

Ethiopians Profit by Protecting Watershed in Face of Climate Change

Over the last three decades, 98 percent of all people worldwide were affected by a natural or climate-related disaster. To help the poorest members of society survive and recover from these growing tragedies, disaster preparedness and climate change adaptation activities have become critical components of development initiatives.

In Ethiopia, rising temperatures and increasingly variable rainfall are killing crops and livestock in drought-prone areas. Farmers in the drier areas of the country are harvesting few to no crops as the sun beats down on fields starved for rain. Meanwhile, pastoralists are struggling to find enough water to keep their camels, cattle, goats and sheep alive.

Increased Water Access Improves Quality of Life

Not every community, however, is in such dire straits.

“My life has changed,” says farmer Ahmed Sheno. “I feel more confident about my family’s future.”

Ahmed’s positive outlook is the result of Catholic Relief Services’ work in eastern Ethiopia. Since 1997, CRS has been working in the Hararghe Catholic Secretariat to implement a number of integrated water resource management projects. The aim of these projects is to help communities increase available ground water by protecting the natural resources within their watershed area. Households can then leverage the increased water access to improve their overall quality of life. Key gains include increased food production through small-scale irrigation, better health and sanitation conditions and the ability to generate income through small rural enterprises.

When CRS and HCS first arrived in the Mede Oda Kebele in 1997, years of poor resource management had significantly reduced the ground water available, forcing residents to rely on wells. As a short-term



*Hillside terracing helps Ethiopian communities to replenish natural water sources for significantly improved quality of life.
Photo by Zemed Abebe/HCS*

solution, CRS provided a diesel-operated water pump to each of four community groups, enabling residents to access water for household use and to irrigate 17 hectares.

In 2003, with hillsides increasingly barren from deforestation and overgrazing, CRS and HCS decided they needed to focus on replenishing available ground water resources, understanding that this shift would take time and require a fundamental change in practices. Using U.S. government (USAID) funding, CRS and partner staff began teaching community members to build stone terraces across hillsides. These terraces prevent heavy rains from washing topsoil away and help retain the water that falls on the hills. Residents also planted trees, small bushes and grasses on the terraces to improve soil stability, reduce soil erosion and provide new sources of firewood and livestock feed.

A Watershed Comes Back to Life

After four years, the residents’ natural resource management activities paid off. The area’s ground water

over—

“I feel more confident about my family’s future. Each of us guards [this area], because it is the foundation for changing our lives.”

**Ahmed Sheno, Farmer
Mede Oda Kebele, Ethiopia**

increased significantly, and natural springs that had dried up many years before came back to life.

The results were so dramatic that the four communities were able to end their reliance on the wells and costly diesel pumps.

Residents have increased field irrigation from 17 hectares to 45 hectares using a gravity-fed irrigation system, that channels water to their fields from the new spring outlets. This increased availability of water enables villagers to grow fruits and vegetables year-round that they can sell at a profit instead of solely growing seasonal, rain-fed crops like sorghum and corn.

Ahmed Sheno alone earned \$1,340 selling his excess potatoes, onions and cabbage—a significant increase over the average household income of \$260. He used this money to build a house with a corrugated iron sheet roof and to buy three oxen, two cows and four



*Increased water access improves quality of life by enabling families to irrigate more fields, earn more income and maintain better hygiene.
Photo by Debbie DeVoe/CRS*

goats. He also contributed to a community project to help build classrooms so his children could receive a better education at the local school.

Residents are continuing to manage and protect the rehabilitated watershed. “Each of us guards [this area];” Ahmed adds, “because it is the foundation for changing our lives.”

About CRS Catholic Relief Services is the international humanitarian agency of the Catholic community in the United States. The agency provides assistance to people in more than 100 countries and territories based on need, regardless of race, nationality or creed. For more information, please visit www.crs.org or www.crsespanol.org.

Giving Hope to a World of Need