Feed the Future Country Fact Sheet

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Managing Natural Resources around Malawi's Hydropower Dams

MCC

A rehabilitated hydropower dam on Malawi's Shire River means clean, renewable energy, while a new environmental trust will support local watershed communities.

In Malawi, the Millennium Challenge Corporation (MCC) is investing in hydropower, a clean and renewable energy source, to revitalize the country's power sector.

One such effort underway is the rehabilitation of a major hydropower dam on the Shire River. To ensure the sustainability of this power infrastructure and the long-term functionality of the hydropower plant, MCC is addressing a range of environmental challenges. For instance, aquatic weed infestation and dense sediment in the Shire River from severe upstream erosion are creating forced outages at the hydropower plant, reducing efficiency and increasing costs.

Together with local implementing partner MCA-Malawi, MCC is tackling this problem with a two-pronged approach that addresses the immediate causes of the power outages while also promoting more sustainable environmental practices to prevent the problem from recurring.

First, MCC funded the purchase of weed harvesters and dredgers to mechanically remove the aquatic plants and silt that have built up over years of the hydropower plant's operation. But removing the weeds and silt is the easy part; the hard part is preventing future build-ups, which is why MCC is investing in a longer-term approach that promotes upstream conservation. MCA-Malawi is working with upstream farmers to adopt conservation agriculture, reforestation and other farming practices that will ultimately improve environmental outcomes at the plant site and help sustain more reliable hydropower generation.

To help sustain support for local watershed communities beyond the life of this project and build long-term food security, MCC will help create and partially fund an environmental trust to support sustainable improvements in land use management in the Shire River Basin. This trust may be supported through combined financing from water and electricity tariffs, and from downstream private companies through a "payment for ecosystem services" mechanism. The goal is to link utilities and private companies that suffer the impacts of poor water quality with the upstream communities that manage the natural resources. The trust, using funding from these downstream stakeholders and/or tariffs, will support NGOs to work with upstream local communities to reduce weed infestation, soil erosion and sedimentation.

This work, which ultimately aims to increase the performance of the power sector to drive investment and create economic

growth, is part of an environment and natural resources management project that falls under MCC's five-year, $350.7 million compact with Malawi.

Learn more.