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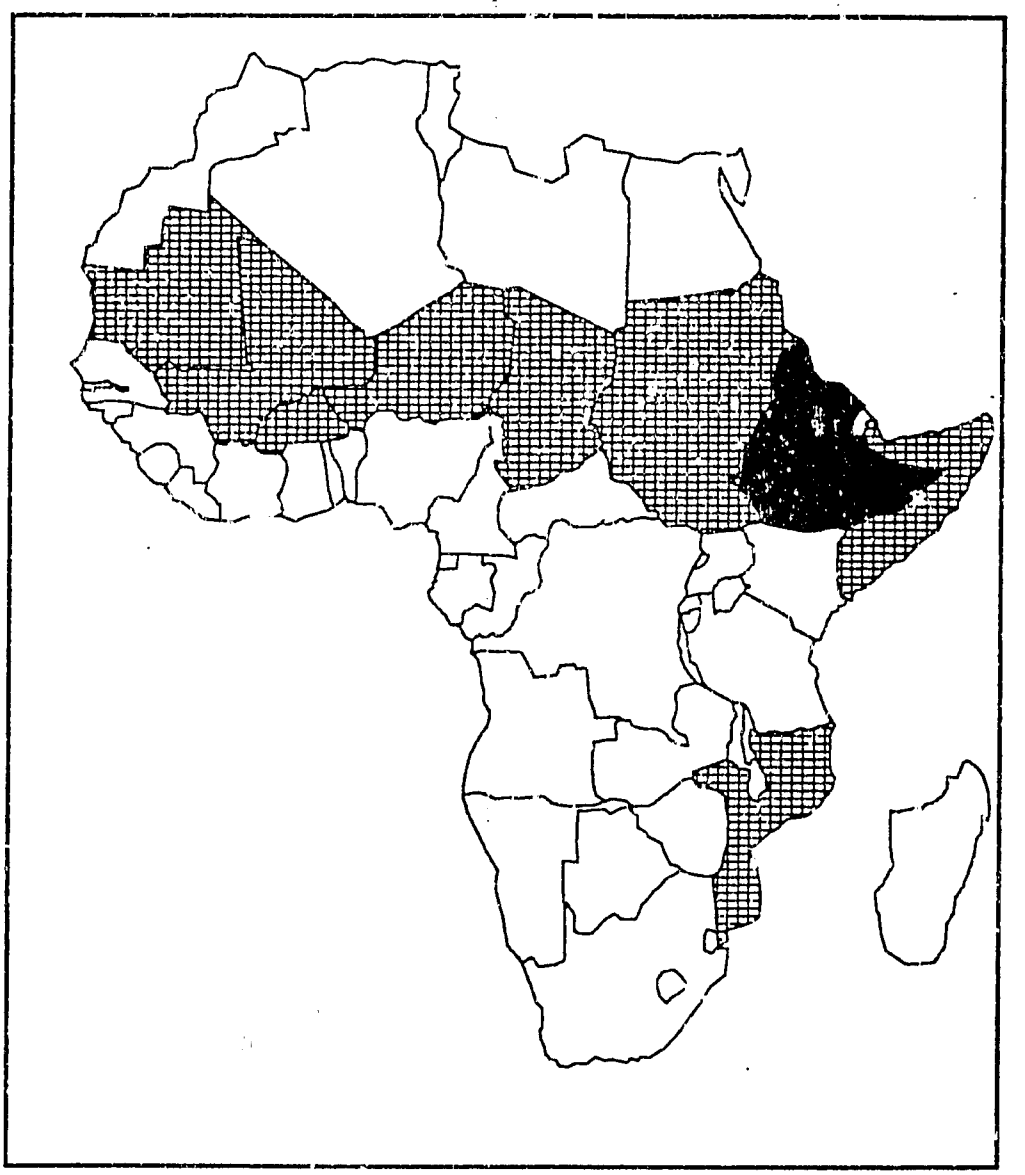
August 1986

