

# 2013 Rainy Season Overview

## West and Central Africa

11 September 2013

### HIGHLIGHTS

- 2013 has been a less damaging rainy season *vis-à-vis* floods and agricultural implications than 2012.
- 323,396 people have been affected by floods this rainy season.
- 30,445 people been displaced by floods this rainy season.
- At least 34,000 Hectares of agricultural land have been destroyed by floods.
- Delays in onset of the rainy season likely to have impact on agricultural yields unless rainfall increases in the next month.
- 30-day rain deficits recorded in Nigeria, Ghana, Liberia, Togo and Benin.
- Damaging floods have occurred in nine countries in the region, most recently in Benin, Mali, Niger, Nigeria, and Senegal.

### FUNDING APPEAL

**NIGER:**  
USD\$64  
million for  
immediate  
flood relief



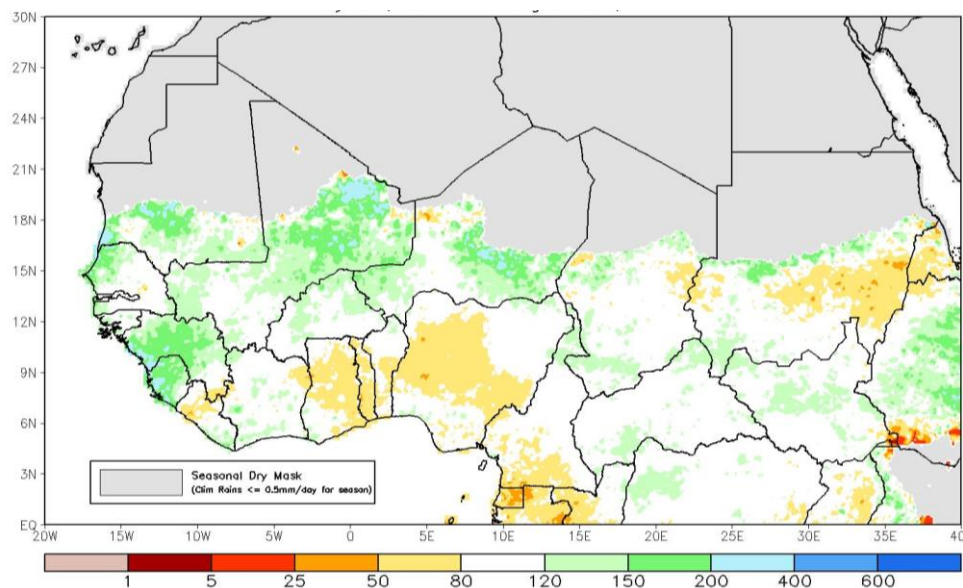
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## Summary

This report offers an overview of the 2013 rainy season in West and Central Africa, *vis-a-vis* rainfall patterns and subsequent impacts on populations, agriculture, and the spread of disease. This report covers the 24 countries under OCHA-ROWCA's coverage area for the period of June to 11 September 2013.

## Rainfall Patterns in 2013



Source: <http://www.cpc.ncep.noaa.gov/products/fews>

The rainy season in West and Central Africa occurs from June-October. To date, rainfall across the region has varied both across countries and as compared to normal rainfall patterns in previous years.

**Delays to the rainy season** occurred in the Gulf of Guinea countries, particularly in western Nigeria, Ghana, Liberia, Togo and Benin with recently recorded rains occurring at below-average levels.

**Insufficient and poorly-distributed rainfall** has occurred since June, leading to increasing rainfall deficits across the Gulf of Guinea countries with these

countries currently experiencing a 30-day rain deficit. Some increases have been recorded in the past two weeks, notably in Benin which has had heavy rains in the north during the first week of September.

