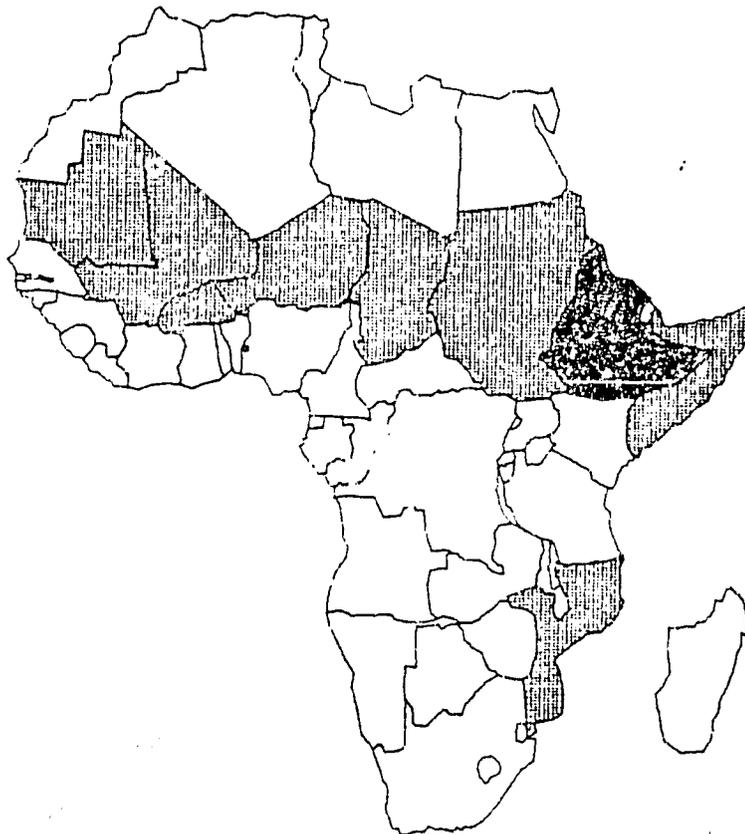


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# FEWS COUNTRY REPORT ETHIOPIA #1



Office of International Development  
Room 105 SA-18  
Washington, D.C. 20523

Africa Bureau, USAID  
Famine Early Warning System (FEWS)

May, 1986

## INTRODUCTION

This is the first of a series of monthly reports issued by the Famine Early Warning System (FEWS) of 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 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 nutrition 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 interventions 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.

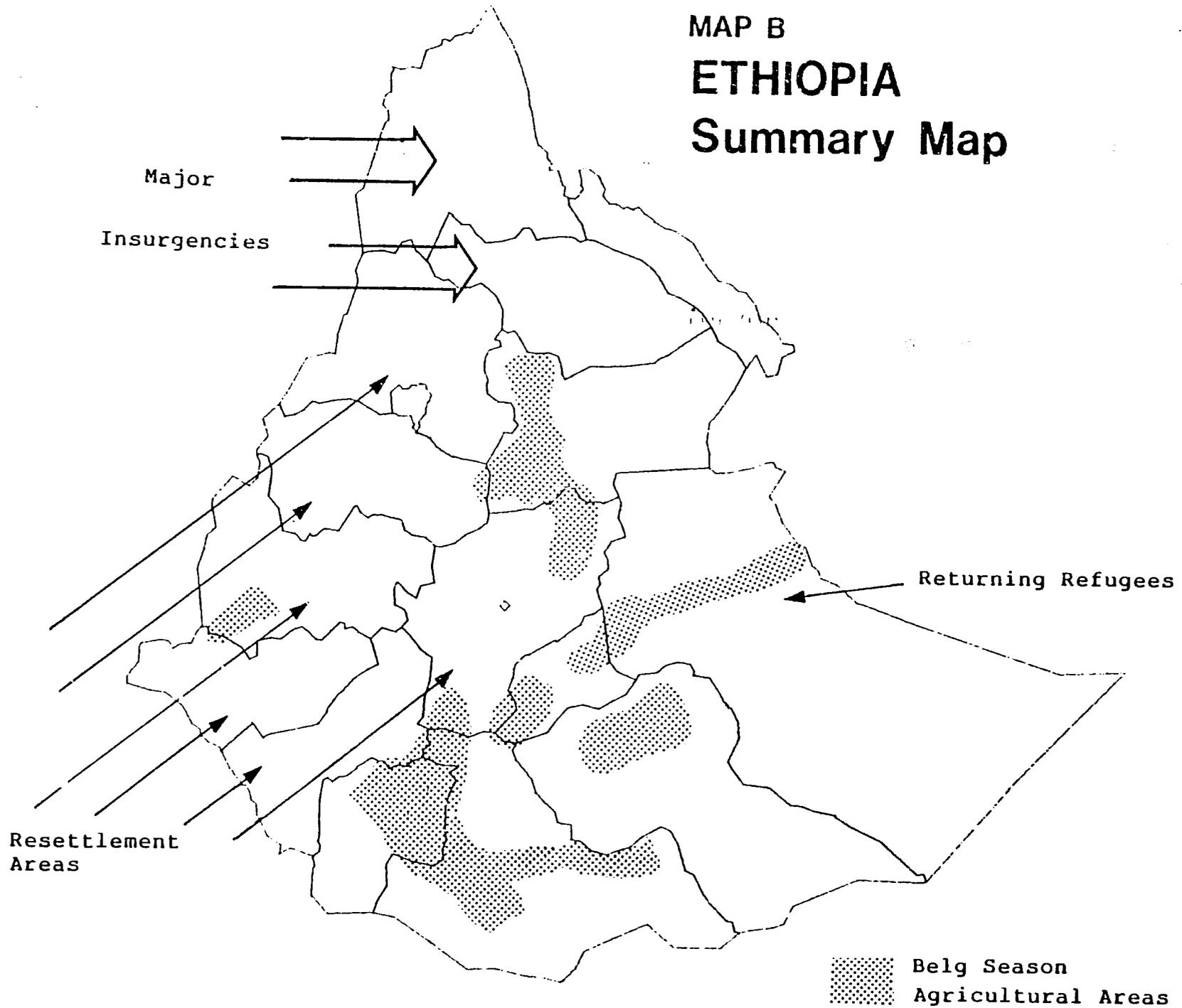
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FEWS is operated by AID's Office of Technical Resources in the Bureau for Africa in cooperation with numerous USG and other organizations.

