

## BRAZIL - Drought

Date: March-September 1983 (FY 83)

Location: Northeast Sertao (semi-arid) region, especially the states of Ceara and Pernambuco

No. Dead: Not reported

No. Affected: Over 20,000,000

Damage: Since 1979 a critical lack of water has caused livestock to perish and entire crops to fail each year. The resulting malnutrition is pervasive, causing physical and mental deficiencies among the affected population. The increase in urban population due to mass migration from the drought area into northeast coastal cities has almost depleted some urban water reservoirs and threatens to overdraw private wells. In 1983, corn, bean, and sorghum crops were almost completely lost. Infant mortality in Ceara increased from 108 to 250 per thousand from 1980 to 1982 and is predicted to reach 400 per thousand by the end of 1983.

### The Disaster

The Sertao, the northeastern interior region of Brazil, has a history of drought that dates back to 1614. Conditions since the early 1970s have been rapidly deteriorating as the low level of rainfall has brought the area's population (approximately 23 million in the five states most affected) to the brink of famine. In a "good" year, annual rainfall averages 700 mm and as little as 250 mm in the driest regions. From November 1982 to June 1983 the Sertao received only 50% of normal rainfall. On the coast the dry spell began in March and continues.

In Ceara, the state most affected by the drought, it was estimated that 1983 agricultural production would drop 8.5% below the 1978 level and livestock herds would be depleted by 50-70%. The number of agriculture-based industries has therefore greatly decreased, and the resulting unemployment and poverty have pushed the rural population to the urban centers. Officials estimated that 400,000 people would migrate to

Fortaleza in 1983, placing a heavy burden on the state capital's water supply. As the situation became more desperate, local newspapers were reporting frequent looting of food stores.

Geologic surveys of the drought area have shown that the northeast is composed of pre-cambrian granite, which makes the chance of finding water unlikely and well-drilling unproductive.

Action Taken by the Government of Brazil (GOB) and Non-Governmental Organizations

In response to the chronic drought problem in the northeast, the GOB has created federal agencies to deal with the immediate issue of approaching famine as well as the accompanying economic and social problems of over-population, unemployment, and poverty.

The Ministry of the Interior, specifically SUDENE (Superintendency for the Development of the Northeast), is the major national funding source for drought relief, which is channeled through the Department of Agriculture, Military Police, and Civil Defense. SUDENE is also responsible for coordinating all existing relief programs throughout the region and trucking water to rural areas. In the current drought disaster, most GOB funds have gone to SUDENE for an emergency public works program that pays about 25% of the minimum wage and offers subsidized food (black beans and rice) instead of pay as an option. SUDENE reported 1.7 million on its work rolls as of September 1983.

A national campaign to draw attention to the northeast was led by one of Brazil's major television networks, Rede Globo T.V. Its fund raising appeal resulted in a great number of financial contributions and food donations from around the country. The Brazilian Assistance League, a private voluntary agency, was responsible for distributing a large portion of these funds. Other local voluntary agencies also distributed food baskets, attempting to reach each affected municipality at least once.

Based on the findings of a survey conducted by the League of Red Cross Societies (LORCS), the Brazilian Red Cross planned to contribute approximately \$2,446,177 to purchase and distribute food boxes to 103,000 people from January through April, 1984. LORCS will contribute a similar amount to the joint program.

Assistance Provided by the United States Government (USG)

In response to numerous requests for assistance and in view of the deteriorating situation in the northeast, the U.S. declared on September 15 that the disaster warranted USG assistance. During a televised ceremony, a check for \$25,000 was presented to the Brazilian Assistance League to assist in disaster relief efforts.....\$25,000

The Office of U.S. Foreign Disaster Assistance (OFDA) provided a hydrogeologist from the U.S. Geological Survey to evaluate ground water development in the drought area in order to explore mitigation possibilities .....\$7,222

TOTAL \$32,222

Assistance Provided by U.S. Voluntary Agencies

None reported.

Assistance Provided by the International Community

League of Red Cross Societies (LORCS) - sent a team of three delegates to survey the drought area and write a detailed evaluation. In cooperation with the Brazilian Red Cross, LORCS designed a relief program to provide food boxes to 103,000 people for four months at a total cost of \$2,446,177.

World Food Program - agreed to begin an emergency food program and to extend its ongoing school feeding programs at an estimated cost of \$7,000,000.

TOTAL \$9,446,177