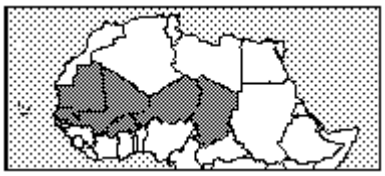


SAHEL WEATHER AND CROP SITUATION REPORT

Report No.2, 11 July 2000

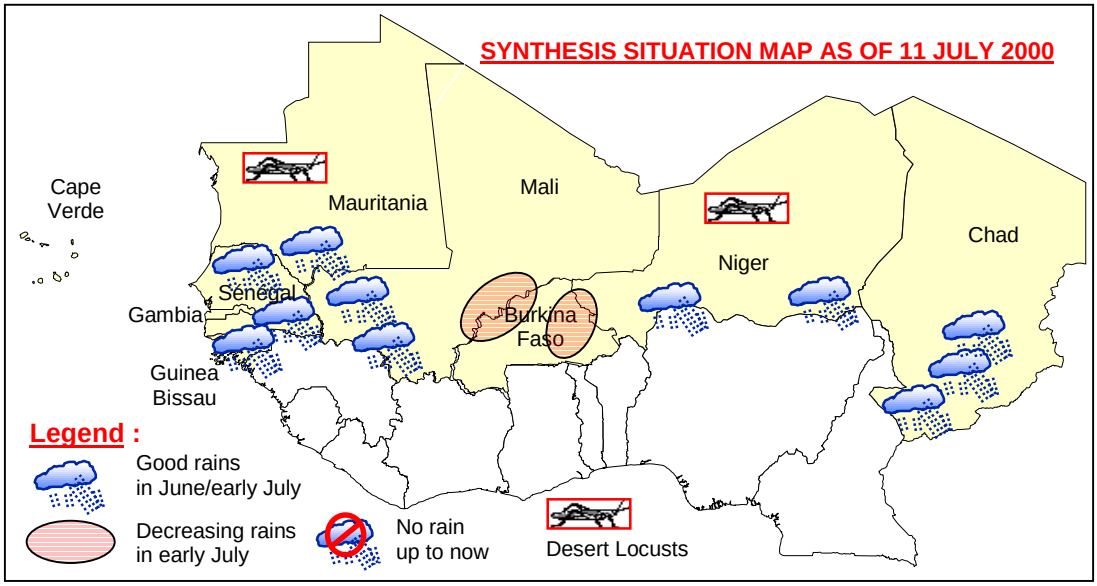
THE RAINY SEASON IS NOW WELL ESTABLISHED IN THE SAHEL

SUMMARY

Rains started in late April or May in southern **Burkina Faso**, **Chad, Guinea Bissau** and **Mali**, in the extreme south-west of **Niger** and the extreme south-east of **Senegal**. They progressed northwards in June in the rest of Senegal, **The Gambia** and southern **Mauritania**. First rains have also been registered in late June in **Cape Verde**. Satellite imagery for the first dekad of July shows that cloud coverage moved northwards, notably over western Senegal and Mauritania, central and eastern Niger and Chad. Therefore, above normal rains have been registered during this dekad in Senegal, Mauritania and western Mali. By contrast, precipitation remained more limited in central Mali and most parts of Burkina Faso.

Plantings are progressing following the onset of the rains. Crops are emerging satisfactorily in southern Burkina Faso, Chad, Mali, Niger and Senegal. Improved rains are needed in Burkina Faso to avoid water stress on recently planted coarse grains. Seed availibility is generally adequate following above average to record harvests in most Sahelian countries in 1999.

Pastures are starting to regenerate. The pest situation is mostly calm. Grasshopper attacks are reported in Chad and Niger. A few Desert Locusts were reported in mid-June in northern Mauritania. Some scattered solitary adults were also seen in central Aïr, Niger.



