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INTER-AGENCY DROUGHT ASSESSMENT

OF

SEVENTEEN DISTRICTS

IN KENYA

AUGUST 12, 1993

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INTRODUCTION

The Inter-Agency Drought Assessment of Seventeen Districts was a unique, cooperative endeavor carried out by representatives of eight different agencies including the Government of Kenya/Office of the President, United Nations Organizations, major donors and Non-Governmental Organizations. Additional agencies also contributed to this effort by providing financial and logistical support to the teams carrying out the analysis. Please see the acknowledgements for a complete list.

The objective of this assessment was to re-examine seventeen districts in the country in order to determine current needs for drought emergency food relief. The participation of such a large number of agencies resulted from a shared recognition of several facts:

- The first Inter-Agency Drought Assessment done in February established a consistent, comparable methodology for assessing needs, which enabled prioritization of relief commodity dispatches among districts.

- There is a natural cycle of change to the drought which needs to be identified as it evolves in the districts and which will necessitate changes in the agencies' response to the drought.

The methodology used is the same as that used in the Inter-Agency Drought Assessment conducted in February 1993. Parts of the methodological approach were adapted from the Watermark Development Group/Turkana DCPU model. For a fuller description of the methodology and a complete set of the forms used, please refer to the Inter-Agency Drought Assessment dated March 10, 1993.

Approximately 27 representatives of various agencies were formed into five teams who covered the 17 districts in one month. Each team included at least one each of the following: a nutritionist, an economist/agriculturalist, a food logistics specialist and a facilitator/administrator. The pace at which the assessment was carried out meant that most teams spent only five to six days in each district - days which sometimes fell over a weekend. The teams' last day in each district was devoted to preparing the teams' first draft of their report. It was fully recognized that this rapid pace would prevent comprehensive coverage of the entire district by the teams and would sacrifice some of the potential for a detailed, exhaustive final report. It was felt, however. that it was more important to conduct a rapid appraisal of all the districts in order to reach conclusions as quickly as possible, rather than to spend several months compiling extensive documentation on each district.

After the first nine districts were completed, the teams were brought back to Nairobi to share their preliminary findings. Based on the experiences of the team members in the field, the GOK/OP requested a meeting and the following operating parameters were agreed upon:

1. There is no team leader.

2. If it is determined there are drought effects still in the district, the team is referred to the objectives outlined in the assessment proposal document.

3. The team membership is as agreed by the Inter-Agency Assessment Working Group. The assessment teams are independent and are responsible for the assessment and reporting. District level people (GoK and NGOs) are to serve as resource persons, not team members. Observers are allowed and are free to share their observations with the teams, but are not members of the teams.

4. Teams should work for consensus where possible, referring to the factual data collected. If there is no consensus based on the data, assenting and dissenting reports should be written and referred to the Inter-Agency Assessment Working Group to resolve, who will use expert advice where appropriate.

5. If appropriate data is not found, the recommendations should be based on the current trend assessment findings and, where applicable, findings and hard data from a district with similar conditions.

6. The final itineraries will be determined by the teams in consultation with the district level people. The teams can decide to split the team for field visits; they should assure that all the available data is collected by each sub-team.

7. The district officials should be informed that WFP will pay only for fuel for the GoK vehicles used for the assessment, which will be paid by the WFP person on the team at the specified rate. The OP will address the issue of costs for food and other expenses for GoK personnel travelling with the teams. The OP will request the DC to inform all authorities that the teams will be travelling in the district.

8. The team members should assure their communications are sensitive and the members do not use their positions to negatively influence the communications. The team members should display cultural sensitivity and not disrupt the team's functioning with inappropriate behavior. As many sources of information as possible should be sought and the sources recorded by the interviewer.

9. All team members are on an equal footing and no one is to be considered more important due to their position or organization.

10. Any and all members of the team are free to consult with one another, however concerns and complaints should be addressed by the entire team.

The analysis and editing were done by a team which included people from WFP, UNDP, UNICEF, USAID, and CARE. To ensure that the editing process did not alter the findings and recommendations of the teams, the editors provided written feedback to the teams on each draft of the district reports, in response to which the teams worked on their own and in two all-day work sessions over the course of three weeks to revise of their district reports.

The report is organized as follows: Section I - Executive Summary; Section II - Individual District Reports. For convenience, each of the 17 individual district reports has been written with the same format, as follows:

A. Summary

B. Review of 10 indicators summarizing the current situation in the district

C. Nutritional Status of Children

D. Economic/Environmental Indicators

E. Relief Food Distributions

F. On-Going and Planned Recovery/Development Activities

G. Final Recommendations

ACKNOWLEDGEMENTS

A large number of individuals and agencies contributed to the execution of this assessment. Eight agencies seconded more than 20 staff members for the entire period of the assessment, while several others contributed Nairobi-based analytical and secretarial staff. Each of these agencies paid their staff salaries and living costs during the field visits. Other agencies donated air flights, vehicles and field-based analytical and technical support. All of these contributions collectively allowed for the successful completion of this activity.

The World Food Program served as the coordinator and lead agency for the assessment. The Government of Kenya, through the Office of the President, provided many of the vehicles used in the field and coordinated logistical arrangements. Major funding for the assessment was provided by British High Commission/Overseas Development Administration (ODA) and the German Embassy/Gesellschaft fur Technischezusamenarbeit (GTZ). The United Nations Emergency Relief Unit (UNERU) assisted with data collection and analysis. UNICEF donated all the flights used by the teams and provided generous support in the field, including lodging and transportation. CARE provided a large number of vehicles, and field support for the teams and Nairobi-based support. Carolyn Mutamba of USAID provided generous support in planning and coordination. Numerous NGOs assisted the teams in the field, providing transportation and logistical support including GTZ, Oxfam, Kenya Freedom From Hunger Councils, Food for the Hungry International, World Vision International, International Federation of the Red Cross, and the Turkana Drought Contingency Planning Unit.

The team members for the field assessment included:

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In Nairobi, Else Larson of WFP provided overall coordination of the assessment process and logistics with assistance from the WFP staff, including Aslam Khan, G.O. Ndege and V.K. Jain. Noreen Prindeville and Laura Sminkey coordinated UNICEF's contributions to the logistical arrangements (flights, field transport, lodging). Those involved in the analysis, editing and compilation of the document included Else Larson and G.O. Ndege of WFP, Laura Sminkey of UNICEF, Steven Redding and David Currie of CARE, Michele McNabb and Carolyn Mutamba of USAID/Kenya, and Bob Palmer of UNERU. Finally, special recognition should go to Dorothy Adoyo, Amina Mohamed and Nancy Mimano of USAID/Kenya for their secretarial support throughout the numerous drafts which lead to the final version of this document.

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ACRONYMS AND ABBREVIATIONS

AIC	African Inland Church
AICF	Action Internationale Contra La Faim (Action International Against Hunger)
AMA	African Muslim Agency
ANS	Action Nord-Sud
Bulla	Small Community or Settlement
CHANIS	Child Health and Nutrition Information System
CPK	Church of the Province of Kenya
CSM/CSB	Corn Soy Milk or Corn Soy Blend
DSM	Dry Skim Milk
DFRC	District Famine Relief Committee
DMP	Drought Monitoring Project
FAO	Food And Agriculture Organization
FHI	Food for the Hungry, International
FFW	Food-For-Work
FGC	Full Gospel Church
KFFHC	Kenya Freedom From Hunger Council
GTZ	Gesellschaft fur Tehnische Zusammenarkeit (German Agency for Technical Cooperation)
ha	Hectare
kg	Kilogram
KSh	Kenya Shilling
LTM	Long Term Mean
MCK	Methodist Church in Kenya
mm	Millimetres
MOH	Ministry of Health
MSF/Belgium} France } Spain }	Medecins Sans Frontieres or Medicos Sin Fronteras (Doctors Without Borders)
MT	Metric Tonne
MUAC	Middle Upper Arm Circumference
NCCK	National Christian Council of Kenya
NCPB	National Cereals and Produce Board
NGO	Non-Governmental Organization
ODA	Overseas Development Administration
PCEA	Presbyterian Church of East Africa
SIDA	Swedish International Development Agency
SFP	Supplementary Feeding Program
TDCPU	Turkana Drought Contingency Planning Unit
TFP	Therapeutic Feeding Program
WFA	Weight-For-Age
WFH	Weight-For-Height
WFP	World Food Program
WVI	World Vision International
UNICEF	United Nations Childrens Fund
UNDP	United Nations Development Program
UN/ERU	United Nations Emergency Respond Unit

EXECUTIVE SUMMARY

The Inter-Agency Drought Assessment undertaken in February 1993 concluded that approximately 1.1 million people in 12 districts (Garissa, Mandera, Marsabit, Turkana, Wajir, Isiolo, Samburu, Baringo, Laikipia, Lamu, Tana River and West Pokot) continued to be in need of food aid assistance for the period of March to May 1993.
That assessment further concluded that due to exceptionally good short rains which extended through to mid-February and a good maize harvest, no new dispatches of food aid should be made to a number of semi-arid districts after the end of March: Elgeyo Marakwet, Kitui, Machakos, Makueni, Meru and Tharaka-Nithi. The FAO/WFP Crop and Food Supply Assessment Mission to Kenya, which followed the February Inter-Agency Drought Assessment in March 1993, reported that this year's short rains maize crop was expected to be 75% higher than the harvest in 1992.

A key recommendation of the February Inter-Agency Drought Assessment was the need for continued monitoring of these districts, as well as the need to conduct re-assessments/reviews of the drought situation every three months.

In this context the second Inter-Agency Drought Assessment was due to commence in May. Given the late start of the long rains, however, it was decided to postpone the second assessment to June/July to allow for the best possible review of the drought situation after the start of the long rainy season.

This assessment specifically looks at the drought food aid needs of seventeen districts in the country. The findings appear to indicate that different situations apply to the 17 districts included in this assessment, and thus different districts require different forms of assistance. Basically, the districts may be categorized into two groups. In one group the slow recovery of the environment, livestock and people continue to justify a certain level of free relief food distributions through the end of 1993, (both general and supplementary food aid) and possibly into 1994. In the semi-arid group of districts the underlying causes of the suggested food needs are a less clearly defined range of drought, agricultural, livestock, health and general development problems. It is, however, the opinion of the teams that some form of food aid and other forms of assistance maybe required in these latter districts. In many districts the teams report interest on the part of the District Famine Relief Committees (DFRCs) in other forms of assistance during a transition period, so as to offer opportunities for members of food-insecure households to gain access to food through Food-For-Work schemes, school meal programs and possibly other interventions.

Among the teams' findings, there is a common theme that in many districts the drought relief food continues to be distributed to a greater number of beneficiaries than the approved levels. This over-distribution seriously erodes the actual quantity of food received by the individual beneficiaries and the potential nutritional impact of the food. Another commonly reported distribution problem is the lack of adequate record keeping. This has complicated both distribution monitoring and assessment activities, rendering it very difficult or impossible for WFP and the assessment teams to state with certainty to whom the food has gone (numbers of actual beneficiaries and their location), reliably ascertain the actual program impact, and realistically estimate the projected needs for

the July-September and October-December periods.

Further, food distributions in a number of districts are being hampered by problems of insecurity. Bandit attacks on food convoys are on the increase, thus making it more difficult to contract transporters at affordable prices and to reach beneficiaries living in insecure places. The teams also report on other security problems such as livestock raiding, which is in many places seriously affecting efforts to restock and therefore slowing down the recovery process among the nomadic populations. Furthermore, in areas which have received good rains and in which pastures are improving, insecurity limits the movement of pastoralists into these areas thus slowing down the recovery process.

In spite of the aforementioned problems and others highlighted in the district reports, the general trend in all the districts is one of improvement. Delivery of drought relief commodities to the districts is improving, reaching 100% or more of monthly allocations in many districts. Crops have or will be harvested and livestock herds are recovering. The nutritional status of under-five children in most drought-affected areas is improving, mortality and morbidity rates related to drought effects seem to be stabilizing or declining, and normal family subsistence patterns are re-emerging.

The following sections discuss in broad terms the findings of the Inter-Agency Drought Assessment and outline the overall recommendations from the teams.

ARID PASTORAL DISTRICTS

Districts and pockets/divisions within districts in the northern and eastern parts of the country, where the majority of the populations depend on livestock, continue to be affected by the drought to various degrees. These districts are: Garissa, Mandera, Marsabit, Turkana, Wajir, Isiolo and Samburu. There are early signs of recovery among livestock, i.e., herds are beginning to grow due to increas. in newborns, declines in livestock sales and slaughtering, and reductions in animal marketing. In most cases, however, these improvements are not yet sufficient to have a significant impact on milk yields. Due to continuing low intake of milk and meat, coupled with poor crop conditions and high commercial food prices, free drought relief food aid will continue to play an important role in alleviating food insecurity in these arid, pastoral districts through the end of 1993.

Data on the nutritional and health status of the population in the seven districts listed above indicate gradual improvements in most areas. In recent months there has been a marked improvement in the delivery of general food rations both in quantity and quality. In many districts food deliveries have been close to 100% of target for all three commodities of the food basket (cereals, pulses, and vegetable oil). Encouraging improvements in the nutritional status of children have been noted wherever the delivery of general rations and supplementary feeding programs have been well coordinated. Adversely, there are also divisions within these districts where no significant changes are reported in the nutritional status of children under five. This situation relates largely to divisions/pockets where feeding programs and medical services have been inadequate. In some places, insecurity has compelled these programs/services to be concentrated in

major settlements. In some divisions the outbreak of measles, malaria and diarrhoea have also contributed towards the lack of change or even deterioration in health conditions of the population.

Given the above scenario, without on-going relief assistance conditions could rapidly deteriorate and the current gradual recovery process now in evidence could be reversed. The teams have therefore recommended that up to 882,400 people in these seven districts receive drought relief food assistance at various ration levels through September 1993: Garissa, Mandera, Marsabit, Turkana, Wajir, Isiolo, Samburu. The teams then recommend gradual reduction in the number of beneficiaries (to approximately 661,700) and/or ration reductions through the remainder of 1993.

SEMI-ARID DISTRICTS

The second group of districts (Baringo, Laikipia, Tana River, Lamu, West Pokot, Kitui, Machakos, Makueni, Meru and Tharaka Nithi) are all semi-arid areas with the exception of Meru, which is a high potential area with pockets of semi-arid lands. In contrast to the seven districts listed above, where the populations primarily depend on livestock, the populations in these districts mostly practice both agriculture and livestock production. Several of the districts have had good or better-than-normal harvests in March-April 1993. Although the data is not as complete as expected, nutritional indicators in general show that, with the exception of some pockets, the nutritional status of the under-fives in these districts is returning to normal.

The assessment teams report, however, that rains in these districts have been late and/or erratic and in some areas inadequate to support normal crop growth for the current rainy season. The impact of these late and/or erratic rains varies significantly from district to district. Some districts such as Baringo and West Pokot consider this season to be their primary planting season, while for others such as Meru, Tharaka Nithi, Machakos, Makueni and Kitui, this is the smaller, secondary planting season. And some, such as Laikipia, Lamu and Tana River, do not normally have sufficient agricultural production during either rainy season and are dependant upon food from other districts every year.

The teams reported that it has been difficult for them to clearly analyze the data which has been collected from these semi-arid districts. Some teams mentioned the lack of reliable historical crop production figures, representative rainfall data, and other district information as a hinderance to their analysis of the current crop and food security situation in the districts. The data the teams did receive reveals that the districts are encountering a combination of problems which may be contributing to food insecurity in the districts and this food insecurity is not always clearly attributable to drought. Rather the food insecurity problems are related to agricultural, livestock, health, security and socio-economic problems in general. This lack of clarity of food insecurity causes, coupled with inconclusive or incomplete data, has resulted in internal inconsistencies in the district assessment reports and recommendations for drought relief food. It has also resulted in assessment team members giving widely differing recommendations on beneficiary numbers in at least three of these districts: Baringo, Kitui, and Makueni. The teams are, however, unanimous in recommending these districts should continue to be closely assessed by regularly monitoring of drought and other food insecurity

indicators.

The teams also report that there is widespread interest in the districts in Food-For-Work assistance and other recovery and developmental interventions, particularly assistance with agricultural inputs for the up-coming short rains (i.e. seeds, tools, fertilizers, pesticides) and for veterinarian and other forms of livestock assistance.

GENERAL RECOMMENDATIONS:

This second Inter-Agency Drought Assessment concluded its exercise by getting all team members together for a one day wrap-up session. The teams reviewed and finalized their individual district reports and also identified a number of general recommendations which are given below.

- The GoK/OP and WFP should take the lead in assuring in future that a specific standardized system is identified for translating assessment findings into numbers of drought-affected people.

- WFP/FAO should be asked to provide training/orientation to future assessment teams prior to the field visits. Such training/orientation should include sessions on all aspects of the assessment: how to use the assessment forms, how to collect the data, how to interpret the data, etc. This should enhance team members' capacity to link observed drought effects to numbers of drought-affected people.

- The GoK/OP and WFP should take the lead in assuring more historical (long term) data and trends are availed to the teams, preferably before the field visits.

- The GoK/OP, together with WFP, should set up systems to strengthen data collection and reporting at the district level.

- In coordination with the GoK and the NGOs, WFP should take the lead in assuring Food-For-Work policies, systems and activities are developed and implemented by NGOs.

- The District Famine Relief Committee (DFRC) system needs to be evaluated and strengthened where appropriate. The UN/ERU together with the GoK/OP should address this recommendation.

- CARE and other district-based NGOs in charge of district level food distributions should coordinate efforts with the DFRCs to increase/improve the monitoring of distribution mechanisms in the district.

The detailed district-specific findings and recommendations, as prepared by the teams, appear in the district reports following in Section II.

SECTION II

INDIVIDUAL DISTRICT REPORTS

GARISSA DISTRICT

A. SUMMARY:

The team, comprised of G. Mahmud (WFP), S. Rotich (OP), E. Ngoroge (WVI), J. Kaloi (KFFHC) and R. Langat (FHI), visited the district from 9-14 June 1993. The past thirty days refer to the month of May 1993 and the previous three months refers to February to April 1993.

Garissa District received none or very poor rainfall during the March-May 93 long rains season. Due to unusually poor rainfall the water sources were reported to be lower than normal except the Tana River, the major source of water for the district. The vegetation and pasture in most areas of the district were drier. Poor rainfall and disease wiped out a major proportion of the livestock in 1992. Livestock mortality has now become normal. Death cases are reported due to diseases but not related to drought factors. The number of animal sales was lower than normal. Although plots under cultivation were few, the last harvest was very poor for both cereals and legumes.

The nutritional status of children was poor in areas where data was available e.g. Central Division, Ijara and Modogashe Divisions. Malnutrition rates ranged from 16% to 21%. These rates are, however, lower than the October 1992 malnutrition survey results. The overall situation has not improved and a severe drought is expected soon. Serious migrations to townships from rural areas were due to insufficient supply of relief food, pasture and water shortage, and insecurity.

Due to extreme insecurity, it was not possible for the team members to go really far from Garissa town, except in parts of Bura Division. This report is mainly based on the available information and discussions with officials from various government departments, representatives of NGOs and local residents of Garissa town and Bura Division. The team recommends 144,000 beneficiaries at 100% ration scale for the three month period July-September 1993. Supplementary feeding should continue until malnutrition rates are down to 12%.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

In Garissa District, rainfall in the past thirty days was lower than normal. In the past three months, the rainfall was very poor. With the exception of a few isolated areas (Bura, Masalani and Ijara Divisions) the rest of the district received none or very low rainfall.

TABLE 1: GARISSA RAINFALL (MM)

	Feb	Mar	Apr	May	Oct	Nov	Dec
1990	14.5	180	78.5	1.4	17.9	150	49.6
1991	0	34.5	120	5.2	10.9	22.4	64.8
1992	0	2.2	43.2	6.1	4.6	136	118
1993	4.3	8.2	0.7	3.6	--	--	--

Sources of information: DAO, Meteorological Dept. Garissa.

Water Sources

The Tana River is the most reliable and permanent source of water in the district, however, waterpans, boreholes and wells are other sources of water. The water sources were lower than normal for the past thirty days as well as for the previous three months. Since the long rains failed the water level has gone down leaving pans and dams dried up. Areas with unusually poor sources of water are Central Division and areas far away from the Tana River due to poor or no rainfall. It was noted that in Garissa township, untreated water was selling at KSh 7 per twenty liter jerrican.

Natural Vegetation and Pasture

The natural vegetation and pastures in the past thirty days was lower then normal while it was normal in the past three months. The only vegetation and pastures enjoying a normal condition are areas along the Tana River. In other areas vegetation has started withering due to the dry spell.

Livestock mortality

Livestock mortality rates in the past thirty days as well as during the past three months have remained normal. At the moment, isolated cases of CBPP, tsetsefly and tick related diseases are rarely reported and mainly in the south which has the highest concentration of cows and sheep.

Livestock sales

Like other pastoral districts, Garissa people are currently reluctant to sell their animals because of the low numbers in their herds. In the last thirty days, sales were lower than normal and during the last three months as well. 50% to 80% of the livestock died during the drought and diseases also reduced the number of heads. Pastoralists are holding their livestock so as to rebuild herds. Very few people are willing to sell what they have. No big market is available at the divisional levels and the only existing market is in Garissa town. In the southern parts of the district (Hulugo and Masalani), livestock is taken to the Coast Province for easy marketing. Relief supplies have really supplemented short food supplies allowing pastoralists to keep their animals. The prices

of livestock have gone up because of low supply and high demand in the market.

Crop Condition

Pastoralism is the major occupation of the people of this area, however, limited farming is practiced in the regions along the River Tana through irrigation schemes. In the past thirty days, the crops in the irrigated areas have been quite normal but were poor in the previous three months. According to the District Agricultural Officer (DAO), all the areas under rainfed agriculture were very poor condition.

Harvest Level

The harvest, which traditionally falls in January and February, was very poor for both legumes and cereals. Only 632 tons of maize were harvested in an area of 3,700 hectares. Harvests in rainfed zones failed and the only crops which survived were in the irrigated places along the Tana River.

Employment

Livestock is considered to be the main source of income for more than 80% of the population in Garissa District. Civil servants and people working with NGO's are the only full time wage earners who makeup 10% or less of the total population. There are no industries so employment opportunities are quite rare. The remaining approximately 10% of the population are petty traders or manual laborers, while a small fraction of the population are agriculturalists.

Displacement of Population

During the past thirty days as well as the past three months, a serious influx into the settlements has been reported by several sources including district officials, NGOs and residents, however, no data were obtained or supplied from any of the sources. Central Division experienced the highest influx mainly from Masalani, Bura, Ijara, Liboi and Hulugho Divisions. Insecurity, shortage of food, water, pastures and medical services were the reasons for the mass movements. After losing their livestock, they moved to Garissa town in search of employment, food and medical attention. It is difficult to establish the actual number of people displaced as they hardly stay in one place for long and there is no system of recording such cases. The movement in this district is inter-divisional migration and not much from outside districts or countries.

Changes in Food Consumption

The traditional staples of the local people are meat and milk. With high losses in livestock, people of this district are lacking supplies of these foods. Inhabitants changed their food consumption patterns to cereals and legumes and the amount of intake is higher than normal for this time of the year. Consumption of cultivated fruits, meat and milk is less than normal. Local people reportedly do not take blood and wild fruits, however wild animals are used as food. 100 percent of the cereals, legumes and oils came from relief supplies. The oil being supplied through relief is not enough for their

normal uses.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Data on nutritional status of children in Garissa District was available from UNICEF, MSF-Spain, Action Nord-Sud, the Catholic Mission and ICRC/Kenya Red Cross. The indicators used were Weight for Height and the malnutrition cut-off point used was 80%. The sample is composed of children who came to the supplementary feeding centers except for Modogashe Division where the sample was random. Malnutrition rates by division are shown below:

Table 2NUTRITIONAL SURVEY RESULTS

Division	Total	%	80%+	%	70-79%	%	<70%	%
Central	4840	68	3767	70	968	20	59	1.2
Ijara	2020	28	1691	84	326	16	2	0.1
Modogashe	310	4	269	87	42	13.5	7	2.2
Total	7171	100	5721	80	1336	19	68	1.0

Sources of information: ANS, KRCS/IFRC, MSF-Spain

The nutritional data shows that the malnutrition rates are still high. In Central Division the rate was at 21%. Red Cross data indicates that in March '93, the malnutrition rates range between 16% (Central Division) and 21% (Ijara Division) with an average of 19%. Additional data from ICRC collected in March in Central Division showed a malnutrition rate of 18%. On-the spot checks done in the nearby bullas in Central Division showed that the nutritional status of children is very poor. No data was available for the other 6 divisions.

Data collected by GOK/UNICEF during the month of October 1992 showed 22% under-five children were malnourished. Although the current figures indicates that nutritional status has improved, this data has many limitations. It was available for only three divisions and the sample was not random.

Supplemental Feeding Programs

MSF-Spain, Action Nord Sud (ANS) and the Catholic Mission run a total of 22 supplemental food distribution centers. 14 of these centers were concentrated in Central Division while 8 were in Ijara division, Masalani Division (1), Bura Division (1) and Hulugho Division (1). During the month of May, three distribution centers (Tetu, Ziwani and Masalani) were closed due to a reduction of the malnutrition rate (below 12%). In Central Division 5,130 children and 4,697 children benefitted from

supplemental feeding during the months of May and April '93 respectively. In all other divisions 2020 children benefitted in May and 2,811 in April.

The average number of children fed on supplementary food in April per distribution center in Central Division (where most of the distribution stations are concentrated) is 336 compared to 366 during the month of May. There was a slight increase in the number of recipient children in May in Central Division. Most of the central division has Many feeding centers while the other four divisions have only few areas covered since they are inaccessible due to insecurity.

Therapeutic Feeding Programs

There are four therapeutic feeding centers operating in Garissa District: Garissa Provincial Hospital run by ANS, the newly settled villages around Garissa town run by MSF-Spain, one in Bura Division by MSF-Spain and one in Garissa town by the Catholic diocese. The Catholic Diocese does not keep records for their TFP centers. During April -May 1993 170 (80%) children had been discharged after recovery.

Table 3

Name of Organization	Number of Children Admitted			
	April	May	June	Total
ANS	59	76	98	233
MSF-Spain	45	32	90	167
Catholic Dio.	350	350	320	1,020

Sources: ANS, MSF-Spain, the Catholic Diocese

Incidence of Disease

The data on incidence of disease was collected at the MCH/FP clinic within Garissa town for the month of May 1992 and 1993. The diseases with the highest incidence in both years are malaria, upper respiratory tract infections and diarrhoea. (See table below).

Table 4

YEAR	URTI		MALARIA		DIARRHOEA	
1993	848	29%	271	9%	1196	41%
1992	712	26%	452	17%	832	31%

Data available at the TFC on disease prevalence showed that malaria and diarrhoea had the highest prevalence rates. The table below shows the prevalence of diarrhoea, respiratory tract infection (URTI) and malaria during the months of March, April and May 1993.

Table 5

Month	Malaria	Diarrhoea	URTI
March	72 (33%)	36 (17%)	49 (22%)
April	45 (35%)	41 (32%)	16 (13%)

The high incidence of Malaria, URTI and diarrhoea have a negative effect on nutritional status which is already stressed due to drought.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

During the past three months, no major price changes were registered for essential commodities. Indicators still show that maize, beans, wheat and oil prices may not move upwards because there is an abundant supply by refugees from Liboi, IFO, Hagadera and Dagahali refugee camps. The past one month has remained the same.

The only commodity gaining price momentum each day is sugar. Milk is quite rare both from cows and the shops (packet). The following table shows the prices of essential commodities. The month of June 1992 is taken as the base for purposes of comparison:

Table 6

	June '92 KSHS	March '93 KSHS	April '93 KSHS	May '93 KSHS
CEREALS	6-8	6-12	6-12	6-8
PULSES	15	25	30	30
OILS (3kg Tin)	NA	180	190	190
RICE	15	30	30	30
WHEAT FLOUR (1 KG)	15	30	30	30
SUGAR (KG)	15	30	40	48

Sources of information: District Trade Officer, Local Residents.

The constant prices of yellow maize has been brought up by an abundant supply to the market of refugee relief supply. Pulses, rice and wheat flour have increased by 100% since the month of June 92. For any items coming from outside the district, an element

of transport cost and insecurity is included in the selling price.

NCPB Purchase and Sales

NCPB purchase in the last three months were nil and sales were very low. In the March - May 1993, period, total sales of maize reached 108.49 MT and 56.19 MT of rice. No other commodities were sold due to lack of stock.

Table 7: NCPB SALES

MONTH	MAIZE (MT)	RICE (MT)
March	61.25	12.34
April	13.14	10.82
May	34.10	23.03
TOTAL	108.49	56.19

Rainfall

The mean rainfall was 81% less, 23% less and 1% less than the LTM in February, March and April respectively. The month of May, however, recorded a mean of 21% less than the LTM. Compared to the long term mean, Garissa District received very little amount of rainfall in those months.

RELIEF DISTRIBUTORS:

General rations

Relief supplies delivered in this district have increased with a correspondent increase in distributions. Monitoring of relief distribution is always very poor in this district and as a result food has been distributed to more beneficiaries than allocated for. A recommendation of the last assessment team for targeting has never been implemented. In distribution centers food was shared among the total population and the ration scale was therefore reduced. For January to May 1993, Garissa District received 4,749.91 MT of cereals, 1,925.85 MT of beans, 325.77 MT of oil and 44.19 MT of meat. Due to insecurity and bad road conditions, transporters are not willing to carry food to some divisions. Up to March CARE, with the help of the district administration and Catholic Mission, distributed relief food throughout the district. The IFRC took over from CARE in Bura Division and parts of Central Division and started distributions from April '93. IFRC is undertaking a registration exercise to register beneficiaries in Modogashe Division. In IFRC areas of operation people complained about the registration process and the number of beneficiaries registered. The IFRC representative was asked about the issue and they are trying their best to identify the needy cases and prioritize the relief distribution. For smooth operations, relief food should be kept at the NCPB store used by CARE which is almost empty.

Table 8
COMBINED WFP & NON WFP FOOD STATISTICS JANUARY-MAY '93

Commodities	Opening Balance	Received	Distributed	Losses	Closing Balance
Cereals	1,311.8 MT	4,749.9 MT	5,430.2 MT	8.5 MT	623.0 MT
Beans	115.05	1,925.85	1,291.62	0.89	749.28
Oil	79.37	325.77	338.02	1.29	66.82
Meat	0	44.19	41.53	.02	2.64

Sources: Catholic Mission/Kenya Red Cross/CARE

Supplemental Ration

Table 9: Supplementary Food Statistics January - April 1993

DIVISION	NGO	JAN. MT	FEB. MT	MAR. MT	APR. MT
Central	MSF-Spain	68	68	35	35
Central	ANS	48	48	0	0
Central	CATH-MISS	0	0	10	10
Ijara/Bura	MSF-Spain	30	30	30	30
TOTAL		146	146	75	75

Sources: UNICEF April '93 Report

Commodities Stored in NCPB Depots

This district has only one NCPB store with a capacity of approx. 15,000 MT in three warehouses. One big store with a capacity of 5,400 mt is used by CARE for keeping famine relief food. 1,352 MT of imported maize and 40.7 MT of rice were in the NCPB store for commercial sales on June 10, 1993,. A large quantity of spoiled food (commercial) has been found which was not suitable for human consumption. A large portion of relief food has been stored in the warehouse of the Catholic Mission which is supposed to be in the CARE warehouse in the NCPB compound because CARE is the lead NGO and directly dealing with relief distribution throughout the district. The Catholic Mission is only working in parts of Central Division, in particular Garissa Town.

ON-GOING AND PLANNED DEVELOPMENT ACTIVITIES:

The team was not able to see much of the district due to insecurity but, as informed by the departmental heads and NGO representatives, there are no big development projects. NGOs are mainly involved in relief and providing MCH and general medical assistance. Very few projects involving irrigation along the Tana River are in operation. Using Tana River water, Bura-Garissa irrigation project and the Food for the Hungry International irrigation project of 200 hectares are the major activities going on very well. No other important development activities were reported. Small scale entrepreneurs are doing some development activities around Garissa town on a commercial basis. FFW was expressed as necessary by most of the NGOs.

RECOMMENDATIONS:

The DFRC and NGOs in Garissa feel that the current number of 110,000 affected beneficiaries is too low: more people are in need of food assistance. According to a UNICEF February '93 survey, 190,000 people required relief food. The environmental indicators as explained by the district officials indicated that the drought situation is getting worse. There are no alternative ways of coping with the shortage of food other than to depend on relief food. The registration done in some areas by relief distribution partners did not cover the entire needy families.

The team was not able to obtain hard facts regarding the population figure and therefore had to arrive at the affected number of beneficiaries through guess work.

1. Drought relief food should be provided for an estimated population of 144,000 at 100% WFP standard ration scale for the three month period July - September 1993. Another assessment should be carried out before October '93.

2. Efforts should be made to carry out a thorough registration in the district to ensure targeted food distribution. Relief distributions should be monitored intensively to ensure that the most needy persons are getting food and to prevent discriminate distribution of relief food.

3. Supplementary feeding should continue until the malnutrition rate is brought down to less than 12%.

4. Nutritional surveillance should be strengthened in order to improve the monitoring of the nutritional status. Disease control measures should be enhanced to reduce the cases of malnutrition. Mobile clinics should be operated in areas lacking medical services and improvement of immunization coverage is essential .

5. General food distribution should be regular and adequate to prevent supplementary food sharing among family members.

6. Rainfall and other environmental indicators should be monitored closely.

7. Restocking projects should be started to reduce dependency on relief and in the long run create self-sufficiency. The programs should include training of pastoralists in animal-keeping and animal primary health care. Veterinary services should be adequate and available to poor pastoralists.

8. Irrigation projects can be supported by Food for Work. Excavation and re-excavation of canals and creation of new dams and pans should be a priority to support agriculture and livestock.

9. School feeding programs should provide balanced and nutritious meals to the school going children, not only maize.

MANDERA DISTRICT

A. SUMMARY:

The team was comprised of Mr. Aslam Khan - WFP, Mr. I.O. Nyaribo - OP, Ms. Jane Sena UNICEF and Ms. Sana Abdalla Omer - UNDP and conducted the assessment in Mandera District from 9 - 14 June 1993. The last thirty days in this report refers to the month of May 1993 while the "previous three months" refers to February - April 1993.

Mandera, situated in the north-east, was among the first six districts in which drought relief assistance was started in June 1992. The majority of the population, up to 90%, is dependant on livestock. Agriculture activities are limited to the strip along Dawa River following alongside the Ethiopia-Kenya border and some spotty rain-fed farming in the central and northern zone of the district.

The district has the largest case load of refugees from the neighboring countries of Somalia and Ethiopia, which has not only compounded the drought situation but negatively affected security as well.

In general, the drought situation has shown improvement over the past six months, especially after the onset of the short rains. The short rains were widespread and above normal which resulted not only in maintaining the pasture, vegetation and water sources, but also crop conditions and harvest levels which fluctuated around the normal level. Livestock mortality is normal, however, sales of livestock during the reporting period were rated lower than normal. Displacement of population was normal. Changes in consumption patterns have been noticed indicating an upward trend in consumption of cereal and legumes.

Goats and sheep have recently starting calving which will provide only supplemental food for the children. Cows and camels, which are considered to be the main source of family food, will be expected to have adequate milk in October 1993 and February-March 1994 respectively.

The nutritional situation of the children has improved compared to the corresponding period last year as well as February 1993, however the present malnutrition rates of 13% to 21% are still considered slightly high. The improvement could be attributed to improved general and supplementary feeding, milking of goats/sheep and health/nutrition education.

Keeping in view the changes in the drought situation over the past six months, the team recommends a gradual phasing down whereby the general food ration would continue to 51,500 beneficiaries in Mandera South which is relatively worse off at 100%, as compared to the North at 70% ration for a population of 41,000 up to the end of October, 1993. From November, the team recommends a district total of 55,000 should receive drought relief at 50% of the WFP ration scale.

B. CURRENT SITUATION IN THE DISTRICT:

1. Rainfall Trends

Rainfall during the past thirty days was above normal, but normal for the previous three months. The district recorded a high amount of rainfall in May 1993 which resulted in many unusual floods and overflow of the Dawa River. The long rains were widespread and distributed evenly throughout the district, except Kotulo Location which received less rains than other areas which is not usual for the area.

2. Water Sources

As a result of good long rains, water sources were normal during the month of May as well as the February - April 1993 period.

The River Dawa is the main source of water with seasonal, highly turbid water flows. There are some ground water supplies (boreholes - 28, water-pans - 36) in the eastern part of the district whose discharge varies in quantity and quality. The River Dawa, which had dried in March overflowed in May 1993 and is now flowing at a normal level.

3. Natural Vegetation and Pasture

Due to good short and long rains, the level of vegetation and pasture was rated higher than normal during the past thirty days and normal during the past three months reference period. Pasture and vegetation had started recovery after the short rains and further improved after the long rains. Kotulo Location and Mandera Central have, however, had below normal vegetation due to less rains in the case of Kotolo and overgrazing in the case of Mandera.

