

SAHEL WEATHER AND CROP SITUATION REPORT



Report No.3, 10 August 2001

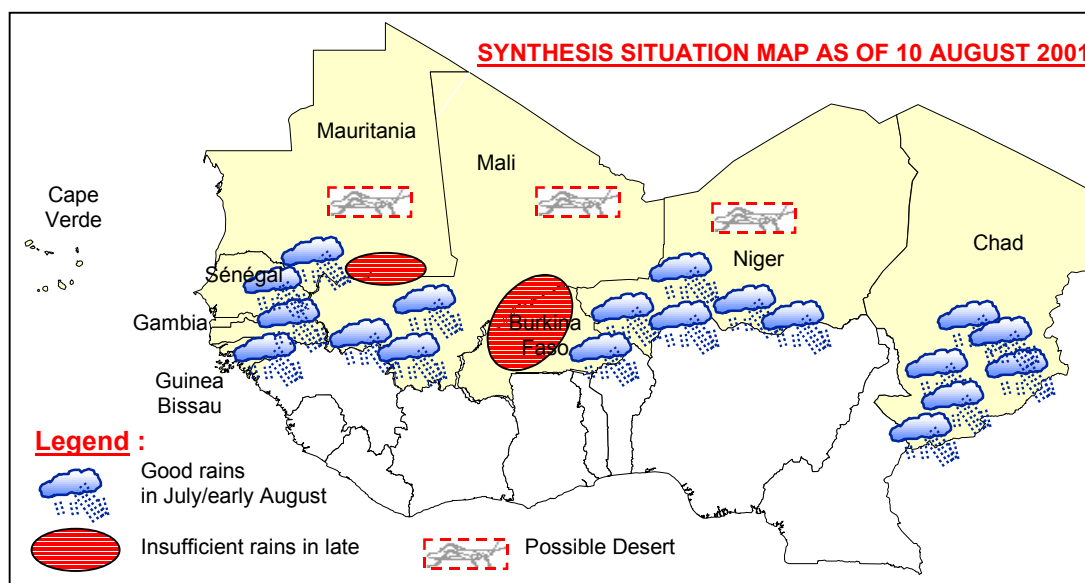
CROPS ARE DEVELOPING SATISFACTORILY REFLECTING OVERALL REGULAR AND ABOVE NORMAL RAINS IN JULY

SUMMARY

Rains were generally regular and widespread over the main producing zones of the Sahel in July. Rainfall improved notably in **Chad, Mali and Niger** during the second and the third dekads of July. Precipitation has been particularly abundant in the sudanian zone of **Chad** during the third dekad of July compensating for insufficient rains earlier in June. By contrast, the north of **Burkina Faso** received reduced rains. In the western countries (**Mauritania, The Gambia, Guinea-Bissau and Senegal**), rains were regular and above normal during the first dekad of July. They decreased somewhat in mid and late July but remained widespread, notably in Guinea-Bissau. **Cape Verde** registered its first significant rains in mid-July in Santiago and Fogo islands. Satellite imagery for the first week of August indicates that Chad, Burkina Faso and Senegal received above normal rains.

Soil moisture reserves are generally adequate to allow a satisfactory crop development in most agricultural zones. No water stress is reported so far. Late plantings of coarse grains are underway in the north of Senegal and in Mauritania while wet plantings have started in the agricultural islands of Cape Verde.

Pastures are regenerating gradually in the pastoral zones. Infestations of grasshoppers are reported in Chad and Niger resulting in localized replanting of coarse grains. Although no Desert Locusts were reported, low numbers of solitary adults are likely to be present in areas of southern Mauritania, northern Mali, northwestern Niger and perhaps in eastern Chad and are expected to increase gradually with rainfall.



SITUATION BY COUNTRY



BURKINA FASO: Regular and well-distributed rains in July permitted satisfactory crop development. Following improved rains in late June, precipitation became regular and widespread up to mid-July. Rains decreased in the north during the last dekad of July.