MAP A  
**ETHIOPIA**  
**Administrative Regions**



**MAP B**  
**ETHIOPIA**  
**Summary Map**



FEWS COUNTRY REPORT #1  
ETHIÓPIA

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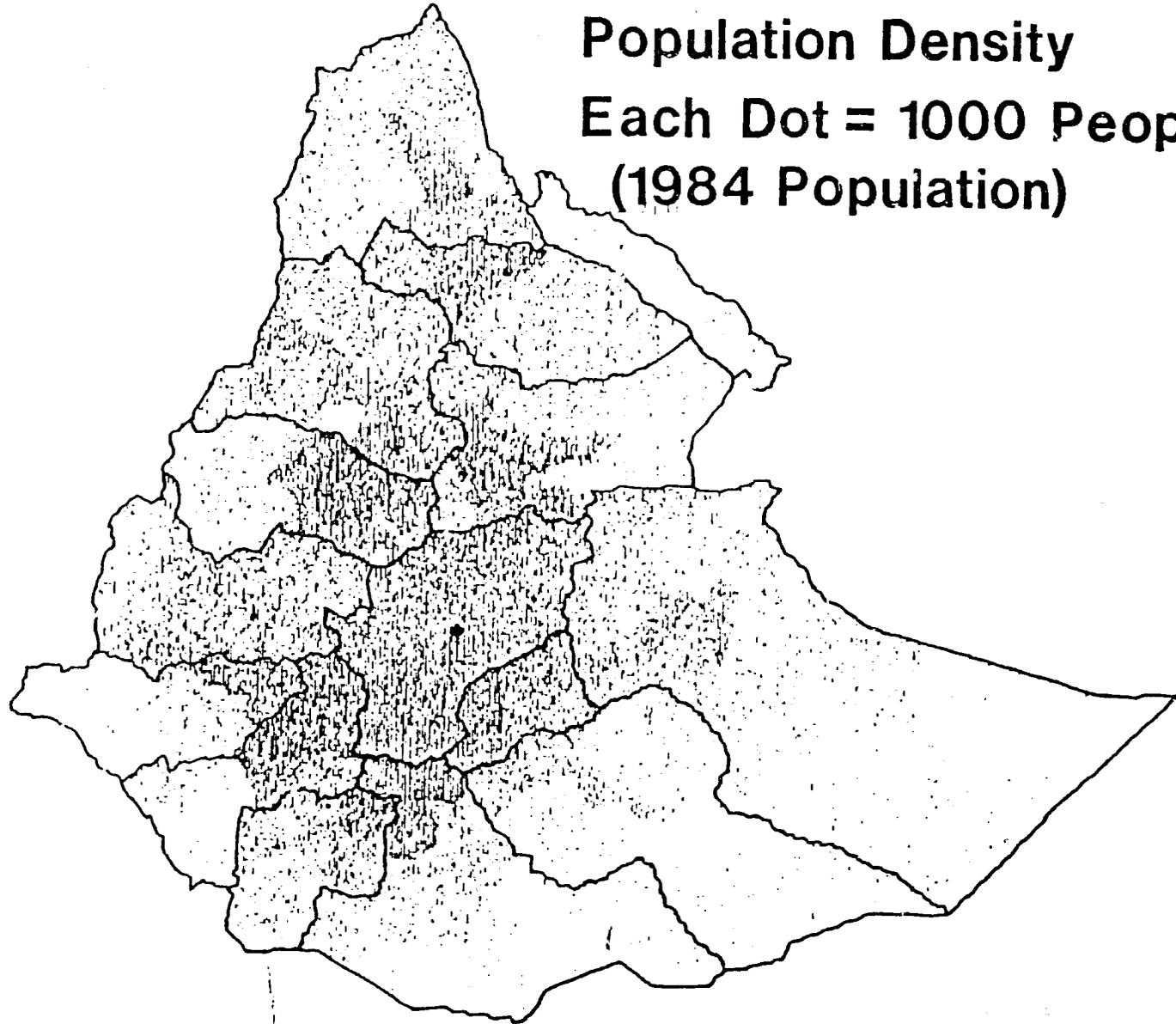
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MAP 1

# ETHIOPIA

Population Density

Each Dot = 1000 People  
(1984 Population)



FEWS COUNTRY REPORT  
ETHIOPIA

Continuing Food Need: Greater Food Aid Supply Than Demand

Summary

Emergency food aid imports for Ethiopia in 1986 will total 900,000MT against an estimated 1986 import requirement of 468,000MT.

Major crop production in Ethiopia should reach 5,585,000MT when the forecast Belg season harvest, in June, is added to the main season harvest of last November and December. Net emergency food aid, for 1986, necessary to feed people at risk of famine, is estimated to be 764,000MT, of which 306,000MT were available in stock at the end of 1985. The remaining amount, 468,000MT, is estimated to be the 1986 emergency food aid import requirement. Donors will import 900,000MT of emergency food aid during 1986 giving rise to large carryover stocks into 1987. Food distribution in the first third of this year did not reach anticipated levels as disbursers of food aid cut back operations due to local food availability. In-country warehouses and port facilities are brimming with food aid stocks, and there is no food distribution crisis in the country. Port offtakes are low due to lack of demand. The import requirement of 468,000MT is therefore a conservative estimate. The security situation in Tigray Region could, however, increase that population's risk of famine over the course of the year. Continued resettlement and villagization could also have an adverse impact on Ethiopia's agricultural potential.

Food Deficit<sup>1</sup>

The 1986 total emergency food aid import requirement as estimated here is 468,000MT and this estimate is independent of crop production estimates, except for any excess Belg season production. This is significantly below that estimated by any other organization; Ethiopian Relief and Rehabilitation Commission's (RRC) 905,000MT (after adjusting for in country food aid stocks), USAID's 888,000MT, and UNOEOA's 900,000MT. This emergency food aid import estimate is based on an enumeration, by the RRC, of the number of people requiring food aid. Estimated at the subdistrict level (Woreda) and reported at the district level (Awraja). The import requirement figure of 468,000MT was checked using a food balance sheet approach (where normal production, imports, other food sources, waste, seed requirements and per/capita food requirements are integrated into a national level picture of the food deficit) and was found to balance well. Food

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<sup>1</sup> All food deficit estimates are based on adjusted production figures for comparability.

balance sheet parameters were taken from AID's "Worrick Report". (See Appendix C for details; the food balance sheet approach implicitly includes 600,000 people resettled by the Government of Ethiopia, as does the estimated import requirement).

Contrary to the expectations of donors and disbursers of food aid, many emergency food distribution centers closed down or reduced operations for at least a time—even in areas judged most at risk—during the period January 1 to May 1. During this period total food aid stocks on hand and undistributed rose from 306,000MT to a minimum of 362,000MT (April 1) and to as high as 400,000MT by May 1. Average distribution of the FEWS estimated emergency food aid import requirement of 468,000MT would result in stocks of at least 432,000MT by December 31, 1986.

Actual distribution of emergency food aid to beneficiaries during the first four months of 1986 is estimated by AID to average 44,000MT per month. At this rate food aid stocks remaining at the end of 1986 will reach 678,000MT. And, given the promise of the Belg harvest for many people judged at-risk, there is no reason to expect this level of distribution to increase drastically, with the exception of deliveries to people in Tigray and Eritrea Regions. (See Graph 1 and Graph 2)

