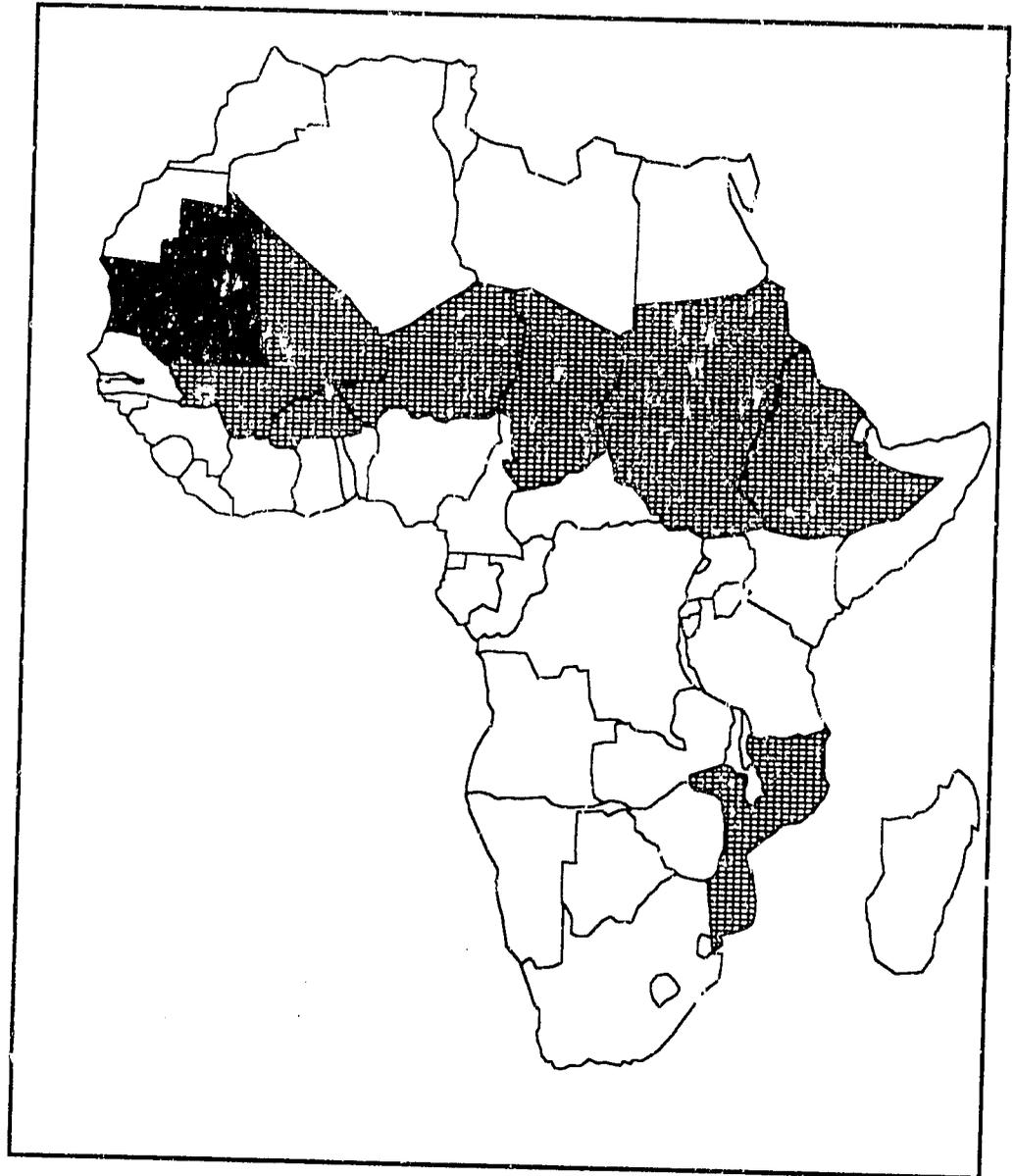


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July 1987

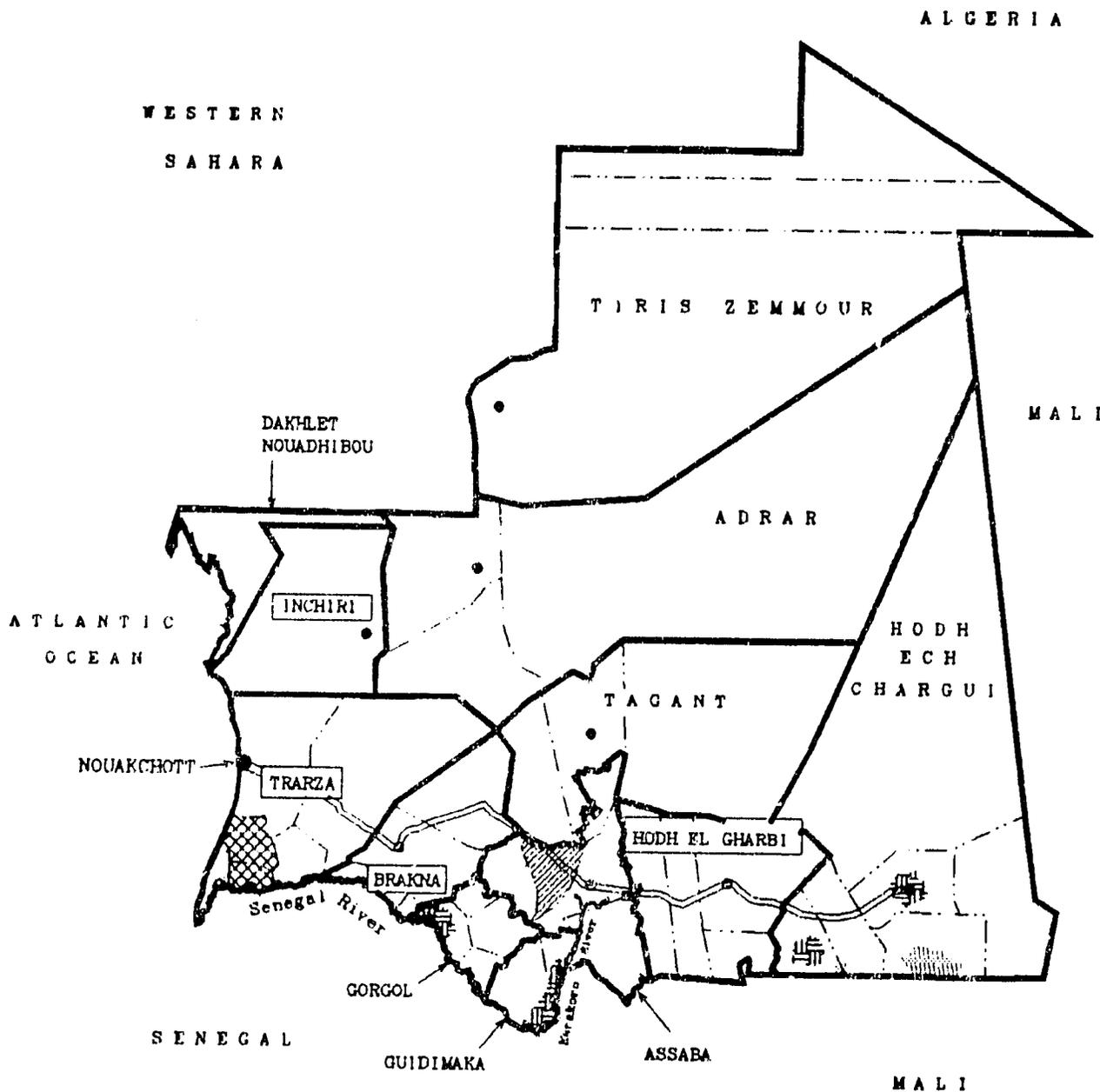
FEWS Country Report

MAURITANIA



Africa Bureau
U.S. Agency
for International
Development

Summary Map



 April mission to Trarza Region found serious malnutrition in 4 villages in Rosso and in 3 in Mederdra Department

 Nutrition surveys in Assaba Region show Guerou Department to have the highest rates of severe malnutrition

 By early July, area shows slightly more vegetation than in 1986

 Grasshoppers have begun to hatch, should reach winged stage by end of July

Famine Early Warning System Country Report

MAURITANIA

Rains Just Beginning

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

Prepared by
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July 1987

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INTRODUCTION

This is the thirteenth in a series of monthly country reports issued by the Famine Early Warning System (FEWS) on Mauritania. 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 PL 480 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), National Oceanic and Atmospheric Administration's National Environment Satellite, Data, and Information Service's Assessment and Information Services Center (NOAA/NESDIS/AISC), the Cooperative Institute for Applied Meteorology (CIAM) and USAID/Nouakchott; the Government of the Islamic Republic of Mauritania (GIRM) Crop Protection Service (CPS) and Food Security Commission (CSA); AGRHYMET; and Doctors Without Borders (MSF) and World Vision (WV).

FEWS is operated by AID's Office of Technical Resources in the Bureau for Africa (AFR/TR) in cooperation with numerous USG and other organizations. The FEWS Country Reports are working documents of AFR/TR and should not be construed as official pronouncements of the U.S. Agency for International Development.

SUMMARY

