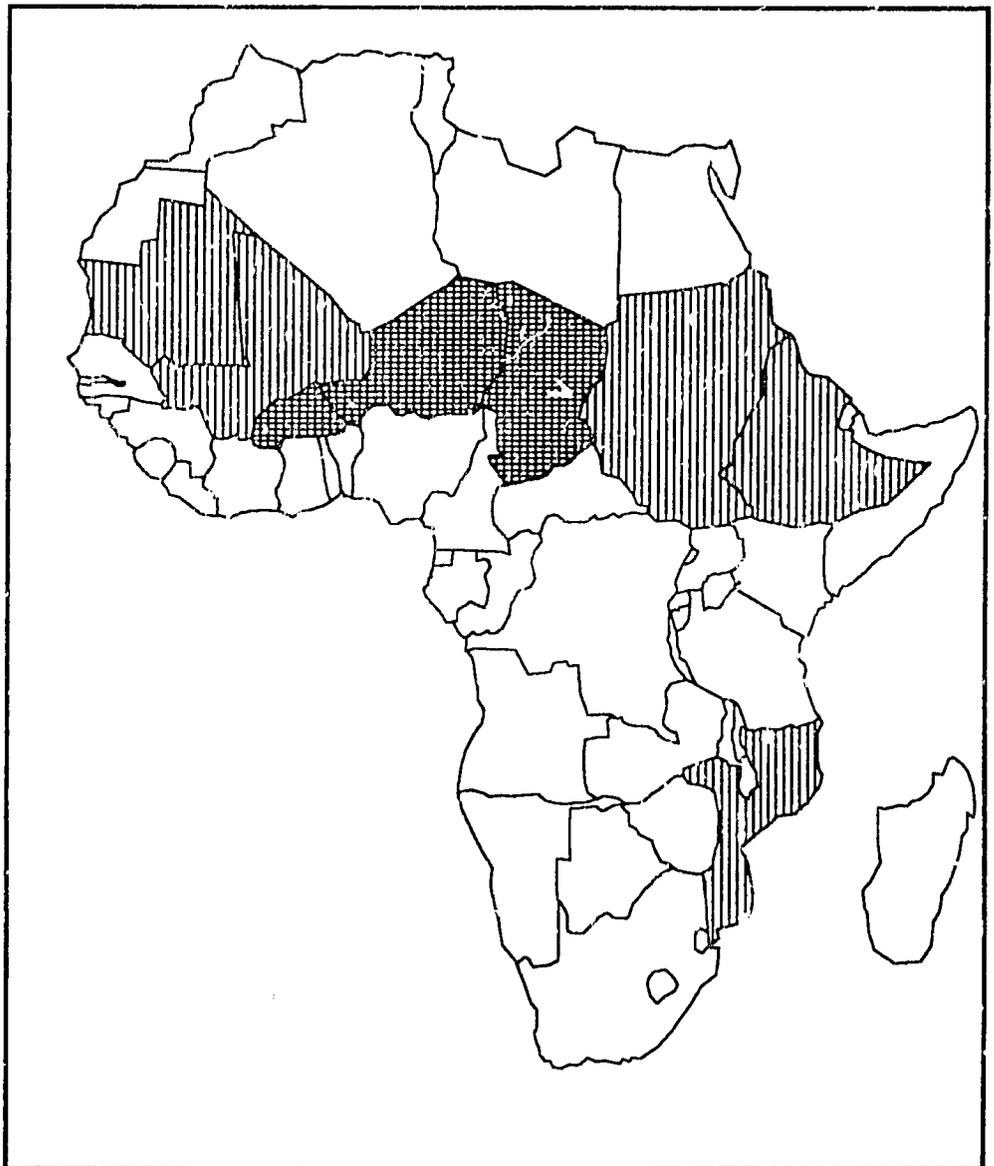


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Report Number 9
March 1987

FEWS Country Report

BURKINA, CHAD, and NIGER

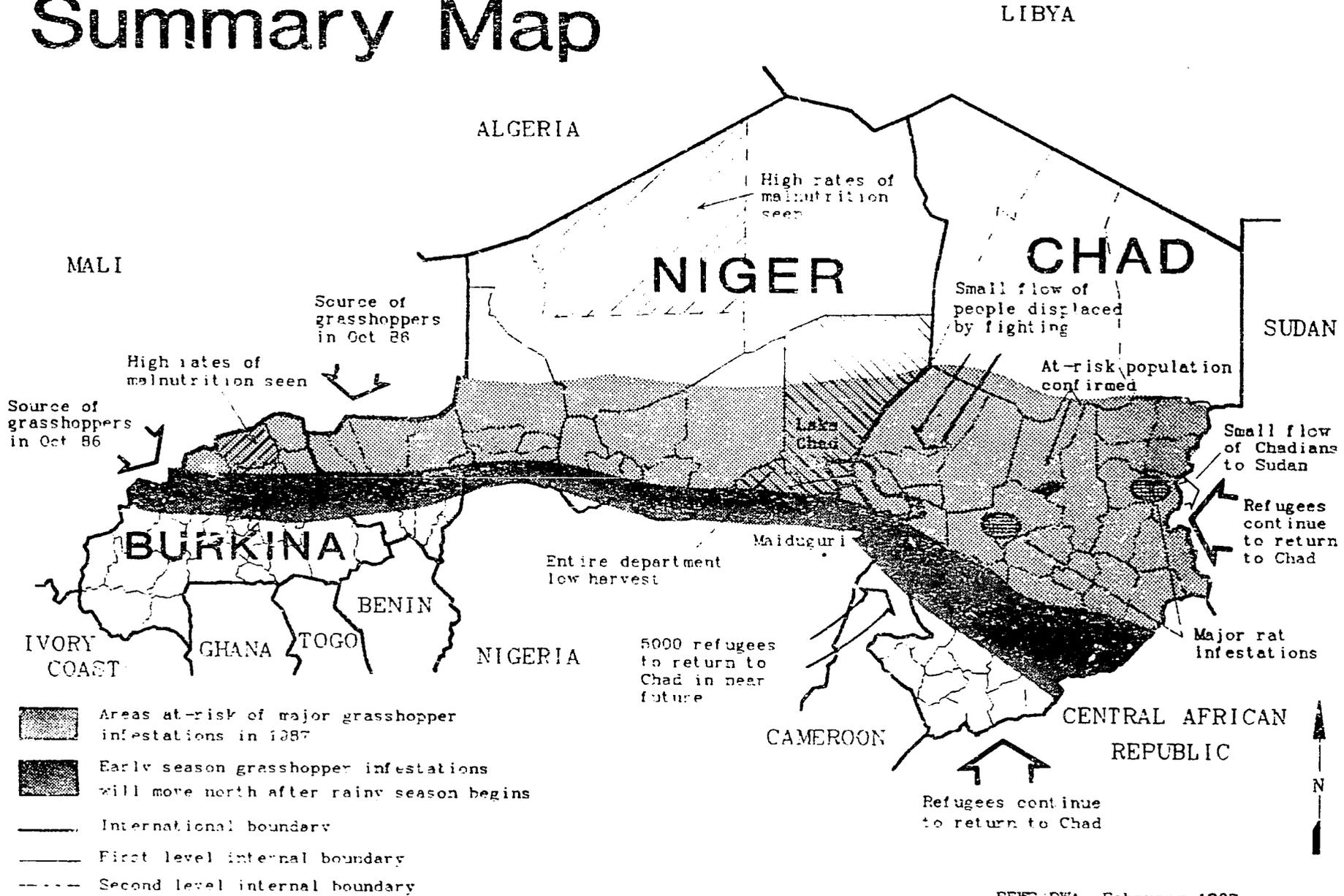


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Africa Bureau
U.S. Agency
for International
Development

AS30
6/87

Summary Map



BURKINA

CHAD

NIGER

Populations At-Risk

Prepared for the
Africa Bureau of the
U.S. Agency for
International Development

Prepared by
Price, Williams & Associates, Inc.
March 1987

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INTRODUCTION

This is the ninth in a series of monthly country reports issued by the Famine Early Warning System (FEWS). Burkina, Chad, and Niger will be combined in one report until the crop cycle begins again in the spring. These reports are designed to provide decisionmakers with current information and analysis on existing and potential nutritional emergency situations. Each situation identified is described in terms of geographical extent, the number of people involved, or at-risk, and the proximate causes insofar as they have been discerned. Information sources are cited in the text. Information has, whenever possible, been presented in the form of quantified data. When quantified data do not exist, qualitative data are used.