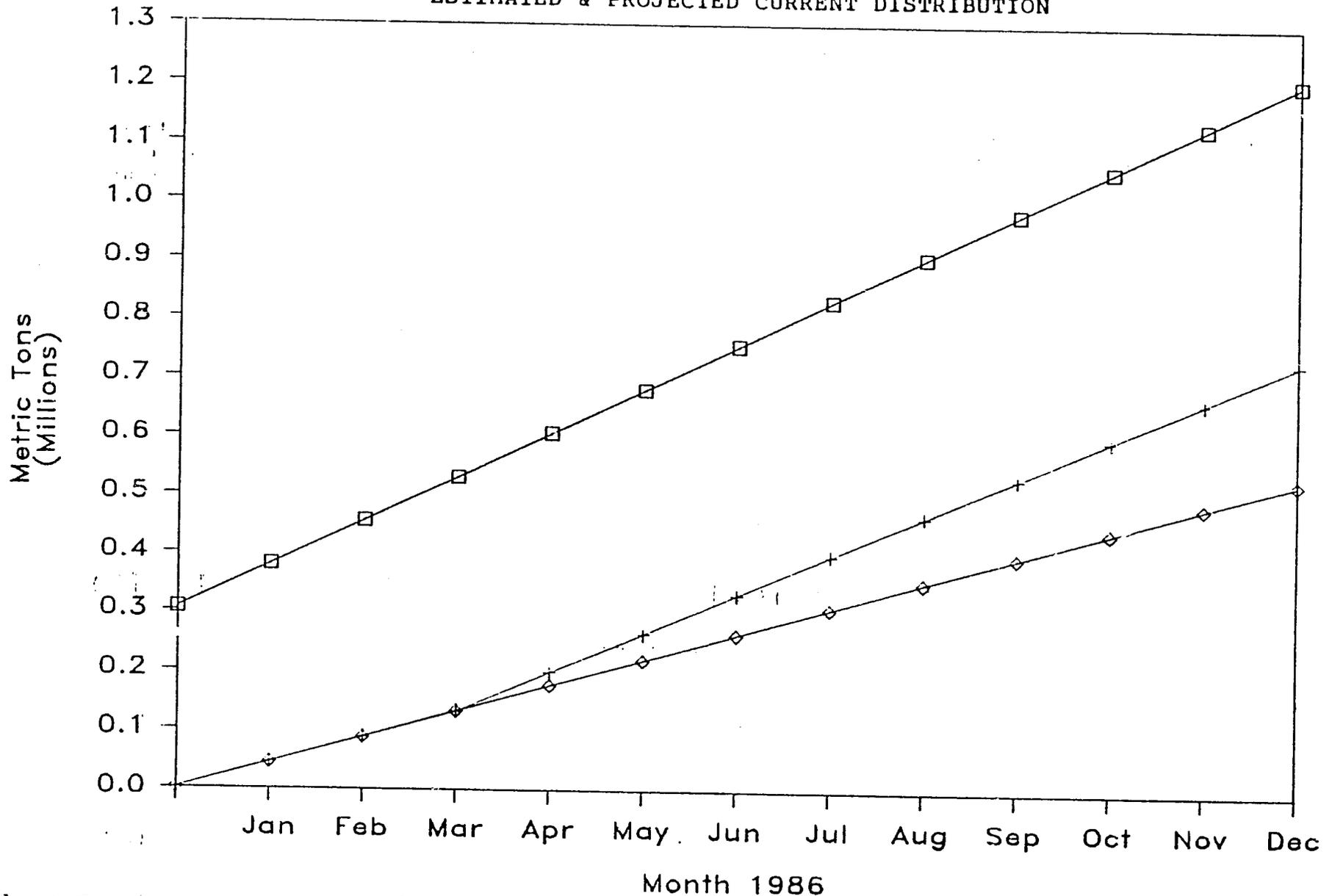
Even if the average monthly distribution to beneficiaries from May 1 to December 31 rose to 69,667MT (a rate higher than existed in December of 1985) for a total of 750,000MT for the year, total food stocks on hand at the end of 1986 would amount to 456,000MT. Distribution could conceivably rise to this level from a variety of causes, e.g., in Tigray, a deteriorating security situation combined with a greater than estimated number of people at-risk, could increase demand. Here, however, the critical issues will be transport and delivery, not supply. If Belg season production does not reach forecasted levels, especially in Wello province where planting may have been limited, then average demand could also rise.

In calculating emergency food aid requirements a key factor is the per capita food requirement. AID has estimated the per capita requirement, necessary to maintain people at their status quo nutritional levels, at 156KG/year, or 13KG/month. This is based on national consumption of the major food crops of cereals, enset, pulses and milk. The 156KG/YR figure was used in this analysis. Other figures are often used to calculate food need, but there is no standard. The Ethiopian government uses 11KG/month (140KG/year) for food aid distribution but 14KG/month (167Kg/year and not counting milk) to calculate food aid needs. Some private voluntary organizations (PVO) distribute food at the rate of 15KG/month (180KG/year), presumably to allow recipients to sell some to obtain tea, sugar and condiments. What has been described as the worst pocket of famine in the country is programmed for food assistance at a per capita rate of 8KG/month (98KG/year).

Graph 1  
**ETHIOPIA**

**CUMULATIVE FOOD STOCKS 1986**

ESTIMATED & PROJECTED CURRENT DISTRIBUTION



□ Stocks + Imports  
 (Growing at an average  
 rate of 75,000MT/MO)

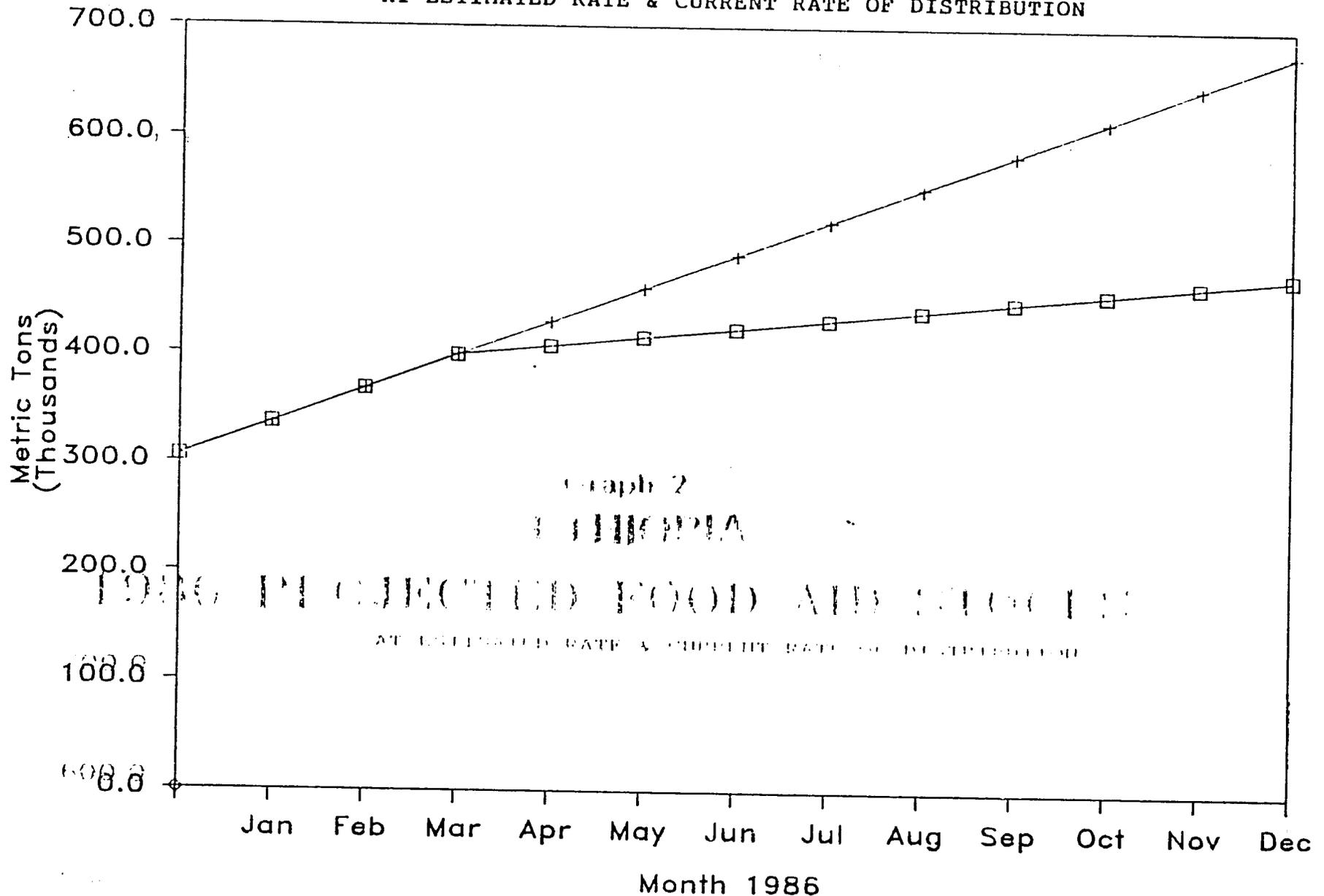
+ Estimated Distributions  
 (At a rate of 68,700MT/MO after March;  
 of Food Aid)

