



Assessment of Hurricane Mitch on Nicaraguan Agriculture

March 17, 1999

Hurricane Mitch Damages Agriculture in Nicaragua

Summary

- Hurricane Mitch was the strongest October Atlantic hurricane on record and caused significant damage to the agriculture and infrastructure sector.
- Government of Nicaragua projects total 1998 exports have been cut \$55 million, while estimates of imports have been revised upward \$57 million.
- Many producers lost a portion of their stored production due to flooding and mudslides.
- Damage caused by Hurricane Mitch was generally less than initially reported.
- The storm is reported to have caused the loss of almost a third of the 1998/99 banana production.
- For tobacco, the hurricane reportedly destroyed over 50 percent of Nicaragua's crop.

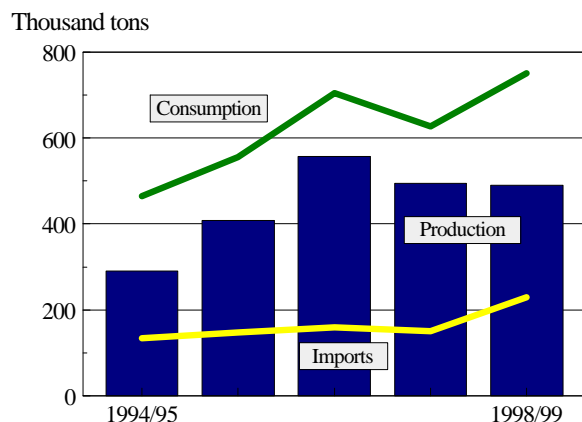
Background

After peaking in strength with 180 mile per hour sustained winds on October 26 - 27, 1998, Hurricane Mitch drifted slowly across Central America. At peak strength, Mitch tied August 1969's Hurricane Camille as the fourth-strongest storm in Atlantic Basin history and the strongest October Atlantic hurricane on record. In northern Honduras where the hurricane made landfall, unofficial reports indicate over 30 inches of rain during the week along the coast and over 50 inches in the interior resulted in severe agricultural damage. In addition, Hurricane Mitch caused some crop damage in northern Guatemala, El Salvador, and southeastern Mexico (Quintana Roo) and to a lesser extent in Costa Rica and Panama. Also, the heavy rains and strong winds devastated agriculture in northwest Nicaragua. Recent reports by the U.S. agricultural attache covering Nicaragua indicate that damage to the infrastructure and agriculture sector was significant.

Hurricane Mitch Damages 1998 Crop Prospects

For the grain and oilseeds sector, the hurricane damage was generally less than initially reported by the Government of Nicaragua. Luckily, most of the first-season grain and oilseed crops had been

Nicaragua: Grain Production, Consumption, and Imports



harvested, but those crops that were left in the field suffered losses. Also, second-crop planting was disrupted by mudslides and soils that were too saturated for planting. USDA estimates the corn crop suffered a loss of 30,000 tons or 9 percent of the crop due to Hurricane Mitch; rice, 23,000 tons or about 10 percent; and sorghum, 10,000 tons or 13 percent. Soybeans and peanut production are both down about 20 percent from previous estimates, to 37,000 tons each. The Ministry of Agriculture and Forestry (MAFF) forecasts for 1999/2000 are optimistic and expect a rebound in area and production. Erosion, deforestation, and damage to storage and irrigation facilities are key concerns. Many producers lost a

portion of their stored production due to flooding and mudslides.

Although Nicaragua does not have any of the major multinational banana companies (i.e. Dole, Chiquita, and Del Monte), the storm is reported to have caused the loss of almost a third of the 1998/99 banana production. MAFF is forecasting a rebound in next season's production. For the fruit and vegetable sector, over half a million dollars in crop damage is due to the Hurricane. Mangoes were the worst hit followed by onions and melons.

For tobacco, the hurricane reportedly destroyed over 50 percent of Nicaragua's crop. Damage to the land is expected to have a lasting effect pulling production down in 1999/2000. However, for sugarcane, only 5 percent of the production loss can be attributed to the storm. The sugar mills, which are located on the Pacific coast, suffered minor damage.