Due to heavy losses of livestock in the 1992 drought, there is, unusually, less competition among the surviving animals for the good available pasture. Divisions like Fino, Arabia and Ashabito have better pasture compared to Mandera Central and Elwak Divisions.

4. Livestock Mortality

The health condition of the animals of all species has shown considerable recovery since the short rains of late 1992. Livestock is slowly recovering and getting healthy, however milking of cows and camels is still poor. Some goats and sheep have started giving milk which is mostly used for tea and the feeding of children.

Mortality, which was reported very high during the 1992 drought, has subsided by the end of 1992. For both reference periods, mortality is normal, however, diseases have been reported in certain parts like Ashabito Kutulu, Takaba, Rahumu, Banisa and Dando Locations. In Kotulo, where less amounts of rain were received, a few camels in poor health were seen grazing.

5. Livestock Sales

Livestock sales have generally decreased after the short rains. This general decrease is attributed mainly due to two factors. Firstly, there was a heavy loss in the region of 45% to 65% during the late - 1991 through end - 1992 drought. Secondly, there is the tendency of pastoralists to preserve their surviving animals in the hope of multiplying their herds.

In the Mandera animal market, where people bring animals from far places like Wajir and Ethiopia, more animals, especially camels and cattle were seen available for sale as compared to February 1993. The market was dominated by male camels, goats and cattle and in relatively poor health as confirmed by people interviewed at the Mandera livestock market. Camels from Ethiopia are crossing in very limited number as the River Dawa is flowing. Somalia has recently reopened a traditional market for camels (for buying camels to be exported to Somalis, though now in small numbers due to losses of animals).

Prices of animals are very high as the supply is less than the demand. Camel prices ranges from Kshs. 6000 - 18,000, cattle Kshs. 4,000 - 6,000 and goats/sheep Kshs. 800 - 1800.

6. Crop Conditions

The condition of the present maize and sorghum has become poorer than normal mainly due to pest attacks. Crops are apparently flourishing but due to lack of pesticides and their high prices, the farmers are unable to protect their crops from pest attacks. In some places, e.g. along the River Dawa which is the main agricultural production area for the Northern part of Mandera, crops were washed away by unusual floods.

Irrigated crops along the river banks in Mandera Central are doing well.

7. Harvest Level

The harvest level of maize and sorghum crops harvested in March 1993 were reported poorer than normal due to less area brought under cultivation. Seeds were not available on time to the farmers, nor were farmers very sure of the continuity of rains.

8. Employment

No employment figures were available, but information gathered from officials at the district indicated that about 90% of the total population are pastoralists. Some sources indicated that the pastoralists constitute 89% while others ranged it in the region of 60 to 70%.

Less than 10% of the district population is engaged in the formal sector. Relief activities carried out by UN and NGO agencies have provided jobs in the towns of Mandera, Elwak, Banisa and Ramu, while a sizeable proportion of the low-income level women vendors are involved in the sale of relief assistance which trickles from refugee camps

and the drought program.

9. Displacement of Population

Approximately 3500 families were reportedly displaced during the onset of the drought in 1992 according to the DO I. Their main reason of displacement was drought. People migrated to the towns in order to assure the survival of human and animal lives. People who have lost their herds are still settled in and around the towns as destitute.

The availability of relief food serves to some extent as a pull factor from rural areas to towns.

Grazing along the Somali border has significantly reduced due to cattle rustling, especially after the presence of UN forces in Somalia. Security in the border area has threatened normal life which has aggravated the drought situation.

10. Changes in Food Consumption

The availability of relief food during the past three to four months has much improved as compared to the past. The improvement in both general and supplementary rations, combined with the improved supply of milk, has resulted in the reduction of malnutrition rates among the children. The main sources of supply of cereals and legume and edible oil is the relief food both from the drought as well as refugee program (Kenyans get from Mandera market at low prices). The consumption of cereals and legumes are considered to be above normal, while consumption of oil, meat, milk and cultivated fruits/vegetables are less than normal

Relief food is playing a key role and it is estimated that almost 100% of the consumption of cereals and legumes in the district are coming from the relief program. Approximately 75% of the consumption of edible oil is also met through the relief program.

C) NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Data obtained and physical observation in Mandera District show there is a great positive change in the nutritional status of the children under five years. This is due to the supplementary and therapeutic feeding programs going on in the district. The heavy rainfall of the past month and a half resulted in an urban-rural movement of livestock owners in search of pasture for the cattle. This resulted in the decline of the numbers of the new attendants and admission to supplementary feeding programs.

While this is appreciated, the major concern should be in few pockets in the district (Banissa Division, El Wak Division and some parts in Takaba Division) which still indicate high rates of malnutrition. Such areas have not been getting supplies of supplemental food on a regular basis. In Banisa, for example, food has been distributed

either one or twice since the drought began. In Takaba (Hobi, Hayalo, Koti, and Genderi Locations) malnutrition rates are (7% - 10%) and El Wak has an average range between 10% - 21%.

There is still a high incidence of diseases among both children and grown-ups: malaria, diarrhoea, coughing and vomiting. Observations have also shown that skin diseases and eye infections are common amongst the children.

Supplemental Feeding Program

SFP is still going on in most parts of the district. Apart from MSF-Holland, who are closing down their centers due to administrative problems by the end of this month (June) in Banissa Division, other NGO's are still carrying on with their services in different parts of the district. The total number of children who are in the supplementary feeding program is approximately 18,904 as compared to approx. 16,000 (Nov. 92 - Feb, 83). Below is the breakdown per division:

Ashabito/Rhamu/RDC	1935
Takaba/Interaid	2543
Banissa	644
El Wak/MDM	7950
Central Kalaliyo Concern	5832
	=====
Total	18904

Therapeutic Feeding Program

TFP is still done in El Wak town, Mandera District Hospital, and Rhamu, each center having an average range between 21 and 30 children. MSF-Holland have closed their services in Banissa.

Table 1
Nutritional Status Of < 5 Years Per Division (WFH)

Div.	<70%			70 - 79.9%			80-89.9%			>90%		
	Mar	Apr	May	Mar	Apr	May	Mar	Apr	May	Mar	Apr	May
Central/ Kalaliyo	1%	1%	-	13%	9%	-	45%	43%	-	41%	47%	-
Elwak	3%	2%	-	10%	16%	-	33%	31%	-	44%	49%	-
Rhamu	2%	1%	-	14%	10%	-	32%	23%	-	52%	65%	-
Banissa	-	-	-	-	-	-	-	-	-	-	-	-
Takaba	2%	0%	1%	7%	7%	5%	35%	38%	33%	56%	53%	61%
Fino	2%	-		13%		-	-	22%	-	-	64%	-

NB. Nutrition survey in the district is underway which will determine the current malnutrition rates.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Prices of yellow maize and wheat grain which are supplied in the relief food basket are very low: from Kshs. 3-5/kg. Prices of basic foods in the district, especially in Mandera and Elwak towns are considerably lower due to plenty of relief supplies from the refugee program being sold cheaply in the market. Prices of commodities like meat, potatoes, onions have increased substantially during the period Feb. - May 93 due to the general economic conditions countrywide and the drought effects as well (food commodities were affected by the drought in 1992, also livestock losses during the drought period affects meat and milk prices): meat Ksh. 90, potatoes Ksh. 30 and onions Ksh. 60 per kg. The prices of food and other items are higher than other parts of the country due to bad road conditions and long distances from Mombasa to Mandera, high transport costs and low local production.

NCPB Purchases and Sales

There were nil purchases of NCPB commercial food during the months of March through May 1992. Sale of yellow maize is very low, with the highest recorded sales of 89 MT in May 1993. Rice sales were also negligible. Bean sales during the reporting period were nil. The stock position of the NCPB commercial food was not impressive due to low off-take of commercial food. This is mainly attributed to the availability of relief food. The current stocks of yellow maize are 202 MT, white maize 11 MT, beans 61 MT and rice 7 MT.

E) RELIEF FOOD DISTRIBUTION:

Food distribution to most parts of the district was rendered irregular and impossible by unfavorable weather conditions that made roads impassable during the months of March and April 1993.

RECOMMENDATIONS:

1. In spite of certain improvements in the environmental and nutritional situation, the drought-affected population will still require food assistance up to the end of January 1994 when the milking situation will have improved. The team recommends gradual phasing down whereby this food from July 1993 until the end of October 1993 will be targeted to a population of 92,500 wherein 51,500 beneficiaries in the south should receive a 100% ration, the remaining 41,000 in the north should receive 70% of the WFP ration scale. From November 1993, until the end of January 1994, a population of 55,000 should be receiving food assistance at 50% of the WFP ration scale.

2. The situation should be reviewed in early 1994 to reassess the food needs requirement for both general and supplementary rations for the specific vulnerable groups who might still be in need of food assistance.

3. The targeting policy should be closely followed with the following population figures.

Mandera South	
Elwak Division	19,500
Takaba Division	12,000
Banisa Division	20,000
	51,500
Mandera North	
Rhamu Division (Asabitio)	20,000
Mandera Central	6,000 (without Kalolugo town)
Fino/Arabia Division	15,000
	41,000
Total	92,500

4. The recommendations of the February Assessment particularly for targeting the food to the drought victims were not followed at the district level. Relevant bodies should be addressed to make sure that beneficiary numbers and target areas are adhered to. Nutritional monitoring should be intensified to ensure food relief is reaching the targeted population. The monitoring currently tied to supplemental food distribution should be closely linked with distribution of general relief food commodities. The UNICEF/NGO information on nutrition should be used as the basis for targeting by division and location.

5. The lead NGOs should closely follow the registration of beneficiaries and distribution of food. The food dispatches, especially in the south, were lower than the monthly requirements and therefore the dispatches should be more timely.

6. Food-For-Work activities should be implemented in the whole district, specifically in the following divisions. Due consultation between GOK and donors should be held to enduse funding.

- Kotulo Division
- 2 water pans
- one school repair

- Rhana Division
- Road repair
- School construction
- Gully construction by the Dawa River

- Banisa Division
- Lagger rehabilitation
- Bush clearing
- Construction of dispensaries
- Water pans

- Takaba Division
- Building of a cattle dip/s
- Road construction
- Construction of jua kali sheds
- Dam desilting

7. Animal and crop diseases are prevalent in most parts of the district. The team recommends that the Department of Livestock Development and Agriculture should provide the necessary medicines and pesticides.

8. The incidence of diseases in the recent past have increased to a high degree, especially, malaria, diarrhoea, vomiting, coughing, skin infection, chest infection, eye diseases and acute respiration infection. Since static health units are not available in most of the areas, mobile services should be intensified.

MARSABIT DISTRICT

A. SUMMARY:

The team, comprised of Adel el Mahi of World Food Program, Michele McNabb of USAID, Daniel Obolla of the Office of the President, and Noreen Prendiville of UNICEF, visited Marsabit District from June 9-14, 1993. The "past thirty days" refers to May 1-31, 1993. The "previous three months" refers to February, March and April, 1993.

There are clear signs of recovery in most of Marsabit, although continued recovery is not yet guaranteed and there are some areas which lag behind. The numbers of goats and sheep are increasing rapidly, due to their short gestation period and reduced slaughter rates, yet milk production remains inadequate. Although the district average rates of malnutrition show a steady decline, reaching normal in many areas, some pockets of high malnutrition remain. Locally produced maize is currently abundant in Central Division, yet the prospects for the crop currently under cultivation are not good. The continuation of the recovery process depends on sustained, but gradually reduced, supplies of both general and supplementary foods.

The team recommends that the number of beneficiaries for the July-September period should be 80,000 people, although only 50,000 are expected to need food from the World Food Program. The other beneficiaries will be supplied by the Kenya Freedom From Hunger Council, World Vision International, and other organizations. World Vision is planning to take over distribution in five areas in July and the beneficiary numbers are still being determined. If the support offered by these additional NGOs fails to materialize, WFP should resume operations in these areas. For the October-December period, a gradual phase-out of food relief should begin. It is expected that 33,000 people will require food from the World Food Program during this period of a total beneficiary population of 53,000. NGOs supplying other areas of the district should be encouraged to begin a similar phasing-out during the October-December period.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Last season's short rains extended into February, and were especially heavy in Laisamis, South Horr and Marsabit. The onset of the long rains, however, was delayed in most areas of the district. Some rains fell in May, but these have been erratic and widely scattered. Many areas received little or no rains in late May and early June. If the long rains do not resume, the recovery process could slow considerably.

Water Sources

Water resources returned to normal in May due to the onset of rains. For the previous three months, water availability has been below normal causing people and animals to migrate in search of permanent water sources. The district water engineer reports increased siltation in some of the water pans and natural reservoirs. This is especially evident in areas that received heavy rains during December/January or April. Soils around the reservoirs had been left loose and bare by the trampling of animal during the drought. When the heavy rains came, soils were washed into the reservoirs. In other areas, rains have not been sufficient to replenish shallow wells. Some boreholes are reportedly over-utilized at present due to the shortage of other water sources.

Natural Vegetation and Pasture

Pasture conditions are highly variable in the district as a result of the rainfall patterns. Higher elevation areas such as Marsabit mountain, the Hurri Hills, Moyale, and the Ndoto range are green and have good pasture. Many animals have been moved to these areas. Ileret, in the far northwestern corner of the district, is reported to be much greener than normal. Lowland areas in Maikona and Laisamis Divisions are drier than normal for the time of year.

Livestock Mortality Rates

At the time of the assessment, numbers of livestock deaths had returned to normal. In the DMP sample, the numbers of animal deaths per household have reduced from more than 25 per household per month in December to less than 2 animal deaths per household per month at present. Herd sizes were increasing, although the growth was limited mainly to sheep and goats. There is now fear that some of the newborn shoats may not be strong enough to survive the upcoming dry season. The upward trend in herd growth rate is especially evident in Maikona and North Horr Divisions due to rising numbers of births and reduced offtake. The nutritional status of animals is considered good, although a few cases of CCPP and tick-borne diseases have been reported.

Livestock Sales

There has been a decrease in animal sales as the pastoralists are holding on to animals for breeding purposes. Another factor limiting sales is the improved reliability of relief food in almost all divisions of the district, reducing the need for sale of animals to exchange for food. In general, the assessment found lower than normal sales for both the last 30 days and the previous three months.

Crop Conditions

Marsabit has a small percentage of arable land, concentrated mainly in Central, Sololo and Moyale Divisions. Small pockets of land with agricultural potential are found in high elevation areas of other divisions. The maize crop currently in the field is at the flowering stage. For the past 30 days, the condition of the crops in the field was rated

as very poor due to the unexpected halt in rains. If the rains do not resume over the next few weeks, yields will be adversely affected. The acreage planted in Central, Sololo and Moyale is reduced as the prolonged short rains did not allow farmers adequate time to prepare their fields.

Harvest Levels

The latest harvest was the short rains crop, harvested in the January-March period. The overall harvest was low and concentrated mainly in Central Division. A "normal" harvest is considered to be 5,940 tons of maize and 810 tons of pulses, whereas this year's short rains output was only 2,900 tons of maize and 100 tons of pulses. The general assessment of the last completed harvest was lower than normal for maize and very poor for pulses due to poor rainfall and destruction by animals.

Employment

The residents of Marsabit are mainly pastoralists, with a small number of agro-pastoralists. Less than 10% of the total population can be said to have full-time employment. The few that have wage-paying employment are found mainly in NGOs and the government.

Displacement of Population

Frequent population movements are normal in the district as pastoralists move with their animals in search of water and improved pasture. These movements can not be considered "displacement." There has been a concentration of people around food distribution points. NGOs and other distributing agencies report that people have begun to move out of most centers, except Korr in Laisamis Division. The food distribution in Korr is reliable and well-established, which may be keeping people nearby. Many of the people who remain in centers after most others have gone are completely destitute households. These people may need external assistance, such as restocking, to enable them to return to their nomadic lifestyles.

Several areas of the district have seen displacement of populations caused by insecurity and raiding. There have been influxes into Loiyangalani from surrounding areas and from Turkana. An estimated 500 households moved from surrounding areas in the division and 250 households moved from Turkana. In both cases, insecurity and raids were listed as the main causes of displacement. In Central Division, some 90 households moved into Ogicho from Kargi due to raids in September 1992. At least half of these households have returned to their places of origin.

Population displacement was rated as normal for the past 30 days and over the past three months, only a slight influx into settlements was reported.

Changes in Food Consumption

Food consumption patterns have not yet returned to normal for most commodities. Availability of relief commodities pushed consumption of cereals, legumes and oil to

"more than normal." Conversely, consumption of traditional foodstuffs - milk, meat and blood - is still less than normal. Milk production has increased slightly as shoats give birth, but it is still insufficient. Meat consumption has declined as slaughter rates have been reduced. Bleeding of animals is also lower than normal due to their reduced number and weakened condition. Consumption of wild foods and fruits and vegetables is low, but normal.

It is estimated than 75% of the cereals and legumes consumed in the district at present come from relief supplies. In the tew agriculturai zones, consumption of locally produced cereals and beans is common. Commercial supplies of foodstuffs and most other products are very low given the availability of relief commodities and difficult access. Approximately 50% of all oil consumed in the district is thought to be from relief supplies.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Nutritional data which may be used to monitor both trends and current status have been gathered from two sources; 1) the Drought Monitoring Project (DMP) which uses the MUAC rating of under 13.5 cm to indicate malnutrition in children in age groups 1-5 years; 2) data collected by UNICEF and other organizations (FHI, AIC, WVI, etc.) using the Weight-For-Height system in randomly selected manyattas irrespective of whether the children are benefitting from supplementary feeding.

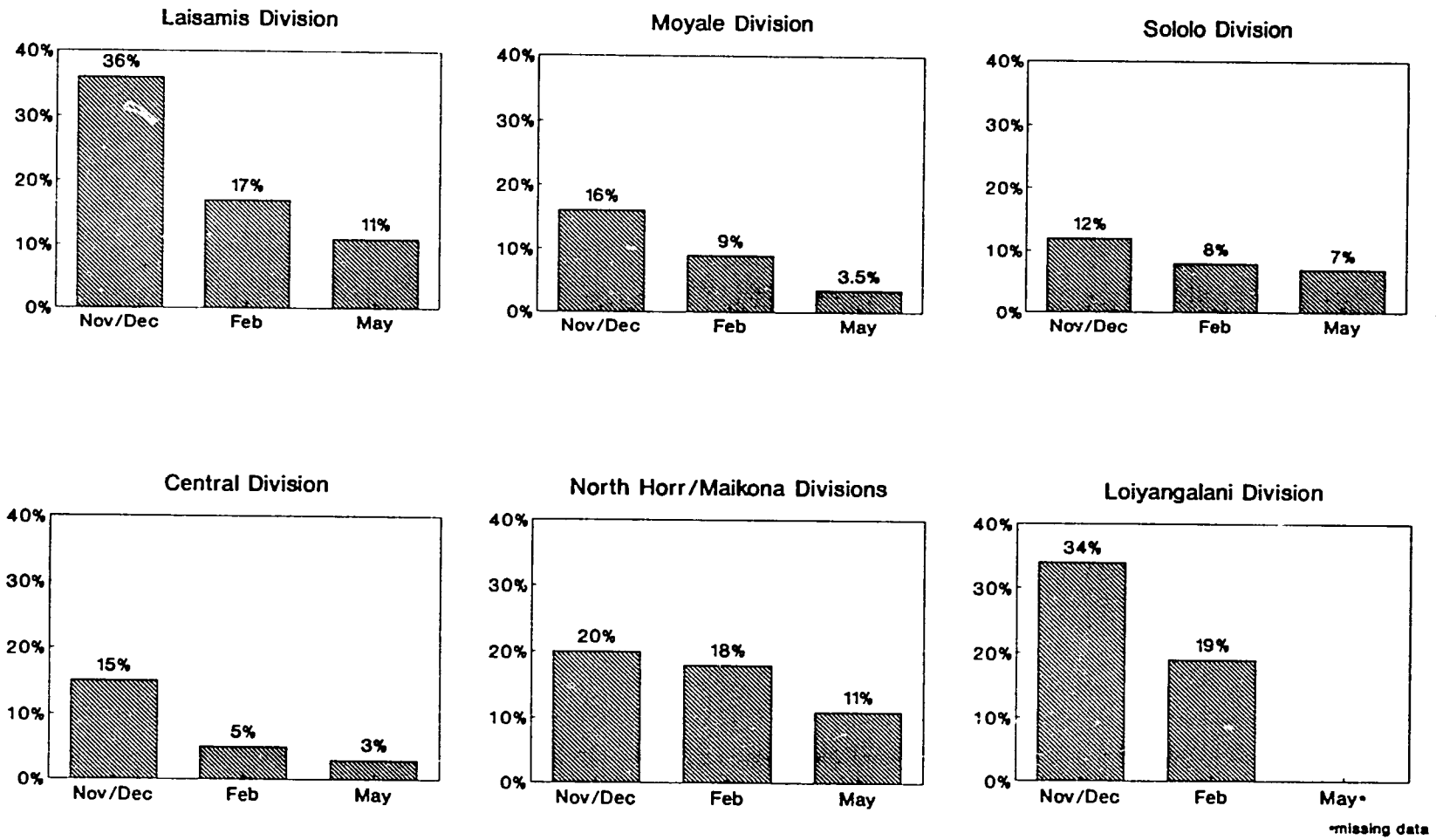
Malnutrition rates as a district average fluctuated between January and March due to the effects of malaria during the prolonged rains on an already weakened population, but overall there has been a gradual decline. District averages on the MUAC scale show levels of 42% in February (16% of these severely affected), decreasing to 28% in April, with only 4% of these moderately or severely malnourished. The MARS.1 graph attached indicates trends and current status per division using Weight-For-Height data. Some notable exceptions to these trends have been a cause of concern. In Laisamis Division, Laisamis Location still shows a rate of 21% (Weight-For-Height) and Ngurinet at 19%. In Sololo, Anona Location reports a rate of 22%. The reasons given include a combination of factors such as particular problems with the distribution of relief food which appear to have now been resolved, recent movement of population into areas with improved pastures (Ngurinet) and displacement of population due to insecurity.

Supplemental Feeding Programs

Supplemental feeding programs are in operation throughout the district and the response among both beneficiaries and implementing organizations has been a positive one. The relative shortage of milk at present, especially among exclusively pastoral communities, has created a certain dependency on the Corn Soya Milk as a source of energy and protein in the diet of young children. Gaps have occurred in the UNICEF supply line in May and June causing some interruptions in the program but normal supply is expected to resume toward the end of June.

Marsabit District Malnutrition Rates

Children <5 years, weight-for-height index



Mars.Nut1

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All beneficiaries, except those in Moyale Division, received 9kg CSM per month. The ration in Moyale has been reduced to 4.5 kg. In Central Division, many areas have been phased out but monitoring will continue.

Table 1
Marsabit Supplementary Feeding Program

Division	Organization	No. of Centers	No. of Benefeciaries	Divisional Totals
North Horr	Farm Africa	1	1500	}3,500
"	Catholic Mission	4	2000	
Maikona	Catholic Mission	1	1000	}1,780
"	WVI (Bubisa)	1	1000	
Loiyangalani	Cath. Mission (Loiy)	3	2000	}4,300
"	AIC (Gatab)	1	1100	
"	Cath. Mission (Kargi)	1	1200	
Laisamis	Cath. Mission (Laisamis)	23	1825	}7,450
"	Cath. Mission (Korr)	1	2425	
"	WVI (Ngurinet)	1	1900	
"	WVI (Loglogo)	1	1300	
Moyale	AMA	4	2800	}6,800
"	WVI	5	4000	
Sololo	AMA	2	1600	}3,424
"	CPK	1	18[illegible]4	
Central	Cath. Mission (Karare)	2	1100	1,200
"	MOH	1	100	

Therapeutic Feeding Programs

Therapeutic feeding centers are in operation in Korr, Loiyangalani and Laisamis. The situation in Laisamis has already been described and a center catering for 80 malnourished or high risk cases was to be opened at the time of the team's visit. The center at Korr caters for 20 children. Korr is still recovering from a reported outbreak

of typhoid during the first quarter of 1993. Forty children are presently admitted at Loiyangalani. The Catholic Mission in North Horr provides milk and CSM to 124 children each day (reduced from 200 in May). This group is composed of mainly borderline and high risk cases and is not strictly a therapeutic feeding center.

Incidence of Disease

Information on mortality and morbidity was obtained both from statistics in Marsabit Hospital and through interviews with medical officers of both Marsabit and Moyale Hospitals. Both reported higher than normal rates of mortality and morbidity due to malaria occurring throughout the district in February, but the incidence has now dramatically decreased. An outbreak of hepatitis A in the northeast of the district in the first quarter of the year also led to a higher number of deaths than one would have expected.

Low birth weights of babies born throughout the district reported by the medical officers and recorded in CHANIS data confirms the prevalence of anaemia in pregnant women.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Livestock prices have increased steadily since the height of the drought due to low supply and improved condition of the animals offered. In Marsabit town, only a few shoats and cows are available for purchase with almost no camels or donkeys offered for sale. The district average price for goats was reported to have risen to 380 shillings per head in April. The team found goat prices in Marsabit as high as 900-1600 shillings, cow prices ranged from 4000-7500 shillings and sheep from 600-1400 shillings.

Cereal prices declined in production zones after the short rains harvest. In Marsabit town, maize prices are currently only 6 or 7 shillings/kg down from 20 shillings/kg in March. Commercial purchases of cereals remain very low in the pastoral zones.

NCPB Purchases and Sales

Current data on NCPB purchases and sales was not available. For the January-March period, the NCPB depot in Marsabit town purchased no food and sold only small quantities of yellow maize and rice. Purchases picked up after the short rains harvest and the depot appears full of locally produced white maize, but no quantities could be obtained.

Rainfall

Heavy rains fell in many places in early May. It was hoped that this signalled the start of the long rains, but the rains then disappeared in most areas by the end of the month. Scattered rains fell in April, especially in Marsabit, Moyale and Ngurunit. These April and May rains brought temporary relief as they replenished water sources and improved pasture, but the quantities were not sufficient to last until the next rainy season.

E. RELIEF FOOD DISTRIBUTION:

General Ration

Food started to arrive to the district in June 1992. THe WFP allocation figure is 89,000 people. The district uses a higher number of beneficiaries which has resulted in a reduced per capita allocation as follows :

Table 2

Period	Ration per person/month		
	Maize	Pulses	Oil
Jan 93	2.4 KG	.4 KG	.13 KG
Feb 93	3.8 KG	.4 KG	.03 KG
March 93	5.1 KG	.9 KG	.05 KG
April 93	3.2 KG	3.3 KG	1 KG
May 93	13.7 KG	2.2 KG	.9 KG

Total quantities of food relief dispatched to the district since the inception of the program as follows :

Cereals 4746 MT, Beans 882 MT, Oil 416 MT.

Relief food commodities were stored in the NCPB warehouse in the district headquarters and then transported to distribution centers in the district. The lead agency is Food for the Hungry International (FHI). Implementing NGOs in the district and World Vision International (WVI), African Muslim Agency (AMA), Catholic Mission, African Inland Church (AIC), Church Of the Province of Kenya (CPK), and German Technical Assistance (GTZ).

Supplemental Rations

UNICEF is providing CSM for 20,310 children in the district through a number of NGOs. The total CSM distributed up to now is 1,456 MT. The ration per child/month is 9 Kg.

Commodities Stored In NCPB Depots

WFP food as well as commercial commodities are stored in the NCPB stores in Marsabit town. Current stock in NCPB stores for WFP food as of 28th of May 93 was as follows:

Cereals 841.45 MT, Pulses 117 MT, Oil 15.2 MT.
Data on commercial stocks were not available.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

World Vision International is currently operating community development activities in the district with various components e.g health, education, agriculture, and water. WVI focused its activities in the sponsorship program areas (Loglogo, Ngurunet, and Moyale. Activities under the above components are : providing drugs, medical checkups, community health education, rehabilitation of education facilities, provision of agriculture seeds and implements, and restocking in a very small scale area not more than 500 people. Any future plans will be also focused on these areas with the same components.

GTZ provide assistance to the district development activities. Funds available for GTZ activities are KShs.24 million to be utilized in the fields of livestock development, agriculture, and health.

In addition to the above, other NGOs are considering provision of assistance through Food For Work (FFW) and Cash for Work (CFW) programs.

G. RECOMMENDATIONS:

1. The number of beneficiaries for the July-September period should be 80,000 people, although only 50,000 are expected to need food from the World Food Program. The other beneficiaries will be supplied by the Kenya Freedom From Hunger Council, World Vision International, and other organizations. World Vision is planning to take over distribution in five areas in July and the beneficiary numbers are still being confirmed.

   For the October-December period, phasing-out of food relief should begin. It is expected that 33,000 people will require food from the World Food Program during this period (of a total beneficiary population of 53,000). NGOs supplying other areas of the district should be encouraged to begin a similar phasing-out during the October-December period.

   Continued support to supplemental feeding programs will be required for both periods.

2. Full termination of relief food can be carried out only if the long rains resume, resulting in improved pasture and a good harvest. Therefore, the situation should be reviewed in November.

3. Implementing organizations should continue with their current methods of targeting (i.e., geographic targeting, Food-For-Work, and traditional sharing practices). There appears to be scope for expansion of Food-For-Work. This should be encouraged, especially as a temporary measure during the recovery phase. WFP should issue clear Food-For-Work guidelines on ration sizes, monitoring and reporting requirements, and types of work to be included.

4. Recovery activities should include: restocking, especially of cattle and draft animals; general NGO support for agricultural development in productive zones; desalting of water pans and natural reservoirs.

5. Most displaced people are expected to leave settlements once security is improved and free food distribution is ended. Some completely destitute households might require external support, such as restocking, to move out of the settlements.

6. Coordination among implementing agencies will become imperative as additional NGOs commence food distributions. The DFRC should carefully coordinate and supervise these activities, and should encourage uniform scaling down of free relief food. If the support offered by these additional NGOs fails to materialize, WFP should resume operations in these areas.

TURKANA DISTRICT

A. SUMMARY:

The team, comprised of Lydiah Andeka of UNICEF, Michele McNabb of USAID, Adelaide Muraguri of the Ministry of Health, and Daniel Obolla of the Office of the President, visited Turkana District from June 21-24, 1993. The past thirty days refers to the month of May. The previous three months refers to February, March and April, 1993.

There are clear signs of drought recovery in Turkana, especially in terms of the nutritional status of children and livestock growth rates. Improved distributions of famine relief food have played a critical role in the recovery. There appears, however, to be increasing disparity among divisions. Recovery in the central divisions of Turkwel and parts of Kalokol and Lokori seem to be lagging behind the northern and southern areas. This difference can be partially attributed to natural factors (low rainfall, overgrazing, human disease, etc.), while insufficient food and concentration of food distributions to easily accessible areas also appear to be contributing factors. NGOs and the District Famine Relief Committee (should pay increasing attention to these regional differences and take all necessary actions to ensure that recovery continues in the entire district.

The team recommends that the number of beneficiaries for both general and supplementary rations remains the same for the July-September period (230,000 for general and 33,600 for supplementary). For the October-December period, it is recommended that a gradual phase-out of relief supplies begins and the number of beneficiaries for both programs should be reduced by one-third (i.e., 154,000 for general and 22,500 for supplementary). The total population of Turkana remains controversial. The team recommends that a thorough census be carried out as soon as possible, with support from the donors.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Above average rainfall was recorded at most stations during the last thirty days. Rains were especially high in Kakuma and Lokichoggio, but lower than normal in parts of Kalokol and Turkwel. For the previous three months, overall rainfall was rated as below normal.

Water Sources

Water sources were also rated as better than normal for the past thirty days due to the good rains. Surface water was widely available during the month, although these sources dried up rapidly in June when the rains stopped. For the three previous months, water resources were below normal after the dry months of March and April.

Natural Vegetation and Pasture

Vegetation and pasture conditions improved significantly, reflecting the good May rains. The monthly observations recorded by the TDCPU show a marked increase in thick vegetation during May, increasing from about 20% to 50% of their sample areas. The center part of the district has much lower vegetative cover than the north and the south, due to the usual rainfall patterns and overgrazing in the area as a result of its relatively good security. Vegetation over the previous three months was rated as normal due to heavy rains in February.

Livestock Mortality rates

Livestock mortality rates have been normal over both the past thirty days and the previous three months. Overall, herd sizes have started to grow as animal deaths, slaughter and sales have reduced and births have increased.

Livestock Sales

During the month of May, improved pastures and good availability of relief supplies led to a sharp decline in livestock sales. This trend has been reflected across the district as pastoralists attempt to rebuild their herds. The improved availability of relief food has been a major factor which helped reduce livestock sales. Prices remain very high as a result of the low supply of livestock. The only areas which report high sales are near the gold camps in Katilu and the refugee camp at Kakuma.

Crop Conditions

Crop conditions were rated as normal for the month of May due to the good rains, an improvement over the previous three months when conditions were poorer than normal. Although the area planted was higher than normal this year (2800 ha of sorghum compared to 1600 ha in a normal year), the apparent end of the rains in June and an infestation of grasshoppers has put the crop at risk.

Harvest Levels

A small percentage of the population is engaged in agriculture (2.6%). The general assessment of the last completed harvest in both rainfed and irrigated areas shows poor harvests of cereals and legumes due to lack of rainfall and water for irrigation.

Employment

The vast majority of the population of Turkana are pastoralists, with less than 10% of household heads considered as wage-earners. The wage-earners are mainly employed by the government or NGOs.

Displacement of Population

There has been a slight influx of population into settlements in some areas during the past several months. In the southern areas of the district, households have moved away from fertile areas along the West Pokot and Uganda borders due to in-security. Some of these households have moved into well-protected, densely populated settlements or have moved out of the region all together. The gold camps in the south continued to attract people.

Other areas, especially in the north and parts of Katilu, reported that people have begun to leave settlements.

Changes in Food Consumption

Food consumption patterns are still abnormal in Turkana. Most households are consuming more cereals, legumes and oil than normal due to the wide availability of relief food. Conversely, consumption of meat, milk and blood is still below normal. Milk consumption has been increasing steadily as animals begin to give birth, but levels remain very low. Consumption of wild fruits has reduced in most areas, although widespread consumption of doom palm fruits was evident in central regions of the district.

Nearly 100% of the legumes and oil consumed come from relief supplies. There was no evidence of commercial supplies of oil or beans in the district. It appeared that pastoralists simply do not consume these commodities when relief supplies are unavailable. For cereals, the team estimated that 75% of all supplies come from relief with small quantities produced locally or purchased from the NCPB and private traders.

C. NUTRITIONAL STATUS OF CHILDREN

Nutritional Assessment Results

The nutritional status of children under five years of age in Turkana District has been gradually improved from September 1992 to May 1993. However, this has not been uniform in the district, as some divisions still reflect relatively high malnutrition rates (see graph TURK. 1 and 2)

The MOH CHANIS report shows a drop in malnutrition rates (using Weight-For-Age measurements) from 50% in January to 32% in April 1993, while the TDCPU MUAC measurements shows a drop from 44% in February to 35% in April 1993. The observed improvement may be attributed partly to the supplementary feeding program provided by UNICEF throughout the district and partly to the long rains of April and May which improved pasture and led to increasing milk yields.

In Turkwel and Lokori Divisions, malnutrition rates are still unacceptably high and the situation has been aggravated by outbreaks of diseases like malaria, diarrhoea and measles.

Supplemental Feeding Programs

Supplemental feeding has been going on in the district covering 97 dry and 31 wet feeding centers. The number of children under five years receiving this ration is 33,157, plus 2312 pregnant and lactating mothers.

Despite improved general ration distribution, it is still evident that the dry rations of corn soya milk (CSM), intended for the children under five, are being shared among other family members. This factor appears to be contributing to the prevailing high state of malnutrition in some divisions such as Turkwel and Lokori and parts of Lokitaung. Reportedly, this sharing is not due to a lack of other relief commodities but to a taste preference developing among all family members for CSM over other relief supplies.

Since the program implementors have no control over intra-household food distribution to ensure that the malnourished child gets the full CSM ration, it is recommended that the divisions in question be encouraged to increase feeding of children in centers (wet feeding) on a daily basis. It will then be possible to determine whether the slow recovery for some children is due to intra-household distribution problems or other factors.

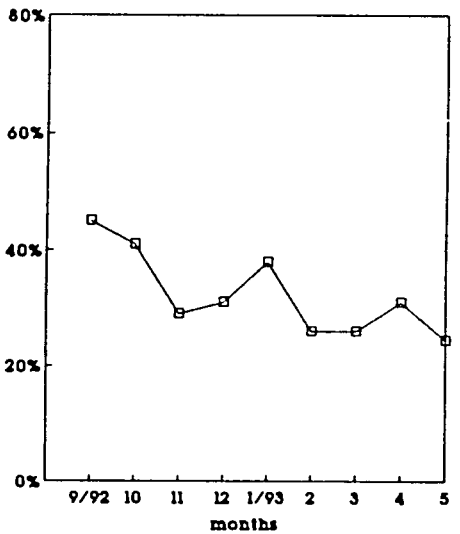
Therapeutic Feeding Programs

There are still 13 therapeutic feeding centers within the district as indicated in the February assessment. However, the number of beneficiaries has reduced from 609 children in January to 427 children in May 1993. The majority of the new cases were seen in Turkwel Division .

