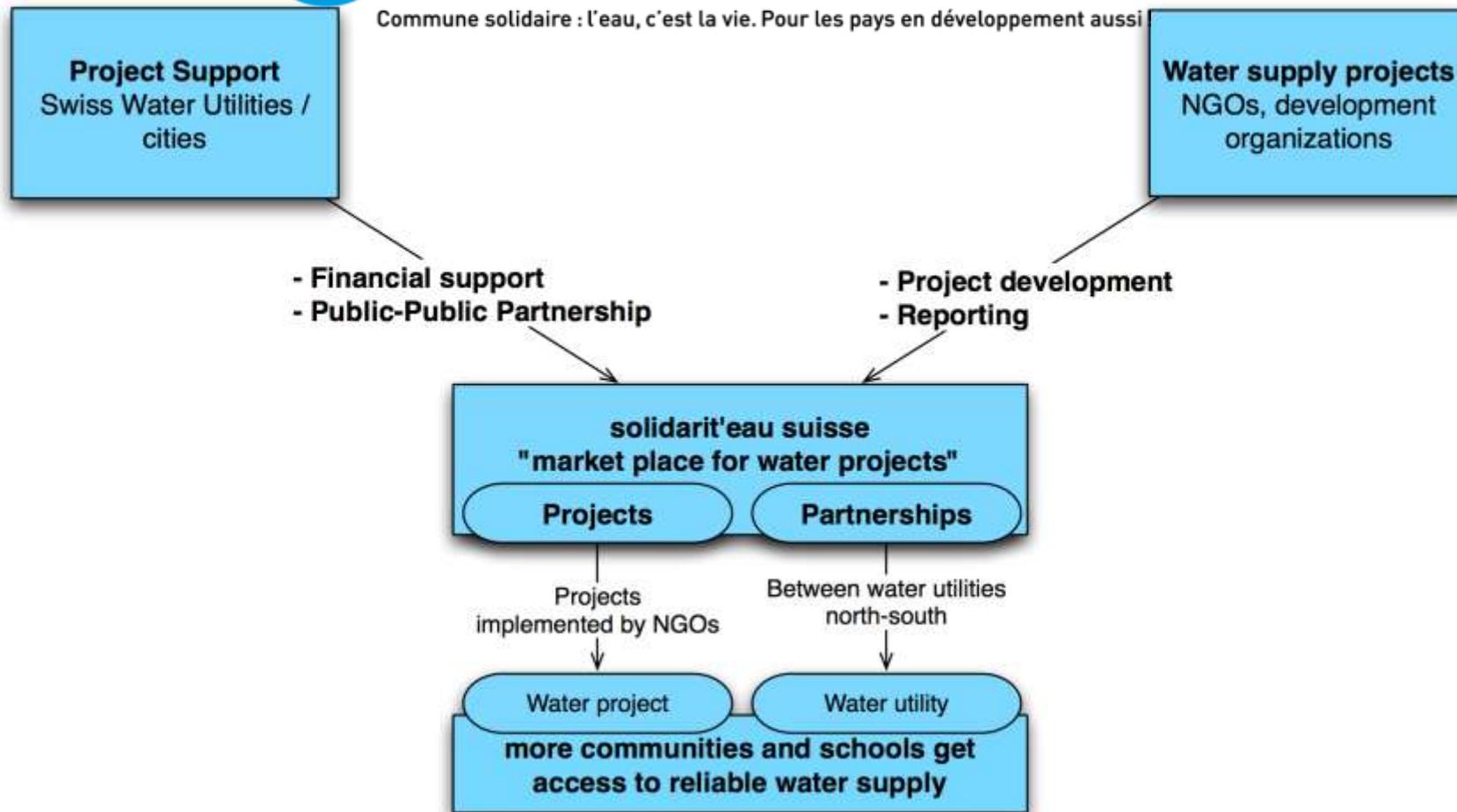
Researchers should always:

- Make sure that research is participatory, involving all stakeholders including women
- Respect women's difficulties in participating, look for times and places suitable to them
- Ensure that researchers knowledge is shared with local men and women
- Work in multidisciplinary teams, including social scientists and gender experts



solidarit'eau suisse

Commune solidaire : l'eau, c'est la vie. Pour les pays en développement aussi





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Label





Vision

All Swiss water utilities/communes will become a „solidarit'eau suisse“ - commune und receives the „solidarit'eau suisse“ - label





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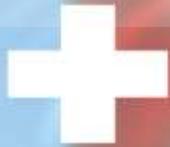
Water for All

No excuses!

It can be achieved!

Political will, joint forces and are needed!

Research must contribute!



H₂O

Thank you

SDC - Swiss Agency for Development and Cooperation