◇ Current Distribution  
 of 44,000MT/MO

Graph 2  
ETHIOPIA

1986 PROJECTED FOOD AID STOCKS

AT ESTIMATED RATE & CURRENT RATE OF DISTRIBUTION



□ Estimated Rate of Distribution  
(68,700MT/MO After March)

+ Current Rate of Distribution  
(44,000MT/MO) Projected to the

Given this range of per capita requirements , the AID figure seems conservative, reasonable, and based on consistent and objective criteria.

### Crop Production

The Ethiopian agricultural year is made up of a main season with harvest late in the year and a minor season with harvest primarily in June. The main season crop was greatly improved over 1984 and the minor season crop, grown only in certain areas, is expected to be greater than normal.

Net production in Ethiopia of the major crops of cereals, enset (also known as false banana, a root crop) pulses and milk will total at least 5,385,000MT (counting all crops as nutritionally equivalent and computing milk supply in terms of cereal calorie equivalents) by the end of the minor (Belg) season harvest. This figure could increase to 5,535,000MT if the Belg season harvest lives up to its current potential. This production figure is based on estimates of agricultural production by AID in January 1986. An alternative estimate, based on an analysis of the food available to people, who do not require emergency food aid during 1986, produced an essentially identical figure as a minimum production figure for the country as a whole. (See Appendix C for details.)

Belg Season: "Normal" minor season production is said to total 200,000-250,000MT, although estimates of possible production range as high as 600,000MT. The importance of the Belg season, as a percent of total production, varies from 10%-50% from north to south in those areas where it occurs (See Map 2). The failure of the Belg rains in 1985 prolonged the famine in those areas dependent on Belg season production to bridge the food gap between main season harvests. As a consequence, people at-risk of famine in Ethiopia, excluding the conflict related famine in Tigray and Eritrea Regions and excluding pastoralists, tend to live in areas where the Belg season is important. (See Map 2)

By all reports, Belg season rainfall has been exceptionally high, and (if flooding, spoilage and waterlogging of soils is avoided) the minimum crop production figure can be expected to rise. Given the exceptional rains a much greater potential exists than the "normal" 200,000-250,000MT and a reasonable forecast of Belg season production is 350,000MT (based on rainfall, eyewitness accounts and discussions with knowledgeable AID personnel) adding 150,000MT to the minimum crop estimate. The 1985 Belg season was very poor, and was responsible for increased risk of famine in eastern Wollo, Northern Shewa, and mountain areas of Hararge. Eyewitness accounts point to very good crops in Belg season cropping areas and good pasturage with healthy animals in pastoral areas.