Use of the term "at-risk" to identify vulnerable populations is problematical since no generally agreed upon definition exists. Yet it is necessary to identify or "target" populations in-need or "at-risk" in order to determine appropriate forms and levels of intervention. Thus, FEWS reports will employ the term "at-risk" to mean...

...those persons lacking sufficient food, or resources to acquire sufficient food, to avert a nutritional crisis (i.e., a progressive deterioration in their health or nutritional condition below the status quo) and who, as a result, require specific intervention to avoid a life-threatening situation.

Perhaps of most importance to decisionmakers, the process underlying the deteriorating situation is highlighted by the FEWS effort, hopefully with enough specificity and forewarning to permit alternative intervention strategies to be examined and implemented. Food assistance strategies are key to famine avoidance. Other types of intervention, however, can be of major importance both in the short-term and in the long-run, including medical, transport, storage, economic development policy change, etc.

Where possible, estimates of food needs are included in the FEWS reports. It is important to understand, however, that no direct *a priori* relationship exists between numbers of persons at-risk and the quantity of food assistance that may be needed. This is because famines are the culmination of slow-onset disaster processes which can be extremely complex.

The food needs of individual populations at-risk depend upon when in the disaster process they are identified, and the extent of the cumulative impact on the individuals concerned. Furthermore, the amount of food assistance required, whether from internal or external sources, depends upon a great number of considerations. Thus the food needs estimates presented periodically in FEWS reports should not be interpreted to mean food aid needs, (e.g., as under PL480 or other donor programs).

FEWS does not collect primary data. Rather, it receives information from various domestic U.S. and international agencies and private voluntary organizations, and from government agencies in the countries under study via in-country FEWS Public Health Advisors. The information is then examined, compiled and analyzed for its predictive potential. Without the ongoing cooperation of all these organizations, FEWS could not function.

In particular, this report owes a debt to various offices of the US Agency for International Development (AID), USAID/Ouagadougou, USAID/N'Djamena, and USAID/Niamey; the Government of Burkina (GOB) Ministry of Agriculture and National Cereal Marketing Board (OFNACER); the Government of Chad (GOC) Ministry of Food Security and Displaced Persons (MSAPS); the Government of the Niger (GON) Office of Food Products (OPVN); the European Agency for Development and Health (AEDES); and CARE.

FEWS is operated by AID's Office of Technical Resources in the Bureau for Africa in cooperation with numerous USG and other organizations.

SUMMARY

The situation in Burkina remains much the same as in January. The December 1986 Government of Burkina (GOB) Ministry of Agriculture estimate of grain production includes a figure for Seno Province* that is markedly lower than previously predicted (Maps 2 and II-1). This puts that province into the vulnerable category, along with Bam, Oudalan and Soum Provinces. The assessment of Chad's population at-risk due to poor harvests has not changed from that of January. There has been an update on food aid plans in response to AEDS' (the European Agency for Development and Health) December assessment, and on relief efforts for the small number of people displaced by fighting in Borkou-Ennedi-Tibesti (B.E.T.) Prefecture (Map 3). About 5,000 refugees are expected to arrive in Chad from the Maiduguri area of Nigeria in the near future. The Government of Chad (GOC) Ministry of the Interior and the United Nations High Commission on Refugees (UNHCR) are preparing for their arrival. In Niger, there is no change in the current factors which put people at-risk of nutritional crisis. In January, the Government of Niger (GON) estimated that there were 714,600 people at-risk and 862,000 potential food aid recipients. Pest problems have not ceased. The current culprits are rats, first cited by the Sudan Mission in early February, and then noted in Chad in mid-February. Few crops remain susceptible to damage, as the harvest of even recessional crops is almost over, but the increasing rodent population does pose a major threat to the upcoming planting season.

Issues

- Recent reports of rat problems in Sudan and Chad point up the fact that grasshoppers are only one of many important crop pests in the Sahel. Pests that cause as much, if not more, crop damage are rats, raghuva (woolly caterpillars), weaver birds, and striga (a weed).

Key Events

- Emergency and supplementary food supplies (for carrying at-risk populations through to the next harvest) should be pre-positioned in vulnerable areas during the next few months to avoid emergency airlifts during the rainy season.

*The administrative units in Burkina are Provinces, Departments, and Arrondissements; in Chad, Prefectures, Sub-prefectures, and Cantons; and in Niger, Departments and Arrondissements. See Appendix III for reference maps which name the first and second level administrative units for each country.

- In a similar vein, any required pesticides and other pest control supplies must be ordered now, so that the pipeline is completed in time for control programs at the start of the rainy season. The rainy season can start as early as April in Burkina, in May in southern Chad, and in June as you move further north.
- The measles and meningitis season is on the upswing throughout the Sahel. The number of measles cases seen usually peaks in April. A watchful eye should be kept for any abnormal patterns that might portend a longer season, or a more intense season, than has been experienced in the past several years.

REGIONAL OVERVIEW

In each of Burkina, Chad, and Niger, the expected harvest, carry-over stocks, commercial imports, and pledged food aid are sufficient to cover the expected food needs in 1987. Chad, however, has the lowest food margin of the three, and the weakest infrastructure for meeting unforeseen emergencies (see Appendix I for Cereals Balance Sheets that utilize the most current information available for each of the three countries). There are stubborn pockets of low crop yield and locally low food stock levels in each country, although in-country resources appear capable of dealing with the possible problems identified so far.

Convergence of Stress Factors

Three measurable indicators of potential nutritional stress are shown in Map 2 (as in FEWS Country Report 8, Map 4). These indicators -- high rates of childhood malnutrition, anticipated food grain needs in excess of estimated local cereal production, and strong likelihood of intense grasshopper infestations -- are shown and mapped as geographic overlays, so that the areas for which at least two of these indicators are present, or anticipated, are pinpointed. Areas meeting the two-indicator criterion are likely to contain high levels of environmental stress. Due to the receipt of refined harvest estimates for Burkina, Seno Province has been added to the map of areas where local production is insufficient to meet current food needs. None of the new production estimates in the other three Burkina provinces highlighted on the food needs map (Kadiogo, Oudalan, and Soum) are higher than the previous estimates (see Appendix II for the new estimates, and FEWS Country Report 8 for the previous estimates).

Mitigating factors which might prevent such apparent stress from generating actual nutritional emergencies -- large on-farm grain stocks remaining from previous years, availability of cash income with which to buy food on the

market, and intra- and inter-regional trading in food stuffs -- are not highly visible and are difficult to estimate. Close monitoring of these high stress areas is necessary in the upcoming year to determine whether government or donor interventions beyond those already planned will be necessary.

Pests

Pests continue to plague farmers as the last of the recessionary crops are brought in. The current pests are rats, reported first in Sudan, and then in Chad. Rats have been a continuing problem along the Niger River in Mali, threatening both Burkina and Niger. Due to the lateness of the infestation, little damage will be done to the 1986 crop year harvest. Continued growth in the rat population, however, is worrisome for the 1987 growing season. Rats cause major damage during planting throughout the Sahel, and can force farmers to reseed their land three and four times, thus limiting resources for replanting after later drought and pest damage.

