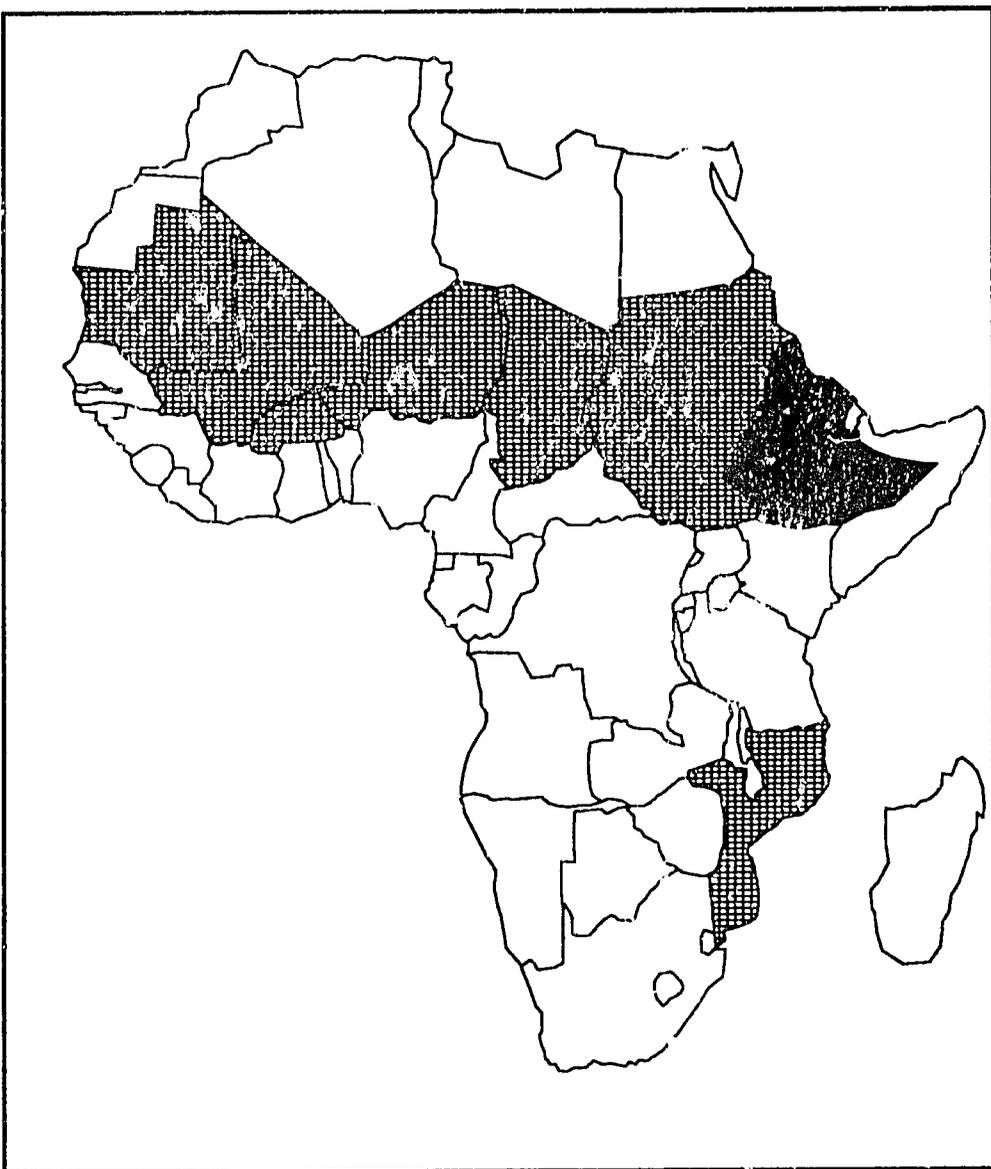


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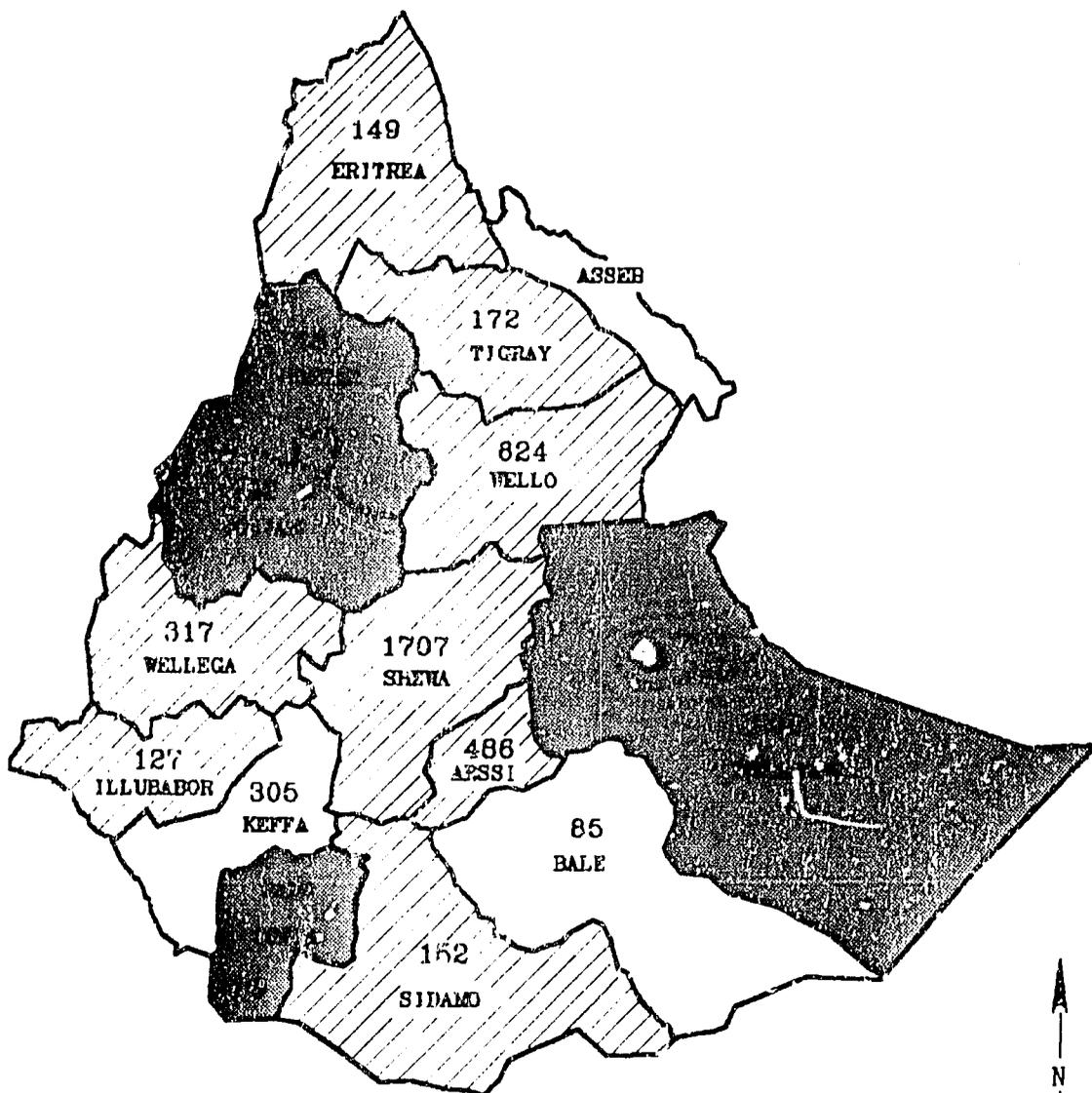
# FEWS Country Report ETHIOPIA



Africa Bureau  
U.S. Agency  
for International  
Development

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# Summary Map



Figures USAID 1986 Cereal & Pulse  
Production Estimates  
(Peasant Sector, Main Season)  
(000's Metric Tons)

 USAID Production Estimate  
Higher Than The FAO Estimate

 USAID Production Estimate  
Lower Than The FAO Estimate

# ETHIOPIA

## Food Availability in 1987

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

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

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## **INTRODUCTION**

This is the eighth 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.

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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.

## **SUMMARY**

Overall indications continue to support the view that Ethiopia will require little or no additional emergency food aid in 1987. New estimates of 1986 major season peasant cereal and pulse production developed by the Ethiopian Relief and Rehabilitation Commission (RRC), the Food and Agricultural Organization (FAO), and the USAID mission, are contradictory. Estimates of main season peasant production of cereals and pulses vary from a low of 5,405,000 MT (FAO), to a high of 5,704,000 MT (USAID). The USAID estimate seems to reflect 1986 agricultural conditions more accurately than the FAO estimate. The most likely result, from national food balance sheet calculations, using the lowest likely estimate of emergency carryover stocks from 1986, ranges from a minor deficit in emergency food aid of 17,000 MT to a minor surplus of 14,000 MT of emergency food aid in 1987. Estimates of carryovers of 1986 emergency food aid into 1987 are based on limited information and, in the case of the estimate by the RRC and the United Nations Office of Emergency Operations in Ethiopia (UNOEOE), understate the stocks available. These stocks should cover emergency requirements in 1987. There is a continuing structural deficit due to underdevelopment, in general, and government policies in particular. The Relief and Rehabilitation Commission (RRC) has enumerated 2,500,000 people (660,000 pastoralists and 1,840,000 agriculturalists) who will require food assistance at a full ration (201 kg per year) during 1987. The RRC has requested donors to provide 409,200 MT of emergency food aid during 1987 to meet this need.