Cumulative rainfall as of late July was generally below last year's level but the spatial distribution of the rains was adequate for crop development. Satellite images for the first days of August indicate that the northern part received above normal rains, compensating for earlier reduced precipitation. Early planted crops are growing satisfactorily while late plantings of coarse grains are generally in the tillering/elongation stages in the east and the centre.

Pastures are regenerating countrywide reflecting good rains in July. Pest activity is limited.



CAPE VERDE: Regular rains in mid-July permitted wet planting in most agricultural islands. Following scattered and limited rains in early July, the rainy season really started during the second dekad of July in Fogo and Santiago islands. Regular rains were registered during the last dekad of July on most agricultural islands. Wet plantings of maize are underway since mid-July while dry plantings undertaken earlier are emerging in the humid zones of Santiago and Fogo islands.

The pest situation is calm.



CHAD: Regular and well above normal rains from mid-July benefited crop development in all agricultural zones. Following erratic rains in June and early July, precipitation improved significantly during the second dekad of July and remained regular, widespread and well above normal in all agricultural zones. During the last dekad, rains were particularly abundant in the southwest and the centre where deficit of rainfall had been recorded in June. Cumulative rainfall

as of late July is above last year's level. Satellite images for the first week of August indicate that precipitation remained well above normal in the west and the centre. Soil moisture reserves are adequate in most agricultural zones. Crops are developing satisfactorily. Millet and sorghum are generally in the tillering/elongation stages in the Sahelian zone, elongating in the Sudanian zone.

Pastures are regenerating widely following these good rains. Attacks of grasshoppers and armyworms are reported in several parts of the south and the centre resulting in localized replanting of millet and sorghum. Grain eating birds also caused damage to maize in the south of Batha region. A few Desert Locusts may be present in parts of Biltine and near Fada in BET where small-scale breeding could occur in areas of recent rainfall



THE GAMBIA: Below normal rains in late July delayed transplanting of rice. After a dry period in mid-June, rains resumed in late June and became abundant and widespread during the first dekad of July. These good rains permitted plantings of coarse grains. Rains decreased

gradually from the second dekad but remained widespread. In the centre and the eastern regions, rains were below normal during the last dekad of July resulting in a delay for rice transplantation.



GUINEA-BISSAU: Good growing conditions prevail allowing satisfactory crop development. After limited rains in mid-June, precipitation improved in late June and early July. Rains decreased significantly in mid July but picked up gradually and became abundant

and widespread across the country during the last dekad. Millet and sorghum are in the emerging and tillering stages. Transplanting of swamp rice from seedbeds is underway after desalinisation of swamp rice fields.

Insect infestations are reported in several zones in Gafata and Gabu regions but there is no significant damage to crops.



MALI: Regular and abundant rains in July benefited crop development. Abundant rains were registered in early July in the south west. They remained regular and above normal during the second dekad of July. Precipitation became widespread and abundant in the south and the centre during the last dekad. Cumulative rainfall as of late July exceeds the 2000 levels. Planted areas of coarse grains are higher than last year. Crops are developing satisfactorily in all agricultural zones. Millet and sorghum crops are in the tillering/elongation stages. Irrigated rice is now being transplanted in the Office du Niger zone, while planting of rice is in progress in the Office Mopti and Ségou irrigated areas. Soil moisture reserves are adequate.

Pastures are generally good. No significant pest infestation is reported. Desert Locust numbers are expected to gradually increase in the Adrar des Iforas where scattered adults are likely to be present and breeding in areas of recent rainfall.



MAURITANIA: Widespread plantings have been undertaken reflecting regular rains since early July. After limited rains in late June, precipitation improved in the southeast during the first and the second dekads of July. Rains decreased significantly during the last dekad particularly in the two Hodhs and Guidimakha. In these regions, cumulative rainfall as of late July was below last year's level. By contrast, Assaba, Gorgol, Brakna and Trarza received above normal rains. Wet plantings of coarse grains are well underway in all agricultural zones. Off-season irrigated rice is being harvested in Adrar and Tagant.

