Sri Lanka boasts a rich agricultural tradition together with a long history of sophisticated water management that dates back to the ancient hydraulic civilization of the country’s northern dry zone. On the strength of past successes, the island nation is building new capacities and solutions to confront a wide array of challenges to its water security, which are driven by population increase, rapid urbanization and the looming threat of climate change.

In this vital work, national organizations and local communities benefit from collaborative research with the International Water Management Institute (IWMI), which has been headquartered in Sri Lanka since the Institute’s inception more than 30 years ago. IWMI researchers work closely with partners across the country to develop and promote science-based solutions aimed at achieving sustainable water and land management for food security, improved livelihoods and a better environment.

Here are key highlights from our recent research for development in Sri Lanka:

**Working towards clean water and sanitation**

With assistance from IWMI, the Government of Sri Lanka made important improvements in its sanitation policy during 2018, including new options for the management of sludge from septic tanks. Further support focuses on introducing options for reuse of this sludge, with the aim of helping the country curb increasing water and land pollution, and achieve faster progress toward the sanitation targets of Sustainable Development Goal (SDG) 6.

**From muck to money: Resource recovery from waste**

IWMI researchers are working with local partners in selected districts of Sri Lanka to make waste management services more sustainable through practical training aimed at enhancing compost production and marketing. In parallel with this effort, researchers have introduced a new university curriculum derived from IWMI research, which gives a stronger business focus to knowledge on the recovery of resources from waste.

**On the lookout for drought: A monitoring and early warning system**

To help create a more resilient future for South Asia, IWMI and several international partners have developed the South Asia Drought Monitoring System. By generating maps based on satellite, soil and rainfall data, the system has already helped Sri Lanka and neighboring countries respond more effectively to this dire threat to food security.
Reinforcing climate resilience in the dry zone

IWMI is working with several partners to renew systems of small reservoirs in three river basins of Sri Lanka’s dry zone. The aim is to help smallholder farmers, particularly women, build greater resilience against climate variability and extreme weather through improved irrigation and drinking water supplies, leading to improved rural livelihoods, based on stronger food and water security.

Eye in the sky: Drones for disaster risk reduction

In recent years, IWMI researchers have used a drone extensively in their work on monitoring and managing crops and water resources. The drone has also served to survey and map natural disasters, particularly landslides, in support of the relief efforts of local organizations.

Your one-stop shop for water data

To help monitor key trends in Sri Lanka’s water resources, IWMI has created a web-based interactive information and mapping portal. Called the Water Information System for Sri Lanka (WISL), it better enables partners to store and share data, and assess water resources in the country at different scales, including river basins and various administrative units.

Valuing wetlands for green urban development

In 1990, Sri Lanka became a member state of the Ramsar Convention, which is an intergovernmental treaty supporting the conservation and wise use of wetlands globally. In addition to six Sri Lankan wetlands already covered, the country recently earned a place among 17 winners of Wetland City Accreditation under a new Ramsar scheme. IWMI supports policy makers in their efforts to stem the loss of Colombo’s wetlands and make them a central focus for green urban development.

A tool for better managing natural river flows

Monitoring environmental flows is vital for ensuring that rivers can continue to meet the needs of society while also sustaining ecosystem services. To assist in this task for the major rivers of Sri Lanka, IWMI researchers have designed the Sri Lanka Environmental Flow Calculator – providing both the software and an online version, while also offering training to local partners.
THE IWMI/SRI LANKA PARTNERSHIP

IWMI is a non-profit, scientific research organization focusing on the sustainable use of water and land resources in developing countries. In Sri Lanka, we work with various universities and government agencies, involving especially close collaboration with the Central Environmental Authority, Department of Agrarian Development, Department of Irrigation, Disaster Management Centre, Mahaweli Authority of Sri Lanka, Sri Lanka Land Reclamation and Development Corporation, and Water Resources Board. Headquartered in Colombo, Sri Lanka, with offices across Asia and Africa, IWMI is a CGIAR Research Center and leads the CGIAR Research Program on Water, Land and Ecosystems (WLE). Much of our work in Sri Lanka forms part of WLE. CGIAR is a global research partnership for a food-secure future.

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