



Photo 1. Azero river basin. Files  
PROCUENCA GIZ Bolivia

# Fostering IWRM to achieve Water Security in Bolivia

*Water security is central to climate resilience. Achieving water security can help society transition toward a climate-resilient future.*

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Even before COVID-19 struck, the world was off track to meet Sustainable Development Goal 6 (SDG 6) - the goal of ensuring water and sanitation for all by 2030. To date, billions of people worldwide still live without safely managed drinking water and sanitation, even though both services have long been defined as human rights. Many water sources are drying up, becoming more polluted, or both. Water-intensive industry, agriculture and energy generation are growing to meet the needs of an expanding population.

The impacts of climate change on various components of the hydrological cycle are affecting major water use sectors, such as agriculture, industry, etc. Most of the adaptation and resilience measures are also water-focused, whereas many of the mitigation measures needed for a net-zero emissions target often have high water footprints. Neglecting the water costs of mitigation can lead to further water insecurity or jeopardize the emissions target

Waters in many areas of the world and specifically in Bolivia are not used sustainably and the situation is projected to worsen in the coming decades owing to increasing pressures from population growth, agriculture and energy

production, as well as from impacts of climate change.

Indicator 6.5.1 tracks the degree of integrated water resources management (IWRM) implementation, by assessing the four key dimensions of IWRM: enabling environment, institutions and participation, management instruments and financing. Sustainable, integrated water resources management is vital for long-term social, economic and environmental well-being – the three pillars of the 2030 Agenda – and helps to balance competing water demands from across society and the economy.

Indicator 6.5.2 looks at the area of a country within transboundary basins and assesses the extent to which that area is covered by operational cooperation arrangements. Transboundary basins are river, lake and aquifer systems shared between two or more countries. Arrangements are “operational” when there is a joint body, meetings between countries take place and information is exchanged at least once per year, and joint or coordinated management plans or objectives for the basin(s) have been set. Transboundary water cooperation plays a crucial role in supporting wider regional integration, peace

and sustainable development, as well as in tackling regional security challenges or in supporting climate change adaptation.

According to the SDG 6 Report (2021) the world has made some progress on the SDG 6.5.1. Many countries have strengthened IWRM laws, developed policies, and reinforced institutions, putting them in a position to scale up implementation, and supporting progress towards many other SDG targets. However, implementation efforts must intensify, particularly in the 87 countries with lower IWRM implementation. As demonstrated by the reporting on indicator 6.5.1 and 6.5.2 of the Sustainable Development Goals is not adequate to tackle the existing and emerging challenges.

The coronavirus disease (COVID-19) pandemic has demonstrated the importance of an integrated approach to water management and the crucial role of national, regional and transboundary cooperation, for example, in ensuring access to water and sanitation for all. It has also led to additional challenges, for example, in financing river basin management and transboundary water cooperation.

When it comes to integrated water resources management (IWRM), the current rate of progress needs to double to meet the global targets, and only two SDG regions are on track to have all their transboundary water bodies covered by operational cooperation agreements (SDG 6.5.2).

One third of Bolivian river basins are experiencing rapid changes in the area covered by surface waters, indicative of flooding and drought events, which are associated with climate change.

To improve the IWRM in Bolivia at fast pace and increased scale the Ministry of Environment and Water (MMAyA) is promoting multi-stakeholder and cross-sectorial coordination, including subnational and local actors and water user's engagement in the formulation and implementation of the Plurinational Integrated Water Resources Management Plan (2021-2030). These actions will be driven by five accelerators:

**GOVERNANCE** – Cross-sector and multilevel collaboration, clear roles,

stakeholder involvement and effective and inclusive water and river basin institutions will make IWRM and river basin management everyone's business.

*Lesson learned:* Efficient mandates for IWRM in all sectors are established, institutions are strengthened to deliver and intersectoral coordination mechanisms to operate effectively.

**INNOVATION** – Innovative practices and technologies will be leveraged and scaled up and ultimately lead to resilient water resources management across the river basins including water and ecosystems conservation and restoration.

*Lesson learned:* Innovative practices and technologies for water, land and ecosystem restoration are leveraged at the national, subnational and local level.

**OPTIMIZED FINANCING** – Improved targeting, better utilization of existing resources and mobilization of additional domestic, international, including climate funding will lead to efficient service delivery, IWRM and river basin management implementation.