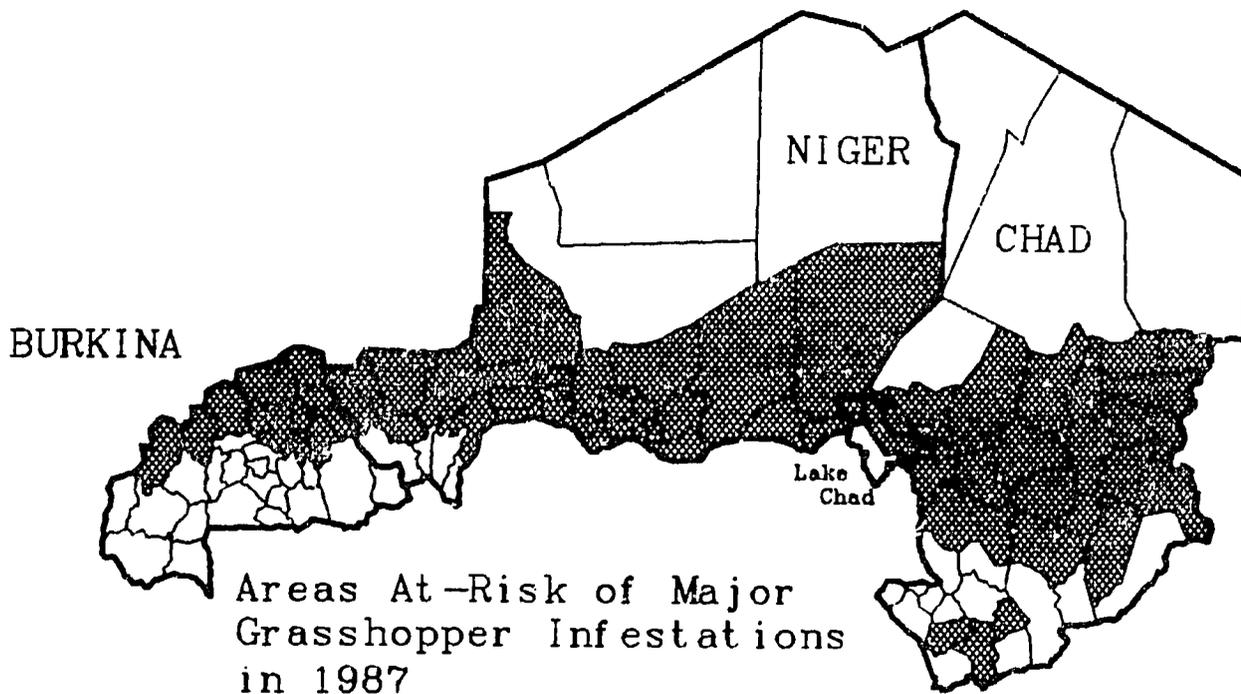
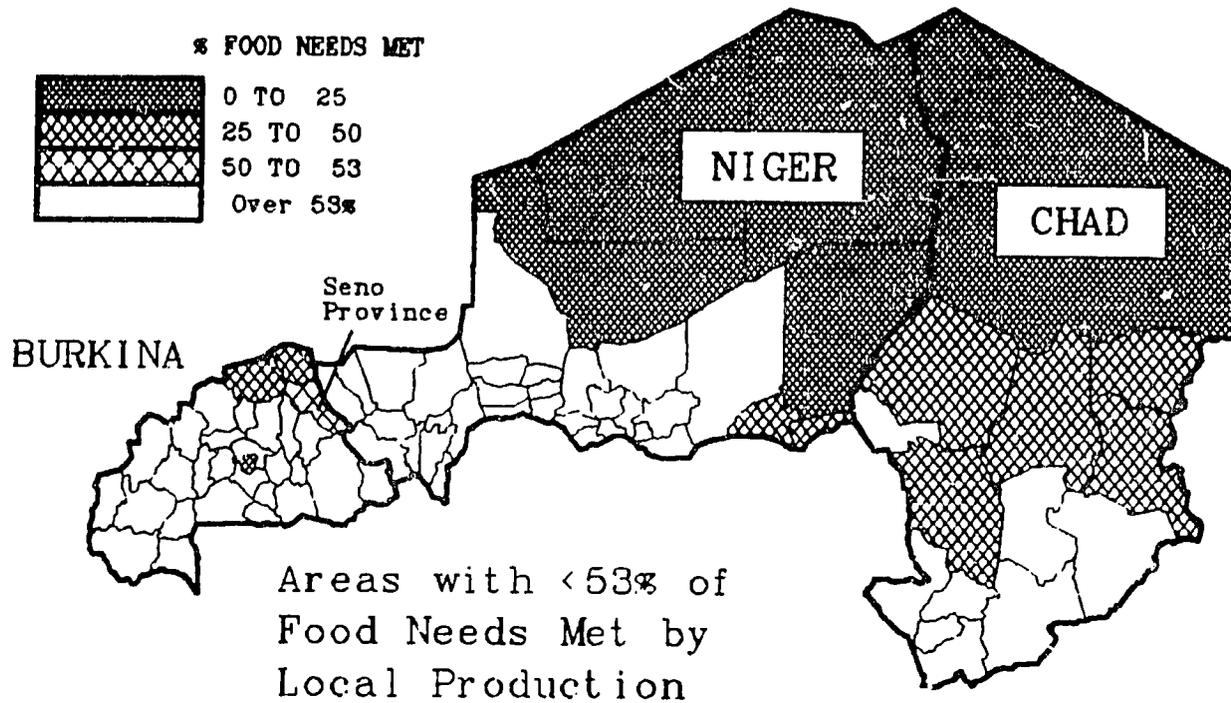
BURKINA

The four Burkina provinces highlighted as showing at least two stress indicators in Map 2 (Bam, Oudalan, Seno, and Soum Provinces) have a combined population of 735,105. It is unlikely that even the majority of the people of these provinces are at-risk of nutritional crises. Of the four provinces, however, only Seno Province had a stock of food pre-positioned as of September 1986. It is probable that some sort of food aid intervention will be necessary in these provinces before the 1987 harvest is completed. It is unlikely, however, that further emergency food commodity assistance, beyond that already planned, will be needed from the donor community during 1987. A description of the agricultural situation in Burkina is provided in Appendix II.

CHAD **Poor Harvests**

The number of Chadians confirmed to be at-risk of nutritional crisis in 1987 due to poor harvests, and to require extra food aid assistance, remains at 13,000, as determined by AEDS (the European Agency for Health and Development) in December 1986, and reported in FEWS Country Report 8. This number is the entire population of Ouled Rachid Canton in Djedaa Sub-prefecture, Batha Prefecture (Map 3). The factors cited in the risk confirmation are a combination of: crop loss; lack of on-hand food stock; lack of wherewithal to purchase food on the market (i.e., a weak livestock market); and a fear that herds, just now beginning to recover from the 1984 drought, would be lost if assistance were not provided.

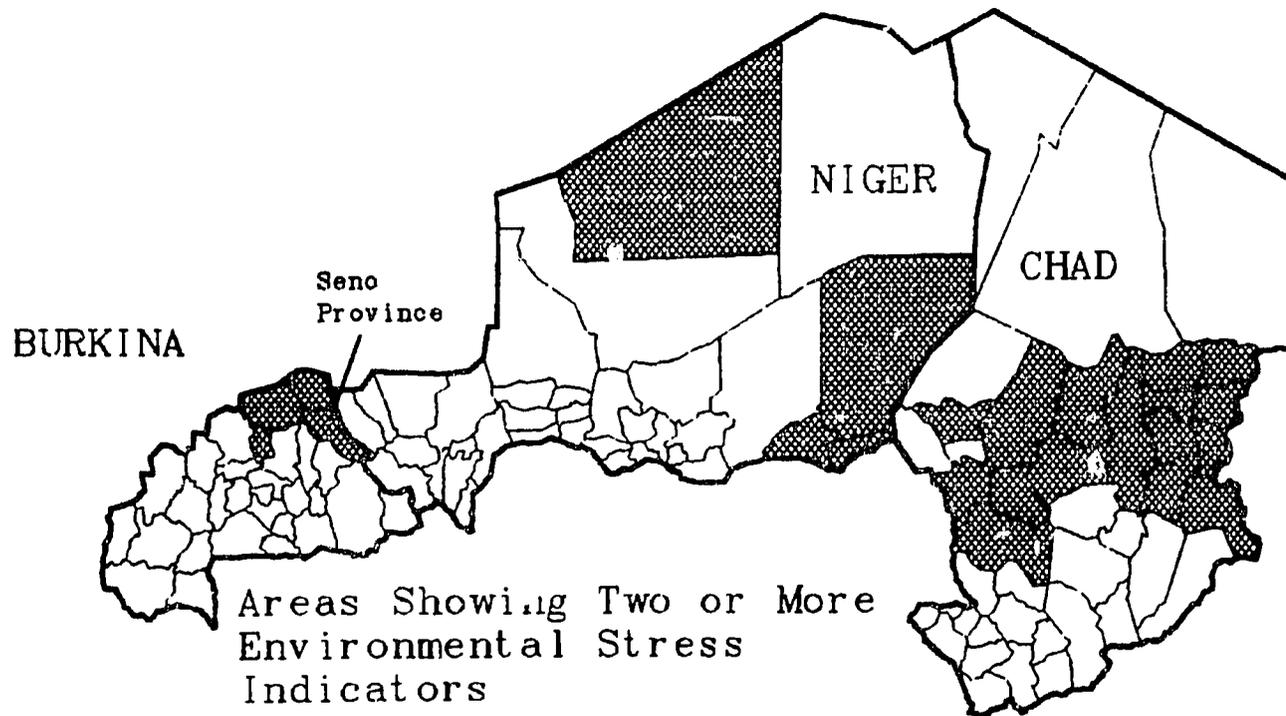
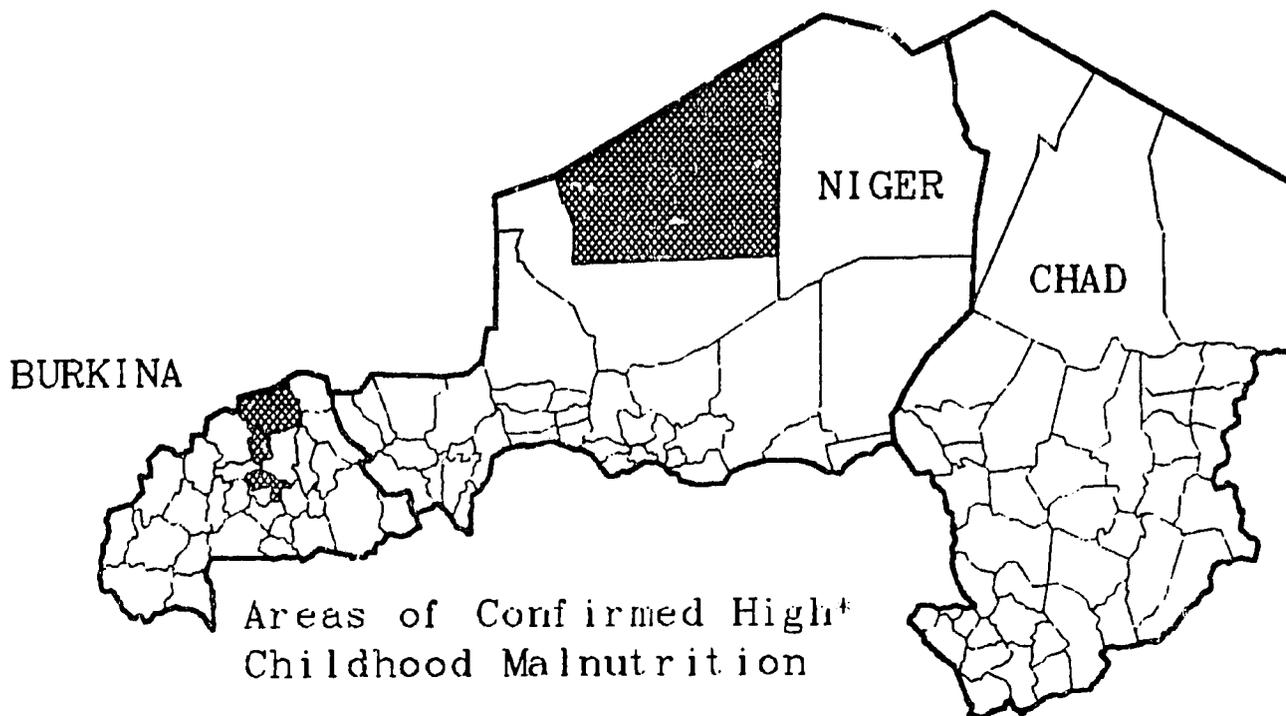
Environmental Stress