Mauritania's growing season has begun with early rain in May and June, which raised hopes of a good year for rainfall. The rain line moved rapidly south in mid-June, however, bringing it back to its more usual latitude for this time of year. Satellite imagery indicates that, so far, the only increases in vegetation levels are in the far southeast (Amourj, Djigueni, and Timbedgha Departments of Hodh ech Chargui Region) and in a second small area along the lower reaches of the Senegal River in Keur Massene and Rosso Departments of Trarza Region. A joint Government of the Islamic Republic of Mauritania (GIRM) Food Security Commission (CSA)/UN World Food Program (WFP) mission investigated reports of food shortage in Trarza Region. The mission recommended that certain villages, where minority groups are without sufficient resources to purchase food, be targeted for food aid distribution. A similar recommendation made earlier for one area in Hodh ech Chargui Region was reflected in the CSA's June 1987 Food Distribution Plan, so it is possible that these villages will also be aided this year. A series of nutrition surveys carried out in Assaba Region by World Vision show that the highest malnutrition rates seen in villages with feeding centers during 1985 have been greatly reduced.

Issues

- Earlier than expected rains may be catching the Mauritania grasshopper control campaign not completely prepared. Not all of the insecticides and other supplies had been pre-positioned in the vulnerable areas of the south by mid June, while reports of hatching of grasshoppers have been received from the southeast and south central parts of the country.

Key Events

- After a surprisingly early start in May, the rains moved south below the border after the beginning of June, returning to Mauritania in early July, the more usual start of the rainy season.
- By July 10, the areas that had received sufficient precipitation for the "moist soil"^{*} agricultural strategy were around Nema and Djigueni in Hodh ech Chargui Region and in the vicinity of Selibabi in Guidimaka Region.
- The first of two free food distributions by the CSA was to take place in June (note that in Nouakchott, three distributions are planned for 1987, rather than two).

^{*} In the moist soil strategy, seeds are planted only after the soil has received sufficient moisture to allow for germination. With the dry soil strategy, seeds are planted before the rains in the hopes that rain will arrive before the seeds lose the ability to germinate.