Malnutrition rates in Turkana, MUAC

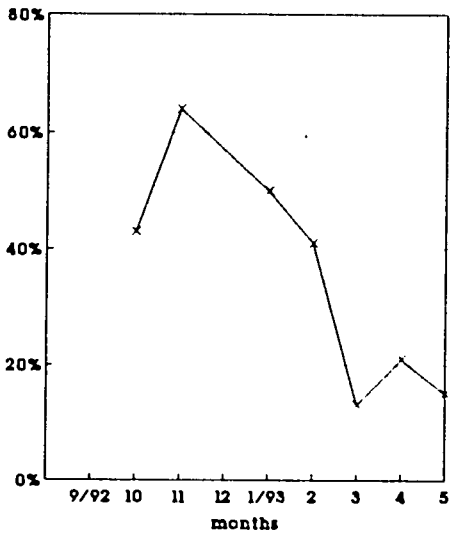
Graph Turk 1

Kalokol division



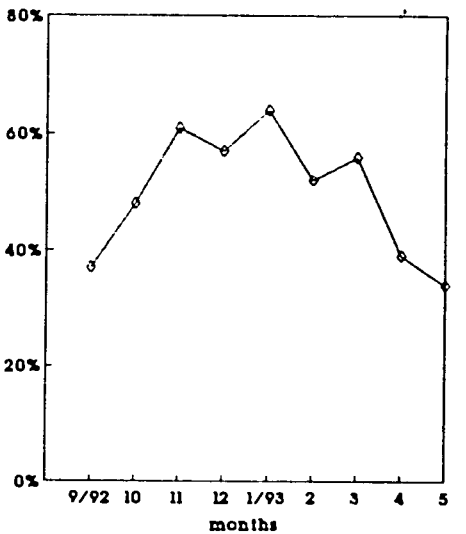
Source: TDCPU

Katilu division



Source: TDCPU

Lokori division

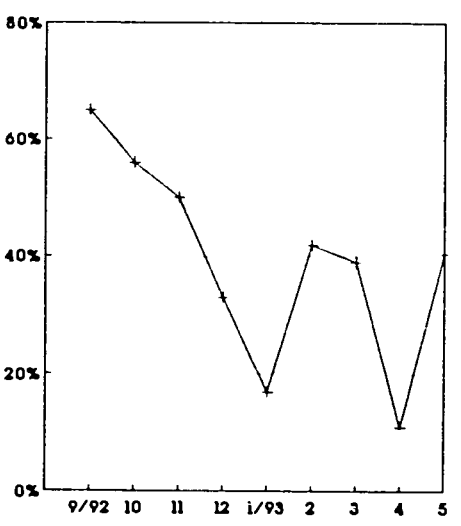


Source: TDCPU

Lokitaung/Kibish divisions

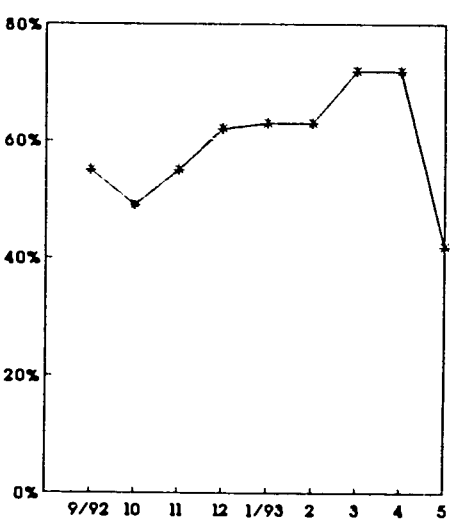
Source: TDCPU

Kakuma/Lokichoggio division



Source: TDCPU

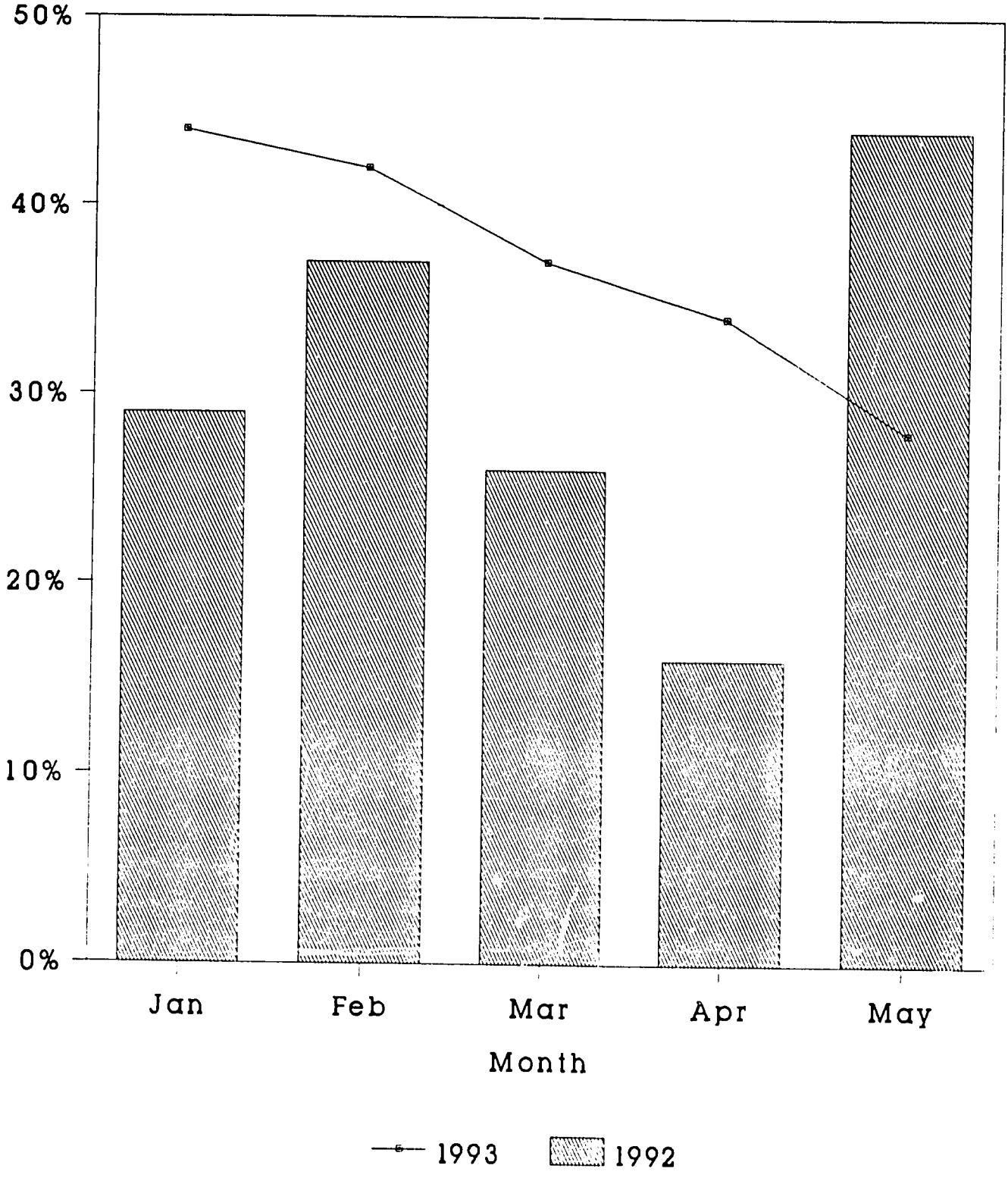
Turkwel division



Source: TDCPU

37A

Malnutrition rate in Turk
(13.5 MUAC



Source: TDCPU
GRAPH - TURK 2

BEST AVAILABLE DOCUMENT

37B

Incidence of Disease

There has been an outbreak of measles in various parts of the district and a total of 373 children were attended to in health facilities, while unknown numbers were traditionally managed.

Malaria and diarrhea have also been rampant throughout the district in the months of April and May, with 4086 and 1353 cases treated in May, respectively. However, these numbers are lower than those recorded in May 1992 (4450 cases of malaria and 1600 cases of diarrhea).

Vitamin A deficiency which is commonly associated with malnutrition was seen to be above normal with a total of 231 cases seen in May 1993. Other conditions, such as URTI, LRTI and skin diseases were within the normal range.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Market prices for white maize grain have reduced slightly since the height of the drought in November and December 1992. The district average, reported by the TDCPU for rural areas, is now 14.4 shillings per kilogram, down from 16.5 shillings in December. This could be attributed to the fact that NGOs have purchased white maize for relief distributions (in addition to WFP supplies of yellow maize) which has reduced demand for commercial supplies of white maize. It is also likely that the supply of commercial maize has improved slightly due to harvests in neighboring districts.

Animal prices have increased steadily since the height of the drought, as seen on Figure TURK 3 & 4. Prices decreased slightly in May, but remain very high. Goat and sheep prices averaged 315-320 shillings in May, while cattle prices were just over 4000 shillings. Camel prices had increased dramatically in April but were unavailable in May.

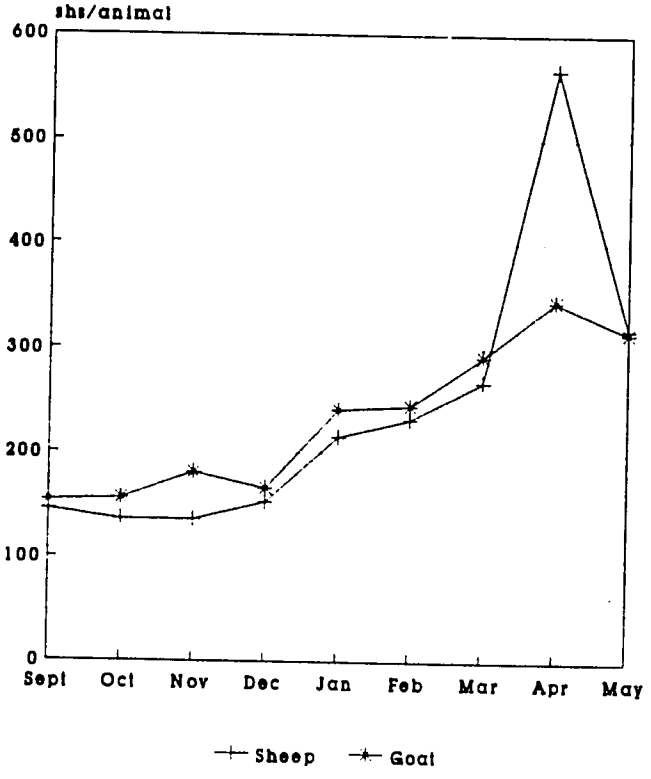
NCPB Purchases and Sales

NCPB purchases remained nil over the March-May period. Sales of yellow maize fell from 637.5 mt in March to only 3.3 mt in May. This could reflect the high distributions of yellow maize as famine relief in May. However, the sale of white maize remained steady during the March-May period at around 480 mt per month.

Rainfall

As mentioned above, unusual rainfall patterns have been recorded in the district over the past few months. In February, higher than normal rains fell in most areas, especially in Lokitaung. All monitoring stations were below the long term mean in March and April when the long rains would normally begin. In May, higher than normal rains were again widespread throughout the district. In June, it appears the rains have ceased. Rainfall has been better distributed in the north and the south than in the center,

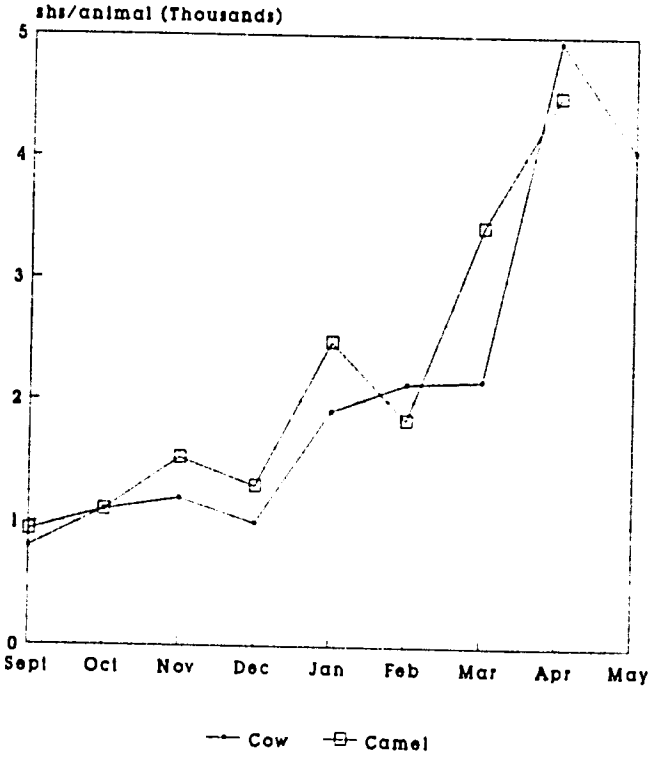
Price trends for sheep and goats



Source: TDCPU

Turkana Figure 3

Price trends for cows and camel

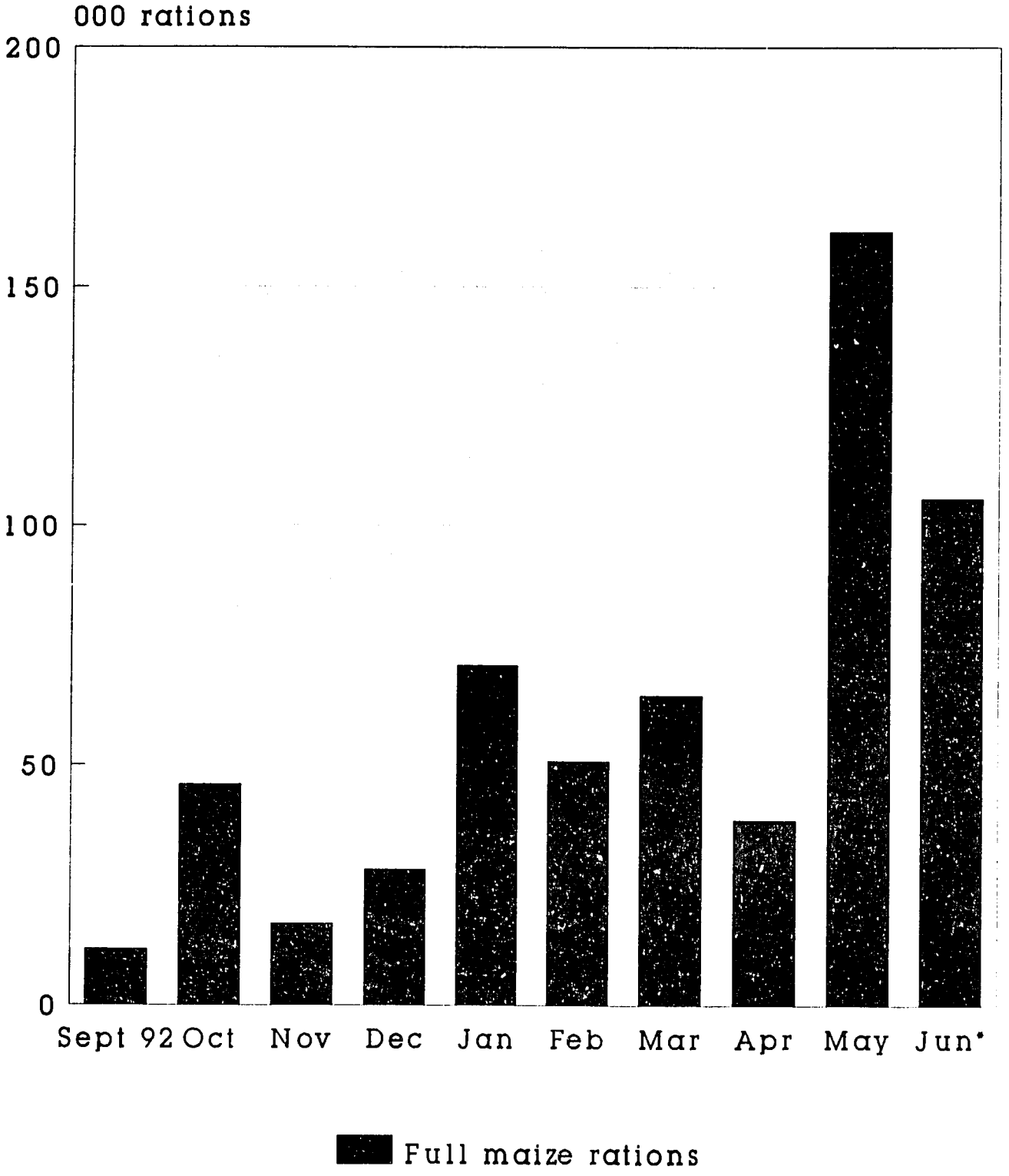


Source: TDCPU

*camel price for may not available

Turkana Figure 4

Distributions of Relief Commodities
Full rations of maize per month



Turkana Figure 5

(*through June 10 only)

29R

although this is normal. Graph XX from the TDCPU shows May 92-May 93 rainfall compared to normal for five stations.

E. RELIEF FOOD DISTRIBUTION

General Ration

There has been a marked improvement in the quantity of relief food distributed in May and early June as shown in graph Turkana Figure 5. Since the inception of the program in September through June 10, 1993, the total amounts distributed have been:

Cereals:	6817	metric tons
Beans:	1657	"
Oil:	378	"
Beef:	12	"

Supplemental Rations

UNICEF has distributed supplemental and therapeutic foods in the district since August 1992. Total recipients of supplementary food include approximately 33,500 children and 2750 pregnant and lactating mothers, plus an average of 500 severely malnourished children in therapeutic feeding. The amount of food distributed since the start of the program is:

UNIMIX -	449	mt
CSM -	1,124	mt
DSM -	5.5	mt
Sugar -	5	mt
Veg Oil -	4,400	litres

Commodities Stored in NCPB Depots

The NCPB depot in Lodwar currently include both commercial and relief supplies. Commercial supplies include approximately 720 mt of white maize and 23 mt of yellow maize, 408 mt of millet and small quantities of rice.

Relief commodities stored in the NCPB depot include approximately 676 mt of yellow maize, 63 mt of beans and 70 mt of oil. Additional quantities of relief food are stored in CARE and NGO warehouses.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

Information was not available during the assessment.

G. RECOMMENDATIONS

1. The team recommends that the number of beneficiaries for both general and supplementary rations remains the same for the July-September period (230,000 for general and 33,600 for supplementary). For the October-December period, it is recommended that a gradual phase-out of relief supplies begins and the number of beneficiaries for both programs should be reduced by one-third (i.e., 154,000 for general and 22,500 for supplementary).

   This one-third reduction should not be applied uniformly across the district, but NGOs should be encouraged to target divisions or pockets within divisions that are most affected. The number of beneficiaries would need to be revised if NGOs increased their contributions of relief food.

   The total population of Turkana remains controversial. The team recommends that a thorough, statistically sound census be carried out as soon as possible, with support from the donors.

2. After December, some vulnerable groups are likely to continue to require food assistance. Blanket distribution should not continue, but relief supplies should be carefully targeted to areas and groups that remain severely affected. This can be accomplished by: a) developing Food-for-Work projects for the able-bodied and b) reducing free food distributions in cities, towns, agricultural zones and other areas where the recovery is more advanced.

3. One major recovery activity should be the restocking of destitute households. Food-For-Work activities such as construction of dams, water pans and roads can also assist with the recovery process.

4. Reducing food relief in settlements while maintaining distributions in rural areas would encourage households to return to their nomadic households. In the central part of the district, the implementing agencies should be encouraged to distribute food in more remote, interior areas instead of concentrating distributions in major settlements.

5. There has been a shortage of supplementary food in the district for the past 4-6 weeks and negative effects on the nutritional status of children are evident. UNICEF should guarantee constant supplies of supplementary foods for the period recommended above.
6. The DFRC should closely monitor the recovery process in areas covered by various implementing agencies. If the recovery advances faster in some areas, the implementing NGOs should be encouraged to phase out and possibly assist with the recovery in other areas.
7. There are indications that the dry rations of supplementary foods, intended for children under five, are still being shared among other family members. This can no longer be attributed to a shortage of general relief supplies but may reflect a taste preference for CSM over other relief supplies among all family members. In the divisions and locations where the rate of malnutrition remains high, implementing agencies should be encouraged to increase wet feeding.

WAJIR DISTRICT

A) SUMMARY:

The drought assessment team, comprised of Mr. Aslam Khan, WFP, Mr.I.O. Nyaribo, OP, Ms. Sana A. Omer of UNDP and Ms. Jane Sena of UNICEF visited Wajir District from 4th to 9th June 1993. The first thirty days refer to the month of May 1993 while the previous three months refer to Feb., March and April 1993.

The general situation has improved as compared to prior periods in 1992 and 1993. Milk production of goats/sheep has begun, malnutrition among children under 5 has shown a declining trend, long rains though not evenly spread were recorded above normal in four out of six rain stations and other indicators like water sources, vegetation and livestock mortality rates have indicated positive signs. Inspite of the above mentioned improvements, the population, having suffered through more than a year of drought has not yet recovered to the extent that the pastoralists can depend on their own resources exclusively. Livestock sales are lower than normal and crop condition is poorer than normal. Approximately 88% of the population is dependent on livestock and the contribution of agriculture sector is, therefore, negligible.

Displacement of population as a result of clashes have compounded the drought situation.

The team recommends gradual phasing down of drought relief assistance by the end of December 93. The team recommends 75% of the WFP ration scale for a population of 225,000 up to the end of September 93 when most of the cows are expected to be milking, and a further reduction to 50% of WFP ration for a target population of 160,000 beneficiaries from October 1st to December 31st, when the camels are expected to start calving. From Jan. 94, food requirements for specific vulnerable groups who have no milking animals should be determined. The monitoring of the situation is recommended to be closely followed.

B) CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

On the average, 211.96 mm of rain were recorded at rain stations during January to May 1993. Rain in Habbaswani and Giriftu, during the month of March - May 93, were recorded lower than normal as compared to the corresponding period in 1992. Long rains distribution was uneven, which may have bad implications for pasture and water sources. Hadado, Tarbaj, Dambas, Korondoli, Ajawa and Eldas Locations have received insufficient rains.

Table 1

AVERAGE ANNUAL RAINFALL

YEAR	RAINFALL (MM)
1987	118.9
1988	271.7
1989	296.1
1990	558.1
1991	173.9
1992	322.9
JAN. -MAY 1993*	211.96

* Break down of rainfall records for 87-92 was not obtained in order to make the average for the months from Jan. - May each year. It was noted that the average for five months in 1993 was much higher.

Water Sources

Water sources are generally normal particularly due to the short heavy rains followed by the long rains. The long rains, are not wide spread throughout the district. Therefore, if no further rains come until the next short rainy season, the result may be stress on the water table and water pans.

The district has a total of 100 dams/pans, 19 boreholes and an unknown number of shallow wells. Most of the permanent water sources are concentrated in the central, north, and a few in the south. Permanent water sources are located quite far from one another which results in concentration of population of people as well as livestock around the existing water sources, with resultant overgrazing.

Natural Vegetation and Pastures

The general condition of vegetation and pasture is good, mainly because of the widespread short rains. Certain locations, however, like Ganyure, surroundings of Hadado, Dela, Korndoli, Eldas, Ajawa and Riba, have poor vegetation. Some newly grown vegetation/grass is not edible by livestock.

Livestock Mortality Rates

After the good short rains, the number of livestock deaths is recorded to be normal. The

conditions may be affected by the long rains which were quite erratic.

Livestock Sales

Livestock sales were recorded to be lower than normal as pastoralists maintain their surviving herds for restocking. Prices have gone up due to the high number of animal losses during the drought. The supply of goats, sheep and cows is abundant according to the Livestock Development Officer. However, animals are not sold for consumption because people cannot afford them.

Crop Condition

Due to uneven rain distribution in certain crop-producing pockets such as Habaswani and Bute Divisions, maize crops are not doing well. Sorghum in Tarbaj Location is, however, flourishing.

Farming in the district is very limited and the produce is neither reliable nor enough to maintain the livelihood of the farmers. Crop conditions under borehole irrigation around Wajir town are doing well for all seasonal crops, though the quantity produced is quite negligible.

Harvest Level

The harvest level of the short rain crop was fair, however in absolute terms, farming contributes a negligible share to the overall food supply.

Employment

Approximately 8.1% population is engaged in the public sector, 2.8% in business, 0.2% in the informal sector, while 88.9% are pastoralists. The total labor force in the district is estimated as 100,000 persons. The growth rate of employment is usually low due to population mobility, weather conditions, poor infrastructure, low level of skilled labor, insecurity, political and economic conditions (regardless of drought). There is only one credit institution in the district.

Displacement of Population

During the reporting period there was a slight displacement of population due to clashes and drought. A total of 5,000 people have moved from Griftu and Arbajahan into Buna due to drought, 10,000 people have moved from Marsabit District into Wajir town for the same reasons. Relief food distribution in some centers was also a factor for movement. This movement was during March, April, May and June, 1993.

Changes in Food Consumption

Relief assistance is the core of food sustenance in Wajir District. During the on-going drought period due to the lack of traditional food supplies such as milk and meat, the

eating habits of the pastoralists have changed: the consumption of cereals and beans has increased considerably while the other commodities such as oil, milk and meat are still below normal.

Cereals and beans are mostly supplied through the relief program at a consumption level of 75%. Due to a shortage of milk, the pastoralist are still missing the home-made fat/butter and approximately 50% of the fat requirements are met through the relief program.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Generally, the nutritional status of the children in Wajir has improved. Wajir being one of the hardiest hit districts, had a very high malnutrition rate of 65% in May 1992. Figures collected from different NGOs working in specific parts within the district indicated that there has been a continuous decrease in malnutrition rate of under-fives, with an average of 4.0% and 12.5% compared to Feb. 92 when they were 15% and 20%.

The table below shows numbers of children registered in the month of April and May 1993 and the malnutrition rates (<80% WFH).

Table 2

NGO/AREA OF OPERATION	NO. OF CHILDREN REGISTERED	APRIL 93 %	MAY 93 %
AICF: Bute, Buna, Griftu, Central	20,861	3.0	1.5
AMA: Central, Habaswanie town	10,583	8.6	0.66
MSF: Central, Wajir Bor.	4,094	8.16	7.8
WVI: Habaswein	15,266	9.1	8.4

The ranges of malnutrition rate per centers are:

	CURRENT ASSESSMENT	FEB. ASSESSMENT
AICF	0.35% TO 3%	4 TO 25%
AMA	0.66% TO 4%	N/A
MSF-B	3% TO 10.6%	5.7 TO 41.%
WVI	2% TO 18%	7.5 TO 29.1%
AIC/GTZ	NIL	7.3 TO 33.1%

Supplementary Feeding Programs

AICF is still carrying out dry supplementary feeding in Bute, Buna, Griftu and Central, but they intend to close down their centers by the end of this month (June 1993) because information on the ground indicated that malnutrition rates have decreased. The number of children attending the SFP has also reduced. Some families with some livestock are returning to the bush to look for pasture. African Muslim Agency (AMA) closed down all their supplementary feeding centers by the end of May when the malnutrition rate declined down to 0.66%.

WVI and MSF-D are still carrying on SFP both dry and wet in their respective areas of operations. Because the number of children attending the SFP was still high and malnutrition rate is still considerably high.

Therapeutic Feeding Programs

Apart from WVI and MSF-B who are still doing therapeutic feeding programs in their areas, AMA and AICF have closed down TFP due to low numbers of children admitted. The severely malnourished cases are admitted to the Wajir Hospital, a maximum of 40 cases per month.

Incidence of Diseases

There is a fair improvement in the occurrence of diseases. Data obtained shows that the incidence of diseases this month is fair compared to the same month last year. In view of the summarization program, improvement in livestock milk production, feeding programs and rainfall, there has been a decrease in incidence of diseases.

Food Price Trends

Food prices have been very much affected by the persistent drought which affected the normal agricultural and livestock production the general country-wide inflation). To-date there seems to have been no major recovery to their normal prices.

The prices of white maize, rice, beans, edible oil, cows, sheep, goats and camels have registered steady increases throughout the year and particularly for livestock in 1993. Prices of yellow maize during May 92 through 93 have been unchanged which is mainly attributed to the continuous supplies of yellow maize through the relief programs (drought and refugee).

The supply situation of white maize, wheat grain and flour, rice and beans were scarce. Vegetables are not popular especially among the dominant group of pastoralist. Livestock supplies have reduced due to loss of animals during the drought and the tendency of pastoralists to maintain surviving animals for restocking.

NCPB Purchase and Sales

Sales and purchase data of NCPB commercial food reveal that the off-take of commercial food by ultimate consumers is almost nil. There have been zero purchases for all commodities and only a meager sale of 3 MT of rice per month for the depot. Cash sales at the minimum level indicates that relief food is plugging the supply gaps. There are sales to institutions like WFP on-going school feeding and development programs in Wajir District.

E. RELIEF FOOD DISTRIBUTION:

General Rations

A total of 2,280 MT of cereals, 379.45 MT of beans and 45.35 MT of edible oil have been distributed during the months of March-May 1993. At the full WFP ration scale, on the average, the above was enough for 190,000 beneficiaries for cereals, 210805 beneficiaries for beans and 75583 beneficiaries edible oil. The WFP planned beneficiary number during April-May was 225,000. The distribution was low as compared to availability of food in the district because of logistics problems.

Supplementary Food Distribution

Table 3

NGO	CSM (MT)	DSM (MT)	SUGAR (MT)	OIL (MT)	TOTAL (MT)
AICF	322	0.1	-	-	322.1
AMA	174	0.3	0.3	0.3	174.9
AIC	15.4	0.025	0.05	0.08	15.555
MSF-B	180.2	7.9	-	1.8	189.9
WV	2.9	0.7	0.55	0.47	1.02
MOH	142.2	1.8	0.95	0.63	145.58
WV	-	0.3	0.3	-	0.6
CM-WAJIR	3.4	-	-	-	3.4
IIRO					
TOTAL	881.3	11.125	2.15	14.38	916.955

Commodities Stores in NCPB Depot

The level of NCPB commercial food like maize and rice is very low due to difficulty in transportation. Beans have been out of stocks for a couple of months. Sorghum and finger millet are also out of stock. NCPB stocks at the date of visit were: maize 103 MT,

white maize 164 MT and 1 MT rice. WFP relief commodities are stocked well and it has been noted that the off-take from NCPB store to the distribution points is below expectation, causing storage problem. 216 MT cereals, 621 MT beans and 94 MT edible oil were in the WFP stocks as of 7 June 93.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

A number of international NGOs like GTZ, World Vision and Oxfam are involved in development and recovery program. Below table summarize the ongoing development activities:

AGENCY	ACTIVITIES	PROJECT COST
GTZ	Integrated Food Security	2.2 DM
"	Livestock Development	2.0 DM
"	Restocking Project	20 DM
"	Water Development	10 DM
"	Agriculture Horticulture Dev.	02 Ksh
"	Community Development Project	01 Ksh
UNICEF	Health	6.517 Ksh
"	Livestock	1.010 Ksh
"	Water	1.025 Ksh
"	Education	3.730 Ksh
"	Women Participation in Dev.	5.95 Ksh
"	Intersectoral Activities Mgt.	4.997 Ksh
WORLD VISION	Water Installation of Generators	7.00 Ksh
	Water- Digging of wells	0.051 Ksh
"	Agriculture	0.04 Ksh
"	Education	0.26 Ksh
"	Health	1.2 Ksh
"	Restocking (GTZ)	18 Ksh
"	Dama/pan -digging/drilling	1.2 Ksh
OXFAM	Shelter	2.0 Ksh
"	Wells (45)	0.9 Ksh
"	Pastoral Development Program	2.0 Ksh
"	Borehole Rehabilitation (UNICEF)	NA
"	Dams/Pans Reh./Cons. (NGOs)	NA
"	Primary Health Care (UNICEF)	NA
"	Food Aid (WFP, UNICEF)	NA
"	Livestock Immunization program	NA
..	Range Land Improvement (UNICEF))	NA
"	Rehab. of Primary schools ((GTZ)	NA
"	Aid to Farmers (GTZ/WV/OP).	NA
"		

Note: All Amounts are in millions.

PLANNED RECOVERY/DEVELOPMENT ACTIVITIES

AGENCY	ACTIVITIES	IMPLEMENT AGENCY	POTENTIAL DONORS
GOK	Reh. of Bore Holes	Water Dept. NGOs	NGOs
"	Dam/Pan Construction	Water Dept/NGOs	NGOs
"	Shallow Wells Program	Ed.Dept./NGOs	NGOs
"	Reh. of 8 Primary Schools	L.Stock	GTZ
	Impro. of 6 grazing blocks	OXFAM	EEC
"	Urban Recovery Program	OXFAM	OXFAM
	Restocking	OXFAM	OXFAM
OXFAM	Wajir Pastoral Development	WV	OXFAM
"	Rehabilitation of schools	WV	GTZ
"	Drilling of Bore Holes		UNICEF
WV			
WV			

G. RECOMMENDATIONS:

1. The general relief distribution should continue at 75% of WFP ration scale for an estimated population of 225,000 until the end of September 1993. By the end of this period most of the cows should be milking and, combined with goats/sheep milking which has already started, should meet most food requirements of the pastoralists. The affected population in need of further food assistance during October -December 1993 is estimated to be 160,000 at a recommended ration scale of 50%.

   A review of the general situation in early 1994 will be required to assess the food requirements after camel calving for the vulnerable groups who have no milking animals. Targeting will be imperative to identify the most needy population.

2. Distribution of SFP and the general ration should go hand in hand in order to create effective impact. SFP should continue until the end of December 1993 with a focus on pockets where malnutrition rates are still high.

3. WFP should ensure dispatches of all allocations before the end of each month. CARE should deliver 100% of the allocation to the district depot (GTZ is responsible for distribution to district centers). The team has observed that secondary transportation is not impressive and recommends that DFRC and concerned agencies should maximize their inputs to ensure deliveries according

to the monthly allocation plan. There is also more need for coordination among the implementing agencies.

4. The drought situation in the district should be continuously monitored by the agencies like DFRC, WFP, UNICEF, GTZ and other NGOs.

5. The agencies in the district should conduct a sample head count and a nutritional survey to determine the case load of affected population in need of drought relief assistance and reduce the malnutrition rates.

6. The ongoing development activities in the district are quite impressive and therefore, possibilities for WFP food contribution should be explored to expand the impact of development activities. The gradual transition from relief to development, in order to mitigate the effects of drought in future is recommended. The following areas could be considered for FFW:

   a. Construction/rehabilitation of water pans/dams
   b. Repair of roads
   c. Construction of schools
   d. Range land management.

7. New water sources needs to be developed in areas with good grazing facilities in order to reduce the concentration around the existing water sources and make best use of available pasture throughout the district.

8. The NFRCS should plan the right variety of seeds for planting to the farmers under the drought recovery program. Out of the 5000 bags of maize seeds delivered to the district for planting during the short rains, 4000 bags are still lying in the store because of being unsuitable for the district soil and climatic conditions. Suggesting that they should be returned and exchanged with suitable for the district soil.

ISIOLO DISTRICT

A. SUMMARY:

In Isiolo District the team conducted the assessment 4-9 June 1993. The team was comprised of G. Mahmud (WFP), S. Rotich (Office of the President), E. Njoroge (World Vision International), J. Kaloi Y (Kenya Freedom From Hunger) and R. Langat (Food for the Hungry International).

A good amount of rainfall had been received during the April-May long rainy season and the short rains continued up to the beginning Feb'93. With good rainfall in the short and long rainy season the overall situation in Isiolo District has slightly improved. The pasture condition is good and enough for the reduced number of animals in the district. The situation would have improved more but due to the huge losses of livestock, many people are still dependent on relief food. Livestock mortality is down but meat and milk production is still low. Along the border of the Ewaso Nyiro River there are some irrigation activities and in a few pockets rainfed cultivation is done. Owing to the small quantity of crop currently in the field it is expected that the next harvest will be low. Due to insecurity and search for pasture and water, many people have migrated to new places. However, traditionally much of this movement is due to other factors.

The average rate of malnutrition for Isiolo during the month of April '93 was high at 19% compared to 4% in 1990, 5% in 1991 and 4% in 1992. Up to March'93 the relief food supply was low but from April'93 it has improved and this district received more than its allocation. Relief food has been distributed to more than the affected population which has undermined the impact.

The team is recommending the ration be reduced to 75% of the WFP ration, however, they did not agree on the number of beneficiaries. Some of the team recommend 40,000 and the other 47,839. Supplementary feeding should continue, targeted on areas with 12% or higher malnutrition rates.

