### International basins and UNCCD water-scarce lands programme

The watershed is an ecological economic unit.

Every watershed is a natural ecosystem, not an institutional boarder.

The watershed management is unitary, not administrative or national.

The watershed management urges in water scarce ecosystems and in drylands.

Istanbul, 18° of March 2009

Valerio Calzolaió. UNCCD Consultant

## 263 of the world's surface water basin are transboundary

The world's 263 transboundary basins include the territory of 145 countries and cover nearly half of the Earths land surface.

Every basin is transboundary, include the territory of different administrative institutions and cover different land surfaces.

There is a water change next to climate change, reciprocal factor and mutual effect of each other. Water scarcity is by now an effect of the recent and anthropogenic water and climate changes.

Currently, a relative scarcity of water concerns all water uses and all water users: it is a worldwide increasing phenomenon.

# Exploring and implementing mechanisms and forms of water management

- •Of the world's 263 international basins, 158 do not have any type of cooperative management framework in place. Not always the existing agreements involve all the states within the basin, cover all the arguments, are respected.
- •In 1997 more than one hundred nations joined hands to adopt the UN Watercourses Convention. It counts today only 16 contracting states (no Italy), 19 short of the number required for entry into force.
- •At regional level, the UNECE Water Convention on transboundary watercourses and international lakes promotes joint water management in Europe.
- •National legislations on water contain (very different) measures on internal basins water management.



- Global long term water changes concern the relationships among water uses and users, the water availability, the rations between available water resources and local and global population, the distribution and quality of water.
  - Population growth and economic development are causing unprecedented pressure on renewable but limited water resources, particularly in drylands.
  - Water scarcity is only partially faced by mitigation and adaptation measures to climate change. Water policies regard the commons and public good regulation, the failure of social policies (both multilateral and national), the sustainable management of all water uses and a more equitable provision of services.
  - Water scarcity is one of the cause of forced migrations, armed conflicts, famines and food crises, particularly in transboundary areas.
  - Effective sustainable water policies are possible only at watershed level.



- A Multilateral Environmental Agreement (MEA), the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification Particularly in Africa (UNCCD) considers three climatic zones most vulnerable to land degradation: arid areas, semi-arid areas, and dry sub-humid areas.
- Drylands exist because the seasonal distribution of rain and the strong evaporation cause an endemic and continuous water deficit and a local absolute scarcity in watercourses and aquifers. In drylands, soil productivity is deeply influenced by water and groundwater is often the only safe and reliable water source for human consumption.
- Water sustainable management is the political economic priority in drylands. UNCCD is the UN Agreement to combat land degradation in drylands. It's the time for a water-scarce lands programme.

### Multilateral water rights negotiations

- The principles of *Integrated Water Resources Management* (IWRM) formulated in 1992 have to be updated, amended, and better specified. For example until now water management has only been synonymous with bluewater management, while greenwater was considered merely as the residual in the water balance.
- The Zaragoza Charter (2008) and several recent scientific studies or social forums calls contain new principles. It is possible to indicate synthetic assessments on uses of water, to evaluate the virtual water balances and the water footprint, to define the minimum quantities of water essential to life (for primary uses such as food and health), to identify the priorities of sustainable use, evaluate the functional traditional knowledge heritage of humanity, to fix legal provisions on groundwater considering the aridity index, to suggest targets for IWRM within river basin management plans.
- it would be necessary to define a water scarcity global project plan in the framework of UW-Water coordination—in the context of multilateral integrated policies and targets. There are three preliminary challenges: a) to survey and analyze information on integrated water scarcity adaptation from different national and international sources and at different scales; b) to realize an inventory of the relevant existing local/watershed/regional initiatives on integrated water scarcity adaptation; c) and to concentrate funds, policies, initiatives in Sub-Saharan Africa drylands and in rural water scarce ecosystems.

#### The right to water

- Linking water as a food source (right to food) and water as a common good (right to water) is essential for the sustainable development of all living species.
- The universal right to water is already partially recognized as implicit part of universal human rights, by an adjustment to food and health rights, particularly with specific references to women and children.
- The United Nations bodies dealing with Human Rights, as well as laws at national and local level, recognized the right to water as an implicit content of some other human rights.
- The right to water is taken into account in a large number of international conferences, documents, declarations or in other legal and political instruments. Yet it is recognized by less than 10 national Constitutions under different perspectives, as well as "by law" in a lot of other Countries.
- The right to water could be implemented at watershed level.

## Thank you for your attention Valerio Calzolaio vcalzolaio@libero.it