VEGETATION AND RAINFALL

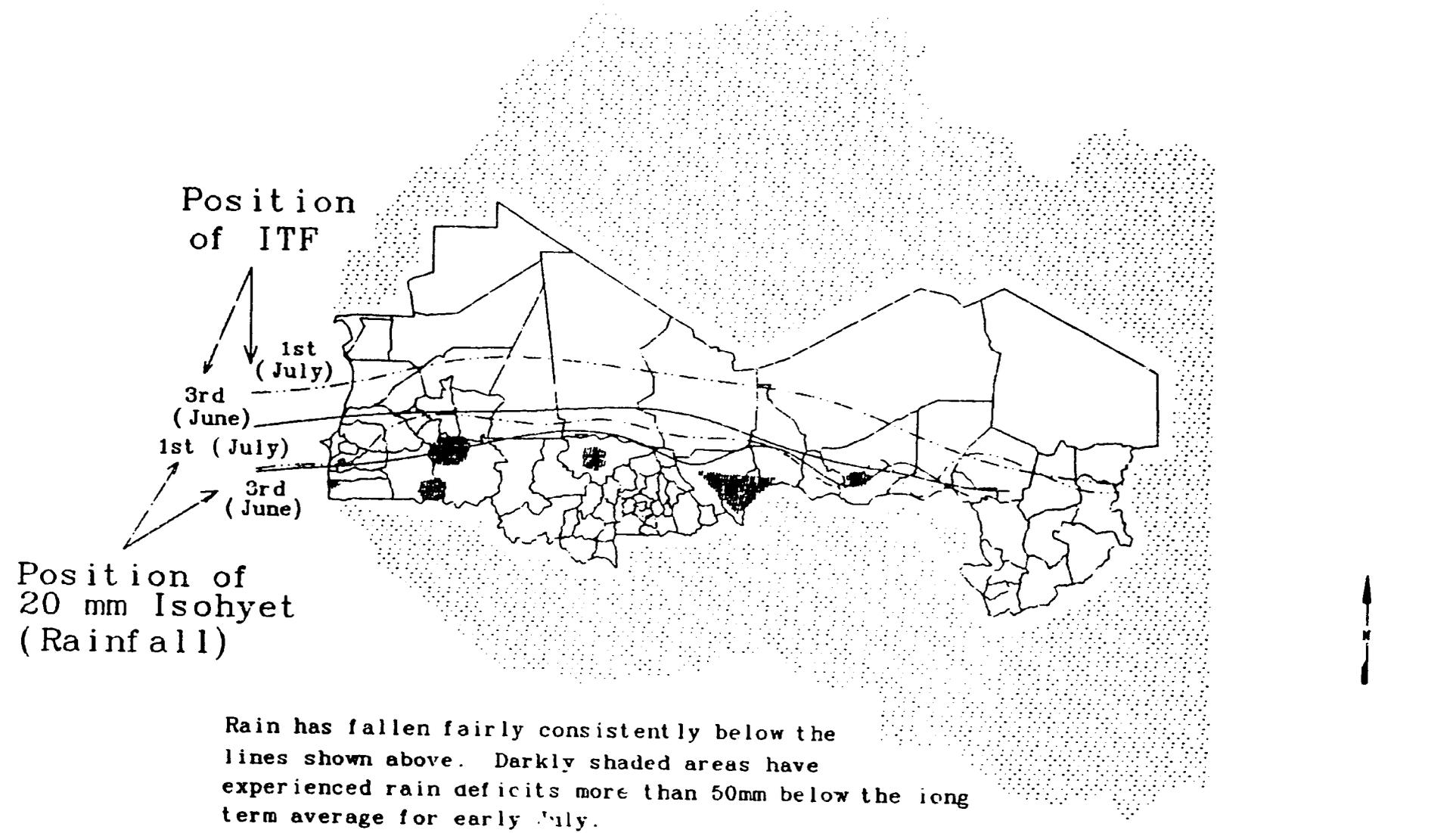
Satellite imagery shows little increase in vegetative vigor in Mauritania through early July. This is not unusual for this time of year, and the level of vegetation seen is not below average for the first ten days of July. Compared to last year in early July, the only areas that appear more vegetated in 1987 are the far south of Hodh ech Chargui Region (mostly in Amourj Arrondissement and a small bit in Djigueni and Timbedgha Arrondissements at the Mali border, see Summary Map) and along the lower reaches of the Senegal River in Trarza Region (in Rosso Arrondissement, more probably due to the benefits of irrigation than rainfall). In both areas the difference is slight, however.

AGRHYMET, a Sahel regional agriculture and meteorological organization based in Niger, has reported isolated, early rainfall in Kaedi (Gorgol Region) and Nema (Hodh ech Chargui Region), that was sufficient for farmers to prepare the soil for planting. Grasshoppers have been hatching in Hodh ech Chargui, Gorgol, and Guidimaka Regions in response to the rains (Summary Map). The line of steady rainfall has just barely reached Mauritania, however, so that these areas could experience further dryness before the rains begin in earnest (Map 2). This is not a matter for worry. The rains last year did not begin until the end of August, yet Mauritania experienced an excellent harvest (for a country that lies mostly in the Saharan climate zone).

FOOD SECURITY

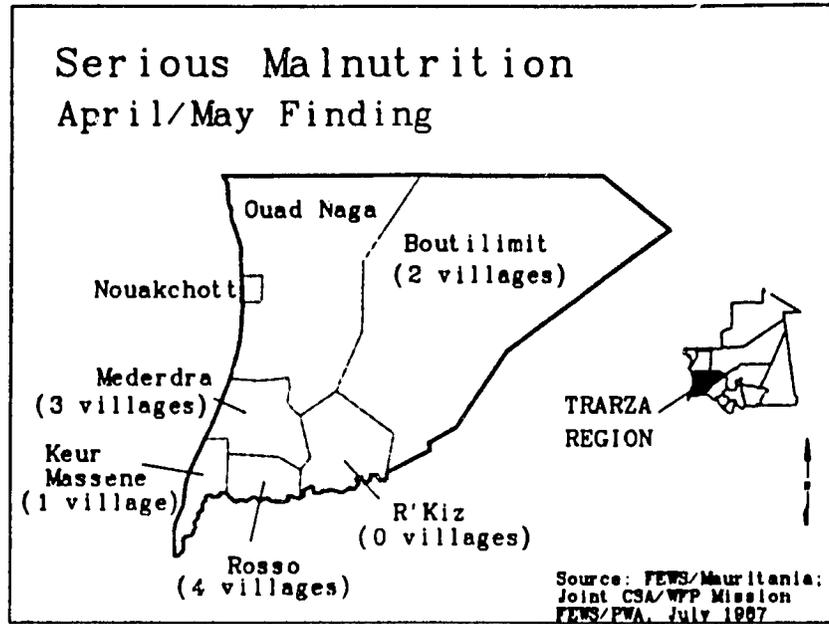
The possible food shortage in Trarza Region described in FEWS Country Report 12 was investigated jointly by the CSA and WFP in late April and early May. The problem was caused by income shortage among certain populations (mostly Puehl and Black Moors, two ethnic sub-groups in Mauritania) in certain villages. Because these people had few resources, they were unable to buy food. The joint mission recommended that the free food distribution in June be targeted to ten specific villages, where the nutritional state of both adults and children were judged to be serious. Out of 40 villages visited, four villages in Rosso Department, three in Mederdra Department, two in Boutilimit Department, and one village in Keur Massene Department were so designated (Map 3). No serious nutrition problems were noted in villages visited in R'Kiz Department. The mission did not visit Ouad Naga Department.