B.CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Rainfall in the past thirty days was normal, but in the past three months was lower than normal. During the discussion with the local residents the team was informed that rainfall was not uniformly distributed throughout the district. Unusually poor rainfall was reported in parts of Central Division, Merti, Modogashe and Garba Tulla areas.

TABLE 1: RAINFALL DATA FEB-MAY 1993

Division	Feb. MM (days)	March	April	May	Total	Average	LTM
Garba Tulla	2.5 (1)	0	124.2 (6)	16 (3)	142.7 (10)	35.7	41.25
Central	137.5 (7)	9.8 (4)	158.7 (11)	53.7 (5)	359.7 (27)	89.93	72.4
Sericho	0	13 (3)	17.5 (6)	11.0 (2)	41.5 (11)	10.4	N/A
Average	46.67	7.6	100.13	26.9			

Sources: Data collected from the stations and Met. Dept.
* () Figures indicating the number of rainy days.

Water Sources

The Ewaso Nyiro River, boreholes, pans and dams are the usual sources of water in this district. After good rains in February and April the water sources were normal, however, in the past three months and in the past thirty days it was slightly less than normal. Areas with low water levels were Kipsin, Oldonyiro, Dadacha Bassa, Iresa Buru and Merti. In Kinna there are twelve natural springs which are the major source of water for irrigation and other purposes. In many areas pure and safe drinking water is still a dream. People walk several kilometers to fetch water from the river. A few seasonal rivers are there but they dry up very quickly after the rains.

Natural Vegetation and Pastures

In almost all areas vegetation and pasture conditions were normal during the past thirty days as well as past three months. There are some pockets with poor vegetation conditions due to lack of rainfall in the long rainy season. Since the number of livestock is reduced the current pasture will be able to feed the remaining animals for the whole year. Poor vegetation and pasture were noticed in Dadacha Bassa, Kipsin, parts of Garba Tulla and Oldonyiro areas due to poor rainfall.

Livestock Mortality Rates

In Isiolo District, livestock mortality rates are currently quite low, which is normal for the period of the year. Most deaths are due to disease. Following the good rains in Dec '92 to Feb '93, the fast growing fresh vegetation affected the digestion of goats especially in Merti Division. Frequent diarrhoea in goats resulted in some deaths. Common diseases and parasites like loypaonomiasis anaplasinomosis and worms hit hard on livestock. It is noted that, poorly maintained dips exist in isolated places while the majority of zones have none. Few or no drugs are available to help fight against animal disease. Due to insecurity in Kinna, Kulamawe, Garfassa, and Malkadeka areas, 70% of the livestock is now moved to Merti and Sericho areas.

Livestock Sales

During the 1991/92 drought many families lost most of their animals. This resulted in the current low supply with a corresponding high demand. It is notable that the majority of those buying animals want to restock. Animal trade is mainly concentrated in Isiolo town and Kinna Location. Prices of livestock have continued to increase since the last rain. During the time of assessment the average price for a goat was 1200 to 2000 ksh, while that of a sheep was between 700 to 1200 ksh. Cow prices have increased drastically since the improvement of pastures in the district after the good rains. An average cow fetches between 6000 and 8000 Ksh in the market. The local residents are however, very reluctant to dispose their livestock and only sell to obtain essential commodities. Earlier sales were registered for banditry zones in fear of cattle rustling activities.

Crop Condition

The hectarage of cultivation in this district is small. Some of the plots have already been planted and some of them are yet to be prepared for cultivation. In the past thirty days crops under cultivation were fewer than normal and there was no harvest for this district in the past three months. In Merti and Sericho Divisions, irrigated crops were doing well. Kinna area has potential agricultural land. Due to insecurity the area under cultivation is small but crop conditions are promising. The current crop under cultivation is so little that even if a good harvest is seen, it will not fulfill the food requirements but only supplement the district's food stock.

Harvest Levels

Harvests in the agricultural potential areas for both cereals and legumes were reported to be lower than normal in the past thirty days as well as past three months. Although along the river and Kinna areas there is potential farming land, the quantity produced in those area were not significant.

Employment

Like other pastoralist districts, about 70 to 80% of the Isiolo population is engaged in livestock keeping. 10% of the population is estimated to be full time wage earners,

working with government, parastatal and non-governmental organizations. A small fraction of the total population is engaged in agricultural activities along the river Ewaso Nyiro. Since there are no opportunities of other employment, a few people are engaged in petty trade and as day laborers.

Displacement of Population

A slight influx into settlements was reported for the previous three months as well as the past thirty days. After the short rainy season the movement increased because herders were looking for pasture and water. Insecurity is one of the reasons for people's movement to safer places. The 1991/92 drought took lots of animal lives and the poor pastoralists became vulnerable and were trying to look for other means of survival. Garba Tulla is now a ghost town. In Kinna Location, the irrigation project was abandoned. All this happened due to insecurity. Cattle rustling as a traditional method of restocking is a regular practice from the neighboring districts. Insecurity issues need to be given serious attention to reduce displacement of populations. Restocking and other development activities to rehabilitate those displaced should reduce movement.

Changes in Food Consumption

The staple foods of the inhabitants of the district are milk and meat, but due to drought, the number of animals cannot supply adequate milk and meat. During the discussion with local residents, the team noted that people are not consuming blood and the consumption of wild foods were normal. On the other hand poor people have little purchasing power to buy available goods. Their food habits have totally changed and they are taking more than normal quantities of cereals and legumes. Approximately 75% of the consumed cereals and beans are coming from WFP relief supplies.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Weight For Height data was available from MOH/UNICEF in a therapeutic feeding center in Central Division and from the Catholic Diocese in the supplementary feeding centers in Garbatulla and Sericho Divisions. No data was available for Merti Division and most parts of Central Division. A total of 60 children had been weighed at the therapeutic center during the month of April '93. 25% of these 60 children were severely malnourished (<70% WFH) while 33% were moderately malnourished. The therapeutic center was opened during the month of April to specifically cater for the increased number of malnourished children due to the prolonged drought.

In Garbatula and Sericho Divisions, data was available for the months of February and March. The sample included all under-five children who had benefitted from the supplementary feeding program. Supplementary foods were collected together with the general rations in these areas. In February, a total of 4545 were measured at the supplementary feeding centers in Garbatula and Sericho Divisions. 823 (18%) of these children were malnourished. 3,505 children were measured at the supplementary feeding centers in both Sericho and Garbatulla divisions in March '93. 829 (24%) were

malnourished.

According to a UNICEF report for the month of April, malnutrition rates were distributed as follows:

Division	Rate
Garbatulla	19.1%
Central	19.6%
Sericho	19.1%
Merti	17.2%

The information above shows that the average rate of malnutrition for the district was fairly high at 19% during the month of April. Data available for the months of February, March and April for Garbatulla and Sericho show that malnutrition remained rather high during the months of February (18%), March (24%) and April (19%). Although figures to compare to the district levels over time were not available, information gathered from nutrition staff and other health workers indicate that these high malnutrition rates are attributed to drought.

Supplemental Feeding

Supplementary feeding was done in three divisions, Central, Sericho and Garbatulla, during the months of March, April and May. In Central Division there were 7,374 beneficiaries: 5,177 under-five children and 2,197 expecting and lactating mothers. These figures remained the same during the month of May. In Garbatulla and Sericho Divisions, data was available for the months of March and April. In Garbatulla in March there were 3,090 under-five beneficiaries and 2,697 in April. In Sericho there were 1,355 beneficiaries, increasing to 1,690 in April. 2,065 lactating and pregnant mothers benefitted from supplementary feeding in March.

Therapeutic Feeding

Therapeutic feeding was restricted to Isiolo District Hospital where malnourished patients were admitted in a special center. This center was opened in April '93 in order to accommodate the increased number of malnourished cases due to drought. During the months of April and May, 73 and 53 children were admitted respectively. The nutritionist in charge of the therapeutic feeding center expressed a need to expand the program since currently they are unable to cope with all the children.

Incidence of Disease

Data on disease incidence was not available for the whole district, the only information made available was for Garbatulla Health Center and Kinna Dispensary. Not all health facilities had submitted their reports to the district headquarters for the period April '92 and April '93. Data clearly show however, that the most common diseases are malaria, diarrhoea and upper respiratory tract infections. A measles and malaria outbreak was reported during the moth of April '93. Micro-nutrient deficiencies were not recorded

separately except for anaemia which was reported to be at normal levels. It was also reported that vitamin A deficiency usually appears as a complication of measles. Immunization coverage information was not available. From all the periods recorded discussions with the staff at the health centers indicated that coverage may be low. Data available for the district for April '92 indicated the coverage is very low at 23%. A heavy health burden in a community would have a negative effect on nutritional status. A low immunization coverage would also have a negative effect on nutritional status. Although the magnitude of disease and low immunization status was not established during this exercise, it can only exacerbate drought effects.

ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

The prices of essential commodities have increased more than 100% over the past one year. Unreliable transport combined with insecurity and poor road conditions were blamed for the increase. Devaluation of currency and short supply of commodities in the market are also the factors which influence prices. Market commodities in various parts of the district come from as far as Meru District and Nanyuki town.

Prices of various essential commodities differ from place to place depending on the distance from the origin. Where relief food has been going consistently, the price tends to be low due to low demand. Some shops in the areas in question have had very low turnover of cereals, beans and oil due to the availability of relief food. (Please see the table below).

TABLE 2: PRICE TRENDS/FLUCTUATIONS

ITEMS	JULY'92	NOV'92	MAR'93	APR'93	MAY'93
MAIZE/Kg	13.00	14.00	11.00	11.00	11.00
BEANS/Kg	11.00	12.00	18.00	18.00	18.00
OIL/Kg	22.00	35.00	45.00	50.00	60.00
COW	500.00	550.00	3500.00	4000.00	6000.00
SHEEP	80.00	100.00	600.00	800.00	800.00
GOATS	200.00	300.00	1100.00	1200.00	1400.00

Sources: Team's computation average of the collected prices.

NCPB Purchase and Sales

In the last three months, March to May 1993, NCPB purchased only 71.73 mt of white maize and 299.20 mt of millet. On the other hand 8.52 mt of y.maize, 0.08 mt of millet and 14.49 mt of rice were sold. No beans were in the store for sales for the last three months.

Rainfall

In Garba Tulla, the average rainfall for February, March and April was 15% less, 0% and 121% more respectively that the Long Term Mean. However, the Central Division had 371% more, 11% less, and 124% more than the Long Term Mean for the months of Feb, March and April respectively. In the month of May, 167% and 102% more than mean was in Central and Garba Tulla Divisions, respectively. NB: Recording of rainfall data in the district is rare except in a few Police Stations.

E. RELIEF FOOD DISTRIBUTIONS:

General Rations

The supply of relief food to the district was very low up to Feb '93 but in March, April and May '93 it increased. The last two months the distribution was done almost 100% in all distribution centers. There is always a high degree of difference between actual number of beneficiaries (over 65,000) and the planned population figure (55,000). Relief distribution was too general, every one in the center getting a share irrespective of their need and drought food has been distributed among the people affected by other socio-economic factors. The team found it very difficult to differentiate the drought victims and others. There is great need for targeted distributions and food accountability needs to be improved.

The Catholic Fund for Overseas Development (CAFOD) provided relief assistance as either cash or in-kind through the missions. In May'93 CAFOD donated 300 mt of maize and 40 mt of beans to the Catholic Mission for free distribution. While discussing with local people, they expressed their willingness to do some community-based development work through Food-For-Work. Relief distribution partners had also shown their interest in Food-For-Work.

TABLE 3: WFP RELIEF SUPPLIES TO THE DISTRICT
FEBRUARY - MAY, 1993

Month	Cereals(MT) (%) of allocation	Pulses(MT) (%) of allocation	Veg.Oil(MT) (%) of allocation	Beneficiaries
Feb	148 (35%)	75 (119%)	4 (19%)	62542
Mar	659 (100%)	126 (127%)	50 (152%)	62542
Apr	919 (139%)	173 (175%)	29 (88%)	62838
May	1236 (187%)	219 (221%)	62 (188%)	47839
Total	2962	593	145	

Sources: WFP Coordinator and records of Crescent of Hope.

Supplementary Rations

In Isiolo District there are 14 centers in Central Division, 6 in Garbatulla, 5 in Sericho and 4 in Merti Division. A total of 19,00 under-five children benefitted from the supplementary food program.

SUPPLEMENTARY FOOD DISTRIBUTION

DIVISION	JAN (MT)	FEB (MT)	MAR (MT)	APR (MT)
Garbatulla	65	65	65	65
Isiolo Central	66	66	66	66
Merti	44	44	44	44
Isiolo/MOH	1	1	1	1
TOTAL	176	176	176	176

Source of information: UNICEF April'93 Report

Commodities Stored in NCPB Depots

The day the team visited the NCPB depot, 66.29 mt. of y. maize, 69.66 mt of w. maize, 299.44 mt of millet and 1.51 mt of rice were reported as NCPB commercial food. 14 mt of y.maize and 98.01 mt of beans were found in the warehouse as relief food. No oil from the relief supplies were there and only 0.92 mt of oil belonging to School Feeding program were in the store.

F. ON GOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

Most physical development activities are undertaken along the Ewaso Nyiro River. These include irrigation, clearing canals, bee keeping, afforestation and soil conservation. CEFA, the Catholic Mission and Action-Aid have initiated a number of these project in Oldonyiro, Isiolo town and Merti. Currently Action-Aid is undertaking a general immunization program in Merti Division. The schools are under the WFP School Feeding Program but the SFP supply was not regular or adequate.

There is a general consensus among NGO's and the GOK to start restocking to assist communities whose livestock died. In Oldonyiro the Catholic Mission intends to initiate a 280 hectare irrigation project, while CEFA intends to expand those currently covering Merti along the Ewaso Nyiro River.

G. RECOMMENDATIONS:

The team did not reach at a consensus. Some members of the team recommend drought assistance to 40,000 beneficiaries while other members recommend 47,839 people. The accepted ration will be 75% of the WFP scale for July-September period. For the October-December period the situation should be reviewed. If the situation improves, the number of beneficiaries and food ration should be reduced.

The recommended division of the population is as follows:

Central	10,904	8,000
Merti	15,959	14,000
Garba Tulla	10,774	9,000
Sericho	10,202	9,000
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Total	47,839	40,000

Rationale for 40,000 people:

a. A fair amount of rainfall was received in the rainy season which improved the water sources and the pastures.

b. With sufficient pasture and water, livestock mortality is near normal and deaths were due to disease. Milk and meat production are slightly increased.

c. Livestock sales were low because of the favorable situation for the pastoralists to rebuild their herds.

d. Malnutrition levels are not that alarming in the district. Supplemental and therapeutic feeding programs are undertaken by UNICEF i.e. children under-five are well taken care of.

e. Free distribution of relief has increased dependency on relief food which can be a serious problem for development. It is important to prepare and make aware the recipients about the possible phase out.

f. Food For Work is compensating the food shortage for the district. If FFW programs start soon there will be additional food supplies to the beneficiaries.

Taking in to consideration of positive trends of the environmental indicators the members recommended 40,000 beneficiaries.

Rationale for 47,839

a. The DFRC, comprised of NGO's, heads of the district government departments,

and representatives from religious organizations, recommended drought assistance to 47,839 people.

b. Isiolo residents depend mostly on their livestock. Since they have lost a substantial number of livestock during the 1992 drought, they have not yet been recovered and thus are totally dependent on the drought relief.

c. With regular shortfall in relief supplies, rations scales have never been maintained.

2. Supplementary feeding should go on in the divisions where malnutrition rates are above 12%. However, continuous nutritional assessment should be carried out.

3. Relief food should be distributed to only drought victims and there is a great need for targeting distribution to have a positive impact of relief.

4. Food For Work should be started immediately. Drought food should switch to Food For Work as soon as possible and strengthen the current EIFA project in Merti Division.

5. Security should be intensified to protect the livestock from banditry attack. Displacement of population can be reduced through better security.

6. Due to the 1991/92 drought the number of livestock were reduced and thus there is need for restocking.

7. Nutritional surveillance should be strengthened. Immunization programs should also be strengthened to reduce the incidence of disease. Disease control measures should be intensified in areas where there is a prevalence of malaria and measles.

SAMBURU DISTRICT

A. SUMMARY:

The team, comprised of Adel El Mahi of World Food Program, Michele McNabb of USAID, Daniel Obolla of the Office of the President, and Noreen Prendiville of UNICEF, visited Samburu district from June 4-9, 1993. The "last thirty days" refers to the month of May 1993. The previous three months "refers to February, March and April 1993.

While there are many positive signs of recovery throughout the district, this can largely be attributed to improved supplies of relief food. Livestock herds are beginning to increase due to improved pasture conditions and lower slaughter rates while people have access to alternative food commodities. The continuation of this recovery process depends on sustained, but gradually reduced, supplies of both general and supplementary foods.

The team feels that 93,000 people in the district continue to require relief food for the July-September period. Due to the varying stages of recovery among the divisions, some areas continue to need full rations while rations in other should be reduced.

Distribution per divisions is recommended as follows :

Division	Beneficiaries	Percentage of Full Ration	Full ration Equivalent
Baragoi	51,000	100%	51,000
Lorroki	7,000	100%	7,000
Wamba	20,000	75%	15,000
Waso	14,000	75%	10,500
TOTAL	93,000	--	83,000

The team further recommends for the October-December period, a gradual phase out of relief food should begin. Beneficiaries numbers should be reduced by one-third from the July - September figure. At this stage it is estimated that approximately 55,700 full rations would be required. Depending on local conditions at the time, these rations could be distributed to all 93,000 beneficiaries or could be targeted to the most needy beneficiaries or divisions.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

The unusual short rains continued into January and February throughout most of Samburu District. The start of the long rains was subsequently delayed, as almost no rain fell in March and very little was recorded in April. The long rains finally began in mid-May. Although rains have been good in some locations, overall the district is suffering from below normal and erratic rainfall.

Water Sources

Water resources for the district are normal for the time of year. Many unpopulated, high elevation areas of the district have received significant quantities of rain in May and June. This has replenished seasonal water supplies in the lowlands from streams and luggas, which had been declining since the end of the short rains in February.

Natural Vegetation and Pasture

The start of the rains in May resulted in improved pasture condition to "normal" in many areas. Like rainfall, the pasture condition is erratic. Within Baragoi Division, for example, pasture in some areas is above normal while nearby areas are below normal. Data from the Drought Monitoring Project showed a decline in thick vegetation cover from almost 60% of the sample areas in February to less than 40% in April due to the delay in the long rains. An increase in vegetative cover should be expected for May and June.

Livestock Mortality Rates

The livestock growth rate is improving but at a slow pace. Deaths due to drought have largely stopped, although some animals are still dying from disease. Births of goats and sheep are increasing slowly but steadily. Cattle are not expected to begin reproducing until September.

At the time of the assessment, livestock was in fair nutritional condition. East Coast Fever continued to affect cattle, mainly in Lorroki and Wamba Divisions. The lack of veterinary services, cattle dips and essential drugs continues to plague Samburu.

Livestock Sales

Livestock sales are currently lower than normal throughout the district as pastoralists are attempting to rebuild their herds. This downward trend has continued from February until the present. Recently, the increased availability of relief food has made it possible for most households to hold onto their animals and start rebuilding.

The scarcity of animals offered for sale has led to very high prices in the markets. Shortages of meat were evident in Baragoi town. Prices in Wamba were exceptionally

high, as goats sold for 1200 shillings per animal and cattle at 4500 shillings. Even at these prices, very few pastoralists were willing to sell.

Crop Conditions

Potential agricultural land is only 33% of the district. The vast part of the district has very little or no agricultural activities and is often affected by drought. Following the short rains, most farmers had prepared their lands and planted in expectation of continued rains which did not materialize. Some crops, such as the small amount of maize planted in Wamba, will not produce significant quantities.

Lorroki Division has relatively large amounts of arable land. Much of this land is either unutilized or occupied by large-scale wheat farmers whose production is sent out of the district. In Wamba, Baragoi and Waso, agriculture does not make a significant contribution to the economy.

Harvest Levels

The harvest of subsistence crops is insignificant in the district although the Ministry of Agriculture continues to encourage production. The last harvest was lower than normal due to poor rains.

Employment

There are no industries in the district which limits the opportunities for full-time, wage-paying employment. Livestock keeping is the main source of income in the district. Apart from Lorroki Division, little formal sector employment exists.

The lack of education in the area has also contributed to many people remaining outside of the formal sector. Far less than 10% of all household heads are assumed to be wage-earning.

Displacement of Population

The drought has caused some displacement of the population, but it is difficult to separate this from normal movements of the nomadic populations in search of better grazing land. Recently, some pastoral households have moved closer to food distribution points because of the difficulties relief agencies have encountered in supplying remote locations.

Some households moved into Lorroki Division with their animals at the height of the drought. As these households now return to Wamba and other divisions, East Coast Fever, a livestock disease prevalent in Lorroki, is reportedly spreading into other divisions.

There was an influx of an estimated 3,500 Turkana in Kawop, Elbarta and Nachola regions. The Turkana reportedly moved into Samburu due to fear of a retaliatory attack from the Pokot for cattle rustling. During an assessment visit to Nachola, many of the

Turkana manyattas had been abandoned. It is assumed that most of these households returned to Turkana.

Another area of Turkana influx into Samburu District is Loikas Village, a slum area outside of Maralal town. Although this area has been populated by Turkana in search of employment in Maralal, the population has reportedly increased as relatives from Turkana and areas of Samburu District arrive.

Changes in Food Consumption

Food consumption in Samburu has not returned to normal. Consumption of maize, beans and oil is higher than normal and probably increased even further in May as relief supplies were more plentiful than in previous months. Conversely, consumption of traditional foods such as meat, milk and blood remained lower than normal. Milk consumption is slowly increasing as some goats and sheep begin to reproduce, but it is still inadequate. Very few cattle or camels have reproduced, so milk supplies from those animals are scarce. Meat consumption is very low. Because of the improved availability of relief supplies, households have not been forced to consume their animals and are able to slowly rebuild their herds.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

The availability of reliable and useful nutritional data in the district remains poor. In most health centers, information available through CHANIS reflects nutritional status of children under one year only. Information available through the various bodies involved in supplementary feeding programs obviously reflects a group of children already benefiting from its effects.

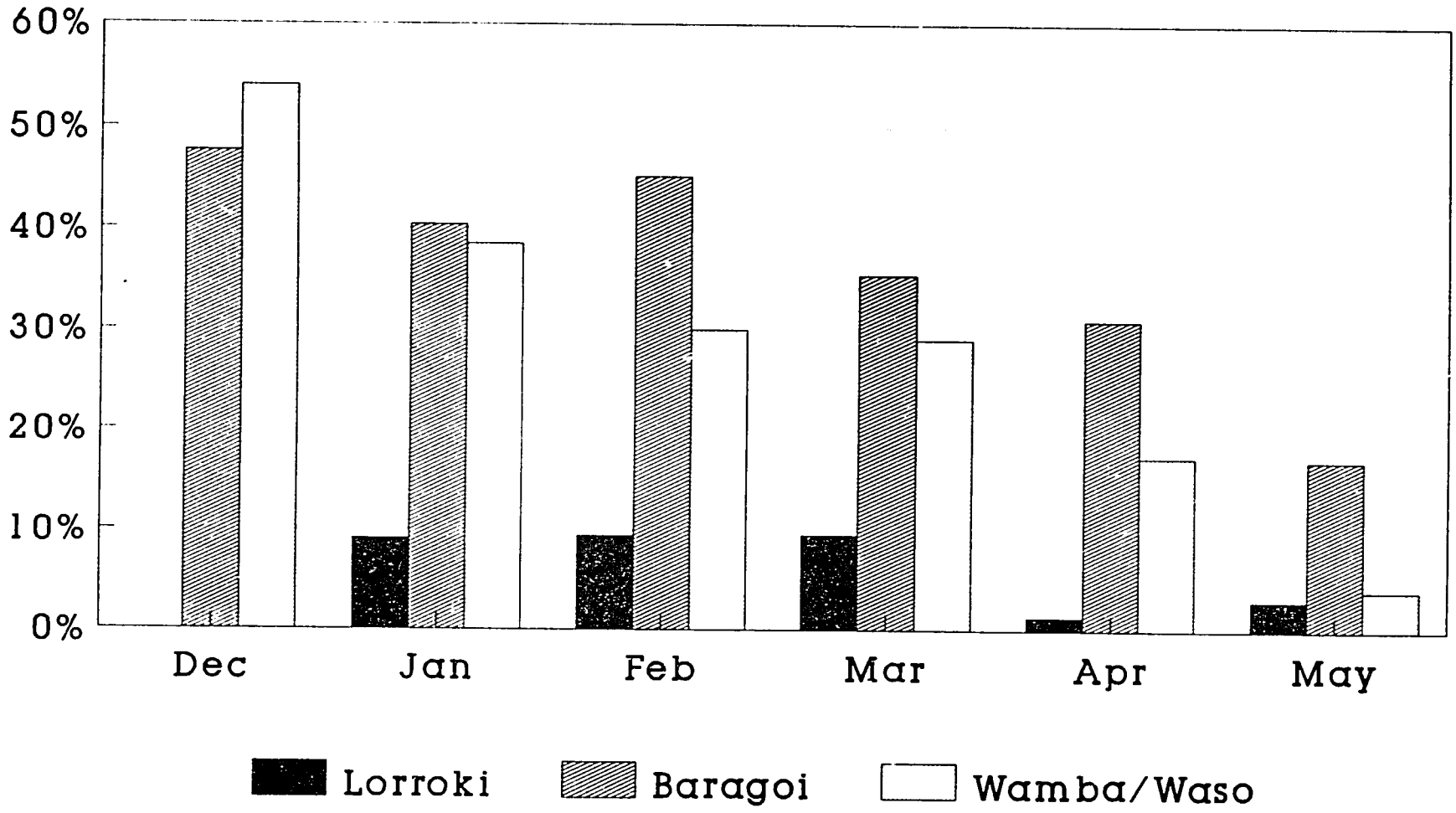
Nutritional status as recorded by the DMP uses Mid-Upper Arm Circumference (MUAC) and as this monitoring has been carried out monthly since December, it would appear to be the most reliable system available with which to monitor trends. The trend of malnutrition rates recorded by the DMP has shown a steady decline since December when rates reached 48.5% (district average) to 33% in January, 36% in February, 29% in March and 21% in April. Of this 21%, the majority were mildly malnourished. Highest rates recorded were in Baragoi Division with the lowest rates in Lorroki Division. (See graph Samb.1)

Supplemental Feeding Programs

Supplemental feeding programs are in operation throughout the district. The nature and coverage of the programs vary from division to division depending on the capacity of implementing bodies.

In Baragoi Division, a total of 11,810 beneficiaries receive monthly rations of 9 kg of high energy blended food through blanket distribution to the vulnerable groups. These groups consist of approximately 95% children under five years with the remaining 5%

Malnutrition Rates in Samburu
Percentage of Children <13.5 cm MUAC



Source: Drought Monitoring Project

Graph SAMB1

made up of lactating mothers.

In Lorroki, Wamba and Waso divisions, implementing bodies have chosen to target distribution towards malnourished children with 4,930 receiving 4.5 kg in Lorroki and a combined total in Wamba/Waso of 1,290. The program in Wamba/Waso is likely to expand in the coming weeks to include a larger number due to increased distribution capacity by some NGOs.

During the team's visit, it was obvious that dependency on this food was very high, especially in groups who use unground relief maize as their staple. Milk remains the preferred food for all young children in pastoralist families, but the supply at present is total inadequate for their needs. The blended food currently in use was United States-donated Corn Soya Milk which is supplied through UNICEF. Acceptability seems to be very high.

Therapeutic Feeding Programs

Therapeutic feeding is now in progress only in Maralal District Hospital. In April, 107 children were registered in the center whereas the number in May was only 46. Most of these cases appear to relate more to either acute disease or various social problems in the home than to actual food shortage due to drought.

Incidence of Disease

While accurate numbers and statistics on disease incidence are difficult to obtain, verbal reports from both senior MOH personnel and local health workers throughout the district do indicate some common trends.

Recent outbreaks of measles have caused deaths and the deterioration in the nutritional status of children in many areas, particularly Lorroki Division where population is most concentrated. A higher than normal incidence of malaria, which occurred in the previous three months, was a source of great concern resulting in a much higher number of deaths than in recent years. Wamba Mission Hospital reported a rate of up to 2-3 times higher than normal for that time of year. In May, the incidences once again decreased.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Samburu is not an agricultural district hence most of the foodstuffs found in the markets are imported from other districts. Food prices, especially maize, are lower than 1992 when the drought was at its peak. Food items like wheat flour and rice have increased in price since 1992 because of scarcity of these commodities in the market.

Livestock and meat prices have increased significantly, due mainly to the small number of animals offered for sale. In Baragoi, the price of shoats in June ranged between 400-800 shillings per animal, up from 300 shillings in February and 150 shillings in October.

NCPB Purchases and Sales

The NCPB depot in Maralal had not purchased any commodities during the three months prior to the assessment. Small amounts of maize and rice were being sold from the depot.

Rainfall Trends

Rainfall trends are still below average in most of Samburu. Scattered rains began to fall in April, although only parts of Wamba received near-normal amounts. Rainfall was better distributed in early May, but late May and early June rains were below normal.

E. RELIEF FOOD DISTRIBUTION:

General rations

The relief food started in the district in June 1992. The monthly food allocation to the drought affected victims calculated according to the recommended figure of 100,000 comes to the following amounts:

Cereals 1,200 Mt, Pulses 180 Mt and oil 60 Mt.

Since the start of the drought, the district had received the following amount of food:

Cereals 6738 Mt, Pulses 1263 Mt, and oil 402 Mt.

The primary transportation is organized by CARE International and the secondary transportation by OXFAM in Baragoi, CARE in Wamba and Waso plus the GTZ as a facilitator. There were no problems with storage facilities in the district witnessed during the assessment. In Wamba there are GTZ stores, OXFAM stores in Baragoi and NCPB stores in Mararal. The district can accommodate up to a 3 month allocation (4,320 Mt).

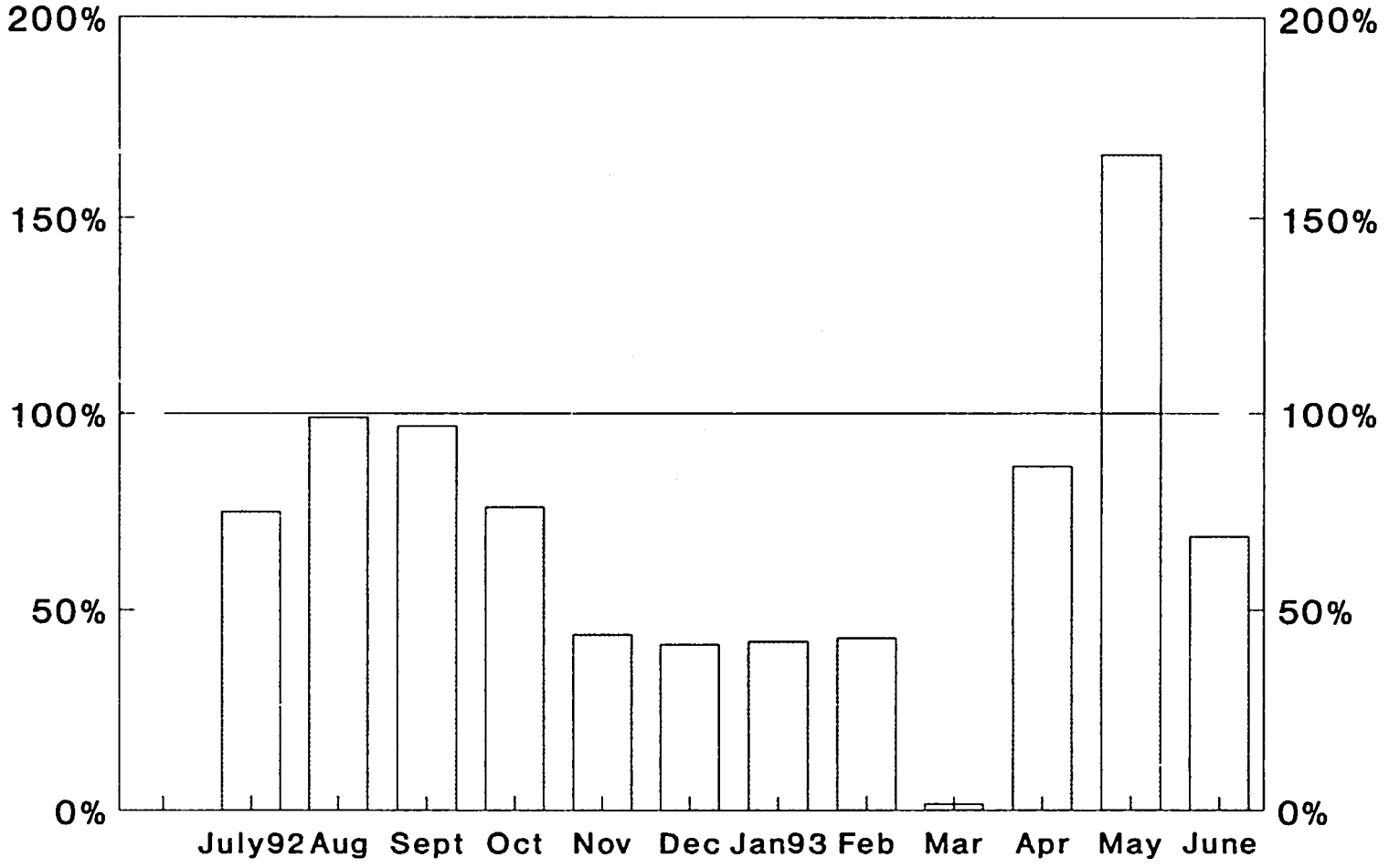
The average food ration received per person/month was less than the standard ration by almost 50% for several reasons. There is a difference between the allocation figure and the number of people actually receiving food in each division. For example, in Wamba the allocation figure is 20,000, but the actual number of people receiving food is 40,000. Inadequate delivery to the district has also reduced per capita allocations.

Supplemental Rations

CSM is provided by UNICEF to the NGOs working in the area (e.g., SAIDIA). The total monthly distribution is around 145 MT. In Baragoi Division the ration/child/month is 9 Kgs, and in is Maralal is 4.5 Kgs (target distribution to malnourished children).

Percentage of Full Allocation Received

Samburu



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Commodities Stored in NCPB depots

The current level of commodities stored in the NCPB depots in Maralal are as follows:

Commodity	Owner	Current stocks in Mt
Yellow Maize	Commercial	959
,, ,,	D.E.O	21
White Maize	Commercial	299
Millet	,,,	12
Rice	,,	4
Oil	D.E.O	123 cans of 10 ltr.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

According to the District Development Officer, there are over 40 development activities currently taking place in the district, implemented by the different ministries and funded by Government of Kenya, covering infrastructure rehabilitation, agriculture, health, etc.

Concerning plans for drought recovery, water development, agriculture, and soil conservation will be the areas of high potential for Food-For-Work activities.

G. RECOMMENDATIONS:

1. General food rations should be distributed to 93,000 in the district for July-September period. Due to the varying stages of recovery among the divisions, some areas continue to need full rations while rations in others should be reduced.

Distributions per divisions are recommended as follows:

Division	Beneficiaries	Percentage of Full Ration	Full ration Equivalent
Baragoi	51,000	100%	51,000
Lorroki	7,000	100%	7,000
Wamba	20,000	75%	15,000
Waso	14,000	75%	10,500
TOTAL	93,000	--	83,000

The team further recommends for the October-December period, a gradual phase out of relief food should begin. Beneficiaries numbers should be reduced by one-third from July-September figure. At this stage it is estimated that approximately 55,700 full rations would be required. Depending on local conditions at the time,

these rations could be distributed to all 93,000 beneficiaries or could be targeted to the most needy beneficiaries or divisions.

Full support to supplementary feeding programs should continue throughout both the July-September and October-December periods with decisions on the appropriate adjustments to rations being made at location level.

2. It is likely that some people in Samburu District will require food assistance beyond the period specified above (December 1993), although the precise number can not be determined at this point.

3. Some District officials have already shown an interest in Food-For-Work activities. This should be encouraged whenever practical. Road improvement appears especially suitable for FFW given the deteriorated condition of roads which is hampering food distribution. The World Food Program should issue guidelines on the management and implementation of Food-For-Work activities immediately, including ration scales, types of activities, etc.

4. Activities necessary to enable Samburu District to fully recover from the effects of the drought include:

   - restocking through acceptable, traditional methods or external purchases when necessary;

   - encouragement of alternative sources of income for these pastoral communities such as agriculture, aloe collection, crafts, etc.

5. No actions appear necessary to encourage displaced persons to return. Once conditions are suitable, these people are expected to return spontaneously.

6. Large numbers of animals have died and large tracts of good grazing ground rendered useless due to outbreaks of East Coast Fever and trypanosomiasis. This issue should be urgently addressed.

7. School feeding programs need to be coordinated and upgraded.

8. To deal with the severe problems constraining tertiary transport especially in Baragoi and Wamba Divisions, the following should be done immediately:

   - District Famine Relief Committees should approve higher rates per ton/kilometer if necessary to encourage private transporters within the approved limits. Increases greater than 10 % can be discussed with WFP\CARE Headquarters.

