

## National Nutritional Food Security System

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## REPUBLIC OF NICARAGUA



### Nutritional Food Security Bulletin

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With the cooperation of



## Summary and current hazards

The food security situation in Nicaragua remains stable, but if the rains continue to be irregular in some parts of the country, there could be problems with the *primera* (first) harvest. This is true especially in the department of Managua and around Lake Managua, where there has been a deficit in precipitation, and in the Rama River area in the South Atlantic Autonomous Region (RAAS), where there could be losses in this harvest - the most important of the year for this region - due to excess rainfall.

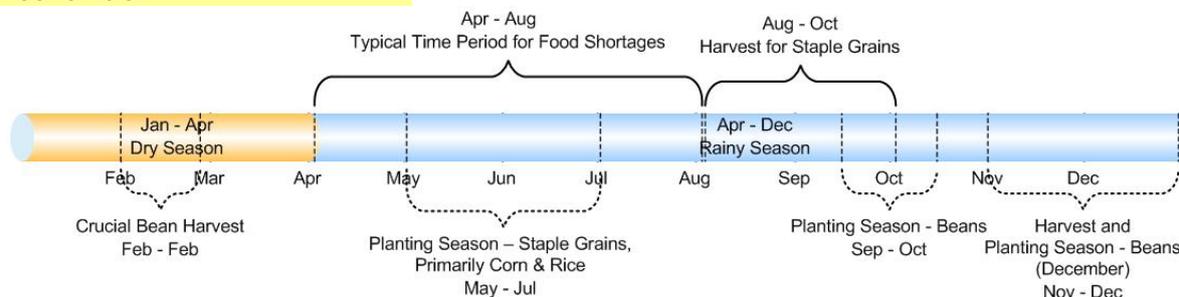
Some losses of maize and bean crops were reported in the departments of Estelí and Matagalpa due to early planting. In the rest of the country the *primera* agricultural cycle is progressing normally.

The prices of the basic grains continue to be stable, while the price of the basic food basket has increased, and the price of fuel continues to rise.

Cases of diarrheic illnesses have increased throughout the country although not as much as in previous years. The highest incidences have been reported in León and Chinandega departments.

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## Seasonal calendar

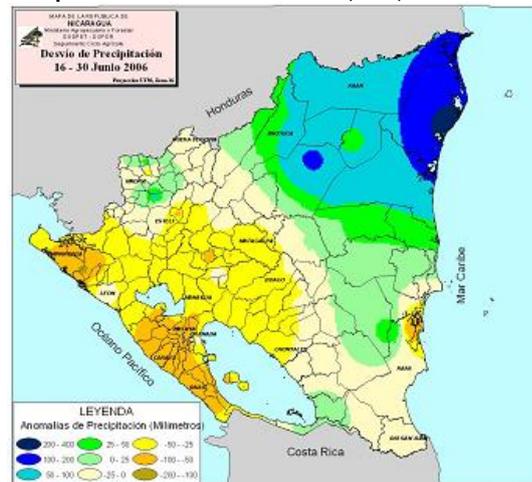


## Agroclimatology

The rains in the second half of July were irregular in their spatial distribution and timing as a result of the meteorological systems that are affecting the country, according to the INETER. The best rainfall conditions were in the North and South Atlantic Autonomous Regions (RAAN and RAAS) (shades of blue and green in Map 1), where the rainfall was normal to above normal. The lowest accumulated rainfall in relation to historical averages was registered in the Central Pacific (the department of Managua and neighboring zones) and part of the central region (shades of dark yellow in Map 1).

The impact of the irregular rains in the department of Managua and neighboring zones could have implications for the food security of poor farming households who depend more on cereal crops; almost 60 percent of the land in this area is devoted to these crops. These households generally produce basic grains for their own consumption, but generally cannot cover all of their needs in this way. Irregular rainfall can reduce their production thus increasing the household deficit that has to be filled elsewhere. This will mean an increase in the supply of

Map 1: Anomalies in rainfall (mm) June 16-30



Source : MAGFOR

manual labor in other agricultural and non-agricultural activities such as the assembly industries that predominate in this region. The limited number of labor opportunities and poor food security situation could result in greater migration to nearby cities or to Costa Rica.

