

New Guidelines aim to support sustainable management of Western Indian Ocean water resources

Nairobi, 25 September 2020 – For many communities living in the Western Indian Ocean region, rivers are an essential resource for food, employment, and energy. A new publication, *Guidelines for the Assessment of Environmental Flows in the Western Indian Ocean Region*, aims to help communities and governments manage these water resources to sustain rivers and the ecosystems, wildlife, and the human livelihoods that depend on them.

Freshwater ecosystems like rivers and estuaries help sustain life in the Western Indian Ocean region by providing a broad range of services. Many settlements have developed around rivers, where communities use the water to drink, fish, irrigate their crops, feed their animals, wash laundry, swim, and more. And because hydropower is the main source of electricity for many countries in the region, rivers have become a pivotal national resource. The Zambezi River, for example, [accounts](#) for half of the hydropower capacity in Southern Africa and boasts agricultural and fisheries resources that sustain an estimated 75% of the 47 million people living along the river's basin.

Yet swelling populations and developments have led to increasing demands and pressures on rivers.

“Harmful activities upstream – such as dumping garbage in the river, livestock grazing on river banks, farming in wetlands and large scale water extraction for irrigation – have changed the quality, quantity, and timing of the water flow in our rivers,” said Japhet Kashaigili of Sokoine University of Agriculture in Tanzania, a contributor to the new guidelines. “If this kind of activity continues unabated, we could arrive at a ‘zero-flow’ situation, in which a river could dry up entirely, with serious negative impacts on community livelihoods, the environment and even the national economy.”

Environmental flows assessments – or Eflows – seek to determine the quantity and quality of water and sediment flows necessary to sustain freshwater and estuarine ecosystems and the human livelihoods and wellbeing that depend on them. Though governments and other stakeholders recognize the key role of sustained environmental flows to communities and the environment, there has been no standardized, region-wide approach to conducting environmental flows assessments. The new *Guidelines for the Assessment of Environmental Flows in the Western Indian Ocean Region* aim to address this gap by outlining, step-by-step, how to conduct such assessments to enable learning and harmonized approaches to Eflows across the region.

Successful implementation of recommendations from Eflows assessments can have profound changes on riverside communities. For example, an [assessment](#) in South Africa on the ecological and social costs of development around a river basin led decision-makers to grant local communities more access rights to water resources. Recommendations from another assessment in Naivasha, Kenya, resulted in an innovative scheme in which large-scale commercial flower growers pay to support soil and water conservation initiatives, [improving](#) local water quality and quantity.

Elsewhere, implementing recommendations from these assessments could make the water again safe to drink, leading to decreased illness. Fish and prawns, whose ecosystems had been disrupted by the reduced river flows, may be found more easily, and farmers may no longer have to worry if they have enough water to irrigate their crops. Critical habitats – and the diverse aquatic and coastal wildlife that depend on them – could rebound, and inter-communal tensions may decrease as residents no longer compete for access to a dwindling resource. National economies can also thrive due to reliable hydropower production and supply. Because the livelihoods and well-being of riverside communities depend on healthy river flows, conducting environmental flow assessments can also contribute to “[building back better](#)” through green recovery in the wake of the COVID-19 pandemic.

The Guidelines, the creation of which was requested by [Nairobi Convention](#) states, were developed by the UNEP–Nairobi Convention, the Western Indian Ocean Marine Science Association and the Sokoine University of Agriculture. They will be used by governments, researchers, civil society, and communities managing water resources.

The Guidelines will be a useful addition to the growing toolkit of the upcoming UN [Decade on Ecosystem Restoration](#) (2021-2030) and efforts to towards achieve Sustainable Development Goal 14.2, on protecting and restoring marine and coastal ecosystems.

“By using a standardized approach in environmental flow assessments, countries and communities in the Western Indian Ocean – and the globe at large – can share lessons and experiences with one another,” noted Kerstin Stendahl, Head of UNEP’s Ecosystems Integration Branch. “This could lead to increased opportunities for policy and governance actions to ensure equitable and sustainable access to water for humans and wildlife – while protecting the economic and environmental security of riverside communities for generations to come.”

NOTES TO EDITORS

These Guidelines were developed under the [Implementation of the Strategic Action Programme for the Protection of the Western Indian Ocean from Land-Based Sources and Activities](#) project of the Nairobi Convention, funded by the Global Environment Facility.

The Nairobi Convention, signed by Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, and Tanzania, aims to promote a prosperous Western Indian Ocean region with healthy rivers, coasts, and oceans. It provides a platform for governments, civil society, and the private sector to work together for the sustainable management and use of the marine and coastal environment.

The UN Environment Programme is the leading global voice on the environment. It provides leadership and encourages partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