   - additional vehicles should be provided by CARE or the district government if private transporters refuse to carry food on certain routes.

   - Food-for-Work should be used to improve roads.

BARINGO DISTRICT

A. SUMMARY:

The team, comprised of five members, I.O. Nyaribo from Office of the President, Jane Sena from UNICEF, Sana A. Omer of UNDP, G.G. Mwangi and G. Mahmud of WFP. The team visited the district from June 21 - 26, 1993. In this report the past thirty days refers to May 93 and the previous three months refers to the period of February to April 1993.

Baringo district has received a good amount of rainfall during the first five months of 1993 . During that same period the rainfall has had a positive impact on the water sources. Vegetation and pasture in most areas of the district have shown considerable improvement. No cases of drought related livestock mortality were reported. The rate of livestock sales was reported to be normal in most parts of the district. Due to delayed long rains planting was done late but nevertheless, the crop under cultivation is doing fairly well. Traditionally farmers in the arid areas of the district do not plant during the short rain season and the last harvest was August 1992 which was very poor. 15% to 20% of the population are agriculturalists, 40% to 50% are pastoralists and 25% to 30% are agro-pastoralists in Marigat, Mogotio, and Kabartonjo. A slight influx of people in anticipation of relief food has been noted in some settlements.

The nutritional status of children under five is fairly good . No high rates of malnutrition were reported and no micro-nutrient deficiencies were observed. There were incidence of diseases such as malaria and diarrhoea.

It was noted that food commodities were scarce and their prices were comparatively high in relation to affordability by the local population. Relief supply to the district as well as distribution has considerably improved after the Feb assessment due to enough supply under the drought program. Relief food has been shared among an extremely high number of population compared to planned number of beneficiaries. The official ration has not been maintained thus there was very little impact on the recipient. It appears that at the district level there are difficulties to distinguish between the drought affected population and those affected by socio-economic factors.

Although the drought indicators showed slight improvement the pastoralist areas have not fully recovered. As the district is still in need of food assistance the team recommends relief for July - September 1993 at 50% WFP ration scale, members expressed different opinions because the factors related to drought could not be differentiated from other hardships. Indeed there was no conclusion about the population figure but two recommended figures were arrived at.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Rainfall in Baringo District was reported to be higher than normal in the previous three months while it was normal in the past thirty days. The distribution of rainfall was fairly uniform except in Marigat Division, Makutanai Location of Tangulbei, Lowiet Location of Nginyang, and Kaibos Location of Mogotio Division. Parts of the district in both high and low-lands areas experienced light and uneven rains during the month of June 1993.

Water Sources

Water sources in the district are mainly rain water catchment in dams and pans. Boreholes, the Kerio River and natural lakes are the other sources of water. In the western parts of Baringo there are few springs which are flowing in to the Kerio River. Due to good rainfall the water sources were normal in the past three months as well as the past thirty days. Low water sources were reported, however, in Makutanai and Tangulbei Locations due to low rain received.

Natural Vegetation and pasture

The vegetation and pasture in both highlands and lowlands were normal in the previous months of February to May 1993. Vegetation has generally recovered in most areas of the district. In some areas pasture has not made significant recovery due to low bush vegetation which inhabits growth of usable pasture. The kind of vegetation seen in those areas is not considered edible by animals. For the period of the year Churo, Loruk and Chemoigat areas of Tangulbei were found to have poor or no vegetation because of less rains received.

Livestock Mortality Rates

No drought related livestock deaths were reported in the district for the last three months or past thirty days. The livestock mortality rates were reported to be stable. The number of death cases due to diseases was insignificant for the district. Most animal deaths were occurred during the drought period of 1991/92. During field visits it was noticed that animals had started calving although at a low rate. There was nonregistration system for animal births and deaths.

Livestock Sales

In the previous three months and the past thirty days, Livestock sales were reported to be normal. Due to market location there were higher number of livestock sold in Mogotio and Marigat market places but the animals offered for sale were not only from those divisions.

The prices of livestock has gone up after the short rain last year and are still selling at higher rates.

Crop Condition

The quality and quantity of crops under cultivation in the small irrigated plots is normal while crops under rainfed agriculture are showing sign of water stress due to inadequate precipitation. The long rains came late, were erratic and inadequate in Marigat Division, parts of Tangulbei and Mogotio Divisions. It is worthy noting too that crop production is a very small proportion in the livelihood of the pastoral communities in the ASAL areas of the district. The following table shows the Hectares under cultivation for three major crops in the district. No data for the previous production or expected production were available.

TABLE

	1992 (HA)		1993 (HA)	
Crops	Targeted	Achieved	Targeted	Expected*
Millet	3050	2736	3500	2411
Maize	19300	15024	16900	15600
Beans	8575	7913	8250	6879

Source: District Agriculture Officer's Report

* In view of the fact that farmers did not achieved the targeted hectarage in 1992, and the erratic rains in first part of 1993, they tended to expect less.

Harvest Levels

Harvests for both cereals and legumes usually occur between August and October. The situation on harvest level therefore remain as per last assessment in February 1993.

	1991 (mt)	1992 (mt)	Decline(mt)	% Declined
Maize	30,327	29747	580	2
Millet	1967	1229	738	38
Sorghum	176	62	114	65
Beans	4650	4273	377	8
Total	37120	35311	1809	5

Source: District Agriculture Officer, Baringo District.
Inter Agency Drought Assessment Report, February 1993

Employment

According to the District Employment Officer, ten or less percent of the district population is employed in the formal sector. The major employment sector is the civil service. A very small number of people are engage in hotel service in the tourist sector. No major job opportunities are found in the district. Some of the district population are engaged as casual laborers and petty traders but no specific data was available. The rest of the population is involved in either agriculture or livestock keeping or both.

Displacement of population

A slight influx had been noticed in few a areas during the period 1991/92. The recent movements were inter divisional migration due to traditional nomadic character of the people especially searching for pasture and water. Some displacement cases were reported in Mogotio Division.

Changes in Food Consumption

Consumption of legumes, oil, meat, milk and blood, wild food, cultivated fruits and vegetables were considered to be less than normal for the period of the year. The lower consumption of these food commodities is due to the non- availability or inaccessibility to purchase. Cereal consumption levels which was rated more than seems to be normal due to relief supplies. It was estimated that 25% of cereals and 50% of legumes were from the drought relief program. Consumption of oil is estimated to be less than 25% supplied by drought relief.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Nutritional data were made available except for Salawa Location run by the Salawa Catholic Mission. Discussions held with the villagers during the field visits, gave the impression that the malnutrition levels were minimal. According to the Sister-in-Charge of the MCH clinic at the Salawa Catholic Mission, the malnutrition rates go up during the planting season in April-May due to food deficits in the family stock. Six malnourished children were admitted in the district hospital during the time of the visit. Close monitoring showed that most cases of malnutrition were associated with diseases or occurred in very poor families. No micro-nutrient deficiencies were observed during the field visit but several incidences of malaria were reported in most divisions and diarrhoea in some pockets of the district.

Supplemental Feeding Programs

Currently no supplemental feeding is going on in the district. A sample survey should be done in drought affected areas which have a considerable number of malnutrition cases e.g. Marigat, Nginyang and Tangulbei Divisions.

Therapeutic Feeding Programs

There is no therapeutic feeding program in the district but the hospitals and health centers can be assisted with TFP where severe cases of malnutrition are admitted.

Incidence of Disease

No information was made available from the district hospital or from any other health center,. but during the team's visit to the field, the community reported high numbers of cases of malaria, diarrhoea and coughing.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

From the data collected from the district there have been increases in food prices during the year 1992/93. From general observation food commodities are very expensive and scarce if available in rural locations. Basic food commodities are only available in town and trading centers. Fresh and processed food supplies are from Nakuru and elsewhere. Livestock prices were reported to be very high. The impression the team got from those interviewed, most households do not have the capacity to buy their daily needs due to lack of income sources.

TABLE 3: PRICES OF MAJOR COMMODITIES

	JUNE 92	SEPT.92	DEC.92	MARCH 93	MAY 93
MAIZE	11.50	10.50	8.00	10.00	12.00
BEANS	15.00	10.00	11.00	15.00	22.00
OIL (LITER)	47.50	72.50	83.30	92.70	100.00
COW (KG)	34.00	34.00	34.00	50.00	50.00
GOATS (KG)	40.00	40.00	40.00	60.00	60.00

NCPB Purchases and Sales

There are three NCPB stores in operation: Kabarinet, Marigat, Kimalal and in Nginyang is one under construction. Data were made available only from the Marigat depot while data from Kabarnet and Kimalal depots were not available. Due to time constraints, Kimalal Depot was not visited. During March - May 1993 the Marigat depot sold 453.69 mt of white maize, 2.79 mt of beans and 13.05 mt of rice.

Rainfall

Baringo District received fairly good amount of rain starting from October 1992 and continuing up to February 1993. This prolonged rain greatly helped rainfed agriculture,

provided enough water for irrigation and growth of pasture. The unexpected rains in January and February this year followed by the long rainy season improved water reservoirs. Dams, pans and boreholes have enough water to last up to short rain season even without further rain.

RAINFALL MEASUREMENT
JAN. - MAY 1993

STATION	JAN. (MM)	FEB. (MM)	MARCH (MM)	APRIL (MM)	MAY (MM)
KABARNET	55.3	57.9	13.7	7.1	10
KABARTONJO	168.1	NIL	NIL	81	191.1
POI	182.7	NIL	NIL	89.8	NA
OSSEN	150.3	104.6	104	46	NA
CHEPLAMBUS	106	65	NIL	NA	NA
ESAGERI	110.4	145	NIL	37.1	NA
KABIMOS	590	265	NIL	43.7	NA

E. RELIEF FOOD DISTRIBUTIONS:

General Rations

Drought relief was started in this district in July last year and it is continuing. A total quantity of 3267.6 mt of cereals, 276.97 mt of beans and 107.32 mt of oil has been distributed last drought assessment in February 1993 recommended 57,900 affected beneficiaries at 50% WFP ration scale, however in reality food has been shared among 200,00 people (according the District Commissioner) distribution was too general irrespective the victims were due to drought or other socio-economic factors. As a result the right beneficiaries were not able to get recommended ration. On the ground it is very difficult to differentiate the drought affected and poor people, both categories are needy. Ultimately drought relief had very little or no impact on the recipient. The relief committees from divisional level to the village level should reactivities. Drought relief has been given to schools because they are not getting supply from the school feeding program.

Supplemental Rations

This district has not received any supplemental feeding from any sources.

Commodities in NCPB Depots

In Kabarnet depot, only 2.34 mt of relief oil were found . There were 38.6 MT of WFP yellow maize in Kabarnet depot. A sizeable quantity of white maize and finger millet

were found in Kabarnet depot but the exact figures were not made available. In Marigat depot 0.87 mt of yellow maize, 2148.93 mt of white maize, 23.76 mt of beans were stored for commercial purpose. Current stock of drought relief in Marigat NCPB depot was only 25 mt of Y. Maize. Kimalal Depot only keep food for commercial purpose. No relief food were kept in Kimalal Depot.

Only limited information was available on ongoing and planned recovery/development activities as follows:

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES

Project Title	Implementing Agency	Funding Agency	Project Coverage	Activities
BSAAP (Baringo Semi Arid Areas Project)	MOALDM (GOK)	World Bank	Marigat, Nginyang, Tangulbei Divisions	Agricultural and Livestock assistance
Food Aid to core Activities in ASAL areas.	MLRRWD (GOK)	WFP	As above	Soil and Water conservation, Infrastructure, Livestock, Afforestation, Welfare.
School Feeding Program	MOE (GOK)	WFP	ASAL Areas of the District	Mid-day Meals to Pre and primary school Children.
KLDP/ASAL (Kenya Livestock Development Project)	MOALDM (GOK)	EEC	Marigat, Nginyang, Mogotio, Kerio Valley	Livestock improvement and bee keeping.
LDP (Livestock Development Project)	MOALDM (GOK)	FINIDA	Kabarnet, Kabartonjo, E/Ravine, Tenges.	Livestock improvement and marketing.
PIDP (Pastoral Integrated Development Project)	MLRRWD	World Bank	Marigat, Nginyang, Tangulbei, K. Valley	Provision of Pastoral Water
KFFH Food Security	KFFH	KFFH/ Donors	Nginyang, Tangulbei	Food Security/ Agricultural Activities
KVDA (Kerio Valley Development Authority)	KVDA	GOK	Marigat and K. Valley	Irrigation, Afforestation, Bee keeping.

Source: District Officer, Baringo District.

It would be advisable to enhance the above existing activities so as to minimize the issue of relief food to the drought affected population. This may entail introduction for FFW activities.

G. RECOMMENDATIONS:

1. The team recommends that further investigation should be carried out to determine the drought affected and those affected by other socio-economic factors.

   According to the District Administration the actual number of recipient is 200,000. Due to this reason members of the team recommended different number of beneficiaries at 50% WFP ration scale for July-September and , October-Dec. periods.

   Three members of the team recommends drought assistance for 57,900 people (February Assessment population) for the period from July- Sept. 93. While for the period October - Dec. 93, the vulnerable population should be targeted. Two members recommend 95,000 people at the same 50% WFP ration scale for July - Sept. 93 then scale this down to a targeted population after another survey in Oct. (See following page for rational for each figure).

2. Accountability and monitoring of drought relief should be intensified through-out the district to ensure food has reached the targeted beneficiaries.

3. Continuous monitoring should be done during the period. The team felt the need of a WFP monitor on the ground as long as the relief assistance is going on.

4. There should be close monitoring and analysis of malnutrition indicators to ensure that appropriate and adequate information is made available.

5. Food commodities as stipulated in the School Feeding Program should be made available.

6. The ongoing development activities should be enhanced and FFW component be included wherever possible.

Explanation for 57,900 (Feb. Assessment figure):

1. Good rainfall results enough water sources for cultivation as well as for livestock and helped to grow good pasture and vegetation.

2. Major livestock death occurred during second half of 1991 and first half of 1992. The recovery process had already started since Oct. 1992. No livestock deaths was reported. Animals are calving or already calved.

3. The areas the team members visited crops under cultivation is showing signs of a good harvest.

4. The relief supply to 57,900 people was shared among 200.000 beneficiaries. This shows that relief food has very little or no impact. No death cases were reported due to starvation.

5. People have their own strategy of coping with the situation in the period where there is no food.

6. Sufferings was not due to drought effects but due to poverty, regular movement of pastoralists.

7. Although nutritional data was not available but direct interviews with locals and district administration didn't indicate malnourished cases.

When all indicators are showing positive trends, it is more logical to decrease the number of drought affected population. Since there is no reliable statistics to determine the actual beneficiaries, part of the team members decided to stick to the same number recommended by Feb. Assessment.

Explanation for 95,000 beneficiaries:

1. During February assessment the figures arrived through guess work.

2. Though the district has shown traces of recovery due to a good rainfall, livestock needs gestation period of calving and full recovery.

3. Farmers in both high and low land areas planted the seed during seasons which were unusual for the district; hence poor harvest is expected. Further, farmers do not plant during the short rains.

4. There is great lack of food commodities in the markets of the district. An example is Marigat, Tangulbi and Kabarnet. Drought is one of the causes for this lack of food. Affordability is also a problem.

5. NGOs on the ground (Catholic Diocese, WVI and the Baptist Church) have all observed and supported increase of number of beneficiaries.

6. There is as yet no means of differentiating the drought affected population from those affected by poverty.

7. The figure of 95,000 was arrived at while in Baringo and it was accepted fully by consensus. This was after discussions with the community, data available, observations...etc. At a meeting at Gigiri with all team members, historical data was distributed to members, details which should have been given before the field visits were embarked upon.

LAIKIPIA DISTRICT

A. SUMMARY:

The team was comprised of five members: I.O. Nyaribo from Office of the President, Jahe Sena from UNICEF, Sana A. Omer from UNDP, G.G.Mwangi and G. Mahmud of WFP. The district was visited from June 26 to July 01, 1993. Mr. Mohamed A.G. Musa and C. Maina Wa Karioki contributed a lot as observers to carry out the drought assessment in the district. The past thirty days refers to the month of June 1993 and the previous three months refers to the period March - May 1993.

Laikipia District received poor rainfall during the long rains season, although the short rains continued through February 1993. The prolonged short rains had a positive impact on water sources. Natural vegetation and pasture improved as a result of the short rains but the situation is changing drastically due to inadequate precipitation. Livestock mortality rates were reported to be normal while livestock sales were stabilizing. Currently the crop condition is fair but showing signs of water stress. The last completed harvest was poor and if no rain is received within the next few days the expected harvest will be very poor or total crop failure will result.

The nutritional status of children under five years of age has slightly improved compared to the same period of last year. But there are some pockets in the district (Mokogodo Division, Sosiani Location of Rumuriti Division) which still show high figures of malnutrition. The incidence of disease is increasing compared to the same month last year, particularly malaria and URTI (T.B.).

The district is food deficient and relies mainly on food supplies from neighboring districts. 70% of the population is pastoralist and depends on livestock. The overall drought situation has slightly improved but not yet reached the recovery stage. Therefore, there is a great need for continued relief supply for an estimated 66,500 drought affected beneficiaries for July - September 1993.

B. CURRENT SITUATION:

Rainfall Trends

During the past thirty days it was observed that rainfall was lower than normal while in the previous three months it was normal. Though available rainfall data did not clearly reflect the situation in the whole district, it was noted that rainfall was generally erratic. Areas like Mukogodo Division, Daiga Location and Ngobit Location of Central Division were reported to have received poor rainfall for this period of the year.

Water sources

Water sources in the district for the past thirty days and the previous three months were found to be normal. Mukogodo Division, parts of Central and Lamuria Divisions however, were reported to have low water levels due to little rainfall received. Nanyuki River and the springs from Mount Kenya are the permanent sources of water but the area covered is not much. According to the DWE there are 121 boreholes currently in the district and all of them are functional. Current water levels in the district can last up to the next short rains season in October.

Natural Vegetation and Pasture

Generally, conditions of vegetation have improved in the district due to the short rains received early this year. In the past thirty days vegetation and pastures were remarked as drier and more barren than normal as the amount of rainfall received during this period was negligible, "whereas in the three previous months it was normal due to the good rains received." There are areas with unusually poor vegetation for the periods of the year. (Mukogodo Division, parts of Central Division and Lamoria Division). However, according to the DLPO the grass is enough to feed the animals for at least three months.

Livestock Mortality rates

In view of the fact that there has been general improvement of natural vegetation and pastures, livestock mortality rates have reduced considerably. In the past thirty days and the previous three months the number of livestock deaths was normal. The deaths were reported to be rare and almost all deaths occurred due to some disease.

Livestock Sales

Since most of livestock was lost during the drought period of the past two years, livestock sales have been lower than normal in the previous three months and returned to normal in the past thirty days. The reason for low sales is due to favorable conditions for restocking. However, this excludes private ranching areas.

Crop Condition

Crop production is mainly concentrated in small pockets of central Rumuruti, Lamuria and Ngarua Divisions comprising about 1.7%. The rest of the district is involved in livestock and game ranching. Most of the district is in a rain shadow area and not fully exploited for crop production. Recurrent crop failure and low output are characteristic of the subsistence small scale farmers who have converted ranching plots to crop production areas.

As the long rains were late, the early planted crops failed to germinate and farmers replanted when the rains fell in May. Crop germination enjoyed enough precipitation but the rains have become less frequent and erratic. The crops, both cereals and legumes, are currently showing signs of water stress. If rains do not come in the next few

days there may be partial or total crop failure. Crops planted in the few irrigated plots (Salama Location of Rumuriti Division, Lamuria Location of Lamuria Division and parts of Central Division) are doing well and harvest is expected to be normal. Destruction of crops by wildlife (mostly elephants) was reported in some pockets of Rumuruti and Ol-Moran in Ngarua Division.

Harvest Level

The main harvest was realized in September - October for legumes and November - December for cereals. These harvests were reported to be lower than normal in the western parts of the district while harvest levels were unusually poor in the east. If the current spate of inadequate and erratic rainfall prevails, the harvest levels will be adversely affected and may even lead to total crop failure in most areas of the district.

Employment

Out of a population of about 286,000, less than 10% of household heads are employed in the formal sector. There are a negligible percentage of people involved in informal employment in the district, mainly around the towns of Nanyuki and Nyari (e.g watchmen, herdsmen, etc.). Other than farming and livestock keeping, there are few employment opportunities.

Displacement of Population

It was noted that due to the pastoral nature of a large part (70%) of the community, there is a movement from one place to another within the district in search of pasture and water. No influx or movement out of the district was reported as a result of drought.

Changes in food consumption

During discussions with local people during the field visits it has been noticed that the consumption of cereals, legumes, milk, blood, cultivated fruits and vegetables are normal for the period of the year. Oil, meat and wild foods are reported to be less than normal for the same period due to lack of affordability and low supply. Total consumption of cereals provided by relief was estimated to be 25%, oil and legumes were less than 25%.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment

Although the general condition of children in Laikipia District is improving, there are some pockets in the district which still need more attention. Doldol Location, Ewaso (Mukogodo Division), Sosian (Rumuruti Division) and Olmoran (Ng'arua Division) are some of the areas in the district which have high rates of malnutrition. According to the data compiled from the district hospital, Mukogodo Division had the highest malnutrition rate of 36% W/A (CHANIS), Ng'arua Division 9%, Central Division 6%, Lamuria 2%, Rumuriti 7%, last year 1992 (Please see Table 1). Looking at the data compiled (Jan.

to Feb. 1993), Mokogodo Division 19%, Ng'arua 7%, Rumuruti 6%, Central 4% and Lamuria 4%. Comparing the two year's data, the malnutrition rates seem to have declined possibly due to the rain that the district received early this year. Health conditions have also improved due to milk production.

TABLE 1
CHILDREN WEIGHED IN LAIKIPIA DISTRICT
(JANUARY - DECEMBER 1992)

DIVISION	Under Weight	Kwashiorkor	Marasmus	Total Attended	Malnutrition rate (%)
Central	1034	51	39	17431	6
Mukogodo	1367	4	14	3802	36
Rumuruti	371	38	57	7021	7
Ng'arua	1627	21	31	17987	9
Lamuria	51	4	7	3293	2
TOTAL	4450	118	148	49534	

Source of information: District Nutritionist (MOH)

Table 2

CHILDREN WEIGHED IN LAIKIPIA JANUARY - FEBRUARY 1993

DIVISIONS	UNDER WEIGHT	KWASHI-AKOR	MARAS-MUS	TOTAL AMEND-ED	MALN. RATE (%)
CENTRAL	249	20	15	6650	4
MUKUGODO	39	4	18	318	19
RUMURUTI	124	4	14	2320	6
NGARUA	585	6	17	8355	7
LAMURIA	39	-	-	1066	4
TOTALS	1036	133	64	18709	

* From the discussion held with the nurse in charge of Doldol Health Center in Mukogodo Division, he indicated that the possible reasons for high malnutrition in Mukogodo Division was due to the occurrence of disease e.g. diarrhoea, measles. He stated that Mukogodo was one of the divisions affected by drought.

During the team's visit to most affected areas, most of the children observed looked moderately malnourished, apart from Sosian (Rumuruti Divsion) and Doldol (Mukogodo) where some children looked severely malnourished.

Incidence of Diseases

Comparing the occurrence of diseases in Table 3 with the same month last year, the data show a significant increase of measles, malaria and URTI, while diarrhoea, skin diseases and eye infection show a slight decline. Anaemia remained static. Generally the distribution of health facilities in the district is poor, people walk very long distances in order to get treatment. This is a major factor contributing to the poor nutritional status amongst the children in the district, since most people do not have access to medical care.

Table 3: INCIDENCE OF DISEASES THE SAME MONTH LAST YEAR (%)

DISEASES	MAY 92	MAY 93
MEASLES	0.2	1
ANAEMIA	0.1	0.1
MALARIA	13	17
DIARRHOEA	6	4
URTI	29	33
SKIN DISEASES	9	7
EYE INFECTIONS	3	2

Supplemental Feeding

The only supplementary feeding program in the district is carried out by World Vision at Sosian center (Rumuruti Division). Where they make porridge (millet) for under-fives. They have 49 children registered who look very malnourished. The Catholic mission at Mukogondo Division distributes dry rations (maize and beans) to children below 3 years through CRS but they intend to stop the distribution very soon for unknown reasons.

Therapeutic Feeding

Currently no therapeutic feeding program is going on.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Most commodities prices were quoted to be lower one month ago, with the exception of white maize which started to decrease from March 1993. Commodities such as sugar, wheat-flour and beans were scarce and, if found, with high prices. Prices of meat and milk were also high. There is an increase of livestock prices as compared to last year's price. Most of these commodities are locally available while some of them are obtained from neighboring districts (sugar, tea etc.). It is worth mentioning that the purchasing power of most of the locals is very low as the majority of them are pastoralist who have been affected by both drought and the general economic situation.

Table 4: Prices of Major Commodities - Laikipia

	June 92	Sept 92	Dec 92	March 93	May 93
Maize	13	15	15	6	8
Beans 90 Kg	900	1000	1200	1100	1400
Oil Liter	30	38	60	90	120
Cow (head)	1200	1400	1500	1600	1800
Goats (head)	600	700	800	900	1000

NCPB Purchase and Sales

There are two NCPB stores in the district. One is in Nanyuki at the district head quarters and the other is in Mukogodo. Commercial activities are mainly concentrated in the Nanyuki Depot. No purchases have been reported for the last two years. The commercial supplies are coming either from Kitale or from Mombasa. No beans, sorghum, millet were purchased or sold but a negligible quantity of rice has been sold from the NCPB Nanyuki depot as shown in Table 5 below.

Table 5: NCPB SALES (MT) MAR - MAY 1993

COMMODITIES	MARCH	APRIL	MAY	TOTAL
Y. MAIZE	39.50	49.94	362.88	452.32
W. MAIZE	31.86	18.00	28.17	78.03
BEANS	0.72	0.36	0	1.08
MILLET	0.32	9.60	0	9.92
RICE	5.42	14.15	5.32	541.35

Source: NCPB Nanyuki Depot

Rainfall

Although rainfall data was made available, it didn't reflect the position on the ground. Whereas the data indicates that there is fairly good amount of rains received, the on-the-spot check showed clearly that the district was generally dry in the past thirty days. Since data was not reliable (different figures from different reports and with many areas missed), it is difficult to come up with the mean average of the district. However, the rains were sufficient for good vegetation and pastures which improved the livestock conditions and water sources.

E. RELIEF FOOD DISTRIBUTIONS:

General Rations

Relief supplies were suspended in March 1993 due to transport problems which resulted in unutilized stock at the district level and resumed from May 1993 after the distribution of the old stock. The District Tender Board Committee (DTBC) solved the problem by awarding an official transporter for relief food. Distribution of relief was not done carefully. Food has been sold or snatched but there was no documentary evidence to prove it. Beneficiaries complained about discrimination in food distributions. During the visit it was not possible to collect correct information about the food received and distributed. Contaminated relief food has been found in the NCPB store and some of this food was sent for distribution. No oil has been received for the last two months after they exhausted all their stock. No reliable accounts for the relief food were available in the NCPB store for the previous months, although very recently registers for relief commodities were introduced. Although there should be active famine relief committees from divisional level down to village level to review the drought situation and food distribution. There are no committees at the divisional or village level. Irrigation projects and other community development activities through Food for Work, can substitute relief. The beneficiaries expressed their interest in involving themselves in FFW. It is very important to target the beneficiaries to maintain the ration scale and have a positive impact of relief.

Supplemental Rations

Supplemental feeding is carried out by World Vision but no details were available.

Commodities Stored in NCPB Depots

It was not possible for the team to find out the current stock levels of the commodities in Nanyuki Depot for commercial sales. The depot has three warehouses with approximately 20,000 MT of capacity, of which one warehouse of 4,500 MT capacity is used to store WFP relief food. On June 28, 1993, 84.7 MT of yellow maize and 33.3 MT of beans from relief were in the store.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

There are a number of ongoing development activities jointly undertaken by the GOK and donor agencies. These activities include soil conservation, laikipia rural Development Program, improved domestic water tanks and pit latrines, immunization program and a school feeding program. Information on funds, sources of funding and number of beneficiaries were not available.

On the other hand a number of recovery/ development activities have been planned including the following:

1. Water development, including rehabilitation of dams, construction of boreholes and dams.

2. Rehabilitation of roads.

3. Improvement of agriculture by providing inputs and introduction of modern farming techniques.

4. Livestock improvement activities e.g. breed improvement.

G. RECOMMENDATIONS:

1. Relief supplies should be continued for 66,500 beneficiaries at 75% WFP standard ration scale for July - September 1993. The divisional allocation of population is as follows:

   Central 10,000, Mukogodo 20,000, Lamuria 4,000, Ngarua 15,500, Rumuruti 17,000. Depending on the improvement of the environmental indicators and livestock production, relief supply to the district can be reviewed for a further period.

2. The supply of the monthly allocated relief to the district should be regular and transportation to the distribution centers should be well coordinated.

3. NGOs should not be involved in transportation of relief, they should receive food at the distribution points, distribute and monitor the distribution, and report to the DFRC.

4. Targeting of beneficiaries and monitoring should be enhanced. Famine Relief Committees should be reactivated up to the beneficiaries level.

5. Food- For-Work activities should be planned to cater for community-based projects e.g. potential irrigation areas for cultivation.

6. There should be distribution of supplementary doses of Vitamin A, Iron and Vitamin C for children in the drought affected areas.

7. There should be concern to improve accessibility to health care in the rural areas, particularly in Mukogodo, Rumuruti and Ngarua Divisions.

8. It is very important to reinforce primary health care programs, particularly to address malaria, TB, and diarrhoea prevention.

9. A survey should be carried out to determine malnutrition rates of some drought affected areas specially in the interior where children are not reached.1

TANA RIVER DISTRICT

A. SUMMARY:

The team comprised of Valerie Wambani (GOK), Robert Palmer (UNDP), Chidi Ogbonna (WFP), D. M.Mutiso (OP), visited Tana River from 4 - 9 June 1993 covering four divisions (Bura, Madogo, Galole, Garsen) out of five in the district. The team could not visit Bangale Division due to time limitations. The "last thirty days" in this report refers to the period May 1 to 31, 1993. The "previous three months" refers to February to April 1993. This assessment is as a result of the recommendations made in the first assessment report in February 1993.

According to projections from the Statistical Office, the district has an estimated population of 180,000 persons with an area of 38,782 sq Km. About half of the population depend on agriculture while the other half is composed of pastoralists. The Tana River forms the major area for concentration of agricultural activities. The extent of seasonal flooding of the River Tana also determines the intensity of the agricultural activities. Some parts of the district, especially in Garsen Division, are dependent on rain-fed agriculture.

Hola Irrigation Scheme, designed to support both local and export agricultural consumption and livestock has failed due to lack of water, and has been abandoned since 1989. On the other hand the Bura Irrigation Scheme is currently working at one eighth of its capacity. These problems have resulted in a serious decline in food production. About 1,500 out of about 4,000 dependent on these schemes have been rendered destitute.

Although there are very few recorded cases of malnutrition in health facilities, the team however counted at least 8 malnourished children in each of the various communities visited, especially amongst the pastoralists. It is estimated that between January to April 1993, 19 to 27% of the children were underweight. UNICEF is currently conducting a nutritional survey in the district.

The recorded rainfall within the period is as little as 1.8 millimeters in places which would normally receive about 89 millimeters. Vegetation and pastures improved in the district due to the prolonged long rains. This does not mean that it was prevalent at assessment time: vegetation and pastures could survive on retained moisture.

The community is heavily dependent on relief supplies. Since the last assessment mission the district has been feeding about 55,000 people, far more than the recommended number of 30,000, thereby drastically reducing the WFP recommended ration scale. Book keeping of the famine relief supplies is poor at all levels requiring WFP to introduce a simplified, standard uniform format. The district is so large that the

WFP monitor on ground is greatly hindered by the unavailability of active transportation facility and this is essential for proper accountability. Public transport, which most times is used to move relief commodities to most distribution centers in the district, is either

difficult to come by or impossible.

Food-For-Work possibilities should be explored to encourage a gradual switch to self reliance.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

According to available data from the district, the short rains October - December 1992 extended until the end of February 1993, which temporarily improved the vegetation during that period. The expected long rains which should have started in March failed. Mean rainfall reported for the month of April in Bura Station during the long rains was 11 millimeters.

Water Sources

The Tana River, which is the primary source of water in the district, has not been of great assistance as there was no overflooding due to the failure of the long rains in places like Mt. Kenya which is the source of River Tana. Again, the construction of dams up stream has also contributed to the lack of floods of the river as crop production along the Tana River is tied to seasonal overflooding.

There are a few water holding points in the southern parts of the district, resulting from the previous rains which are presently serving the pastoralists for watering the animals as they move them along in search of pastures.

Natural Vegetation and Pastures

The failed long rains have resulted in poor vegetation in areas like Madogo, Bangale, parts of Galole, Garsen and Bura Divisions. However pasture condition towards the southern part and along the Tana River is better than the north arid section of the district.

Livestock Mortality

Livestock mortality has reduced in places like Madogo, Galole, Mbalambala and Bura since the last report as the animals are being moved southward in search of pastures and water.

Livestock Sales

Livestock sales increased as of April 1993 following the failure of the expected rains. The local price survey indicate that camels are sold between KSH 12,000 to 15,000, Cows - KSH 2,500 - 5,000, Goats - KSH 600 to 1,400, Sheep - KSH 600 - 1000. There was a price increase in June owing to the fact that the people with purchasing power remained

constant whereas the rest were on famine relief. Interviews in the community proved that animal milk production has substantially dropped because of the calving period.

Crop Conditions

The district received 71 MT of seeds, composed of maize, beans, cowpeas, sorghum and upland rice for planting during the 1993 long rains. Most of the crops planted in irrigated and rain-fed areas dried up due to moisture stress as the rains failed. This was very prevalent in areas around Bura that recorded low level rains. This has further worsened the food situation forcing the local communities to be more dependent on relief food commodities.

Farmers have started harvesting cash crops such as mangoes and bananas which are readily available in the local markets. Mangoes of about 200 to 300 grams sell for KSH 2 - 3 while a bunch of 10 sizeable fingers of banana will sell for KSH 6.

Previous Harvest Levels

There has been a continuous decline in the area under cultivation, as well as in the production of crops. The failure of the expected long rains, followed by the loss of the planted seeds have been the major factors. The crop yield projections for 1993 is shown below:

Commodity	Target	Planted	Yield Estimate
Maize	2.456.0 HA	523.0 HA	523 MT
Pulses	726.0 HA	318.2 HA	159 MT
Sorghum/Millet	30.7 HA	18.0 HA	11 MT
Uplands Rice	544.0 HA	120.0 HA	180 MT
Onions	77.5 HA	18.7 HA	187 MT
Tomatoes	185.7 HA	51.0 HA	510 MT
Kales	164.2 HA	46.7 HA	467 MT

The previous year's harvest was poor for all listed commodities due to low seasonal flooding and insufficient rains.

Employment

According to the district authorities, the employment rate in the formal sector is just about ten percent. Most households depend on peasant farming and cattle rearing. The bulk of salary earners within the district are government employees and a few employed by NGOs and development project schemes.

Displacement of Population

Data available from the DC's office showed that displacement of population within the district has been on the increase over the past two/three months. Insecurity resulting from cattle raiding and armed banditry along the roads compounded with failure of the long rains has forced an influx of many people originating from other districts in the north eastern parts of the country to the district in search of security, good pastures for animals and food as indicated below:

Table 2

No. of Displaced	Places of Displacement	Origin
20,000	Waldena	Wajir
25,000	Witu	Within Tana River
10,000	Mbalambala	Garissa
10,000	Garsen	Somalia
20,000	Kone	Kitui, Isiolo
		Other districts
85,000 [1]		

This sudden upsurge in the number of the displaced has created multiple problems for the authorities and local population. Competition for grazing land has increased. Additionally, there is also competition for the scarce food, water and other natural resources. According to the DFRC, the food which is meant for 30,000 people is currently being used to feed an estimated population of 85,000 beneficiaries (60% displaced and 40% resident population). This has resulted in other complications associated with poor nutritional intake.

The displaced move along with their thatched housing structures which they can easily erect within a week or so. Since security both for food and protection is thought to be found around big towns and settlements, the displaced tend to settle around these places while a few young men wander around with the animals searching for pasture.

Changes in Food Consumption

Consumption of cereals and legumes has increased between 1992 and 1993. The famine relief commodities provided by WFP and that from African Muslim Agency cover about twenty percent of the cereal intake of the district. Fats and oil are not available in large quantities and could not be afforded by most people. Information from the District Agricultural Officer states that most animals are calving has declined, making it unavailable. Mango and banana intake have increased as the crops are being harvested.