Rainfall and Inter-Tropical Front, by Decade June 21-30 (3rd) and July 1-10 (1st)



Source: AGRHYMET
FEWS/PWA, July 1987

Map 3:



Food Aid Coverage

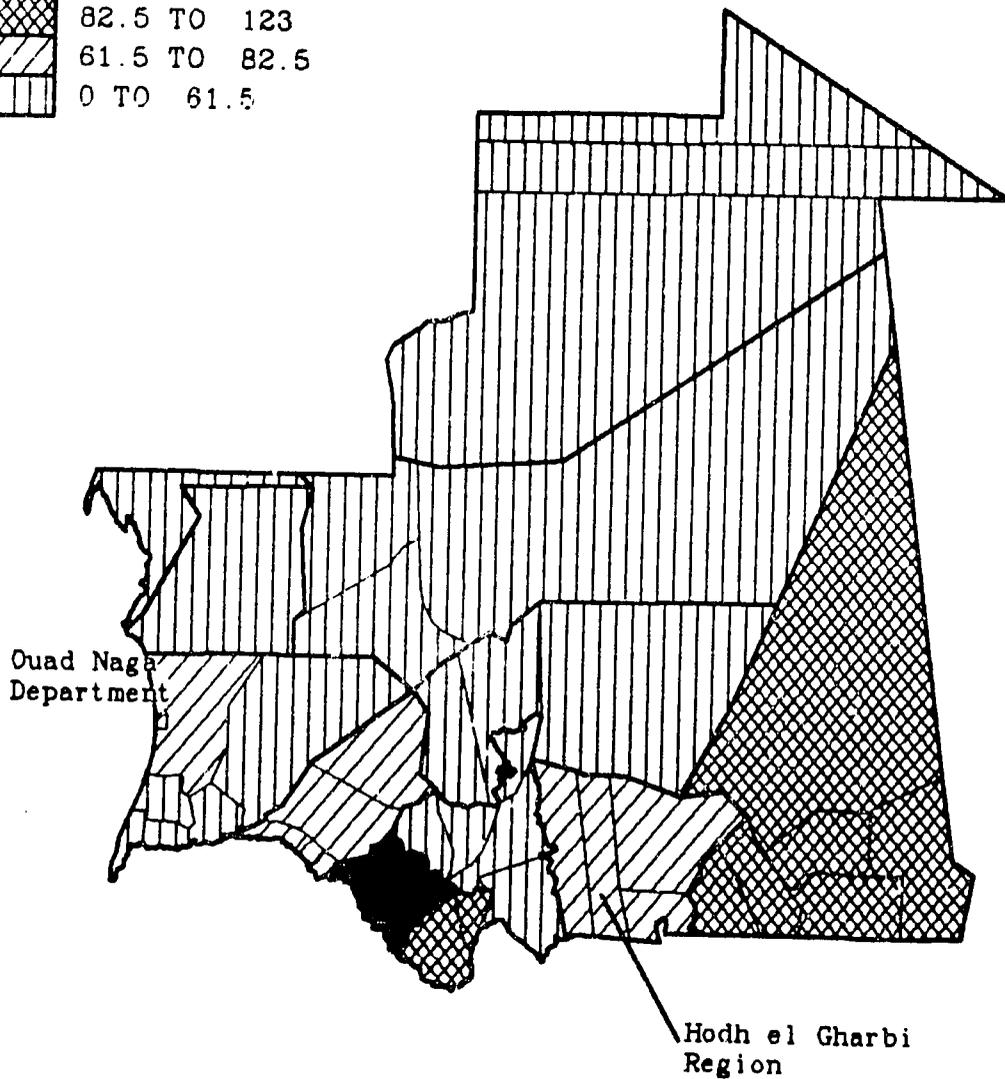
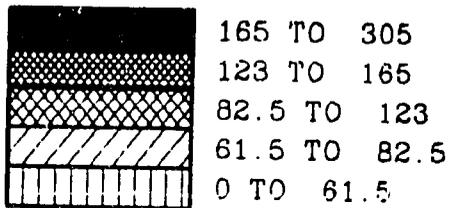
As stated in previous FEWS Country Reports, 30,500 metric tons (MT) of cereals will be distributed for free in 1987 (21,000 MT by the CSA, 9,500 MT by the Saudi Red Crescent Society). Of the CSA portion, about one-third was scheduled for distribution in June to the regions the CSA is supporting this year (that is, all but Tagant, Adrar, and Inchiri Regions). The June distribution will shift Hodh el Gharbi Region and Ouad Naga Department of Trarza Region out of the "less than 50% of needs met at an annual 123 kg per capita ration" range into the "less than 50% of needs met at an annual 165 kg per capita ration" range (Map 4).^{*} Included in the June distribution will be 240 MT for the food shortage area in Touil Arrondissement, Hodh ech Chargui Region, as recommended by an earlier joint mission (FEWS Country Report 12).

The Saudi contribution of food aid to Tagant, Adrar, and Inchiri Regions has raised an issue with which the GIRM, and the donor community, must contend. The 1987 per capita aid amount is much higher for these three regions than the CSA is able to provide for the rest of the country (Table 1 and Map 5). While Saudi support for these three non-agricultural regions allows the GIRM, with donor support, to provide more to the remaining 10 regions (including Nouakchott) than would otherwise have

^{*} Based on food grain consumption and population estimates for 1986, Mauritians consumed 123 kg per person, on the average. FAO uses 165 kg per person per year for calculating national food needs. While the actual consumption patterns are not known, pastoralists (concentrated in the northern Regions) probably consume less than 123 kg of grain per person per year, and agriculturalists (concentrated along the southern border) may well consume more than 165 kg of grain per year.