**High rainfall patterns** were recorded throughout the season in West Africa, notably in south Senegal, Guinea Conakry, Sierra Leone, and western Mali. High rainfall has resulted in damaging floods in at least nine countries in the region, namely: Benin, Burkina Faso, The Gambia, Guinea, Mali, Mauritania, Niger, Nigeria, and Senegal; heavy rains that have resulted in flooding has occurred in Benin, Mali, Niger, Nigeria, and Senegal in August alone.

In addition to floods, heavy rains have resulted in the overflowing of the Gambia River in Senegal, the Niger River in northern Benin and the risk of overflow of the latter river in Nigeria, and Mali. On 5 September, Benin national authorities issued a red alert, duly noting the potential for the River to flood on the Nigerian side; as of 11 September, this alert is forecast to be reduced to Orange by Saturday, 14 September.

**Map 2: Risk of overflow of The Niger River:**

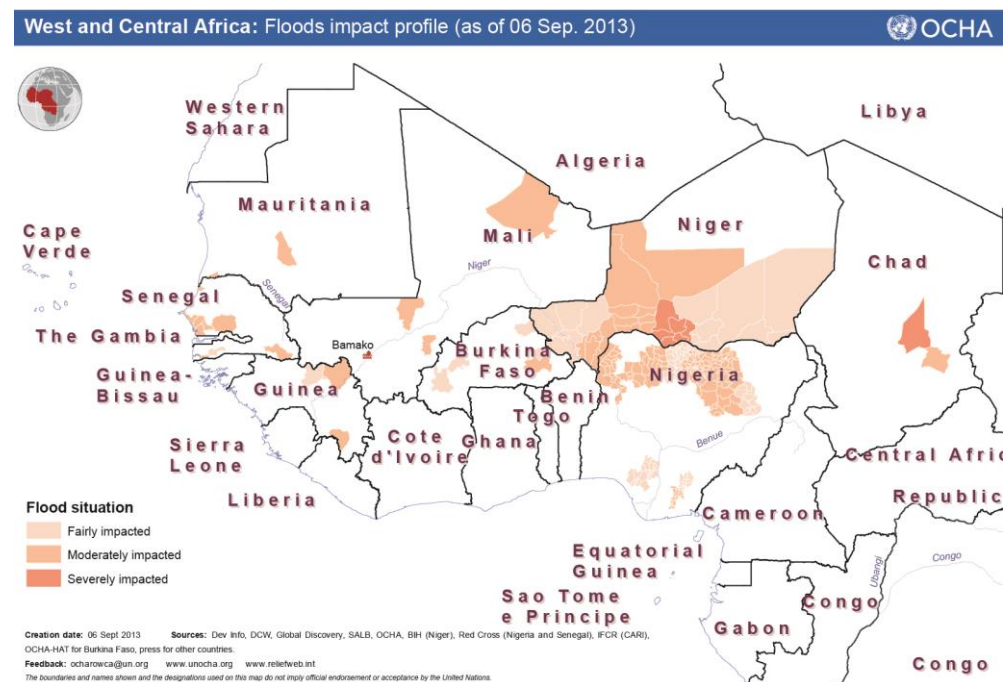


### *Rains Forecast*

Cumulative rainfall in the next month should be **normal to high rainfall** in central Sahel, northern coastal Sahel, western Mali, southern Mauritania, extreme southern Chad, most of Senegal and The Gambia. **Rainfall deficits expected in:** central Chad, southeast Niger, and northeast Nigeria.

# Rainy Season Impact on Populations

Map 3: 2013 Flood-Affected countries in West and Central Africa:



High rainfall has resulted in damaging floods in Benin, Burkina Faso, The Gambia, Guinea, Mali, Mauritania, Niger, Nigeria, and Senegal. These rains have resulted in damaging floods that have compromised the personal security of affected populations and rendered many homeless and/or with compromised livelihood options.