FEWS Country Report

ETHIOPIA

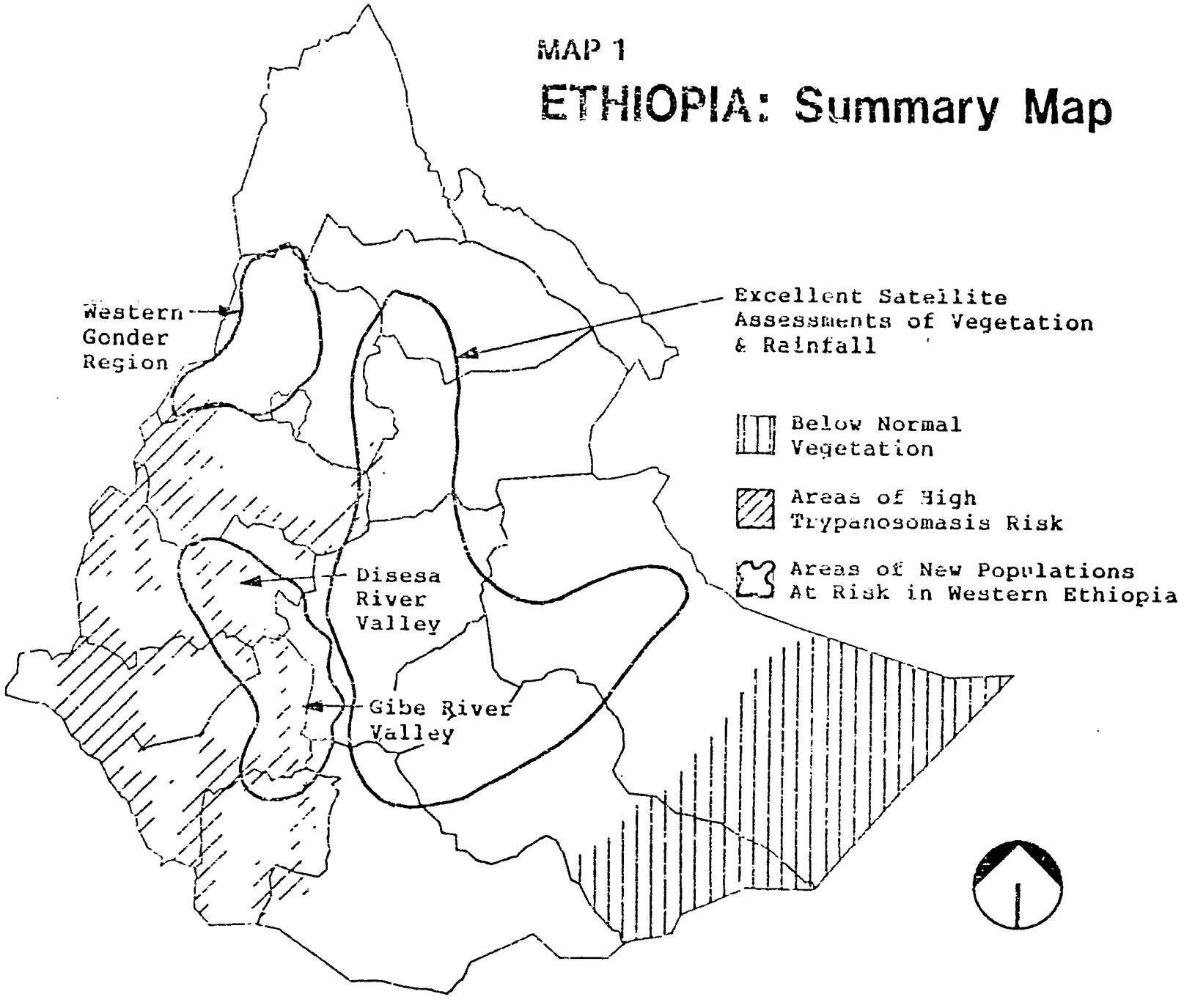


Washington, D.C. 20523

Africa Bureau
U.S. Agency
for International
Development

MAP 1

ETHIOPIA: Summary Map



Map: FEWS/PWA, August 1986

Famine Early Warning System Country Report

ETHIOPIA

Excellent Outlook
But Locusts a Concern

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

Prepared by
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August 1986

Contents

INTRODUCTION

This is the third of a series of monthly reports issued by the Famine Early Warning System (FEWS) on Ethiopia. It is designed to provide decisionmakers with current information and analysis on existing and potential nutrition emergency situations. Each situation identified is described in terms of geographical extent and the number of people involved, or at-risk, and the proximate causes insofar as they have been discerned.

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 for the present, until a better usage can be found, 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. However, other types of intervention 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, food needs estimates are included in the FEWS reports. It is important to understand, however, that no direct relation exists between numbers of persons at-risk and the quantity of food assistance needed. This is because famines are the culmination of slow-onset disaster processes which can be complex in the extreme.

The food needs of individual populations at-risk depend upon when in the disaster process identification is made and the extent of its cumulative impact on the individuals concerned. Further, the amount of food assistance required, whether from internal or external sources, depends upon a host 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 is operated by AID's Office of Technical Resources in the Bureau for Africa in cooperation with numerous USG and other organizations.

