INITIAL ANALYSIS OF THE IMPACT OF THE DROUGHT ON FOOD SECURITY IN GUATEMALA, EL SALVADOR, AND HONDURAS
September 2015

Key messages

- Most areas of Central America are characterized by two cropping cycles: The first season (primera) starts in April and ends with the harvest in August/September, while the second season (postrera) starts in August and ends with the harvest in December/January.

- However, many areas affected by the current drought rely on a single cropping cycle (primera) for staple grains. Cash crops such as coffee, sugar cane and livestock have also been affected and will have reduced yields in some areas.

- In general, the primera accounts for the larger harvest, especially for maize. Beans are mainly produced in the postrera season.

- The continued impact of the 2014 drought, the false early start of the 2015 wet season followed by a rainfall deficit at the beginning of the 2015 primera cropping cycle, caused significant losses in food production. In addition, an extended mid-season dry spell led to a reduction in sown areas.

- Drier than average weather conditions coupled with a stronger El Niño phenomenon are expected to lead to higher temperatures in most of Central America. The Foro del Clima Centroamericano forecasted below average rainfalls from August to November, when crops are most sensitive to water shortages. This will preclude an early start of the postrera, negatively affect the crop production cycle and therefore limit possibilities for recovery.

- For the second consecutive year, this weather pattern has affected the food security of the most vulnerable households living in the Dry Corridor of Guatemala, El Salvador and Honduras. Initial analysis conducted by WFP and partners indicates that more than 4.1 million people in Central America have been affected by the prolonged drought and 2.2 million people are suffering moderate or severe food insecurity. Households depending on crop production and agricultural day labor for their livelihoods are the most vulnerable.

- WFP estimates that these populations will need sustained assistance through the 2016 primera season, recognizing that food security will improve temporarily in areas that benefit from a positive postrera.
Methodology

- WFP has been continuously assessing the food security needs of drought-affected populations in Guatemala, El Salvador and Honduras. Based on primary data collected between May and July 2015 from affected households (Guatemala: 1870 households, Honduras: 566 households, El Salvador: 1043 households), and key informants as well as secondary data provided by official entities, WFP made preliminary estimates of the affected population and of those in food insecurity.
- In order to further improve the understanding of the food security situation in the affected areas, further assessments are either ongoing or planned to take place in the coming months.

Affected areas

Governments of Central America identified the **Dry Corridor as the most drought-affected area.** WFP conducted further analysis to establish a list of municipalities with high or very high frequency of droughts. (Source: 2010 FEWSNET Livelihoods Map; Government data on basic grain production by municipalities (2003-2012); Areas of the Dry Corridor identified by CEPREDENAC in 2001; and CIAT 1999).

- Guatemala: 51% of municipalities in the Dry Corridor have been affected, especially Baja Verapaz, El Progreso, Zacapa, Chiquimula, Jalapa y Jutiapa, Quiche, Huehuetenango, Totonicapán, San Marcos, Retalhuleu, Santa Rosa and Escuintla.
- Honduras: 91% of municipalities in the Dry Corridor have been affected, especially La Paz, Lempira, Intibucá, Choluteca, Valle, Francisco Morazán y El Paraiso.
- El Salvador: 57% of municipalities have been affected, especially San Miguel, Morazán, La Unión, La Paz and San Vicente.

Production loss in Primera

- The rainfall deficit during the *primera* planting season reduced seed germination and limited the flowering and development of grains.
- Maize and beans were most affected by the drought. While the extent of crop damages varies according to their sowing and planting time and the irregular temporal and spatial distribution of rains, the Dry Corridor is of particular concern.
- Due to commercial reserves and good integration with international markets, among other factors, thus far, no market shortage of maize and beans have been recorded. The severity of the drought in the Dry Corridor is also masked by national aggregate food supply.
- In El Salvador, the drought led to a 25% decrease in the national production of maize. According to the Ministry of Agriculture, 66% of producers in the affected areas reported a total harvest failure.
- Guatemala reported losses between 50% and 100% for maize and beans in the Dry Corridor. According to FAO, this corresponds to a loss of USD 82.6 million in maize production.
- Honduras reported a 96% loss in maize, 87% in beans, and a 19% decrease in the amount of sorghum produced in the Dry Corridor. Compared to the total cultivated area at national level, losses correspond to 15% for maize, 12% for beans, and 50% for sorghum.
Livelihoods

- Subsistence agriculture and agricultural wage labor are the main sources of livelihood for populations living in the Dry Corridor. The impact of the two-year drought comes on top of the coffee rust disease that has been affecting vulnerable households since 2012.

