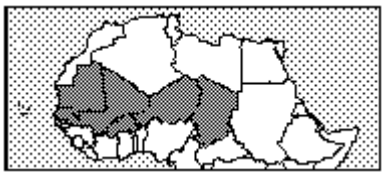


SAHEL WEATHER AND CROP SITUATION 1998

Report No 1 - 10 June 1998

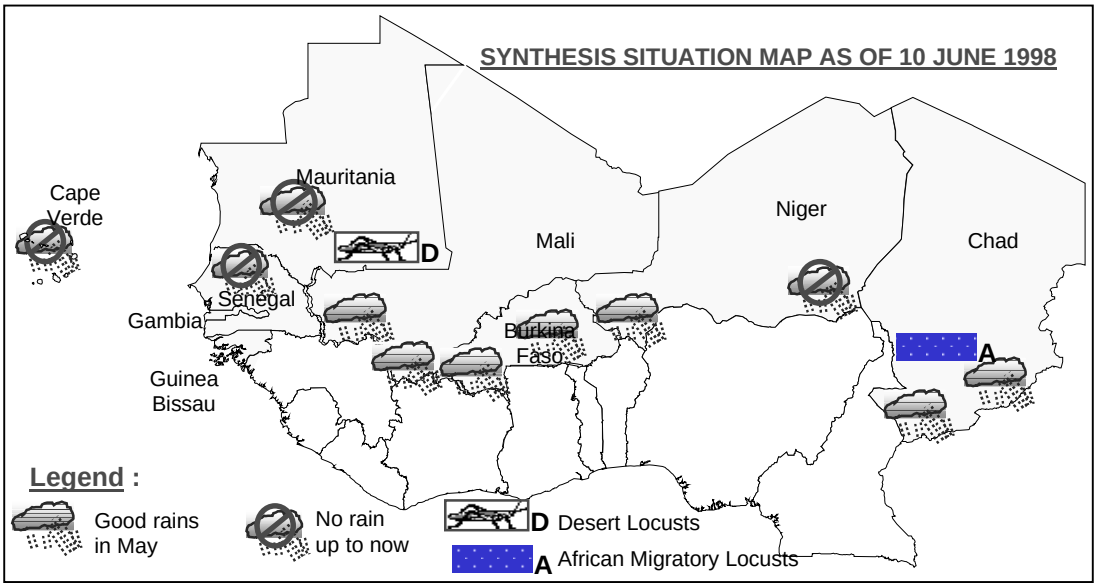
THE RAINY SEASON HAS STARTED UNDER GENERALLY FAVOURABLE CONDITIONS IN CENTRAL AND EASTERN SAHEL

SUMMARY

Rains started in early April in **Burkina Faso** and became widespread and abundant over the entire country in late May. The rainy season started in April in the extreme south of **Chad, Mali** and **Niger.** First significant rains reached the east of **Guinea-Bissau** in mid-May and the extreme south-east of **Senegal** in early June. Elsewhere, in **Cape Verde**, **The Gambia**, most parts of Senegal, **Mauritania** and eastern Niger, seasonably dry conditions continue to prevail. The last Meteosat satellite image for the first days of June indicates that cloud coverage progressed northwards over the Sahel region, especially in Mali, Burkina Faso and western Niger.

Land preparation and planting are progressing following the onset of the rains. Crops are emerging satisfactorily in Burkina Faso and southern Chad and Mali.

Grasshoppers are reported in Burkina Faso and eastern Guinea Bissau. No Desert Locusts were reported recently in the region. Low numbers of adults are expected to appear in the summer breeding areas of southern Mauritania, and northern Mali and Niger. These will lay eggs with the onset of the seasonal rains. However, the scale of breeding this summer is expected to be very small. African Migratory Locusts hoppers resulting from residual populations following infestations in late 1997 have been reported in Chad, near N'Djamena.



POSSIBLE IMPACT OF EL NINO IN THE SAHEL ?