### **Issues**

- There are indications that the estimate of people at-risk published by the RRC was deliberately minimized. In any case, the food required is above levels normally distributed, assumes all people require total rations, and sums exactly to 2,500,000.
- Diverse estimates of food availability during 1987 ensure controversy among donors as to the appropriate level, if any, of additional emergency food aid.
- Preliminary indications are that donors will act to meet the RRC's request for 409,200 MT of emergency food aid in 1987, regardless of the carryover stock of emergency food aid from 1986 into 1987.

### **February Indicators**

- Estimates of actual distributions of food aid during the last four months of 1986 should become available from relief organizations, giving a more accurate estimate of emergency food aid stocks carried over into 1987.

## CROP PRODUCTION

The RRC and the Food and Agricultural Organization (FAO) have each released, in January, independent estimates of 1986 main season peasant production of cereals and pulses. A USAID mission assessment has also been completed. The USAID mission assessment shows crop production to have returned to normal pre-drought levels and suggests that both the FAO and the RRC have understated production in the most important agricultural regions. The FAO took reports of pockets of poor agricultural production to show a decline from "normal" regional production. USAID accepted that in a "normal" year there would be pockets of poor production and that these pockets were not abnormal in 1986.

**Table 1: Estimates of 1986 Main Season Peasant Sector Cereal and Pulse Production by Region, RRC, FAO and USAID (000's MT).**

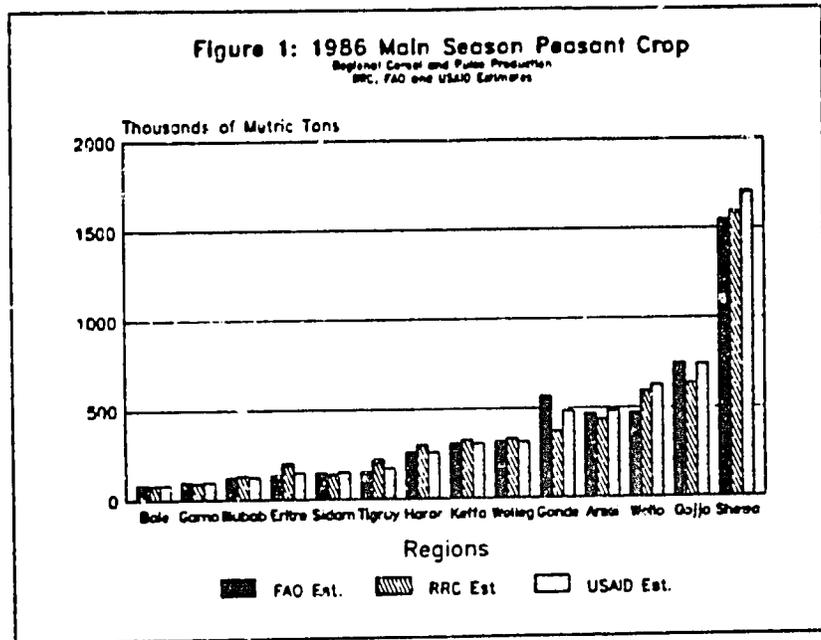
Region	1980-1983 Average	RRC	FAO	Mission
Arssi	465	436	465	486
Bale	85	81	85	85
Gamo-Gofa	95	92	100	99
Gojjam	765	634	745	742
Gonder	565	371	565	481
Hararghe	370	300	260	258
Illubabor	170	133	125	127
Keffa	300	325	305	305
Shewa	1640	1592	1545	1707
Sidamo	145	141	145	152
Wellega	415	334	315	317
Wello	725	591	470	624
Eritrea	170	422	135	149
Tigray	200	*	150	172
<b>Total</b>	<b>6115</b>	<b>5457</b>	<b>5405</b>	<b>5704</b>

\* Eritrea and Tigray are combined in the RRC estimate,

Sources: FAO Mission Assessment, RRC 1987 Food Supply Report, Mission Cables.

Figure 1 graphically illustrates the differences between the regional estimates of FAO, RRC and USAID. The most important difference is in the estimates of production in Shewa Region, where the USAID estimate is a full 162,000 MT higher than that of the FAO. In Wello Region, USAID is 154,000 MT higher than the FAO. FEWS accepts the

Mission's estimates, which more closely correspond to the results of FEWS monitoring during the growing season than do the estimates of the RRC or the FAO.