Admin Units, Upper Map:
 Provinces, Arrondissements, Prefectures
 Admin Units, Lower Map:
 Provinces, Arrondissements, Sub-prefs.

Source: Grasshoppers - Mission Cables;
 Burkina Production - see Appendix II;
 other production - see FEWS Country Report 8
 FEWS/PWA, February 1987

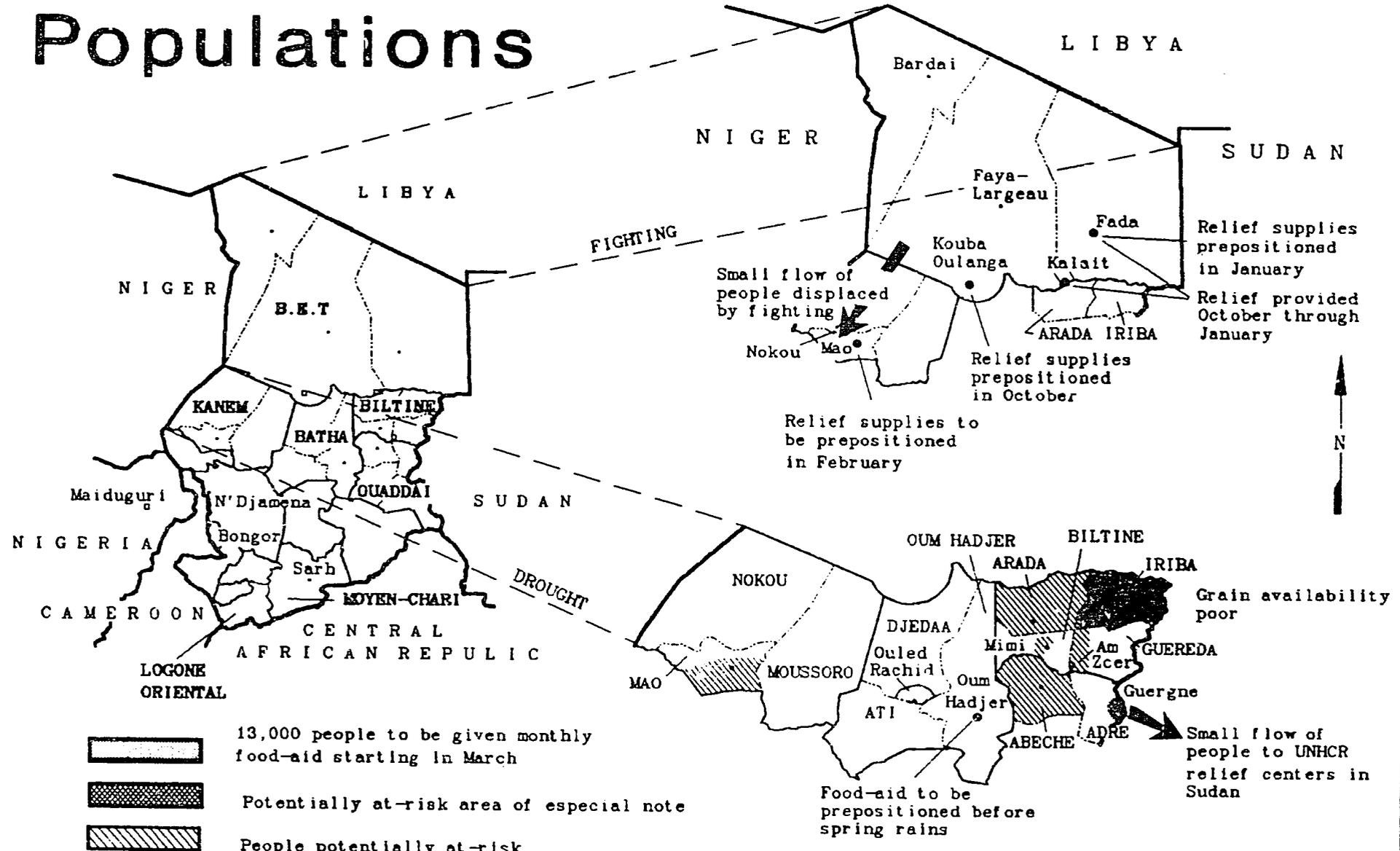
Environmental Stress



* 10% or more of those surveyed or in Province, weighing less than 80% of standard weight for age or height

Source: Malnutrition - GON; CARITAS; CRS; LICROSS - see FEWS Country Report 8 FEWS/PWA, February 1987

At-risk Populations



Source: Mission Cable, February 18, 1987
FEWS/PWA, February 1987

Other areas considered potentially at-risk by AEDES remain, as cited in January, southern Mao Sub-prefecture (Kanem Prefecture); Abeche Sub-prefecture and Guergne Canton of Adre Sub-prefecture, both in Ouaddai Prefecture; and Mimi Canton of Biltine Sub-prefecture and Am Zoer, Arada, and Iriba Sub-prefectures, all in Biltine Prefecture (Map 3). AEDES' assessment is based on the very poor harvests reported in these areas. As current population estimates for Chad are given by climate zone (Saharan, Sahelian, and Sudanian), it is not possible to estimate population at the canton level.

With the exception of Iriba Sub-prefecture, no emergency interventions are expected to be necessary before the next growing season is underway. The picture in Iriba Sub-prefecture is unclear. The AEDES/Chad team is currently surveying that area to determine what, if any, emergency action might be necessary.

A second area of note is Guergne Canton of Adre Sub-prefecture, Ouaddai Prefecture. There are reports of an unspecified number of people leaving the canton for western Sudan. There is at least one UN High Commission on Refugees (UNHCR) relief center within 24 miles of the border, easily accessible from Guergne Canton. Adre suffered a great deal of crop loss to grasshoppers during 1986, although the price of millet in the area remains low, indicating strong reserves of grain. The signal here is one of individual poverty rather than wide scale famine. A program such as Food-for-Work may be enough to alleviate the stress that has caused people to travel across the border.