In late 1997 and early 1998, the weather phenomenon called El Niño severely affected rainfall and crop growing conditions in several continents. El Niño ("the Christ Child") is the name given to the occasional warming of surface waters in the central and eastern equatorial Pacific Ocean. Sea-surface winds blow from east to west towards the equator and pile warm water in the ocean of the western tropical Pacific near Indonesia and Australia. As a result of this warm pool of water, the atmosphere is heated and conditions favourable for precipitation occur. Such a phenomenon, which is known to occur every 2 to 7 years, with varying degrees of intensity and duration, may affect agriculture and water resources either positively or negatively.

This year's El Niño is regarded by various experts as one of the most severe this century with record Pacific ocean surface temperatures being observed. In Asia, El Niño-related droughts have affected cereal production in Indonesia, China, Korea D.P.R, the Philippines, Thailand as well as Papua New Guinea in the Pacific Rim. In Latin America, abnormal dry weather delayed plantings in Central America while substantial perturbations have been registered in Bolivia and Nordeste of Brasil. In Africa, alternating droughts and floods, whose relation with El Niño is not established, caused substantial losses of crops and livestock in most of eastern Africa and in several countries of central Africa. By contrast, in southern Africa, the fears of a severe drought similar to the El Niño of 1991-92 have not materialised.

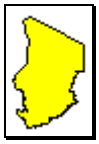
As regards the impact of El Niño in western Africa, during the past months, unusually high temperatures have been registered in most sahelian countries, reaching 2 to 5 degrees above normal. Popular belief is that this is a sign of a good growing season. Scientists who met on the subject in early May in Abidjan confirmed this, indicating that probability was greater for normal or above normal rainfall over the Sahel than for below normal rainfall, notably in the north-west of the Sahel. Predictions from NOAA (National Oceanic and Atmospheric Administration) – Africa desk - indicate that probabilities are slightly higher for above normal rainfall in central Sahel, while they are slightly higher for below normal rainfall across western Sahel and parts of eastern Sahel. However, it is too early to make definite conclusions and FAO/GIEWS will monitor closely developments throughout the season.

SITUATION BY COUNTRY

BURKINA FASO: The rainy season started with generally above normal rains. First sporadic rains fell in the south-west and the east in late March. Effective rains started in the south-east in early April. They progressed northwards over almost the entire country in mid-April and became above normal in late April. They decreased somewhat in early May but remained above normal and reached the extreme north in late May. In early June, precipitation remained abundant and widespread over the entire country. Planting of millet and sorghum is now well underway. Crops are emerging satisfactorily in the south and the west. Land preparation has started in the extreme north.

Some grasshoppers have been reported in the east and the west. Seed availability problems are likely following poor 1997 harvests in some areas.

CAPE VERDE: Seasonably dry conditions prevail. Planting of maize normally starts in July following the onset of the rains on the main islands. Maize production was particularly poor both in 1996 and 1997, which may cause problems of seed availability in some areas.



CHAD: The growing season has started on time in the Sudanian zone. First significant rains were registered in mid or late April in the Sudanian zone but also in the Sahelian zone (around 40mm in Bitkine area). They progressed northwards and remained generally above normal in May and early June. Planting of coarse grains is underway in the south and will progress northwards following the onset of regular rains.

Pastures are dry. High temperatures in recent months reduced the number and level of water reserves, causing overgrazing and conflicts between farmers and pastoralists. African Migratory Locusts hoppers have been reported in mid-May in Linia region, east of N'Djamena, as well as in some villages along the Logone River. These hoppers result from hatching of eggs laid by residual populations following infestations in these areas in late 1997.

THE GAMBIA: Seasonably dry conditions prevail. Wet planting will progress in the weeks ahead following the onset of the rains. Seed availability problems are likely, following the 1997 below average harvest in some areas.

GUINEA-BISSAU: The first significant rains reached the east and the south in mid-May. They stopped in late May but resumed in early June. Land preparation for the planting of coarse grains is underway in the east and the north. Planting of rice in seedbeds has also started. Transplanting will start in July/August after desalination of swamp rice fields following stronger rains. Seed availability problems are likely in some areas.