The middle income and better off farmers in this region have more diverse sources of income as they have more land and can diversify their crops to include vegetables, tubers, and fruits. They also have irrigation systems and livestock which provide milk and milk by-products for household consumption.

In RAAS, where there has been heavy rainfall, the level of the Rama River is rising, which could result in losses to the crops that are generally grown along the river. In this zone, the poor farmers use close to 45 percent of their land to grow basic grains. Anything that goes wrong with the harvests, especially the *primera*, which is the most important harvest of the year in this area, causes migration to Costa Rica and to the coffee-growing zones of Nicaragua. Most middle income and better off households in this zone are cattle farmers, and the increase in rainfall is not a threat to the pastures.

According to the Water Requirements Satisfaction Index (WRSI, Map 2), which provides an indication of the growing conditions for maize, conditions around Lake Managua range between poor and mediocre (shades of brown and beige).

In the departments of Matagalpa and Estelí, losses of 2 percent of the area planted with maize and beans were reported, due to drought, early planting, and damage caused by birds, ants, and rodents. In the rest of the country, the maize, bean, sorghum, and rice crops are in good shape.

The INETER forecast for the month of July indicates that rainfall will be below the historical average in the central and Atlantic zones, while in the rest of the country it will be above the historical average (see Graph 1).

## Food Availability

The availability of maize, rice, and beans depends on accumulated inventories, which did not decline in July and indicate that there is adequate food in the country.

The availability of maize is estimated at 3 million *quintals*, more than enough to cover the requirements of the month according to the recommended level of 337 thousand *quintals*, as well as the estimated consumption (historical average) for the month of 553 thousand *quintals*. The availability of rice is estimated at 1.5 million *quintals*, which meets the recommended stock level of 332 thousand *quintals* and the historical consumption average of 377 thousand *quintals*. The same is true of beans, with an availability of 1.9 million *quintals*, while the recommendation for July is 300,000 *quintals* and the historical consumption is 196 thousand *quintals*.

Consequently, the availability of basic grains is good. The start of the first harvest begins in August at which point national availability will need to be reassessed.

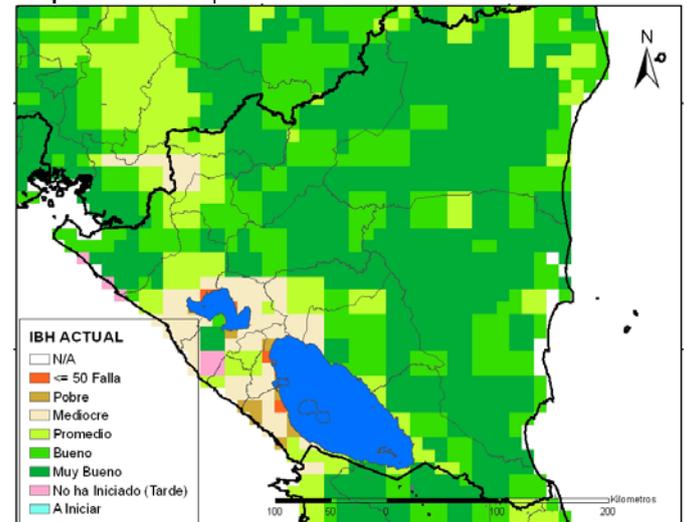
## Prices

Producer prices for basic grains – maize and beans – have been in line with the harvest period as can be seen in the seasonal calendar (rice has been left out because information on the average prices in the plantations was not available). The prices of the basic grains rise in April, corresponding with both the planting season and the beginning of the lean season. The highest price paid to producers for beans was recorded in May, C\$424/qq, and the best price for corn was in June, C\$145/qq (1 qq (*quintal*) = 100 pounds). From January to June 2006, the average prices for beans and maize were C\$393/qq and C\$114/qq, respectively.