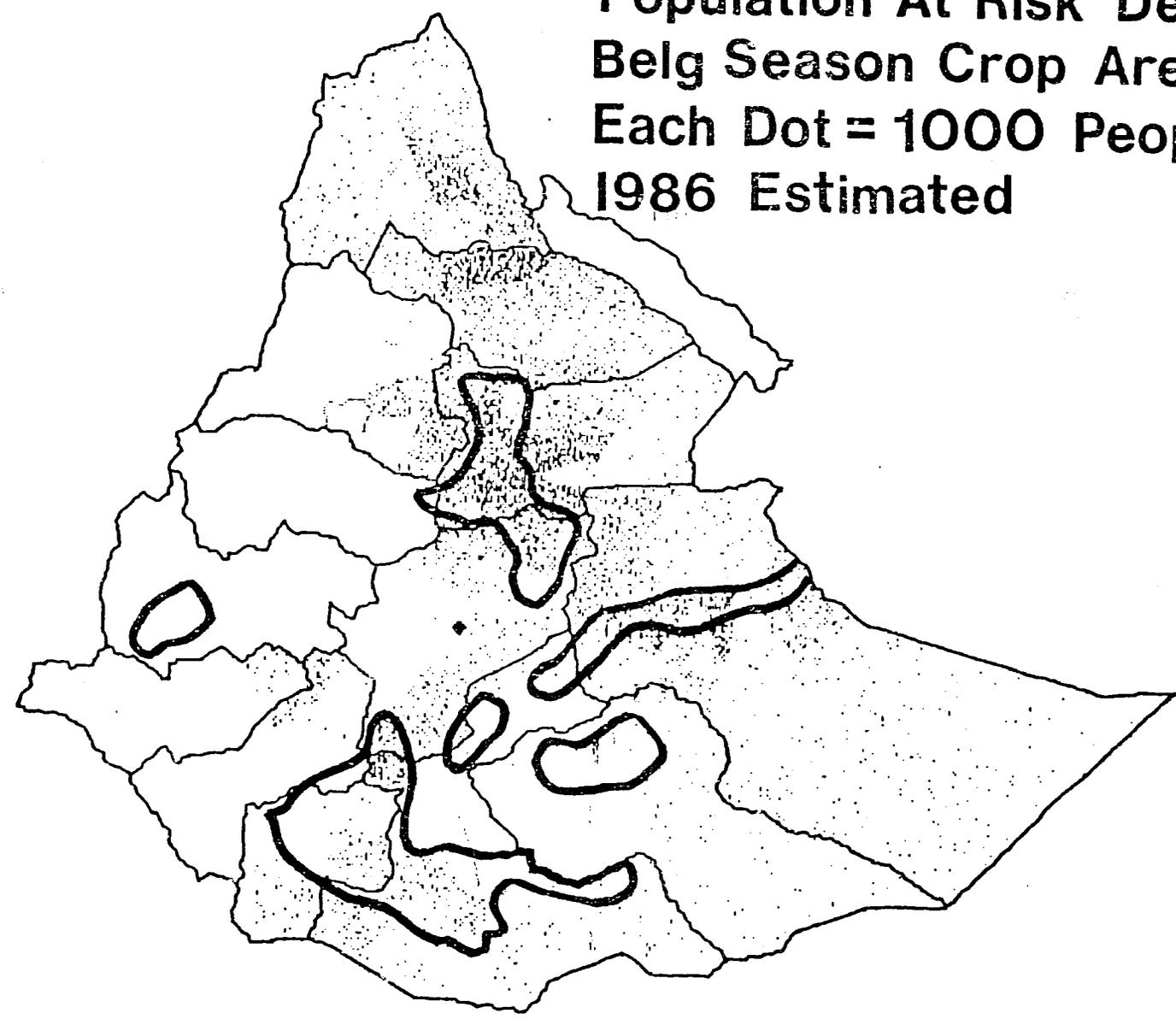
MAP 2

# ETHIOPIA

Population At Risk Density/  
Belg Season Crop Areas

Each Dot = 1000 People

1986 Estimated



Most commentators on this year's Belg season point to potential constraints on production, but there are no explicit reports of those potentials being actualized. There should have been no shortage of seed for this season, and none is explicitly reported. Other suggested limitations such as the inability of farmers to cultivate adequately given the shortage of oxen and physical limits set by malnutrition are also not reported and, in fact, mitigated against due to the success of food aid distribution. Commentators worry over the possible destruction of crops due to heavy rains continuing beyond the time for the Belg harvest, although this would be most worrisome only in a heavily mechanized environment. And they worry about damage from hail and flooding, although if these occur they will be localized. In any case specific reports of these problems have not materialized. There is also worry that the rains might not end in time to allow cultivation for the Meher (main) season planting. This is extremely unlikely. Continuing rains through May would probably have little adverse effect on either Belg or main season production. Reports from the first 10 days in May, in any case, show the rains are beginning to taper off. Given the residual soil moisture from April rains even limited May rainfall—if decently distributed—would ensure excellent yields. Prolonged rains in the Belg season could result in spectacular yields.

An additional constraint, that must be acknowledged, is the possibility of pestilence. Wet years following drought conditions generally see an explosion of insect populations such as locusts and grasshoppers that could effectively negate the increased Belg season production forecast here.

Estimating Total Production<sup>2</sup>: The FEWS and USAID crop production estimate of 5,385,000MT compares to the Ethiopian estimate of 5,513,000MT (after adjustments for milk, Belg season and root crops), and the FAO estimate of 5,047,500MT (after subtracting waste and seed). These estimates used as their basis the estimated divergence by region from a "normal" season. Inadequate baseline information and imprecise divergence figures ("67% of normal", "6% higher than normal", "no change") give little confidence to final estimates. Differences in crop production estimates can be inherent in the methodology used or the parameters chosen. It can be due to logical failures, fail-safe assumptions or simply the lack of adequate data for analysis.

Crop production estimates are an essential part of food aid needs assessment but, in Ethiopia, the lack of adequate data means that crop estimates are bound to be inaccurate. The food deficit, calculated from the estimated crop production, is the basis of food aid planning by donor countries. The current oversupply of

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<sup>2</sup> All production estimates have been adjusted to be comparable.

imported emergency food aid is a consequence of inaccurate crop production estimates.

### Port Situation

Food aid arrivals continue to increase stocks in all three ports supplying the emergency food aid program in Ethiopia. Brimming warehouses in country, few available trucks, and lack of demand have reduced the rate food aid is removed from ports. For the week ending 6 May, 1986, a total of 80,200MT arrived in port and 12,000MT were shipped out by truck and rail, leaving an estimated total of 220,200MT of emergency food aid stocks in port. An additional 70,000MT await offloading. (See Appendix B for details).

### Resettlement

Perhaps the most controversial issue between Marxist Ethiopia and western governments and private relief organizations is resettlement. By the end of 1986 the GOE had planned to resettle 1.5 million people. Approximately 600,000 persons, mostly from the north, have already been moved to areas designated conducive to agricultural development in the southwest.

The GOE has two approaches to resettlement, Integration and New Lands. Under Integration small groups of people are resettled into existing villages. The villagers are responsible for providing land and housing to the newcomers. The goal for self-sufficiency is 12 months. Seventy-six integrated resettlements exist. Under New lands (which has received the most press coverage) resettlement sites are constructed on newly cleared lands. The goal for self-sufficiency is 24 months. One hundred fifty-eight such resettlement sites exist. By province:

| <u>Province</u> | <u>Integrated</u> | <u>New Lands</u> |
|-----------------|-------------------|------------------|
| Gondar          | 0                 | 4                |
| Gojjam          | 3                 | 47               |
| Illubabor       | 15                | 39               |
| Shewa           | 9                 | 7                |
| Wellega         | 32                | 61               |
| <u>Keffa</u>    | <u>17</u>         | <u>0</u>         |
| Subtotal        | 76                | 158              |
| Total           |                   | 234              |

The US government and other donor governments agree that a voluntary and well-planned resettlement program is needed. Years of land degradation by drought, deforestation, and over-population in many areas in the north has rendered the soil incapable of supporting its population. But in 1984-85 the GOE implemented an inadequately planned and coercive program. At the peak of the resettlement move, many of the "existing" and most of the new sites had no established infrastructure, i.e. no system to

redistribute land, housing, etc. Government promises of clinics, tilled land, oxen, farm implements, and seeds never materialized. In addition, many resettlement areas experienced outbreaks of cholera, malaria, and tse tse fly infestation of livestock. There were chronic shortages of food and clothing.

Human rights abuses were widespread during the resettlement move. Reports of peasants being lured to feeding centers with offers of free food and then being rounded-up by soldiers and taken south filled the international press. Men were separated from their families; women were taken from market and transported, in open trucks and non-pressurized planes, to resettlement sites hundreds of miles away. Already weak from lack of food, many were forced to march to camps. Once arrived, armed soldiers forced the settlers to clear land and build housing. Many refugees who fled the resettlement camps into Sudan and Somalia described the sites as concentration camps, where beatings, torture and death occurred.

Whether due to criticism from western governments, exposure of the program in the press, or the GOE's acknowledgement of its failure, the resettlement program has been temporarily suspended. No new movements will take place until after the harvest season in December 1986. The RRC has launched a family reunification program; and the GOE gives out assurances that when the resettlement program resumes it will be on a completely voluntary basis. •

### Villagization

Potentially far more disturbing than the resettlement program is the GOE's villagization program. The GOE claims that the aim of this program is to cluster rural people together to better provide them with social services and economic assistance without depriving them of access to their lands. However, to outside governments the concept of villagization appears to be designed to exert central government ideological control, and to cut-off peasant support for separatists waging guerrilla war against the government. The goal, unbelievably, is to resettle virtually all of the rural population of the country.

Unlike the resettlement program, villagization continues, particularly in southern Ethiopia. In Shewa, 355,000 people have been moved; in Hararge 1,700,000 and in Arssi 830,000. Villagization also continues in Gama Gofa and Illubabor. If implemented as planned, villagization will have a staggering effect on the population (most of approximately 43 million Ethiopians will be moved). The long-term effects of villagization on agricultural production in Ethiopia remain to be seen, but in the short-term most observers conclude that overall crop production will be reduced.

### Populations At-Risk

The best estimate of people at-risk was produced by the GOE's Relief and Rehabilitation Commission (RRC). Based primarily on Woreda level analysis, the RRC published maps of food availability and Awraja level estimates of settled people requiring immediate assistance and assistance later in the year, and estimates of pastoralists requiring assistance. The RRC used a total population figure for January 1986 of 42,744,000. This number probably excludes refugees outside of the country (up to 1,000,000) and those who died (up to 300,000) during the famine.

