

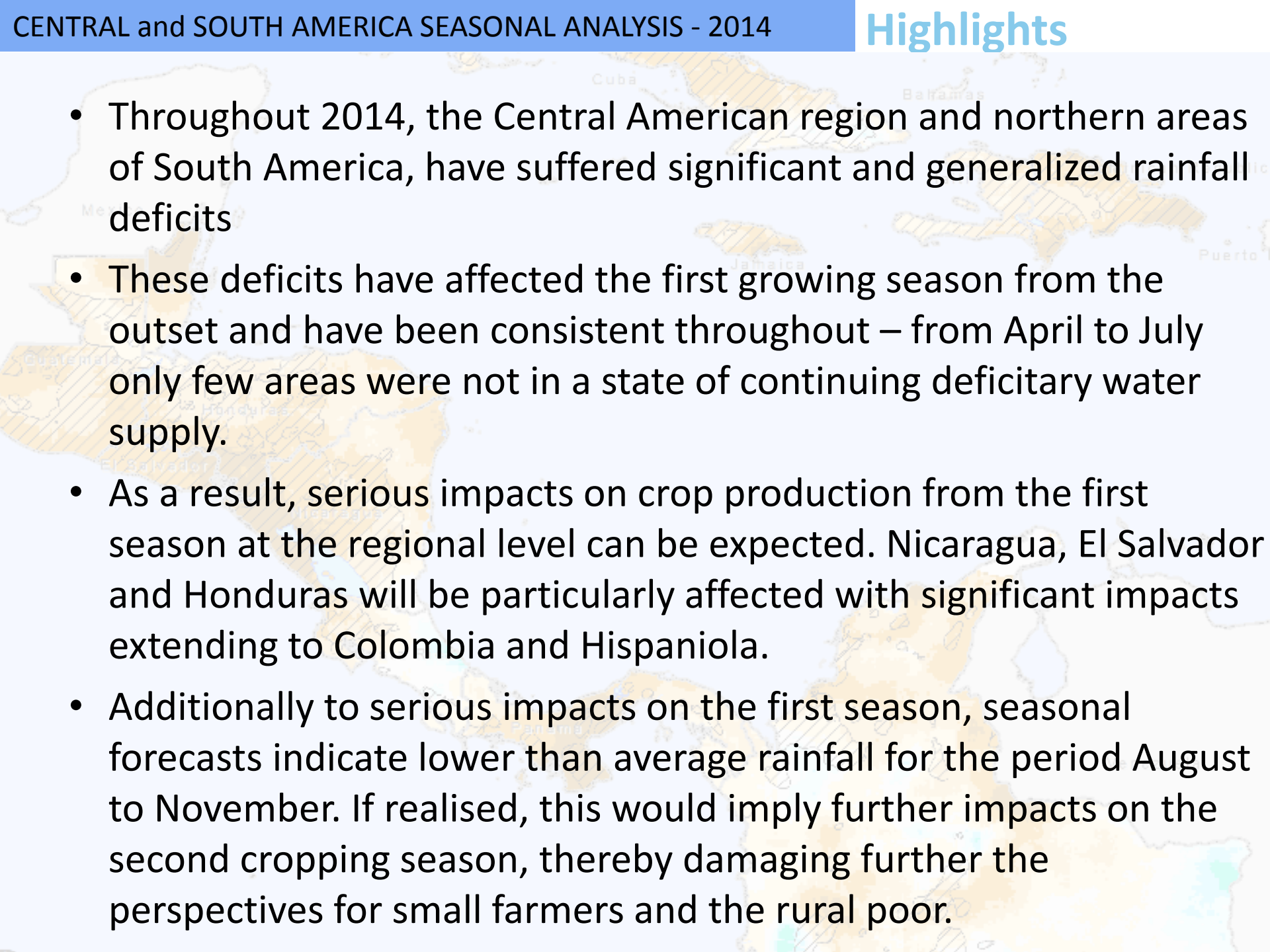


Central and South America

The 2014 Rainfall Season



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- 
- A faint background map of Central and South America is visible. The map shows the outlines of the continents and some major islands like Cuba and the Caribbean islands. The text is overlaid on this map.
- Throughout 2014, the Central American region and northern areas of South America, have suffered significant and generalized rainfall deficits
 - These deficits have affected the first growing season from the outset and have been consistent throughout – from April to July only few areas were not in a state of continuing deficitary water supply.
 - As a result, serious impacts on crop production from the first season at the regional level can be expected. Nicaragua, El Salvador and Honduras will be particularly affected with significant impacts extending to Colombia and Hispaniola.
 - Additionally to serious impacts on the first season, seasonal forecasts indicate lower than average rainfall for the period August to November. If realised, this would imply further impacts on the second cropping season, thereby damaging further the perspectives for small farmers and the rural poor.

