

Relief Organization and Private Sector Partners Work Together to Provide Clean Water

In late April 2018, heavy rains deluged Kenya's Makueni County, pouring down 300 percent of the area's average seasonal rainfall in just 48 hours. The rainfall and resultant flooding resulted in the deaths of at least 28 people and damaged or destroyed hundreds of houses. It also collapsed the county's Kamunyolo dam and swamped the water treatment plant in Makueni's Wote town, downing Wote's two major water sources and cutting off access to safe drinking water for thousands of people in the county.

Funding from USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA) helped the Kenya Red Cross Society (KRCS) respond quickly. KRCS collaborated with engineers working for two private companies, Davis & Shirtliff and Irrico, to design a new water treatment plant. Traditional plants made of concrete cost at least \$350,000 and can take as long as eight months to build and operationalize, but the model KRCS and its private sector partners designed cost just \$100,000 and was functional in eight days. In addition to



supporting the design, both companies provided materials at subsidized rates: Davis & Shirtliff contributed items such as generators and solar lamps, while Irrico provided the facility structures.

The KRCS plant was only intended to provide short-term relief, but was so successful that KRCS donated the facility to the Makueni County Government after emergency operations had ended. The county has integrated the plant into the county's water supply infrastructure. KRCS trained the previous water treatment plant's staff to operate the new facility, and the team was soon providing safe drinking water to Wote.

The plant, which can produce 1.2 million liters of water per day and serve as many as 60,000 people, is also a successful example of how relief organizations and private sector companies can work together to find innovative solutions to meet humanitarian needs.