

C I L S S

COMITE PERMANENT INTER-ETATS DE LUTTE
CONTRE LA SECHERESSE DANS LE SAHEL



PERMANENT INTERSTATE COMMITTEE FOR
DROUGHT CONTROL IN THE SAHEL

SECRETARIAT EXECUTIF



Burkina Faso



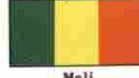
Cap-Vert



Gambie



Guinée Bissau



Mali



Mauritanie



Niger



Sénégal



Tchad

PROJET DIAGNOSTIC PERMANENT **PERMANENT DIAGNOSIS PROJECT**

EXTRAORDINARY COUNCIL OF MINISTERS MEETING

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MARKETING CAMPAIGNS ASSESSMENT 1987/1988

1988/1989 AGRO-PASTORAL CAMPAIGN

AND FOOD SITUATION PROSPECTS FOR 1988/1989

C A U T I O N

DATA PROVIDED IN THIS DOCUMENT WERE PREPARED IN MID
OCTOBER 1988 AND ARE REALY TENTATIVE, HENCE, THEY
WILL BE SUBJECTED TO MODIFICATIONS UPON RECETN OF
MORE UP-TO-DATE INFORMATION.

THIS DOCUMENT ENDEAVOURS :

- TO ASSESS THE 1987/1988 CEREAL MARKETING SEASON BY BRINGING INTO FOCUS THE INTERVENTION OF GRAIN BOARDS AS WELL AS THE FOOD SITUATION THAT PREVAILED DURING THE PERIOD THAT ELAPSED.
 - TO DESCRIBE HOW THE 1988/1989 AGRO-PASTORAL SEASON IS PROCEEDING AND TO GIVE PROSPECTS TO FOOD SITUATION BY USING CEREAL ASSESSMENT PROJECTIONS.
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1. MARKETING SEASON ASSESSMENT - 1987-1988

1.1. Organisation of the season 1987-1988

1.1.1. The Institutional Context

The 1987/1988 marketing season was organized in a context of greater disengagement of the States from the direct flow of cereal marketing.

This disengagement took place to the benefit of private national sectors whose operators were called upon to organise themselves into viable Economic interest groups (marketing groups, producer cooperatives, consumer cooperatives) capable of instilling a greater dynamism into the cereal market.

However, the major concern of the states, which is to ensure sufficient and regular supply for the people in the short and medium terms as well as food self-sufficiency in the long term, implies that their disengagement is limited by two basic constraints :

- safeguarding the income of producers and protecting national output for its promotion.
- ensuring a greater accessibility of the populations to cereals by practising non speculative consumer prices.

These constraints explain the carefulness of the states in the immediate and integral application of the disengagement measures.

Hence, the domestic marketing of dry cereals (millet, sorghum, maize, fonio) is subjected to liberalisation in most of the countries, with the private sector assuming a nearly full control while the public bodies play only a marginal role. However, the importation or exportation of these cereals remain prohibited or authorised depending on the national production level of the year concerned.

In contrast, rice marketing is generally subjected to legislations. The existence of state production units practising modern rice farming and embarking on costly investment, the strategic role of rice in urban food-intake patterns, the international context of rice marketing, all come to explain to some extent, the relaxation of existing policy in this regard. Under the circumstances, the primary marketing of rice is dominated by structures directly controlled by the state. Moreover, existing import tax regulations, financial measures governing the collection of local paddy rice and the processing and distribution of industrial rice, make it possible to guarantee the flow of national production at administered prices. Importations are subjected to controls and often placed under quotas. Here, the protection of local production is observed in all the CILSS countries.

There is therefore a greater convergence of cereal marketing policies in CILSS countries. This convergence is however not expressed in the same manner as reflected in the tools adopted by the states in the implementation of their policies.

Some of these tools (or Grains Boards), be they Offices or commissaries, are truly undergoing a structural reorganisation phase following the redefinition of their role.

The function most common to these boards is the management of the security stock in countries where such a stock exists. They are also responsible for the collection and dissemination of cereal market information to make the market more transparent.

In some countries, the grains boards are also responsible for guaranteeing supply to deficit zones. It is observed that the definition of these zones vary according to the respective countries (whether or not the urban areas are taken into consideration). Furthermore, there are no similarities in mode of action (pricing, criteria and procedures governing sales).

In some other countries, it is incumbent upon the grains boards to regulate the market through direct interventions to sustain the producer prices and/or contain increases in consumer prices.

1.1.2. Programme of activities of grains board

As the projected gross deficit was estimated at 1 562 000 tonnes for all countries in the sub region, it was expected that the cereal marketing sector would engage in an intense activity to ensure supply for the populations. In effect, in addition to the spatial redistribution of the marketable portion of local output, the equivalent of this deficit was also to be imported and distributed through the basic marketing channels. 9 940 000 tonnes (66.6 %) were identified right from the commencement of the season as part of importation programmes :

- public and private importations (741000 tonnes)
- food aids (253000 tonnes).

Within such a context, the purchasing objective of 154 000 tonnes assigned to the grains boards appeared to be negligible as compared to the volume of activity in the sector in general. A part of these purchases was to be effected by placing public tenders for bids by private traders, emphasizing the major role reserved for the private sector mainly in domestic cereal marketing.

In view of their new role, the grains boards were generally not assigned quantitative objective as regards sale. Their responsibility, in particular, was to effect sales during shortages so as to contain price increases as far as their resources will permit them.

The sale and purchasing modalities of the grains Boards are fixed by the state. The purchasing and sale of dry cereals are subjected to price legislations (Burkina Faso and Chad in particular) or open market pricing (Mali, Niger and Senegal). The purchasing price of paddy rice is fixed by the state almost everywhere.

1.2. The Marketing Season

Total cereal output in the 1987/1988 cropping season was 6 721 000 tonnes as against 7 593 000 tonnes in 1986/1987. This represents a decline by nearly 13 %. This situation explains the difficulties encountered in ensuring supply for the population as reflected in the prevailing market situation.

1.2.1. Sale and purchasing operations of grain boards

The Grains Boards could only buy 64 540 tonnes from local sources representing 42.7 % of their purchases projections.

This low level of purchases is explained by the sharp decline in supply right from March, leading to a continuous rise in prices throughout the marketing season. Hence, neither the direct purchases from farmers nor the tenders for bidding by private traders could proceed conveniently due to the shortages on the market and/or the continuous increases in prices in almost all the countries.

This situation accounts for the relatively high level of sales made by these bodies : 149 610 tonnes of dry cereals mainly, a figure equivalent to that of 1987/1988. Unlike the situation which prevailed during this latter season, these sales could not prevent the price increases which persisted in almost all the countries until in August.

1.2.2. Cereal importations

Importations were up to 1 286 300 tonnes of all cereals, 73.3 % of which were commercial importations. As compared to the 1986/1987 season there is a clear structural modification in favour of commercial importations which was then only 41.3 %.

The rate of external dependence was 17 % on the whole (1). It was 53.7 % for rice and 83.2 % for wheat.

1.2.2.1. Commercial importations

Commercial importations of all types of cereals rose to the tune of 943000 tonnes for the 741 000 projected. 64.2 % of these imports was made up of rice (605 800 tonnes) and 24.2 % of wheat (227 900 tonnes).

1.2.2.2. Food aid

Cereals imported as part of food aid totalled 343 300 tonnes implying 38 % less than the total in the 1986/1987 season. It must be pointed out that 28.7 % of this aid is made up of rice and 21.2 % of wheat. It is significant to note that 61.1 % of the importations of dry cereals from part of food aid. It is noteworthy that aid in the form of dry cereals, be they meant for sale or for free distribution, is basically directed towards the most deprived rural populations. The proportions for rice and wheat are respectively 14 % and 24.2 %.

(1) Proportion of imports in local total resources.

Even then, food aid actually imported is only 38.6 % of the aid solicited by CILSS countries from the International Community.

1.3. The food situation

1.3.1. Cereal consumption

The total apparent consumption was 6 971 500 tonnes. As compared to the 1986/1987 season, this represents a decline in volume by 6.6 %.

Apparent consumption per head was 174 kg annually, for all the CILSS countries, implying a decrease by 8.4 % as compared to estimates for 1986/1987 which was 190 kg. 15.5 % of this consumption (27 kg) is of rice while 4 % (7 kg) is of wheat the remainder (80.5 % or 140 kg) being made up of millet, sorghum, maize and fonio.

This apparent consumption of all cereals differed from one country to another : Burkina Faso (175), Cape Verde (164), Gambia (165), Guinea-Bissau (187), Mali (188), Mauritania (160), Niger (183), Senegal (180), Chad (134).

1.3.2. Trends in storage

At the beginning of the 1987/1988 season, stocks held by public organisations and para-statal were around 661 900 tonnes making up the equivalent of 8.9 % of resources and dropping to 389 900 tonnes at the end of the season.

This decline of public stock made it possible to satisfy part of importation needs, particularly food aid needs.

It can be asserted that the lack of resources resulting from the reduction in production and from the restrictions on importations brought about a decline in food consumption, a massive reduction in the stocks held by the public (and probably the private sectors) and a substantial increase in consumer prices.