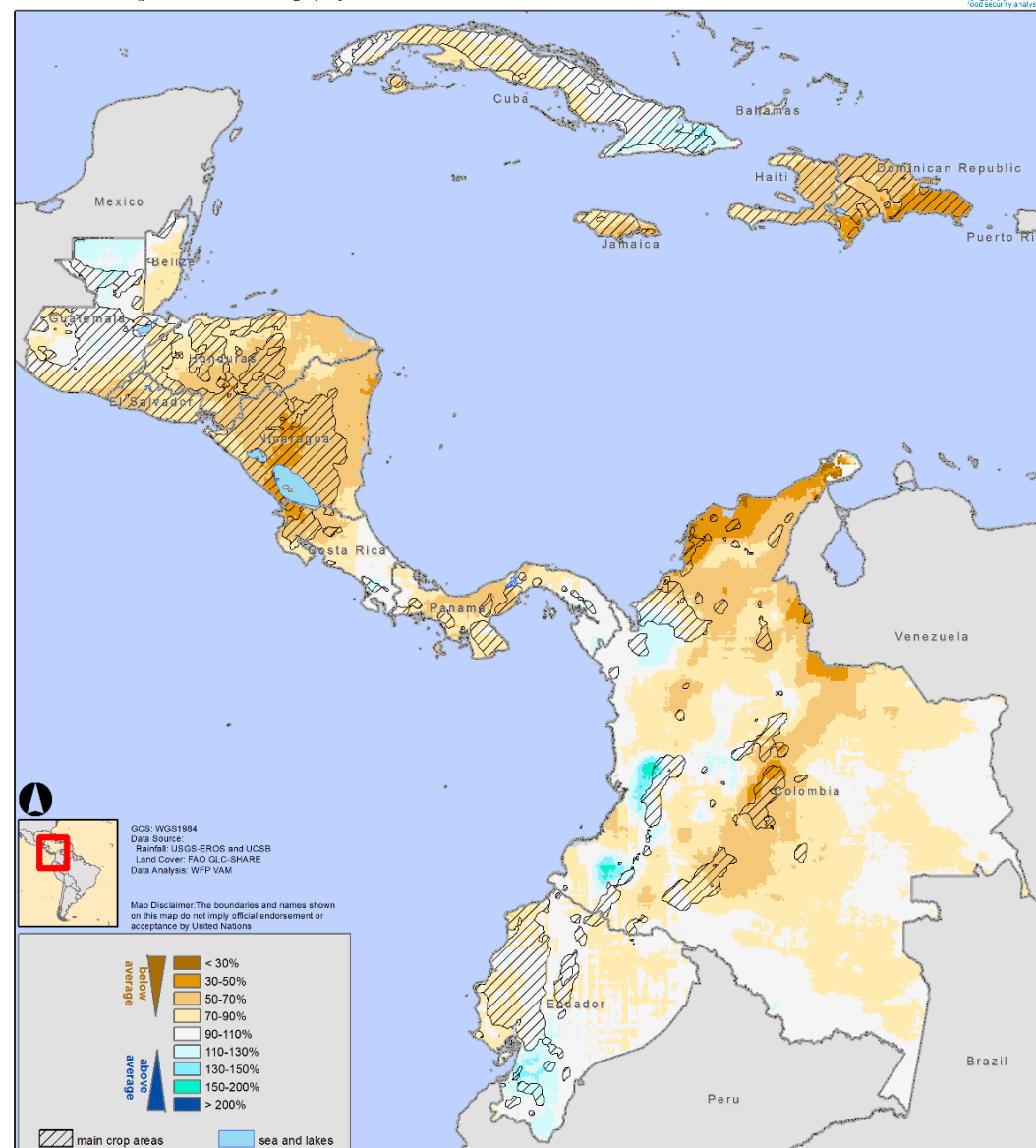
Current Situation and Near Term Perspectives



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CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
Total Rainfall (percent of Average) by 31 Jul 2014



Overall Rainfall Performance

The rainfall season until the end of July in Central and South America has been characterized by widespread below average rainfall.

These deficits have arisen from widespread persistently below average rainfall from the very onset of the season.

Deepest deficits can be found in Nicaragua, Salvador, Honduras and Panama as well as Hispaniola (Haiti and Dominican Republic) and northern areas of Colombia.