Food Flows

CARE is planning to pre-position 1,000 metric tons (MT) of its emergency PL480 sorghum in Oum Hadjer Town for distribution to the Ouled Rachid area starting in March. If 1987 sees a lack of rain and abundance of pests similar to 1986 levels, it is possible that food aid assistance will be required by people in the rest of Batha Prefecture before the completion of the next harvest. Before the start of the rainy season, the GOC Ministry of Food Security and Displaced Persons (MSAPS) plans to pre-position some 12,000 MT of rice "up-country" in anticipation of possible emergency distribution needs. In 1987, it is not likely that further emergency food aid will be required beyond perhaps the 5,000 MT not yet called forward by CARE (see Table I-2, Appendix I).

Fighting in B.E.T.

The current fighting in Borkou-Ennedi-Tibesti Prefecture (B.E.T.) has displaced several hundred Chadians southward to Kanem and Biltine Prefectures (Map 3). Starting in late October, at least 650 people have been assisted in

Kalait Town, on the border of Faya-Largeau Sub-prefecture, B.E.T. Prefecture, and Arada Sub-prefecture, Biltine Prefecture. In January, about 100 families came down from B.E.T. to the area between Nokou and Mao Towns, in Kanem Prefecture. As of mid-February, food assistance pre-positioned for people fleeing hostilities in B.E.T. totaled about 565 MT of cereals, vegetable oil, and non-fat dried milk. These stocks were put in Fada Town, Kouba Oulanga Town, and Mao Town (Map 3, upper right).

Refugees

Refugees continue to return in small numbers to eastern Chad (Biltine and Ouaddai Prefectures) from Sudan, and to southern Chad (Moyen-Chari and Logone Oriental Prefectures) from the Central African Republic. The flow has been small enough to place no special strain on the Chadian economy, although some of the people returning require assistance in re-establishing themselves. The UNHCR is setting up sub-offices in Adre Town, Ouaddai Prefecture, and Sarh Town, Moyen-Chari Prefecture, to oversee repatriation assistance. The Government of Chad (GOC) is expecting 5,000 refugees to return from the Maiduguri area of Nigeria (Map 3, far left) in the near future. Preparations are being made for their arrival.

NIGER

The Government of Niger (GON), which has promised that no citizen will die of hunger, has two mechanisms for identifying people at-risk of nutritional crises. The first is an estimate by the Ministry of Agriculture (MINAG) of the number of people who either live in agropastoralist villages that have grown less than 30% of the grain necessary to feed the villages' populations, or who are pastoralists or displaced people having insufficient animal or other resources with which to acquire an adequate food supply. Using this definition, the GON MINAG estimated in January that 714,577 people will be at-risk during 1987. The second mechanism is an estimation of the number of people in a jurisdiction who will require some food assistance in the coming year, as determined by local government officials. This mechanism predicts that 868,134 people will require 46,000 MT of food aid during 1987. The people identified by each mechanism are not in the same locations, perhaps due in part to local government officials' knowledge of local factors, and perhaps also to the measure of each official's influence with those who make the final allocations. Although four arrondissements are identified as showing at least two stress indicators in Map 2 (Arlit in Agadez Department, and N'Guigmi, Diffa, and Mainc-Soroa in Diffa Department), the agricultural resources and the infrastructure with which to address the problems are present in Niger.

Appendix I COUNTRY CEREALS BALANCE SHEETS**Table I-1: Burkina, Cereals Available for Estimated 1987 Population of 8,445,122**

Estimated Net Production		1,631,900 MT
Stocks*		
GOB, Security	45,563 MT	
GOB, Stabilization	45,984 MT	
Private	30,000 MT	
Donor	10,000 MT	
On-Farm	300,000 MT	
Subtotal		431,550 MT
Food aid pipeline		
PL480, Regular	35,599 MT	
Other Donor	5,500 MT	
Subtotal		41,100 MT
Imports*		
GOB Wheat	30,000 MT	
GOB Rice	20,000 MT	
Subtotal		50,000 MT
Total Estimated Supply		2,154,550 MT
Cereal Needs @		
Avg 192 kg/person		1,621,500 MT
Estimated Cereal Surplus		533,050 MT

Source: Production from GOB Ministry of Agriculture, December 1986; Food aid from AID Food for Peace (FVA/PPE), January 1987

*Stock and import estimates are from November 1986 or earlier, and may not reflect the current situation.

Table I-2: Chad, Cereals Available for Estimated 1987 Population of 4,617,086

Estimated Net Production		582,250 MT
Stocks		
GOC (to sell)	17,000 MT	
Italian Rice (MSAPS[*])	12,000 MT	
Emergency PL480	2,000 MT	
Other	14,000 MT	
Subtotal		45,000 MT
Food aid pipeline		
Emergency PL480	2,500 MT	
Emergency PL480 not yet called forward	5,000 MT	
Regular PL480 (FFW[*])	2,500 MT	
WFP[*]	10,000 MT	
Subtotal		20,000 MT
Official Imports	75,000 MT	
Unofficial Exports	60,000 MT	
Subtotal		15,000 MT
Total Estimated Supply		662,250 MT
Cereal Needs @ Avg 142 kg/person		655,600 MT
Estimated Cereal Surplus		6,650 MT

Source: Mission Cables (production, imports, exports, cereal needs, and FFW and WFP Food aid pipeline as of November 28, 1986; stock and emergency PL480 as of February 18, 1987)

^{*}MSAPS is the Government of Chad Ministry of Food Security and Displaced Persons, FFW is the Food for Work program sponsored by the USAID Food for Peace (FFP) office, and WFP is the UN World Food Program.

Table I-3: Niger, Cereals Available for Estimated 1987 Population of 6,965,600

Estimated Net Production		1,537,300 MT
Stocks		
GON	162 MT	
On-Farm	10 MT	
Subtotal		172 MT
Imports		
GON/OPVN*	0 MT	
Commercial	15 MT	
Subtotal		15 MT
Total Estimated Supply		1,537,487 MT
Cereals Needs @ Avg		
175 kg/urbanite or pastoralist		
& 205 kg/agropastoralist		1,349,500 MT
Estimated Cereal Surplus		187,987 MT

Source: Production data from GON Ministry of Agriculture, January 1987; Population estimate from FEWS/Niger, January 1987

*OPVN is the Government of Niger Office of Food Products (functions as a Food Products Marketing Board and as the coordinator of emergency food distributions).

Appendix II**BURKINA FASO, 1986 CEREAL HARVEST**

The Ministry of Agriculture (MINAG) released a report of the 1986 agricultural campaign on December 31, 1986. According to that report, Burkina can expect a gross harvest of 1,919,358 metric tons (MT) of cereals. This figure includes 7,019 MT of fonio, a cereal not included in previous reports. Burkina is presently expecting a 1,912,839 MT harvest of the principal grain crops (millet, sorghum, maize, and rice).

The 1986 harvest is larger than any harvest during the past eleven years. Compared with 1985, Burkina is anticipating a 21% increase in cereal production (excluding fonio, which was not counted in the previous years' figures), whereas there will be a 75% increase in overall cereal production compared to that of 1984 (Table II-1). These sizable increases in production are attributed to large increases in the area under cultivation over the last two years. The rice harvest is the only cereal expected to decrease from 1985 levels, due primarily to decreases in the crop area devoted to rice. Burkina's high producing provinces (each expecting a gross harvest of over 88,000 MT, and a net harvest of 75,000 MT of cereals) are the southwestern provinces of Kossi, Houet (the outlier at 133,900 MT net harvest), and Mou Houn; the northwestern province of Yatenga; the central province of Bazega; and the southeastern provinces of Boulgou and Gourma (Map II-1).

