Central America
Drought Update

**Highlights:**

- Prolonged dry weather associated with the current El Niño event reduces the 2015 output of the main season crops.
- Aggregate 2015 maize production of the subregion’s four major producing countries is tentatively forecast by FAO to fall 8 percent from the previous year’s already reduced level, but sharper declines are expected in most-affected El Salvador and Honduras.
- Imports of maize in the 2015/16 marketing year (September/August) are set to increase substantially in the subregion.
- Maize prices remain well above their year-earlier levels, reflecting the unfavourable production prospects and reduced availabilities from the 2014 drought-reduced harvests.

The “Dry Corridor” (Corredor Seco) of Central America is a strip of land stretching from the low areas of the Pacific watershed through the foothills (0-800 metres) of Guatemala, El Salvador, Honduras, Nicaragua and parts of Costa Rica. It is a semi-arid region characterized by recurrent droughts, which covers nearly one-third of the Central American territory.

Harvesting of the 2015 main *de primera* basic grains season (May-September), which accounts on average for some 60 percent of the subregion’s annual maize crop, but also rice and beans, is virtually concluded. Early estimates point to a sharply reduced *de primera* output due to the prolonged dry weather resulting from the current El Niño event, which not only delayed and reduced plantings but also affected crop development and yields negatively. This is the second consecutive year that prolonged dry weather, related to El Niño, has impacted the main *de primera* season. Most affected is the Dry Corridor (see box), which covers most of El Salvador and parts of Costa Rica, Guatemala, Honduras and...
Nicaragua. A large number of subsistence farmers have suffered partial or total loss of their crops and are in need of assistance. As a result, the Central American Agricultural Council, headed by Ministers of Agriculture of the Central American subregion, has declared a subregion-wide state of alert.

Currently, planting of the second season crops (August-November), mostly beans, is underway under exceptionally dry conditions. Rainfall levels up to the third dekad of August, as indicated in Figures 1, 2 and 3 point to severe deficits with respect to last year and the subregion’s long-term average. Moreover, the reduced output of beans during the first season has likely reduced the availability of seeds for planting.

Based on a reduced first season harvest area and yields similar to last year’s drought-affected level, but assuming normal weather patterns for the remainder of the year, FAO’s preliminary forecast for 2015 maize output stands at 3 million tonnes, 8 percent down from the already reduced level of 2014 and well below average. Production declines are expected to be particularly sharp in El Salvador and Honduras. However, with an over 90 percent probability that El Niño conditions will continue into early 2016, there is a strong likelihood that the output of the second season will also be impacted by severe dry weather. The situation needs to be closely monitored in the coming months. The reduced production outlook implies that the 2015/16 marketing year (September/August) maize import requirements by the subregion are likely to reach record levels.

**El Salvador:** The irregular rainfall patterns, which predominated from May to August, impacted almost all of the 88 000 hectares planted to maize during the main de primera season, with more than 60 percent of this area reported to be entirely lost. Of the almost 3 000 hectares planted to beans, preliminary reports point to complete loss of more than 80 percent of the area sown. Official estimates point to more than 102 000 farmers losing their production of maize and beans. With a loss of USD 28 and USD 1 million in investments of seed, fertilizer, pesticides and land preparation for maize and beans, respectively. The severe first season losses will have greatly reduced the availability of seed for the ongoing second season planting. FAO’s preliminary forecast for 2015 points to an 18 percent reduction in maize production as a result of the losses incurred during the main de primera season, which would necessitate an additional 105 000 tonnes of imports over last year’s level to maintain national average per capita consumption levels.

**Guatemala:** Early estimates indicate possible losses of over 80 percent of the first season crop in the Dry Corridor of Guatemala, impacting 154 000 families. Preliminary official estimates point to a total loss of 55 000 tonnes of maize and 11 500 tonnes of beans. From an agronomic perspective it is not feasible to grow maize in the Dry Corridor during the second season, which lasts less than 90 days, while local maize varieties require 120 days to reach maturity and at least 70 days of well-distributed rains. Therefore, it is highly unlikely that earlier maize losses will be recovered, with affected families requiring assistance to meet their food needs. For beans, however, first season losses could be compensated by good output in the second season but only in the case of favourable weather, which seems unlikely according to current forecasts. FAO’s preliminary forecast for 2015 points to a 5 percent reduction in maize production from 2014, based on the estimated losses incurred during the main de primera season, which would necessitate an additional 70 000 tonnes of imports compared to last year to maintain national average per capita consumption levels.