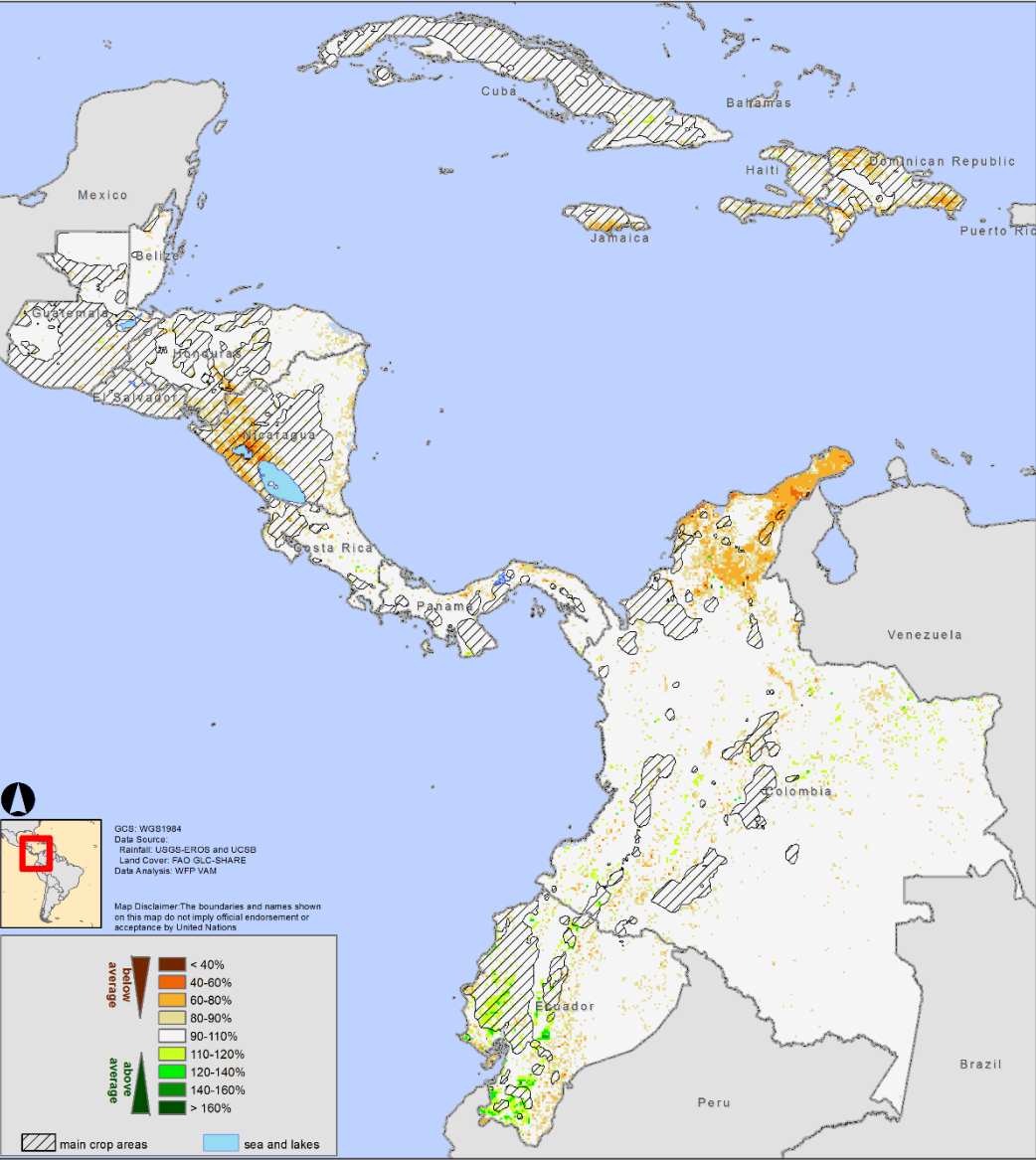
In Cuba and northern Guatemala the situation is more favourable with only very moderate deficits or above average conditions.

Total rainfall from February to July 21st 2014 as a percentage of the 20 year average. Hashed pattern indicates main agricultural areas.

Brown shades indicate below average rainfall, blue shades indicate above average seasonal rainfall

CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
NDVI (percent of average) 20Jul-05Aug 2014



Overall Vegetation Status

The seasonal rainfall deficits are reflected in below average vegetation development across the region.

This is more evident as extensive patterns in Nicaragua, Hispaniola and northern Colombia and as scattered anomalies elsewhere.