The total population at-risk is estimated to be 6,450,410 of whom 5,038,640 required immediate assistance presumably as of January 1, 1986. Given the lack of information it is impossible to know, precisely, the current situation. It is known, however, that feeding levels have been reduced from the high levels of December 1985, thus 5,038,640 is considered an upper bound. (See Map 3)

#### ETHIOPIAN ESTIMATE OF PERSONS NEEDING FOOD AID ASSISTANCE

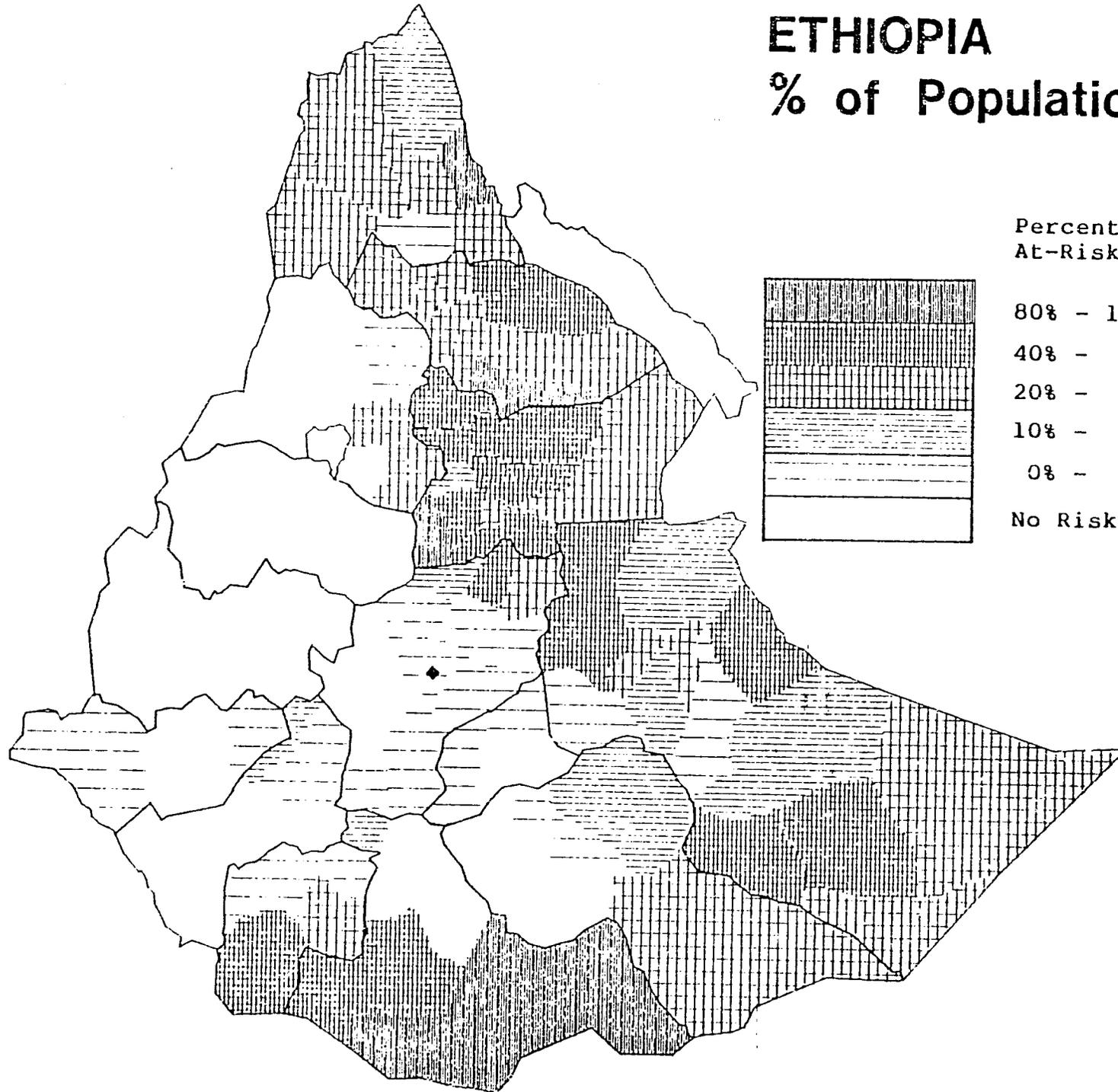
| Region     | Immediate Assistance | Later Assistance | Regional Total |
|------------|----------------------|------------------|----------------|
| Arssi      | 14,760               | 4,910            | 19,670         |
| Bale       | 84,000               | —                | 84,000         |
| Gamo Goffa | 123,320              | 30,150           | 153,470        |
| Gojjam     | —                    | —                | —              |
| Gonder     | 150,340              | 65,000           | 225,340        |
| Hararghe   | 911,180              | 350,190          | 1,261,370      |
| Illubabor  | —                    | 25,000           | 25,000         |
| Keffa      | 70,020               | 5,250            | 75,270         |
| Shewa      | 208,370              | 379,170          | 587,540        |
| Sidamo     | 407,800              | 34,000           | 441,800        |
| Wellega    | —                    | —                | —              |
| Wello      | 1,628,850            | 298,100          | 1,926,950      |
| Tigray     | 800,000              | 200,000          | 1,000,000      |
| Eritrea    | 630,000              | 20,000           | 650,000        |
| Total      | 5,038,640            | 1,411,770        | 6,450,410      |

SOURCE: 1985 Meher (Main) Crop Season Synoptic and 1986 Food Supply Prospect Final Report, Early Warning and Planning Services, Relief and Rehabilitation Commission, Addis Ababa, Ethiopia, January 1986.

MAP 3

# ETHIOPIA

## % of Population At-Risk



Percent of Population  
At-Risk

80% - 100%

40% - 80%

20% - 40%

10% - 20%

0% - 10%

No Risk

## APPENDIX A

### Regional Detail

**Tigray:** Conflicting reports of agricultural production range from deficit to 50,000 MT surplus in Shire Awraja. Central areas within the Takkaze River Valley are said to show very high levels of childhood malnutrition. World Vision has officially ceased its feeding program in Tigray; no PVO has yet to take their place. Feeding programs were suspended for a time in the east due to existing main season harvest stocks. Fighting continues between the TPLF and the government of Ethiopia. The food need situation in Tigray must be monitored closely to move quickly to supply need not previously identified as the potential for famine exists here.

**Eritrea:** Agricultural production during the 1985 main season was good, although good figures are unavailable due to the security situation. There is a lack of information on feeding programs within the Region. Eritrea is a region where the true situation is not well understood and where the food need situation could change quickly and drastically, thus increasing the potential for famine.

**Arssi:** The 1985 main season crop was good with total production above "normal". Rainfall failed in two rift valley Woredas resulting in complete crop failure making part of the population there at-risk. Most of Arssi produced a surplus above local need for 1986. Arssi is also a region where Belg season production is an important fraction of total production. Rainfall during this season suggests a greater surplus for the 1985/86 cropping year than anticipated.