Cereals Available* as of June 1987

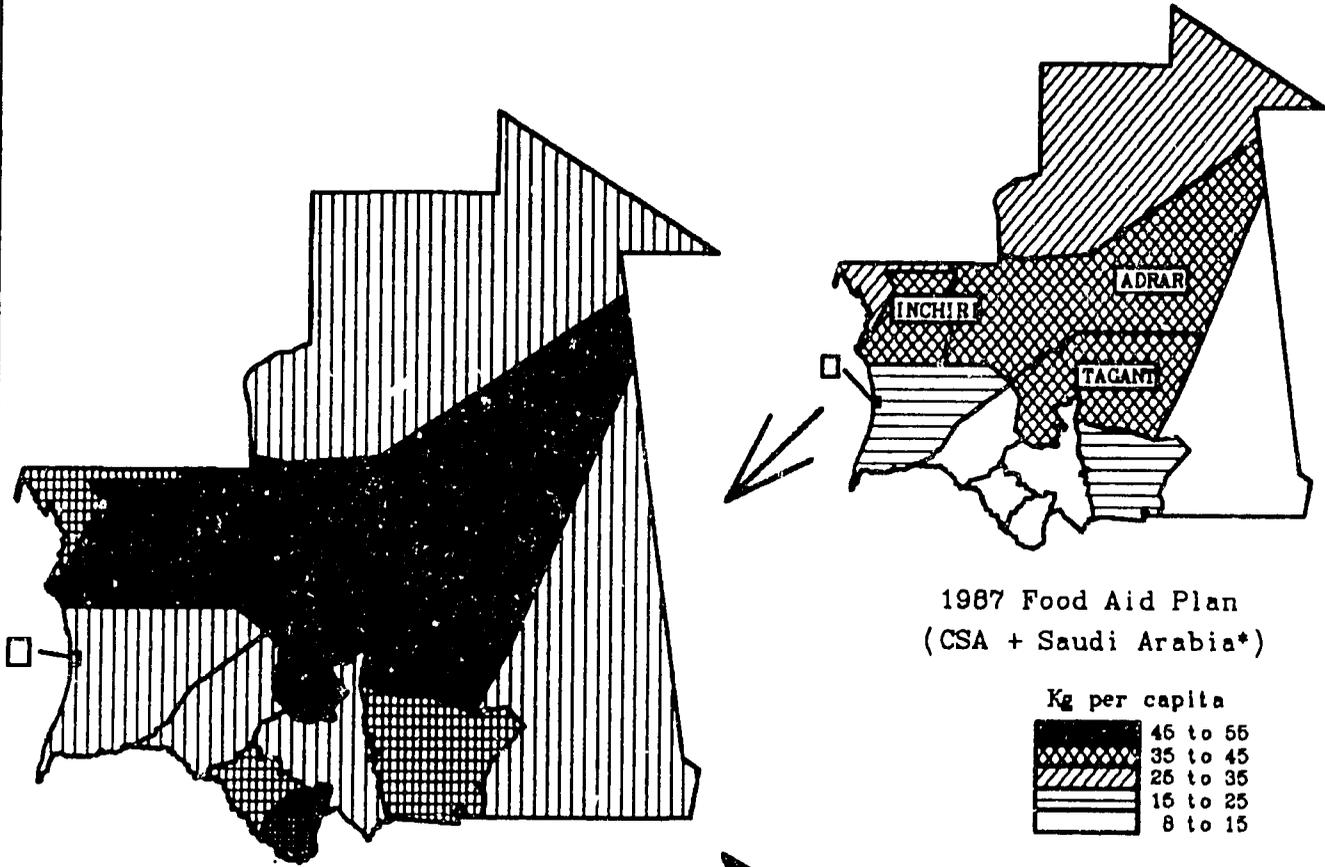
Kilograms per capita



*Includes May '87 estimate of 1986 harvest
and planned June food aid distribution

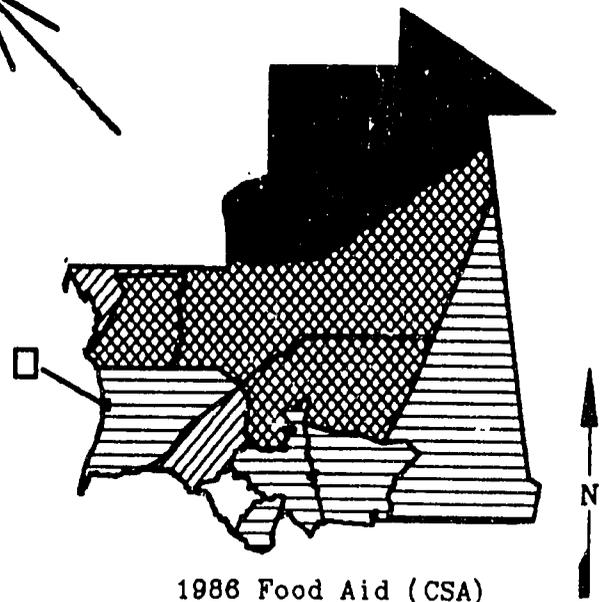
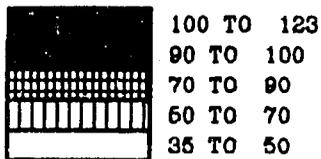
Source: CSA; FEWS/Mauritania
FEWS/PWA, July 1987

Food Aid Coverage 1987 vs 1986



1987 Food Aid
in terms of
1986 Coverage

% of '86 per capita Food Aid



*While the overall Saudi food aid package is known by FEWS, the Saudi regional plan is not. This map therefore depicts an even food distribution in the three regions that the Saudis will aid (Adrar, Inchiri, and Tagant).

Source: CSA; FEWS/Mauritania
FEWS/PWA, July 1987

been possible, the image of preferential treatment of the north remains. This could add to any north-south tensions that might exist in Mauritania, a common problem throughout the Sahel.