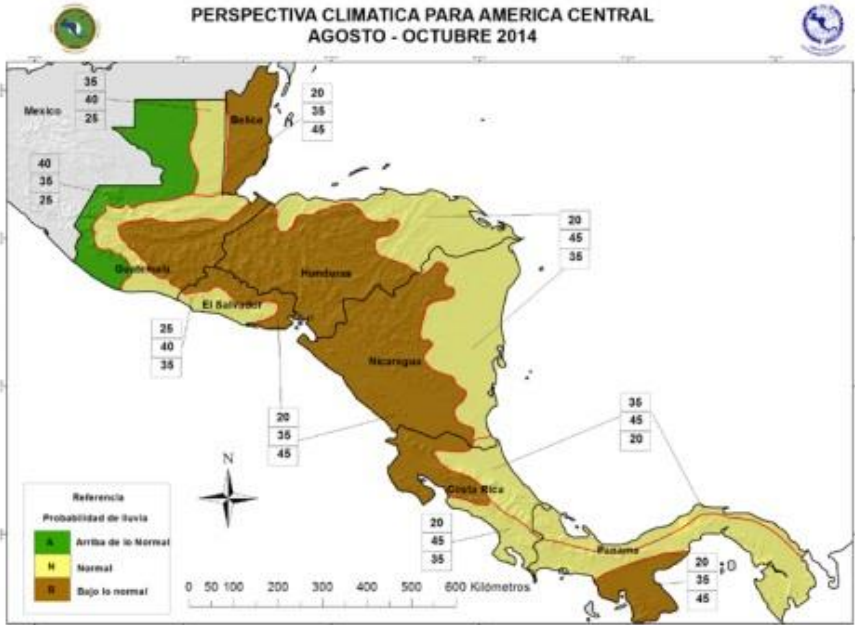
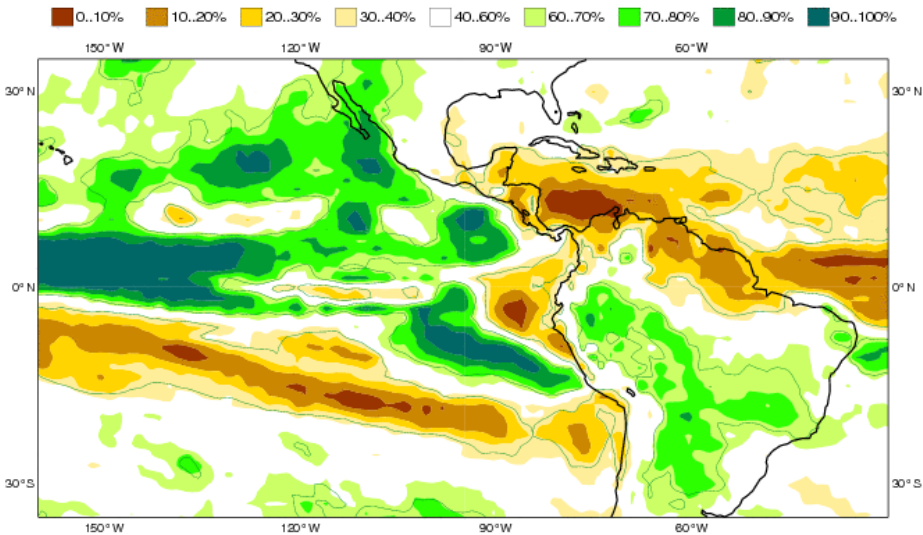
These indicators point to significant problems in crop production and pasture development across most of the region for the first cropping cycle.

Vegetation index in mid July 2014 as a percentage of the 12 year average. Hashed pattern indicates main agricultural areas.
Yellow-orange shades indicate below average vegetation, green shades indicate above average vegetation

CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

ECMWF Seasonal Forecast
Prob(precipitation > median)
Forecast start reference is 01/08/14
Ensemble size – 51, climate size – 450

System 4
SON 2014
Solid contour at 1% significance level



Forecast for the rainfall situation for August-October 2014:
Probability of rainfall to exceed the usual amount. Green (favourable) denotes higher likelihood of more rainfall than usual, browns higher likelihood of less rainfall than usual. Source: ECMWF (left) CariCOF(right)

Forecasts for the remainder of the season

After a significantly drier than average first half of the season, the forecasts for the second half of the season are fairly pessimistic.

Rainfall for the period from August to November is forecast to be below average across all of Central America and northernmost South America.

Under these indications a continuation of the below average rainfall patterns that have prevailed so far is the most likely outcome. This implies a high likelihood of continuing problems for regional crop production, extending to the livestock sector and to general water supply.