2. ASSESSMENT OF THE 1988/1989 AGRO-PASTORAL SEASON AND PROSPECT OF THE FOOD SITUATION

2.1. Assessment of the 1988/1989 Agro-Pastoral Season.

The commencement of the rainy season differed from country to country in the Sahel : from the beginning of April in Burkina Faso and Niger up to July in Mauritania and Cape Verde islands. From then on, rainfall became average until July ending in Eastern Sahelian countries and scanty in the Western Sahel. However from August until mid-September, rainfall became very abundant everywhere and even brought serious flooding in several countries (Burkina Faso, Mali, Niger and Chad). In contrast the cessation of the rains in this season was abrupt and early (in the third decade of September almost throughout the Sahel). After the rainy season, except in Senegal and Cape Verde, cumulative rainfall was better than last year and even higher than the mean for the period between 1951 and 1980. Finally, rainfall was generally satisfactory for the countries as a whole with the exception of Central and Northern Senegal and Cape Verde Islands where the season was of too short duration.

The hydrological situation was very favourable. The discharges and levels of major rivers in the sub-region were clearly above those of last year. They even hit record levels in Chad. On the whole the situation this year has not been witnessed for several years and cropping after the withdrawal of flood waters promises to be exceptional particularly in Senegal, Mauritania and Chad.

In spite of the low levels of quantities harvested last year, the seed requirements of farmers seem to have been more or less satisfied. The distribution of other inputs (fertilizer, pesticides) was somehow disturbed by the administrative re-organisation of agricultural structures in certain countries (Niger, Burkina Faso) and particularly by the inaccessibility of some areas after the floodings in August. Cultivated acreages were quite greater than those of the last season except in Senegal where re-sowing became necessary.

Crop development was satisfactory in the sub-region in general except in the Northern and Central regions of Senegal and Cape Verde Islands where the rainy season was too short as a result of which certain crops sown lately could not complete their cycle. It is also worth noting that considerable crop damages in the lowlands and irrigated perimeters were caused by excess water and floods in August. It may be concluded that the crops did not suffer from water stress and could develop normally except in the case of millet and sorghum in Senegal (July) and maize in Cape Verde (October).

Abundant rainfalls permitted the productions of considerable fodder. Despite occasional damages caused through insect attacks (particularly in Mauritania and Chad), the situation of pasture is generally satisfactory. Water reserves for animal watering will be sufficient until the next rainy season. Animal health situation is generally good in Sahelian countries this year. Isolated foci of diseases : symptomatic anthrax (Burkina Faso and Chad) and Nodular Dermatitis of cattle (Burkina Faso, Gambia and Mauritania) have been reported among others, even though not on a alarming scale.

The phytosanitary situation was dominated by migratory locust invasions. All countries were affected with the exception of Burkina Faso. Since June, the presence of migratory locusts was reported in Mali, Niger, Chad and Mauritania.

As the Inter-Tropical Front fell in position towards the southward direction of the sub region, mature and immature swarms moved towards the main agricultural areas especially to the Southern part of Mauritania and to the Northern and Central parts of Senegal. In spite of the massive control operations mounted, pasture and crop damages occurred. Other parasites were also reported : caterpillars and cantharis in Burkina Faso, grass-hoppers and grain-eating birds in Mauritania, aphids in Niger and grass-joppers in Senegal and Chad. However damages caused were to a lesser extent than that of locust.

At present, crop damages from migratory locusts seem to be low but the situation can develop very rapidly and compromise the harvest.

Harvest prospects are encouraging for most of the countries except Senegal and Cape Verde. Worth mentioning in the fact that available assessments do not take into consideration the eventual damages caused by insect attacks after mid-October.

The forecast made in October gives the following results :

- Production of millet and sorghum : 7 719 000 tonnes
- Production of maize : 607 000 tonnes
- Production of paddy rice : 802 000 tonnes
- Production of fonio and other cereals : 85 000 tonnes

all making up a total production of 9 213 000 tonnes of cereals.

This will be by far, the highest production level in Sahelian countries, exceeding last year's level by 37.1 %. This record output is due to exceptional production in Mali and Chad (over 2.4 million tonnes by each), Burkina Faso (over 2 million tonnes), and Chad (825 000 tonnes). Even so, this record output should not overshadow certain realities of some individual states : cereal harvest in Senegal is lower than last years level by over 9 % while Cape Verde produced below 8 000 tonnes. Furthermore, while the overall output level for millet, sorghum and maize rose by 39.5 %, rice, consumed on an increasing scale, had only a 10.6 % increase in output. However, despite these bright prospects, the threat of invasion by grasshoppers throughout the CILSS member countries does not augur well for the harvest.

It may be concluded that while production promises to hit the record levels in CILSS countries, particularly in Eastern Sahel, some western Sahelian countries could only manage to obtain an insufficient output particularly of rice. The problem of insect attacks could be contained in Eastern Sahel. In the western Sahelian countries notably Mauritania, Senegal and Cape Verde, there was an outbreak of grasshoppers towards the end of the season. The bright prospects of a record output is compromised by the possible generalization of insect outbreak in the 1989 season.

2.2. Prospects of the Food situation

Assessments and projections made on the basis of the prospects of cereal production give the hope of a better food situation in the sub-region compared to the previous season.

In the CILSS countries as a whole, projected cereal consumption is 7 616 900 tonnes, of which 1 107 900 tonnes (14.5 %) is made up of rice while 302 200 tonnes (4 %) is composed of wheat. This corresponds to an average consumption per head of 184.8 kg annually. Considering the expected output and importations, this consumption level makes it possible to obtain a surplus of 1 010 000 tonnes for the combination of all types of cereals but particularly millet, sorghum and maize (841 400).

Importations programmed (1 017 700 tonnes) basically comprise rice (682 400 tonnes or 67 % of total imports) and wheat (260 200 tonnes or 25.6 %). Of the programmed importations, 85.6 % is of commercial importations.

The projected quantity of public stocks by the end of the season (372 600 tonnes) is 4.6 % lower than the current level of total stocks (389 900 tonnes).

The situation of individual countries, however, is highly different. Whereas countries like Burkina Faso, Mali and Niger made very large overall surpluses, others like Cape Verde, Mauritania, Senegal and Chad had deficits. These situations often conceal the existence of deficits for rice and wheat.

This raises the thorny issue of the imbalance between production structures (agricultural production, processing) and consumption structures in CILSS countries.

Under the circumstances, one may raise doubts over the capacity of Sahelian countries to proceed in such a way that deficits in local cereals made by some are offset by the surpluses of others. A potent solution to this problem may serve as a reference for establishing the Protected Cereal Zone.

2.3. Situation of the individual countries

2.3.1. BURKINA FASO

2.3.1.1. Rainfall-Hydrology

Rainfall was early this year beginning right from the first decade of April, but was quite irregular until May ending, with dry decades alternating with wet decades.

Thereafter, overall rainfall became satisfactory throughout the country. The Northern part of the country had high rainfalls and by the end of September, the cumulative figure was above the inter-annual average (1951-1980).

For the country as a whole, there was only a slight deficit experienced in Po and Ouagadougou as compared to last year.

2.3.1.2 Agricultural Situation

The growth condition for cereals were generally satisfactory.

Only crops in the lowlands (particularly sorghum) suffered from excessive rainfalls. Farmers who were obliged by the conditions of the recent seasons to cultivate in the lowlands were penalized this year especially in Tapoa, Kenedougou and Gourma. Some irrigated perimeters were also flooded after the heavy-spates in the Comoe and the Nakambe in August.

In the Yatenga and the Ouagadougou regions, the early cessation of rains in the third decade of September is likely to bring about a reduction in expected yield particularly in the case of millet.

All the same, the overall prospects for the harvests are bright.

2.3.1.3. Pastoral situation

The situation of pastures is very satisfactory particularly in the major animal rearing areas, ie the North and the East, where rainfall was very abundant this year. The only handicap for Agro-pastors is the lack of fodder seeds.

Water reserves for animal watering will be sufficient until the next rainy season.

The animal health situation is quite good for the country as a whole. However there were reports of contagious diseases in several provinces: symptomatic anthrax, nodular dermatosis and pasteurellosis and the more serious phenomenon of bovine rinderpest in the provinces of Sissili and Nahouri due to the return of several animals from Ghana.

2.3.1.4. Phytosanitary situation

The phytosanitary situation of crops is satisfactory even though some slight and very localised attacks by cantharis, caterpillars and grasshoppers were observed.

There was also the passage of swarms of immature migratory locusts in early May, in Sahelian provinces but without any damages.

However, there is a slight risk of insect invasion in the North in October ending.

It must also be pointed out that crop damages by striga (witchweed), and Raghuwa are becoming increasingly significant.

All the same, the overall phytosanitary situation is better than last year.

2.3.1.5. Harvest Projections

There is the likelihood of a record harvest this year. In effect it exceeds those of 1986/1987 and 1987/1988 by 5.7 % and 34.3 % respectively.

Forecasts made on 30 September give the following results :

millet and sorghum production	: 1 776 000 tonnes
maize production	: 212 000 tonnes
fonio production	: 9 000 tonnes
paddy rice production	: 37 000 tonnes

implying an overall cereal output of 2 034 000 tonnes.