Cattle Herd and Shrimp Output Reduced

Over \$9 million worth of livestock was reportedly lost with the vast majority in losses to the cattle herd. Cattle ranches are requesting the Government to restructure old debts and access new credits for the rehabilitation of the national cattle herd at reasonable interest rates. Currently, private banks charge farmers an average annual interest rate of 14 percent. The ranchers would like the effective rate to drop to around 10 to 12 percent.

Before Hurricane Mitch hit Nicaragua, the Government and aquaculture industry estimated that cultivated shrimp output (exports) would be near 11 million pounds worth \$35 million. Preliminary damage figures dropped exports 23 percent, to 8.5 million pounds. Although the loss amounts to \$9 million, production is still about \$2.5 million above the 1997 level. Government and local producers are confident of a rebound in 1999, despite an estimated \$17 million in infrastructure damage.

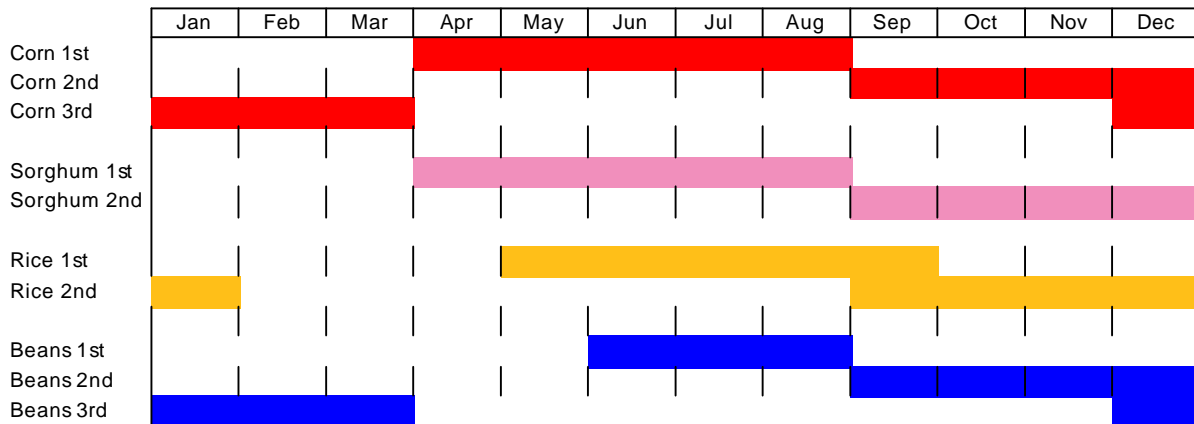
Macro Economic Impact - Loss of Exports, Increased Imports

Government of Nicaragua projections of total 1998 exports have been cut from \$923 million to \$868 million, while estimates of imports have been revised upward from \$1,500 million to \$1,557 million. The Government’s growth projections for 1998 have been cut from 6 percent to 4 percent and for 1999 from 6 percent to 5 (over the lower 1998 figures). Others believe that these projections are too optimistic. Local and regional financial analysts have estimated growth before the storm closer to a 5-percent annual rate, with new estimates ranging from 2 to 3 percent annual growth or lower. Much will depend on how quickly the infrastructure and agriculture sectors are rebuilt.

Satellite Imagery Analysis

Analysis of low resolution NOAA-14 and high-resolution Landsat Thematic Mapper imagery from as recent as February 8, 1999, show lingering damage from the massive run-off from catastrophic rainfall. Damage from flowing mud and erosion is evident in northwest Nicaragua, north of Lake Managua, centered around Leon. The Casita mudflow, on the slope of the volcano, and sediment deposits along the rivers are noticeable. Second-season crops are actively growing. Image 1 is an overview of Northwest Nicaragua. Image 2 is a closeup view of Leon and the Casita Volcano mudflow. Image 3 is a view of the Chinandega area, mostly west of the Casita mudflow.

Nicaragua Crop Calendar



For more information, contact Timothy Rocke, USDA/FAS/PECAD, 202-720-1572