**Bale:** The 1985 main season crop was favorable in most of the region with some marketable local surplus in certain Woredas. This situation is said to depend on a "favorable" Belg harvest as this season represents up to 50% of local production. That the Belg harvest is forecast to be exceptional suggests that numbers of people predicted to be at risk will decline.

**Gamo Gofa:** The 1985 main season crop was generally poor although above that of 1984. Enset and sweet potato production could, however, make most of the Woredas self-sufficient in food. The Belg season is important in Gamo Gofa, especially in Gardula Awraja where people are predicted to be at risk. A good Belg season harvest could lower their numbers. Pastoralists, without animals, would however probably continue to require food aid.

**Gojjam:** Production during the 1985 main season was above "normal", no people are at-risk, and a marketable surplus exists in at least half of the Woredas of Gojjam Region. The Region has

no Belg season crop production, although Belg season rains bode well for main season cultivation as well as for pastoralism.

Gonder: Most Awrajas produced a local surplus although pockets of need, in the east, exist. Simada Woreda in Gaynt Awraja is singled out as being the worst pocket of famine in the country. With only three months of food available a major effort has been initiated to airlift 400MT of food a month to 49,000 beneficiaries. This is a per capita feeding rate of 8.16KG, well below the recommended minimum.

Hararghe: Main season production in 1985 was a failure in low and mid-altitude agricultural areas, with total production estimated at 50% of normal. A large estimate of people at-risk is based upon this assessment and a merely normal Belg harvest in the mountains. The Belg season provides 50% of Hararghe's total crop production. Excellent Belg season rains could have a very important impact on populations at risk in the mountainous agricultural areas. There are approximately 400,000 returned refugees from Somalia in the Region requiring food aid, not otherwise appearing in this analysis. It is expected that supplemental emergency food aid will be made available to these returnees through UNHCR. Reports by refugees in Somalia of excess emergency food aid distributions, by CARE, are discounted by PVO observers in Hararghe. Nevertheless the situation requires continued monitoring.

Illubabor: Adequate production was available from the 1985 main season crop with the exception of some small pockets.

Keffa: The 1985 main production season provided adequate crops, or surpluses in most areas of the Region. Minor deficits occurred in Limu and Jimma Awrajas in the north of the Region.

Shewa: In most areas the 1985 main production season provided at least near self-sufficiency and often marketable surplus. The exception was in the northernmost Awrajas where lack of rain, and possibly seed, limited production. These same Awrajas are dependent on successful Belg seasons to see them through to the next main season harvest. This year's Belg rains promise exceptional harvests and should act to limit the number of people at risk of famine.

Sidamo: Above normal production characterized the main season harvest. Enset is the most important crop locally so grain production should be available for market. Where Enset has been blighted there is a gradual shift into sweet potato production. Wolayita Awraja in the northwest is often singled out as being especially at risk and childhood nutrition studies bear out the effect of crop disease in generating at-risk populations. Grain prices in Wolayita Awraja actually increased after harvest. Substitution of sweet potato for enset in Wolayita is not

expected to return that Awraja to self-sufficiency.

Wellega: All areas reported either self-sufficiency or a marketable surplus for 1985 main season production. Belg season production is important in a small area of the southwest which has already produced a marketable surplus.

Wello: The 1985 main season production was far better than that in 1984 but still below the level necessary for self-sufficiency. Crop production in low and mid altitude areas was very poor. An excellent Belg season harvest could reduce the number of people requiring food aid from the predicted 1,960,950. This is the hardest hit of the regions in terms of numbers of people affected, and affected primarily by drought. Eyewitness accounts report that vegetation from Belg season rains is verdant, and while Belg season production is not as important a percentage of total production as is true further south, nonetheless it is expected to reduce the food aid requirement from June thru the end of 1986. Wello must be monitored closely to ensure that Belg season production does, in fact, make a difference and to ensure that the situation doesn't deteriorate.

## APPENDIX B

### Port Situation

Food aid arrivals continue to increase stocks in ports supplying the aid effort in Ethiopia. No food supply crisis to beneficiaries exists. Increasing stocks and a reduction in offtakes has created severe congestion in all ports. The figures reported below are as of the week May 6, 1986.

**Massawa:** No berthing delays are reported. Food aid stocks are high - 70,800MT; average daily offtake has fallen. Pallets are urgently needed to avoid water damage to food aid stocks already in port, and for an additional 22,000MT of commercial food, and 43,400 of food aid expected over the next month. At the average weekly offtake rate it would take over three months to clear the port.

**Djibouti:** Heavy rains have caused extensive damage to languishing stocks inadequately protected by tarps and the absence of pallets. World Vision sustained the biggest loss estimated at 10-15%. CARE and CRS each estimate a 5% loss. Approximately 5,000 pallets are urgently needed to prevent further food spoilage. Food aid stocks in port total 32,300MT with an expected additional food aid arrivals of 8,000MT.

Port congestion remains a serious problem at Djibouti. Offtake, which had ceased due to a washed-out bridge and railway line between Dire Dawa and the Djibouti border, has begun again but it will take 4 to 6 weeks to complete major repairs. The NGO's are finding it extremely difficult to separate the spoiled stocks and move them due to the severe congestion. Food continues to arrive at the port compounding the problem. At the average weekly offtake rate it would take over five months to clear port.

**Assab:** There is a 30-day berthing delay. The situation is expected to deteriorate further with the expected arrival of 200,400MT of food aid imports, 30,000 tons commercial food imports, and fertilizer. Port congestion is due in part to warehousing of food aid stocks - many feeding programs have been temporarily suspended or decreased to half rations. Inland warehouses are filled to capacity. The GOE has given priority allocation of available trucks to clear food stocks from ports, but they have not arrived. As a result of the above factors, offtake has fallen dramatically. Available transport is being used for harvest (commercial wheat) and to transport fertilizer. Current food aid stocks in port or afloat total 187,200MT. It would take over six months to clear Assab of current stocks at average weekly offtake rates.

Heavy rains fell at Assab on April 11. Damage to grain was minimal (approximately 100 bags of USG food and 10 MT of USG

commercial fertilizer). Bulk commercial wheat (Australian) stored in an open warehouse absorbed rain water.

All food aid, commercial food, and fertilizer at Assab is currently stocked on pallets. However, many are broken. The repair and construction of new pallets could be made at the port carpentry shop, but the donation of a large supply of timber suitable for pallet construction is required. In addition, tarpaulins are beginning to tear and need replacing.

## APPENDIX C

### Food Needs and Food Production:

There is a disparity between the AID and Ethiopian estimates of food aid which comes about because of different approaches. AID obtained estimates of regional production and other available food and used estimated population and estimated per capita consumption (156kg/year) to arrive at a national level deficit of 900,000MT for 1986. The Ethiopian Relief and Rehabilitation Commission (RRC) used the enumeration approach to estimate populations at-risk for each Awraja (district level) then multiplied by an average per capita food need (167kg/year) to obtain a total food aid requirement of 1,211,118MT for 1986. Applying AID's per capita figure of 156kg/year, instead of 167kg, the RRC's emergency food aid requirement is reduced. The RRC counted people at-risk for part of the year as requiring the full yearly ration. A further 110,118MT can be deducted from the RRC food aid need by conservatively estimating average need for people needing partial aid at 6 months of full rations. These two adjustments, lower per capita requirement and correcting for partial years, give a corrected Ethiopian estimate of 896,146MT. The table below summarizes these corrections.