2.3.1.6. Projected Cereal Assessment

Cereal availability in the country is as follows :

Available net output	: 1 718 600 tonnes
Initial stock (1988 ending)	: 39 600 tonnes
Planned importations	: 146 000 tonnes
<u>TOTAL</u>	: 1 904 200 tonnes

The use of cereals will be as follows :

Human consumption	: 1 678 000 tonnes
Final official stock (1989 ending)	: 63 100 tonnes
<u>TOTAL</u>	: 1 741 100 tonnes

Hence, taking into consideration the 100 000 tonnes of planned importations of rice, there will be a surplus of 163 100 tonnes.

2.3.2. CAPE VERDE

2.3.2.1. Rainfall-Hydrology

The first rains, despite being quite low, were recorded early (in July).

Up to mid September, rainfall was relatively well distributed. Thereafter, it showed deficits over all the islands. The cessation of the rainy season became apparent by 4 October.

On the whole, in spite of a very good commencement of the season, the sharp decline in rainfall levels in September and the cessation in October jeopardized crop development.

2.3.2.2. Agricultural situation

Until in September, crop development was satisfactory in the islands of Fogo, Santiago, San Antao and San Nicolau and poor in Sal, Boavista and San Vicente.

However, since rainfall showed deficit from then on, crops could not develop normally and demonstrated various degrees of water stress.

Severel acreages sown were lost in the process particularly in Maio and San Vicente. It is estimated that out of the 31 900 hectares cultivated on all the islands, only 14 100 will be harvested.

2.3.2.3. Pastoral situation

Following the rainfall deficit in all the islands from mid-September onwards, the rate of development of the vegetative cover declined after a good commencement of the season.

We may also point out that natural pasture only constitute a small part of animal feed, since the better part is ensured from harvest residues.

Livestock health is generally good in spite of the problem of precarious fodder availability. Only an epidemics affecting poultry animals was recorded.

2.3.2.4. Phytosanitary situation

There was no major phytosanitary problem until September : damages caused by migratory locusts in March/April and Senegalensis (Oedalus) after the rainfall, were minimal.

Throughout the month of October successive invasions of migratory locusts were recorded. However since maize farms had already attained the maturity stage, they were least affected.

2.3.2.5. Harvest projections

Projections on maize are as follows :

Cultivated acreage	:	31 900 hectares
Acreage harvested	:	14 100 hectares
Yield	:	540 Kg/ha
Output	:	7 600 tonnes

This output is well below that of the last seasons (which were respectively 12 000 and 21 200 tonnes) but is still above those of previous seasons.

2.3.2.6. Cereal assessment projections

Cereal availability in the country is as follows :

Available net output	:	6 500 tonnes
Initial stock (1988 ending)	:	26 200 tonnes
Planned importations	:	34 100 tonnes
<u>TOTAL</u>	:	66 800 tonnes

The expected utilization of cereals is as follows :

Human consumption	:	76 000 tonnes
Final official stock (1989 ending)	:	18 500 tonnes
<u>TOTAL</u>	:	94 500 tonnes

This implies an uncovered cereal deficit of 27 700 tonnes in 1989.

2.3.3. GAMBIA

2.3.3.1. Rainfall-Hydrology

The first significant rains were recorded during the second decade of June, implying some delay as compared to last year.

Rains then became quite irregularly distributed in space. At the end of July, cumulative rainfall, as compared to the normal (1951 to 1980), showed a slight deficit in Georgetown and Banjul and a surplus in other areas.

At the end of September, however, rainfall throughout the country was clearly above normal.

2.3.3.2. Agricultural situation

In all the Divisions of the country, crop development was satisfactory.

The growth of rain-fed rice was very good while a high harvest is also being expected from rice farms estimated at 90 030 hectares as against 82 701 in 1987/1988 representing an increase by 8.9 %.

2.3.3.3. Pastoral situation

The exceptional rainfall recorded greatly enhanced pasture development. Biomass production was very abundant during this season.

As regards animal health, several cases of bovine nodular dermatosis and horse anthrax were reported.

2.3.3.4. Phytosanitary situation

Swarms of migratory locusts invaded the country between 4 and 8 October particularly in the North Bank Division, Lower River Division and Maccarthy island Division.

Damages were detected on millet and maize farms.

However, at the National level on the whole, these damages do not seem to be very significant.

2.3.3.5. Harvest projections

The following are the results of cereal harvest projections :

Millet and sorghum production	:	74 000 tonnes
Maize production	:	15 600 tonnes
Fonio production	:	400 tonnes
Paddy rice production	:	29 900 tonnes

implying a total cereal output of 119 900 tonnes.

This output is higher than that of the last season by 30.4 % and exceeds that of the 1985/1986 season by 4000 tonnes.

2.3.3.6. Cereal assessment projections

The following are the cereal resources of the country :

Net available output	:	93 000 tonnes
Initital stock (1988 ending)	:	15 900 tonnes
Planned importations	:	145 000 tonnes
<u>TOTAL</u>	:	253 900 tonnes

Expected cereal utilisation is as follows :

Human consumption	:	134 000 tonnes
Official final stock (1989 ending)	:	000 tonnes
Planned exportations.	:	66 000 tonnes
<u>TOTAL</u>	:	200 000 tonnes

This leaves a surplus of 53 900 tonnes of cereals, basically made up of rice.

2.3.4. GUINEA-BISSAU

2.3.4.1. Rainfall-Hydrology

The rains began in the third decade of May.

After slowing down in the first decade of June, rains generally resumed satisfactory (above 400 mm in August). Thereafter, from August ending to September ending, cumulative rainfall in Bissau showed a slight deficit compared to the normal (1951 to 1980).

The rains then continued until the second decade of October.

On the whole, rainfall for this cropping season was satisfactory.

2.3.4.2. Agricultural situation

Crop development conditions were favourable throughout the cropping season with the exception of maize in the Northern part of the country where rains were excessive in August.

The only problem was that, as a result of excessive rains, the soil became water-logged and adversely affected rice transplanting in some areas.

2.3.4.3. Pastoral situation

By virtue of regular and generalised rainfall, the pasture situation is satisfactory in spite of the delay in the development of the vegetative cover compared to last year.

There is no special problem worth mentioning in connection with animal health.

2.3.4.4. Phytosanotary situation

The insect situation is calm even though a swarm of mature migratory locusts was observed in Doungal in mid-October.

2.3.4.5. Harvest projections

Though cereal output is slightly lower than that of last year (by 2.6 %), the average recorded in recent seasons :

production of millet, sorghum, maize : 80 000 tonnes

production of paddy rice : 145 000 tonnes

implying a total cereal output of 225 000 tonnes.

2.3.4.6. Cereal assessment projections

Cereals available in the country are :

Available net output : 147 900 tonnes

Initial stock (1988 ending) : 26 100 tonnes

Planned importations : 42 000 tonnes

TOTAL : 216 000 tonnes

The utilization of cereals are :

Human consumption : 166 800 tonnes

Final Official stock (1989 ending) : 2 000 tonnes

TOTAL : 168 800 tonnes

This leaves a surplus of 47 200 tonnes of cereals, (mainly rice) for

2.3.5. M A L I

2.3.5.1. Rainfall-Hydrology

From June 1988, rainfall was characterised by abundance and was evenly distribution over time.

As regards rainfall distribution in space, three major zones may be distinguished as being homogenous from the point of view of cumulative rainfall.

- the Southern zone bordered at the North by Bafoulabe, Banamba and Tominian where rainfall ranged between normal and excessive.
- the Sahelian flank between the Bafoulabe-Tominian axis and Bandiagara-Mopti-Dioura, where cumulative rainfall was generally slightly lower than normal.
- the Northern part of this flank where rainfall showed a wide deficit.

River levels almost everywhere exceeded that of last year but fell below the average since 1951.

In a nutshell, the state of the upper Niger river remained at the maximum on the Bani throughout September.

River levels began to fall very early. By mid-September, the levels of river Niger and river Senegal had fallen significantly.

2.3.5.2. Agricultural situation

The general condition in farming was quite good except in the Northern and Eastern areas of the country where the negative cumulative effect of the two previous seasons created problems for the farming population. In these areas, inadequate resources (food, seeds, inputs) posed serious handicaps at the commencement of the season.

In the rice - farming areas of Segou, Bourem, Ansongo, Rharous and Djenne, the rapid rise in water levels flooded part of croplands.

In all other places, farmers were able to realise their farming programmes without major difficulties. Soil preparation and sowing activities were effected satisfactory.

On the whole, cultivated acreages clearly increased as compared to the previous season.

2.3.5.3. Pastoral situation

Almost everywhere, the good rainfalls permitted the regeneration of pasture lands.

Despite the considerable damages caused by locusts in the Northern part of the country, the pastures can satisfactorily cater for the feeding of livestock.

Efforts need to be deployed in the South towards eliminating bush fires, the major cause of pasture degradation.

As regards animal health, the major epizootic diseases have been brought under control. However, in the North and the ODEM area (livestock development operation at Mopti) there are cases of abortions among cattle for reasons not very clearly understood.