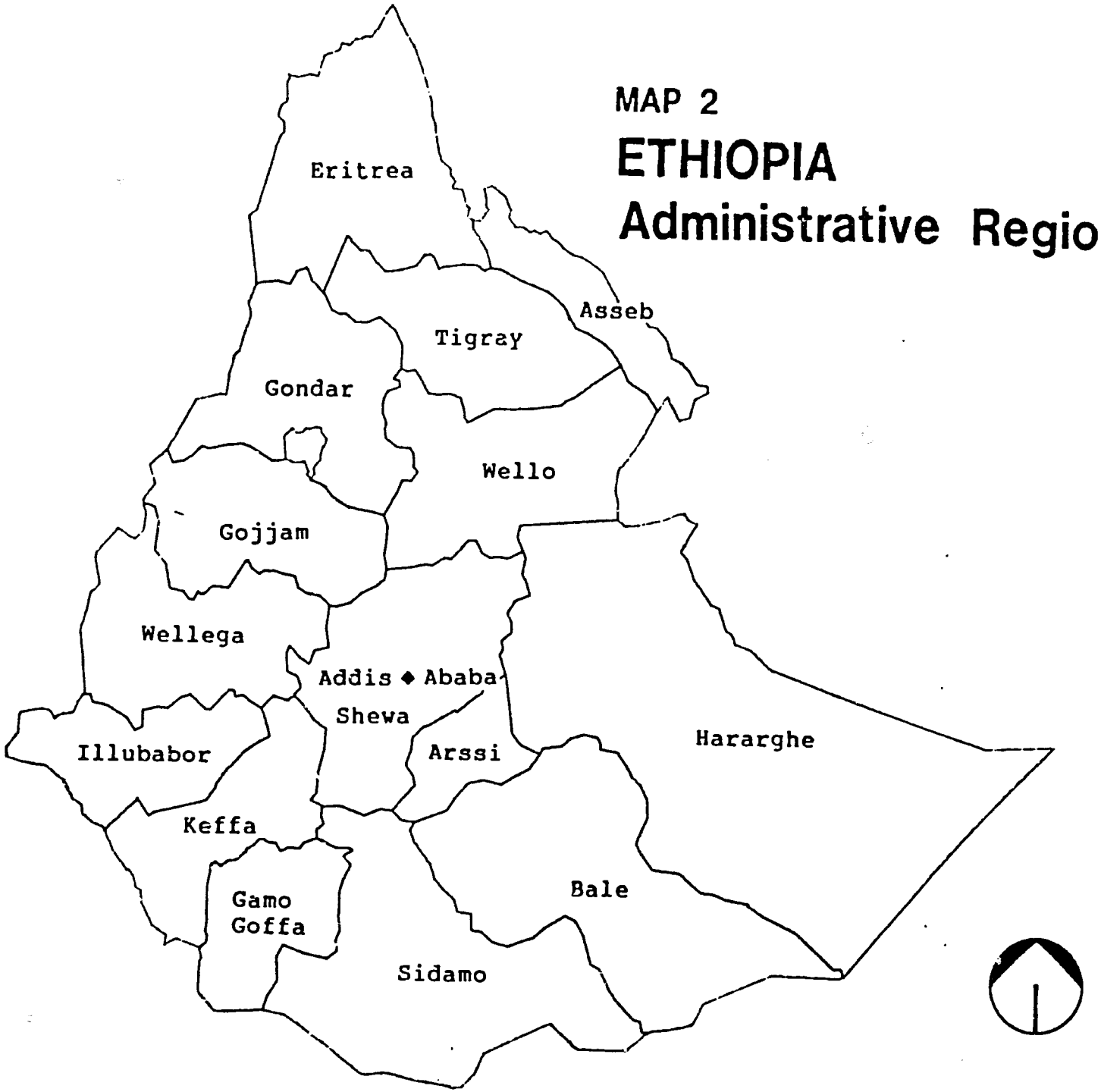
SUMMARY

The current population at-risk in Ethiopia is estimated to number 6,179,690. This is a slight increase from the FEWS Country Report #2 estimate due increases in the numbers of people at-risk, because of drought and animal disease, identified in western Ethiopia. But, if present trends continue and if optimal conditions prevail over the rest of the current main (Meher) cropping season, there will be a dramatic reduction in the numbers of people considered at risk after in December after the harvest. The minor season (Belg) harvest was excellent in most parts of the country, as were the Belg rains. The FEWS estimate of Belg season production reverts to 350,000MT, as shown in FEWS Country Report #1. Current major season (Meher) agricultural activities are proceeding well in most areas including those strongly affected by last year's drought. Exceptions are Regions in the west, especially Wellega, Illubabor, Keffa and southwesternmost Shewa. In those areas, which were not previously considered drought affected, the Belg season rains failed and, while not an area of Belg season production, farmers there depend on Belg rains for land preparation and planting of main season crops. As a result main season sorghum and maize crops are reported to have failed. People are in need of food aid in those parts of these western areas where last year's poor crop and a continuing loss of livestock (primarily through the ravages of Trypanosomiasis) did not leave people with sufficient resources to survive the current failure of main season crops. Pests are a possible constraint on main season agricultural production with armyworm and locusts the primary concerns.

Issues

- Current rainfall in most of the country is excellent, and the majority of drought affected people in eastern Gonder, most of Wello, northern Shewa and Hararghe Regions could reach self-sufficiency. If Meher season rainfall were to fail during August and September, as it has in the past, especially in the northern Regions of Eritrea, Tigray and Wello, it could have drastic consequences for rehabilitation, especially in Wello where an excellent Belg harvest set the stage for a dramatic turnaround.

- In the western Regions existing resources should allow most people to weather the current failure of main season sorghum and maize crops. Nevertheless, the number of people counted at risk could increase if these resources were overestimated, if pests destroy shorter maturing replacement crops, or if the spread of Trypanosomiasis destroys the livestock resources of more people.



MAP 2
ETHIOPIA
Administrative Regions

Map: FEWS/PWA August 1986

- Pests such as armyworm and locusts, if not controlled, could inflict major damage on crops and rangelands in all areas of Ethiopia, drastically reducing the present promise of good production.

Key Indicator

- The severity of the pest infestation (armyworm and locust) and the success of control measures will determine partially determine the extent of drought recovery in Ethiopia. Especially in Eritrea Region the potential for locust swarms spreading to the rest of the country and into Sudan requires continued monitoring and active control.