**Honduras:** In Honduras, the departments most affected by the prolonged dry weather due to the El Niño phenomenon are Comayagua, Francisco Morazan, El Paraíso, Choluteca, La Paz and three municipalities at the northern border with El Salvador (FEWS NET, 2015). Preliminary estimates point to losses in excess of 60 percent and 80 percent of the maize and beans areas, respectively. Official estimates indicate that a little over of 161 000 families were directly

---

**Table 1: Central America - Maize production in main producing countries ('000 tonnes)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>El Salvador</td>
<td>829</td>
<td>7 910</td>
<td>650</td>
<td>-18</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1 709</td>
<td>1 789</td>
<td>1 700</td>
<td>-5</td>
</tr>
<tr>
<td>Honduras</td>
<td>546</td>
<td>400</td>
<td>350</td>
<td>-13</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>468</td>
<td>368</td>
<td>370</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3 347</td>
<td>3 070</td>
<td></td>
<td>-8</td>
</tr>
</tbody>
</table>
affected by the current dry conditions. With a little more than half severely affected as they experienced total crop losses. FAO’s preliminary forecast for 2015 maize production indicates a 13 percent reduction from the already reduced 2014 crop, reflecting the losses incurred during the main de primera season. This would necessitate an additional 91 000 tonnes of imports over last year’s high level to maintain national average per capita consumption levels.

**Nicaragua:** The prolonged dry weather severely affected the departments of Carazo, Chinandega, Boaco, Esteli, Madriz, and Nueva Segovia, accounting for some 30 percent of the area planted during the main de primera season. Preliminary reports indicate that as much as 50 percent of the area planted may be damaged, including total loss of crops in the worst affected areas (FEWS NET, 2015). FAO’s preliminary forecast for 2015 points to a production close to last year’s drought-reduced level. An additional 85 000 tonnes of imports would be required in 2015/16 over last year’s high level to maintain national average per capita consumption levels, assuming that conditions do not deteriorate further.

**Maize prices remained at high levels in August, while those of beans were relatively low**

In most countries of the subregion, the beginning of the 2015 main season cereal harvest halted the increasing maize price trend of the previous months. However, uncertain production prospects due to prolonged dry weather, associated with the El Niño phenomenon, limited the downward pressure and kept prices at high levels. This is the second consecutive year that the main season cereal harvest is negatively affected by severe dry weather. In **El Salvador**, prices declined only slightly from July and were around the high values of a year earlier. In **Honduras**, prices remained close to their levels in July and some 20 percent higher than in August last year. In **Nicaragua**, where the harvest will not begin until mid-September, maize prices spiked by some 20 percent in August and were well above their year-earlier levels. By contrast, in **Guatemala**, prices declined significantly and were lower than in August last year, as a result of improved supplies from the ongoing 2015 main harvest coupled with imports from Mexico.

Red bean prices declined significantly in **El Salvador** and **Honduras**, with the entry into the market of new product from the recently-started harvest, and were almost one-third below their year-earlier levels. By contrast, in **Nicaragua**, the largest producer and exporter of red beans in the subregion, prices increased in August but remained more than one-third below their levels at the same time last year. In **Guatemala**, where black beans is the variety mostly produced and consumed, prices continued to increase seasonally as new product from the ongoing harvest did not yet enter the markets.

**Drought mitigation responses**

**El Salvador:** To mitigate the effects of the drought, the Government has begun distributing both maize and bean seeds to the affected farmers to mitigate the current seed shortages, as well as providing other assistance such as irrigation pumps. The Government has also authorized imports of 14 000 tonnes of maize and 550 tonnes of beans from outside the Central American subregion at zero tariff to mitigate price increases (FEWS NET, 2015). FAO, for its part, is aiding the Ministry of Agriculture in its long-term strategy to adapt local agriculture to the effects of climate change. Specifically, FAO’s support is focusing on: i) Local capacity development; ii) Agro-climate risk management; iii) Support for research, innovation and transfer of new technology for climate change adaptation; iv) Sustainable management of local basins and land tenure; v) Outreach and education; and vi) Resource mobilization for adaptation, mitigation and resilience to climate change.