2.3.5.4. Phytosanitary situation

The problem of insect attacks has been and remains the major cause for concern during the season.

From May onwards, the ecological conditions became very favourable to the outbreak of migratory locusts.

The following are the areas infested :

- the Northern part of the Kayes and Koulikoro areas along the border with Mauritania in the western part of the country.
- at the Northern part of the country, in the administrative circles of Miafunke, Rharous, Goundam, Dire.

However, at the National level, damages caused by locust attacks are considered as negligible even though the farmers who were the victims have been placed in a disastrous plight.

In contrast, the impact on natural vegetation is significant in the Kayes area, Northern Koulikoro, Mopti and Tombouctou, damages caused to pastures are considerable even though this could not greatly affect livestock feeding.

2.3.5.5. Harvest projections

The harvest of this season hit a record. Cereal output exceeds that of last year by 48.3 % while the previous record output was exceeded by 37.7 %.

The output is estimated as follows :

Millet and sorghum production	: 1 900 000 tonnes
Maize production	: 211 000 tonnes
Paddy rice production	: 287 000 tonnes
Fonio production	: 30 000 tonnes

implying a total cereal output of 2 428 000 tonnes.

2.3.5.6. Cereal assessment projections

The following are the cereal resources of the country :

Available net output	:	1 978 100 tonnes
Initial stock (1988 ending)	:	51 300 tonnes
Planned importations	:	53 300 tonnes
<u>TOTAL</u>	:	2 082 700 tonnes

The utilization of cereals is as follows :

Human consumption	:	1 338 000 tonnes
Final official stock (1989 ending)	:	58 000 tonnes
<u>TOTAL</u>	:	1 396 000 tonnes

This leaves a big surplus of 686 700 tonnes of cereals.

2.3.6. MAURITANIA

2.3.6.1. Rainfall-Hydrology

The first significant rains were recorded in the second and third decades of July in Kaedi, Kiffa, Aioun and Selibaby. Thereafter, rainfall became generalised throughout the month of August.

At the end of August, the situation was clearly better than last year but slightly below the average (from stopped 1980).

The rains stopped abruptly on 22 September. Furthermore, it may be pointed out that rainfall in 1988 is better than the average for the past ten years, and was well distributed in time (2 to 3 times per decade).

2.3.6.2. Agricultural situation

The good rainfall recorded enabled the season to proceed under good conditions.

The rains began normally and there was no water stress throughout the season.

Factors of production were made available under satisfactory conditions. The only problems encountered were those of inaccessibility (particularly to the irrigated parameters of the Trarza area) resulting from the flooding in August and the inavailability of labour in some areas.

Acreages cultivated "en dieri" exceed those of last year while those "cultivated "en dieri" "en walo" represent more than twice the represents more rice acreage in 1987/1988.

Rice acreage was only greater by 8 % due to the floods in some irrigated perimeters.

However, this generally satisfactory agricultural situation may be compromised by insect attacks in the month of October considering that only a small portion of crops has been harvested.

2.3.6.3. Pastoral situation

The vegetative cover this year was excellent contributing to the decline in transhumance.

The vegetation indicator is clearly better in several areas at the Southern part of the country than last year.

However, pastures were attacked in October by migratory locusts and the excellent situation prevailing may be considerably degraded.

In contrast, the animal health situation was affected by the good rainfall as germs kept multiplying. Furthermore, several cases of bovine nodular dermatosis and pasteurellosis have been reported throughout the country.

2.3.6.4. Phytosanitary situation

In October, insect attacks were experienced throughout the country. In spite of the control measures implemented, pastures and crops are threatened by migratory locusts.

At the time of writing of this report, pastures had been attacked particularly by locusts. In contrast, crops (maize and millet especially) were affected to a very little extent. It may have to be pointed out that this trend can undergo serious developments.

Damages by grasshoppers and grain-eating birds were reported but the impact was minimal.

The summary is that the insect situation at October ending is very alarming since the whole cereal output of the country faces a threat.

2.3.6.5. Harvest projections

This forecast does not take into consideration the damages caused by migratory locusts.

As at October, these damages were negligible, but the overall assessment can only be made after the insect attacks have been brought under control.

Nevertheless reports are that the harvest is the best in the past eight years.

Projections made in October arrived at the following results :

Sorghum production	: 120 800 tonnes
Millet production	: 8 500 tonnes
Rice production	: 50 800 tonnes
Maize production	: 1 300 tonnes

implying a total cereal output of 181 400 tonnes. This figure exceeds that of 1987/1988 by 9.2 %.

2.3.6.6. Cereal assessment projections

The following are the cereal resources of the country :

Available net output	: 138 600 tonnes
Initial stock (1988 ending)	: 49 700 tonnes
Planned importations	: 117 000 tonnes
<u>TOTAL</u>	: 305 300 tonnes

The utilization of cereals in the country is estimated as follows :

Human consumption	: 330 000 tonnes
Final official stock (1989 ending)	: 56 000 tonnes
<u>TOTAL</u>	: 386 000 tonnes

Hence there is an uncovered cereal deficit of 80 700 tonnes.

2.3.7. NIGER

2.3.7.1. Rainfall-Hydrology

Considerable but localised rainfall was recorded right from April. The rainy season actually settled almost everywhere in June after a very dry month of May. After the first decade in July, rainfall became abundant and regular virtually throughout the country, so much that in the Southern and Central parts of the country (farming areas), cumulative rainfall ranged between normal and excessive. In August in particular, rainfall was exceptionally high causing damage to property.

The spate in Niger was initially caused by waters originating from local sources as a result of the heavy rainfall. The combination of this local spate with others coming from the upstream led to a very rapid rise in water levels flooding the rice fields in the process.

2.3.7.2. Agricultural situation

Agricultural inputs were placed at the disposal of farmers very early in the season. The suppression of seasonal loans for the acquisition of these inputs certainly created some difficulties though without any considerable impact.

In contrast, the simultaneous commencement of the season throughout the country brought about some tension in the labour market despite the return of seasonal migrant labour.

Fortunately, this situation could not bring about a decline in cultivated acreage compared to last season.

It rather seems that there is an increase in cultivated acreage as compared to the 1987/1988 season, which was also considered lower than normal and slightly greater than in 1986/1987 (1 to 2 % increase).

In the wake of the abundant rains in August, farmers could still not complete the second weeding, considering the excessive growth of weeds on farms and the lack of labour. Crops which mostly suffered from this situation were non-cereals.

The conclusion is that, the highly favourable rainfall conditions which prevailed, raises the hope for higher yields. The combination of this factor with greater cultivated acreages gives the expectation of a record output.

2.3.7.3. Pastoral situation

The situation of pastures is very good but the insect invasions might have caused slight damages to it.

No special animal health problem was reported.

2.3.7.4. Phytosanitary situation

Two major events characterized the cropping season from the phytosanitary point of view : the outbreak of the larvae of locusts as well as winged locust in Fillingue, Tanout, Tahoua, Diffa and Southern M'Guigmi, on the one hand, and the appearance of aphids around Dosso and Zinder on the other.

As regards locusts, a massive control action embarked upon by the crop protection Services, OCLALAV, and farmers organised into intervention squads, made it possible to control larval invasions in the farming areas of the country. As a result, little damage was recorded on croplands but the natural vegetation and pasture lands were damaged to some extent.

On the other hand, attacks on groundnuts and cowpea by aphids in Zinder and Dosso affected the harvest.

The conclusion is that the phytosanitary situation was more calm as compared to the fears initially expressed.

2.3.7.5. Harvest projections

Cereal output in Niger hit a record. It far exceeds that of 1985/1986 (33.4 %) and that of last year (by over one million tonnes).

Forecast per crop is as follows :

Millet and sorghum production	: 2 383 000 tonnes
Paddy rice production	: 50 000 tonnes
Wheat production	: 1 000 tonnes

implying a total cereal output of 2 434 000 tonnes.

2.3.7.6. Cereal assessment projections

The cereal resources of the country are as follows :

Available net output	: 2 054 900 tonnes
Initial stock (1988 ending)	: 35 400 tonnes
Planned importations	: 99 200 tonnes
<u>TOTAL</u>	: 2 189 500 tonnes

Cereal utilization is estimated as follows :

Human consumption	: 1 779 900 tonnes
Final official stock (1989 ending)	: 80 000 tonnes
<u>TOTAL</u>	: 1 859 900 tonnes

This leaves a very substantial surplus of 329 600 tonnes of cereals.

2.3.8. SENEGAL

2.3.8.1. Rainfall-Hydrology

The first rains were recorded locally in South-Eastern Senegal during the third decade of May, but they became generalized during the second and third decades of June.

Up to July, rainfall remained lower than the previous year and was below the normal (1951 to 1980).

Thereafter, rains became very abundant in August particularly in the Southern part of the country.

The cumulative deficit of July diminished and even turned into a surplus as compared to the normal by 10 October. Only Kaolack, Thies and Kedougou experienced deficits as compared to the normal.

The discharges of the rivers Senegal, Gambia and Casamance were higher than those of the previous years in July and August. The decline in water levels began in September.

In September, the hydrological situation was better than last year in rivers Senegal and Casamance, but the situation of river Gambia was to the contrary.