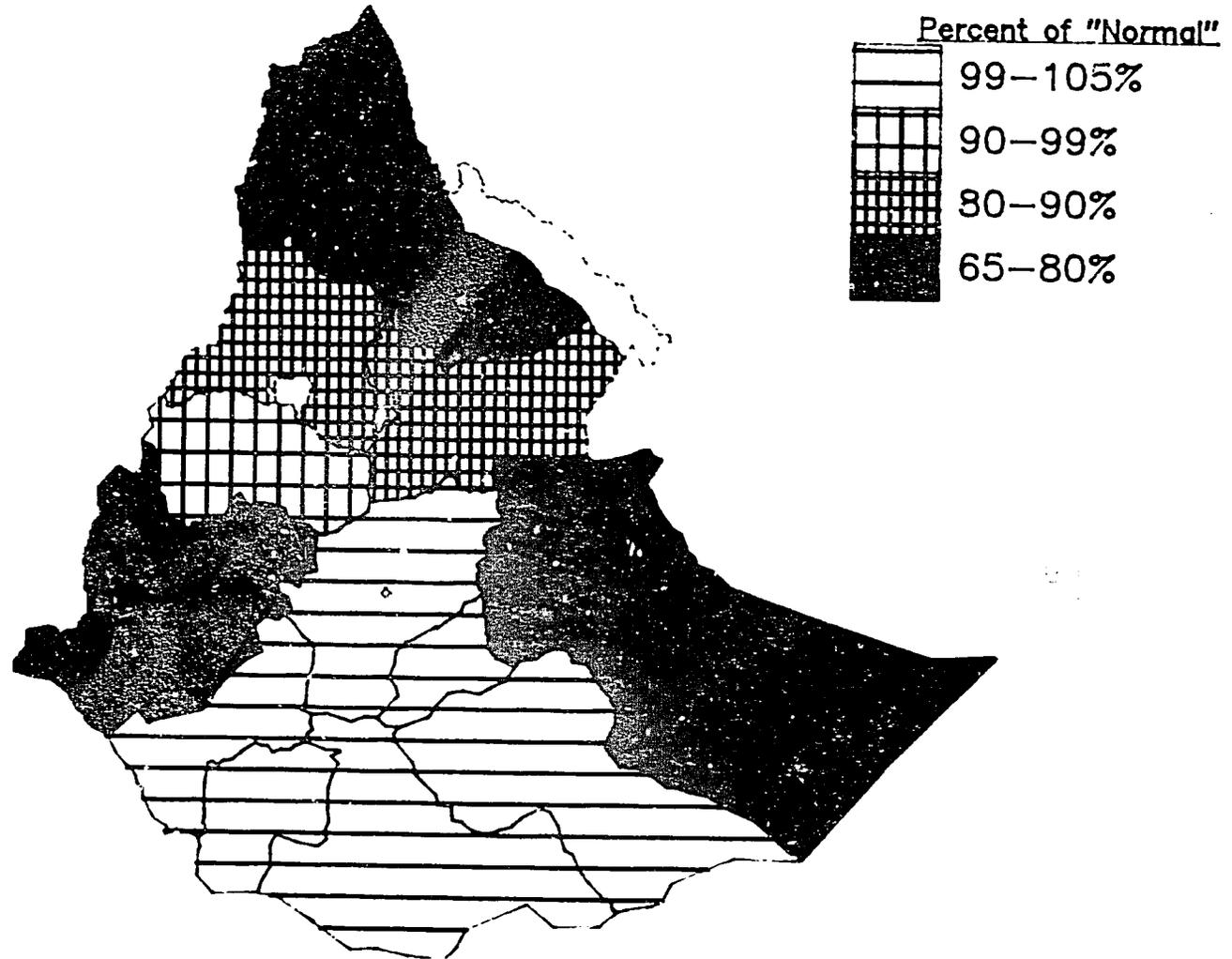
While the peasant sector accounts for most of the main season crop production in Ethiopia, producer cooperatives, state farms, settlements and resettlement areas are estimated by the FAO to provide an additional 800,000 MT of cereal and pulse production. This figure is accepted by all as the best possible estimate.

Estimates of agricultural production in Ethiopia are usually made relative to a "normal" year, which is the historical average of several years. Thus, differences in base "normal" production can account for some of the differences between estimates by different organizations. The RRC used the period 1979-1983 (main seasons). The FAO used 1980-1983. USAID used 1980-1985 (excluding 1984). (See Map 2) There are several problems with both the method of estimation and the use of different years to determine "normal".