LOCUSTS AND ARMYWORM

There is a commonsense folk belief in Ethiopia that famine caused by locusts follows a drought year. This year the threat contained in that belief is supported by reports of favorable locust breeding conditions throughout the country. Compounding the locust threat is the threat of armyworm depredations. The actual extent of these threats will become clear in August.

During June the first generation of this year's armyworm plague caused some damage, albeit minimal, to maize and sorghum crops countrywide. During August the second generation of armyworm has the potential to inflict a great deal more damage on those important food crops. The Ethiopian government is responsible for the control of armyworm and will supply insecticides to those areas usually at-risk. Nonetheless, armyworm outbreaks during August, if not identified and acted against in time, could cause considerable damage just when recovery looks likely for many people who were severely drought affected in 1984 and 1985.

Individual locust swarms have been sighted in the Red Sea Hills of eastern Eritrea Region, in the lowlands of northeastern Shewa Region and in southeastern Tigray Region (where they have reportedly damaged developing crops). These are all areas where small numbers of locusts could be expected in any given year. There is a strong possibility of a second generation of locusts forming larger swarms and spreading out of these areas. The Ethiopian government is carrying out surveys to locate egg masses and high concentrations of juvenile locusts that will identify the extent of the late August through September adult locust threat and will pinpoint areas suitable for active control measures. These surveys limited in scope in Eritrea Region and are not taking place in Tigray Region due to the security situations there.

RAINFALL AND VEGETATION

Assessments of satellite imagery show main season rainfall to be normal in extent and amount over all of Ethiopia except the southeastern corner (southern Hararghe and southern Bale Regions) where rainfall was less than normal. The common wisdom in Ethiopia is that good Meher season rainfall follows good Belg season rainfall, which was generally true this year.

Vegetation cover (based on assessments of satellite imagery, see Images 1-3) show lower indices as compared to last year for those low rainfall regions, as could be expected. Normal indices are observed in a broad belt in the west from western Gonder Region south through Gojjam, Wellega, Illubabor, and Keffa Regions. This indicates that at least natural vegetation has recovered from the failure of the Belg season rains in that area. Rainfall in these western areas during the Belg season was much lower than normal and consequently affected the growth of vegetation, including crops, into the Meher season. Nonetheless, current images show vegetation cover in these areas to be higher than elsewhere in Ethiopia. It is unlikely that the verdant growth seen in these images is mirrored in the condition of Meher season crops in these areas.