REGIONAL MEETING ON THE GROWING SEASON IN THE SAHEL

From 26 to 29 June in the Agrhymet Centre of Niamey, the CILSS (Comité inter-Etats de Lutte contre la Sécheresse au Sahel) organised a regional meeting on the current crop and food supply situation in the Sahel. The participants reviewed the prevailing situation at the start of the rainy season in each country. They analysed the seasonal weather forecast made by the ACMAD (African Centre of Meteorological Applications for Development) and the Agrhymet Centre for the Third Forum on Seasonal Climate Prediction (PRESAO) (*see Sahel report n°1*). Final 1999 production figures were given for Mauritania and balance sheets were reviewed accordingly. Information was given on the current food supply situation and the on-going food assistance in each country. Markets are generally well supplied and prices much lower than previous years following above average to record harvests in most countries in late 1999.

Following technical or financial difficulties encountered in 1999 in several countries, the status of the preparation of national production surveys was reviewed in each country. The Agrhymet Centre has provided funds for national services. It has scheduled technical missions in July in Chad, Guinea Bissau, Mauritania and Senegal to discuss with national authorities the implementation of this year's survey.

Some presentations on methodological aspects were done, notably by the World Food Program on its Vulnerability Assessment and Mapping programme. Under the framework of this programme, an inventory of existing national statistical sources on food security in the Sahel and the setting-up of the "Sahelian Food Aid Monitoring System" (SAFAMS), a new data base on final destination of food aid at sub-national level have started. The AP3A project of the Agrhymet Centre also presented a contribution for a methodology on how to integrate breeding in the assessment of structurally vulnerable zones in several sahelian countries. The final report and the "avis" prepared at the end of the meeting are available with the CILSS Secretariate.

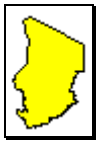
SITUATION BY COUNTRY

BURKINA FASO: Plantings benefitted from above normal rains but crops may suffer water stress following limited precipitation in early July. Following generally above normal rains during the first and the third dekad of May, precipitation decreased significantly during the first dekad of June but became widespread and abundant in mid June. Rains again decreased in late June except in the east and remained generally below normal in early July. Cumulative rainfall as of late June was generally above last year's level and above average. Therefore, conditions were favourable for the planting of millet and sorghum in the north and for their emergence in the rest of the country but more rains are needed to avoid water stress following reduced precipitation of late June/early July, notably in Kossi, Mouhoun and Sourou provinces in the north-west and in Gnagna, Namentenga and Ganzourgou provinces in the east.

Pastures are starting to regenerate countrywide and water reserves are being replenished. No pest activity is reported.

CAPE VERDE: Land preparation is underway. Scattered limited rains have been registered in late June in the highlands of Santiago island but planting of maize normally starts in July with the onset of regular rains.

Following a record harvest in 1999, the availability of seeds is adequate. However, maize seeds have been requested in Praia area on Santiago island and in São Nicolau island. Treatments against Nezara viridula have been undertaken in Santa Cruz area on Santiago island.



CHAD: The growing season is now well established in the agricultural zones. Following first rains in late March and mid-April in the extreme south, the rainy season actually started in mid-May in the south, in the Sudanian zone. Precipitation progressed northwards in the Sahelian zone in June, notably during the second dekad. They reduced somewhat during the third dekad but improved significantly during the first dekad of July. Planting of coarse grains is now underway in the Sahelian zone. Recently planted millet and sorghum are generally growing satisfactorily in the Sudanian zone.

Pastures are regenerating. Grasshopper attacks have been reported in Mayo-Kebbi but there is no significant damage to crops. Grain-eating birds and rodents caused some damage to maize sowings in irrigated areas of Bol in Lac region. No Desert Locusts activity is reported.

THE GAMBIA: Widespread rains permitted the start of plantings. First rains were registered in the east in early June. They progressed to the west and covered almost the entire country during the second dekad of June. Precipitation became abundant during the last dekad. Planting of coarse grains is now well underway.