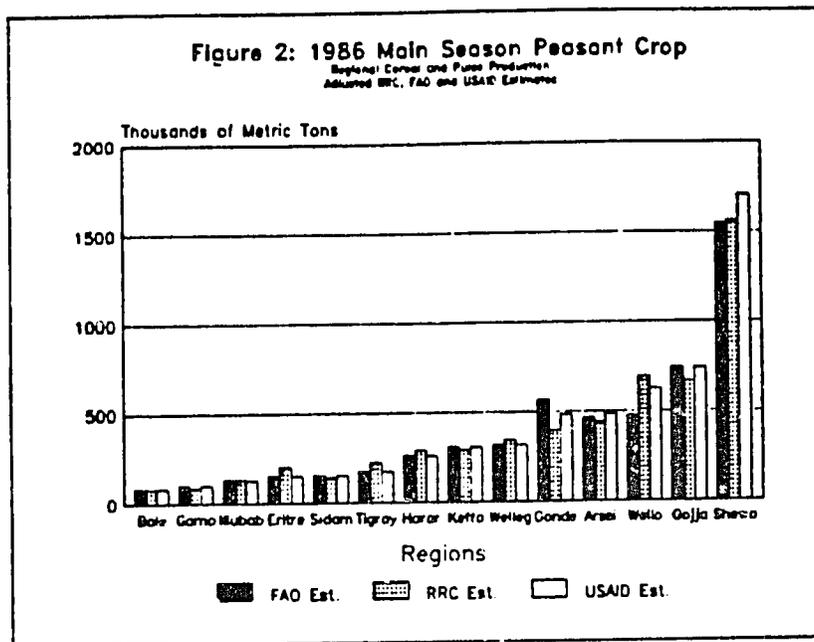
1. Comparisons between estimates can only be made after they are adjusted to relate to the same average period. (See Figure 2 for the differences between adjusted estimates of regional production.)

# Ethiopia: USAID Peasant Production Estimates

Regional Divergence From "Normal"



Map: FEWS/PWA, January 1987



2. The method assumes that production in those average years is known with some accuracy.

3. The method implies a verifiable and replicable method for ascertaining the precise degree, by region, that this year is better/worse than last year and/or than the "normal" year.

4. Final harvest statistics, generated through scientific sampling and questioning of farmers, should validate or invalidate previous estimates and lead to a new "normal" base. In September 1986 the Ethiopian Central Statistics Office (CSO) released their 1985 survey of 7000 peasant farmers and provided a final harvest estimate of 4,520,000 MT. The FAO then revised their 1985 estimate to 5,095,000 MT. While most outside observers acknowledge the inaccuracy of the CSO estimate, no one has the knowledge to say just how inaccurate it is. The CSO estimate also provides no basis for judging the validity of the method or the estimate used by the FAO or any other organization.

5. "Normal" production is an integral part of any estimate of usual consumption (i.e. status quo consumption). Comparisons of national food balance sheets must account for these differences.

## THE FOOD BALANCE

The 1987 national food balance sheet for Ethiopia is the subject of some controversy. The foci of this controversy are the various estimates of production and the amount of emergency food aid to be carried over into 1987 from 1986. (See CARRYOVER STOCKS.) Estimates can also differ on Belg season harvest prospects, milk production, root crop production, the structural deficit and the average consumption requirement. A comparison of FAO, RRC and USAID production estimates requires that they all, at least, be adjusted to the same "normal" base.

A forecast of the 1987 Belg season, with harvest in June and July, is required for a 1987 national food balance sheet as it generates a significant amount of the food available for consumption in 1987. This is especially true in regions with large populations at-risk. Belg season production is often stated as providing an additional 250,000 MT toward the annual food supply; the FAO uses the figure 170,000 MT; the USAID Mission uses the figure 237,000 MT. In fact, the average amount of actual Belg season production is unknown. A high estimate of excellent Belg production has been 600,000 MT; a reasonable estimate of last year's (1986) Belg production is 350,000 MT.

Estimates of milk production are based on extremely limited information, as are estimates of root crops, especially potatoes and sweet potatoes (none of which are counted in official production statistics). The continuing structural deficit has been calculated to lie in the range of 400,000-515,000 MT, with the higher figure the more reasonable estimate. The consumption requirement for major staple crops is estimated at 180 kg/year by the RRC (based on estimates of nutritional requirements) and 163 kg/year by USAID (based on calculations of the actual average consumption, stat'is quo).

Table 2 shows that the three new estimates of production give very different pictures of the emergency food deficit faced by the nation of Ethiopia. The consumption requirement is based on 162.6 kg of the major food items per person per year. Figures 3, 4 and 5 show the contribution of several components of the national food balance sheet toward meeting the total consumption requirement.