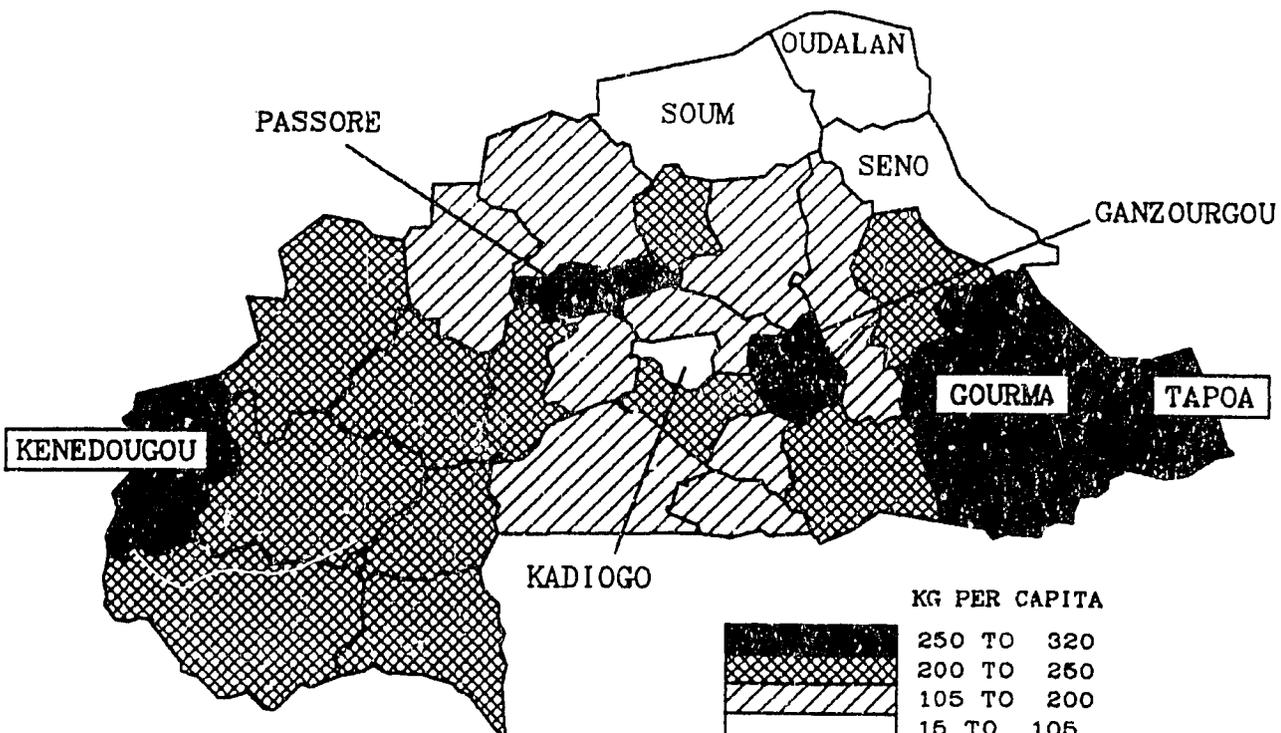
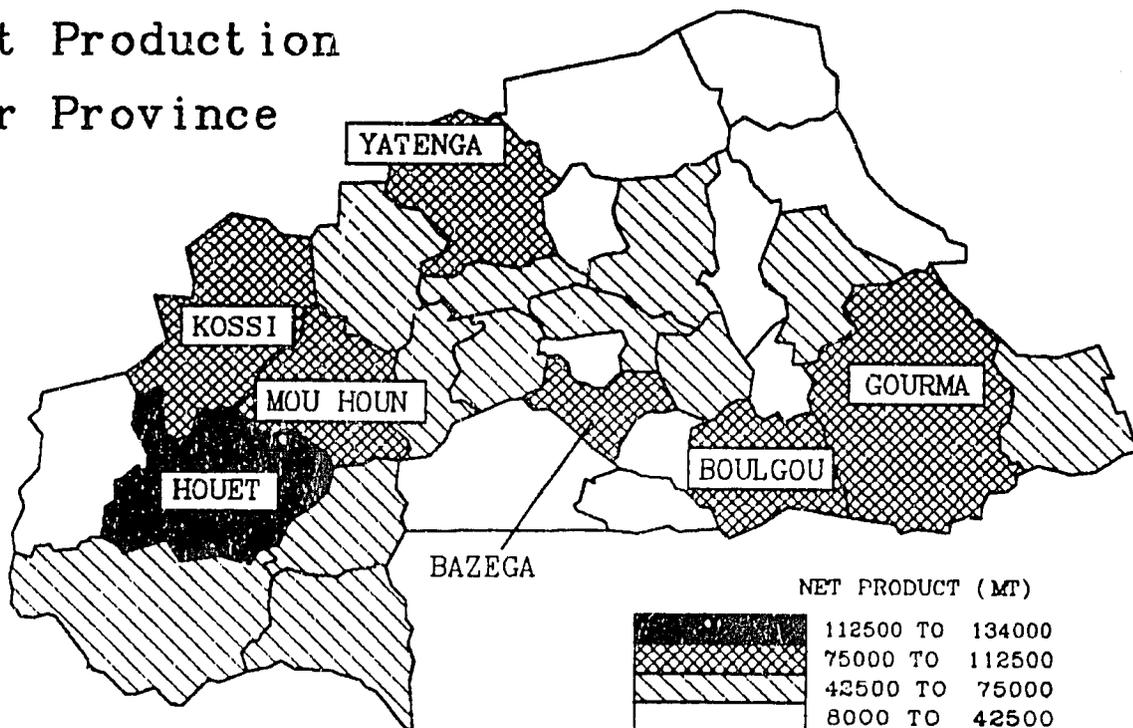
Table II-1: Burkina, Annual Gross Cereal Production, Excluding Fonio

Crop	1984 (000 MT)	1985 (000 MT)	Est. 1986 (000 MT)	% Of 1984	% Of 1985
Sorghum	597.9	796.5	1,027.2	171.8	130.0
Millet	416.8	586.6	682.7	163.8	116.4
Maize	62.2	142.6	163.0	262.1	114.3
Rice	16.1	50.9	39.9	247.8	78.4
Total	1,093.0	1,576.6	1,912.8	175.0	121.3

Source: "Report on the Situation of the 1986-1987 Agricultural Campaign". GOB Ministry Of Agriculture, December 31, 1986.

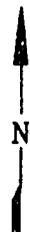
Net 1986 Production

Net Production
per Province



Net per Capita
Cereal Production

Source: GOB MINAG; GOB census pro-rated FEWS/PWA, February 1987



The December 1986 net production estimate for the four principal grains is 2% higher than that of September 30 (net cereals production, estimated to be 15% less than gross production, accounts for seed reserves and milling losses). Adding the small fonio harvest does not appreciably change the percent increase. The increase over the September estimate is not distributed evenly across all provinces. Percent changes from the September net province production estimates for 1986, range from minus 23.6% (Seno Province) to plus 26.3% (Houet Province). According to the newer province estimates (Table II-2), production in Houet and Sourou Provinces will now meet local food needs, whereas production in Sanmatenga will not. It is now apparent that Seno Province is quite vulnerable (local production will meet only 52.8% of the food needs, rather than 69.1% as calculated from the older figures), while Yatenga Province is a bit less vulnerable than previously thought (local production will actually meet 72.4% of the province's food needs, rather than the previous figure of 58.6%).

At the national level, Burkina appears to be marginally self-sufficient in cereal production (see Table I-1 in Appendix I). After the GOB National Cereal Marketing Board (OFNACER) Stabilization and Security Stocks are added, the cereal balance (106,500 MT) is approximately 106.6% of needs (before accounting for imports and stock on hand). However, OFNACER stocks were estimated in September and November of 1986, and the stock balances, by province, are probably now lower than the figures shown in Table II-2.

As shown in the table, cereal production deficits are expected in 11 out of 30 provinces. If anticipated deficits are expressed as a percentage of cereal requirements, the central province of Kadiogo will produce enough to provide for only 8.3% of the population's needs. It should be kept in mind, however, that Kadiogo contains the capital city, Ouagadougou. Thus, at least 96% of the Kadiogo population lives in an urban area, and should have other sources of food. After the OFNACER stocks are added to net production, all but Sanmatenga still have projected deficit cereal balances, although the severity of the deficits is somewhat diminished. Of the grain deficit provinces, Oudalan, Soum, and Seno are the most vulnerable, and warrant monitoring through the next crop year.