2.3.8.2. Agricultural situation

The overall conditions of cereal development was average.

The final settlement of the rainy season was late this year (July ending), bringing about a delay in the commencement of cropping.

The increase in harvest in the South should make up for the decline expected in the Central and Northern parts.

In effect, good rainfalls in October was indispensable (low North water reserves of soils in the North as well as some departments in the Central region : Thies, Louga, Diourbel) to enable the lately-sown millet and sorghum to complete their cycles in this part of the country.

2.3.8.3. Pastoral situation

In spite of the vagaries of the rainfall this year the overall situation of pasture is good particularly in the areas South of the axis Dakar-Kaolack-Tambacounda.

No particular animal health problem was reported.

2.3.8.4. Phytosanitary situation

Apart from some grasshopper attacks at the beginning of the season, the situation was calm until mid-September.

In the third decade of September as well as in October, the country experienced invasions by migratory locusts to varying degrees depending on the ecological area.

Apart from the South (Kolda area and Ziguinchor) and the South-East to a smaller extent (Tambacounda), infestation is generalized particularly in Louga, Thies, Diourbel and Saint Louis.

Damages caused by migratory locusts to cereal farms in Mid-October are estimated at 5 to 10 %. However, since these locusts are in different stages of maturity, the situation can rapidly turn alarming.

2.3.8.5. Harvest projections

Unlike in most of the other CILSS countries, cereal production in Senegal will fall below that of last year: While the rice harvested is greater than that of last year by 14000 tonnes, the output of millet and sorghum declined by 13.5 %.

Estimates made concerning cereal output in the 1988/1989 season are as follows :

Millet production	: 573 000 tonnes
Sorghum production	: 120 000 tonnes
Maize production	: 112 000 tonnes
Paddy rice production	: 150 000 tonnes
Fonio production	: 3 000 tonnes

implying a total cereal output of 958 000 tonnes.

2.3.8.6. Cereal assessment projections

The cereal resources of the country are as follows :

Available net output	: 768 800 tonnes
Initial stock (1988 ending)	: 97 600 tonnes
Planned importations	: 408 900 tonnes
<u>TOTAL</u>	: 1 275 300 tonnes

Estimated cereal utilization is as follows :

Human consumption	: 1 348 800 tonnes
Final official stock (1989 ending)	: 60 000 tonnes
Planned exportations	: 2 800 tonnes
<u>TOTAL</u>	: 1 411 600 tonnes

This leaves an uncovered cereal deficit of 136 300 tonnes despite the planned importations of roughly 400 000 tonnes of rice and wheat.

2.3.9. C H A D

2.3.9.1. Rainfall-Hydrology

The first significant rainfalls were recorded in May in the Southern and South-Central parts of the country.

Rainfall became generalized in June but to a lesser extent as compared to last year. They then became very abundant in July, August and September.

By the end of September cumulative rainfall everywhere was clearly above that of last year and to a lesser extent above the normal (1951 to 1980).

The hydrological situation was favourable in the basins of the Chari, the Lagoon and Lake Chad.

The levels of rivers this year, in Chargoua, Nguely, and NDjamena, were unprecedented since 1970.

The waters of lake Chad reached the Bol station on 31/09/88. The height of 148 cm was reached on 12/10/88, whereas the station was dry last year.

At the end of September, while the level of the Lagoon began to fall, lake Chad and the Chari continued their spate and the capital faced the risk of inundation.

2.3.9.2. Agricultural situation

The crop development conditions were very favourable during this season.

Crop development was not disturbed by any water stress and cereal production in the Sahelian region and the Sudanian region are expected to be at par.

However, the very abundant rainfall this year caused serious damages to crop in the lowlands. Large acreages of food crops were flooded.

Cropping after the withdrawal of flood waters (berbere) would also be satisfactory with a clear increase in acreage compared to 1987.

2.3.9.3. Pastoral situation

The situation of pasture is generally good throughout the country except in the Kanem area.

Fodder production will be greater than in recent years but there are fears of considerable bush fires.

The livestock situation is generally good. However cases of symptomatic anthrax in the Chari Baguinmi and a recrudescence of respiratory diseases among sheep and goats are worth to be mentioned.

2.3.9.4. Phytosanitary situation

Migratory locusts pose a serious threat to the harvest.

In spite of the control operations carried out in October, swarms of migratory locusts invaded the Eastern areas like Ouaddai and Biltine. Other areas invaded include the Central region (Batha) and the Western region (Kanem).

It must be pointed out that localised damages were also caused by grasshoppers and caterpillars.

At the time of writing this report, it is considered too early to make an estimate of the ensuing crop damages.

2.3.9.5. Harvest projections

Despite the damages caused by locusts (which are difficult to estimate now), cereal output in Chad will also hit a record.

It exceeds that of last year by 44.2 % and that of 1986/1987 by 13 %. In effect, the best in recent years was in 1986/1987. Output this year is as follows :

Millet/sorghum production	:	684 000 tonnes
Maize production	:	47 000 tonnes
Paddy rice production	:	52 000 tonnes
Berbere production	:	42 000 tonnes

implying a total cereal output of 825 000 tonnes.

2.3.9.6. Cereal assessment projections

The availability of cereals in the country is as follows :

Available net output	:	685 500 tonnes
Initial stock (1988 ending)	:	48 100 tonnes
Planned importations	:	41 000 tonnes
<u>TOTAL</u>	:	774 600 tonnes

Estimates of cereal utilization are as follows :

Human consumption	:	765 300 tonnes
Final official stock (1989 ending)	:	35 000 tonnes
<u>TOTAL</u>	:	800 300 tonnes

This leaves an uncovered cereal deficit of 25 700 tonnes.

3. RECOMMENDATIONS

On the basis of the preceding analysis and cereal policies in force in CILSS countries, the following recommendations are being made :

- Under desertification control, there is the need to search for a greater productivity of cereals in order to curtail the extension of land clearings. Furthermore, a rational livestock exploitation policy needs to be promoted in order to augment its contribution to the achievement of the objective of food self-sufficiency and to reduce the over-exploitation of pasture lands.

- The organization of farmers into economic groups has to be strengthened as a potent factor for the necessary structural changes.

- It is necessary to strengthen the search for a more performant cereal variety and to disseminate it effectively towards the promotion of local products within the framework of sub-regional cooperation.

- In view of the persistence of insect invasions, cooperation must be strengthened between Sahelian States, CILSS and the International Community in order to make the design for the control of harmful insects more effective (strengthening of crop protection services and efficient regional coordination).

- As part of cereal policies, systems for the multi-annual regulation of cereal availability have to be sought for :

- Local cereal consumption must be promoted by improving the processing (at the industrial and cottage-industry levels) of products adapted to consumption patterns as part of sub-regional cooperation.

- Legislative, regulatory and financial measures are to be taken to promote bilateral and triangular exchanges between CILSS member states.

For the attention of Member States :

- It is necessary to improve information systems permitting a better monitoring of the food situation and a greater flow of information in the cereal market.

- Farmers' stocks have to be promoted through technical, financial and institutional means and through awareness campaigns as one of the means for reducing inter-annual fluctuations in cereal availability.

- The promotion and/or establishment of general warehouses at the disposal of private traders for the storage of cereals is worth considering.

- Fiscal, financial, organizational and institutional measures have to be taken to assist farmers in selling their cereals on the market.

- The monitoring of areas facing the risk of shortage so as to effect the necessary supply, has to be continued by placing a special emphasis on the most vulnerable population even in this present situation of general abundance.

- Appropriate policies must be instituted to promote the marketing and consumption of local cereals in order to reduce the dependence on imported cereals, particularly rice, and thereby check the outflow of foreign exchange.

- The structural reorganization of grain boards must be continued to instil a greater dynamism in the cereal market.

- Importation programmes must be reviewed to take the results of the cropping season into a greater account.

For the Executive Secretariat :

- Instruments for the diagnosis of the food situation, particularly the cereal assessment, have to be improved by strengthening the assistance given to national structures.

- Reflexions towards granting a greater attention to the livestock sector in the achievement of the food self-sufficiency objective, have to be initiated or promoted.

For the attention of the International Community :

- There is the need to programme a multi-annual aid which may be turned into a financial aid (for the purchase of local cereals) in years of good harvests.

- Financial and technical assistance for triangular exchange operations must be augmented.