Grasshoppers have been reported on cassava crops in the east.

MALI: The growing season has started in the south. The first significant rains reached the extreme south in early to mid-April. They progressed northwards in early May and remained generally widespread and above normal in mid and late May. In early June, they started in the west. Land preparation is underway and first planting of millet and sorghum has started in the south. Plantings will progress northwards following the arrival of the rains.

Low numbers of solitary Desert Locust adults may be present in a few of the major wadis in the Adrar des Iforas and Tilemsi Valley and may lay eggs with the onset of the summer rains.

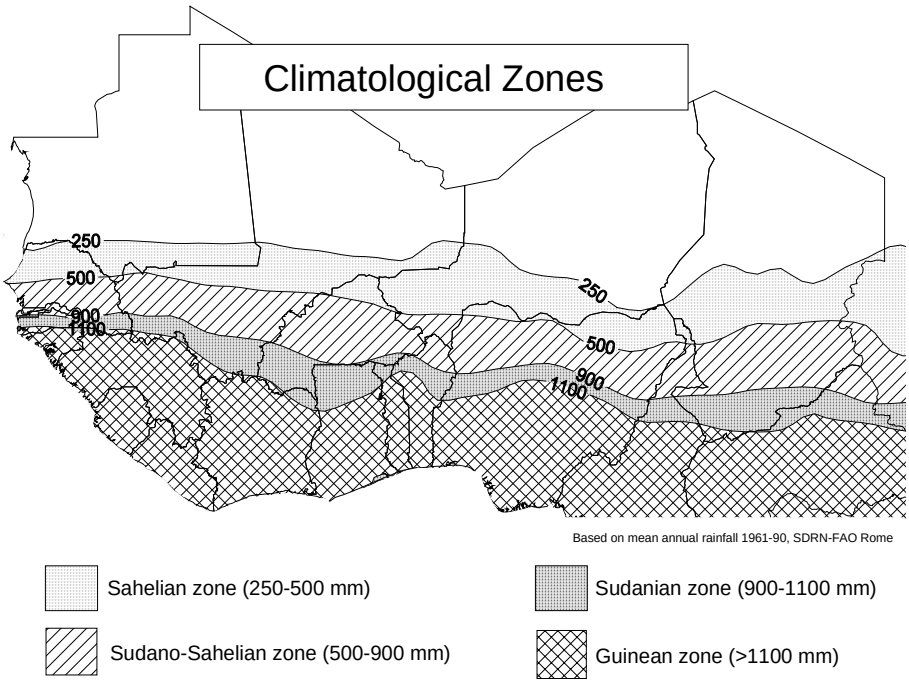
MAURITANIA: Mostly seasonably dry conditions prevail, although some limited rains have been registered in the two Hodhs. Land preparation is underway.

Desert Locust present in the north will decrease as conditions become unfavourable and adults may start to move south and appear in summer breeding areas. The scale of this movement is expected to be very small.

NIGER: First rains permitted plantings to start in several areas. The first rains were registered in the south and the south-west in mid to late April. They became more widespread and abundant in late May. In early June, they covered the western part of the country. In the east, seasonably dry conditions prevail. Plantings of millet and sorghum have started in late May and are now well underway. They have been done in about one third of the villages, but mainly in Dosso and Niamey departments where crops are now emerging. Plantings have not yet started in Agadez and Diffa departments.

Pastures are dry. Low numbers of solitary Desert Locust adults may be present in a few places of Tamesna and lay eggs with the onset of the summer rains.

SENEGAL: Mostly seasonably dry conditions prevail. Sporadic rains were registered in the extreme south in mid-May but the weather remained dry countrywide in late May, compared to last year which had registered an early start of the rainy season in late May. In early June, first significant rains covered the extreme south-east. Land preparation is underway in the south and planting will progress following the onset of the rains.



This is the ***first 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 Representatives up to 30 May have been utilized. The satellite images of the first days of June have 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/ then click on English and Sahel Reports.

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