[1] (Included in the district's population of 180,000

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment

Data collection in this district is hindered by impassable roads during rainy seasons as well as an unstable security situation in various parts of the district. According to the CHANIS data available from Hola District Hospital, 16 -21% of the children under five, who were measured were underweight during the period January - April 1993. The nutritional levels have not changed much since the last assessment and it is worth nothing that this information is based on district averages with only 16 out of 44 health facilities reporting monthly data.

Supplementary Feeding Programs

The Catholic Mission continues to provide supplementary feeding in Galole and Bura Divisions with assistance from UNICEF. In Galole Division, the total number of beneficiaries in March and April were 2,950 children under five years of age and 254 pregnant mothers, whereas Bura Division registered 2,266 children and 622 pregnant mothers.

About 48% of the registered children measured in Galole Division fell below 90% W/H. The corn soya milk for June distribution was already infested in April and unsuitable for use.

Therapeutic Feeding Programs

There is no therapeutic feeding program in the district.

Incidence of Disease

The disease pattern has not changed since the last assessment as malaria and respiratory infections are still the leading causes of morbidity. Information on vitamin deficiencies is almost non-existent because the Ministry of Health reporting forms collect this under the category "others". The immunization coverage is 65.2% based on the 1992 National Immunization Coverage Survey.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Price trends of white maize varied between KSh.12 and KSh.20 per kilo while beans, cowpeas and green grams were more or less static during the period May - December 1992. Prices of these commodities showed marked increases during the months of January - May 1993. The increase in prices is attributed to economic factors in the country especially in the transport sector because the district is heavily dependent on food supplies from other parts of the country. Current prices of vegetables, cereals,

beans, sugar, edible oil are up by 60% compared to the general price trend in most parts of the country. Prices of fruits such as mangoes and bananas are lower than in most parts of the country. Commercial foods are available in the market. The price of beef is KSH 40/= per Kg.in contrast to goat meat which is selling at KSH 60/= per Kg, about 30% lower than in most parts of the country.

NCPB Offtake

NCPB has recorded no purchases of food commodities for the months of March, April and May 1993. Sales of yellow maize were 536 MT for the month of March, 1,854 MT for April and 519 MT for May 1993. Virtually all commodities such as beans, maize, rice and green-grams are brought by traders from other parts of the country.

Rainfall

In Hola Division the rainfall for the months of January to May 1993 is 30.4mm in a period of 19 days while Bura recorded a mean of 25.7mm in 15 days. Rainfall data for 1992 was not readily available. These mean rainfall are by far less than what the district receive in a good season.

E. RELIEF FOOD DISTRIBUTION:

General Ration

The beneficiaries are heavily dependent on the relief food commodities and distribution is made to cover an estimated 85,000 beneficiaries, above the WFP specified targeted 30,000, thus reducing the prescribed ration scales. Consequently, the beneficiaries receive as low as about 25% of their due ration scale. In the month of May a total of 324 MT of cereals, 105 MT pulses and 22 MT of edible oil were distributed.

Considering the vastness of the district, its poor roads and transportation difficulties, the WFP monitor is being hindered from effective monitoring of the commodities. It is necessary that transportation arrangements be made as most distribution locations are not easily accessible.

Currently, the bookkeeping is not at its best in the visited distribution centers. In certain cases, it is difficult (if not impossible) for the selected food distribution committee to present receipt and disbursement figures. This problem needs to be addressed immediately with a view to putting an efficient distribution system in place.

Supplemental Rations

The Catholic Mission in May distributed 6.47 MT of beans to a supposed 3,000 beneficiaries. 16.7 MT of UNICEF CSM for supplementary feeding is infested, thereby halting its distribution.

Commodities Stored in NCPB Depots

CARE's main store in Bura Division as of June was 97.3 MT of yellow maize, 9.7 TM edible oil and 36.2 MT beans. The CARE representative present at the time of the visit could not ascertain for what period the stock covered. This calls for improved communications between the head offices and the district authorities.

F. RECOMMENDATIONS:

1. Based on the visited areas affected by the drought situations, interviews, data collected and observations, the district should continue to receive famine relief supplies to 60,000 beneficiaries for the next three months (next assessment period) when the DFRC reviews the situation.

2. WFP Food Monitor in the district should be provided with adequate transport facilities to enable him perform his duties more effectively and efficiently.

3. WFP should introduce a simplified, standard format for monitoring relief commodities.

4. Communication relating to monthly allocations, delivery schedule and other logistical arrangements should be improved between Nairobi and the district.

5. There is need to undertake a study with a view of gradually introducing food for work V in the district.

6. The district authorities should go by the official figure of beneficiaries and begin targeting the vulnerable if faced with the situation of more beneficiaries and less food.

7. Supplementary feeding should be extended to cover all needy parts of the district based on the results of the ongoing UNICEF Nutrition Survey.

8. The drought situation in the district should be reassessed in the next three months.

WEST POKOT

A. SUMMARY:

The team, comprised of Lydiah Andeka of UNICEF, Michele McNabb of USAID, Adelaide Muraguri of the Ministry of Health, Daniel Obolla of the Office of the President and Gabriel Omondi of WFP, visited West Pokot District from June 24-29, 1993.

The general situation in West Pokot has significantly improved since the February drought assessment. Good rainfall since the beginning of the year has improved pasture conditions and led to increased livestock births. The nutritional status of children under five years has also improved. The percentage of underweight children seen in MOH clinics from January-May 1993 was 15.1%, compared with 17.5% and 18.6% for the corresponding months of 1991 and 1992. Last season's long rains produced a higher than normal maize harvest in August-September 1992 of nearly 600,000 bags (54,000 tons), rather than a crop failure as reported at the time of the February Drought Assessment. The crop currently under cultivation was in good condition in May and the area planted had increased due to the availability of seeds under the Drought Recovery Program. However, rains were poor at the time of the assessment, causing some crop stress. The district continues to suffer from animal diseases and cattle rustling.

The team recommends suspension of relief food supplies to the district, effective August 1, 1993, and another assessment to be carried out in the month of November 1993 to review the food situation in the district. The team further recommends that the July food allocation should be distributed only to the hard hit areas of the district (e.g., Masol and Sekerr Locations of Sigor Division; Shalpor, Ptoiyo and Turkwel of Chepareria Division). NGOs should be fully involved in distribution and targeting of relief food.

The WFP district coordinator and the DFRC should organize a follow-up assessment to the five areas mentioned above (Masol, Sekerr, Shalpor, Ptoiyo and Turkwel) during the month of July. Recommendations, based on data collected using the Drought Assessment methodology, should be forwarded to the National Famine Relief Secretariat and WFP/Nairobi.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Rainfall in the district was higher than normal for the month of May. Although the onset of the long rains was delayed by one month, the total received for the previous three months (February, March and April) was considered to be normal due to the heavy rains in February. In Kapenguria, March-May rainfall was 150% of the long term mean with nearly 450 mm of the 550 mm recorded during the month of May. At the time of the assessment, rainfall during the month of June had been erratic. An area with unusually poor rainfall for the period of the year was Masol Location in Sigor Division.

Water Sources

Water resources have returned to normal in the district. Seasonal rivers provide water for many households, both from flowing water after rains and from wells dug in the river bed during other times of the year. New water sources are being constructed under the ASAL program, including the construction of sub-surface dams, boreholes and solar-powered pumping. Masol Location in Sigor Division was seen to have low water resources due to stolen spare parts for its water pump.

Natural Vegetation and Pasture

Vegetation during May was rated as normal due to the good rains. Over the previous three months, vegetative conditions were considered normal. At the time of the assessment, good vegetative cover was seen throughout the district, even in some of the semi-arid areas. This vegetative cover is likely to begin drying soon as the rains come to an end.

Livestock Mortality rates

Livestock mortality rates were considered higher than normal, with many reports of diseases. Contagious Bovine Pleuro Pneumonia (CBPP) and East Coast Fever (ECF) are widespread. Some areas of good pasture are currently unutilized due to the presence of ECF-carrying ticks. The regular movement of animals from the district to Uganda, where livestock vaccination rates are low, contributes to the presence of disease. The number of deaths due to drought was kept low late last year because households were able to move their animals to better pastures in Uganda before a crisis hit. Alale Division has suffered from large scale losses of goats due to disease, Suam Location in Kacheliba and Riwa Location in Kapenguria have had unusually high levels of livestock mortality due to disease.

Livestock Sales

Livestock sales were normal for the February-May period. There have been attempts to increase marketing opportunities in the district but many of these have failed. The frequency of cattle rustling discourages pastoralists from gathering their animals in market areas.

Crop Conditions

The 1993 long rains crop was normal during the month of May. Planting was delayed due to the late rains but the area planted increased. The area planted for maize was more than 18,000 hectares compared to 13,800 in 1990, 17,445 in 1991, and 17,500 in 1992. The distribution of seeds through the Drought Recovery Program has contributed to the high hectarage planted. At the time of the assessment, there were fears that the crop might be threatened due to a break in the rains. Germination of beans was reportedly low.

Harvest Levels

The general assessment of last completed harvest indicates a higher than normal cereals harvest in August/September 1992 but shows lower than normal for legumes in the same period. Available information indicates that 50% of the farms in areas that reported good harvests are hired and cultivated by people from outside the district. The commercial farmers normally export their surplus production to other districts or sell it to the NCPB.

The table below shows 1990-1992 maize production in the district.

Year	Division	Ha.	Prod. (Bags)	Yields/Ha (bags)
1990	Kapenguria	7050	246,750	35
	Chepareria	2580	41,288	16
	Sigor	2308	36,928	16
	Kacheliba	950	14,400	16
	Alale	900	15,200	16
	Total	13788	354,566	25
1991	Kapenguria	7575	378,750	50
	Chepareria	3950	79,000	20
	Sigor	3750	75,000	20
	Kacheliba	1130	22,600	20
	Alale	1040	20,800	20
	Total	17445	576,150	35
1992	Kapenguria	8585	489,345	57
	Chepareria	3460	41,520	12
	Sigor	3561	42,732	12
	Kacheliba	982	11,784	12
	Alale	903	10,836	12
	Total	17491	596,217	35

Employment

The population of West Pokot is largely comprised of pastoralists or agro-pastoralists. Less than 10% of all household heads are involved in formal sector employment.

Displacement of Population

There were no reports of population movements into settlements, although some people have moved from border areas where cattle rustling is prevalent. Some Kenyan households have returned to the district from Uganda due to insecurity.

Changes in Food Consumption

Food consumption patterns have returned to normal, for cereals, blood, wild fruits and cultivated fruits. The cereals supply appeared good, with maize from last season's harvest moving from surplus to deficit areas within the district. Consumption of legumes, oil, meat and milk were considered to be less than normal. Last year's bean harvest was low and only small quantities of beans and oil has been received as famine relief. Meat consumption remains low as pastoralists conserve their herds, reduced by rustling, drought and disease. Milk consumption has increased in some areas as animal births increase, yet it remains below normal in many areas due to disease.

It is estimated that less than 25% of all cereals, legumes and oil consumed comes from famine relief supplies. The total quantity distributed is low as households report receiving only very small amounts.

Nutritional Assessment Results

The information available for West Pokot shows that the nutritional status of children below 5 years has slightly improved in 1993. This improvement is deduced from a comparison of data obtained from MOH CHANIS monthly reports from the months of January to May, 1991-1993. Table 1 below on malnutrition trends shows that except for the month of January, there has been a downward trend for the malnutrition rates in each month of 1993 compared to the same months in previous years. This improvement may be attributed to the availability of maize in the district either from the previous harvest or from relief supplies, and also partly to improved milk production, as pastures for their livestock were improved by the rains of January-February.

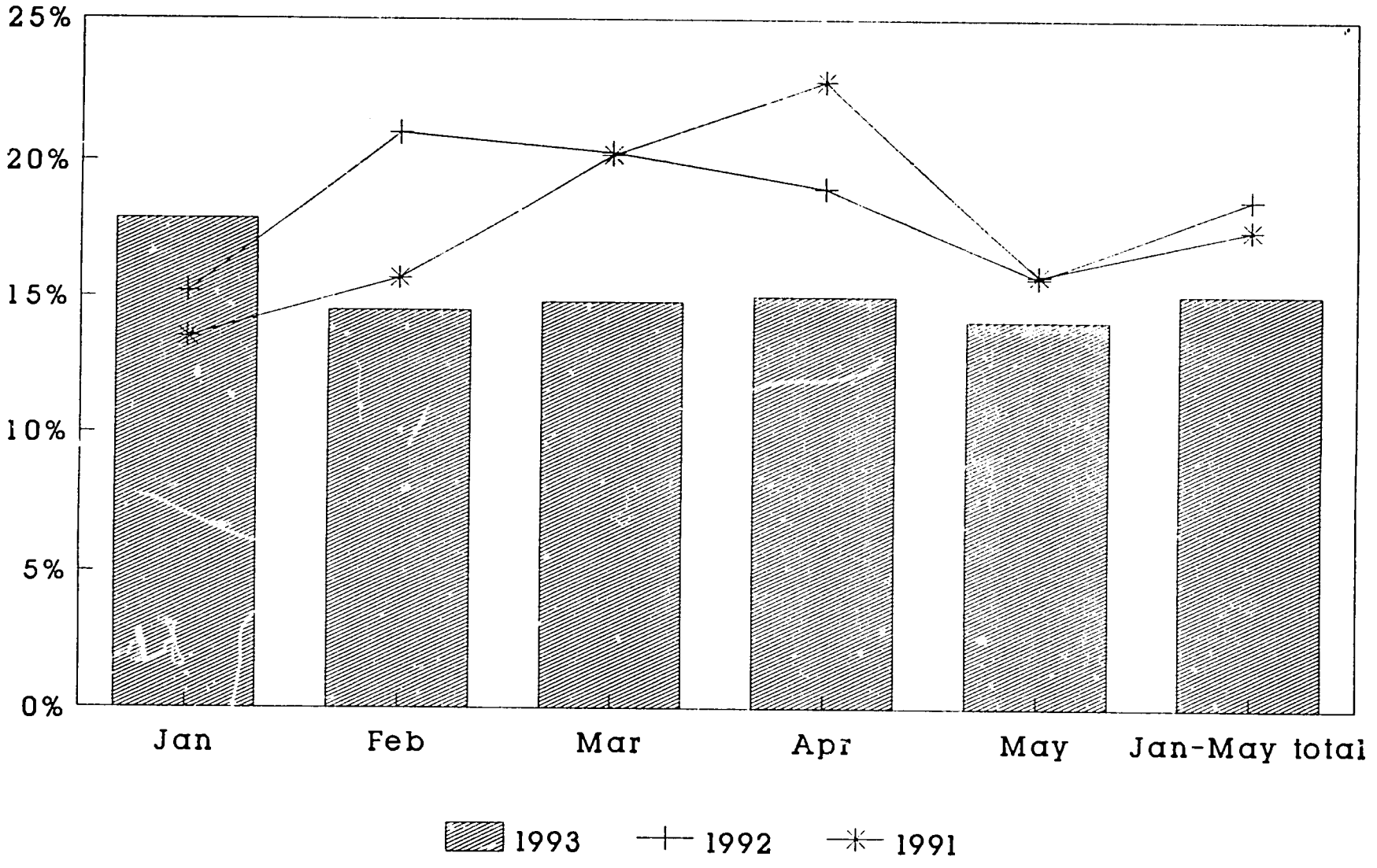
This improvement is not, however, in the entire district. Pockets of some divisions like Masol and Sekerr Locations in Sigor Division neighboring Turkana, and also Ptoiyo and Turkwel, are still having cases of severely malnourished children. It was not possible to obtain relevant data to support this as the NGO involved in these locations (Dutch Reformed Mission) did not have any.

According to information from health workers in various health facilities, it was realized that diseases like malaria, diarrhea, Upper Respiratory Tract Infections (URTI) and Kla-azar contributed greatly to the incidence of malnutrition in those areas where it occurs.

Supplemental Feeding Programs

According to the February 1993 assessment report, the district is supposed to have five supplementary feeding centers, with 340 beneficiaries. At the time of this assessment, no supplementary feeding was seen to be taking place. There are no supplies of

Underweight children in West Pokot
CHANIS data



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supplementary food (CSM) from UNICEF nor any other organization. The only relief food available in the district are yellow maize and corn oil for general rations.

Therapeutic Feeding Programs

There are no therapeutic feeding programs in West Pokot. However, during the survey, it was observed that an area like Masol location has a need for a therapeutic feeding program. The WFP district representative in W/Pokot was requested to do a follow-up and see the possibility of starting a program.

Incidence of Disease

A number of diseases were reported in the district with the common ones being malaria, URTI, diarrhoea and skin diseases.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Cereal prices have increased in March and April. Whole grain maize prices remain relatively low at 700 shs/90 kg bag, apparently due to adequate supply. Maize prices in Kapenguria were as low as 6 shillings/kg in November and December 1992 and are now 8.50 shs/kg. The price of maize flour has increased significantly, forcing more households to purchase whole maize and take it to the mills themselves. Rice and wheat prices have also increased over the period, from 25 and 20 shillings respectively in October to 35 and 32.5 shillings at present.

Meat prices were very low in January but have risen steadily since. This might have reflected a high number of sales at the time as animals faced drought stress. In January, a kilogram of beef sold for 30 shs/kg, while mutton and goat meat sold for 35 shs/kg. By April, the prices were 50 shs/kg for beef, and 60 shs/kg for mutton and goat. Prices of skins and hides have shown similar trends.

Table 1

MALNUTRITION TRENDS FOR CHILDREN 0-59 MONTHS
M.O.H. CHANIS DATA (<80% WFA) OF JANUARY TO
MAY 1991-1993

	1991			1992			1993		
MONTH	Number Malnur	Total No. Measured	% Malnur	No. Malnur	Total No. Measured	% Malnur	Number Maln.	Total No. Measured	% Malnur
JANUARY	705	5,219	13.5%	538	3,552	15.2%	775	4,327	17.9%
FEBRUARY	903	5,740	15.7%	1,075	5,116	21.0%	857	5,928	14.5%
MARCH	1,064	5,278	20.2%	1,089	5,367	20.3%	852	5,750	14.8%
APRIL	1,133	4,959	22.8%	887	4,663	19.0%	794	5,296	15 %
MAY	759	4,818	15.8%	626	3,986	15.7%	710	5,036	14.1%

NCPB Purchases and Sales

NCPB has depots in Kapenguria and Sigor, with a total capacity of 13,500 MT (150,000 bags). The depot in Kapenguria purchased nearly 4,000 MT of maize in March, 100 MT in April and 1,100 MT in May, while the Sigor Depot purchased approximately 2,000 MT in March, 1,000 MT in April and 600 MT in May. Purchases in Kapenguria were far greater than sales, with monthly sales of between 1-22 MT. Slightly higher sales were reported in Sigor (372 MT in March but declined to 118 MT in May).

Much of the food purchased by the Cereals Board in West Pokot is transported to deficit districts like Turkana. Because Kapenguria is located very near Trans Nzoia district, it is likely that some of the maize purchased by NCPB in Kapenguria was actually produced in Trans Nzoia.

Rainfall

Rainfall patterns have been unusual since the beginning of the year. In January and February, higher than normal rains fell in many parts of the district. In March, when the long rains were expected to commence, virtually no rains fell. However in April, some rains were realized in monitoring stations at Kapenguria, Kacheliba and Nauyapong (Alale division) while by May, very good rains were reported at all stations. Kapenguria received 548.1 mm of rainfall over the period March - May, 1993. Out of this, a total of 444 millimeters of rain was recorded during May with rain falling on 22 of the 31 days of the month. As shown on Graph 2 the long rains in Kapenguria were 145% of long term mean. Kacheliba, in the dry zone, recorded 146 mm of rain over 13 days in May.

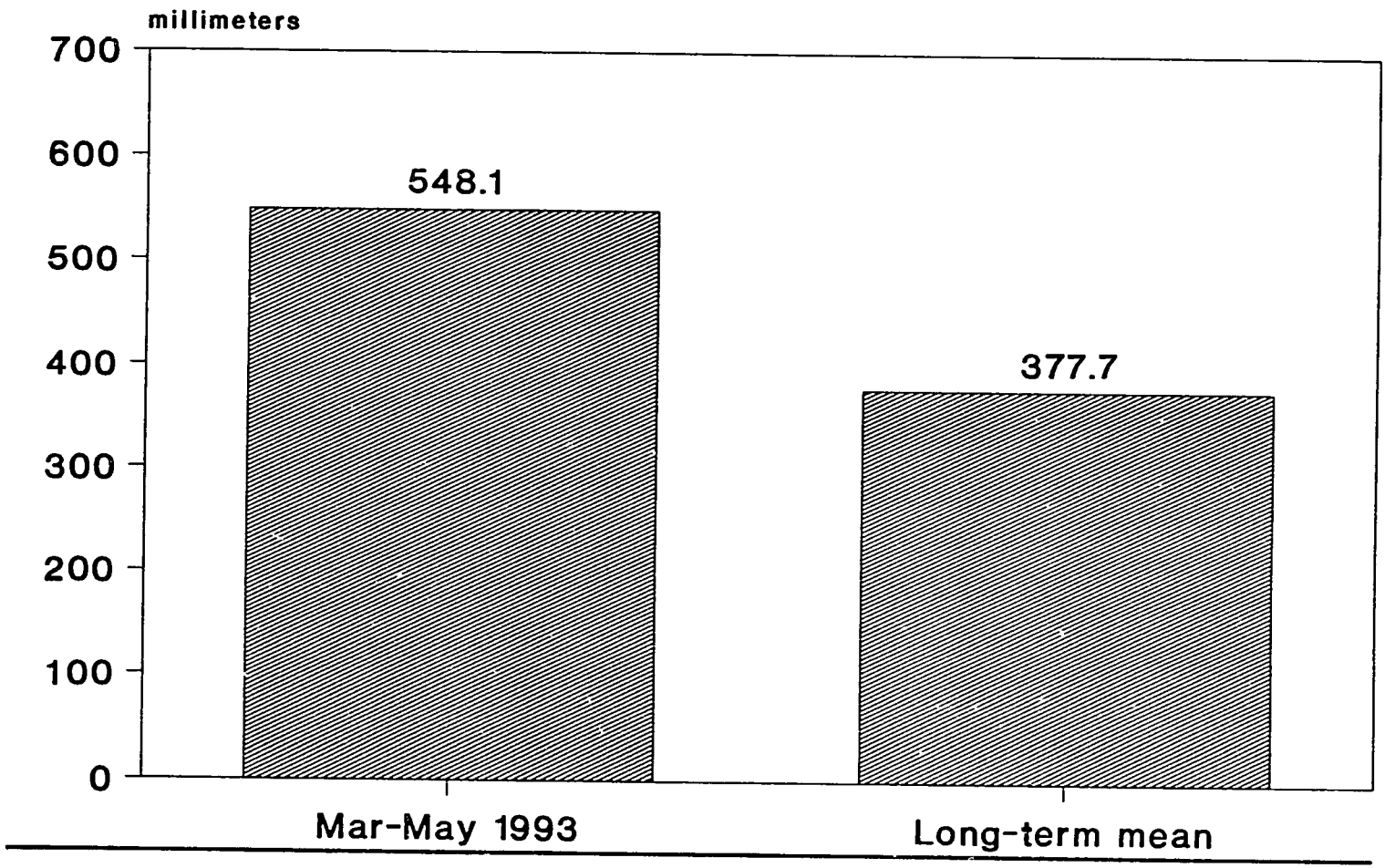
E. RELIEF FOOD DISTRIBUTION:

General Ration

Reports received from the district indicated that the relief food ration is very low and many of the intended beneficiaries are not receiving the rations. The February assessment recommended that 26,000 people receive relief food, but it appears many more are actually receiving food. In some distribution centers, food is given to all people present at the time of distribution regardless of whether they have been registered. In others, only the mother and father in the household received rations regardless of the number of children, and these rations were often as little as 2 kg of maize/month. There seemed to be a lack of understanding about the intended purpose of the relief food, as people interviewed told the assessment teams that food was targeted to: households who lost their animals due to cattle rustling, blind people, households with many children or perpetually poor households.

Graph 2 1993 Long Rains Compared to Mean (mm)

West Pokot District (Kapenguria)



Source: Kenya Meteorological Dept.
and district data

Supplemental Ration

There are no supplementary feeding programs in the district.

F. RECOMMENDATIONS:

1. The DFRC gave a figure of 35,733 as the current targeted beneficiaries, compared to the February assessment team's recommendation of 26,000. However, this team recommends suspension of relief food supply to the district effective August 1, 1993. This recommendation is based on the Agricultural Annual Report which indicates a higher than normal harvest (596,217 bags of maize) for the 1992 long rains crop which was harvested in August/September 1992. (This report was computed after the February 1993 Drought Assessment Mission, which reported that there had been a crop failure.) As a result of that harvest, relief food distributed and improved pastures, there has been quick recovery from drought stress. The team further recommends that another assessment be carried out in the month of November 1993 to review the food situation in the district.

2. The July food allocation should be distributed only to the hard hit areas of the district, e.g. Masol and Sekerr Locations of Sigor Division and Shalpor, Ptoiyo and Turkwell of Chepareria Division. NGOs should be fully involved in distribution and targeting of relief food.

3. The WFP district coordinator and the DFRC should organize a follow-up assessment to the five areas mentioned above (Masol, Sekerr, Shalpor, Ptoiyo and Turkwel) during the month of July. Recommendations, based on data collected using the Drought Assessment methodology, should be forwarded to the National Famine Relief Secretariat and WFP/Nairobi.

4. There should be close monitoring of the crop in the field until harvest time by the DFRC.

5. In order to avoid deterioration of the current nutritional status of the affected areas, it is necessary to;

   . Intensify growth monitoring in health facilities.
   . Improve drug supply in static health facilities
   . Intensify health/nutrition education

6. Intensify inoculation of livestock as a measure to reduce morbidity and mortality .

7. There is need for identification of community based FFW short term activities to be implemented through NGOs. District officials have begun to discuss FFW activities with community leaders. This should be encouraged and NGOs should be identified

to manage the activities.

8. There is need for the Drought Recovery Program to provide the right seeds for planting in areas where there is potential for crop production.

KITUI DISTRICT

A. SUMMARY:

The team, consisting of G.G. Mwangi and G.O. Ndege from WFP, J. Wangila and S. Mwale from USAID, L.N. Kimani from OP, M.W. Kinyua from MoH, and I. Van Bouwdijk from Caritas Neerlandica, conducted the drought assessment in Kitui District during the period June 8-12, 1993. In this report, "the last thirty days" refers to the period covering the beginning of May 1993 to the beginning of June 1993. The "previous three months" as used in this context refers to the months of February, March and April 1993.

The district received abnormally prolonged long rains during the months of October 1992 to February 1993 period. These rains led to a bumper harvest of cereals and good pasture and water sources for the animals but it had a negative impact on legumes, particularly beans.

The bumper harvest in the February-March 1993 period was also the main economic base, since livestock had been diminished by drought. As a result, part of their produce was sold to cater for other basic needs besides supplementing for the poor legumes harvest. There was also an outbreak of malaria in the district which forced a number of people to sell part of their produce to cater for medical treatment.

Owing to the fact that the long rains of 1992/1993 were good and there was a bumper harvest, most of the people in the district still have some food reserves. Putting all the variables together i.e. data received from various government departments, NGOs, church institutions, general surveys in the field, there were two dissenting views. First view is that the available food may last only up to the end of July and the recommended beneficiaries are 257,665 people. The second view is that the available food may last up to August 1993, and that about 188,000 people will be vulnerable to drought effects and will need food assistance thereafter, with some parts of the district being worse off than others.

There are some places in the district where Food For Work programs such as road construction, water harvesting and conservation programs can be viably implemented. However, Food for Work activities require precise and thorough understanding of the community needs before being started.

B. CURRENT SITUATION:

Rainfall Trends

The short rains of 1992 continued up to February 1993 and were evenly distributed and above average in the district. In fact it is unusual for the district to have such rains in January and February. These prolonged rains led to a bumper cereals harvest but also

losses in beans harvest due to rotting. Some areas experienced bean losses of up to 70% the of expected harvest.

The situation changed drastically with inadequate rains during the anticipated long rainy period in March April and May. Up to the time of this report, rainfall in the district was below average and may lead to a near total loss of planted crops due to inadequate precipitation (refer to rainfall).

Water Sources

Due to prolonged rains through February 1993, water resources in the district improved tremendously. Dams, wells, seasonal rivers etc, benefitted a great deal from these unexpected rains, but due to the current failure of the long rains, these water sources are being depleted at an alarming rate. The situation will be critical from August. There are no permanent rivers except the Athi River, which is on the district border.

Natural Vegetation and Pastures

The general vegetation and pastures improved tremendously through February to the benefit of both grazers and browsers. However, the rains anticipated in the March - May period were below average, erratic and not available at all in some parts of the district.
If no rains fall during this time the situation becomes critical from August as pastures and natural vegetation are showing signs of drought stress.

Livestock Mortality Rates

Mixed farming is practiced because livestock acts as a buffer during poor rainy seasons. The livestock mortality rates in the district were reported to be normal. In comparison with previous years, the current mortality rates may be considered lower due to improved natural vegetation and pastures occasioned by the October-December rainfall which spilled over into February 1993. It should be noted, however, that the numbers are generally lower because of drought in 1992 and an East Coast Fever epidemic in 1990 to early 1992. Livestock have not fully recovered from past effects. Herd sizes may not increase due to pasture deterioration and sale to cater for basic needs.

Livestock Sales

The October-February rains led to a bumper crop harvest and improved pastures. This resulted in an abundant supply of food crops and fattening of animals to gain high returns as a means of hedging against the expected short fall in the long rains. Therefore, livestock sales were depressed with prices skyrocketing due to the high demand. The prices were as follows.

Livestock Type	Kshs	
	Jan-Feb	March-May
Cows	4000	4000-7000
Goats	700	700-1200
Sheep	550	550-700
Poultry	100	100-150

Generally, prices were higher in the period March-May than January-February.

It is noteworthy that in some areas, especially Central, Mwingi and Kabati Divisions, there were higher sales due to increased malaria incidence leading to people selling animals to pay for medical for treatments.

Crop Conditions

The conditions of the crops were diverse and varied with respect to specific crops and localities. Cereals, particularly maize, and beans were in very poor condition over the last 30 days (June) and past 3 months (March, April and May). Sorghum and millet were generally poorer than normal over the same periods. The only heartening and possibly significant harvests could be from pigeon peas which have been doing well but are now being stressed due to very poor long rains. Historical crop condition figures were not available, however, the condition is generally poor.

In the 1993 long rains season, the projected food and drought crop situation is as detailed below. Under the Drought Recovery Program, UNDP/FAO, the following seed inputs were received.

Beans - 30 Mt
Sorghum - 60 Mt were received.

The district reported it had 145 MT of bean seed, 7 Mt of cowpeas and 54 MT of sorghum are available for the short rains season.

The germination for the current crop was considered good for pulses and sorghum but only fair for vegetables, particularly, kales had very poor germination rates.

The situation of the crops in the fields is considered poor save for vegetables. Field sanitation was generally fair.

The protection control to pests and diseases was fair for pulses, poor for vegetables but good for the sorghum and millet.

Table 4: The projected long rains yield is dismal as shown below.

Crop	Targeted Ha	Ha Planted	Av. Expected	Est. Yield
Maize	1000	-	17 bag/ha	-
Pulses (beans)	8500	3600	13 bag/ha	1 Bag/Ha
Sorghum	20000	12000	10 bag/ha	3 Bags/Ha
Onions	78	77	---	3 Ton/Ha
Tomatoes	888	880	---	1 Ton/Ha
Kales	476	415	---	2 Tons/Ha

At the time of the assessment, vegetables were particularly being affected by inadequate rains, diseases and pests. Currently the food situation is fair.

Harvest Levels

The last harvests were in January-February for legumes and February-March for cereals. The bumper harvests of cereals were due to extended and prolonged rainfall that even the long maturing breeds, the 5 and 6 series which are usually planted in Western Kenya and require more than 3 months rainfall matured and yielded well. The harvest of pulses (beans) was very poor in the district and already shortages are being felt.

The cereals harvest was not only unusually high but memorable. Legume levels were lower than normal due to a number of factors, including the rotting of the crop; non-conducive harvesting environment emanating from prolonged rainfall; high pesticide costs leading to reduced use by farmers and post-harvest losses due to poor storage management.

Dissenting Views on Harvest Levels

View No. 1

Due to a poor harvest of legumes, cereals are being sold to supplement legumes. Also due to inadequate long rains hence no green crop in the field except for pigeon peas, the consumption of cereal has been higher than normal. It is expected, the February/March cereal harvest will last till the end of July 1993.

View No. 2

Cereals will last through August. This is because

a) There was a bumper harvest

b) The long rains crop contributes only about 25% of the annual maize crop in the district.

c) Harvests are always targeted until the next harvest period (Estimated harvest of last season was 48,115 MT)

Employment

Except for a ginnery industry, opportunities for formal sector employment are mainly in the limited public offices. Out of the estimated total population of 750,000, only about 10% or 75,000 depend on formal employment as a means of income. Public sector earnings however, have lately been eroded by price increases and reduced buying power as a result of the general state of the economy.

Displacement of Population

There has been a slight displacement of population in some divisions of Kitui District. There might have been some displacement of people in Kyuso but the figures were not available.

According to the figures used for relief distribution for the months of February and March by the NCCK, it was noted that Endau Location had a total of 1135 displaced population.

Sub-Location	No. affected
Twambui	212
Malalani	559
Katumbi	266
Ndetani	98
Total	1135

People did not cultivate due to the fear of banditry attacks in these locations. Movement of displaced people is internal and is excluded from the total number of affected population.

Changes in Food Consumption

The cereals consumption was more than normal. Legumes, milk and cultivated fruits/vegetables were being consumed normally, however, oil and meat consumption was less than the normal. For cereals, legumes and oil, less than 25% was from relief sources.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

During the months of January to April 1993, the overall status of children under five as measured by the Weight For Age indicator (W/A) showed that approximately 18 % of children attending MCH centers were underweight. This figure only relates to those who were motivated enough to attend MCH services.

Comparing with the previous period from October 1992 to January 1993, the number of underweight children remained more or less constant. The approximate malnutrition rate from October 1992 to January 1993 was 19 % while from January to April 1993 it was 18 %. According to the 1992 Nutrition Annual Report, Mutito and Kwa-Vonza Divisions had the highest number of malnourished children. The trend in the whole district is as shown in the table below.

Table 2: Malnutrition Rates by Division

	Underweight	Total	Percentage
Central Division	1,592	7,139	9
Kwa Vonza	2,031	7,999	25
Kyuso	1,721	7,058	24
Mutito	1,465	5,135	29
Mutomo	3,052	16,514	19
Mwingi	385	2,640	15
Total	10,246	56,737	18

Source: District Hospital Kitui

The figures presented in the nutritional assessment include those who are suffering from mild, moderate and severe malnutrition. The reason being that the figures obtained from the hospital were not segregated.

In January, 8 of the 10 centers were distributing oil but distribution has diminished since then. In April only one center was distributing oil; beans did not arrive until March/April for only one center; maize was available at approximately 3 centers each month; millet at 2 centers only in April. The delayed supplies could have resulted in an increased number of severely malnourished children. UNICEF may have pulled out because the nutrition status had improved at that time, but with the failure of long rains, the effect of drought is already being felt. Data for relief food is only up to January 1993 and therefore we can not infer malnutrition status to be related to drought. However the high incidence of malaria and diarrhoea could have caused the slight decline in nutritional status. There was also an outbreak of East Coast Fever which affected the milk production.

The Catholic Diocese covers 7 out of 18 Parishes with 10 MCH clinics, serving around 2,800 beneficiaries per month. Data collected from these MCHs is forwarded to the District Hospital. These MCH clinics do not use the W/A indicator. They register whether 0-3 year old children lost or gained weight (500 g or more) compared to the previous month. Out of those data the following is concluded between January and April the percentage of children losing weight compared with the previous month remained more or less constant, with some parishes more affected than the others. In the Parishes of Migwani, Komangao, Kabati, Boma and Shange, the percentage of children loosing weight over the period Jan-April was on average between 24 and 31%. Mwingi Parish was best off with around 20 % of children loosing weight. In Ikutha, the nutritional status of children seems to have deteriorated in January by 17 %, February by 22 %, March by 39 % and April 39 % of children losing weight.

Supplemental Feeding Programs

The supplementary food was being supplied to the Catholic diocese MCH clinics, and some was channelled to the governmental clinics through the Diocese. The food has been arriving very irregularly since January 1993. Most of it consisted of oil that was delayed.

Therapeutic Feeding Programs

There is no therapeutic feeding program operating in the district.

Incidence of Disease

Malaria incidence was higher than normal in most of the divisions.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

In general, food commodity prices fell significantly in all divisions of Kitui District, particularly for the key cereals and legume commodities during the current period (March-May 1993) compared to the previous period (October 1992 to February 1993). The exception to this general trend were the prices of rice, wheat flour and livestock products such as meat and milk. For those commodities whose prices did not fall (wheat and rice), the products are normally imported into the district and so their prices must be constant. For livestock, the supply is lower than the demand and so prices cannot come down.