TABLE N°1: CILSS COUNTRIES EX-POST CEREAL ASSESSMENT 1987/1988
(in thousands of tonnes)

ITEM/COUNTRY	BURKINA FASO	CAPE VERDE	IGAMBIA	GUINEA BISSAU	MALI	MAURITIA- NIGER	SENEGAL	CHAD	TOTAL FOR CILSS COUNTRIES		
									RICE	WHEAT	OTHER CIGRAN
Population (mid-1988)	18601000	1359000	1792000	1929000	17814000	12000000	17284000	15295000			140159000
Gross output	1513,2	21,2	92,3	231,4	1637,5	166,1	1433,1	572,1	725,1	0	15995,7
Available output	1275,2	18,0	72,4	154,1	1320,9	125,9	1200,6	473,7	398,7	7	15096,5
Initial stock	100,8	30,9	3,9	0	141,5	86,5	61,6	124,2	209,6	60,0	392,3
Importations	170,7	36,0	135,2	63,0	54,0	157,5	108,5	158,7	704,4	1300,8	281,1
Commercial	133,0	5,0	124,9	51,5	40,0	100,4	49,7	130,1	605,8	1227,9	109,3
Food aid	37,7	31,0	10,3	11,5	14,0	57,1	58,8	28,6	98,6	72,9	171,8
TOTAL Resources/Util	1546,7	84,9	211,5	217,1	1516,4	369,9	1370,7	756,6	1312,7	1361,5	15769,9
Utiliz (non Consump)	39,6	26,2	81,2	43,5	51,3	49,7	35,4	48,1	236,0	76,2	162,6
Exportation			65,3	17,4					84,9	0	0
Final stock	39,6	26,2	15,9	26,1	51,3	49,7	35,4	48,1	151,1	76,2	162,6
Total Apparent consumption	1507,1	58,7	130,3	173,6	1465,1	320,2	1335,3	708,5	11078,9	1285,3	15607,3
Apparent consumpt. per haed (kg)	175,22	163,5	164,5	186,9	187,5	160,1	183,3	133,8	26,9	7,1	139,6
O. C. L. (kg) **	190,00	206,0	165,0	175,0	167,0	165,0	237,0	141,0			

Source: CILSS

* Including intra-Sahelian exchanges

** Official Consumption Levels (Kg)

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE : 2. BURKINA FASO

ITEMS	RICE	WHEAT	OTHER CEREAL.	TOTAL
Population (mid 1988)				8.601.000
Gross output	36,70	,00	1.476,50	1.513,20
Available output	20,20	,00	1.255,00	1.275,20
Initial Stock	28,80	2,70	69,30	100,80
Importations	86,40	35,90	48,40	170,70
Commercial	78,00	34,50	20,50	133,00
Food Aid	8,40	1,40	27,90	37,70
TOTAL Resources/Util	135,40	38,60	1.372,70	1.546,70
Utiliz(unconsumption)				
Final Stock	14,70	2,70	22,20	39,60
Total apparent consumpt°	120,70	35,90	1.350,50	1.507,10
Apparent consump° per head (kg)	14,03	4,17	157,02	175,22
Official Consumption levels (kg)				190,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE : 3. CAPE VERDE

ITEMS	RICE	WHEAT	OTHER CEREAL.	TOTAL
Population (mid 1988)				359,000
Gross output	,00	,00	21,20	21,20
Available output	,00	,00	18,00	18,00
Initial Stock	6,10	,90	23,90	30,90
Importations	10,70	8,50	16,80	36,00
. Commercial	,00	,00	5,00	5,00
. Food Aid	10,70	8,50	11,80	31,00
TOTAL Ressources/Util	16,80	9,40	58,70	84,90
Utiliz(unconsumption)				
Final Stock	5,40	5,00	15,80	26,20
Total apparent consumpt°	11,40	4,40	42,90	58,70
Apparent consump° per head (kg)	31,75	12,26	119,50	163,51
Official Consumption levels (kg)				206,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE No 4 : GAMBIA

ITEMS	RICE	WHEAT	OTHER CEREALS	TOTAL
Population (mid 1988)				792.000
Gross output	20,40	,00	71,90	92,30
Available output	11,20	,00	61,20	72,40
Initial stock	3,90	,00	,00	3,90
Imports	118,30	16,70	,20	135,20
Commercial	108,90	16,00	,00	124,90
Food aid	9,40	,70	,20	10,30
TOTAL Resources/Util	133,40	16,70	61,40	211,50
Utiliz (unconsumption)	81,20	,00	,00	81,20
Exports	65,30	,00	,00	65,30
Final stock	15,90	,00	,00	15,90
Total apparent consumption	52,20	16,70	61,40	130,30
Apparent consumption per head (Kg)	65,91	21,09	77,53	164,52
Official consumption levels (kg)				165,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE : 5. GUINEA-BISSAU

ITEMS	RICE	WHEAT	OTHER CEREAL.	TOTAL
Population (mid 1988)				929,000
Gross output	141,90	,00	89,50	231,40
Available output	78,00	,00	76,10	154,10
Initial Stock	,00	,00	,00	,00
Importations	50,30	7,40	5,30	63,00
. Commercial	47,00	4,50	,00	51,50
. Food Aid	3,30	2,90	5,30	11,50
TOTAL Ressources/Util	128,30	7,40	81,40	217,10
Utiliz(unconsumption)	43,50	,00	,00	43,50
Final Stock	26,10	,00	,00	26,10
	17,40	,00	,00	17,40
Total apparent consumpt°	84,80	7,40	81,40	173,60
Apparent consump° per head (kg)	91,28	7,97	87,62	186,87
Official Consumption levels (kg)	110,00			175,00

TABLE N°6 : MALI

BILAN CEREALIER EX-POST 1987/1988
(In thousand of tonnes)

ITEMS	RICE	WHEAT	OTHER CEREALS	TOTAL
Population (mid 1988)				7,814,000
Gross output	236,60	,00	1,400,90	1,637,50
Available output	130,10	,00	1,190,80	1,320,90
Initial stock	30,80	,00	110,70	141,50
- SNS	,00	,00	50,00	50,00
- OPAM	11,70	,00	53,10	64,80
- ON, ODR, DANACCOOP/ONG	15,90	,00	1,40	17,30
- Commerçants privés				
- grossistes	3,20	,00	6,20	9,40
Imports				
Imports	33,00	21,00	,00	54,00
Commercial	23,00	17,00	,00	40,00
Food aid	10,00	4,00	,00	14,00
TOTAL Resources/Util	193,90	21,00	1,301,50	1,516,40
Final stock				
SNS	18,90	4,00	28,40	51,30
OPAM	,00	,00	24,00	24,00
ON, OUR, DNACCOOP	13,80	4,00	4,40	22,20
	5,10	,00	,00	5,10
Total apparent consumption	175,00	17,00	1,273,10	1,465,10
Apparent consumption per head (Kg)	22,40	2,18	162,93	187,50
Official consumption levels (kg)	25,00			167,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE N°7 : MAURITANIA

ITEMS	RICE	WHEAT	OTHER CEREALS	TOTAL
Population (mid 1988)				2000000
Gross output	50,90	,00	115,20	166,10
Available output	28,00	,00	97,90	125,90
Initial stock	35,50	37,00	14,00	86,50
CSA + other aids	6,70	35,20	15,20	57,10
SOMIMEX	22,80	,00	,00	22,80
Commerçants privés	6,00	,00	,00	6,00
Imports				
• Commercial	79,50	62,20	15,80	157,50
• Food aid	75,00	25,40	,00	100,40
	4,50	36,80	15,80	57,10
TOTAL Ressources/Utili	143,00	99,20	127,70	369,90
Utiliz (unconsumption)	30,20	3,90	15,60	49,70
Final stock	30,20	3,90	15,60	49,70
CSA	4,20	3,90	15,60	23,70
SOMIMEX	20,00	,00	,00	20,00
Commerçants privés	6,00	,00	,00	6,00
Total apparent consumpt°	112,80	95,30	112,10	320,20
Apparent consumption per head (Kg)	56,40	47,65	56,05	160,10
Official consumpt° levels (kg)				165,00

TABLE N°8 : NIGER

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

ITEMS	RICE	WHEAT	OTHER CEREALS	TOTAL
Population (mid-1988)				17.284.000,00
Gross output	60,80	,00	1.372,30	1.433,10
Available output	33,40	,70	1166,50	1200,60
initial stock	4,90	2,40	54,30	61,60
O.P.V.N.	2,20	,00	54,30	56,50
RINI	2,70	,00	,00	2,70
MOULINS DU SAHEL	,00	2,40	,00	2,40
Imports				
Commercial	36,60	17,00	54,90	108,50
Food aid	32,70	17,00	,00	49,70
	3,90	,00	54,90	58,80
TOTAL Ressources/Util	74,90	20,10	1.275,70	1.370,70
Utiliz (unconsumption)	1,50	2,20	31,70	35,40
Initial stock	1,50	2,20	31,70	35,40
OPVN	,40	,00	31,70	32,10
RINI	1,10	,00	,00	1,10
MOULINS DU SAHEL	,00	2,20	,00	2,20
Total apparent consumpt°	73,40	17,90	1.244,00	1.335,30
Apparent consumpt° per head (Kg)	10,08	2,46	170,79	183,32
Official consumption levels (kg)				237,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE N°9 : SENEGAL

ITEMS	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid 1988)				7.085.000
Gross output	135,80	,00	918,10	1.053,90
Available output	74,70	,00	780,40	855,10
Initial stock	93,50	,00	19,00	112,50
C.P.S.R	93,50	,00	,00	93,50
CSA	,00	,00	19,00	19,00
Minoterie	,00	,00	,00	,00
Imports				
Commercial	257,30	102,60	42,80	402,70
Food aid	220,00	84,00	4,40	308,40
	37,30	18,60	38,40	94,30
TOTAL Ressources/Util.	425,50	102,60	842,20	1.370,30
Utiliz (unconsumpt°)	37,60	51,30	10,90	99,80
Exports	2,20	,00	,00	2,20
Final stock	35,40	51,30	10,90	97,60
Total apparent consumpt°	390,10	51,30	831,30	1.272,70
Apparent consumpt° per head (Kg)	55,06	7,24	117,33	179,63
Official consumpt° level (kg)				185,00