**Table 2: The Food Balance for Ethiopia (Cereals and Pulses) Using RRC, FAO and Mission Data (000 MT).**

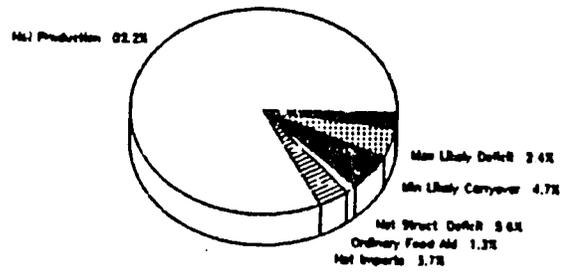
	<b>RRC</b>	<b>FAO</b>	<b>Mission</b>
<b>Consumption Requirement</b>	7413	7413	7413
<b>Peasant Sector Production</b>	5531*	5451*	5704
<b>Cooperatives</b>	210	210	210
<b>Settlements</b>	35	35	35
<b>Resettlements</b>	205	205	205
<b>State Farms</b>	350	350	350
<b>Belg Season Production (1987)</b>	250	170	237
<b>Gross Production</b>	6581	6421	6741
<b>Less Seed and Loss</b>	(1316)	(1284)	(1382)
<b>Milk Production</b>	280	280	304
<b>Root Crops</b>	550	550	550
<b>Potatoes</b>			30
<b>Net Production</b>	6095	5967	6256
<b>Commercial Imports</b>	300	300	300
<b>Exports (Pulses)</b>	(25)	(25)	(25)
<b>Gross Deficit</b>	(1042)	(1171)	(882)
<b>Structural Deficit</b>	515	515	515
<b>Non-emergency Food Aid</b>	100	100	160
<b>Residual St. Deficit</b>	415	415	355
<b>Gross Emergency Def.</b>	528	656	367
<b>RRC Carryover</b>	(251)	(251)	(251)
<b>RRC Emergency Deficit</b>	-277	-405	-116
<b>Min. Likely Carryover</b>	(350)	(350)	(350)
<b>Max. Likely Deficit</b>	-178	-306	-17

\* Adjusted to the same "normal" basis as the USAID Mission estimate.

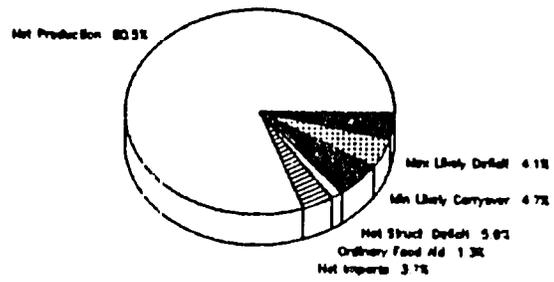
Sources: FAO, RRC, FEWS parameters.

Holding constant the minimum likely carryover of emergency food aid stocks into 1987, the various production estimates would lead to greatly different conclusions. The measure of the national deficit ranges from a

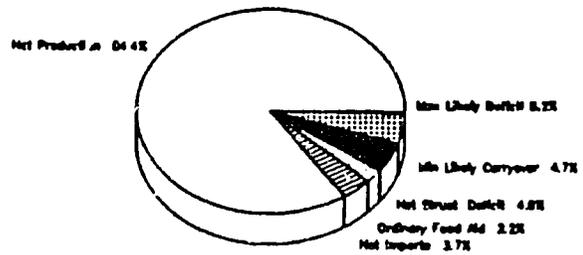
**Figure 3: RRC 1987 Food Availability  
Components of Total Consumption**



**Figure 4: FAO 1987 Food Availability  
Components of Total Consumption**



**Figure 5: USAID 1987 Food Availability  
Components of Total Consumption**



maximum deficit of 306,000 MT using FAO data and parameters, to a minimum of 17,000 MT using USAID data and parameters. A far different picture emerges when all parameters, except production, are held constant. Using a reasonable set of parameters (USAID's), a reasonable forecast of normal Belg season production (RRC's 250,000 MT), and a reasonable estimate of post harvest losses and seed use (20%), these deficits change significantly. The most likely carryover results in a maximum national food deficit of 188,000 MT, based on FAO production figures; a possible deficit of 124,000 MT, based on RRC production figures; and a net surplus of 14,200 MT using USAID production figures.

### **CARRYOVER STOCKS**

New food aid import requirements for 1987 depend on just how much emergency cereal food aid is left over, undistributed, from 1986. The true figure is certainly higher than the one negotiated in September by the Government of Ethiopia and the United Nations Office of Emergency Operations in Ethiopia (UNOEOE), and should meet or exceed the amount of emergency food grain necessary to feed the RRC's enumerated population at risk. (See PEOPLE AT-RISK.) It could also exceed the maximum national food balance sheet deficit of 405,000 MT shown in Table 2 above.