Long maturing Meher season crops in western Ethiopia depend on Belg season rains for germination and farmers require the rains for cultivation. Given the failure of the long maturing main season crops (sorghum and maize) in this area, these normal (high in absolute terms) vegetation indices are meaningless unless farmers successfully substituted shorter maturing crops (e.g. pulses) at the onset of the main rainy season.

In many areas of Ethiopia, rainfall and vegetation conditions are excellent. In a broad band extending south from Eritrea through western and central Tigray, Eastern Gonder and Western Wello, Shewa, Sidamo and Arssi and east into Hararghe (including its most important cropping and range areas), vegetation indices are much higher than last year and assessments of rainfall suggest crop development is excellent.

The only areas of some concern in the east are in the far east of Hararghe Region (around Jijiga) and in the southern part of Hararghe and Bale regions where grasslands are considered in poor condition. In the far north of Eritrea Region, crop and grassland conditions are poor and appear worse than last year at the same time. This is a region of marginal agricultural potential at best.

CROP PRODUCTION

It is becoming increasingly clear that the Belg season harvest was generally above normal to excellent in most of the areas where it is an important production season. FEWS originally estimated (FEWS Country Report #1) Belg season production at 350,000MT. This estimate was reduced downward to 278,000MT (FEWS Country Report #2) based on USAID mission reports. New information, not fully analyzed, suggests that the original estimate of 350,000MT is a more accurate assessment of Belg season production. Although the RRC has actually revised their estimate downward to below normal levels it is believed this is based on factors unrelated to agricultural production. This higher FEWS estimate means that Belg season production had an even more positive impact on previously drought affected people than was previously reported (FEWS Country Report #2).

An exception to an excellent Belg season is the Belg growing area in the highlands of southwestern Wellega Region. This area, that usually provides 11 percent of the total nationwide Belg harvest, produced significantly below normal this year, although the exact decline is unknown. FEWS has adopted a working estimate of 17 percent below normal for this area.

This poor Belg harvest in Wellega is reflected in the prospects for Meher season crops in that Region and in other parts of the west where Belg season rains are exploited for land preparation and early germination of long-maturing Meher season crops such as maize and sorghum. In several areas of the west (including western Gonder Region), alternate, short-season crops, have been sown to replace sorghum and maize (where seed has been available).

In other areas the Meher season rains are generally good and offer the potential for at least normal production. This is especially true for areas deemed at-risk due to drought for the last two years. The cropping (highland) areas of Hararghe Region, the highland and mid-altitude areas of Wello Region and Northern Shewa all appear to be headed toward food sufficiency by the end of 1986. Seed supply is acknowledged by the RRC to be adequate in all areas (with the possible exception of Tigray and Eritrea Regions). Reported oxen and tool shortages are only a problem for main season production in certain areas of western Ethiopia. (See POPULATIONS AT-RISK).

Structural problems in agriculture ensure that chronic food shortages will continue in certain areas. Small landholdings in Sidamo province, especially in heavily populated Wolayita Awraja, severely limit the people's agricultural potential. In Wolayita Awraja in particular, a bacterial blight of false banana (Enset, a root crop) has combined with the structural problem to keep potential production down. Farmers are beginning to grow sweet potato as a substitute for false banana but it is difficult to estimate the extent of the substitution. Sweet potato production could make a major contribution toward improved total production in those Enset producing areas affected by the blight.

POPULATIONS AT-RISK

The current estimate of the population at-risk in Ethiopia of 6,179,690 has increased slightly from last months estimate of 5,818,455. This is due to an increase in estimates of people at-risk in the western regions of Gonder, Wellega,Illubabor, and Keffa.

The failure of the Belg rains in these western regions will severely limit Meher season production. In western Gonder Region this limitation puts an additional 225,000 people at-risk. This figure is tentative. Replanting with other crops, at the onset of the Meher season rains, could more or less successfully mitigated the failure of the maize and sorghum crops.

A particular region of concern in the west are the low and mid-altitude areas in and around the Gibe and Didesa River Valleys (in eastern Wellega, Illubabor and Keffa Regions, and in southwestern Shewa regions). These areas are reported especially hard-hit by the current main crop failure, as well as with massive livestock losses due to the spread of Trypanosomiasis. If the Belg rains had come, softening the ground, hand cultivation could have substituted for draught animals in these areas. This did not occur. Nor are there animal resources available to these people at-risk either for meat and milk or to sell to obtain grain. In other areas of the western Regions affected by the failure of the Belg season rains, sufficient resources exist for people to feed themselves. There are approximately 187,000 people requiring food aid in these areas. High resolution satellite imagery will be obtained to more precisely assess the situation in this area.

TABLE 1: ESTIMATE OF PERSONS AT-RISK BY REGION DURING 1986.