Pastures are regenerating gradually in all pastoral zones. No significant pest activity has been reported. Isolated Desert Locusts are likely to be present in the south from Trarza to the two Hodhs. Small-scale breeding is likely to be in progress in areas of recent rainfall.



NIGER: Widespread rains in July permitted plantings to be completed. Rains increased progressively towards the north of the agricultural zones. They became regular and generally above last year and above normal in mid-July. All the villages located in the north completed their plantings by the end of July. Early plantings are developing satisfactorily. Soil moisture reserves are adequate. Some flooding is reported in Dosso region.

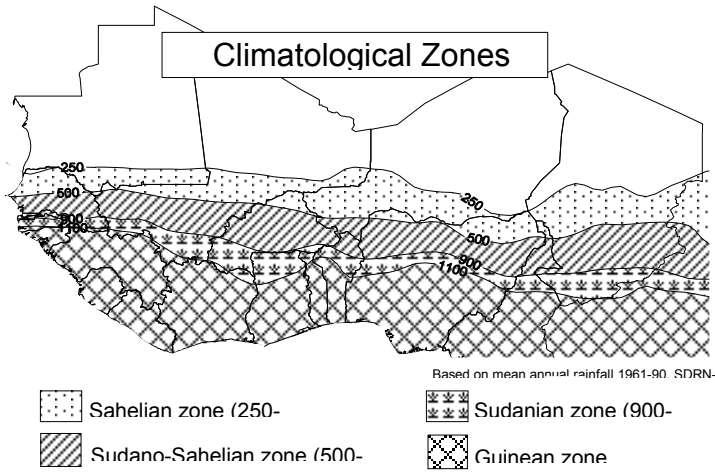
Pastures are regenerating normally. Infestations of grasshoppers and floral insects were reported in many localities of Maradi, Tahoua, Tillabery and Zinder departments. Control measures have been undertaken. Desert Locust numbers are expected to gradually increase in Tamesna and parts of Aïr where scattered adults are likely to be present and breeding in areas of recent rainfall.



SENEGAL: Widespread rains from early July permitted plantings to progress northwards. Above normal rains reached the northern regions in early July. They remained regular and widespread during the second dekad of July. Cumulative rainfall as of the end of July is above last year's level and above normal except in Linguère, Kébémér and Vélingara. Satellite images for the first days of August indicate that rains improved significantly in the centre and the north. In general, millet and sorghum crops are developing satisfactorily. They are tillering/elongating in the south and emerging in the north.

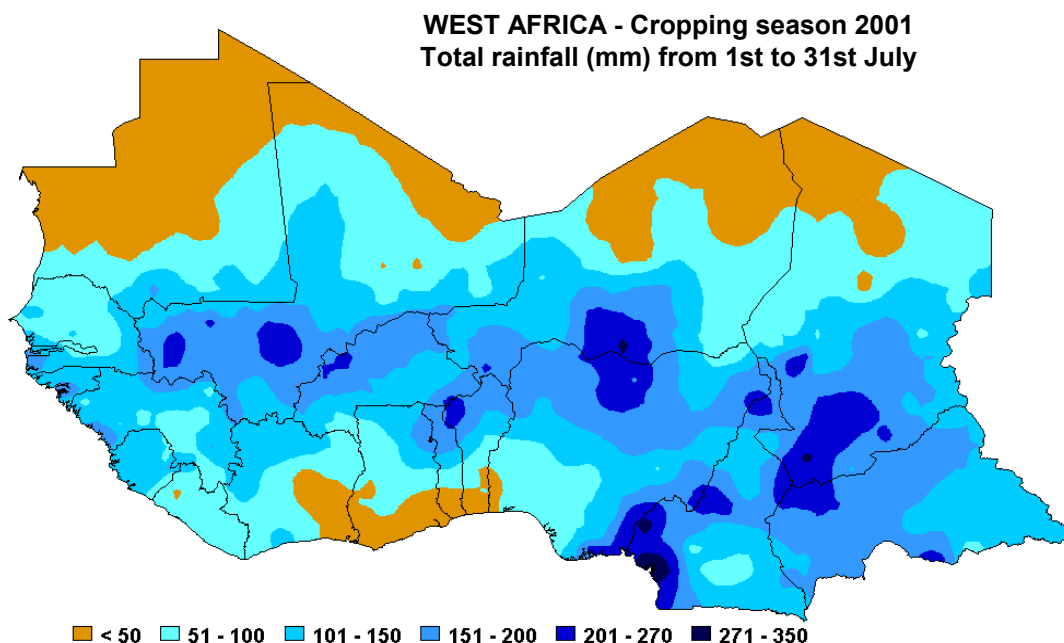
Pastures are abundant in the south while they are regenerating progressively in the centre and the north. The pest situation is calm.