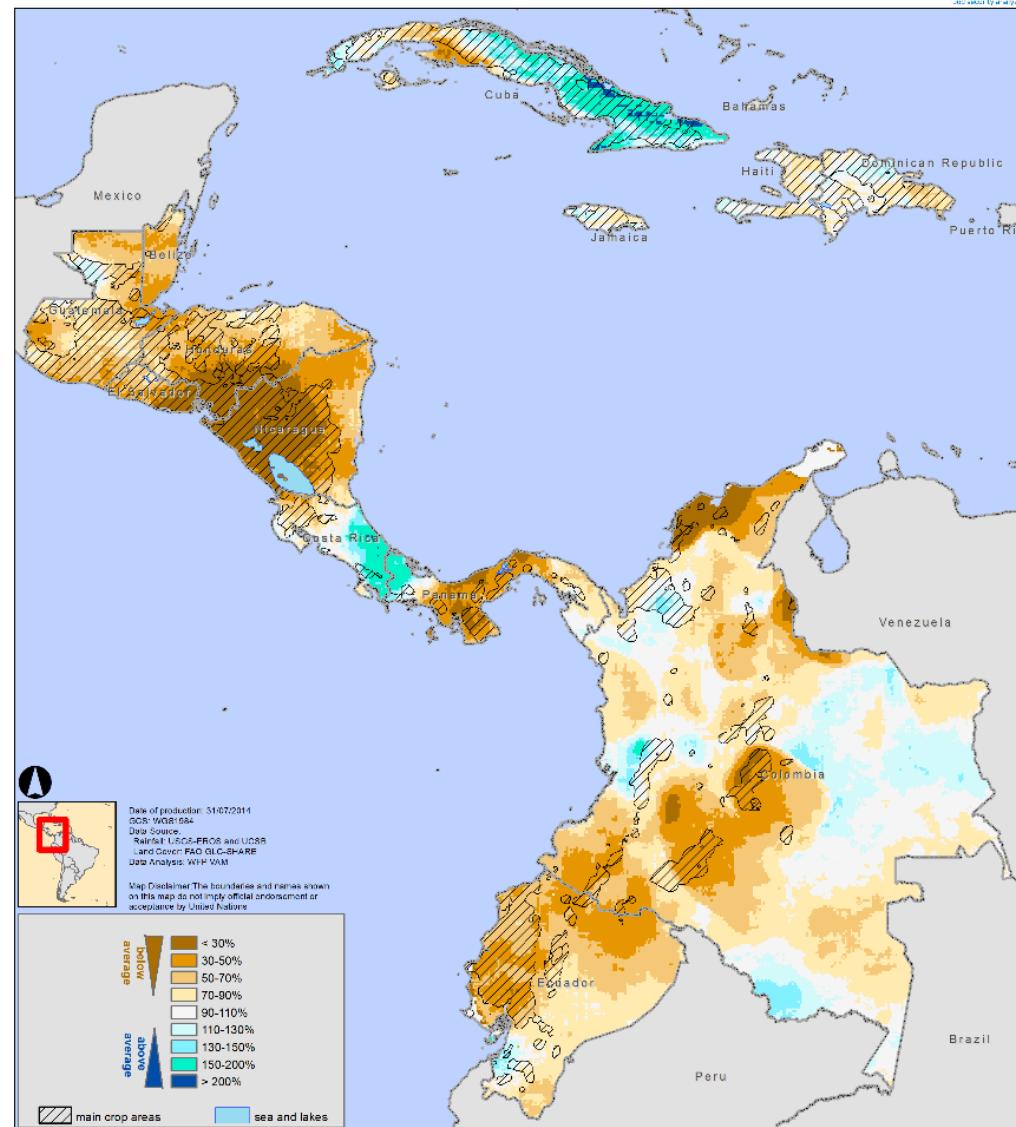
How the Season Evolved



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CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
Rainfall (percent of average) in the 30 days to 30 Apr 2014



April

Drier than average conditions predominated across the region from the beginning of the growing season. During April the crops of the first cycle are planted.