In terms of the prices paid by the consumer, the price of beans has shown a slight decline, from C\$713/qq in January to C\$658/qq in June. This could be due to their availability as was mentioned in the paragraph above. The price of maize has been irregular during the current period.

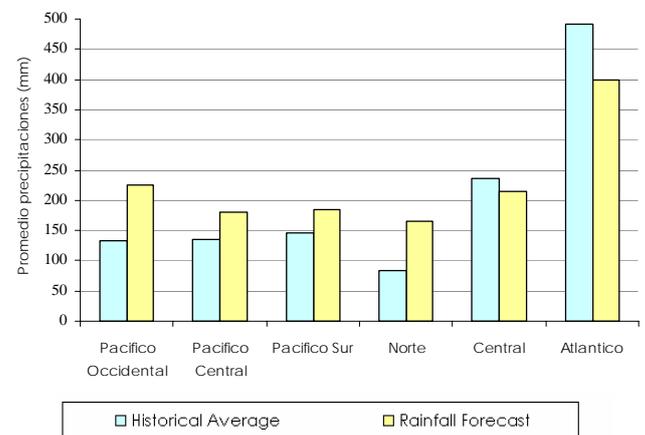
The gap between the prices paid to the producers versus consumers is due mainly to the lack of supply in the markets caused by defects in the commercialization process. The biggest gap was in January for beans and maize. Beans

Map 2: Water requirement satisfaction index



Source : MFEWS

Graph 1: Comparison of forecast rainfall vs. historical average, July 2006 (mm)

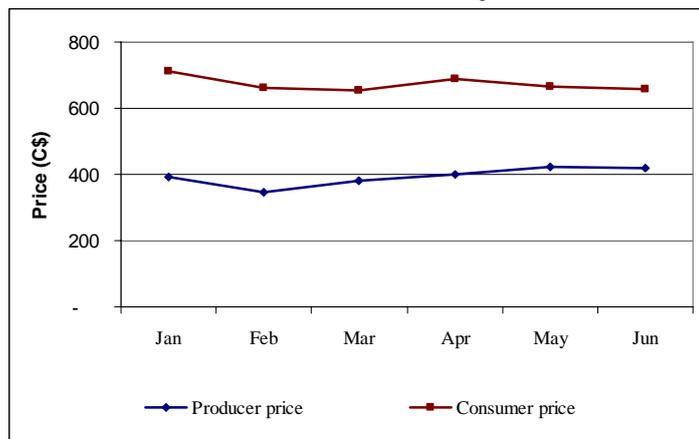


Source: INETER

maintained this margin in the first four months and the gap then narrowed; maize maintained the margin between April and May, similar to January reports.

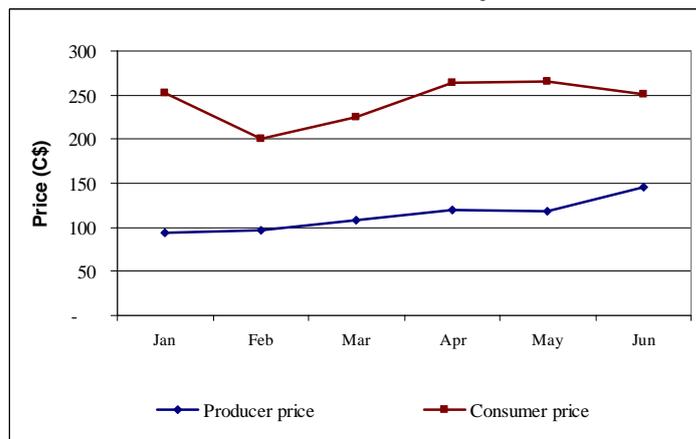
The January through June average prices for beans and maize were C\$280/qq and C\$129/qq, respectively. The behavior of these prices has a direct effect on the cost of the basic food basket for the population. See Graphs 2 and 3.

