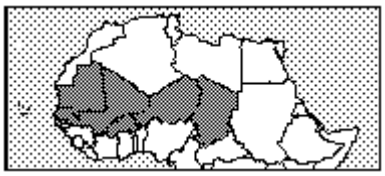


SAHEL WEATHER AND CROP SITUATION 1998

Report N°3 - 10 August 1998

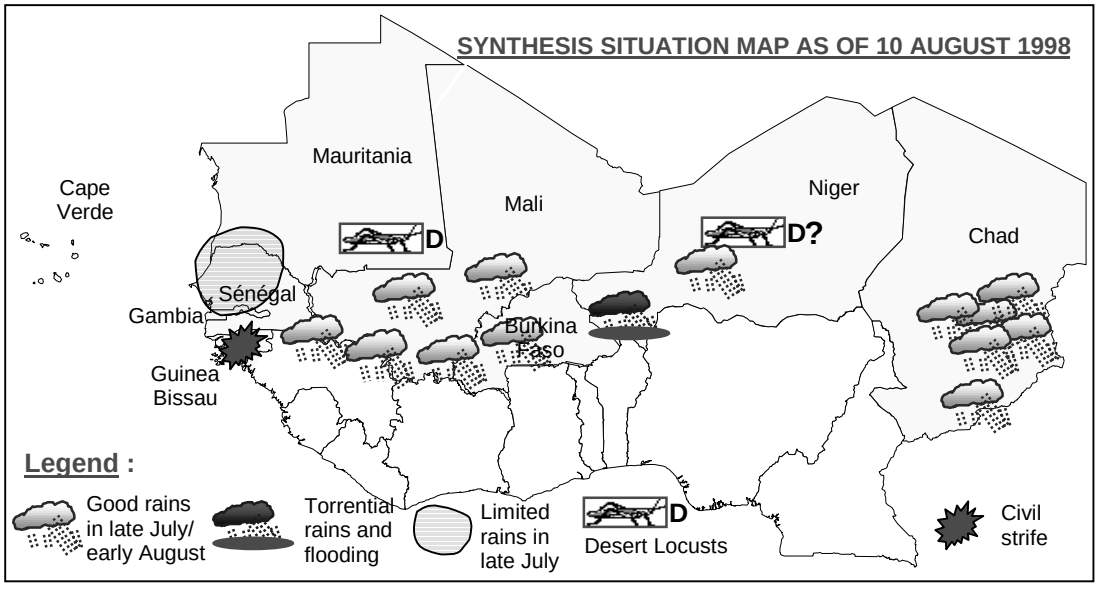
GROWING CONDITIONS GENERALLY FAVOURABLE EXCEPT IN SENEGAL WHERE CROPS ARE SEVERELY AFFECTED BY LATE AND BELOW NORMAL RAINS

SUMMARY

The rainy season is now well established in most countries of the Sahel. Following reduced rains in late June, precipitation remained generally widespread in July over most producing areas of **Mali**, **Burkina Faso**, **Niger** and **Chad**, becoming more abundant and reaching quite northern areas during the last dekad of July. By contrast, precipitation remained limited over **Senegal** and **The Gambia** and rains started only in late July in northern Senegal. In **Mauritania**, sufficient rains after mid-July permitted plantings in the main producing zones. Rains started in **Cape Verde** in late July. Rainfall decreased in **Guinea-Bissau** but remained widespread. The latest Meteosat satellite image for the early days of August indicates that clouds remain present over most producing areas of Burkina Faso, Chad, Mali, Mauritania and Niger where precipitation should remain adequate. By contrast, rains remain more limited over Senegal and The Gambia.

Reflecting good rainfall in late July and early August, crops are generally developing satisfactorily in Mali, Burkina Faso, Niger and Chad. Cereals are emerging satisfactorily in Mauritania. In Senegal and The Gambia, crops are severely affected by reduced precipitation. Many plantings failed and improved rains are urgently needed to avoid extensive crop failure.

Grasshoppers are reported in Burkina Faso, Chad, Mali, Niger and Senegal. Grain-eating birds are also present in Mali and Senegal. Limited Desert Locusts activity is reported in Niger. Small-scale breeding is expected with the onset of the summer rains in southern Mauritania, northern Mali, Niger and Chad.



EVOLUTION OF THE SITUATION IN GUINEA BISSAU

After eight weeks of fierce fighting between government of Guinea Bissau forces and army rebels, a truce negotiated by a contact group of Portuguese speaking nations was signed on Sunday 26 July. It called for an immediate cessation of hostilities, formal negotiations, a de-militarised zone around the strategically located town of Mansoa, north of Bissau, the deployment of peacekeeping troops from Portuguese speaking countries and the opening of corridors of humanitarian aid. Since then, the capital Bissau, largely deserted after weeks of heavy shelling, is reported to be quiet.