Table 1: 1986 and 1987 Cereal Food Aid Coverage

Region	Total Distribution		Distributed per capita		1987 per capita Distribution as % 1986 per capita
	1986 (MT)	1987 (MT)	1986 (kg)	1987 (kg)	
Adrar	3,850		47.8		
Inchiri	850		63.5		
Tagant	2,870		25.1		
Subtotal	7,570	9,500	36.4	44.7	123.1
Assaba	3,630	2,540	18.5	12.7	68.6
Brakna	5,050	2,700	28.2	14.8	52.4
Dakhlet Nouadhibou	950	850	31.7	27.9	87.7
Gorgol	1,600	1,250	12.3	9.5	76.6
Guidimaka	960	900	15.7	14.4	91.9
Hodh ech Chargui	3,920	2,440	17.8	10.9	61.0
Hodh el Gharbi	3,130	2,300	21.0	15.1	72.1
Nouakchott	7,685	3,000	22.8	8.7	38.3
Tiris Zemmour	1,115	720	54.1	34.2	63.3
Trarza	6,180	4,300	23.7	16.2	68.2
Total	41,790	30,500	23.3	16.7	71.6

Source: GIRM Commission for Food Security (CSA); FEWS/Mauritania

NUTRITION

World Vision Data

World Vision (WV) has completed several nutrition surveys in Assaba Region, which it serves. One survey, completed in January 1987, attempted to assess the background nutrition level of children under the age of five in the region; a second survey, completed in February 1987, repeated similar studies done in the same towns at the same time of year in 1985 and 1986 to assess child nutrition levels in the towns which WV serves.

From the first survey (Table 2), which visited mostly rural villages, it appears that both moderate and severe malnutrition are highest in Guerou Department and next highest in Kankossa Department. Similarly, the highest rate of severe malnutrition found in the second survey, which screened 2,906 children in urban areas, was in Guerou Town, the main town of Guerou Department (Village

Moderate malnutrition is defined here as measuring less than 90% of the standard but still measuring more than 80% of the standard; severe malnutrition is defined as measuring less than 80% of the standard.

9, Figure 1^{*)}. The rate of severe child malnutrition in Guerou Town (20.1%), is quite high for a survey using a weight for height nutrition measure.

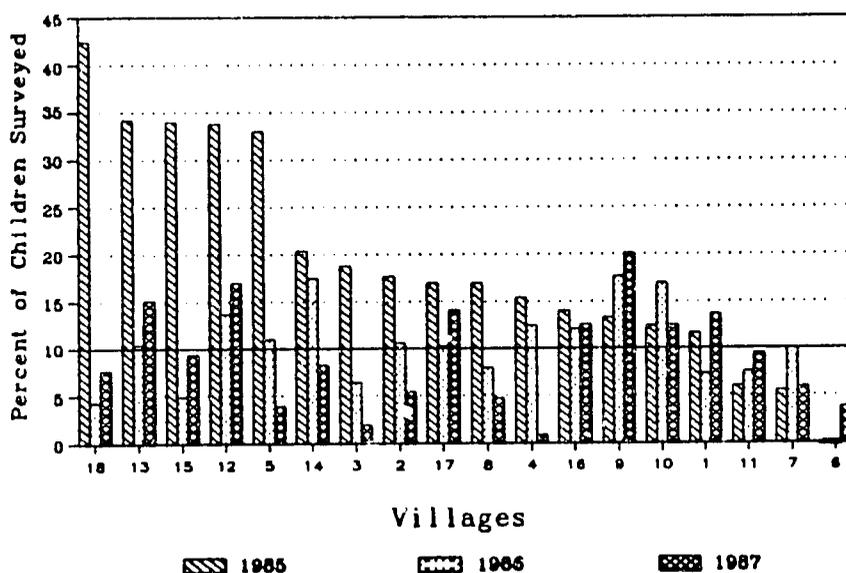
Table 2: Rates of Malnutrition in Assaba Region, January 1987

Department	# Children Evaluated	Moderate Malnutrition		Severe Malnutrition	
		#	%	#	%
Kiffa	117	13	11.1	4	3.4
Kankessa	131	25	19.1	9	6.9
Guerou	121	30	24.8	13	10.7
Boumdeid	215	35	16.3	10	4.7
Barkewol	190	32	16.8	7	3.7
Total	774	92	17.4	43	5.6

Source: World Vision/Mauritania; FEWS/Mauritania

Figure 1:

**Severe Malnutrition in WV Assisted Towns*
Assaba Region: 1985, 1986, and 1987**



*See Appendix for key to village names

either 1985 or 1986). Even so, the rates seen in this last group still do not approach the high rates of severe malnutrition measured in 1985.

Figure 1 also shows the shifts in rates of severe malnutrition from February 1985 to February 1987. Towns that were in the worst shape in 1985 (villages 5, 12, 13, 15, and 18) now have rates of severe malnutrition less than half that seen in the first survey. Of those, villages 5 and 18 (El Gherd and Lekdheirat) have shown the most dramatic drop in malnutrition rates. Of disturbing note, however, are the number of towns where more than 10% of the children surveyed are still severely malnourished and the fact that rates of severe malnutrition are increasing in the towns which originally were at the lower end of the scale (e.g., villages 9, 11, and 6, the last of which had contained no severely malnourished children in

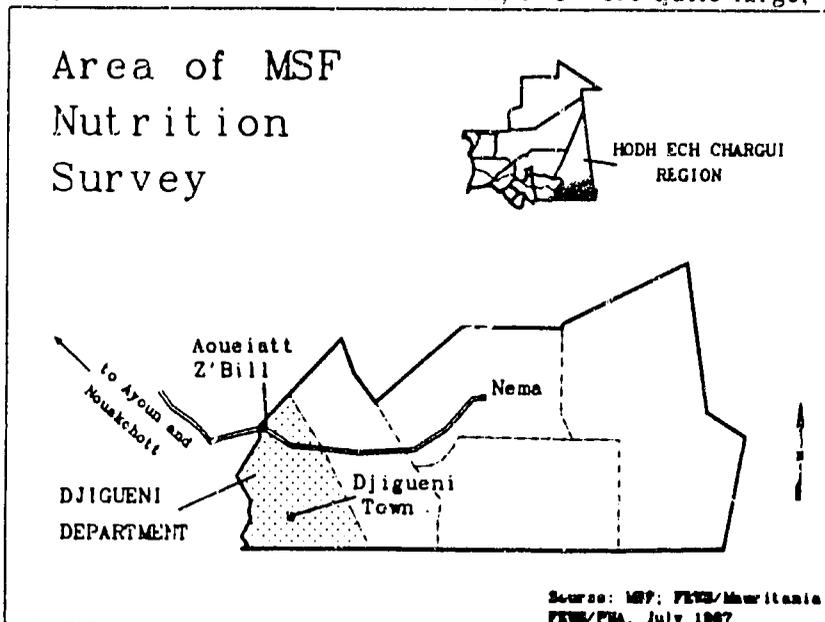
* Only those villages that were surveyed in all three years are included in Figure 1.