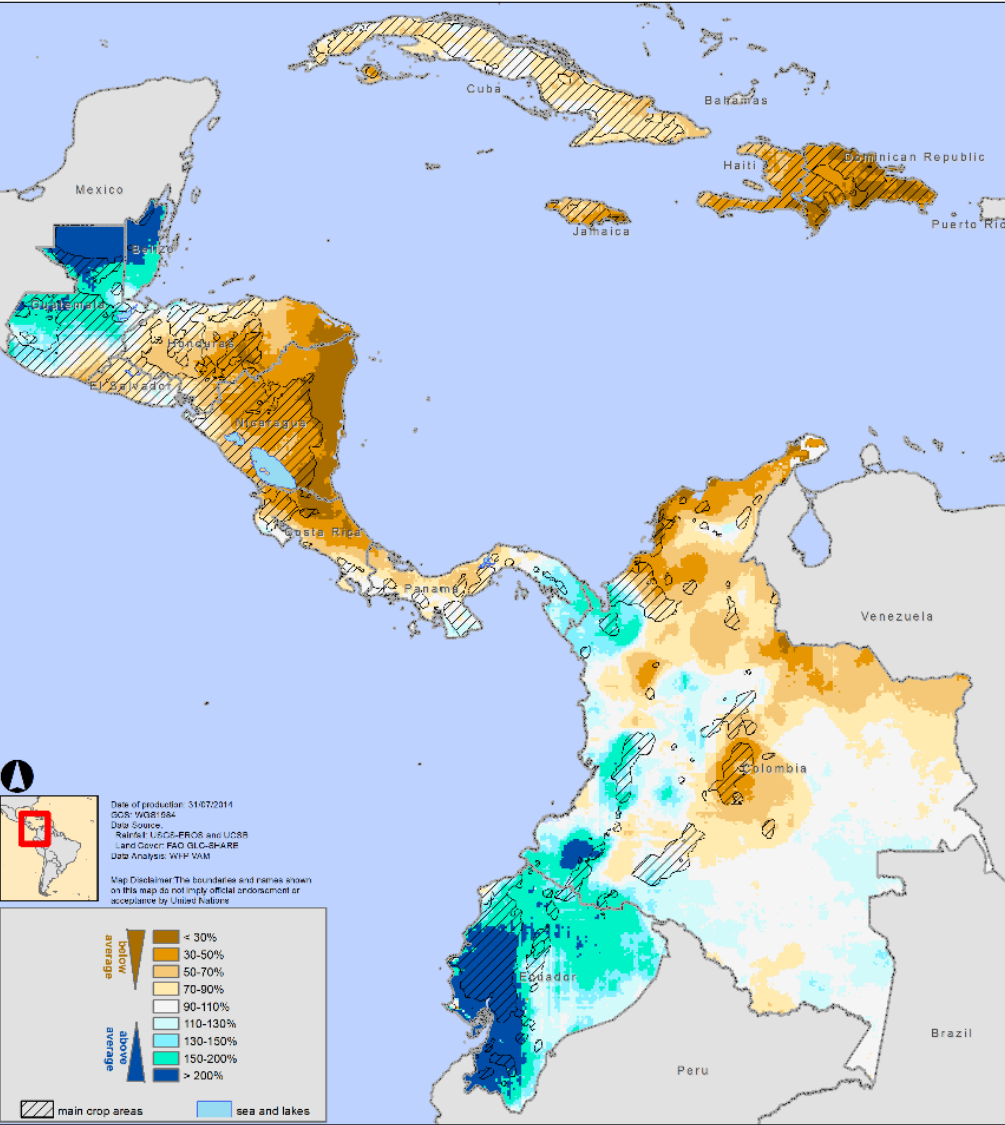
Much drier than average conditions spread across Nicaragua, Salvador and Honduras, as well as parts of Colombia and most of Ecuador (including main cropland areas). Only Cuba and parts of Costa Rica registered some rainfall surplus.

This led to delays in the start of the season and problems on early crop development

Total April 2014 rainfall as a percentage of the 20 year average.
Hashed pattern indicates main agricultural areas.
Brown shades indicate below average rainfall, blue shades indicate above average seasonal rainfall

CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
Rainfall (percent of average) in the 30 days to 31 May 2014



May

During May, dryness intensified across most of Central America with the exception of Guatemala. Most intense deficits occurred in Nicaragua and Hispaniola. Dryness also continued in northern areas of Colombia .