It has been estimated in late July that about 288,000 people, most of them from Bissau, were displaced in the country by the conflict and are in need of assistance. About 156,000 people were concentrated in urban areas of Bissau, Bolama and Prabis, and 134,000 camped in the countryside, mainly in the Bafata and Gabu regions.

This conflict occurred at the start of the growing season when crops need to be planted or transplanted (for rice). These agricultural activities were seriously disrupted. Insecurity disrupted also the distribution of inputs to farmers who, in many cases, consumed their seed stocks. As a result, food production is likely to fall substantially and the country will be faced by a serious food deficit during the next marketing year.

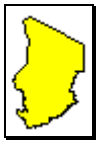
The World Food Programme (WFP) distributed some 2 800 tonnes of food through the International Committee of the Red Cross (ICRC), churches or NGOs. As of 4 August, about 500 tonnes of WFP food has been delivered to Bafata and Gabu from Guinea Conakry, and 25 tonnes from Senegal. Another 175 tonnes are en route from Senegal but heavy rain is reported to have delayed the WFP convoy. FAO is in the process of buying and dispatching of some 60 tonnes of seeds and 36 tonnes of fertilisers. An appeal for US$ 29 million has been issued by the UN Office for the Coordination of Humanitarian Affairs on 10 July to provide aid to 350,000 displaced people in Guinea Bissau over the next six months. The FAO section of the appeal foresees assistance to 40 000 farm families in Gabu and Bafata region for a total amount of US$ 2 686 900. A UN Inter-agency assessment mission visited the country on 2 and 3 August.

SITUATION BY COUNTRY

BURKINA FASO: Generally above normal rains in July benefited crop development. Following decreased rains in late June notably in the west and the east, precipitation remained generally abundant and widespread in July. Rains decreased during the third dekad in the north and the east but soil moistures reserves are adequate following above normal rainfall over the eastern half of the country during the previous dekad. Precipitation remained generally widespread countrywide in early August. Crops are developing satisfactorily. They are generally tillering/elongating in the south and the west and emerging/tillering in the east and the north.

Pastures are regenerating satisfactorily, notably in the north. Worm infestations have been reported in several areas.

CAPE VERDE: First significant rains in late July permitted wet plantings of maize. Following first rains in high areas of Mosteiros during the second dekad of July, more widespread rains were registered in the southern islands (Santiago, Fogo and Brava islands) on 24-25 and 29-30 July. A shower also reached part of Santo Antao island on 24 July. These first rains allowed planting of maize to begin on the main islands. Crops are now emerging. Seed distributions have been undertaken in the producing areas.



CHAD: Widespread and abundant precipitation benefited crop development during the entire month of July. The decreased rains of mid and late June have been well compensated by widespread and above normal rainfall since early July. Precipitation increased significantly in early July, notably in the south-west, and then intensified and progressed northwards in mid and late July, reaching quite northern areas in the Sahelian zone. Rains remained abundant and widespread in early August. Reflecting these good growing conditions, crops are developing satisfactorily. Their stages of development vary in the regions according to the planting dates.

Pastures are regenerating well following abundant rains in July. Grasshoppers are reported in Chari, Guéra and Batha. Low numbers of solitary Desert Locust adults may be present in a few places of Biltine and southern BET. Small scale laying is likely to occur if additional rains fall.

THE GAMBIA: Crop development is affected by irregular rains. Following first rains in mid and late June in the east and the centre, rainfall started in July in the west but precipitation remained below normal, notably during the first and the third dekad of the month. Plantings progressed following the onset of the rains. Crops are emerging but soil moisture reserves are limited.

GUINEA-BISSAU: Agricultural activities have been hampered by recent civil disturbances. Fighting, which started in Bissau on 7 June, spread to other areas and continued up to 26 July, date of the signature of a cease-fire, which is reported to have been respected. Insecurity is likely to have impeded normal agricultural activities at the critical planting period. Satellite imagery indicates that rains remained widespread over the country in July although below average during the first and the third dekad. They increased in early August.

The cease-fire should facilitate the resumption of normal activities in the fields. However, areas planted are likely to be reduced following insecurity at planting period and shortages of seeds, which may have been eaten during the last two months. Transplanting of rice should start after desalination of swamp rice fields (see further details in box on page 2).

MALI: Growing conditions improved following good rains in late July/early August. Precipitation remained somewhat irregular from late June to mid-July, slowing down plantings compared to last year except for irrigated rice. In late July, rains improved significantly over the main producing zones. They remained abundant in early August, reaching quite northern areas. Crops are tillering/elongating in the south; they are emerging in the north.