One pattern that remains consistent through the World Vision surveys is that the larger towns along the one permanent road in Assaba Region (which runs from Nouakchott to Nema, in Hodh ech Chargui Region) tend to show higher rates of malnutrition than do smaller towns far from the road. Various explanations for this have been put forward, including: the possibility that townspeople have less access to land and herds, and so must depend on uncertain cash income for buying food on the market; the possibility that the larger towns are perceived to have more facilities for supporting the destitute, so that people with few resources are attracted more to them than to other towns; and inherent socio-economic disorganization in urban areas.

MSF Data

In March of 1987, the private voluntary organization Doctors Without Borders (MSF) completed a nutrition survey of 1,798 children in 21 villages in Djigueni Department, Hodh ech Chargui Region. Among the towns included, two were quite large, while the rest were much smaller. In Djigueni Town and Aoueiatt Z'Bill, 483 and 406 children were screened, respectively, while in the other 19 villages, the number of children screened ranged from 10 to 92 (Map 6). In contrast to the WV findings in Assaba Region, the two larger towns did not display rates of malnutrition that were appreciably higher than the averages for the department, even though one of these large towns is on the Nouakchott to Nema road.

Map 6:

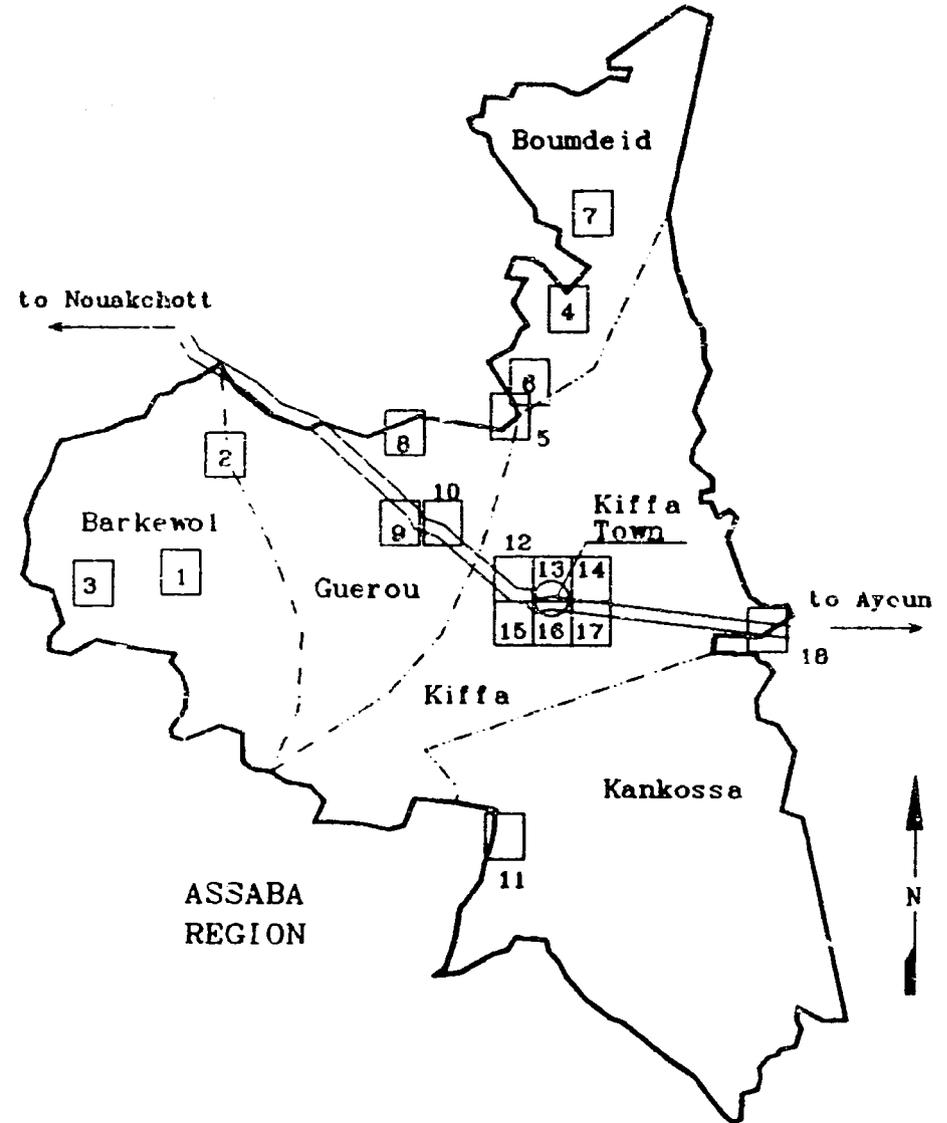


smaller. In Djigueni Town and Aoueiatt Z'Bill, 483 and 406 children were screened, respectively, while in the other 19 villages, the number of children screened ranged from 10 to 92 (Map 6). In contrast to the WV findings in Assaba Region, the two larger towns did not display rates of malnutrition that were appreciably higher than the averages for the department, even though one of these large towns is on the Nouakchott to Nema road.