EX-POST CEREAL ASSESSMENT 1987/1988
(In thousand of tonnes)

TABLE : 10. CHAD

ITEMS	RICE	WHEAT	OTHER CEREAL.	TOTAL
Population (mid 1988)				5,295,000
Gross output	42,00	,00	530,10	572,10
Available output	23,10	,00	450,60	473,70
Initial stock	6,10	17,00	101,10	124,20
Imports	32,30	29,50	96,90	158,70
Commercial	21,20	29,50	79,40	130,10
Food Aid	11,10	,00	17,50	28,60
TOTAL Resources/Util	61,50	46,50	648,60	756,60
Utiliz(unconsumption)				
Final Stock	3,00	7,10	38,00	48,10
Total apparent consump°	58,50	39,40	610,60	708,50
Apparent consump° per head (kg)	11,05	7,44	115,32	133,81
Official Consumption levels (kg)				141,00

TABLE N° 11: DEFINITE RESULTS OF GROSS FOOD PRODUCTIONS

1987-1988 CROPPING SEASON
in thousand tonnes

	Millet/ Sorghum	Maize	Paddy rice	Fonio	Other cereals	Total cereals	Cowpea beans	Groundnut
Burkina Faso	1.311.826	159.485	36.658	5.146	-	1.513.115	n.d	n.d
Cape Verde	-	21.200	-	-	-	21.200	13.000	-
Gambia	56.170	15.440	20.430	390	-	92.430	-	119.950
Guinea-Bissau	89.493	*	141.942	-	-	231.435	n.d	n.d
Mali	1.206.702	178.609	236.568	15.589	-	1.637.468	14.695	100.680
Mauritania	114.152	1.007	50.915	-	-	166.074	9.997	-
Niger	1.362.777	7.778	60.754	1.748	-	1.433.057	208.768	40.529
Senegal	801.289	113.625	135.793	3.175	-	1.053.882	28.625	963.123
Chad	501.000	28.000	42.000	-	1.000	572.000	n.d	n.d
Total	5.443.409	525.144	725.060	26.048	1.000	6.720.661	n.d	n.d

SOURCE : National Services

(*) Maize production is included in that of Millet-Sorghum.

TABLE No 12: PROJECTIONS ON GROSS CEREAL OUTPUT 1988/1989 SEASON

in thousand tonnes

	Millet/ Sorghum	Maize	Paddy rice	Fonio	Other cereals	TOTAL CEREALS
Burkina Faso	1776	212	37	9	-	2034
Cape Verde	-	8	-	-	-	8
Gambia	74	16	30	0	-	120
Guinea-Bissau	80	*	145	-	-	225
Mali	1900	211	287	30	-	2428
Mauritania	129	1	51	-	-	181
Niger	2383	0	50	-	1	2434
Senegal	693	112	150	3	-	958
Chad	684	47	52	-	42	825
TOTAL	7719	607	802	42	43	9213

Source : CILSS/FAO

(*) Maize production is included in that of millet-sorghum.

TABLE N° 13 : COMPARISON OF CEREAL OUTPUTS IN 1981-1982 AND 1988/1989

in thousands of tonnes

	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	Projections: % Rate	
	season	season	season	season	season	season	season	88-89	88/89 season:
								season	87/88 season:
Burkina Faso	1270	1210	1011	1119	1584	1925	1513	2034	134,4
Cape Verde	3	4	3	3	2	12	21	8	30,1
Gambia	99	109	66	89	116	102	92	120	130,4
Guinea-Bissau	126	132	132	165	180	200	231	225	97,4
Mali	1107	984	880	760	1669	1763	1637	2428	148,3
Mauritania	83	21	16	22	67	146	166	181	109,0
Niger	1688	1704	1747	1075	1834	1825	1433	2434	169,9
Senegal	923	766	517	706	1241	890	1054	958	90,9
Chad	522	453	489	314	690	730	572	825	144,2
TOTAL	5821	5383	4861	4253	7383	7593	6719	9213	137,1

SOURCE : CILSS.

TABLE No 14. CILSS COUNTRIES

CEREAL ASSESSMENT PROJECTIONS 1988/1989
(in thousands of tonnes)

ITEM/COUNTRY	BURKINA FASO	CAPE VERDE	IGAMBIA	GUINEA BISSAU	MALI	MAURITIA NIA	INIGER	SENEGAL	CHAD	TOTAL FOR CILSS COUNTRIES	RICE	WHEAT	OTHER CEREALS	TOTAL
Population (mid-1989)	18832000	369000	1812000	1953000	18012000	12000000	17510000	17291000	5428000					14120700
1. AVAILABLE CEREALS	1758,2	32,7	108,9	174,0	2029,4	188,3	2090,3	866,4	733,6	592,1		76,9	17312,8	7981,
Gross output	2034,8	7,6	120,0	225,4	2428,3	181,0	2434,9	958,0	824,9	802,6		,8	18411,5	9214,
Available output	1718,6	6,5	93,0	147,9	1978,1	138,6	2054,9	768,8	685,5	441,0		,7	17150,2	7591,
Initial stock	39,6	26,2	15,9	26,1	51,3	49,7	35,4	97,6	48,1	151,1		76,2	162,6	389,
2. NEEDS	1741,2	94,5	134,0	168,8	1396,0	386,0	1859,9	1408,8	800,3	11136,4		307,0	16546,1	7989,
Consumption level/head(kg)	190,0	206,0	165,0	175,0	167,0	165,0	237,0	185,0	141,0					
Human Consumption	1678,1	76,0	134,0	166,8	1338,0	330,0	1779,9	1348,8	765,3	11107,9		302,2	16206,8	7616,
Final Official stock	63,1	18,5	,0	2,0	58,0	56,0	80,0	60,0	35,0	28,5		4,8	339,3	372,
3. GROSS SURPLUS/DEFICIT	17,0	-61,8	-25,1	5,2	633,4	-197,7	230,4	-542,4	-66,7	-544,3		-230,1	766,7	-7,
4. PROJECTED IMPORT/EXPORT	146,0	34,1	79,0	42,0	53,3	117,0	99,2	406,1	41,0	682,4		260,6	74,7	1017,
Commercial Importation	135,0	6,0	125,0	36,0	43,0	100,0	57,0	340,0	30,0	667,0		202,0	3,0	872,
Programmed food aid	11,0	28,1	20,0	6,0	10,3	17,0	42,2	68,9	11,0	84,2		58,6	71,7	214,
Exports	,0	,0	66,0	,0	,0	,0	,0	2,8	,0	68,8		,0	,0	68,
5. NET SURPLUS/DEFICIT	163,0	-27,7	53,9	47,2	686,7	-80,7	329,6	-136,3	-25,7	138,1		30,5	841,4	1010,
6. UNCOVERED NEEDS		27,7				80,7		136,3	25,7					

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE N° : 15. BURKINA FASO

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				
1. Available cereals	35,10	2,70	1.720,40	8.832.000
Gros output	37,00	,00	1.997,80	1.758,20
• Available output	20,40	,00	1.698,20	2.034,80
• Initial Stock	14,70	2,70	22,20	1.718,60
				39,60
2. NEEDS				
• Consumption level/head	144,91	37,63	1.558,64	1.741,18
• Human Consumption	14,03	4,17	171,80	190,00
• Final official stock	123,91	36,83	1.517,34	1.678,08
OFNACER	21,00	,80	41,30	63,10
CNLES	,00	,00	34,60	34,60
CGP	,00	,00	6,70	6,70
GMB	21,00	,00	,00	21,00
	,00	,80	,00	,80
3. GROSS SURPLUS/(+)/DEFICIT(-)	-109,81	-34,93	161,76	17,02
4. PROJECTED/IMPORT/EXPORT				
• Commercial Import	100,00	37,10	8,90	146,00
• programmed food Aid	100,00	35,00	,00	135,00
• Exports	,00	2,10	8,90	11,00
	,00	,00	,00	,00
5. NET SURPLUS/(+)/DEFICIT(-)	-9,81	2,17	170,66	163,02
6. UNCOVERED NEEDS	9,81	0	0	

CERIAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE N° : 16. CAPE VERDE

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				369,000
1. Available cereals	5,40	5,00	22,30	32,70
Gros output	,00	,00	7,60	7,60
Available output	,00	,00	6,50	6,50
Initial Stock	5,40	5,00	15,80	26,20
2. <u>NEEDS</u>				
Consumpt° level/head	17,89	20,24	56,39	94,51
Human Consumption	39,00	44,00	123,00	206,00
Final official stock	14,39	16,24	45,39	76,01
	3,50	4,00	11,00	18,50
3. <u>GROSS SURPLUS(+)/DEFICIT(-)</u>	-12,49	-15,24	-34,09	-61,81
4. <u>PROJECTED/IMPORT/EXPORT</u>				
Commercial Import	6,10	8,50	19,50	34,10
programmed food Aid	3,00	,00	3,00	6,00
Exports	3,10	8,50	16,50	28,10
	,00	,00	,00	,00
5. <u>NET SURPLUS/(+)/DEFICIT(-)</u>	-6,39	-6,74	-14,59	-27,71
6. <u>UNCOVERED NEEDS</u>	6,39	6,74	14,59	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE N° : 17. GAMBIA