Table 11-2: Burkina, Estimated Production Versus Demand

Province	Estimated Population ¹ July 1987	1987 Food Need ² (000 MT)	1986 ESTIMATED CROP PRODUCTION ³ Millet, Sorghum, Maize, Fonio, and Rice			CEREAL BALANCE		OFNACER Stocks ⁶ (000 MT)	ADJUSTED BALANCE	
			Gross ⁴ (MT)	Losses ⁵ (000 MT)	Net (000 MT)	(000 MT)	% Of Needs Met		(000 MT)	% Of Needs Met
BAM	170,421	32.7	45,280	6.8	38.5	5.8	117.6%	0.0	5.8	117.6%
BAZEGA	324,570	62.3	93,732	14.1	79.7	17.4	127.8%	0.0	17.4	127.8%
BOUGOURIBA	233,041	44.7	56,693	8.5	48.2	3.4	107.7%	3.0	6.4	114.4%
BOULGOU	424,953	81.6	113,516	17.0	96.5	14.9	118.3%	2.6	17.5	121.4%
BULKIEMDE	376,796	72.3	76,142	11.4	64.7	-7.6	89.5%	2.4	-5.2	92.8%
COMOE	265,431	51.0	77,892	11.7	66.2	15.2	129.9%	1.9	17.1	133.6%
GANZOURGOU	207,456	39.8	66,506	10.0	56.5	16.7	141.9%	0.0	16.7	141.9%
GNAGNA	243,463	46.7	60,022	9.0	51.0	4.3	109.1%	0.0	4.3	109.1%
GOURMA	312,923	60.1	107,256	16.1	91.2	31.1	151.7%	5.7	36.8	161.2%
HOUEI	633,560	121.6	157,523	23.6	133.9	12.3	110.1%	11.9	24.2	119.9%
KADIOGO	515,552	99.0	9,699	1.5	8.2	-90.7	8.3%	32.4	-58.3	41.1%
KENEDOUGOU	147,271	28.3	48,943	7.3	41.6	13.3	147.1%	0.0	13.3	147.1%
KOSSI	352,401	67.7	101,180	15.2	86.0	18.3	127.1%	0.0	18.3	127.1%
KOURITENGA	207,257	39.8	36,790	5.5	31.3	-8.5	78.6%	3.1	-5.4	86.4%
MOU HOUN	307,715	59.1	88,890	13.3	75.6	16.5	127.9%	11.5	28.0	147.4%
NAHOURI	110,892	21.3	19,876	3.0	16.9	-4.4	79.3%	1.3	-3.1	85.5%
NAHENTENGA	206,166	39.6	38,503	5.8	32.7	-6.9	82.7%	0.0	-6.9	82.7%
OUERITENGA	314,563	60.4	71,579	10.7	60.8	0.4	100.7%	0.0	0.4	100.7%
OLDALAH	112,819	21.7	12,052	1.8	10.2	-11.4	47.3%	0.0	-11.4	47.3%
PASSORE	231,691	44.5	77,355	11.6	65.8	21.3	147.8%	0.0	21.3	147.8%
PONI	244,648	47.0	58,530	8.8	49.8	2.8	105.9%	4.5	7.3	115.5%
SANGUE	225,628	43.3	56,352	8.5	47.9	4.6	110.6%	0.0	4.6	110.6%
SANMATENGA	385,822	74.1	86,576	13.0	73.6	-0.5	99.3%	3.0	2.5	103.4%
SENO	246,362	47.3	29,385	4.4	25.0	-22.3	52.8%	5.4	-16.9	64.2%
SISSILI	265,577	51.0	49,060	7.4	41.7	-9.3	81.8%	0.0	-9.3	81.8%
SOLUH	205,503	39.5	22,494	3.4	19.1	-20.3	48.5%	0.0	-20.3	48.5%
SOUROU	285,299	54.6	66,235	9.9	56.3	1.5	102.8%	0.0	1.5	102.8%
TAPOA	169,134	32.5	63,378	9.5	53.9	21.4	165.9%	0.0	21.4	165.9%
YATENGA	554,140	106.4	90,739	13.6	77.1	-29.3	72.5%	7.4	-21.9	79.4%
ZOUNDEGOO	164,059	31.5	37,680	5.7	32.0	0.5	101.7%	0.0	0.5	101.7%
TOTALS	8,445,122	1,621.5	1,919,858	288.0	1,631.9	10.4	100.6%	96.1	106.5	106.6%

(1) Population estimate from December 1985 GOB census, pro-rated by provincial population growth rates to estimate July 1987 population.

(2) Consumption of 192 Kg/Person/Year as per USAID Mission estimate.

(3) Estimated gross production from GOB Ministry of Agriculture (MINAG) report of December 31, 1986.

(4) Gross cereals production includes Fonio (a wild grain, akin to millet), which was not included in the September 1986 MINAG report.

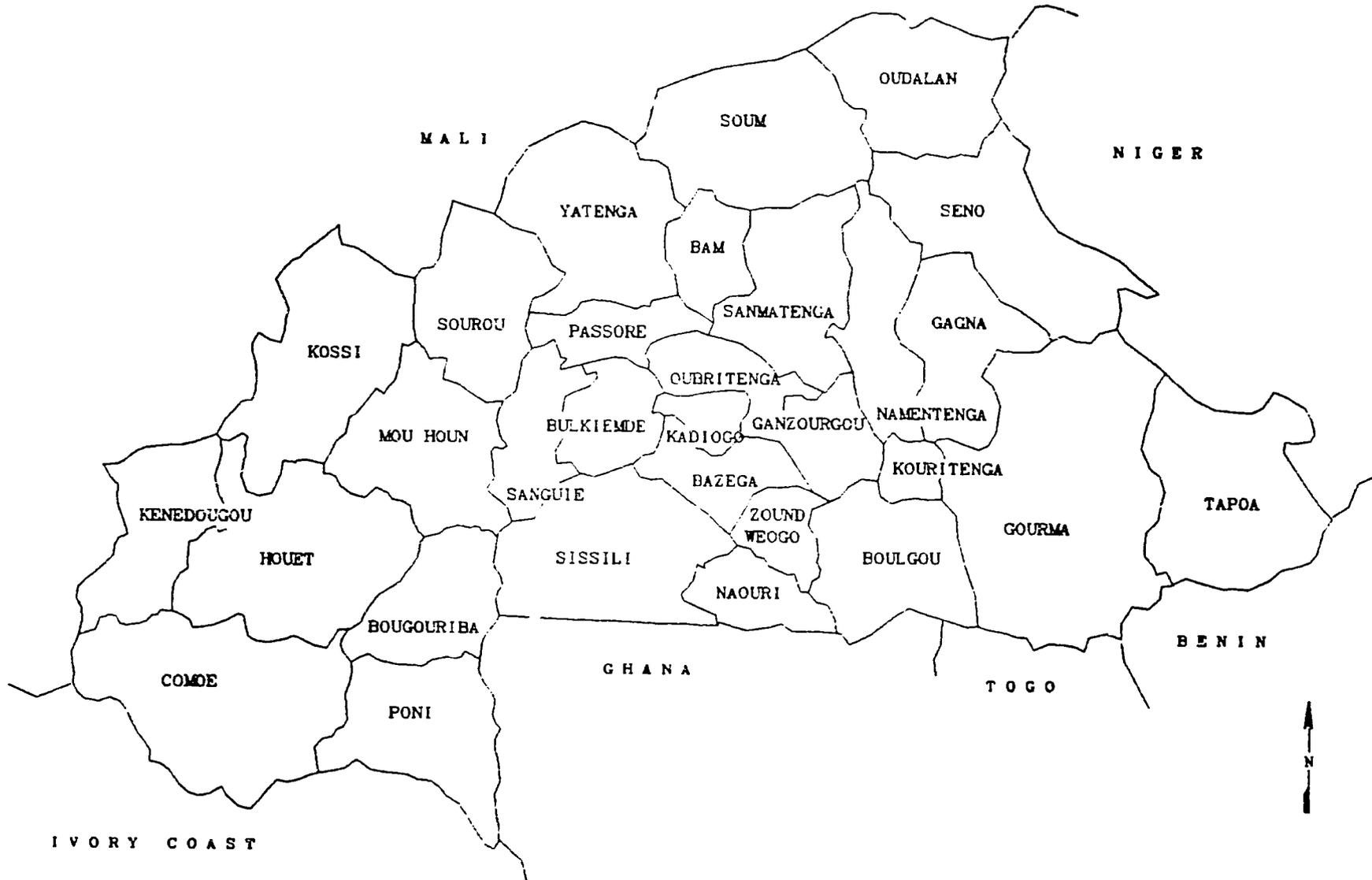
When comparing with previous FEWS reports, subtract Fonio production from gross production in Comoe (2,192 MT), Houet (2,002 MT), Kenedougou (1,465 MT), Kossi (1,300 MT), and Yatenga (60 MT) Provinces. Total Fonio production reported in December was 7,019 MT.

(5) Milling and waste losses for all cereals is 15% of gross production.

(6) OFNACER stocks estimated by GOB in September and November of 1986.