Yellow maize grain and flour prices were not available beyond March (grain) and January (flour), indicating the decline in demand for these commodities. This can be attributed to the exceptionally good harvest of white maize in February-March 1993, following the unusually good long rains. White maize grain prices fell significantly, especially during the March-April period, when the lowest prices were recorded. The prices for May indicate a rising trend, from a district average of Shs 7.50 per kg (Shs 675/90 kg) in March and April to Shs 9.20 per kg (Shs 828 per bag) in May. The largest fall in the maize grain price was recorded in Mutitu Division (52%) while the least was recorded in Mwingi Division (22%).

White maize flour prices fell less dramatically, ranging from a 3% decline in Mutomo to 29% in Central. The lowest prices were recorded on average during the April-May period (Shs 26.80 per 2 kg bag), relative to Shs 28 per bag in March, and Shs 30.50 and 33.80 in February and January respectively. Rice and wheat prices rose, as did the beef, goat meat and milk prices. Rice prices rose by between 12-16%, while those of wheat flour rose by an average of 20% (somehow Central Division showed a fall of 19%). The price of beef rose from Shs 45 to 60 per kg in the period January to May 1993, while those for goat meat rose from Shs 50 to 70 per kg during the previous period. For legumes, the prices of beans were lower for the current period than during the pervious period, falling by between 7 and 32 %, with the lowest average prices being recorded in March-April (Shs 11-12 per kg). In May, however, the price of beans began to show an upward trend (Shs 15 per kg). A cow-pea prices fell from Shs 30 per kg in January to Shs 8 per kg in April, and begun to rise in May (Shs 10 per kg). No prices were obtained for oils or pigeon peas.

The supply of commercial food in the district has been relatively better during the current period compared to the previous period as shown by the market prices. The failure of the March-May rains may lead to crop failure in cereals (except for pockets of sorghum and millet), and legumes (except for some pockets of pigeon peas). This crop failure means there will be no food from farms until the next harvest in January-February next year, if the short rains are both adequate and timely. The current stocks of food at household level are rapidly diminishing and are unlikely to last beyond August/September of this year. As the food scarcity begins to bite, it is expected that food prices for all commodities will rise sharply in the coming months and households will become increasingly reliant on market

sources or relief sources (for the worst-hit ones) beginning the August-September period.

NCPB Sales and Purchases

National Cereals and Produce Board sales and purchases of various food commodities from Kitui Depot in the last three months (March April and May), varied as shown in the table below.

NCPB Sales and Purchases

	Purchase (MT)		Sales (MT)	
	Kitui	Kyuso	Kitui	Kyuso
W. Maize	3,555.1	60.21	34.29	60.2
Y. Maize	---	---	129.1	25.1
B. Millet	735.0	2,257	---	---
W. Millet		1.68	1.37	---
Sorghum	1.12	1.44	---	---
Beans	288.81	---	142.11	---
Rice	---	---	---	4.92
Total	XXXX	XXXX	XXXX	XXXX

Quantity of Relief Food Currently Stored

At the time of the assessment, there were no relief foods stored in Kitui Depot, however, it was noted that there were 610 bags of cereals stored in Mwingi Depot for distribution. The distribution has been slow due to the fact that the majority of the people in the division still have food commodities. In Mwingi substantial amounts of maize are being sold by NCPB to a local miller who processes the commodity and sells to Kitui, Garissa and other neighboring districts.

It was noted that Kitui Depot is storing some substantial stocks of commercial white maize and some stocks of yellow maize. There was no relief food stored in Kitui Depot, however other divisions still keep some limited quantities of cereals.

Rainfall -

As already discussed above in the summary of the current situation, the 1992 long rains were below average while the 1992 short rains were above average and continued through February 1993. The 1993 long rains are so far below average across the whole district as reflected with the following: March/May Rainfall data.

Table 5
March-May 93 Rainfall Compared to Long Term Mean

Division	Station	March	LTM	April	LTM	May	LTM
Mwingi	Mwingi	Nil	57.3	70.7	156.9	42.3	26.8
	Migwani	Nil	77.3	44.0	197.3	54.9	37.7
Kyuso	Kyuso Office	Nil	138.9	91.9	185.2	11.4	41.7
	Kakuyu	Nil	N/A	49.5	N/A	44.4	N/A
Mutitu	Mutitu Office	45	88.9	48.6	253.9	Nil	42.4
	Nuu	Nil	60.9	15.5	111.3	46.6	15.6
Kwa Vonza	K/Vonza	6	N/A	57.2	N/A	Nil	N/A
	Matinyani	15.5	99.9	2.5	391.5	18.18	63.1
	Kanyangi	15	N/A	-	N/A	Nil	N/A
Central	YFTC	99.7	N/A	43.4	N/A	46.8	N/A
	Kisasi	12.0	N/A	34.2	N/A	6.0	N/A
	Miambani	87.5	N/A	86.44	N/A	35.4	N/A
Mutomo	Voo	Nil	N/A	35.0	N/A	-	N/A
	Kanziko	Nil	N/A	32.4	N/A	-	N/A

E: RELIEF FOOD DISTRIBUTION:

Full General Food Rations Distributed Per Month:

Food rations during the drought period in Table 2 refers to food received in Kitui District since August 1992 to March 1993. The August 92 dispatch was by the GoK. From October to January, WFP, religious organizations and other NGOs participated. February and March data refers to WFP food dispatches only since no other data was available.

Table 6: Famine Food Received in Kitui

	Cereals	# (% Planned Benef.)	Beans (Mt)	# (% Planned Benef.)	Oil (MT)	# (% Planned Benef.)
Aug. 92	1200	100,000 (40.2%)				
Sep. 92						
Oct. 92	2215	184,583 (74.1%)				
Nov. 92	2998	249,833 (100.3%)				
Dec. 92	461	38,417 (15.4)	450	250,000 (100.4)	150	25,000 (100.4)
Jan. 93	74	6,167 (2.5)	243	135,000 (54.2)		
Feb. 93	26	2,167 1			50	83,333 (39.7)
Mar. 93	159	13,250 (6.3)	70	38,889 (18.5)	60	100,000 (47.6)

NB: As per WFP figures, planned beneficiaries for August 1992 to January 1993 were 249,000 while for February to March, the number was reduced by tne assessment team to 210,000.

The above situation shows that the food distributed was either shared among planned beneficiaries in quantities below recommended levels (except for cereals in November 1992, pulses and oils in December 1992) or there were other undocumented sources of food. This is because the DFRC's 1992 year end records show that the number of affected population had risen to 595,240 but dropped to 210,091 persons by end of January 1993 when greens and beans were available from the gardens.

Supplementary Food Distributions per Month

There were no UNICEF supplementary food distribution centers in the district during the assessment period of February through May 1993.

F. ONGOING AND PLANNED RECOVERY DEVELOPMENT ACTIVITIES:

There are a number of development activities undertaken jointly by the GoK and other organizations. Among these projects are:

1. School Feeding Program (SFP) catering for mid-day meals to pre- and primary school children supported by WFP.

2. Food for Work (FFW) supported by WFP and catering for soil and water conservation activities, water development, afforestation, welfare activities and livestock development. The project is undertaken by KIDP/DANIDA and the Catholic Diocese of Kitui.

3. National Livestock Project supported by the World Bank to benefit 100,000 households district wide.

4. National Poultry Development Project supported by the Netherlands Government to benefit 60,000 households and to cover 60% of the district.

5. Kitui Integrated Development Program (KIDP) supported by DANIDA to benefit 80000 households covering 80% of the district.

6. Apart from UNDP/FAO, GTZ supplied the following quantities of seed, maize - 3.676 tons cow peas 31.272 tons, beans 42.384 tons and sorghum 2.88 tons. Kenya Freedom from Hunger supplied 10 tons of sorghum.

An up-to-date report on entirely GoK sponsored and general development projects is not included in the report. Information on planned recovery/development activities was not available.

It was the general feeling in the district that Food For Work should replace relief food distribution in the future for all able-bodied drought victims. The development activities to benefit from Food For Work should be community based and may include among others: soil and water conservation, agriculture, infrastructure, welfare etc. as determined by the community/beneficiary level.

RECOMMENDATIONS:

1. There are differing views among the team concerning the number of beneficiaries appropriate for further drought relief assistance.

   VIEW 1:

   Relief support to Kitui District should only resume after August and should benefit at most 188,000 people. Although the 1991/92 short rains and 1992 long rains had failed culminating in the August 92-March 93 relief effort.

   Further, the past short rains harvest was excellent; with 534,600 bags of maize among other food crops. There has been food stock depletion mainly due to:

   High malaria incidence
   School fees
   Purchase of pulses
   Other basic needs

   Therefore, with only 1993 long rains failed which only contributes about 25 % of the crop output, the number of beneficiaries has to be lower than before. The percentages in the table below represent level of severity. The population figure used in this assessment is the same as that used in February assessment, i.e, 750, 000 people. This was then desegregated to divisional level using data from UNICEF, Socio-Economic Profiles, Kitui District, 1993.

   See the table below:

AFFECTED POPULATION BY DIVISION

DIVISION	%	LOCATION/SUBLOCATION	NO. OF BEN.
1. Mutito	30	Endau, Mti-ya Ngombe Nuu, Mui, Nzombe, Mutitu	25,000
2. Central/ Kwa-Vonza	20	Mlango and Kisasi, Kanyangi and Yatta	44,000
3. Mwingi	30	Bitanyi and Endui	56,000
4. Kyuso	20	Ukasi, Tseikuru, Tharaka Mifukoni and Ngomeni	25,000
5. Mutomo	40	Voo, Mutha and Kanziku	38,000
Total			188,000

Source: DDO's Office

* The Gentral/Kwa-Vonza figures are combined because the population projections available to the team do not have separate figures for the latter.

View 2:

Since no reliable data was available from the district, two sources of information were used and the lower planning figure (from method 1) for the affected population for July-September 1993 period was taken as 257,660 people.

Method 1: The planning figure in August 1992 (one year ago) was assessed by WFP at 249,000. Since the team estimated the critical period to be August after the failure of the current crop, we apply the population growth rate of 3.48%, which gives the current August 1993 figure as 257,665.

Method 2: Here, the percentages of affected people obtained from the technical team in Kitui is used.

Division	* Population	% of affected population.	No. of beneficiaries
1. Mutito	84,094	30	25,220
2. Central/ Kwa-Vonza	268,657	40	107,460
3. Mwingi	186,050	30	56,000
4. Kyusso	122,274	25	31,000
5. Mutomo	125,055	40	50,000
Total	786,130		269,780

* Source: MPND, Kitui District Development Plan, 1989-1993.

NB: The Central/Kwa-Vonza figures are combined because the population projections available to the team do not have separate figures for the latter.

It is clear that Method 1 yields 257,665 people while Method 2 yields a higher figure of 269,680. We therefore recommend the lower figure from Method 1 of 257,665 as the affected population for July-Sept,1993 period and distribute it by division using ratios of beneficiaries computed from Method 2.(see below):

Distribution of affected people by division

Division	% of affected pop.	Ratio of Ben.	No.of Ben. from Method 2
1.Mutito	30	.094	24,097
2.Central/Kwa Vonza'	40	.398	102,672
3.Mwingi	30	.208	53,505
4.Kyuso	25	.115	29,619
5.Mutomo	40	.185	47,772
TOTAL		1.000	257,665

2. There should be close monitoring of the situation in the district.

3. Logistics for distribution should be timely to ensure that allocation for the district arrives in time

4. The on-going Food For Work Community-based activities should be stepped up.

5. With anticipated rains in October/November, there should be planned programs for provision of seed for planting. Plans to avail the right seeds and quantity should be implemented at the latest by August.

6. In view of the fact that the long rains have failed to come as expected, supplementary feeding should be reintroduced in worst affected areas such as Endau, Mti-ya Ngombe, Nuu, Mui, Nzombe and Mutitu of Mutito Division; Mlango and Kisasi of Central Division; Bitanyi and Endui of Mwingi Division; Ukasi, Tseikuru, Tharaka, Mifukoni and Ngomeni in Kyuso; Voo, Mutha and Kanziku of Mutomo Division; and Kanyangi and Yatta of Kwa-Vonza Division.

7. There is a need for improvement of water resources and on-farm storage facilities.

MACHAKOS DISTRICT

A. SUMMARY:

The team was comprised of Evelyn Njoroge (World Vision), J. Wangila (USAID), Chidi Ogbonna (WFP), D. M.Mutiso (OP). The team visited Machakos from 21 to 26 June 1993, covering all six divisions (Masinga, Yatta, Mwala, Kangundo, Kathiani and Central) of the district. The "last thirty days" in this report refers to the period May 1 to 31, 1993. The "previous three months" refers to March to May 1993.

Machakos District covers an area of 6,163 sq. kms. of which 1,543 sq. kms is considered arable. It has an estimated population of 817,831 people. Most of the population is dependent on crop production and livestock rearing.

Agricultural activities in the area are dependent on successful long and short rains. Coffee, and various species of peas (as mentioned in the report) grow relatively well in the district.

Food production has continued to deteriorate. Rainfall received within the reporting period was not adequate for sustained agricultural practices.

The district received relief food supplies after the last assessment but record keeping is not dependable making it difficult to obtain accurate data. It is clear that the recipient beneficiaries of the relief supplies package far out-number the WFP official figure, thus reducing the specified ration scale. A beneficiary receives about 30%.

The team did not reach consensus on their recommendation for drought relief food. Some recommended immediate resumption of drought relief food for 156,000 beneficiaries, while others recommended relief begin in September due to other factors causing stress in the district.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Rainfall in the previous three months was lower than normal; and very poor in the past thirty days. Mwala, Yatta and Masinga Divisions areas had unusually poor rainfall.

Water Sources

The recovery from drought for most water sources has not been sustained due to the inadequacy of the long rains. Currently, the majority of these sources are lower and fewer than normal. Their capacity to meet requirements is rapidly declining. Very poor

conditions are evident in Mwala, Yatta and Masinga Divisions; and parts of Central, Kangundo and Kathiani Divisions.

Natural Vegetation and Pastures

After pasture regeneration resulting from the short rains, the pastures were normal over the past 3 months but drier and more barren than normal in past 30 days. The impact of the failed long rains is telling especially in Mwala, Yatta and Masinga Divisions, parts of Central-Kalama, Konza and Muputi and Kangundo-Kyanzavi, Kakuyuni and Koma Rock. Livestock conditions are good but deteriorating with continuing drought and are worse than the same time last year.

Livestock Mortality

Most farmers in the district depend on both agriculture and livestock. Most families tend to have very small parcels of land thereby necessitating them to concentrate mainly on agriculture production as opposed to livestock keeping.

It is reckoned that during the 1992 drought, farmers lost between 10 - 20% of their livestock. With the failure of the long rains (March - May), fodder has increasingly become scarce. Though the mortality rates were reported to be normal, it is estimated that in some parts of the district, Mwala and Yatta Divisions and Kalama Location in Central Division, farmers lost as much as 60% of their livestock during the last three months due to diseases (BCBB).

Livestock Sales

Livestock sales were lower than normal in the previous three months and normal in the last thirty days, however due to scarcity of pasture, farmers are forced to sell off their livestock hence depleting the already reduced herd size. This situation is expected to be exacerbated by drought and in the next two months livestock sales are expected to be exceedingly high. Despite the high prices of meat products in the market, livestock prices are expected to be lower than normal in the very near future.

Crop Situation

Due to the failure of the long rains, there has been a crop failure particularly for maize and beans. The germinations were poor, with some areas experiencing zero rates. The only healthy looking plants are coffee (perennial) and pigeon peas which are getting stressed.

The next significant harvest will be at the earliest in January, 1994. The most drought hit areas are Masinga and Yatta Divisions, the "rain shadow" along the Athi River, and Muputi Location in Central Division which has not realized a harvest since the 1992 long rains.

Harvest Levels

The last harvest in January/February 1993 was very good for cereals but poor for legumes. This is mainly attributable to farm input inaccessibility and unavailability occasioned by past drought, and the attendant erosion of purchasing power and general unpreparedness. The harvest has been depleted due to lack of alternative sources of income to meet basic needs particularly school fees, purchases of pulses and drugs against the high malaria incidence, among other factors. The achieved production was about one million bags against an annual requirement of 1.6 million bags. They also harvested 5,787 bags of sorghum, 3,888 bags of millet and 33,468 bags for beans.

There were extensive pockets with unusually poor pulse harvests, like Katangi in Yatta, Iveti in Kathiani, Kalama in Central, Wamunyu , Kibauni, Muthetheni and Mbiuni in Mwala where soils are very sandy. Also affected is the rain shadow area along the Athi River.

With the new Small Coffee Improvement Project II modality of monthly payments for coffee, economic pressure may ease off during picking time of June, July and early August in the coffee growing areas.

Employment

Employment, which is less than 10% in the formal sector has a larger concentration (not measured due to lack of data) in the urban areas. Others engage in various income generating activities including manual labor to support their families.

Displacement of Population

There are no recorded cases of displaced population.

Changes in Food Consumption

Consumption of cereals, legumes, oils and meat is less than normal due to depleted stocks. The effects of the drought are being felt and eating habits of the population indicate most people are living on an unbalanced diet.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

The nutritional status data of under-five children collected in March 1993 in Machakos District was fair at 13% using WFA indicators. The cut-off point was the 3rd percentile (less than 80% WFA). This data was available from the MOH Child Health And Information System (CHANIS). Malnutrition within the divisions ranged from 5.2% - 23%.

Mwala Division had the lowest levels of malnutrition while Masinga had the highest (See Table below).

TABLE 1: Nutritional Status of Under-Fives

	Malnutrition		Total	
Division	Number	%	Number	%
Kathiani	451	10	4342	100
Yatta	87	7	1316	100
Mwala	37	5	708	100
Central	558	11	5435	100
Masinga	1005	23	4376	100
Kangondo	52	8	662	100
	2190	13	16839	100

The frank cases of either marasmus or kwashiorkor were negligible during the time the data was collected (March '93) except for Masinga Division where 142 cases (marasmus and kwashiorkor) were reported. Data available for Masinga for the month of May 1993 indicated that malnutrition was still high. Out of a total of 5,643 children seen in the Child Health Clinic, 1156 (33%) were malnourished. When the nutritional status of under-five children for May 1993, was compared to May 1992, there was a great decline from 18.5% to 33%.

Supplementary Food Distributions Per Month

There were UNICEF supplementary feeding activities in the district through March/April, 1993 on a limited scale. No information on this activity was provided to the team.

Therapeutic Feeding

There was no therapeutic feeding program in the district.

Disease Incidence

Data available for the months of March '92 and March '93 for the whole district showed that the three most common diseases were malaria, URTI and skin diseases. Data collected from Kithimani dispensary (Yatta Division) and Masinga Sub-Health Center (Masinga Division) also showed that diarrhoea was common.

Reports from all health facilities indicated that there was an outbreak of malaria from January to May.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Over the past one year, district average prices have fluctuated. White maize grain prices peaked between November and January. The beans prices peaked over the period October - December 1992. Pigeon pea prices have remained at their highest (Ksh 1,800) since November.
For most commodities, May 1993 prices are higher than they were in February and April. The increased demand may continue to push the prices of non-livestock products upwards.

In the livestock industry, prices are now higher than during the same period last year (1992). This is attributed to increased demand and improved pastures resulting from the successful last short rains.

The comparative prices are as given below:

Table 2

Commodity	May 1992	May 1993
Cow	4200	5500
Sheep	450	650
Goat	600	900
Chicken	100	200

These prices are dictated by the supply of the said commodities. The market availability survey indicated that most of the commodities' supply was normal, except for millet, rice and beans which were scarce. Wheat flour, sheep and donkeys were scarce. Most of the commodities like rice, wheat, potatoes, e.t.c, are imported from other districts.

The normality and similarity in prices over the same months in 1992 and 1993 has the implication that the short rains' harvest satisfactorily cushioned the community. The undoing lies in the failure of the long rains crop harvest expected from June.

Food prices were generally high in the months of May 1992 to January 1993. During the harvest period February/March 1993, food prices dropped down considerably and started an upward trend from the month of May 1993. Maize is currently selling at Ksh 10/= per

Kg. whereas beans are selling at Ksh 25/= per kg. The failure of the long rains, have resulted in total crop failure, consequently food prices are expected to skyrocket with time.

NCPB Purchases and Sales

The district reported some purchases of maize, millet and rice by the NCPB stores during the last three months. The district has also recorded sales of white maize amounting to 5,665 bags of 90 Kgs. each.

Rainfall

	FEB		MAR		APRIL		MAY		JUNE
	MM	DAYS	MM	DAYS	MM	DAYS	MM	DAYS	MM DAYS
KANGUNDO	108.3	3	24.2	5	87.1	10	56.4	3	N/A
MATUNGULU	197.6	10	65	3	212.2	10	0.4	1	N/A
KAKUYUMI	72.1	7	N/A	N/A	104.7	9	24	2	N/A
KYANZAVI	182.7	14	0	0	111.8	16	0	0	N/A
MITABONI	145.7	5	70	3	0	0	0	0	N/A
MACHAKOS TOWN	161.6	6	0.7	1	69.4	4	56.9	4	N/A
KATUMANI	56.6	7	0	0	0	0	0	0	N/A
MASII	90	14	4.05	2	0	0	14	2	N/A
WAMUNYU	124.2	13	0	0	0	0	16.5	4	N/A
MBIUNI	263.3	9	16.9	3	0	0	25.9	4	N/A
MUTHETHENI	172.5	12	26.4	6	17.2	2	43.3	7	N/A
KITHIMANI	112.3	3	103.5	2	80.4	3	0	0	N/A
MASINGA	125.2	20	0	-	0	0	26.7	4	N/A

SOURCE: DISTRICT AGRICULTURAL OFFICE MACHAKOS

E. RELIEF FOOD DISTRIBUTION:

General Ration

The district received and distributed WFP relief food commodities in the form of wheat, edible oil, beans and maize. The last distribution was in March 1993. NGOs like KFFH, the Catholic Church, CPK, NCCK, and GTZ were also instrumental in contributions of various relief food commodities and farming implements.

All food commodities were distributed through the DFRC. It is possible that relief food commodities were distributed outside the vulnerable/targeted group.

An estimated number of 242,000 beneficiaries was being fed on the relief food commodities at the peak of the relief effort. This drastically reduced the prescribed ration scale making the targeted ration ineffective. In certain areas, beneficiaries cover long distances to receive their relief food package when available and this anomaly should be rectified.

Relief supply records in the district are not well maintained, so it was not possible to obtain accurate data. This calls for WFP to look into ways of rectifying this anomaly by introducing a standard format or enforcing any existing one and increase monitoring which is lacking.

Duplication of food collection should be discouraged. This happens as certain beneficiaries shuttle to the various DC offices to ask for and receive food and may return to their locations to receive more food.

Supplemental Rations

No information was reported.

Quantity of Food Currently Stored

There are no relief food commodities currently stored in the district.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

None were reported.

G. RECOMMENDATIONS:

1. * View A: Famine relief supplies should resume immediately to cater for 156,000 beneficiaries until the next assessment.

   * View B: Relief supplies should resume from September. The number of

- beneficiaries arrived at on the basis of depletion of food stocks should be referred to in the text, particularly in the section on harvest levels.

  Relief food should be distributed to the vulnerable groups (drought affected) only.

2. Supplementary feeding should be resumed for the vulnerable groups as soon as the report is accepted and continue the next assessment.

3. WFP should effectively monitor the district and introduce simple, standardized formats for record keeping which should be improved at all levels.

4. Communication networks for information flow between Nairobi, district headquarters and distribution points should be streamlined.

5. Food-For-Work, as a source of community development activities, should be enhanced and encouraged with an aim of gradual return to self-reliance.

   This was found acceptable and welcome by the administration, religious organizations, NGOs and community subject to proper targeting and implementation.

6. The district should be reassessed in the next three months (September/October) to ascertain the further effect of the drought.

MAKUENI DISTRICT

A. Summary:

The team was comprised of Evelyn Njoroge (World Vision), J. Wangila (USAID), Chidi Ogbonna (WFP) and D. M.Mutiso (OP). The team visited Makueni from 27 June to 3 July 1993 covering all the seven divisions (Mbooni, Kilome, Matiliku, Kibwezi, Wote, Kaiti, and Mulala) of the district.

The "last thirty days" in this report refers to the period May 1 to 31, 1993. The "previous three months" refers to March to May 1993.

Makueni District covers an area of 7,263 sq. kms. of which 5,510 sq. Kms is considered arable. It has an estimated population of 616,000 people.

The district is heavily dependent on agriculture. Successful agricultural activities in the area are dependent on successful long and short rains. Food production has continued to deteriorate due to the drought situation caused by the failure of the long rains expected in March, 1993.

Relief food commodities were last received and distributed in the district in March 1993. There is some degree of food record keeping in some of the divisions but efforts should be geared towards improvement. Food distribution should be targeted only to the needy and deserving groups. The beneficiaries of the relief supplies package far out-numbered the WFP recommended figure thus reducing the impact of the ration. Relief food commodities are a good source of family support in difficult times as now.

There are 4 differing views among the team members concerning when and how many should receive drought relief food.

A. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

Rainfall was very poor both in the past 30 days and in the previous three months. Wote, Matiliku, Kibwezi, Mulala (Kasikeu, Kilungu, Upete), Mbooni (Tulimani, Kiteta, Kisau) and Kaiti (Kithembe) Divisions had unusually poor rainfall.

Water Sources

Due to failure of the long rains, the condition of water sources has deteriorated from excellent(February) to lower and fewer than normal in June. Kibwezi, Wote, Matiliku and Mulala Divisions, and parts of Kaiti, Mbooni and Kilome Divisions have unusually poor water sources in the reference period.

Natural Vegetation and Pastures

The condition of the vegetation is very poor as a result of failed long rains. Areas lying in the agro-ecological zones 5 and 6 (parts of Wote, Matiliku, Mulala and Kibwezi Divisions) are hardest hit.

Livestock Mortality

Livestock mortality in the district in the past 30 days was normal, but higher than normal in the previous 3 months. In some areas, however, such as Kalawa Location in Wote Division, the rates were as high as 60% during the last two months. Wote, Kibwezi, Matiliku and Kaiti Divisions had unusually high mortality rates due to lack of enough fodder and diseases.

Livestock Sales

Livestock sales were higher than normal in the previous 3 months and normal in the past 30 days due to the prevailing drought conditions and malaria incidence.

Crop conditions

Crop conditions in the past 30 days and the previous 3 months were very poor. The long rains have failed resulting in total crop failure. What was planted either never germinated or is drying up in the fields. The district is experiencing unusual climatic conditions and this may be the worst season ever experienced in the recent past.

Harvest Levels

The short rains harvests in the district was unusually high for cereals but below normal for legumes. Despite the extent of the rains, however, some areas had lower than expected harvest levels. This was because of among other factors lingering past drought effects which resulted in lack of inputs, poor land preparation and resettlement in Masongaleni, Kiboko and Kibwezi from Chyulu Hills. This was further exacerbated by inadequate rains in Kalawa and Kalii in Wote and Kibwezi Divisions, respectively; and in the rain shadow along Athi River.

Employment

Employment, which is between 10 - 25 % in the formal sector, has a larger concentration in the urban areas. Other people engage in various income generating activities including manual labor to support the families.

Displacement of Population

There are no recorded cases of displaced populations.

Changes in Food Consumption

Consumption of cereals and cultivated fruits/vegetables, legumes, oils, milk and meat has been lower than normal due to their increasing scarcity and soaring prices.

C. NUTRITIONAL STATUS OF CHILDREN:

Nutritional Assessment Results

Nutritional assessment data was available from the MOH Child Health and Nutritional Information System (CHANIS) for the month of April. It covered 22 health facilities distributed within the six divisions. The indicator used was Weight for Age and the cut off point was the third percentile (less than 80% WFA).

The nutritional status of children below five years could be described as fair, with the district average of 13.4% and a range of between 6.2% and 16.0%. The malnutrition rates were distributed as in the table below:

Table 1: Nutritional Status by Division.

Division	Under-weight		Total Number
	Number	%	
Wote	186	7.6	2438
Matiliku	91	7.8	1166
Mbooni	340	10.6	3196
Kilome	64	6.2	1028
Mulala	225	15.5	1449
Kibwezi	338	16.0	2124
Total	1244	13.4	11401

Kibwezi Division still has the highest rate of malnutrition. The rate as at the last assessment was 21.7% as against 16% in this assessment. Comparing February and the current assessment malnutrition rates , the status of three divisions, Mbooni, Mulala and Matiliku

had gone down while the status of the other three divisions had slightly improved as shown in the table below.

Table 2:Assessment Comparisons

DIVISIONS	1ST ASSESSMENT	2ND ASSESSMENT
WOTE	12.0	7.6
MATILIKU	5.9	7.8
MBOONI	8.5	10.6
KILOME	6.8	6.2
MULALA	5.9	15.5
KIBWEZI	21.7	16.0

Masongaleni, Mbui Nzau and Kiboko settlements require mention. These areas, which were only settled last year, have poor basic amenities like roads, schools, water points and health facilities. The new settlers have not had time to establish themselves, especially in preparing land for sufficient food production. Their household food security was worsened by the drought situation.

Nutritional data collected in Masongaleni Sub-Health Center showed that malnutrition rates from January to June have been higher than the district average.

Table 3: Nutritional status for Masongaleni.

N/Status	Jan	Feb	Mar	April	May	June
Malnourished	34(22%)	110(30%)	88(30%)	153(37%)	105(26%)	80(26%
Normal	124	252	209	258	295	225
Total	158	362	293	411	400	305

Supplemental Food Programs

There was no supplementary feeding program in the district.

Therapeutic Feeding Program

There was no therapeutic feeding program in the district.

Disease Incidence

Data available from the MOH showed that the three most common diseases were malaria, upper respiratory tract infections and diarrhoeal diseases. There was an outbreak of malaria from December to April in almost all the divisions. Currently, both outpatient and inpatient figures for malaria are declining. Kibwezi Division was reported to have been hardest hit. ACTION-AID INTERNATIONAL set aside about KSh. 800,000/= to supplement GOK efforts during this malaria outbreak.

Many families were forced to sell food from their stores in order to buy the drugs they required. These sales adversely contributed to the worsening food situation in the division.

D. ECONOMIC/ENVIRONMENTAL INDICATORS

Food Price Trends

Data available on market prices point to varying price behavior. For the major commodities, maize prices showed a downward trend from Jan. 93 (KSh.10) to May 93 (KSh.7); bean prices were increasing as from March (KSh.12) to KSh.15 in May 1993.

At the time of the assessment, maize and beans were going for KSh.10 and KSh.25, respectively. These prices are likely to continue rising as scarcity deepens.

Various sources put the availability of commodities as follows: maize normal and beans scarce.

NCPB Purchases and Sales

There were purchases of 267.45 MT of white maize, 23.4 MT of beans and 2.1 MT of millet in the months of February and March 1993. There were no recorded sales in the corresponding period.

NCPB commercial stocks at the Makueni Depot were as follows:

White maize	4916.34 MT
Beans	6.3 MT
Millet	11.52 MT
Rice	12.96 MT

All commodities stored belonged to NCPB.

Rainfall -

Rainfall in mm received in the district was as given below:

Table 4:Rainfall Received, Feb-May 93

STATION	FEB	MAR	APRIL	MAY
WOTE	88.1	47.9	60.0	13.2
KAMBI MAWE	187.2	10.4	28.0	7.0
KILOME	57.0	82.0	63.3	17.6
MBOONI	336.0	7.3	60.8	179.1
TULIMANI	213.0	4.0	25.5	50.0
KITETA	214.3	0	11.3	0
MUTHINGIINI	46.0	0	0	45.0
MASONGALE NI	0	182.0	114.0	0
KIBWEZI	66.9	0	28.2	0
MAKINDU	24.3	16.3	17.3	0

SOURCE: DISTRICT AGRICULTURAL OFFICE, MAKUENI

For February, Kambi Ya Mawe, Mbooni, Tulimani, Kiteta and Masongaleni stations received over 100mm of rainfall. Nzaui, Katheka and Darajani recorded no rainfall, while the rest of the stations in the district had rainfall distributions ranging from 0-100mm. The maximum number of wet days was 15 at Mbooni. By division, Mbooni received the highest amount of rainfall while Kibwezi had the least.

In March the situation deteriorated with only one station (Masongaleni) receiving over 100mm. All the other stations received less than 85mm with Kathekani, Kibwezi and Muthingiini recording none.

For April, except Masongaleni, all the other stations had rainfall ranging between 10 - 65 mm. Muthingiini received no rainfall.

Mbooni had 180mm in May while all the other stations had either less than 50 mm or none. From the information above, the rainfall situation is considered inadequate for crop and fodder sustenance.

E. RELIEF Food DISTRIBUTION:

General Ration

Edible oil, beans, maize and millet were last distributed in the district in March 1993. According to available data, cumulative receipts since inception of the program are 1624.55 MTs of cereals, 13 MTs - beans and 83.88 MTs of edible oil. Records show that Kenya Freedom From Hunger Council contributed 148.92 MT of cereals, 26.82 MT of beans in the district, which were not channelled thorough WFP.

It is possible that relief food commodities might have been distributed outside the vulnerable/targeted group. Therefore targeting should be improved.

The district seems to be feeding over 440,096 persons from the famine relief commodities as against the WFP official figure. This has drastically reduced the prescribed (WFP) ration scale making the targeted nutritional requirement ineffective. It is essential that WFP monitors the food activities in the district. A uniform and simple format should be introduced to enable better record keeping.

Relief food commodities, 4.68 Mt of edible oil and 13 MT of beans were diverted to feed boarding students in secondary schools in (Mulala, Kaiti, Wote, Mbooni) Divisions.

Duplication of food collection should be discouraged as some individuals have in the past received food from the DC's and DO's offices. The tendency is that such a person may possibly return to his/her location for further collection.

Quantity of Relief Food Currently Stored

There are no relief food commodities currently stored in the district.

F: RECOMMENDATIONS:

1. There 4 differing estimates of the number of beneficiaries in the district, which are given below.

a) The estimated needy population is 180,608 effective August,1993. This figure has been arrived at as follows:

Table 5

DIVISION	TOTAL POPN.	PROPORTION AFFECTED	AFFECTED POPN. (ESTIMATED)
MBOONI	123,303	10%	12,330
WOTE	80,000	40%	32,000
KIBWEZI	149,155	50%	74,577
KAITI KITHEMBE UKIA AND KILUNGU	 54,000 102,000	 50% 10%	 27,000 10,200
MULALA AND MATILIKU	87,505	20%	17,501
KILOME	46,899	15%	7,000
TOTAL	642,862	180,608	

These estimates were arrived at after discussions with the DC, the DOS, the Community, Government Officers and especially the DAO and personal observation.

b) - There is an ongoing school feeding program in the district catering for 29,907 beneficiaries. This program by September 1993 will cater for 4,000 more beneficiaries, at the ration scale of:

a. Maize 150 grams x 5 days = 3 Kgs/month
b. Beans 40 grams x 5 days = .8 kgs/month
c. Vegetable Oil 15 grams x 5 days = .3 Kgs/month

- Unreliable district population data of 616,000 when they can not come up handy with the true population (area by area).

- Improper targeting of the beneficiaries. Relief commodities cross hands into well-to-do homes (ex-government officials, shopkeepers, teachers).

- If the situation in the district is as it is portrayed, districts authorities would not have a balance of about 110 MT of cereals in the district at the time of visit.

- The drought alarm is being raised, yet the school drop-out rate in divisions like Wote, Kaiti, Mbooni, Mulala that have no school feeding program is about 5-7%.

- This district had a bumper harvest of cereals which found its way into the NCPB. This harvest was sold out cheaply into the market and some quickly transported out of the district.

Taking the divisional percentages, as I viewed the area, interviewed people and gathered information, I arrived at the figure of 76,000 as below:

No of people affected by percentage according to the divisions:

Table 6

DIVISION	POPULATION	% AFFECTED	
KIBWEZI	149,155	20%	29,831
MBOONI	123,303	2%	2,466
WOTE MULALA MATILIKU	167,505	20%	33,501
KILOME KAITI	202,899	5%	10,145
TOTAL	642,862		75,943
ROUNDED UP TO			76,000

Effective as soon as report is accepted.

c. On the basis of interviews, observations, data collected and analysis thereof, 104,000 beneficiaries were found to be in need of relief assistance in Makueni. Relief supplies should only resume from September.

The breakdown of the whole figure 104,000 is as follows:

Table 7

DIVISION	POPULATION	% AFFECTED	
KIBWEZI	149,155	25	37,300
WOTE	80,000	20	16,000
MULALA MATILIKU	87,000	20	17,400
KAITI	156,000	15	22,400
KILOME	46,803	10	4,680
MBOONI	123,303	5	6,163
TOTAL	642,862	104,000	

Effective September, 1993.

However, this is only a crude estimate due to limited data availability in the district and difficulty in discerning and delineating the exact impact of drought in the district.

