The 2009/10 agricultural season was affected by the fact that total aggregate rainfall levels had fallen far below the historical average in the central and eastern departments of the country (El Progreso, Baja Verapaz, Jalapa, Jutiapa, Chiquimula and Sacapa in the Corredor Seco).

Nevertheless, key agricultural departments recorded improved output and higher average yields in comparison with the 2008/09 agricultural season, thanks to their more evenly distributed rainfall.

Localised losses (up to 100 percent of output) were recorded in the Corredor Seco area.

Maize, bean and rice production in 2009/10 (both seasons) was estimated at 1.7 million tonnes, 147 000 tonnes, and 17 000 thousand tonnes, respectively, which was 1.5 percent below the 2007 production levels (latest available official figures).

The total imported basic grains requirement in 2009/10 is put at around 766 000 tonnes, which should be covered by commercial imports through formal and informal channels.

Some 145 400 households are estimated to have been affected by the irregular rainfall and in need of emergency food assistance.

1. INTRODUCTION

The joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM) visited Guatemala from 3-23 November 2009. The aim of the mission was to assess the production of basic grains (maize, beans and rice) which had been affected by adverse climate conditions in the so-called “Dry Corridor” areas, and above all in the country's Oriente Region.

The Mission benefited from cooperation from the Rural Operations Unit (UOR) at the Ministry of Agriculture, Livestock and Food (MAGA). It was able to plan a field tour optimising the time available visiting most of the areas affected by the drought and a sufficiently representative number of the commercial production areas in the country yielding surpluses. MAGA officials played an active part in every phase of the Mission (from the preparatory phase and the field survey to the presentation of the preliminary findings) and the Mission was also provided with logistical support by the central divisions of the Ministry, and by the local and departmental coordination bodies whose contribution was crucial to the Mission's success.

During the first few days' work and before embarking on the field visits, Mission teams held meetings with the various institutional stakeholders involved (MAGA, Food Security and Nutrition Secretariat (SESAN), The National Institute of Seismology, Vulcanology, Meteorology and Hydrology (INSIVUMEH), FONTIERRAS, and international organisations (UNICEF, UNDP, OCHA, Italian Cooperation, USDA, MFEMS,) to collect all the available information on the socio-economic situation, the latest meteorological data, National Agricultural Surveys (ENAS from 2005 to 2008), forecasts of output and losses in the areas sown in the 2009 agricultural season, and price data, among other things.

The visit lasted eight days from 6-13 November 2009. The Mission visited 9 of the 21 departments into which the country is divided. It conducted face-to-face interviews with focal groups, community leaders, government officials and other key informants to gather information on the adverse climatic events affecting production, production forecasts for the current year and in comparison with the prior year, input availability and prices, the health status of farmyard animals and herds, and the outbreaks of diseases. The Mission also gathered information on household food security, their resources, their alternative income-generation possibilities in the areas visited, and the availability of basic services.
The Mission travelled for a total of 2000 km. It also visited the largest market area in the capital where it conducted face-to-face interviews with wholesalers and food collectors/stockists, and recorded their forecasts for market supplies in the coming months.

2. **THE SOCIO-ECONOMIC CONTEXT**

2.1 **Population and poverty**

Guatemala is ranked 177 out of total of 182 countries on the Human Development Index (HDI). It is a medium-low income country with a per capita GDP of USD 2,576 and a Gini coefficient of 55, making it one of the countries with the least equitable incomes distribution. It has a population of just under 14 million (13,830,968), 34 percent of whom are under 14 years of age.

The country comprises 23 linguistic communities, 51 percent of the population are classified as poor, and 15 percent extremely poor. The most vulnerable groups are women, children of both genders, and indigenous people living in the highlands and in the ‘Dry Corridor’.

72 percent of the poor population, who account for 75 percent of the indigenous population, are concentrated in the rural areas. 1.3 million households, accounting for one-half of the total national population, are rural. Of these households, 83 percent depend on agriculture and livestock as their only source of income and 38 percent have no cropland of their own.

2.2 **The macroeconomic situation**

In the 1990s, and following the 1996 peace negotiations, Guatemala tried to stabilise the economy by various structural adjustments designed to rein in inflation, improve the balance of payments and create conditions for sustainable economic growth. The country made gradual progress towards stabilising prices and to reducing inflation to single figures in the second half of the decade. The economy grew, although it failed to achieve the sustained expansion required to address the problems of poverty and marginalisation. The hoped-for results were not forthcoming despite the external donations given to the country as part of the peace process and direct investment by large foreign corporations through the privatisation programme.