- More than 65% of households in the Dry Corridor had no food stocks left by the start of the 2015 primera season.

- Losses of the first cropping cycle led to a reduced demand for agricultural labor, the main source of income for a large part of the population.

- As a result of speculation on crop losses, maize and bean prices increased compared to the 2014 season.

- In Guatemala and Honduras, food expenditures in over 70% of affected households account for over 65% of total household expenditures, reflecting extremely high levels of economic vulnerability. In order to maintain adequate food consumption, households resort to negative coping strategies. These strategies often impair households’ ability to cope with further shocks, such as the protracted drought or increased food prices.

- The increase in food prices, reduced incomes due to limited job opportunities and the lack of food stocks for sale increased the food insecurity of vulnerable households attempting to recover from the effects of the 2014 drought and the coffee rust.

Consumption

The drought has led to a reduction in dietary diversity and overall food consumption: over 40% of the affected households have low to medium dietary diversity, over 30% reported an insufficient consumption of iron-rich foods, and 15% lack adequate intake of proteins and vitamin A.

Coping strategies

- The vast majority of affected households are already applying one or more negative coping strategies related to food consumption ranging from 70% of households in El Salvador to 93% and 98% in Guatemala and Honduras respectively. This includes reducing the number of meals eaten per day, reducing the size of meals, borrowing, and consuming cheaper and less preferred food.

- In response to the shock, the majority of affected households have applied one or more livelihood coping strategies. Emergency and Crisis livelihood coping strategies such as selling female animals and consuming seed stocks that were to be saved for next season are being used to a high degree in Honduras (99%). Over 25% of affected households in Guatemala and 9% in El Salvador are also applying emergency livelihood coping strategies. However, more than half of affected households in El Salvador and Guatemala (52% and 56% respectively) are resorting to crisis level livelihood coping strategies such as selling productive assets and limiting expenditure on productive assets, fertilizers, pesticide, and animal feed. A significant portion (76%) of affected households in El Salvador have applied stress level coping strategies such as spending their savings, purchasing food on credit and borrowing food. This is seen to a lesser extent in Guatemala (14%) and Honduras (1%).
Affected and Food Insecure

According to current estimates, **4.1 million** subsistence farmers and day laborers have been affected by the drought, with **2.2 million** people being severely or moderately food insecure.

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<tr>
<th>Country</th>
<th>Affected Population</th>
<th>Food Insecure Population</th>
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<tbody>
<tr>
<td></td>
<td>Percentage</td>
<td>Number (rounded)</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1,345,000</td>
<td>54%</td>
</tr>
<tr>
<td>Honduras</td>
<td>2,023,000</td>
<td>67%</td>
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<tr>
<td>El Salvador</td>
<td>825,000</td>
<td>23%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,193,000</strong></td>
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Conclusion and Forecast

- For the second consecutive year, the drought affected the main cropping cycle (*primera*), causing crop losses and a further deterioration of livelihoods in Guatemala, Honduras and El Salvador. Crop losses, lack of food reserves, the loss of labor opportunities and the seasonal increase of food prices have aggravated the food insecurity situation of affected households, limiting the recovery possibilities.

- In all of the drought affected areas, food insecurity will continue to deteriorate until December/January when the *postrera* harvest would typically alleviate the lack of access to food. Preliminary data from follow up assessments in August for Honduras and Guatemala already reflect notable deteriorations in the food security of affected households, with lower levels of food consumption, decreased dietary diversity, increased percentage of household expenditures on food and increased negative coping strategies.

- Due to the El Niño phenomenon, the drought is likely to extend and grow in intensity, which will reduce the availability of water resources and affect the development of crops during the *postrera*. FEWSNET and the *Foro del Clima Centroamericano* have also warned that below average rainfall in August to November 2015 will result in a delay of sowing for the *postrera*.

- Many of the affected areas rely on a single harvest and can only recover their livelihoods with the 2016 *primera* harvest. In areas that normally benefit from two cropping seasons, poor forecasts for the 2016 *postrera* will likely equate to only a temporary recovery. Concerns over the level of livelihood coping strategies employed in response to a protracted drought could also impact household investments in future planting seasons.

- Continued and sustained assistance will be required for the most vulnerable households and communities until livelihoods are able to adequately recover.

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