While the RRC admits to no information on the amount of food aid actually distributed by relief organizations, it has estimated a net carryover into 1987 of 174,000 MT with an additional 77,000 MT expected to arrive in the first months of 1987, for a total of 240,000 MT of emergency food aid available for distribution in 1987. Yet, the World Food Program (WFP) has reported, as of December 20, 1986, that 240,100 MT were either shipped inland in the previous two weeks, in port, afloat or expected to arrive by December 31, 1986. These food aid stocks alone, which would not have been distributed in 1986, nearly match the total carryover estimated by the RRC. While an estimate of food aid stocks in inland warehouses is difficult, a conservative figure of 70,000 MT (actual quantities could far exceed that amount) added to the expected arrival of 77,000 MT in early 1987 would provide an additional 147,000 MT, giving a total of 387,100 MT of food aid grain stocks available for distribution in 1987. (An additional 84,000 MT, pledged for 1986 but not yet scheduled, is not included in this analysis.)

The RRC's estimate is based, in part, on the assumption that relief organizations continued to distribute food aid, in the last four months of 1986, at the levels

extant in July and August. Distributions slowed down, or were postponed, due to a favorable harvest in just those areas where relief organizations were most active. In fact, the RRC admits to more food on-hand than its estimates is carried over.

**Table 3: The RRC's Calculations of the 1986-1987 Carryover Stock, for Food Aid Distributed by the RRC and by Non-Governmental Organizations (NGOs, relief organizations) (000s MT).**

	<u>RRC</u>	<u>NGO</u>	<u>Total</u>
<b>Carryover</b>			
<b>From 1985</b>	73,945	185,000	258,945
<b>Received (1986)</b>	267,200	518,000	785,000
<b>1986 Stock</b>	341,145	703,000	1,044,145
<b>Distributed (1986)</b>	248,400	489,600*	738,000
<b>Balance</b>	92,745	213,400	306,145
<b>Deductions</b>			
<b>Security Reserve</b>	10,000		10,000
<b>Resettlements</b>	31,850		31,850
<b>Swap for Seed</b>		30,000**	30,000
<b>Urban Areas and MCH</b>		25,000**	25,000
<b>UNHCR</b>		35,000**	35,000
<b>Net 1987 Carryover</b>	50,895	123,400	174,295

\* The RRC assumed that the NGO's distributions in the last four months of 1986 would be double the RRC's distributions.

\*\*These figures are approximations only.

Source: Annex II, RRC's "Review and Assistance Requirements", January 1987.

There are several interesting aspects to the RRC's calculation, not the least of which are the deductions for a food security reserve and for food aid to resettlers in 1987. In any sense of the word, these are indeed carryovers into 1987. Contrary to the figures cited above (785,000 MT), the WFP reports a total of 875,395 MT of food aid (cereals, milk, edible oils and other commodities) in Ethiopia as of December 20, 1986, with an additional 67,000 MT expected to arrive by the end of the year.

Emergency Food Aid distributions were below expectations during the first four months of 1986, resulting in "brimming" inland warehouses and a lack of port storage at the beginning of May. Distributions in the last four months of 1986 should also have been below the RRC's expectations. The current WFP figures, and the RRC's own figures imply carryover stocks higher than the level reported by the RRC. The total carryover of emergency food aid stocks should be above the level reported by the RRC and fall within the range of 350,000 to 450,000 MT.