**Guatemala:** Currently, WFP, in conjunction with the Guatemala ministries of Agriculture, Livestock and Food (MAGA) and of Food and Nutrition Security (SESAN), is providing food assistance to 110 000 families. FAO is also supporting the ministries of MAGA and SESAN to

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>El Salvador</td>
<td>458</td>
<td>495</td>
<td>600</td>
<td>21</td>
</tr>
<tr>
<td>Guatemala</td>
<td>768</td>
<td>830</td>
<td>900</td>
<td>8</td>
</tr>
<tr>
<td>Honduras</td>
<td>421</td>
<td>509</td>
<td>600</td>
<td>18</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>162</td>
<td>190</td>
<td>275</td>
<td>45</td>
</tr>
</tbody>
</table>

| Total      | 2 024            | 2 375            | 17               |
improve the resilience of agriculture in the Dry Corridor to the El Niño event. Under the “Comprehensive response to drought in the Dry Corridor of Guatemala” programme, which targets 100 000 families in the most affected areas, FAO’s intervention focuses on: i) Implementation of early warning systems; ii) Distribution of agricultural inputs and local capacity development; iii) Formulation of participatory management plans of micro-basins; iv) Agricultural diversification; and v) Promotion of good agricultural practices, among many other programmes.

**Honduras**: The Government in June declared a state of emergency and its contingency planning in response to the drought is focusing on two main areas, direct food assistance and direct support to production. The food assistance component foresees the direct distribution of packages over a period of three months, aiming to distribute a total of 5.5 million tonnes to the affected population at a cost of a little over USD 7.7 million. The support to production component foresees the distribution of seed (for both maize and beans) and fertilizers during the second season, whose planting is already ongoing, at a cost of a little over USD 700 000. Funding for these initiatives is mainly coming from the Government but appeals and commitments have been sought from the international community. It is estimated that WFP is already providing direct assistance to 29 percent of the affected population. FAO is mobilizing resources to provide direct assistance to production and to support food and nutrition monitoring systems, which includes this year’s agricultural survey.

**Nicaragua**: The Government has begun food distributions to 27 000 households in the affected areas as well as the delivery of 23 000 technology packages that include seeds for planting.

---

**Figure 1: Central America - Cumulated rainfall up to the third dekad of August 2015**

*Rainfall cumulated values: 21-31 August 2015; Deviation: year of interest (YOI)*

![Rainfall Map](image-url)

**Source**: European Union 2015 - Joint Research Centre (JRC, GWSI, ECMWF)
Figure 2: Central America - Deviation in cumulated rainfall from long-term average up to the third dekad of August 2015
Rainfall cumulated values: 21-31 August 2015; Deviation: year of interest (LTA)

Source: European Union 2015 - Joint Research Centre (JRC, GWSI, ECMWF)

Figure 3: Central America - Deviation in cumulated rainfall, the third dekad of 2014 relative to the same dekad of 2015
Rainfall cumulated values: 21-31 August 2015; Deviation: year of interest - previous year

Source: European Union 2015 - Joint Research Centre (JRC, GWSI, ECMWF)
Figure 4: Probability of an El Niño developing (red bars) vs neutral conditions (red lines) and La Niña (blue lines)

Early-August CPC/IRI Consensus Probabilistic ENSO Forecast

Source: International Research Institute for Climate and Society

Figure 5: Central America - Wholesale prices of white maize in El Salvador, Guatemala, Honduras and Nicaragua (September/August)
Figure 6: Central America - Wholesale prices of beans in El Salvador, Guatemala, Honduras and Nicaragua (September/August)
This report is prepared by the **Global Information and Early Warning System (GIEWS)** of the Trade and Markets Division of FAO. The updates focus on developing anomalous conditions aimed at providing early warnings, as well as latest and more elaborate information than other GIEWS regular reports on the food security situation of countries, at both national and sub-national levels. None of the information in this report should be regarded as statements of governmental views.

*FAO-GIEWS would like to thank the Joint Research Center of the European Union as well as the Vulnerability Analysis and Mapping (VAM) unit of the World Food Programme for their support with weather-related information and graphs used in this report.*

For more information visit the **GIEWS Website** at: [www.fao.org/giews](http://www.fao.org/giews)

Enquiries may be directed to:  
Global Information and Early Warning System (GIEWS)  
Trade and Markets Division (EST)  
Food and Agriculture Organization of the United Nations (FAO)  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
E-mail: GIEWS1@fao.org

---

**Disclaimer**

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

© FAO, 2015