

Botswana Water Accounts

As one of ten country partners in the World Bank's WAVES global partnership on natural capital accounting Botswana is constructing accounts for water, minerals, land and ecosystems.

With strong support from the Botswana Economic Advisory Council (BEAC), the WAVES team has put together water accounts to manage this scarce resource better for economic growth, diversification, and poverty reduction.

These highlights from water accounts from 1993–2012 help to understand the quantity of Botswana's water stocks; what flows come from these stocks; how water is supplied and used in the economy and environment and with what result.

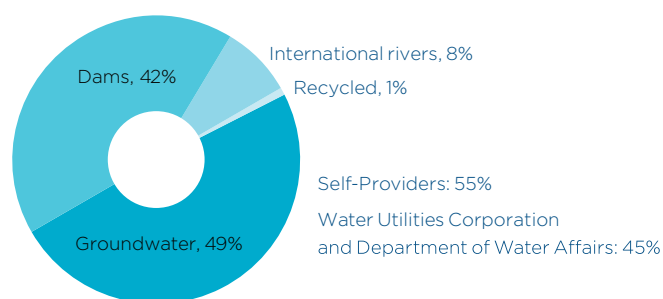
Water supply and use

Groundwater accounts for the largest share of water use. Self-providers, including mines and livestock and irrigated agriculture, use more than half of the total water used in the country

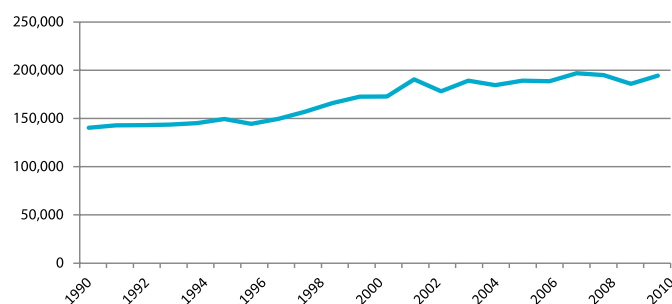
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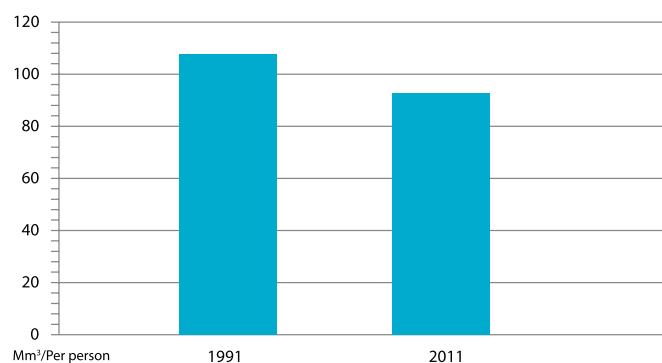
 **Figure 1. Water supply by natural source**



 **Figure 2. Long-term trend in water use in Botswana² (000M³)**



 **Figure 3. Water use per person**



“44% of water use was in the agricultural sector in 2013”

Water in the national economy

National income depends on water but can we increase income without using more water? Water productivity measures the relationship between water used and national income and varies by sector. In agriculture, for example, we see low productivity, whereas in the service sector it is high.


The agricultural sector (livestock and irrigation), is the highest water user (43 and 44 percent in the two years respectively), but a low contributor to GDP and formal employment. The sector supports a large share of informal employment, providing a social service. By contrast, mining uses less water but contributes more to GDP.

This is why demand management and equitable systems for water allocation are becoming increasingly important. Water must be affordable and meet the needs of society.

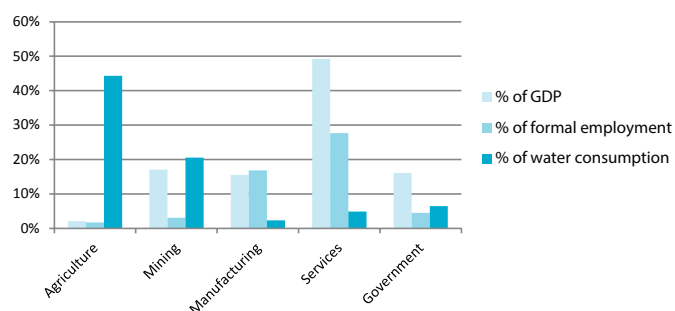
Water in our future

- How can we improve water productivity and use scarce water resources sustainably to reduce poverty, increase national income and encourage growth?
- Are we allocating water to the right sectors to promote sustainable growth?
- What balance should we strike between economic efficiency, sustainable water use and social goals such as employment?

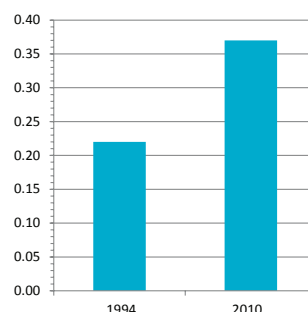



 In December 2013, Gaborone Dam water reached the lowest level since the reservoir was built in the 1960s.
Image credit: Glenn-Marie Lange – World Bank

 **Figure 4.** Sector shares in water use, GDP and formal employment in 2011



 **Figure 5.** GDP PULA/M³



 **Table 1.** Value added per m³ by sector

	1993	2010
Agriculture	0.02	0.03
Mining	0.77	0.41
Manufacturing	9.74	9.36
Services	23.00	31.07
Government	0.54	0.71

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