## PEOPLE AT-RISK

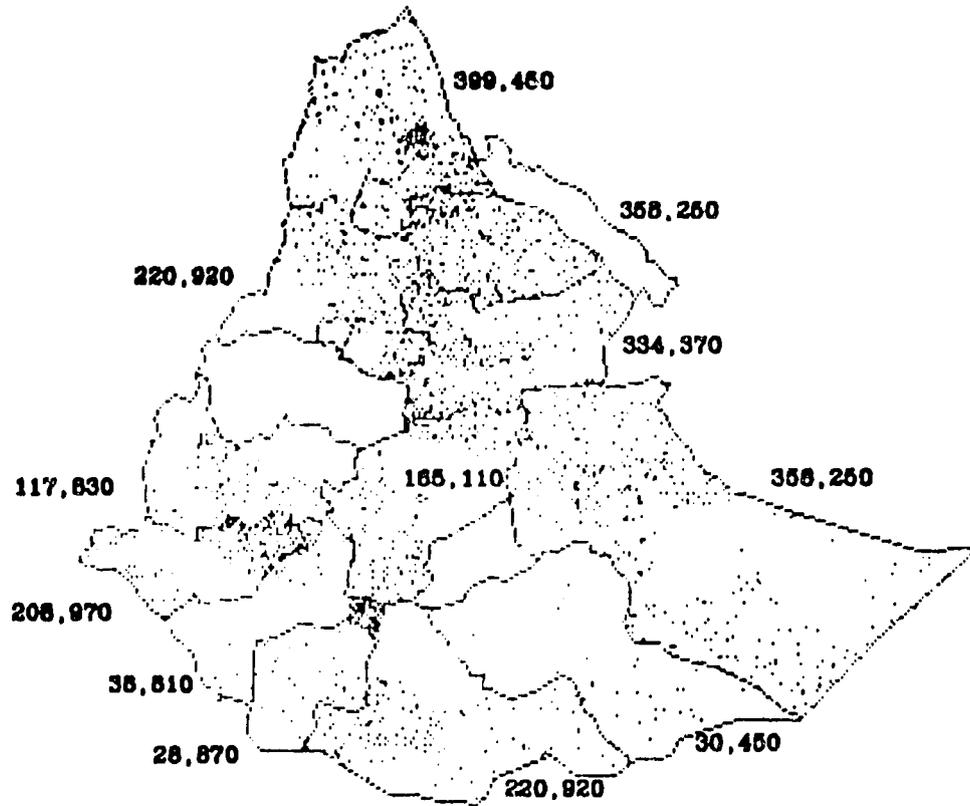
The RRC has enumerated 2,500,000 people at-risk in 1987 and estimated their food aid requirement at 409,203 MT based on an assumed ration of 201 kg per capita. Using the USAID status quo criterion (159 kg per capita per year), only 324,401 MT would be required to meet the needs of these people (Table 4, Map 2). Pastoralists were counted by the RRC as requiring full rations for 12 months. Agriculturalists (croppers) were counted as requiring full rations for 9 months (until the next harvest). The RRC has requested that donors provide 409,203 MT of emergency food aid in 1987 without making any reduction for carryover stocks. (See Map 3.)

**Table 4: RRC Estimates of Agriculturalists and Pastoralists At-Risk by Region and the Food Aid They Require Using the RRC Criterion (@201 KG/Person/Year) and Using the USAID Criterion (@163 KG/Person/Year).**

<u>Region</u>	<u>People At-Risk</u>			<u>Food Aid Required (000's MT)</u>	
	<u>Croppers</u>	<u>Pastoral</u>	<u>Total</u>	<u>@163 KG</u>	<u>@201 KG</u>
Bale	0	30450	30450	4.9	6.1
Gamo Gofa	19700	7170	26870	3.6	4.4
Eritrea	298470	100980	399450	52.8	65.2
Gonder	220920	0	220920	26.9	33.3
Hararghe	125390	232860	358250	53.2	65.8
Illubabor	191060	17910	208970	26.2	32.1
Keffa	38810	0	38810	4.7	5.8
Shewa	178540	6570	185110	22.8	28.1
Sidamo	81200	139720	220920	32.6	40.5
Tigray	298540	59710	358250	46.1	56.9
Wellega	117630	0	117630	14.3	17.7
Wello	268690	65680	334370	43.5	53.3
<b>Total</b>	<b>1838950</b>	<b>661050</b>	<b>2500000</b>	<b>331.6</b>	<b>409.2</b>

Source: RRC "Review and Assistance Requirements", January 1987.

# 1987 Population At-Risk



Each Dot Equals 1000 People



Source: RRC, January 1987

Map: FEWS/PWA, January 1987

These estimates show a very dramatic improvement from the situation in the previous two years. They also belie the RRC's and the FAO's peasant sector production estimates, which would lead to estimates of larger numbers of people requiring food aid based on regional deficits. Until recently, there would have been no reason to question the general magnitude of the RRC's enumeration. It is, however, two months late, sums to exactly 2,500,000 and is accompanied by rumors of politburo pressure to minimize estimates of the number of people at-risk.

If the RRC counted only those people who require total assistance over the next year (only 9 months in the case of agriculturalists) then there are additional people who only require partial assistance. If the RRC counted anyone who requires any assistance as at-risk, then the food requirement is greatly inflated. In September, FEWS estimated 3,900,000 people at-risk in Ethiopia, requiring 433,000 MT of food aid. In October this number was reduced, primarily due to the obvious improvement in the agricultural situation in Hararghe Region, to 3,450,000 people.

Of these 3,450,000 people, approximately 1,140,000 were pastoralists. That figure was judged to be the most immutable of the estimates, for pastoralists at-risk in 1986 were reported by all observers to be without the resources to improve their situation in 1987. The unexplained reduction of that figure to the 660,000 RRC estimate is very curious. The reduction of agriculturalists at-risk to 1,840,000 is less of a problem. An actual enumeration should point to true problem areas, as opposed to estimates made from often exaggerated field reports. Even the higher FEWS estimate of people at-risk, however, would require 373,440 MT of food assistance at most.