In 2001, despite greater macroeconomic stability, economic growth fell sharply to below the population growth rate.

The economic recovery began in 2004, however, thanks to greater confidence on the part of foreign investors in the economic policy being pursued by the Bergen government, higher raw materials prices and the expansion of the economy in the United States where many Guatemalan migrants work.

The expansion of private consumption therefore exceeded the aggregate GDP growth rate in 2001-05 obtained by the rising levels of remittances from Guatemalans working in the United States of America.

These factors contributed to a constant acceleration in the GDP growth rate, which, in 2007, expanded by 5.7 percent – the most rapid rate of increase in 12 years.

2.2.1 **Trade policy**

In recent years, Guatemala’s trade policy has been geared to signing the Free Trade Agreements and trying to establish a Central American customs union. Statistics published by Banco de Guatemala nevertheless show that the trade balance continues to be negative because of a huge increase in the trade deficit, which rose from USD 5,118 million in 2005 to USD 6,780 million in 2008.

2.2.2 **Exchange-rate policy**

As a result of the world financial crisis following the bursting of the sub-prime mortgage bubble in the United States, the exchange rate (Q/USD), which had been hovering around 7.5, rose to around 8.3 (between November 2008 and November 2009). The exchange rate increase had direct consequences in terms of agricultural production costs, leading to an increase in the prices of imported farm inputs such as fertilisers, seeds, insecticides, fungicides, and herbicides. Furthermore, there was also an increase in the cost of imported food grains, such as maize and beans.
2.2.3 The government budget

The government budget in nominal terms rose from GTQ 42 500 million in 2008 to GTQ 49 700 million in 2009. This was equivalent to an increase of GDP of between 15 percent and 15.6 percent of GDP, the highest budget in the country's history.

Tax revenues were the main source of funding for the central government budget, accounting for about 12 percent of GDP, one of the lowest percentages in the whole of the Central American region. A number of isolated measures were therefore approved after 2000 but they failed to achieve the expected result of a root-and-branch reform of the national taxation system. One of the most important measures adopted was the increase in value-added tax from 10 to 12 percent in August 2001.

In view of the worldwide financial crisis, the taxation yield forecast at 2009 fell by around GTQ 3 000 millions. Failure to achieve the hoped-for results in terms of fiscal policy led to an increase in the internal and external public debt. In the central government budget this led to an increase in debt servicing provisions, which could possibly reduce the possibilities for meeting such needs as food security.

3. THE AGRICULTURE SECTOR

3.1 The features of agriculture and food production

Agriculture is a major subsector in the Guatemalan economy because it generates some 14 percent of the gross domestic product (GDP), employing between 40 and 50 percent of the workforce, and accounting for more than 50 percent of foreign exchange revenues from exports. In general terms, one can identify two types of agricultural production:

- Production for export, and
- Production for domestic consumption.

Maize and bean are produced throughout the whole country, even in marginal areas, depending upon the climate conditions and soil quality, considering that Guatemala's climate is extremely variable. All the production is rainfed which makes the crops highly vulnerable to climate variations, mainly in the areas which suffer from recurrent droughts.

Guatemala has two main agricultural seasons: the “de primera” season which begins in April-May and is harvested in August-September, and the “de postrera” season which begins in August-September and is harvested from November onwards.

The bulk of the basic grains are produced by four types of farmers, whose productivity depends upon the size, location and quality of the land they farm:

- Sub-subsistence farmers. These farmers meet their households’ food requirements (above all in maize and beans) by farming small parcels of land. They complement their output from what they buy on the market using the income generated by their labour.
- Subsistence farmers. They meet all their household’s food requirements (in maize, beans and sorghum), farming their small parcels of land.
- Farmers producing surpluses. These farmers produce enough to meet their household requirements, and are able to market some surplus production.
- Commercial farmers. Their production is used entirely for trading purposes.

Guatemala is a domestic food consumption-deficit country and is a net importer of maize, black beans, rice, beef, chicken meat, pigmeat, chicken eggs and milk. Hitherto, the subsectoral policies adopted (fertiliser distribution policy and the land leasing programme, for example) have not fully succeeded in achieving the impact expected in terms of reducing the domestic food production deficit.

3.2 Regions with structural food deficits

The regions with structural maize and black bean production deficits are:

- The central and western highland areas
- the semi-arid region
• some areas in northern Guatemala.

In these areas there are communities of subsistence and sub-subsistence farmers which generally farm hillside lands.