MAP III-1: BURKINA

PROVINCES

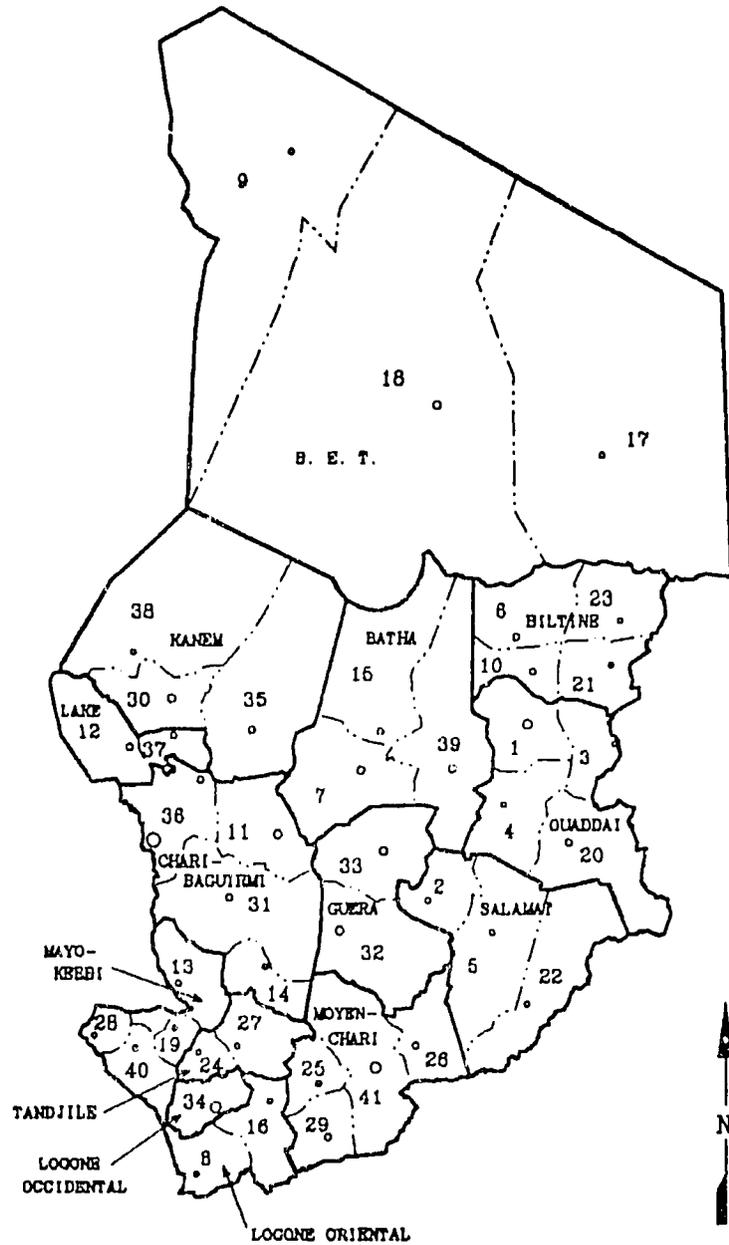


FEWS/PWA, February 1987

Administrative Units

(Prefectures & Sub-prefectures)

<u>Sub-prf</u>		<u>PRF</u>
1.	Abeche	OUA
2.	Abou Deia	SAL
3.	Adre	OUA
4.	Am Dam	OUA
5.	Am Timau	SAL
6.	Arada	BIL
7.	Ati	BAT
8.	Baibokoum	LOR
9.	Bardai	BET
10.	Biltine	BIL
11.	Bokoro	ChB
12.	Bol	LAK
13.	Bongor	MK
14.	Boussou	ChB
15.	Djedaa	BAT
16.	Doba	LOR
17.	Fada	BET
18.	Faya-Largeau	BET
19.	Gounou	MK
20.	Goz Beida	OUA
21.	Guereda	BIL
22.	Haraze	SAL
23.	Iriba	BIL
24.	Kelo	TAN
25.	Koumra	MCh
26.	Kyabe	MCh
27.	Lai	TAN
29.	Moissala	MCh
30.	Mao	KAN
31.	Massenya	ChB
32.	Melfi	GUE
33.	Mongo	GUE
34.	Moundou	LOc
35.	Moussoro	KAN
36.	N'Djamena/ Massakory	ChB
37.	N'Gouri	LAK
38.	Nokou	KAN
39.	Oum Hadjer	BAT
40.	Pala	MK
41.	Sarh	MCh



- Main Town in Sub-prefecture
- Prefectures
- - - - - Sub-prefectures

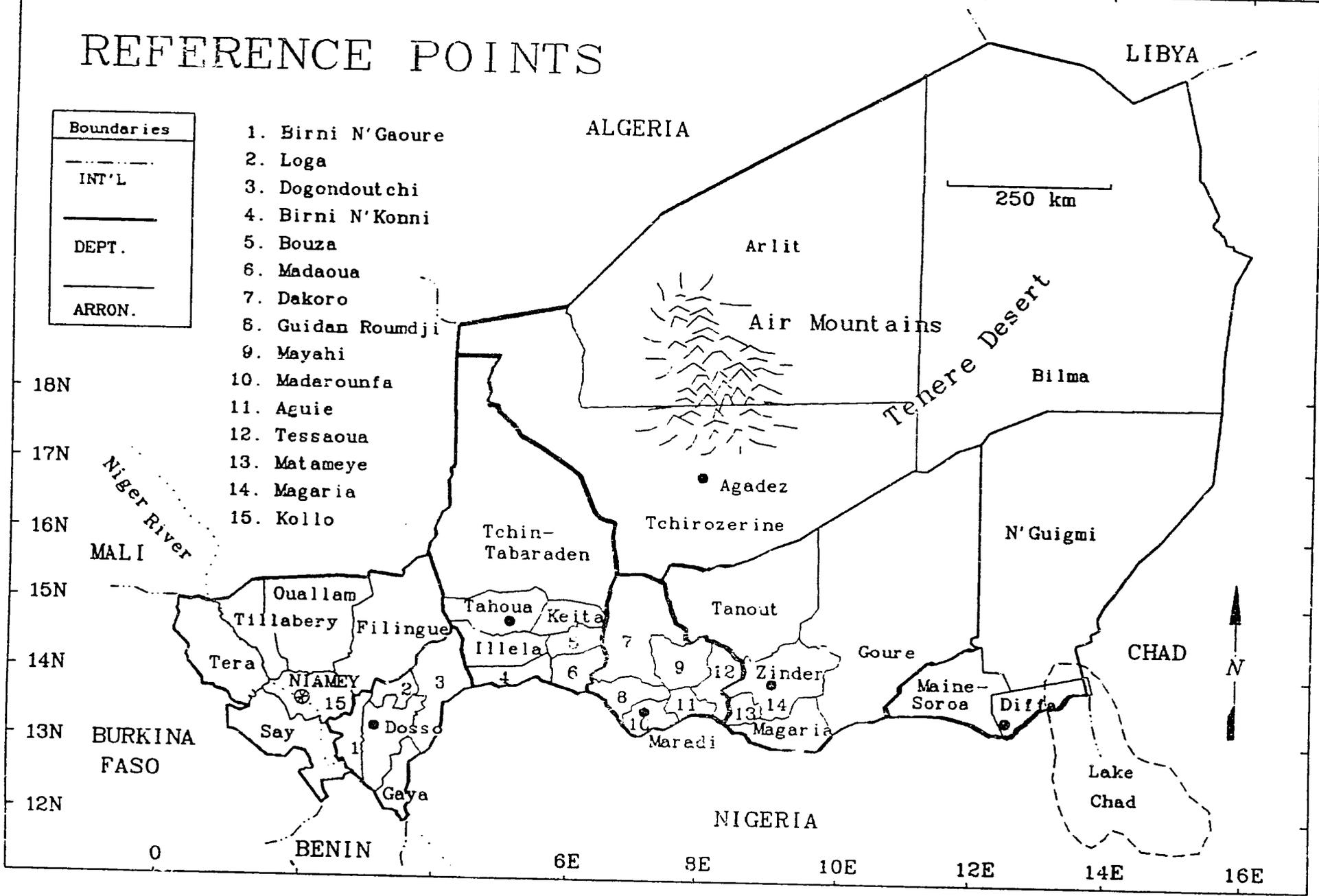
Source: 1969 Map in Eng.; Two Undated Maps in Fr
Map Authors Unknown

FEWS/PWA, February 1987

REFERENCE POINTS

Boundaries	
	INT'L
	DEPT.
	ARRON.

1. Birni N'Gaoure
2. Loga
3. Dogondoutchi
4. Birni N'Konni
5. Bouza
6. Madaoua
7. Dakoro
8. Guidan Roundji
9. Mayahi
10. Madarounfa
11. Aguié
12. Tessaoua
13. Matameye
14. Magaria
15. Kollo



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