Pastures, which remained scarce up to mid-July in Tombouctou and Gao regions, are now regenerating satisfactorily. Grain-eating birds are reported in the Office du Niger and in Ténenkou area where treatments have been undertaken. Grasshoppers are reported in Bandiagara and Ségou areas. Low numbers of solitarious Desert Locust adults are expected to be present in a few of the major wadis in the Adrar des Iforas, the Tilemsi Valley and in Timetrine. Small-scale breeding is likely to occur if additional rains fall.

MAURITANIA: Substantial rains after mid-July permitted widespread plantings in the main producing areas. Following first rains in the south and south-east in June, limited rains were received on 1st and 7th July and then on 17-18th July. The growing season really started countrywide following substantial showers of 23-24th and 27-28th July over most producing areas, which permitted widespread planting of coarse grains. Crops are now emerging. They are tillering in Guidimakha.

Pastures have started to grow in many areas. Treatments against grain eating birds in Gorgol and Trarza are finished. No Desert Locusts were reported from mid June to mid July. Isolated solitarious adults were seen

at two locations south-west of Aioun El Atrous on 21-22 July. Low numbers of solitarious adults are expected to be present and breeding in a few places of the southern parts of Trarza, Brakna, Assaba and the two Hodhs. Consequently, scattered hoppers may appear and numbers may increase in the summer breeding areas of the south and centre.

NIGER: Crop development is generally satisfactory following improved rains since mid-July. Following the start of the rainy season in June in the west and the centre, precipitation decreased somewhat in late June and early July but resumed in mid-July, becoming widespread and abundant in late July. Torrential rains exceeding 100mm in one night were registered over Niamey and its region on 1st August. They caused substantial damage to infrastructure and possibly to crops.

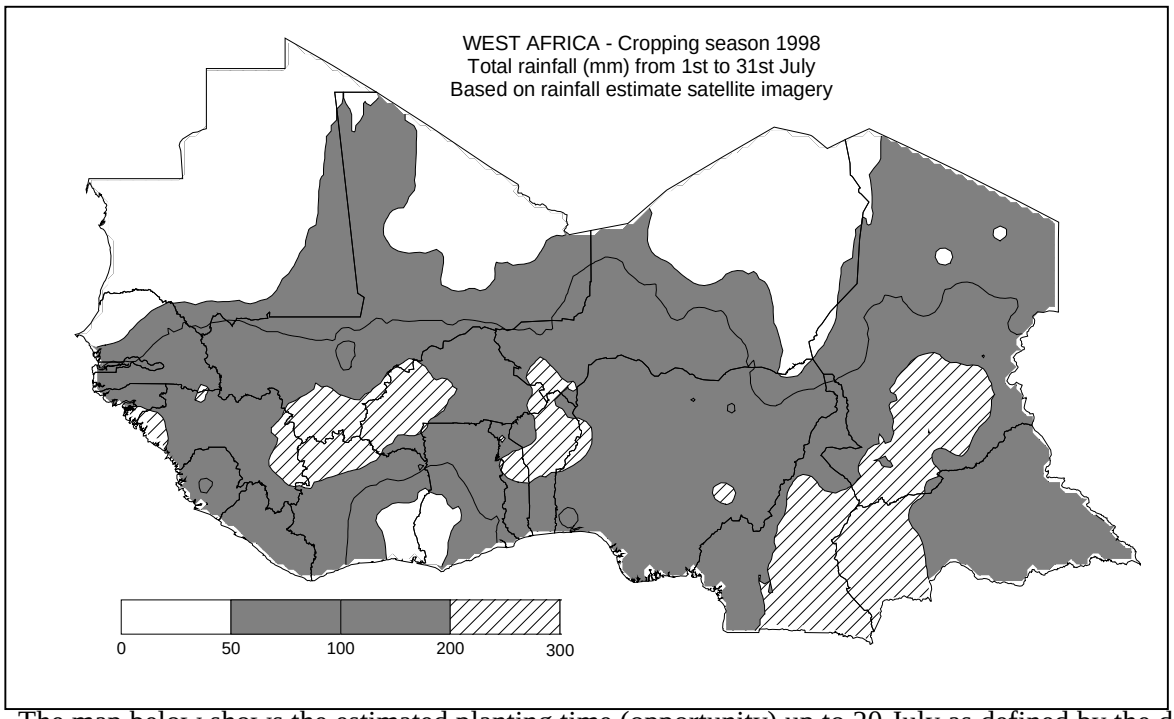
Pastures are regenerating satisfactorily. Unconfirmed reports from the Aïr indicate that Desert Locust adults were seen laying. Solitarious adults are also probably present in a few places of Tamesna. Small-scale breeding may be in progress in a few of these areas where rains have recently fallen. Breeding is expected to continue and scattered hoppers are likely to appear.