GUINEA-BISSAU: Abundant rains benefited plantings. Following first rains in mid-April in the east and the south, the weather remained mostly dry up to mid May. In late May/early June, rains covered the entire country, improved significantly during the second and third dekad of June and became particularly abundant during the first dekad of July. These good rains benefited land preparation and planting of coarse grains in the east and the north. Planting of rice in seedbeds is also underway. Transplanting will start in July/August after desalination of swamp rice fields following abundant rains.

Input distribution has been undertaken in some areas to limit seed availability problems following the reduced 1999 harvest. No pest activity is reported.

MALI: The growing season is starting under favourable conditions. Following generally widespread and regular rains in June, notably during the second dekad, millet and sorghum are emerging satisfactorily in the south while plantings are progressing well in the centre and the north. Cumulative rainfall as of late June is normal to above normal in most meteorological stations. However, precipitation decreased somewhat in early July in the centre. Planting of rice in seedbeds is underway in the irrigated areas along the Niger river.

Pastures are improving, notably in the south. Seed availability is good following two successive record crops in 1998 and 1999. Low numbers of Desert Locusts are likely to be present and persist in a few wadis in the Adrar des Iforas where small scale laying could commence if rainfall occurs.

MAURITANIA: First rains in June permitted plantings to start in the south. The first rains were registered on 9 and 10 June in the two Hodhs and Guidimakha. Precipitation remained limited during the second dekad of June but improved significantly during the third dekad, notably on 25 and 28 June, thus marking the real start of the rainy season. Precipitation improved again in early July, notably in Assaba, Gorgol and Guidimakha. Plantings are well underway in Guidimakha, south Gorgol, Assaba and the two Hodhs. They are about to start in the other agricultural areas.

In mid-June, some groups of Desert Locust adults were reported east of Nouadhibou in the Dakhlet, near Bou Lanouar and the Moroccan border. No other locust activity was reported during the month. Low

numbers of adults are likely to appear in the summer breeding areas of Tagant and the two Hodhs and lay with the onset of the rains. No further activity is likely in the north due to dry conditions.

NIGER: The growing season is now well underway. Following a somewhat delayed start of the rains, precipitation progressed northwards and eastwards in June, allowing land preparation and plantings of millet and sorghum. Rains eached the south-east of the country in early July. It is estimated that about two thirds of the villages had done their plantings as of late June against only one-third in 1999. Millet and sorghum are emerging or even tillering. Plantings are starting latter in the east, in Diffa and Zinder departments.

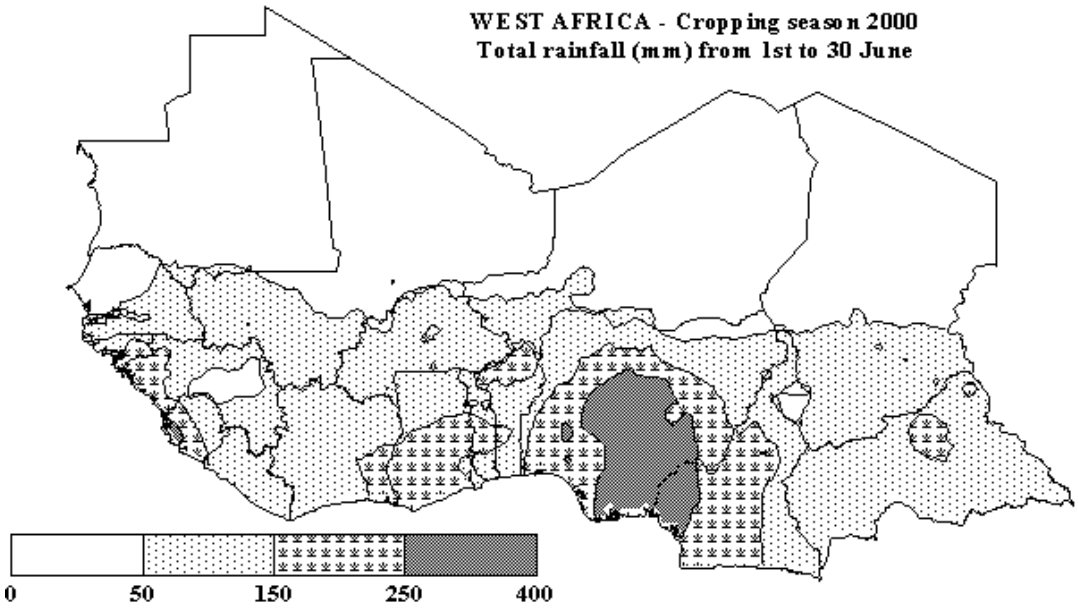
Infestations of grasshoppers, army worms and grain eating birds are reported in some areas, notably in Tahoua and Agadez departments. During the first week of June, scattered Desert Locusts were seen in central and northern Aïr. The residual populations previously and currently reported in the Aïr area could move west towards Tamesna and lay in areas of recent rainfall.