The physical features of the soils in the highlands are better than in the semi-arid region where they are shallow and stony. In the semiarid region, the producers farm small parcels of land which average less than 7,000 square metres in area. This makes it difficult for them to exploit economies of scale (for input purchases and sales of surpluses). In the Northern region of the country, production takes place on thin and stony karstic soils, except for very limited areas of alluvial soils on the banks of the most important rivers (the Playitas, Chisec, Alta Verapaz, and the Salinas, Sayaxché, Petén rivers). In these areas individual farmers have larger areas of land even though the yields per unit of area remain low, and the farmers do not exploit the full production potential of the soils.

3.3 The state of food insecurity in the country

Chronic malnutrition affects 43.4 percent of the Guatemalan population (ENSMI 2008-2009), the highest rate in the whole of Latin America and the Caribbean and one of the highest in the world. The incidence of chronic malnutrition is highest in the north-west (64.8 percent), but there are also significant rates in the northern region (51.1 percent) and the southwestern region (47.1 percent).

Chronic malnutrition among children is the main effect of food insecurity affecting the vulnerable households affected by adverse natural events. The cost of the repercussions of food insecurity on the health, growth and cognitive development of the human being in Guatemala is equivalent to 11.4 percent of the annual GDP (PMA-CEPAL)\(^1\).

Acute malnutrition affects 0.9 percent of the population (ENSMI 2008-2009), the most seriously affected regions being the North-East (1.3 percent), the South-West (1.2 percent) and the North (1.1 percent).

It is generally felt that acute malnutrition is most frequent and serious in the Eastern region of the country, particularly in the ‘Dry Corridor’, while chronic malnutrition is most prevalent in the Western region.

Against this background, it is the most vulnerable households that do not have the capacity to react, or mechanisms to re-establish their means of subsistence, because of the great inequalities and differences in income and marginalisation.

The structural causes which compound the effects of the natural events and limit the people’s ability to re-establish their life resources may partly be summarized as follows:

• The cost of the food basket rising more steeply than the minimum vital wage (1995-2000).
• Inadequate access to assets: land, credit, education, housing, goods, basic services, which affects the most vulnerable families.
• Limited incomes of households suffering from food insecurity due to unstable and inadequate sources of income (as day labourers, or subsistence farmers) and a poor diet according to the Emergency Food Security Assessment (EFSA) carried out in October 2009.
• Inadequate dietary and child care practices, caused by low calorie consumption and a limited variety of foods\(^2\)

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1 Análisis del impacto social y económico de la desnutrición infantil en América Latina. Results from the case of Guatemala. ECLAC, WFP. 2006.
2 Food insecurity assessment in the departments of Guatemala, Quiché and Izabal in eastern dry corridor, Red Humanitaria, 2009
Table 1. Variations in the price of the basic food basket in terms of the farm wages paid between 2006 and 2009

Food prices varied significantly. A comparison of the costs of the basic food basket (CBA) and the basic vital basket (CBV) with the farm wage shows that food prices rose more steeply than farm wages.

From 2006 to 2009 CBA and CBV costs increased by 30 percent, while farm wages rose by 21 percent over the same period; this reflects the weaker purchasing power of day labourers’ households, reducing their capacity to gain access to food.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CBV</th>
<th>CBA</th>
<th>FARM WAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>10.8%</td>
<td>10.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2008</td>
<td>18.6%</td>
<td>18.6%</td>
<td>5.4%</td>
</tr>
<tr>
<td>2009</td>
<td>0.7%</td>
<td>0.8%</td>
<td>10.3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30.1%</td>
<td>30.2%</td>
<td>20.7%</td>
</tr>
</tbody>
</table>

Source: INE 2009

3.4 Trade flows, maize reserves, by region

Guatemala has three markets which function as wholesale centres for the marketing of maize located in the capital city: the ‘Terminal’, the ‘Central de Mayoréo’ (CENMA) and the grains market on ‘21 Calle’. It is on these markets that most of the production from the surplus areas are marketed (from lands on the southern coast, some areas in the east of the country, and the areas of northern Alta Verapaz and Quiché, and southern Petén), to be transferred to the food-deficit areas (mainly in the western highlands). There are also smaller inter-regional trade flows directly from the food-surplus to the food-deficit areas without passing through the wholesale markets in the capital. There are also international trade flows (mostly unrecorded) mainly with Mexico and El Salvador.
This report has been prepared by Giorgia Nicolò, Edgar Escobar, Gustavo García and Ariel Ortiz (FAO) and Juan Manuel Morales and Carmen Galarza (WFP) under the responsibility of the FAO and WFP Secretariats with information from official and other sources. Since conditions may change rapidly, please contact the undersigned for further information if required.

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