SENEGAL: Crop prospects are unfavourable reflecting late and limited rains in the centre and the north. Following sporadic rains in the extreme south in mid-May, the rainy season started in the extreme south-east in early June. Rains progressed slowly to the centre and the north, which remained dry up to mid-July. Wet planting of coarse grains started in late July in the north. Satellite imagery indicates that precipitation remained below normal in early August over the entire country. Crop development is severely affected by these insufficient rains. Many plantings failed. Improved rains are urgently needed to avoid further stress to crops and extensive crop failure.

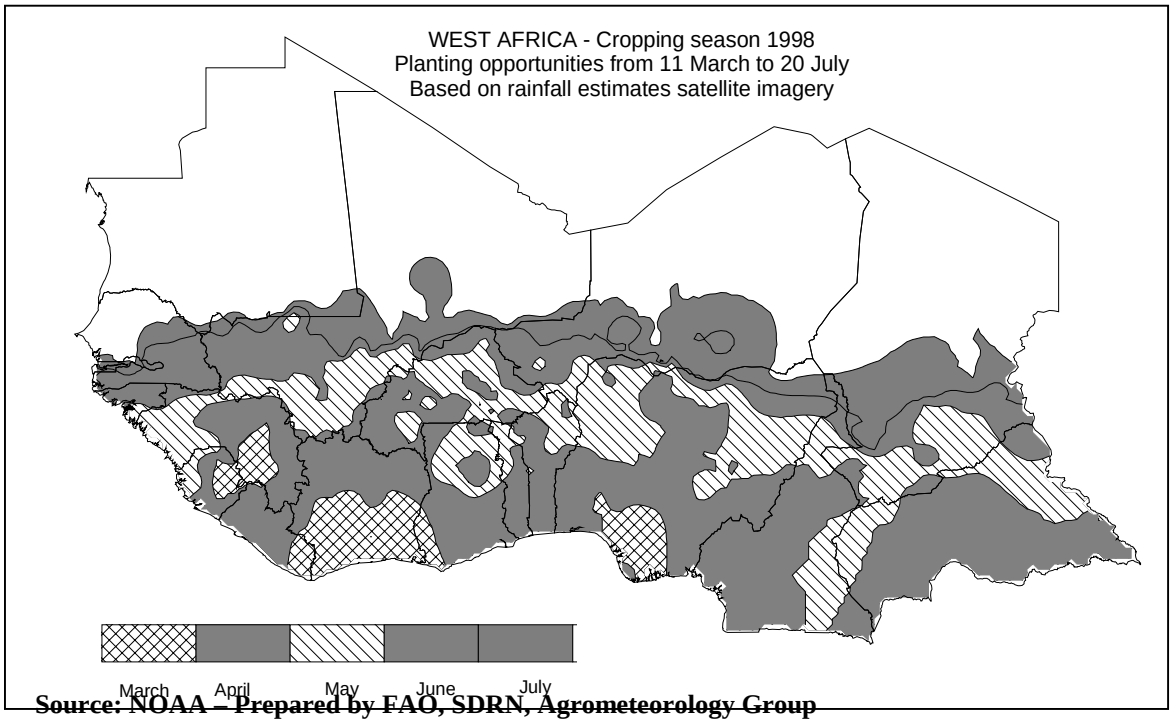
Pastures started to regenerate following first rains in the north but may dry if rains do not improve. Grasshoppers and other insect's infestations are reported in several areas. Grain eating birds (quéléa quéléa) are also present in the Senegal River region. No Desert Locust activity is reported.

TOTAL RAINFALL AND PLANTING OPPORTUNITY MAPS

The first map indicates the total rainfall amount for the whole month of July. Data is extracted from the RainFall Estimate (RFE) Satellite Imagery as produced by NOAA/USGS/FEWS/USAID project. The RFE images are obtained by interpolating various parameters recorded at ground and obtained through remote sensing measurements as: rainfall, relative humidity, wind speed, elevation, cold cloud temperatures.



The map below shows the estimated planting time (opportunity) up to 20 July as defined by the dekad (10-day) satisfying the following requisites: during that 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 also based on RFE imagery. It can be noted that plantings were still not possible in central and northern Senegal as of 20 July.



Source: NOAA – Prepared by FAO, SDRN, Agrometeorology Group

*This is the **third GIEWS report of the 1998 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 1998 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 Environment 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 FAO/ARTEMIS rainfall estimates, field data on rainfall, FAO agro-meteorological crop monitoring field reports and information provided by FAO Representations up to 31 July have been utilised. The satellite images of the first days of August have also been consulted 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/ then click on English and Sahel 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, if required, please contact: Mr Abdur Rashid, Chief, ESCG, FAO - Rome

Fax No.: 0039-06-5705-4495

E-Mail address : GIEWS1@FAO.ORG