SENEGAL: Rains progressed in the south and centre in June and reached the north-west in early July. Following early rains in the extreme south-east in mid or late May, rains progressed in June towards the southwest, the centre and the north. Dry conditions still prevailed in the north-west in late June but rains arrived during the first dekad of July. Plantings of coarse grains are underway in the centre and the north. Recently planted crops are emerging satisfactorily in the south.

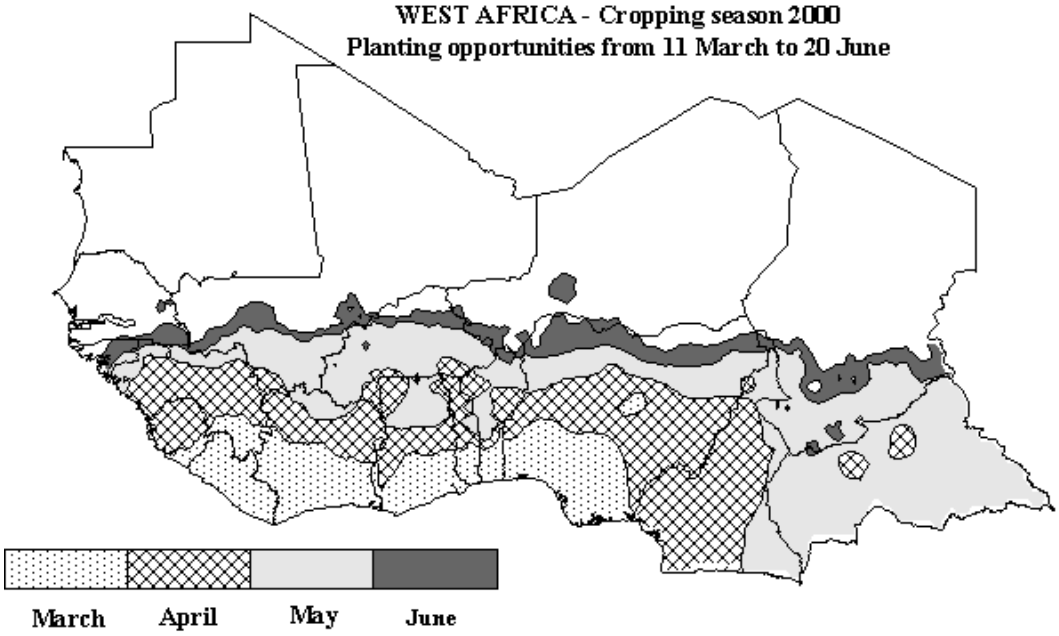
Pastures are starting to regenerate in the south and the centre. No significant pest activity has been reported but pest control teams are reactivated at national or village level. Surveys as well as preventive treatments have been undertaken.

TOTAL RAINFALL AND PLANTING OPPORTUNITY MAPS

The first map indicates the total rainfall amount from 1st May to 30th June. Data is extracted from FAO field reports and the RainFall Estimate (RFE) Satellite Imagery as produced by the 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 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 **second GIEWS report of the 2000 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 2000 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 **30 June** have been utilized. The satellite images of the first dekad of July 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 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.*

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