*Lessons learned:* Costed plans such as the National Watershed Plan (PNC) and others related to delivery IWRM counts with diverse

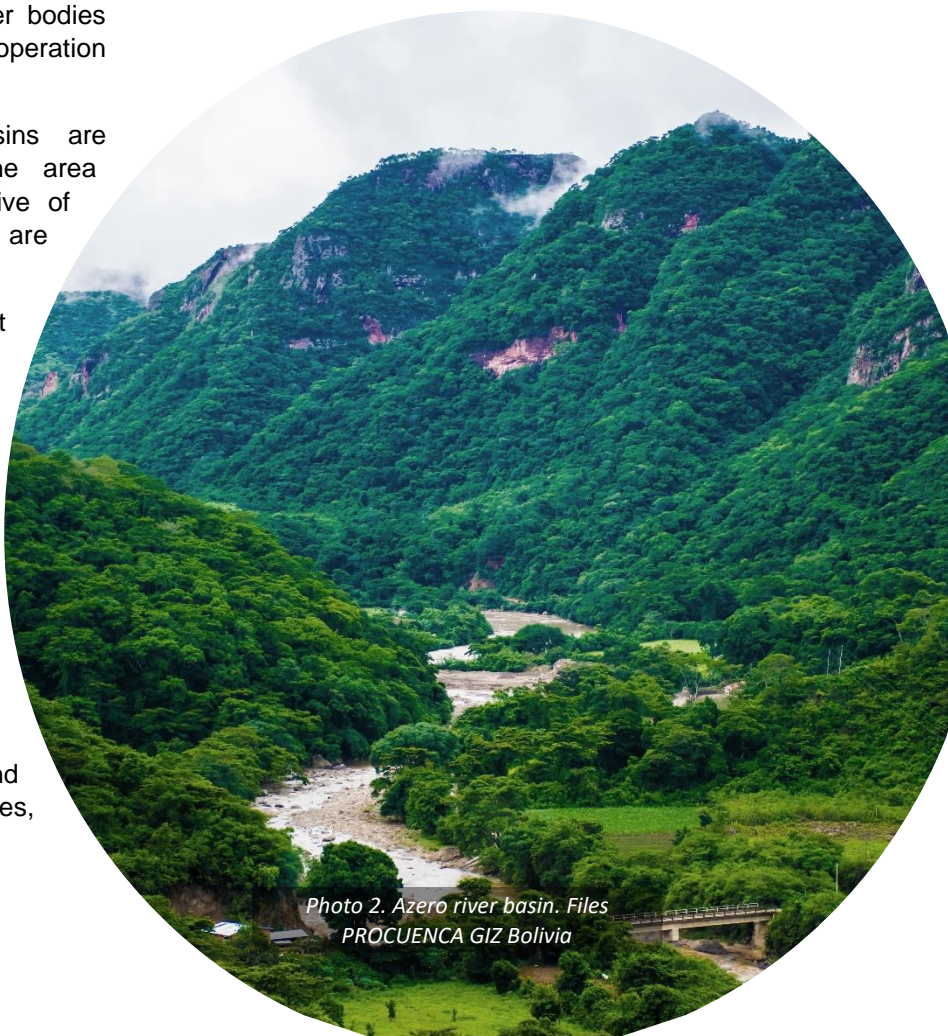


Photo 2. Azero river basin. Files  
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Photo 3. Guadalquivir river basin. Files PROCUENCA GIZ Bolivia

access and mobilization of funds subnational, national and

international.

#### CAPACITY DEVELOPMENT

– Inclusive human and institutional

capacities at all levels will enable improved service levels, operating and maintenance technology, increased job creation in the water sector and the retaining of a skilled work force. *Lessons learned:* Skilled sectoral and cross-sectoral staff enhance sustainable implementation of IWRM.

#### IMPROVED DATA AND INFORMATION –

Data generation, validation, standardization and information exchange will build trust, so decision makers can apply robust water resources and river-basin information system and increase accountability.

*Lessons learned:* High-quality information on IWRM and Climate Change indicators is shared and easily accessible by any decision maker.

#### Conclusion/Next steps

To implement IWRM at all levels by 2030, Bolivia must build on their 6.5.1 multi-stakeholder monitoring processes to understand main barriers and identify priority action areas to accelerate progress. Overall, to achieve the global target, the current rate of implementation needs to double. Bolivia should double its IWRM efforts to improve the river basin management across the country towards the water security to the next report period (2021- 2023).

Bolivia must accelerate progress in adopting cooperative arrangements to enable water for all and capitalize on the catalytic role transboundary water cooperation can have across SDGs (6.5.2). Where operational arrangements are lacking, identifying and advancing key factors of operability, such as holding regular meetings and exchanging data between countries, can result in ‘quick wins’ that accelerate target achievement with sometimes minimal efforts. Bolivia should strengthen the efforts to implement the current and future transboundary river basin agreements.

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MINISTERIO DE MEDIO AMBIENTE Y AGUA



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