Table 1: 2013 Cumulative Floods and Damages: <sup>1</sup>

Country	Affected Persons	Displaced Persons	Deaths	Homes Damaged	Homes Destroyed	Flooded Lands (by Hectacre)	Date of Event
Benin	33,000	10,000		5,500		21,000	5 Sep
Burkina Faso	6,712		1		602		15-17 Aug
Gambia	3,300	216	2				12-13 Aug
Guinea	11,106						1-17 Aug
Mali	34,700	20,000	37		280		9-12 Aug and 28 Aug
Mauritania	4,225	2,305	8	525	313		19-20 Aug
Niger	75,347		12		2,100	13,000	13 Aug- Present
Nigeria	81,506	7,924	19	6,505		2,217 (by farmland)	14 Apr-17 Aug
Senegal	73,500 <sup>2</sup>		5	6,777			30 Aug
<b>TOTAL</b>	<b>323,396</b>	<b>40,445</b>	<b>84</b>	<b>19,307</b>	<b>3,295</b>	<b>34,000 Ha/2,217 farms</b>	

<sup>1</sup> The figures in this table are preliminary estimates collected in real time from partners' assessments, reports, and media sources.

<sup>2</sup> Figures are still being determined in Senegal with the range of affected persons estimated as between 73,500-105,000.

As of 11 September, At least 323,396 have been affected by floods in these countries with an estimated 40,445 people displaced, and 84 deaths reported as a result. An estimated 19,307 homes have reportedly been damaged or destroyed in these countries, and over 34,000 Hectares of agricultural lands flooded. In Nigeria over 80,000 people have been affected by floods in the past two months, with the states of Abia, Zamfara, Bauchi and Kogi being the most affected out of 21 states impacted.

*2013 v. 2012*

The extent of flooding and subsequent damage caused by floods in 2013 is significantly lower than the impact of high rains across the region last year, when 13 countries reported floods affecting 1.5 million people. In Nigeria alone, over 130,000 people were affected by what was reported as the worst floods the country had experienced in 40 years. With the exception Benin currently, flooding in 2013 does not presently raise cause for alarm.

**Floods in Bamako, Mali**



Heavy floods in Mali's capital Bamako on 28 August has affected nearly 35,000 people, resulting in 37 deaths and at least 20,000 displaced people (2,133 families).

Assessments conducted by IOM indicate that 47 per cent of affected persons are children; 55 per cent of the affected families are still living on their land to take care of their remaining belongings; 10 per cent of the displaced are living with host families; and 35 per cent of the displaced have relocated to seven provisional reception centres. As regards damage assessments, at least 60 per cent of the houses assessed are completely destroyed, 15 per cent partially damaged but habitable, and 25 per cent are inhabitable.

The assessment similarly highlighted that 88 per cent of latrines in the affected zones are either damaged or destroyed by floods. Additional WASH concerns included the presence of stagnant water, posing a problem to the spread of waterborne diseases and malaria. Cases of acute respiratory infections among affected communities have also been identified, especially among children.

## Rainy Season Impact on Agriculture

Delays in the starting of the rainy season, sporadic rainfall patterns and below-average or high rainfalls have all impacted the agricultural sector in different albeit concerning ways.

### **Delays & Dryness**

Delays and below-average rainfall will likely have a negative impact on agricultural production in the five Gulf of Guinea countries, namely, Liberia, Ghana, Togo, Benin, and Nigeria. As reported by FAO/WFP, three successive months of water stress for crops in these countries has increased the possibility of below average harvest and a reduction in the planting of soybeans and rice.

Erratic rains in Senegal have caused irregular crop development for groundnut, cowpea and cereal; the state of vegetation development is also reported to be uneven with some deficits in the northern parts of Senegal. If rainfall in the last month of the rainy season improves, then the harvest this year should be at or above average.

### **Floods**

Floods have caused damage to livelihoods and agricultural inputs in all nine countries affected by floods since the onset of the rainy season. As regards agriculture, the destruction of crops, loss of livestock, and the disruption the commercialization of food products, are among the concerns at this point in the rainy season. In Mali 76 tons of rice and millet were destroyed by late-August floods, in addition to 50 hectares of paddy; in Niger and Benin over 34,000 hectares have been affected. In Nigeria, preliminary reports indicate that at least 2,217 farmlands have been destroyed by flooding this season.

