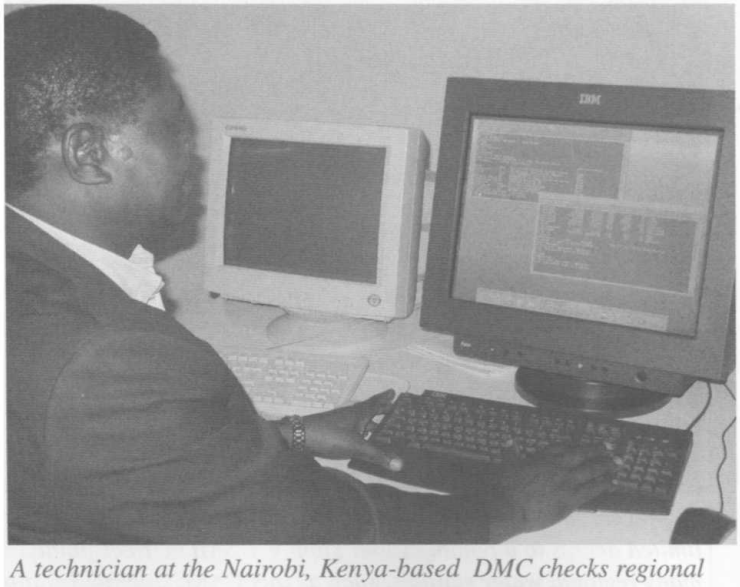
*Professor Laban Ogallo of the Nairobi, Kenya-based Drought Monitoring Center (DMC), supported by USAID/OFDA, points out annual and forecasted rainfall levels for the Horn of Africa region (photo by Sonya Green, USAID/OFDA).*

conditions and impacts. Drought advisories generated by the DMCs allowed farmers to prepare for difficult growing conditions by planting quickly maturing and drought-resistant crops, planting earlier, making a timely purchase of pesticides, and intensifying locust control efforts. These agricultural preparations helped farmers in some areas improve their crop yields and increased their chances of maintaining their livelihoods even as a potential drought loomed.

In FY 1999, USAID/OFDA began supporting a similar climate information program in Niger and Uganda called RANET (New Radio and Internet Technology for Communication of Weather and Climate Information to Rural Communities for Sustainable Development in Africa). RANET works to make weather-related information more accessible to rural populations, drawing climate data from local and global sources, and distributing the information via digital satellite, receiving stations, computers, and radios. A February 2002 USAID/OFDA assessment of the program found that RANET has had a broad impact across a range of sectors. RANET's use of community radio stations to transmit information has helped improve agricultural production in Uganda and reduce drought vulnerability. The technology is a medium for other important community information such as health-related public service announcements, education, pest-borne diseases, HIV/AIDS information, and updates on agricultural market conditions.

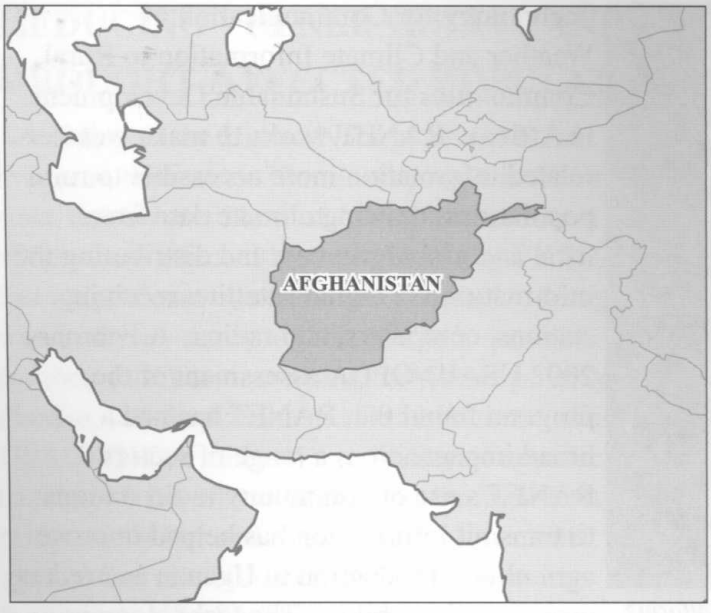


*A technician at the Nairobi, Kenya-based DMC checks regional weather data (photo by Sonya Green, USAID/OFDA).*

