



## Integrated Water Resources Management in Bolivia

Country:	Bolivia
Project:	PROAPAC*
Term:	2008-2012
Total funding:	EUR 15 million
Partner:	Ministry of Environment and Water
Goals:	The different water users have better access to water in sufficient quantity and quality without affecting the balance of the ecosystems.

\*in close cooperation with the GIZ agricultural development programme PROAGRO

### Status quo/Challenges

Since the so-called 'water war' in Cochabamba in 2003, water has been a politically and socially sensitive issue in Bolivia. The privatisation of water and sewerage services and the consequent increase in the rates charged for this vital resource led to violent unrest.

The Plurinational State of Bolivia enacted a new state constitution in 2009, which recognises the Human Right to Water, prohibits the privatisation and concession of sources and services, and identifies water as a strategic and vulnerable resource, while guaranteeing participation and social control in its management. The new constitution has a clear approach to Integrated Water Resources Management (IWRM), although there is still no agreed definition of the term and Bolivia still lacks systematised experience in this regard.

With the assistance of two German cooperation programmes (drinking water/basic sanitation and agricultural development) supported by GIZ in Bolivia, the Bolivian Ministry of Environment and Water initiated the develop-

ment, implementation and monitoring of IWRM strategies and actions in pilot watersheds in 2009. However, implementation is still lagging behind.

### Approach

Bolivia has developed a series of regulations that contain IWRM elements, including the state constitution, the National Development Plan, the National Watershed Plan and the National Plan for Basic Sanitation. These constitute a frame of reference that guides actions at various levels of planning and decision-making, including territorial, sectoral and administrative areas.

In this context, GIZ's Bolivian counterparts are demanding more advice on IWRM, especially in the areas of drinking water and irrigation.

The technical assistance provided by GIZ therefore focuses on strengthening management structures and on capacity development for staff at municipal governments, water and sewerage operators, and other social organisations of relevance for the participatory and sustainable management of watersheds.

All activities give consideration to the cross-cutting themes of gender, interculturality, conflict and social policy management, in order to manage this sensitive subject and to strengthen social peace ('do no harm') in water-related activities, as well as to carry out awareness campaigns on the impacts of climate change.

### Good practices

Some good examples of implementation and internalisation of the IWRM approach at different levels can be mentioned:

- Active participation and decision-making by relevant stakeholders at local level, e.g. through watershed management organisations, facilitates the implementation of concerted IWRM measures.

- A provider of water and sewerage services charges a certain percentage as compensation for protection measures, such as buying areas around the wells or declaring water protection zones in the upper watershed.
- The inclusion of downstream water users facilitates forms of compensation upstream, for example 'water for work'.
- Diversifying or changing the structure of crops, e.g. by planting orchards, roses or less drought-susceptible crops as well as agroforestry practices upstream, reduces erosion and is an effective contribution to climate change adaptation.
- Public and private institutions in the sector are promoting concerted proposals for the new water law, based on IWRM as an important reference for the regulatory and strategic development of sustainable water use in Bolivia.
- Furthermore, public awareness events on environmental and sanitation issues as well as sensitisation for the undesired effects of climate change encourage the local public administration and population to invest in modernising wastewater treatment and reusing treated wastewater in agriculture. Action programmes to improve water use efficiency at household level and in agriculture are complementing these efforts.

### Impact/benefits

In Bolivia, IWRM contributes significantly to reflection about the state of water resources, the environment and its relationship with social and institutional actors, especially at local level and even more at basin level. Although the quantitative impact is not very noticeable as yet, greater sensitivity for an integrated approach to water resources management can be observed at all levels. For instance, establishing agreements and commitments to shared management responsibility has a great effect on fostering an intersectoral approach. This provides substantial added value, such as: inclusion of actors and usually marginalised sectors, greater planning capacity as well as a complementary approach, more timely consideration of important aspects, optimised use of available resources, greater efforts to guarantee the quality and availability of water or adaptation to climate change.

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### Emerging issues

The following emerging issues can be noted:

- Currently, the integrated approach finds greater acceptance at the local level than at the regional or national levels and the corresponding institutional structures. Consolidation of the present results, as well as systemisation and documentation, could help to anchor IWRM more firmly at higher levels.
- There is not yet enough institutional and social awareness of the need to use water efficiently, especially taking in account future scenarios of climate change. The IWRM framework therefore needs to be complemented more systematically by environmental and sanitary education, agroclimatic risk sensitisation measures and participatory planning and monitoring systems.
- Furthermore, it is essential to encourage the creation of watershed management organisations by relevant local actors to facilitate water governance with a certain degree of control over local service operators.
- It may be advisable to put more emphasis on peri-urban management of drinking water and sanitation, especially with regard to wastewater treatment, climate change adaptation measures, and the elaboration of metropolitan master plans for drinking water and sanitation.
- Frequently, the sector approach at higher levels affects the objectivity of interventions, limiting their coordination and reducing their impact, mainly because of political interests. It is therefore vital to strengthen the intersectoral approach, as sectoral thinking is still a major obstacle to IWRM in Bolivia.

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