Region	People At-risk the Entire Year	People At-risk Part Year	Regional Total
Arssi	14,760	4,910	19,670
Bale	84,000*	--	84,000
Gamo Goffa	123,320	30,150	153,470
Gojjam	--	--	--
Gonder	160,340	290,000	450,340
Hararghe	911,180	150,190	1,061,370
Illubabor	--	34,000	34,000
Keffa	70,020	25,250	95,270
Shewa	208,370	100,000	308,370
Sidamo	430,500	--	430,500
Wellega	--	57,500	57,500
Wello	1,300,000	--	1,300,000
Tigray	800,000	386,300	1,186,300
Eritrea	630,000	368,900	998,900
Total	4,732,490	1,447,200	6,179,690

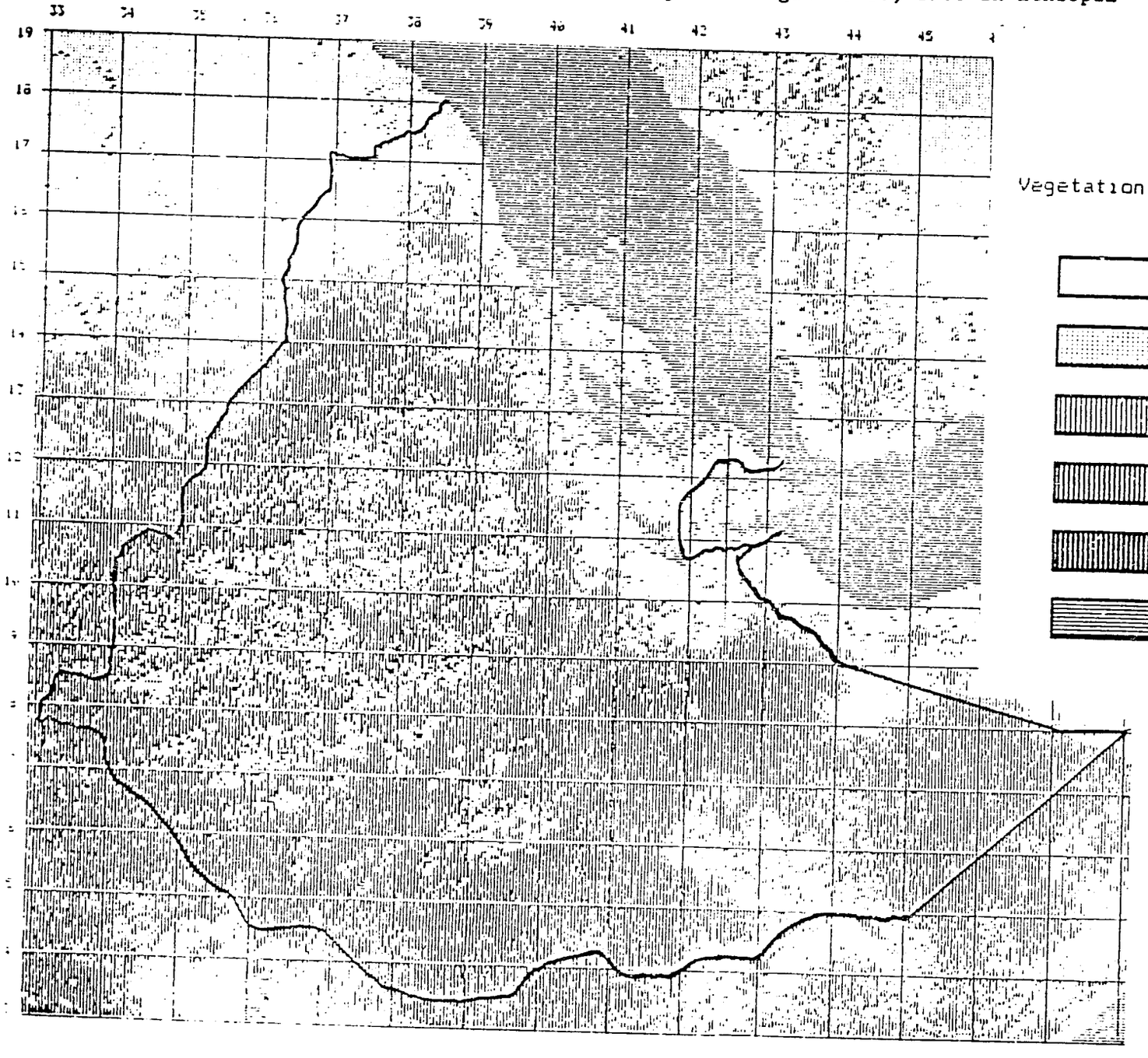
* ALL PASTORALISTS

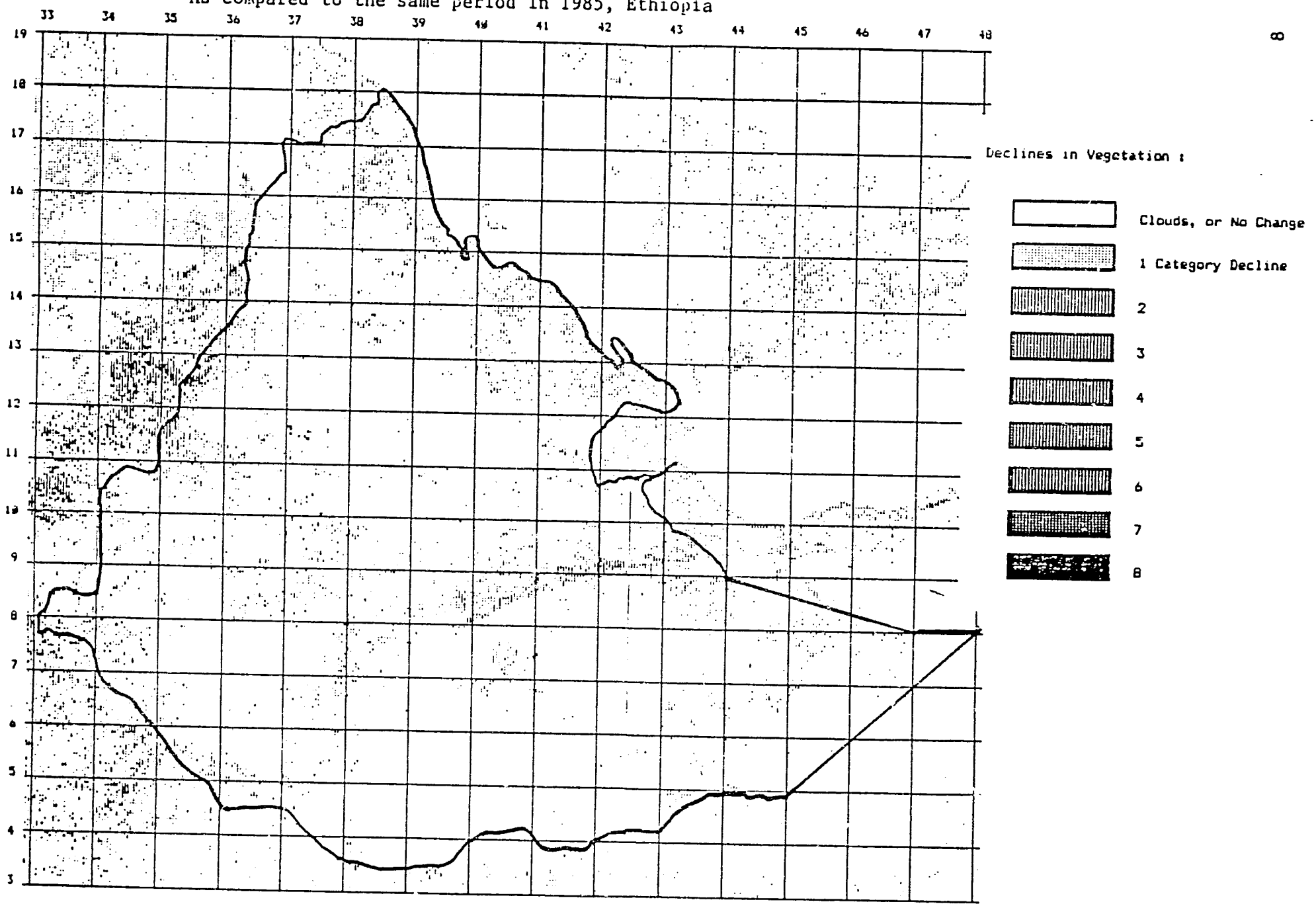
SOURCE: RRC and Mission Reports

Food aid necessary to feed these people totals 851,150MT of grain (a full ration is estimated at 156kg/person/year). Estimates dating from May indicate that approximately 4,400,000 people are currently receiving food aid at an annualized level of from 78kg up to 180kg. The actual per capita food distribution is not correlated with the number of people in a region that require food aid. Most distributions are rationed at so much per family and 11kgs/person/month, or 132kgs/person/year, is probably close to the average distribution. At estimated current distributions this requires 48,400MT/month of emergency food aid.