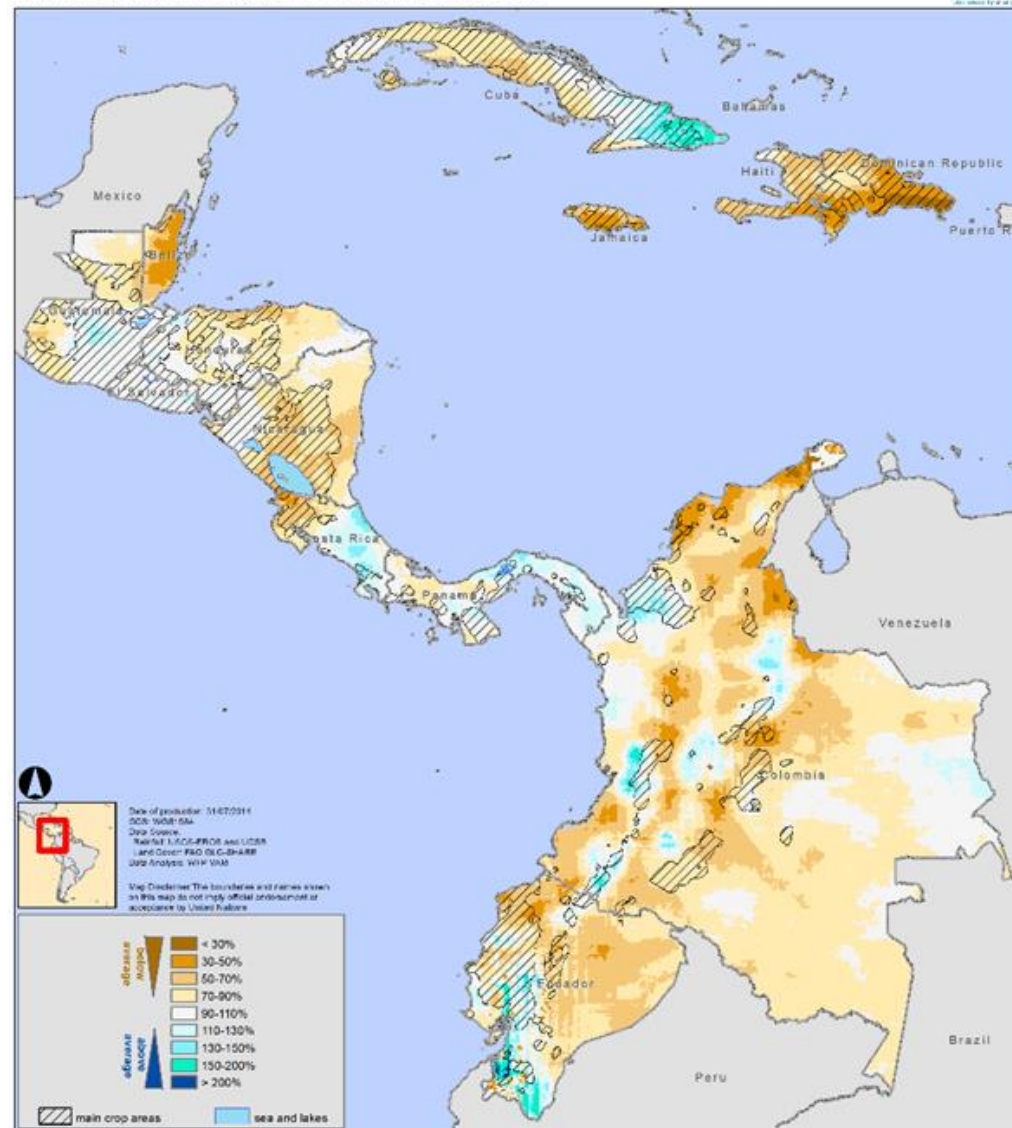
Elsewhere in South America, Ecuador enjoyed a much wetter than average month.

These rainfall deficits were regional in scope and affecting most crop land area in the region. These are conditions unsuitable for planting and early crop development.

Total May 2014 rainfall as a percentage of the 20 year average.
Hashed pattern indicates main agricultural areas.
Brown shades indicate below average rainfall, blue shades indicate above average seasonal rainfall

CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
Rainfall (percent of average) in the 30 days to 30 Jun 2014



