

Workshop 1 (synthesis): multipurpose stream management strategies

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Abstract For a meaningful dialogue on balancing water uses between stakeholders in a river basin, adequate information and proper understanding, knowledge and access to reliable data are essential for all parties. Technological and economic components in water resources management have limited significance without the social context, and the legal framework plays a key role in the dialogue between stakeholders at all levels. Other aspects that fit into strategic planning and management of water resources projects are risk assessment, ecosystem requirements, credibility and trust building.

Keywords Knowledge base; stakeholder dialogue; strategic perspective; water resources management

The knowledge base and capacity building efforts

Every water resources development project is unique in its complexity, which will also be typical for the strategic management of such projects. There are different levels for expanding as well as retaining knowledge. Capacity building has its proper base in public participation of all concerned, particularly on the local level. For academic training and research, national universities and other similar institutions should be integrated in the planning, implementation and follow-up activities related to water resources projects. Strategic competence can be available and retained if educational programs also include a link to practical work and qualified employment possibilities.

A meaningful dialogue on balancing water uses between stakeholders in a basin is possible only if all parties have adequate information and proper understanding, knowledge and access to reliable data. Different ways of applying water balance studies are also providing the platform for water regulation measures. Undertaking such tasks represents important learning processes for all involved. The larger and more heterogeneous the basin, whether national or international, the more important is the challenge of ensuring a “level playing field” between stakeholders.

Knowledge about water resources management issues needs to be developed and shared, not only across sectors and disciplines, but also across cultures. Knowledge is generated primarily in a two-way learning process, which involves all stakeholders, including indigenous people. It must start with highlighting the fundamental principles of how to manage precious and vulnerable human and natural resources in a variety of teacher and school children interactions from the very first steps in the educational process.

New ways – and courage – are required by providers of knowledge and capacity building, be they universities or consultants, to change from traditional short term activities towards a more sustainable, long term engagement with target groups at the local level.

A new generation of water specialists with holistic and multidisciplinary perspectives has to be created by continuous pedagogic efforts securing the national competence base. Technological and economic components in water resources management have limited

significance without the social context, that is the role of specific human impact and interference as well as public acceptance.

Strategic perspectives in water resources management

In water resources development both resource and risk handling are crucial for a well balanced water resources management procedure. A key issue in river basin water management is how to handle river regulation in different time perspectives. The focus on risk assessment has important components on safety and health but also environmental impact assessments. How should different ecosystem needs be included in the overall evaluation? The strategic planning is basically a process dealing with variability under uncertainty in a river basin setting. Climate variability is primarily of a short term concern whereas climate change is a more pronounced long term challenge. A shift in thinking may provide perspectives that can lead to new and more efficient strategies. Droughts and floods are certainly life threatening events. They can however also give lessons to learn and inputs to better meet such problems when they appear next time. In that sense they can – although devastating – be seen as providing some opportunities for development.

The legal framework as well as the legislative process plays a key role in the dialogue among stakeholders at all levels. Water laws are about “who gets what”, and how we secure “water for all”. Laws should not be seen as static, but rather as dynamic instruments for the dialogue about “reasonable and equitable” water sharing between users and uses within countries and basins. The “political will” to accomplish this development for improving quality of life is the driving motor in the process.

Stakeholder dialogues in basins should focus on shared benefits and win-win solutions, rather than on conflicts. The process of dialogue between people is more important than geographical and cultural differences. In balancing water uses between societal needs and ecosystems requirements – with the basin as the logical unit of dialogue – the value of ecosystem functions need to be assessed, whether in economic and/or other terms. The essential values of credibility and trust building are other aspects that fit into this perspective of strategic planning and management of water resources projects.

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