

## Indicative topics with relevance to the EU Water Initiative

### International Co-operation

**Developing Countries;** Rational Use of Natural Resources - Ecosystem dynamics - Renewable natural resources; Integrated approach to natural and agro-resource use systems - Multiple Demands on Coastal Zones, Food Security

**Mediterranean;** Integrated Management of Limited Water Resources - Water Treatment, re-use and energy implications

**Western Balkans;** Waste water treatment and reuse, treatment of industrial and municipal waste - Use of recycled materials

**Russia and other NIS (EECCA);** Environment and Health Protection

### Thematic Priority Global Change and Ecosystems

**Integrated water management at catchment scale;** "twinning" partnerships with African and NIS river and transboundary basins.

**Integrated urban water management;** African, Asian and/or South American mega-cities and peri-urban areas.

**Management of water under scarcity;** south-Mediterranean countries.

**Development of scenarios of water demand and availability at 25-50 years;** SE Mediterranean, Black Sea region and other NIS countries.



# Example of EU Water Initiative RTD projects with ETAP links

- ◆ River Basin Management through twinning between European and third countries river basins
  - Africa, Latin America, EECCA, Asia
- ◆ Integrated urban water management within the context of global change in Europe and developing countries:
  - Dealing with long-term strategies and management in Metropolitan areas in Europe and Mega-Cities in developing countries
- ◆ Drinking, Water, Future Scenarios, Water Scarcity etc.

## A recent example.... River Basins and Organisations (RBOs) in river 't-winning' research co-operation

- **RIVERTWIN:** A regional model for Integrated Water Management in Twinned River Basins
- **TWINBAS:** Twinning European and third countries river basins for development of integrated water resources management methods
- **WADE:** Floodwater Recharge of Alluvial Aquifers in Dryland Environments
- **TWINBASINXN:** Promoting Twinning of River Basins for Developing Integrated Water Resources Management Practices

**EUROPE:** Spain (Guadalentin River Basin) , UK (Thames), Sweden (Norrstrom), Germany (Neckar), Austria (Mur) and various RBOs in France, Netherlands, Italy, Poland, Hungary

**AFRICA:** Namibia (Kuseb Catchment), South Africa (Western Namaqualand), Botswana (Okavango), Benin (Queme), RBOs in Niger and Senegal

**MEDITERRANEAN COUNTRIES:** RBOs in Algeria, Morocco, Israel (Nahal Zin Catchment - Negev Desert)

**EECCA Countries:**

Uzbekistan

(Chirchik/Upper Syrdaria), Kazakhstan (Nura)

**LATIN AMERICA:** Chile (Bio Bio) and RBOs from Mexico and Brasil

**SE ASIA:** RBOs in Indonesia



## ...few facts for guidance...

Past and on-going research has a lot to offer in the short and medium term efforts towards the preparation of IWRM plans and improved WatSan approaches

- There is a multiple of sources of useful knowledge: EC Framework Programmes, EU Member States bilateral/multilateral programmes and private sector
- Relevant RTD 'awareness' exists in developing countries
- Development planners should consider existing research results during their work; researchers should embrace such challenging invitation by providing support suitable to the planning context; policy makers should facilitate this process
- The capitalization of added value from innovation and better knowledge management requires a continuous feedback between research and development co-operation
- Reinforcement of local structures of knowledge generation and management are essential for sustainable development based on local capacity



# How can the EU Water Initiative/RTD contribute to ETAP?

- ◆ Contribute with related research on appropriate watsan technology gaps, approaches and barriers, and;
- ◆ ...provide guidance on the 'technological content' of future investment in developing countries
- ◆ Interface and build capacity of potential technology 'users' and technology 'beneficiaries' in developing countries.
- ◆ Provide better insight on future watsan funding opportunities.

# How can ETAP contribute to the EU Water Initiative?

- ◆ Increasing awareness on currently available environmental technologies adapted to various climatic/socioeconomic/‘technical’ conditions in developing countries
- ◆ Establishing a strategic research agenda for appropriate environmental technologies for developing countries.
- ◆ Proposals on addressing relevant barriers specific to the developing countries.

to improve their lives



just add water



### II.3.2.1 - Integrated urban water management within the context of global change in Europe and developing countries

- **Need for improved integrated assessment of risks connected to complex urban water systems**
- **Sustainable long-term strategies and management practices to global change pressures (quantity, quality and cost-effectiveness).**
- **Urban sprawl in metropolitan areas and the competing needs of a polycentric/decentralised planning and of integrative needs.**
- **International co-operation should be foreseen for establishing links with the problems of developing countries mega-cities.**
- **Technical dimension of the various urban water uses and address economic, social, institutional and environmental aspects.**
- **Support to the Environmental Technology Action Plan and to the EU Water Initiative.**



### II.3.2.3 - Technologies and systems for drinking water production and distribution

- **Cost-effective system schemes and technologies for safe drinking water supply.**
  - address the whole water supply system, from different water sources to the consumer tap.
  - chemical / microbiological quality / minimising problems of taste and odours.
- **Improved multi-barrier concepts, on-line monitoring and control, also for responding to the growing needs of system security.**
- **The innovation in system design should lead to:**
  - higher reliability
  - better compliance with regulation
  - minimise health and occupational risks.
- **Issues of consumer perception and acceptance.**
- **SMEs**
- **Testing and validation activities.**
- **Environmental Technology Action Plan and EU Water Initiative (participation of third countries).**

# Issues for consideration (1)

- Invest in ensuring a 'strategic nature' of partnerships / consortia which can have a wider impact in the analysis of priorities, generation, promotion and application of knowledge based IUWM
  - The need to organise work with a view on multi-stakeholder interactions, consultative approaches and various aspects of sustainability.
  - Do not underestimate the range of involved stakeholders
- Clarify from the very beginning the wider conceptual and strategic frameworks between metropolitan areas and 'mega-cities' in developing countries.
  - Common features / barriers
  - Specific features / barriers
  - Interfaces of knowledge exchange and transfer
  - Strategy in support of knowledge content for the EU Water Initiative and ETA/WSSTP, already during its life time.
- Consideration of the emerging dominant role and impact of large urban settlements and integrated urban water management within the river basin and IWRM concepts.
  - to optimise the interfacing of urban water concerns with relevant activities beyond the urban boundaries, such as rural water supply, down-stream use, and agriculture

## Issues for consideration (2)

- Ensure right balance and contextual interfaces between sustainability aspects: **society, environment, economy**
- Pay attention to what is feasible, practicable and affordable in terms of immediate improvements (medium-term) and targets (**European Directives/MDGs**) and what is visionary and innovative (long-term) to support sustainability.
- Adequate attention to novel approaches on the basis of emerging technologies to reduce O&M (wastewater treatment, water losses, rain/storm water, recycling and reuse etc) but also on the way that **technological ingenuity** is reinforced to adopt them.
- Consider the potential for '**project results**' as **comprehensive blueprints for progress at various levels** (**Stakeholder aspirations, Legislation, Institutions,, Appropriate Technology, Public-Community and Public-Private partnerships, future RTD agenda...**)