*Senegal experienced exceptionally high rainfall in late August, reaching as much as 230 mm. in some areas. Dakar, Fatick and Kaolack were reportedly the worst affected regions by the ensuing flash floods. Agriculture lands were submerged with water in Fatick and Kedougou. In Kedougou, Senegal agricultural lands were flooded by the Gambia River and in Fatick agricultural lands were reportedly flooded by flash floods.*

*Crops affected this rainy season have included groundnuts, cowpea, and cereal in Senegal and rice and millet in Mali*

## **Locusts**

WFP/FAO report that heavy rains in summer breeding grounds for locusts occurred in Mali, Niger, Mauritania, and northeast Chad. The agencies predict that there will likely be an increase in locust infestations from such summer breeding and have called for close monitoring of the situation in the coming months.

## **Rainy Season Impact on Spread of Disease**

Heavy rains and floods may be facilitating the spread of waterborne diseases in Nigeria and Mali.

In Nigeria, health officials warn that Nigeria remains vulnerable to further outbreaks because of its high population density and poor sanitation in many areas; in both the 2010 and 2011 rainy seasons, the country faced cholera outbreaks that killed over 2,000 people. In Mali, rapid assessment teams deployed to assess needs and damage following the end-August floods have documented cases of acute respiratory infections among flood affected communities, notably among children.

## **Response to Date**

Responses to the issues posed by both high and low rainfalls are being addressed in the following ways.

### *Benin*

Humanitarian partners have been mobilized through the 'Agence Nationale de Protection Civile' (ANPC) and the UN Resident Coordinator's office. Local authorities in Karimama have identified 14 relocation centres for flood affected populations. Critical needs identified include 2,200 tents, food and health supplies.

### *Mali*

In Mali, the government requested the assistance of IOM to provide immediate assistance to affected populations. IOM has since deployed five assessment teams to conduct needs and damages assessments (*see Floods in Bamako, Mali* insert on page 4).

### *Niger*

The government of Niger is unblocking 62 million CFA (USD\$124,000) to respond to current humanitarian needs and assist those threatened by the rains. On 6 September, the Government launched a pressing appeal calling for national and international support in the amount of USD\$64 million underlining that it lacked the means to adequately meet the needs of floods victims.

### *Nigeria*

The government has been working through its Ministry of Health, NEMA, and SEMA, in tandem with the Red Cross and UNICEF, *inter alia* to provide assistance to flood-affected population. In the three most flood affected states of Zamfara, Kogi, and Bauchi, relief assistance has been as follows: in Bauchi, UNICEF responded with damage and needs assessments; in Zamfara, UNICEF, the Red Cross, and the Ministry of Health conducted joint evaluations; and in

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For updates on the Sahel response, follow @OCHAROWCA  
<http://sahelnow.blogspot.com>

Kogi, SEMA and NEMA engaged in a sensitization campaign underlining sanitation and health concerns. State and national authorities similarly engaged in temporary site development and the provision of free medical services to address floods. On 6 September the NEMA announced that it was going to set up two IDP camps in Bauchi state for current and future flood-affected populations.

### *Senegal*

To address the floods, the Government of Senegal set-up water pumping facilities across the country as well as spraying / vector control mechanisms, UNICEF (through the Ministry of Health and Social Affairs), World Vision, the Senegalese Red Cross and other partners also provided assistance flood-affected populations.

The Government (through the *Service Nationale d'Hygiene*), the Senegalese Red Cross and UNICEF as WASH Sector Lead are carrying out further joint assessment missions to identify people in need and address remaining gaps in response. Preliminary reports indicate that primary needs include WASH services, notably vector control, followed by NFIs (including kitchen kits and standard NFI kits).