***Drought advisories, generated by the USAID/OFDA-supported Drought Monitoring Centers, have helped farmers prepare for difficult growing conditions.***

*Afghanistan*

In FY 2002, Afghanistan experienced its third year of drought while emerging from twenty years of war and civil strife. An assessment conducted in early 2002 for USAID by the Tufts University Feinstein International Famine Center found that while Afghans had developed coping mechanisms to survive two decades of conflict, they had greater difficulty dealing with the ongoing drought. Coping mechanisms that may have worked in the earlier stages of the drought had been quickly exhausted. Afghan families watched their livelihoods slip away as rain-fed and irrigated agricultural production decreased with each year of continued drought. The assessment highlighted a 'cash famine' in which farmers lost income just as they were becoming dependent on markets for items that they once produced. The resulting debt triggered a downward spiral as farmers were forced to sell livestock,




*Afghanistan*

farming equipment, and other assets critical to their livelihoods. The sale of these items was not enough to offset crippling loans taken out by farmers in previous years in an attempt to recover from failed harvests. Even though drought conditions abated in parts of Afghanistan during 2002, and crop production increased 82 percent in the summer of 2002, many Afghans were already so impoverished that these improvements were not enough to generate economic recovery.

***Since water is critical not only for drinking, but for sanitation, livestock care, and crop production, the Tufts assessment found that control over water access was often a matter of life or death.***

The water shortages resulting from the drought further exacerbated the desperate situation of the Afghan people. As the drought persisted, the Tufts University assessment team found a marked rise in water insecurity due to limited access to potable water. The assessment also revealed that wealthier households were drilling deeper wells and installing more powerful pumps; a practice that limited water availability for poorer households. Since water is critical not only for drinking, but for sanitation, livestock care, and crop production, the Tufts assessment found that control over water access was often a matter of life or death. As a result, many Afghans with limited access to water were forced to travel longer distances to obtain their supply; a risky proposition given the numerous dangerous obstacles such as extreme heat or cold, insecurity, limited means of transportation, and hazardous road conditions.

The difficulty of accessing potable water increased the vulnerability of Afghans to disease. Given the risk of potential outbreaks, USAID/OFDA funded $114.4 million in programs to provide potable water and rehabilitate water systems, as well as initiatives to improve health conditions and prevent disease. For example, USAID/OFDA's health interventions included the rehabilitation of health clinics, birthing centers, and hospitals. Through UNICEF, USAID/OFDA supported inoculation campaigns against measles and polio for millions of children, while also improving basic health services, particularly for women and children. In addition, USAID/OFDA funded CARE to provide one-quarter of Kabul's water supply, focusing on the districts most vulnerable to disease due to poor sanitation. Other USAID/OFDA programs rehabilitated wells and water and sanitation systems.

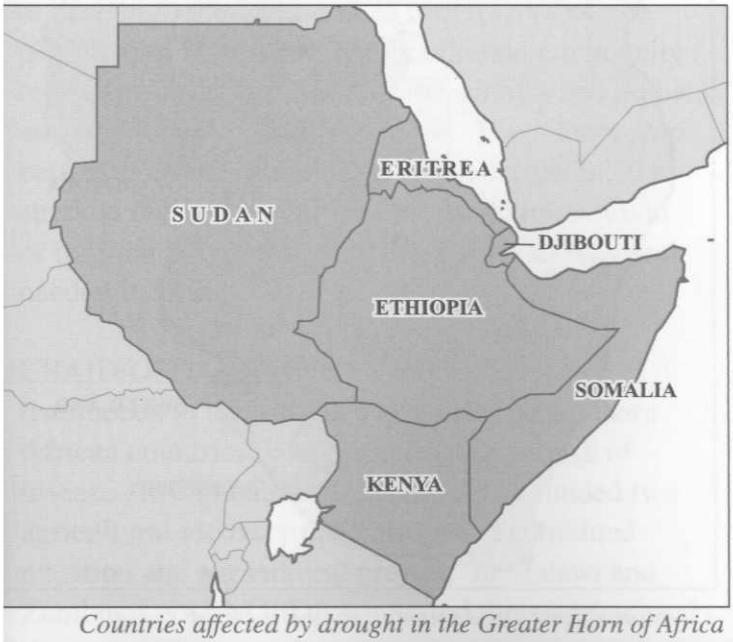
In order to minimize the impact of the loss of livelihoods — debt, limited access to water, poor sanitation, and disease — USAID/OFDA focused