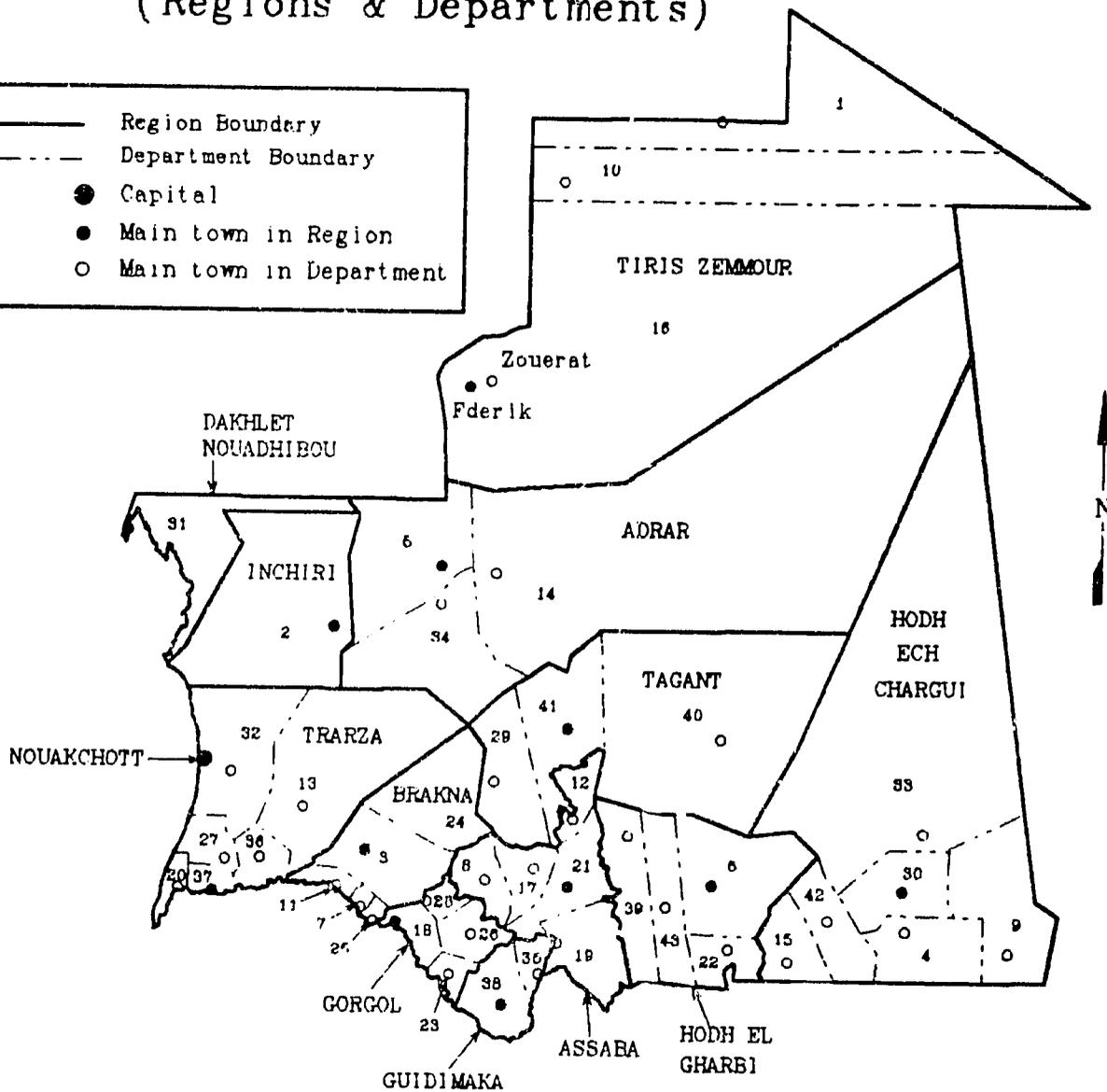
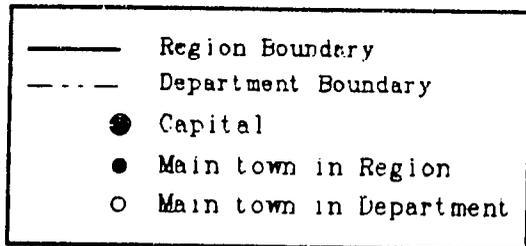
For the department as a whole, 5.5% of the children screened were severely malnourished. The average data for this department provide a similar picture to the overall results of WV's first survey (Table 2), assuming that the methodologies used by the two organizations allow for comparison.

Key to Figure 1

Department/Town	Id	Village
Barkewol	1	Barkewol
	2	El Ghaire
	3	El Ghabra
Boumeid	4	Boumeid
	5	El Gherd
	6	Hassey-Tine
	7	Leftah
	8	Brouda
Guerou	9	Guerou
	10	N'Takat
	11	Kankossa
Kiffa (Town)	12	Khadima
	13	Khleigh
	14	Sagatar
	15	Seif
	16	Sonadar
	17	Touemiritt
	18	Lekdheirat
Kiffa (Department)		



Administrative Units (Regions & Departments)



Departments	RGN	Department	RGN	Department	RGN
1. Ain Ben Tili	TZ	16. Fderik/Zouerat	TZ	30. Nema	HC
2. Akjoujt	IN	17. Guerou	AS	31. Ncuadhlibou	DN
3. Aleg	BR	18. Kaedi	GO	32. Ound Naga	TR
4. Amourj	HC	19. Kankossa	AS	33. Oualate	HC
5. Atar	AD	20. Keur Massene	TR	34. Oujeft	AD
6. Ayoun el Atrous	HC	21. Kiffa	AS	35. Ould Yenge	GU
7. Bababe	BR	22. Kobenni	HG	36. Rkiz	TR
8. Barkewol el Abiod	AS	23. Maghama	GO	37. Kosso	TR
9. Bassikounou	HC	24. Magta Lahjar	ER	38. Selibabi	GU
10. Bir Mogrein	TZ	25. M'Bagne	ER	39. Tamchekket	HG
11. Boghe	BR	26. Mbout	GO	40. Tichit	TA
12. Boumeid	AS	27. Mederdra	TR	41. Tidjikja	TA
13. Boutilimit	TR	28. Monguel	GO	42. Timbedgha	HC
14. Chinguetti	AD	29. Moudjeria	TA	43. Tintane	HG
15. Djigueni	HC				

Source: FEWS/Mauritania 1986; IGN 1980
FEWS/PWA, February 1987