June

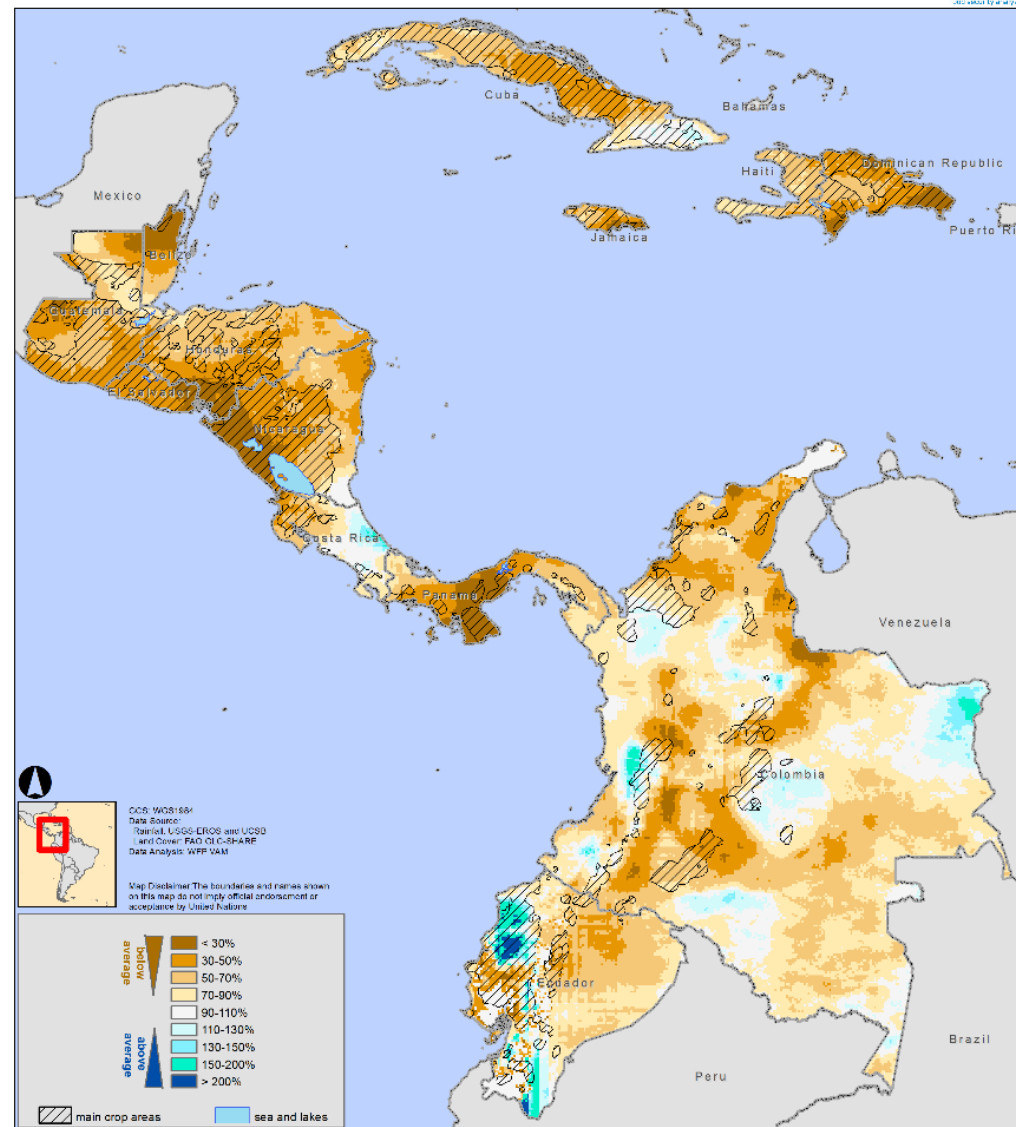
During June, conditions remained drier than average, though deficits were lighter than previous months. Dryness was again stronger in Nicaragua, Hispaniola and Colombia. Only Costa Rica and Panama had near normal conditions.

Dryness remained regional in scope with few areas with normal or above normal rainfall. This brought little relief from the early season large rainfall deficits – most crop development taking place under problematic moisture conditions.

Total June 2014 rainfall as a percentage of the 20 year average.
Hashed pattern indicates main agricultural areas.
Brown shades indicate below average rainfall, blue shades indicate above average seasonal rainfall

CENTRAL and SOUTH AMERICA SEASONAL ANALYSIS - 2014

CENTRAL and NORTHERN LATIN AMERICA
Rainfall (percent of average) in the 30 days to 31 Jul 2014



July

July saw a worsening of conditions –very significant rainfall deficits extended throughout the region, with particularly strong deficits in Nicaragua, Salvador, Panama and Hispaniola as well as parts of Guatemala and reaching Cuba.

By this stage severe impacts on crop were inevitable and regional in scope. Most countries in the region will suffer significant impacts on crop production.

Most seriously affected countries include Nicaragua, Honduras and El Salvador, with serious impacts in Guatemala, Hispaniola and Colombia.

Total July 2014 rainfall as a percentage of the 20 year average.

Hashed pattern indicates main agricultural areas.

Brown shades indicate below average rainfall, blue shades indicate above average seasonal rainfall

Data Sources:

Rainfall: CHIRPS, Climate Hazards Group, UCSB

Vegetation: MODIS NDVI, EOSDIS-NASA

Land Cover: FAO GLC-Share

Processing:

VAM software components, ArcGIS

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