Estimates of the emergency food aid stocks in Ethiopia available at the end of 1986 to carry over into 1987 remain high. The estimate of these stocks, from 456,000MT to 678,000MT, made in FEWS Country Report #1 remains realistic and it is likely that actual carryovers will be at the high end of the estimated range.

Image 1: Average Vegetation Indices for the period August 1-10, 1986 in Ethiopia

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Declines in Vegetation :
Clouds, or No Change
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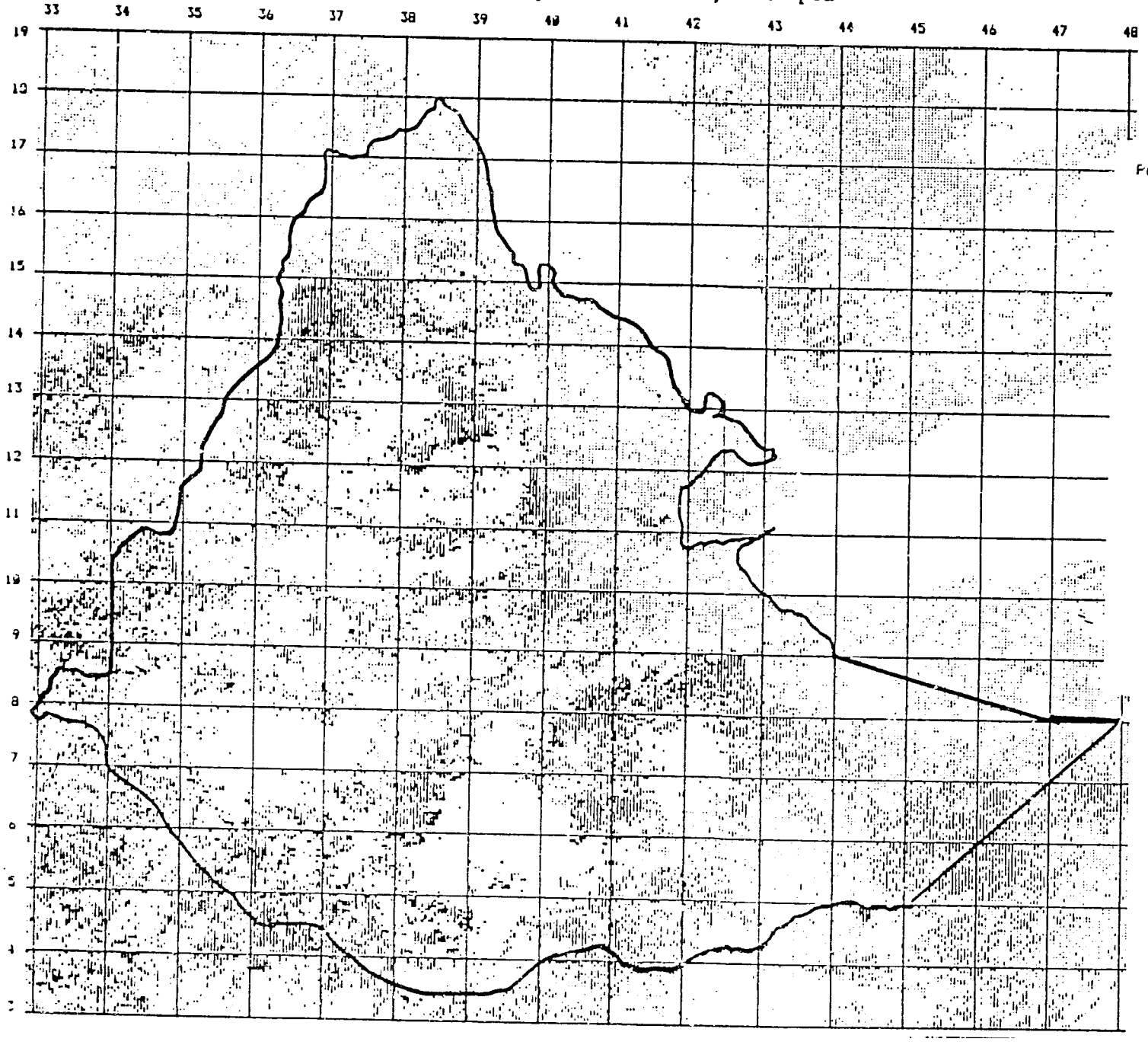
Image 3: Increases in Vegetation Indices for the period August 1-10, 1986
As compared to the same period in 1985, Ethiopia



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