**Graph 2:** Average prices for maize paid to the producer and to the consumer. Period: January-June 2006



Source: Statistics Department - MAGFOR

**Graph 3:** Average prices for beans paid to the producer and to the consumer. Period: January-June 2006



Source: Statistics Department - MAGFOR

The cost of the national food basket increased of 1 percent, from C\$2,955.37 in May to C\$2,986.30 in June. The products with the biggest price increases were: potatoes 2.2 percent, meat 3.7 percent, bread and tortillas 2.6 percent. This mainly affects low income families and is likely due to the constant increase in the fuel prices which rose by 2.6 percent (going from C\$65.22 to C\$66.99 per gallon) from May to July. Another factor potentially impacting prices is the deterioration of the highways, which slows down the flow of the production to the markets and increases delivery times, leading to an increase in the cost of the products.

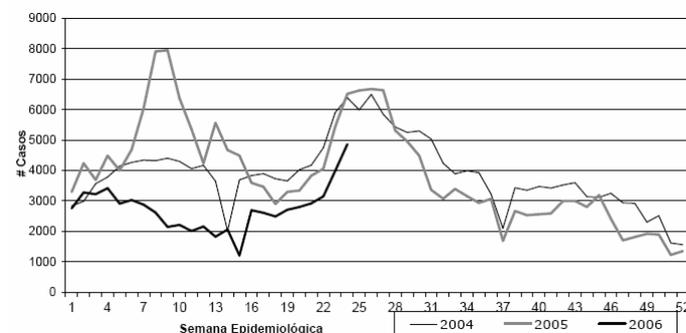
## Health

Constant rains and the lack of potable water are important factors that increase the cases of diarrheic illnesses, especially in children under five years of age.

In July, the prevalence of diarrhea grew, especially in the departments of León, Chinandega and Jinotega (urban areas of the municipalities of Jinotega, Pantasma, El Cuá and San Rafael del Norte), with complications that are viral in origin, and caused by water supply problems because of electricity cuts, resulting in a lack of hygiene.

Although the statistics do not show a marked increase in the number of cases of diarrhea, and there are fewer than were reported in former years. The number of cases continued to rise in week 23 (June 11 to 17, 2006). See Graph 4.

**Graph 4:** Acute diarrheic illnesses, 2004 - 2006



Fuente: Sistema Nicaraguense de Vigilancia Epidemiológica Nacional SISNIVEN

In July and in the coming months, an upswing in the number of cases is expected because of the wet season's conditions. This results in lower weight among the infant population, who are the most affected, and a general deterioration of their nutritional condition. This period also corresponds to the lean season, compounding the poor nutrition of infants and children under five.

## News

- The information system on food security will be implemented in the department of Nueva Segovia and will be extended to the municipality of Dipilto. This is a pilot program for the development an early warning system being designed by SISSAN.
- The results of the "Study of Measurement and Evaluation of Nutritional Food Security in the Geographic Zones Outlined in the Sustainable Rural Productive Strategy, PRORURAL," will be published as an instrument for the preparation of programs that give incentives to the production required by the various zones, based on the demand for food (primarily basic grains) based on the differences found in the food consumption patterns in the households.
- In July 2006, the Ministry of Education, Culture and Sports, through the Integral School Nutrition Program (PINE/MECD), will begin implementation of the School Vegetable Garden program in 11 schools in Totogalpa, in Madriz and La

Conquista, in Carazo. The objective is to familiarize students with methods for sustainable food production that they can apply in their own homes, to promote new food and nutrition habits, and to add other food produced in the school garden to the school meal. Another objective is to improve the quality of education by using the school vegetable garden as an educational tool integrated into the curriculum. This project will be executed with technical and financial support from FAO-PESA for a period of two years. The participants in the project will be municipal delegates from the MECD, directors, parents, members of the student governments, primary school students, and experts from the PINE.