The following map provides reference to the different climatological zones of the Sahel as defined in the box on page 6

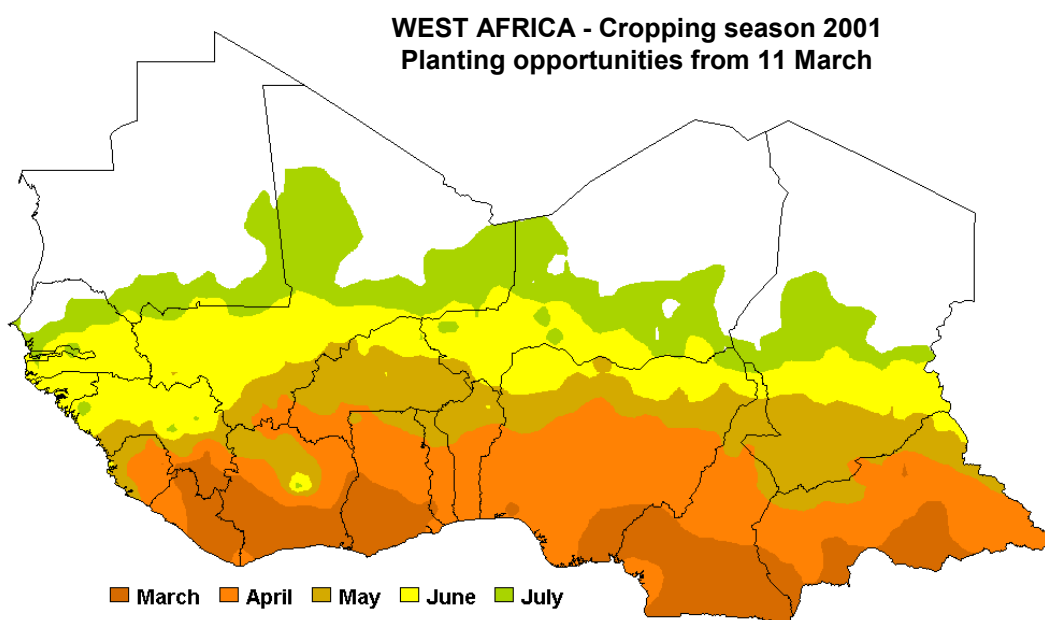


TOTAL RAINFALL AND PLANTING OPPORTUNITY MAPS

The first map indicates the total rainfall amount from 1st to 31st July. Data is extracted from FAO field reports and the RainFall Estimate (RFE) Satellite Imagery as produced by NOAA/USGS/FEWS/USAID project. The RFE images are obtained by interpolating various parameters recorded on the ground and obtained through remote sensing measurements such as: rainfall, relative humidity, wind speed, elevation, cold cloud temperatures.



The map below shows the estimated planting time (opportunity) as defined by the dekad (10-day) satisfying the following requisites: during the first dekad, 25 mm of rainfall should be measured and a total rainfall of at least 20 mm should be recorded during the two next dekads. Data used for this analysis are from FAO field reports and RFE imagery.