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				812.000
1. Available cereals				108,90
Gros output	32,40	,00	76,50	120,00
Available output	30,00	,00	90,00	93,00
Initial Stock	16,50	,00	76,50	15,90
	15,90	,00	,00	
2. <u>NEEDS</u>				
Consumpt° level/head	53,54	17,13	63,32	133,98
Human Consumption	65,93	21,09	77,98	165,00
Final official stock	53,54	17,13	63,32	133,98
	,00	,00	,00	,00
3. <u>GROSS SURPLUS/(+)/DEFICIT(-)</u>	-21,14	-17,13	13,18	-25,08
4. <u>PROJECTED/IMPORT/EXPORT</u>				
Commercial Import	64,00	15,00	,00	79,00
programmed food Aid	110,00	15,00	,00	125,00
Exports	20,00	,00	,00	20,00
	66	,00	,00	66,00
5. <u>NET SURPLUS/(+)/DEFICIT(-)</u>	42,86	-2,13	13,18	53,92
6. <u>UNCOVERED NEEDS</u>	,00	2,13	,00	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE No : 18. GUINEA-BISSAU

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				953,000
1. Available cereals	106,10	,00	67,90	174,00
Gros output	145,50	,00	79,90	225,40
Available output	80,00	,00	67,90	147,90
Initial Stock	26,10	,00	,00	26,10
2. NEEDS				
Consumption level/head	88,96	7,59	72,23	168,78
Human Consumption	91,25	7,96	75,79	175,00
Final official stock	86,96	7,59	72,23	166,78
	2,00	,00	,00	2,00
3. GROSS SURPLUS(+)DEFICIT(-)	17,14	-7,59	-4,33	5,23
4. PROJECTED/IMPORT/EXPORT				
Commercial Import	36,00	6,00	,00	42,00
programmed food Aid	36,00	,00	,00	36,00
Exports	,00	,00	,00	,00
5. NET SURPLUS/(+)/DEFICIT(-)	53,14	-1,59	-4,33	47,23
6. UNCOVERED NEEDS	,00	1,59	4,33	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE No : 19. MALI

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				8.012.000
1. Available cereals	176,60	4,00	1.848,80	2.029,40
Gross output	286,70	,00	2.141,60	2.428,30
Available output	157,70	,00	1.820,40	1.978,10
Initial Stock	18,90	4,00	28,40	51,30
2. <u>NEEDS</u>				
Consumption level/head	179,47	17,47	1.199,07	1.396,00
Human Consumption	22,40	2,18	142,42	167,00
Final official stock	179,47	17,47	1.141,07	1.338,00
	,00	,00	58,00	58,00
3. <u>GROSS SURPLUS/(+)/DEFICIT(-)</u>				
	-2,87	-13,47	649,73	633,40
4. <u>PROJECTED/IMPORT/EXPORT</u>				
Commercial Import	33,30	20,00	,00	53,30
Programmed food Aid	23,00	20,00	,00	43,00
Exports	10,30	,00	,00	10,30
	,00	,00	,00	,00
5. <u>NET SURPLUS/(+)/DEFICIT(-)</u>				
	30,43	6,53	649,73	686,70
6. <u>UNCOVERED NEEDS</u>				
	,00	,00	,00	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE No : 20. MAURITANIA

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				2,000,000
1. Available cereals				
Gross output	58,30	3,90	126,10	188,30
Available output	51,00	,00	130,00	181,00
Initial Stock	28,10	,00	110,50	138,60
	30,20	3,90	15,60	49,70
2. NEEDS				
Consumption level/head	112,80	95,30	177,90	386,00
Human Consumption	56,40	47,65	60,95	165,00
Final official stock	112,80	95,30	121,90	330,00
	,00	,00	56,00	56,00
3. GROSS SURPLUS(+)/DEFICIT(-)	-54,50	-91,40	-51,80	-197,70
4. PROJECTED/IMPORT/EXPORT				
Commercial Import	81,00	36,00	,00	117,00
Programmed food Aid	75,00	25,00	,00	100,00
Exports	6,00	11,00	,00	17,00
	,00	,00	,00	,00
5. NET SURPLUS/(+)/DEFICIT(-)	26,50	-55,40	-51,80	-80,70
6. UNCOVERED NEEDS	,00	55,40	51,80	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE N° : 21. NIGER

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				7.510.000
1. Available cereals	29,10	2,80	2.058,40	2.090,30
Gros output	50,20	,70	2.384,00	2.434,90
Available output	27,60	,60	2.026,70	2.054,90
Initial Stock	1,50	2,20	31,70	35,40
2. NEEDS				
Consumpt° level/head	75,70	18,47	1.765,69	1.859,87
Human Consumption	10,08	2,46	224,46	237,00
Final official stock	75,70	18,47	1.685,69	1.779,87
	,00	,00	80,00	80,00
3. GROSS SURPLUS/(+)/DEFICIT(-)	-46,60	-15,67	292,71	230,43
4. PROJECTED/IMPORT/EXPORT				
Commercial Import	40,00	30,00	29,20	99,20
programmed food Aid	40,00	17,00	,00	57,00
Exports	,00	13,00	29,20	42,20
	,00	,00	,00	,00
5. NET SURPLUS/(+)/DEFICIT(-)	-6,60	14,33	321,91	329,63
6. UNCOVERED NEEDS	6,60	,00	,00	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE No : 22. SENEGAL

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				
1. Available cereals	117,40	51,30	697,70	7.291,00
Gross output	150,00	,00	808,00	866,40
Available output	82,00	,00	686,80	958,00
Initial Stock	35,40	51,30	10,90	768,80
2. NEEDS				
Consumption level/head	401,44	52,79	954,61	1.408,84
Human Consumption	55,06	7,24	122,70	185,00
Final official stock	401,44	52,79	894,61	1.348,84
	,00	,00	60,00	60,00
3. GROSS SURPLUS(+)/DEFICIT(-)	-284,04	-1,49	-256,91	-542,44
4. PROJECTED/IMPORT/EXPORT				
Commercial Import	322,00	75,00	9,10	406,10
programmed food Aid	280,00	60,00	,00	340,00
Exports	44,80	15,00	9,10	68,90
	2,80	,00	,00	2,80
5. NET SURPLUS/(+)/DEFICIT(-)	37,96	73,51	-247,81	-136,34
6. UNCOVERED NEEDS	,00	,00	247,81	

CEREAL ASSESSMENT PROJECTIONS 1988/89
(in thousand of tonnes)

TABLE N° : 23. CHAD

ITEM	RICE	WHEAT	OTHER CEREAL	TOTAL
Population (mid-1989)				5.428.000
1. Available cereals				733,60
Gross output	31,70	7,20	694,70	824,90
Available output	52,20	,10	772,60	824,90
Initial Stock	28,70	,10	656,70	685,50
	3,00	7,10	38,00	48,10
2. NEEDS				
Consumption level/head	61,71	40,38	698,26	800,35
Human Consumption	11,00	7,44	122,56	141,00
Final official stock	59,71	40,38	665,26	765,35
	2,00	,00	33,00	35,00
3. GROSS SURPLUS/(+)/DEFICIT(-)	-30,01	-33,18	-3,56	-66,75
4. PROJECTED/IMPORT/EXPORT				
Commercial Import	,00	33,00	8,00	41,00
programmed food Aid	,00	30,00	,00	30,00
Exports	,00	3,00	8,00	11,00
	,00	,00	,00	,00
5. NET SURPLUS/(+)/DEFICIT(-)	-30,01	-18	4,44	-25,75
6. UNCOVERED NEEDS				
	30,01	,18	,00	

TABLE N° 24 : GROSS CEREAL PROJECTED ASSESSMENT- 1988-1989 SEASON

	Total : Population :(1000 inhab):	Annual : consumption: :/head (kg)	Fodd need : (1000t)	Gross : output : (1000t)	Losses and : seeds : (1000t)	Net : output : (1000t)	Gross : Surplus/ : Deficit	Gross : Surplus/ : Deficit
Burkina Faso:	8.832	190	1.678	2.034	316	1.718	40	-367
Cape Verde	369	206	76	8	1	7	-69	-56
Gambia	812	165	134	120	27	93	-41	-59
Guinea-Bissau	953	175	167	225	77	148	-19	-9
Mali	8.012	167	1.338	2.428	450	1.978	640	-16
Mauritania	2.000	165	330	181	42	139	-191	-204
Niger	7.510	237	1.780	2.434	380	2.054	274	-526
Senegal	7.291	185	1.349	958	189	769	-580	-456
Chad	5.428	141	765	825	139	686	-79	-273
TOTAL	41.207		7.617	9.213	1.621	7.592	-26	-1966

Source : CILSS.

(1) 15 % for millet, sorghum, maize, fonio and 45 % for rice.