#### 1986 FOOD REQUIREMENT FOR PERSONS ENUMERATED AS AT-RISK

|                                   |         |           |
|-----------------------------------|---------|-----------|
| 5,038,640 people (immediate need) | @ 156kg | 786,028MT |
| 1,411,770 people (later need)     | @ 78kg  | 110,118MT |

|                            |           |
|----------------------------|-----------|
| Total Food Aid Requirement | 896,146MT |
|----------------------------|-----------|

Estimates of net domestic production vary widely, and are based upon imprecise estimates of percent divergence of this years production from that of a "normal" year. These estimates include:

|       |                                   |
|-------|-----------------------------------|
| RRC   | 5,513,130MT                       |
| USAID | 5,385,000MT                       |
| FAO   | 5,047,500MT (less waste and seed) |

As a independent check on these estimates FEWS estimated the minimum production necessary to feed those people judged "not at-risk" by the RRC. This estimate was made by working "backward" from the enumeration of people needing food aid assistance. This floor to possible production validated AID's estimate, and provided a rationale for estimating maximum emergency food aid required during 1986.

### Food Deficits:

The amount of food aid that needs to be imported during 1986

depends on food resources already in Ethiopia. Combining the food balance sheet and enumeration approaches to food need assessment gives a more complete picture of that situation than does either method alone. The food aid requirement of 896,146MT can be reduced by the forecast additional Belg season production (150,000MT), carryover food aid stocks (306,000MT) and added to by 3% (27,908MT) to provide for losses in distribution. This new emergency food aid import requirement of 467,972MT is far below that estimated by any other organization. Yet given the current in-country food aid stocks and present levels of distribution this estimate seems conservative. Currently food aid shipments in port or afloat total 290,000MT and in-country warehouses are said to be brimming. Using the PRC's production estimate would have reduced the import requirement by an additional 128,000MT, a choice not taken here (but one that could be justified by the increasing in-country food aid stocks).

#### ESTIMATES OF FOOD PRODUCTION, SUPPLY AND AID IMPORT REQUIREMENTS

|                           | SOURCE OF ESTIMATE |             |             |
|---------------------------|--------------------|-------------|-------------|
|                           | AID                | PRC         | FEWS        |
|                           | METRIC TONS        |             |             |
| <b>SUPPLY</b>             |                    |             |             |
| Production                | 5,385,000          | 4,757,270   | 5,358,000** |
| Milk Production           | *                  | 172,000     | *           |
| Belg Season Prod.         | *                  | 200,000     | *           |
| Root, Sweet               | *                  | 383,860     | *           |
| Potato, Other             |                    |             |             |
| Total Production          | 5,385,000          | 5,513,130   | 5,358,000   |
| <b>DEMAND</b>             |                    |             |             |
| Total Demand              | 6,910,000          | 7,138,248   | 6,668,064   |
| <b>DEFICIT</b>            |                    |             |             |
|                           | (1,525,000)        | (1,625,118) | (1,310,064) |
| <b>IMPORTS</b>            |                    |             |             |
| Commercial Imports        | 300,000            | 300,000     | 300,000     |
| Normal Food Aid           | 114,000            | 114,000     | 114,000     |
| <b>EMERGENCY FOOD AID</b> |                    |             |             |
| Food Aid Required         | (1,111,000)        | (1,211,118) | (396,064)   |
| Somalia Returnees         | (58,000)           |             |             |
| Distribution losses       | (25,000)           |             | (27,908)    |
| 1985 Carryover            | 306,000            | 306,000     | 306,000     |
| Basic Import Need         | (388,000)          | (905,118)   | (617,972)   |

ADJUSTMENT

|  |         |         |         |
|--|---------|---------|---------|
| Additional Belg<br>Season Production             | 150,000 | 150,000 | 150,000 |
| 1986 EMERGENCY<br>FOOD AID IMPORT<br>REQUIREMENT | 738,200 | 755,118 | 467,972 |

AID used a population to 44,200,000 people to estimate DEMAND. The RRC and FEWS use a population of 42,744,000 to estimate DEMAND. AID and FEWS used a per capita food requirement of 156KG/Year while RRC use a per capita food requirement of 167KG/Year.

\* Included in production figures

\*\* Calculated as a check on AID & RRC estimates by working backward from DEMAND and Food Aid Required

|   |             |
|---|-------------|
| 1. 42,744,000 People* @ 156KG                                 | 6,668,064MT |
| 2. Less At-Risk Need  | 896,146MT   |
| 3. Net Food Supply<br>(Production + Importation)<br>(1. - 2.) | 5,771,918MT |
| 4. Expected Imports<br>(Commercial and Non-Emergency Aid)     | 414,000MT   |
| 5. Estimated Minimum Net Production<br>(3. - 4.)              | 5,357,918MT |

The Belg Season Forecast:

USAID, the RRC, and FAO used in their production estimates, and the RRC used in its at-risk estimates, a forecast of Belg season (the current minor agricultural season with harvest in May and June) production of approximately 200,000-250,000MT, a "normal" year. NOAA rainfall assessments show current Belg season rainfall to be exceptionally good, with rainfall extending to areas not usually impacted by Belg season rains. This implies that Belg season production will reach excellent levels (given possible constraints on production to be discussed below) and pasturage peripheral to traditional Belg cropping areas is showing unusual greening and bodes well for pastoralists and their herds. It also implies increased milk production over previous estimates.

If current conditions continue, Belg season production could be 150,000MT tons higher than originally forecast. This increases the minimum net crop production estimate to 5,535,000MT. For populations at-risk the Belg season is especially important in Showa, Wello and Hararge Regions. The numbers of people in those regions projected to need assistance later in the year could be reduced if current conditions continue.

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NGO food distribution programs are currently limited in scope and in some cases postponed. In Mekele, in eastern (government controlled) Tigray NGO food distribution programs were suspended in February for at least a month (when local food aid stocks represented a one to two month supply). Distribution was deemed unnecessary due to remaining fall harvest stocks. In Yifatna Timuca Awraja, in northern Shewa, food distribution (15KG/month to 365,000 people) was suspended from January to May 1986 for the same reasons. A report suggests distribution to at least some people not at-risk in Hararghe, who use the extra food to pay taxes to the Ethiopian Government.

Current market prices in Addis Ababa are low, with the exception of Teff. Grain prices are substantially lower outside of the city, a situation to be blamed on the Ethiopian Agricultural Marketing Corporation's (AMC) policies. Teff prices are said to be high due to farmer's withholding supplies in hopes that the AMC will raise its purchase price. The implication is that the Teff producers, in general, are not in immediate need of cash to buy food, agricultural implements, animals or other normal necessities of life. Awraja level price data from all over the country shows market prices much lower than in the same period after the 1984 harvest.

An additional 600,000 people have been resettled by the Ethiopian government. It is estimated that those resettled to existing villages will require food aid for 12 months, and those resettled to new settlements will require food aid for 24 months. In realistic terms these estimates mean after the main season harvest in 1986 and 1987 respectively. There is no reason to believe that the RRC excluded these populations from their at-risk calculations. Nor did AID exclude these people from their food balance sheet. Resettled persons therefore account for approximately 93,600MT of the projected food aid requirement of 468,000MT for 1986.