Data source: NOAA - Prepared by: FAO, SDRN, Agrometeorology Group

This is the **third GIEWS report of the 2001 season on weather and crop conditions in the Sahelian countries of western Africa**. Geographical coverage of these reports include the nine CILSS (Permanent Inter-State Committee for Drought Control in the Sahel) member states: Burkina Faso, Cape Verde, Chad, Gambia, Guinea-Bissau, Mali, Mauritania, Niger and Senegal. Reports will be issued each month from June to November. The final report for 2001 with the first production estimates will be issued in late-November

These reports are prepared with data from, and in close collaboration with, out-posted FAO Representatives, the Agro-Meteorology Group and the Environmental Monitoring Group (SDRN), the Emergency Centre for Locust Operations (ECLO), the Special Relief Operations Service (TCOR), the World Food Programme (WFP), as well as various Non-Governmental Organizations (NGO's). In this report, satellite imagery provided by FAO/ARTEMIS, field data on rainfall, FAO agro-meteorological crop monitoring field reports and information provided by FAO Representatives up to **31 July** have been utilized. The satellite images of the first week of August has also been utilized for final updating.

In these reports, reference will be made to four different **eco-climatic zones** based on the average annual precipitation and agricultural features, i.e. Sahelian zone, Sudano-Sahelian zone, Sudanian zone and Guinean zone. They are shown in the map on page 4 and described below:

Sahelian zone: Where average annual precipitation ranges between 250 and 500 mm. This zone is at the limit of perennial vegetation. In parts where precipitation is less than 350 mm, only pastures and occasional short-cycle drought-resistant cereal crops are grown; all cropping in this zone is subject to high risk.

Sudano-Sahelian zone: Where average annual precipitation ranges from 500 to 900 mm. In those parts of this zone where precipitation is less than 700 mm, mostly crops with a short growing cycle of 90 days are generally cultivated predominantly sorghum and millet.

Sudanian zone: Where average annual precipitation ranges from 900 to 1 100 mm. In this zone, most cereal crops have a growing cycle of 120 days or more. Most cereals, notably maize, root and cash crops are grown in this zone.

Guinean zone: Where average annual precipitation exceeds 1 100 mm. Guinea-Bissau and a small area of southern Burkina Faso belong to this zone, more suited to root crop cultivation.

Reference will also be made to the **Intertropical Convergence Zone (ITCZ)**, also known by its trace on the earth's surface, called the **Intertropical Front**. The ITCZ is a quasi-permanent zone between two air masses separating the northern and southern hemisphere trade winds. The ITCZ moves north and south of the equator and usually reaches its most northerly position in July. Its position defines the northern limits of possible precipitation in the Sahel; rain-bearing clouds are generally situated 150-200 km south of the Intertropical Front.

Please note that this report is available on the **Internet World Wide Web** at the following address: [HTTP://WWW.FAO.ORG/GIEWS/](http://WWW.FAO.ORG/GIEWS/) then click on "English" and "Sahel Weather and Crop Situation Reports".

The report can also be received automatically by **E-mail** as soon as it is published, subscribing to the **GIEWS/Sahel report ListServ**. To do so, please send an E-mail to the FAO-Mail-Server at the following address: mailserv@mailserv.fao.org, leaving the subject blank, with the following message:

subscribe GIEWSSahel-L

To receive the report in French, do the same with the message:

subscribe SMIARSahel-L

To be deleted from the list, send the message:

unsubscribe GIEWSSahel-L (or unsubscribe SMIARSahel-L)

This report is prepared under the responsibility of FAO/GIEWS with information from official and unofficial sources and is for official use only. Since conditions may change rapidly, for further information, please contact Mr. Abdur Rashid, Chief, Global Information and Early Warning Service, FAO Headquarters- Rome
Fax No.: 0039-06-5705-4495, E-Mail address: GIEWS1@FAO.ORG

Web site : [HTTP://WWW.FAO.ORG/GIEWS/](http://WWW.FAO.ORG/GIEWS/)