*To prevent the onset of disease in Afghan populations with no or limited access to a potable water supply, USAID/OFDA funded many regional water stations, such as this CARE-operated station in Kabul (photo by Dick Owens, USAID/OFDA).*

on the agricultural sector, as 70 percent of Afghans rely on agriculture for their livelihoods. Considering the importance of cash for vulnerable Afghans to purchase food, potable water, fuel, and other critical goods, USAID/OFDA funded rural rehabilitation with cash-for-work programs. In six districts of central Afghanistan, USAID/OFDA's implementing partner, the International Medical Corps, began a cash-for-work program with the goal of rehabilitating 60 wells, reconstructing or cleaning 15 km of irrigation canals, and providing cash infusions for 7,000 drought-affected participants. With overwhelming support, enthusiasm, and collaboration from impacted communities, the program exceeded expected outcomes and the project moved forward by establishing water management associations. With USAID/OFDA assistance, 79 wells are functioning, 15 fresh water springs are flowing, 143 km of canals were cleaned and rehabilitated, 66 km of roads were restored, and on an average day more than 3,000 people worked on projects that improved their communities. The revitalization of these communities has instilled a newfound sense of hope and reinvigorated a feeling of self-reliance in the residents of central Afghanistan, encouraging the return of refugees and internally displaced people who had fled disastrous drought conditions.

### *Greater Horn of Africa*

Drought conditions in the Greater Horn of Africa, another area dependent on agriculture, improved slightly in portions of some countries during FY 2002, but the cumulative effects of three years of drought continued to adversely affect the livelihoods of agricultural and pastoral populations. Populations in southern and southeastern Ethiopia, faced with losses of between 60 to 80 percent of their herds in some areas, were forced to migrate in search of pasture land and water sources. According to a December 2002 U.N. study, conducted by its World Food Program (WFP) and Food and Agriculture Organization (FAO), crop production in Ethiopia had decreased 25 percent below 2001 levels while grain prices increased substantially. In Eritrea, also experiencing a third year of drought, the U.N. study estimated that 1.4 million of Eritrea's 3.3 million residents were affected by drought conditions causing major crop failure in agricultural areas and the substantial loss of livestock among pastoral communities. In Kenya, although drought conditions in parts of the country improved, 1.2 million people remained drought-affected during 2002.




*Countries affected by drought in the Greater Horn of Africa*

***USAID/OFDA assessments in the Horn of Africa helped to target humanitarian assistance to the hardest hit sectors and populations in hope of reversing the multiplier effect of the drought.***

Drought conditions were severe enough to impoverish communities in the Greater Horn of Africa; unfortunately other factors increased the impact of the drought. Ethiopia and Eritrea continued to experience the lingering effects of their 1998-2000 border conflict. A November 2002 USAID/OFDA assessment in Eritrea found that military and national service conscription and the resulting labor shortages played a significant role in exacerbating humanitarian needs, as did the displacement of war-affected populations, influxes of deportees from Ethiopia, repatriation of refugees, and border closures with Sudan and Ethiopia. USAID/OFDA assessments in the Greater Horn of Africa helped to target humanitarian assistance to severely impacted sectors and populations in