Other reasons which may push this figure downwards are:

- Bumper harvest (short rains) of 853,170 bags of cereals that were enough to last the district at least 9 months.

- School feeding program (approx. 30,000 pupils)

- Only the long rains have failed. Normally, the long rains harvest accounts for less than 20% of the district annual production.

Following the text, the problems are more related to the structures but exacerbated to an extent only by drought. As earlier stated, measuring this extent is a big problem.

d) Visited the area, witnessed what is the situation on the ground.

Failure of the long rains.

Interviews with GOK, NGOs and the public.

Breakdown of beneficiaries is as follows:

Table 8

Kibwezi Division	149,155	50%	74,577
Mbooni Division	123,303	20%	24,661
Wote) Mulala) Matiliku)	167,505	40%	67,002
Kilome) Kaiti)	202,899	30%	60,869
Total	642,862		227,109 Beneficiaries
Margin of error for 10%			200,000

The district should start receiving famine relief supplies for 200,000 beneficiaries as soon as the report is accepted and until the district is re-assessed.

NB These are the numbers of beneficiaries recommended originally when we did the report in the field as per laid down guidance. The differing numbers are an after thought.

2. Supplementary feeding should be provided to malnourished children, pregnant and lactating mothers, especially in the new settlements of Masongaleni, Kiboko and Mbui Nzani in Kibwezi Division; Mavindini, Kalawa, Kathonziweni, Kitise, in Wote Division; Nziu in Matiliku Division, Kithembe in Kaiti Division and Kasikeu in Kilome division need special attention.

3. Monitoring and evaluation of relief supplies should be intensified.

4. Food-For-Work for community based projects should gradually replace famine relief food as and when the people are sufficiently recovered from the drought effect.

5. Efforts should be made to assist farmers in readiness for the short rains planting season whose onset is expected from mid - October.

6. The district should be re-assessed in September/October 1993.

MERU DISTRICT

A. SUMMARY:

The team, comprised of Adel El Mahi of World Food Program, Julius M. Kaloi of Kenya Freedom From Hunger Council, Simon Rotich and Valarie Wambani of the Office of the President, conducted the drought assessment in Meru District from June 26 - 1 July 1993. The "last thirty days" refers to the period from May 1 - 31, and the "last three months" refers to the period of February, March and April 1993.

High rainfall levels were received in the highlands while the lowlands received none or very little. Although the vegetation and pastures in most divisions are green, it is expected to be affected by the continued dry spell as from August 1993.

The condition of livestock was reported to be normal in the past three months and in the past thirty days. No unusual animal diseases were experienced. Livestock sales have been very low during the assessment period mainly because farmers were reluctant to sell. Due to dry areas in the lower lands, the livestock keepers have started driving their cattle to areas bordering Isiolo District.

The district is expected to have a crop failure for almost all the crops (about 10% of the crop may survive). This can be attributed to late and poor rains which resulted in late planting.

The reported malnutritional status of children range between 4% -6% underweight, and this indicates that there is no significant change in the nutritional status reported during January 1993 to May 93.

The team recommends 53,790 people in pockets of 6 divisions should receive a ration of 4 legs of cereals 1.8 bags of beans and .6 kg of oil for the July-September period. No supplementary feeding is recommended.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

The rainfall patterns in the district have been erratic since last year. The good rains of December 1992 to February 1993 caused confusion among the farmers, followed by low rainfall in April and May 93, when high levels were expected (see Table 3, page 6). The upper Timau areas at the moment are the only ones which have received reasonable rains. The rest of the divisions received very little rain indeed. Information obtained from the D.A.Os office, meteorological department and local farmers show that the rains came one month late and stopped completely after a very short while.

Water Sources

Mount Kenya and Nyambene Hills are the major sources of rivers that serve most parts of Meru District. Seasonal streams after rains also reinforce the main rivers.
It is noted that areas particularly in the lowlands have water sources quite far away from the local residents. These are water catchment points where piped water is supplied and the situation is always the same. Plan International and the Catholic Diocese of Meru have initiated a number of projects which provide piped water from the main sources. Areas covered include parts of Igembe, North Imenti and Mutuati Divisions.

Although most parts of the district are currently facing a dry spell, water supply is still normal but in lower zones tends to be contaminated by coffee residues from factories.

Natural Vegetation and Pastures

The short-lived rains of April and May 1993 kept the vegetation and pastures in most parts of the district green. There are, however, some pockets that are affected by shortage of rains and the grass has started drying up: lower areas of Abothuguchi East and West Divisions, lower parts of Igembe, Timau and Tigania East and West).

It is expected that due to the failure of the rains, vegetation and pastures will be grossly affected by the continued dry spell as from August 1993.

Livestock Mortality Rates

No unusual animal deaths were reported in the past thirty days or for the past three months. Normal animal diseases resulting from negligence by farmers to dip their livestock are observed from time to time.

Livestock Sales

Livestock markets in the majority of the divisions do not exist. The only active market areas are in Kianjai (Tigania West Division) and Maua (Igembe Division). Most of the cows sold in these markets come from Isiolo and Tharaka Nithi Districts, while those from Meru lowland areas are very few indeed. The Meru town market also enjoys a unique advantage since lorries help to ferry the animals to the market from divisions and the surrounding districts.

From reliable sources, the numbers presented for sale are not as high as during last year's drought period. This is because very low stocks are available among the livestock farmers. The prices of various livestock vary from size to size. The following are the prices of an average animal:

Table 1

Animal	Oct 92	May 93
Cow	1,500 KShs	6,000 KShs
Goat	200 KShs	1,500 KShs
Sheep	150 KShs	1,000 KShs

Sales have been quite low for the months of February, March, April and May, because of the reluctance of farmers to sell, resulting in high prices in the livestock market. At the such a time of the year more livestock is brought to the market for sale.

Crop Conditions

The main food crops grown in most parts of the district are maize, beans, and green grams while cash crops are coffee, tea, tobacco and miraa. The district has three ecological zones; the high zone, middle zone and the semi-arid lower zone. The high zones grow both cash crops and food crops whereas the middle and semi-arid lower zones only plant food crops which include maize, beans, millet and sorghum. The semi-arid zone, however, is mostly occupied by pastoralists who plant few food crops.

Due to poor rainfall, a number of crops in the middle and lower zones are experiencing water stress and it was observed that there is already a crop failure due to wilting. This crop was expected to be harvested in the months of August and September 1993. Only a few irrigated areas in the middle zone which constitute less than 10% of the cultivated farms have good crop conditions.

Harvest Levels

All grain-growing zones received a bumper harvest of maize in the last harvest season of February and March 1993. Legumes, however, did very poorly due to heavy November/December rains which swept most of these crops. Little or no harvest was received in most parts of the district. This has significantly contributed to a major shortfall of beans.

It is expected that the harvest for maize currently in the field will be poor in the middle and lower zones. This can be attributed not only to the late planting, but also shortage of rains at the moment when it was actually required (in its tasselling stage).

Employment

It is estimated that less than 10% of the population in each division is employed in the formal sector. This is mainly concentrated in the urban centers. The remaining 90% are self employed or working as casual laborers on individual farms. Some are engaged in

agricultural and livestock production while others are mainly self employed.

Displacement of Population

There has been no influx into settlements during either the last thirty days or the past three months.

Changes in Food Consumption

There were no significant changes reported in the consumption of maize, vegetables and fruits. However, the consumption of beans was lower than normal because of the last poor harvest. Oil consumption was also lower due to its current high prices.

Relief food did not make much contribution to this district as relief food ended sometime in March 1993.

C. NUTRITIONAL STATUS OF THE CHILDREN:

Nutritional Assessment Results

CHANIS is still the only source of nutritional data available in Meru District. About 20 health facilities have reported this data consistently for four months this year, with only 5 reporting in March 93, as compared to between 18 - 26 health facilities in 1992.

Malnutrition levels have ranged from between 4% - 6% underweight (Weight-For- Age) for the period January - May 1993, indicating very little variation from 1992 data of 5 - 6% underweight. Although this data is limited, health staff from both Maua Methodist and Meru District Hospitals reported an increase in the number of severely malnourished children admitted in the wards especially in the months of May and June, 1993. There were mainly kwashiorkor cases attributed partly to the poor harvest of beans last season. It was noted that some of the children this time were from the high potential agricultural areas of the district, which is normally least expected. In addition, a number of children came in the 2nd stage of malnutrition with swollen legs and some were over five years of age.

Supplementary Feeding programs

There are no supplementary feeding programs in the district.

Therapeutic Feeding Program

There are no therapeutic feeding programs in the district. Neither Maua and Meru Hospitals are providing energy dense diets for children admitted to the wards with severe malnutrition, thereby increasing their length of stay in hospital to 1 - 3 months.

Incidence of Diseases

It was reported by the health staff that malaria, respiratory infections and skin diseases were the three major causes of morbidity. The incidence of malaria has increased in the months of March and April 93 and was higher than normal. This was caused by the prolonged rains early in the year resulting in an increase in the number of pools of water in the area. The increased incidences of anaemia were caused by the high incidence of malaria.

Measle cases were reported to be higher than normal especially in the months of March and April 1993.

Micronutrient deficiencies are not reported separately in the data collection forms.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

Although Meru District has been a land of plenty, the food stuffs sold in the markets in divisions are expensive compared to other districts. In the past Meru District has been producing enough food for the district and for others (Isiolo...etc).

In the past three months, prices of locally produced commodities have gone up, depending on what kind of supplies are brought to the markets. In the months of April and May 93, more animals were brought in the market. The reason behind this was the issue of school fees and attempts to provide medical care to family members due widespread malaria attacks. Very low quantities of beans are in the market and the NCPB recorded nil purchases this year.

Table 2:Price Trends

Item	October 92	January 93	May 93
Maize 1Kg	14.00	10.00	9.00
Sorghum 1Kg	N/A	7.00	5.00
Millet 1Kg	20.00	17.00	6.00
Beans 1Kg	N/A	N/A	14.00
Sugar 1Kg	15.00	17.00	42 - 50

* (No beans were available in the market)

The items stocked in the markets but with controlled prices have not changed much in the past months of February, March, April and May, while those decontrolled vary in prices

from place to place with transport costs given more emphasis.

NCPB Purchases and Sales

The district has two independent depots which are situated in Maua and Meru towns. Throughout the year, no beans were either purchased or sold in Maua or Meru depots. No yellow maize was bought or sold throughout this year although stocks were available in the months of March, April and May 93. About 700 MT of white maize were transferred from Nyahururu to Meru depot.

In addition to the commercial foodstuffs stored by NCPB, beans and yellow maize for the School Feeding program are kept.

Rainfall

Table 3

Year	February	March	April	May
1992	14.9 mm	2.7 mm	2.5 mm	223.1 mm
1993	96.5 mm	25.1 mm	262.4 mm	215.6 mm

The rainfall pattern since 1992 has been unpredictable but with better figures this year. However, Meru District normally receives higher mm of rainfall in March, April and May. Higher rainfall has been recorded in the highlands while the lowlands continue to receive either drizzles or no showers at all.

Rainfall in the past thirty days has been lower than normal while it appears almost normal in the previous three month.

The only rainfall readings for the district are placed in the town and do not necessarily indicate the true rainfall picture of the entire district.

E. RELIEF FOOD DISTRIBUTIONS:

General Ration

Relief food stopped in March, as recommended by the February drought assessment team. Much of the information available at the district level shows that quantities received and distributed differ from information provided by WFP Nairobi. The table below shows that difference:

Table 4:Food allocated to the District since November 1992

Commodity	WFP infor.	District infor.
Cereals	776.59	908.37
Pulses	82	62
Oil	35	35
Red mix Wimbi		119.178

The monthly food relief allocated to the district was 375 mt of cereals and 56 mt of pulses. This, compared to what had been received during the period November 92 to February 93 in the district level will show that only 60.5% of cereals and 27.7 % of the total allocation has been received.

Table 5: Number of Beneficiaries of food relief in the district.

Commodity	# of beneficiaries
Yellow maize	75,697 persons
Beans	5,166 persons
Oil	58,333 persons
Red mixed Wimbi	9,931 persons

Source: DO I

Supplemental Rations

There is no supplementary feeding program in the district.

Commodities Stored in NCPB Depots

At the time of assessment, there was no food relief in the NCPB depots in the district. The following amounts reported as the current balance :

Table 6

Depot	Y.maize	maize	Sorghum	Bean	Millet	Rice
Meru	280.9	90.6	0.00	7.2	3388	0.00
Maua	0.00	287.01	0.00	0.00	0.00	0.00
Total	280.9	57.61	0.00	7.2	3388	0.00

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

There are several NGOs working currently in the district: Plan International, Save the Children Fund - Canada (SCF), Catholic Missions, and CPK. As stated by the District Development Officer, there were around 30 NGOs in the district with no coordination among them. Plan International and SFC/Canada, basically development organizations focus on child welfare. The organizations do not believe in the handout activities (relief) but on development through community integrated projects.

The ongoing development activities for Plan International and SCF Canada were in the field of :

- Health: mobile clinics, family planning, public health personnel training, and immunization.

- Education: rehabilitation of schools.

- Food security: grain storage facilities (SCF-C), provision of seeds and implements.

- Water: provision of good drinking water through water tanks (family water tank), water harvesting project.

- Agriculture: sustainable ag. development projects (women groups), kitchen gardens.

- Income generation: promotion of women income generation projects (revolving funds) the target group was women.

G. RECOMMENDATIONS:

1. The team recommends the following pockets to receive food for the period July - September 1993. These are the most dry areas of the district mainly bordering Isiolo and Tharaka Nithi District:

Division	Pocket	Population
North Imenti	Ruiri Kirua	18,000
Abothuguchi W&E	Kiago Nduruma Ntugi Mwanganthi	7,790
Egembi	Kangungi Akachi Athiru Gaiti	10,000
Timau	Kisima Kirimara	3,500
Tigania W&E	Njia Mituntta Akathi Muthari	14,500
T O T A L	15	53,790

The team recommends the following ration rate:

- Cereals : 4 Kg/person/month.
- Pulses : 1.8 Kg/person/month.
- Fats/oil : 0.6 Kg/person/month.

2. The DFRC should continue to closely monitor the drought situation and report to the OP and WFP.

3. Relief food should only go to the above-mentioned areas and particularly to specific needy cases in these pockets.

4. Organizations including the GOK, UN agencies, and NGOs should make seeds and implements available promptly for planting for the next season (vegetables and root crops). Reseeding activities should be encouraged in the lower zones so as to increase and improve pastures.

5. For both drought and economic/development, Food-For-Work projects should be introduced in the district to help construct and maintain roads, water, dips, grain storage facilities, and other essential amenities.

6. The team heard complaints pertaining to irregularities in the past food distribution where distributors gave food to relatives and friends but not to the needy. Therefore, the team strongly recommends that food distribution should be thoroughly monitored to ensure that similar anomalies do not recur. The Food Monitoring and Reporting System developed by WFP, OP, and CARE Inter. should be strictly adhered to.

7. NGOs should be encouraged to venture in to those lower dry areas and should emphasize the collection of nutritional data.

THARAKA NITHI DISTRICT

A. SUMMARY:

The team, comprised of Adel El Mahi of World Food Program, Julius M. Kaloi of Kenya Freedom from Hunger Council (KFFHC), Simon Rotich - Office of the President, Valarie Wambani- Office of the President, visited Tharaka Nithi District from the 21st to 26th June 1993. The past thirty days referred to 1 - 31, May 1993, and the previous three months referred to February, March, and April 1993.

The rains during May 1993 were lower than normal and insufficient for crop support, especially in Tharaka North and South divisions. The lower areas of Mwimbi and Chuka Divisions are also facing a crop failure. Vegetation and pastures improved drastically following the good rains of December - January and hence livestock mortality rates remained normal with no unusual deaths reported during the period of February - May 1993. Livestock sales during May were reported to be normal but higher than normal towards the end of April and the beginning of May, as people sold animals to pay school fees. There is no major change in food consumption during the period.

In Tharaka Nithi District, the estimated percentage of household heads employed in the formal sector is less than 10% (employed with the government, Catholic Missions and other NGOs;). There have been no major changes in the average number of severely malnourished children compared with the period of October - December 1992, with an increase in the number of children who are under-weight in Tharaka North and South Divisions.

Relief food distribution stopped in February 93 as recommended by the February assessment team.

Due to a continued dry spell in North and South Tharaka Divisions, the team has found it necessary to recommend resumption of food for the period of July - September 93 for Tharaka North and South Divisions of a reduced ration rate of 80% and 50%, respectively. Supplementary food is not recommended in the coming period. Distribution of seeds to enable farmers tc plant at the right time is also recommended.

B. CURRENT SITUATION IN THE DISTRICT:

Rainfall Trends

The prolonged rains of December - January 93 were well spread in the district, however, rains in the last thirty days were lower than normal and areas like Tharaka North Division and isolated areas of Tharaka South Division (Chakariga, Nkondi and Tunyai locations) had no rains or very little reported. This is according to team members observations of lowland pastures, because data on rains was limited. Nevertheless, the Chuka and Mwimbi Divisions

received better rains than the lower areas. The rains received were not adequate and the cross planted have started dying due to the dry spell.

Table 1: Comparison of rainfall at the Gatunga Police Station

	February	March	April	May
1993 Mean	45.1	3	65.3	71.1
LTM	14.2	72.7	226.4	81.4
% mean	318 %	4 %	29 %	87 %

Water sources

Most parts of the district rely on water from rivers and streams. Mount Kenya is the major source of these rivers. Tharaka North streams have dried up due to continued dry weather and thus residents have to rely on hand-dug wells as a supplement to the streams.

In Chuka and Mwimbi Divisions, there is adequate supply of water through rivers though residents experience problems in drawing it due to the steepness of the land. The GOK and SIDA have initiated a number of water projects in both Tharaka North and South Divisions which have improved the quantity and quality of water.

Natural Vegetation and Pastures

Vegetation and pastures improved towards the end of last year following good rains of December - January, and remained normal in the past thirty days as well as in the past three months. Vegetation and pastures in most divisions appear normal although very little rain was received during the period March - May 93. Locations in lower Tharaka North, however, are having unusually poor vegetation resulting from the current dry spell. Isolated pockets of Tharaka South Division meanwhile continue to face a similar fate. Chuka and Mwimbi Divisions continue to enjoy good vegetation with the lower parts of the two zones remaining with normal pastures.

Livestock Mortality Rates

The lower zones of the district harbor 90% of the livestock kept. A few exotic breeds are kept in the high zones mainly to provide milk while the local breeds are mainly found in the dry areas of the district. No unusual mortality rates were reported either in the higher or lower zones in the past thirty days. Tick borne diseases are reported in the lower zones simply because very few dips are operating. Nevertheless, normal mortality rates were maintained in the past three months as well as in the past thirty days.

Livestock Sales

The prices of livestock were reported to be quite high at the moment with very low supply in the markets due to low animal stocks available. The only high sales were reported during last year's drought. In the past thirty days, livestock sales were normal. Towards the end of April, high sales were recorded, because many parents wanted to pay second term school fees for their children. The past three months had sales higher than normal.

NB : No proper established animal markets are available and therefore data was very limited.

Crop Condition

A number of crops including maize, beans, green grams and millet grown in lower Mwimbi and Chuka Divisions were experiencing water stress and thus expected to do very poorly. The maize which is at its tasselling stage at both lower and upper zones are indeed in very poor condition and thus very low yields are expected during the harvest season of August - September 93. The sorghum in the field which was planted in the last October - November rains is doing relatively well although the grain sizes are affected due to current drought. Late planting of millet and green grams will contribute to low yields during the harvest. Some isolated planting of legumes was done during the first week of May.

The general poor crop situation could be attributed to the following reasons :

- Late planting due to the late start of rains.
- High costs of inputs forced the farmers to plant without fertilizers.
- Generally poor farm husbandry because of low inputs of quality seeds.
- Low interest by farmers to plant drought resistant crops like the root crops, cassava and sweet potatoes.

Harvest Levels

From the findings, it was clear that the last harvest season of January - February 1993 was a bumper harvest particularly in Chuka and Mwimbi Divisions. It is important to note, however, that there was less cash income due to poor prices for coffee, farmers sold a bigger quantity of this harvest to enable them to pay school fees for their children. However, this does not have any link to drought. The harvest for crops currently in the fields will be lower than expected due to failure of the rains. Maize and beans, which the population almost entirely depend on in high and middle zones, are expected to yield very little. The worst hit areas in the district are Maragwa, Kamaguna, Kanyoro, Marimanti and

Chakariga. Both Tharaka South and North will experience very low harvests.

Displacement of Population

There has been no influx and outflux of populations in the past thirty days or in the past three months.

Employment

It is not possible to get exact figures of those on formal employment, however, it is estimated that less than 10 % are employed. The few who are employed work with the government as civil servants and in private businesses, mainly concentrated in Chuka town.

Changes In Food Consumption

Food consumption was normal since the previous harvest had been reported to have been quite good. Most households are using less oil because of its high cost. Relief food did not make any contribution to the diet since it ended in February 1993.

C. NUTRITIONAL STATUS OF THE CHILDREN:

Nutritional Assessment Results

CHANIS data is available in the district hospital with only 11 health facilities reporting mainly in Chuka and Mwimbi Divisions. Health facilities in Tharaka North and South Divisions do not report consistently. There has been no change since the last assessment. This data indicates that an average of 3,000 children were weighed monthly between January and April 1993 with malnutrition rates of 8 - 11% underweight (Weight For Age) compared with 7 - 9 % in October - December 1992. Prior to September 92, CHANIS data was still under Meru District. This information is based on discussions with staff from the Catholic Mission operating MCH CHANIS in the two divisions.

Although this information is limited, the District Nutrition Officer reported that the nutritional status tended to be worse in Tharaka North and South Divisions. The Catholic church operates a number of child health centers in these divisions with a good data base in immunization but nothing on CHANIS. There is a need for expansion of their activities to incorporate growth monitoring and CHANIS which would be useful for targeting nutrition interventions.

The number of severely malnourished children (those reported to have marasmus or kwashiorkor) appears to have decreased in this period on an average compared with the period of Oct - Dec 1992.

Supplementary Feeding Programs

There were no supplementary feeding programs in the district.

Therapeutic Feeding Programs

There were no therapeutic feeding programs in the district.

Incidence of Disease

Data available at the District Medical Records Dept. on incidence of diseases is from both GOK health facilities and NGOs (Catholic Missions and PCEA). The top three leading cases of morbidity are malaria, upper respiratory tract infections and skin diseases.

Measles cases were reported higher than normal in March 93 due to an outbreak in approximately 5 health facilities. An increased incidence of anaemia was attributed to the high incidence of malaria.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Price Trends

The prices of various commodities vary from town to town mainly because of the price decontrol process initiated by the government. Where the commodities are brought by retailers from far places, the transportation costs are incorporated in the final price of the commodity bought by consumers. The areas experiencing such are mainly in the North and South Tharaka Divisions. It was notable that most of the shops in the above mentioned divisions either stock very low levels of commodities or do not stock at the moment because consumers are finding them unaffordable.

•Table 2:The following is a generalized price table for the district

Item	Oct. 92	Jan.-Feb.93	March 93	April 93	May 93
Maize 2Kg	27 KSh	19.5 KSh	12 KSh	10 KSh	12 KSh
Beans 2Kg	30.5	16.5	30 KSh	30 KSh	34 KSh
Sorghum 2	22.5	19 KSh	30 KSh	35 KSh	30 KSh
Kg	22.5	29 KSh	30 KSh	36 KSh	N/A
Millet 2 Kg	8 KSh	5 KSh	6 KSh	N/A	15 KSh
Potatoes	1,000	4,500	5,500	5,000	5,000
1Kg	250	600	750	700	950
Cow	250	600	750	600	850
Goat	N/A	N/A	100	150	200
Sheep					
Poultry					

Retail price of the commodities farmed in the divisions (especially Tharaka North and South dropped following the harvest of maize and beans in January, February, and March.

Rainfall

Rainfall in the district has been quite erratic in the period of March - May 93. The higher zones have received some rain although inadequate as compared to past periods. Lower areas (Zones 4,5, and 6) have hardly received any meaningful rain and therefore, a total failure of crops planted is expected all over. (Refer to Table 1 on page 2).
Because of this low or no rainfall, pastures in the North and South Tharaka Divisions have started withering. Although rains were expected in March and April, many areas did not receive drizzles until the middle of May which was in very small amounts. Due to this, Chuka and Mwimbi Divisions which are in agricultural zones are going to experience crop failure which will result in food shortage.
NB : Rainfall data was very scarce and the team had to base the rainfall report on discussions with various groups.

E. RELIEF FOOD DISTRIBUTION :

General Ration

Food started to arrive in the district in August 1992. No reliable information was available at the district level concerning quantities received. WFP Nairobi data shows that the quantities sent to the district since August 1992 were as follows.

Cereals 1,700.14 MT, Pulses 188 MT, Fats/oil 82.99 MT.

At the District level, the information gained showed the following quantities (received and distributed):

Wheat 1,261.75 MT, Beans 425.6 MT, Y. maize 2,195.7 MT.

As recommended in the February assessment, the DFRC suspended distribution of food to the district by the end of March 93. The number of beneficiaries receiving food at that time was 127,000 people. Catholic mission assisted in the distribution of relief food.

Supplemental Rations

No supplementary food has been distributed in the district.

Commodities stored in the NCPB stores

No NCPB depots are in the district. All district allocations have been stored in Meru Depot, however, at the time of this assessment, there was nothing stored for Tharaka Nithi district at the time of this assessment.

F. ONGOING AND PLANNED RECOVERY/DEVELOPMENT ACTIVITIES:

Tharaka Nithi District has an insignificant number of NGOs working in the district. There is only the Catholic mission. Based on the data provided by the District Development Officer, the following development activities are under way or planned:

Ongoing Activities: small scale surface irrigation projects aimed at production of vegetables; a high pressure gravity-fed irrigation project covering around 400 hectares for the development of horticultural and food crops in Chuka Division. There are also various projects undertaken by the government ministries in fields of livestock and health.

Planned Activities: There are many planned projects in the field of water supply and sanitation which will be funded by the government, EEC, and World Bank in various parts of the district. In the field of agriculture, there is a national extension project and national dairy development project which intends to introduce new husbandry techniques to staff and farmers and provide them with new skills, and improvement of quality and quantity of farm-grown feed for dairy cattle.

G. RECOMMENDATIONS:

1. The team recommends that the number of beneficiaries and the ration rate for the district for July-September 1993 be as follows :

   - T. North Division : 28,424 beneficiaries at 80% of the WFP standard ration rate.

   - T. South Division: 55,189 beneficiaries at 50% of the WFP ration.

   Further assessment for the period October -December should be done.

   There is no need for supplementary food at the moment in the district.

2. Relief food should be carefully targeted by the DFRC to the areas identified above.

3. There is a great need for provision of agricultural seeds early enough so as to enable farmers to plant in the right time.

4. Existing NGOs should collect nutritional data alongside their health data.

5. NGOs should be encouraged to spread their activities in Tharaka Nithi District especially in North and South Tharaka Divisions.

6. The relevant authorities should seriously address the poor status of the roads.

7. The DFRC should closely monitor the drought situation in the district with emphasis on the lowlands of Chuka and Mwimbi Divisions.

8. Relief food should be closely monitored by a recommended NGO to enable the target beneficiaries receive it in good time and at the same time promote an efficient record keeping process.

LAMU DISTRICT

A. Summary

The team was comprised of Valerie Wambani (GOK), Robert Palmer (UNDP), Chidi Ogbonna (WFP), D. M. Mutiso (OP) and visited Lamu District from June 9 - 14, 1993. The "last thirty days" in this report refers to the period May 1 to 31, 1993. The "previous three months" February to April 1993. This is the first drought assessment in the district.

The mission visited Mpeketoni, Witu and Amu Divisions but could not visit Faza and Kiunga due to tidal movements and security reasons.

Lamu District is bordered on the South by Kilifi District, to the West by Tana River District to the North by Garissa District and to the North-East by the Republic of Somalia. Lamu District is divided into the mainland and the Islands of Manda, Lamu, Faza, Pate, Ndau and Kiwaiyu.

According to the District Development Officer and the drought situational report of Lamu District, the population is about 85,000 people occupying an area of 6,814 sq Km. 50% of the population depend on agriculture, 30% on livestock, 10% on tourism and 10% on fishing.

Agricultural concentration is in Mpeketoni Division, which is the bread basket of the district. The district produces cotton, mangos, maize, sorghum, millet, cowpeas and other commodities. Agricultural activities in certain areas are being hindered by wildlife (baboons, monkeys and hippopotamus) which destroy the crops.

There is a land settlement scheme in Mpeketoni (Lake Kenyatta) wherein families are allocated a ten acre plot of land for farming purposes. A similar scheme is about to be implemented in Witu Division. GTZ is currently involved in various infrastructural development projects in the settlement schemes.

Part of the drought food commodities are used for "Food For Work Projects" involving the chasing of wild life that destroy the crops, digging of water trenches for water supply schemes and feeding of about 9,000 Somali refugees. The district authorities were advised that this is contrary to the working documents between the Government and WFP.

The district authorities informed the team that food production is hampered in the district due to wild life menace, banditry and the drought experienced in the northern and north-eastern parts of the district.

Vegetation in Mpeketoni, and parts of Witu were relatively green compared to other parts of the district.

The district seems to have great potentials for Food-For-Work projects. There are various development projects which could be undertaken in the district and tied to Food-For-Work programs.

The team recommends that the District continue to receive relief commodities for 2,903 beneficiaries located in Kiunga, Witu and Faza Divisions for the next three months being the next assessment period.

B. CURRENT SITUATION IN THE DISTRICT

Rainfall Trends

Although there is limited rainfall data covering only Mokowe weather station for the period January-May 1993 , however the District Agricultural Officer informed the team that the District has received very little rainfall.

Water Sources

The district authorities report that for the previous three months water availability was very poor. This situation has slightly improved but it is still lower than normal. Faza, Kiunga, northern parts of Witu and Manda Island are extremely affected. Drinking water has to be ferried from Lamu Island to Faza, Kiunga and Manda. Places like Faza and Manda depend on harvesting of rain water for domestic uses, so when rain fails water shortage is experienced.

Natural Vegetation and Pastures

In the past 3 months, the extended short rains in February gave rise to greener vegetation, however this natural pasture was invaded and over grazed by livestock from the neighboring districts of Tana River and Garissa. Most of these livestock have since moved from the district and the vegetation is gradually returning to normal.

Livestock Mortality Rates

Livestock activity is mainly done in Witu Division. During the last three months, there was an increase in livestock (cattle, sheep and goat) mortality due to increased competition for pastures as a result of the influx of animals from other districts who also brought along diseases. The District Livestock Production Officer estimates that about 15% animal loss was experienced by the district during the last three months. The situation has improved to normal during the past thirty days.

Livestock Sales

According to the District Agricultural Officer's assessment, Witu Division, which experienced livestock losses is still recovering, therefore sales are still lower than normal.

Crop Conditions

Agricultural seeds received in the district were planted but due to erratic rainfall patterns, most of the crop suffered water stress causing farmers to replant. Although rainfall in the past thirty days has improved, it is still inadequate to sustain a fair crop through out the district. Mpeketoni is the only division out of five in the district that has a fair crop of maize and beans. Harvest is expected some time in August. A total of 1,895 hectares of land was put under cultivation for the rains in 1993 for a total of 17 crops.

There is an ongoing settlement scheme in Mpeketoni wherein needy farmers from all parts of the country are allocated a ten acre plot of land to farm around the Lake Kenyatta area. There is a Farmers' Training Center in Mpeketoni to cater for the training needs of the farmers. There is also a planned settlement scheme in Witu Division. GTZ is actively involved in the development efforts of these settlement schemes, providing such infrastructures as health centers, educational facilities and piped water.

Harvest Levels

According to available data in the District Agricultural Office, 3,720 MT of 7 major food crops (maize, sorghum, millet, rice, cowpeas, green grams and pigeon peas) are expected at harvest.

The District Agricultural office also indicated that the harvest of November 1992 was poor, although the team was not given any kind of statistics.

Employment

It is estimated that employment in the formal sector is less than ten percent. Most of the employment is provided by the Government. There are very few industries in the area. The economy on the Island depends heavily on tourism, while that on the mainland is dependent on agriculture and livestock.

On the Island, the work is mainly done by the men who are often free-lance tour guides, boat operators and fishermen. A small percentage work in hotels and restaurants.

Displacement of Population

Displacement of population in the district is mainly caused by insecurity due to banditry activities around the Witu area. The banditry activity seems to spill over from Tana River and districts in the north.

There is also a problem with the constant flow of refugees from Somalia into the district. There is a reported case load of 3,000 Somali refugees in Kiunga Division. Their presence has caused a number of families to move away from the area for fear of insecurity. There is no marked influx of people from other districts. The need for food aid seems to be for other reasons discussed elsewhere in the report.

The District authorities estimate that there are about 9,000 Somali refugees in Kiunga, Faza and Amu Divisions at any one time. As refugees come under a different mandate, famine relief food meant for drought victims should not be directed to this group. UNHCR should probe into this matter with the aim of alleviating this burden from the district authorities.

Changes in Food Consumption

Consumption of cereals legumes and oil is reported less than normal. Milk consumption has declined in the past four months due to poor conditions of animals and this has caused price escalation. According to the amount of food received in the district, the famine relief components cover less than 5% of the requirements.

C. NUTRITIONAL STATUS OF CHILDREN

In this district, CHANIS data has been routinely collected from 15 health facilities over the last four years. This information is analyzed by the District Medical Records Officer and is used by the health team for planning purposes.

According to this data, the malnutrition rate is on the decrease with 14% reported in 1989 and 8% in 1992 (underweight - WFA). There has been no significant change in the number of severely malnourished children admitted in Lamu District hospital during this period. These figures represent district averages of children measured in health facilities only. It is important to note that access to health facilities is a problem in Faza Division, one of the most densely populated, thereby limiting the attendance rate. In Witu Division, data collection is affected by insecurity as well as impassable roads during the rainy season.

The District Nutrition Officer reported an increase in malnutrition especially in Amu Division resulting from frequent divorce which renders mother and child more vulnerable as the man is usually the sole bread-winner.

Supplementary Feeding Program

There is no supplementary feeding program in Lamu District.

Therapeutic Feeding Program

There is no therapeutic feeding program in this district.

Incidence of Disease

Health staff reported an increase in the incidence of malaria and respiratory infections with 4,665 and 3,998 cases treated in April 1993 compared with 4,181 cases of malaria and 3,388 cases of respiratory infections in April 1992. Skin diseases are also among the top three leading causes of morbidity. These three contribute about 50% of the total reported morbidity.

There has been a marked improvement in the immunization coverage of the district 87.4% in 1992.

D. ECONOMIC/ENVIRONMENTAL INDICATORS:

Food Prices Trends

Price trends of both yellow and white maize had slight increases during the months of May to December 1992 which were selling between Ksh 5.50 to 7.50 per Kg. and Ksh 6.40 to Ksh 7.80 respectively.

There have been price increases during the months of January and May 1993 with yellow maize selling at Ksh 6/= and KSH 10/= whereas white maize has been selling at Ksh 8/00 and Ksh 15/00. The marked trend in price increases could be attributed to systematic decrease in food production due to less area under cultivation, crop destruction by wild life and losses due to poor storage. The district is currently heavily dependent on food from other parts of the country. Coupled with the current economic situation in the country, prices in this district tend to be higher than in most parts of the country.

Commercial foods are available in the market but due to the high cost, many people can not afford them.

Fish is selling at KSH 50 per kilo. A cow which was at KSH 3,700 May 1992, is currently selling at KSH 5,200. A goat which was selling at KSH 450 is currently selling at KSH 850. The price of beef is Ksh 60 where as goat meat costs Ksh 80.

NCPB Purchases and Sales

The NCPB did not purchase any maize (either yellow or white), sorghum, beans, millet, wheat, rice and oil for the months of March, April and May 1993. Sales of yellow maize were as follows: March 21.3 Mt; April 15.4 Mt; May 1993 14.2 Mt.
Beans were bought as 0.1 Mt, 0.8 Mt, 0.8 Mt, 0.5 Mt for the months of March, April and May respectively.

Rainfall

The total rainfall (mm) recorded in 1992 from 11 weather stations is as follows:

Bahari	Nil
Mukunmbi	Nil
FTC	794.4
Kiongwe	Nil
TCE	771.5
Plots No 419	122.3
Witu	862
Mokowe	581.7
Hindi	766.3
Bargoni	584.3
Rasini	Nil
Siyu	494.2
Patte	331.8
Kiunga	Nil

E. RELIEF FOOD DISTRIBUTION

General Rations

WFP relief food receipt and distribution details (according to available data) from 15/10/92 (date of first receipt) until 11/06/93 (reporting date) is as below:

Wheat: 23 MTs was received and distributed. Of this 23 MTs, only 11 MTs were recorded in Mokowe NCPB books. 12 MTs were delivered directly to GTZ for distribution without entering it into the NCPB books.

Yellow Maize: 150.83 MTs were received, entered into the NCPB books and distributed.

Beans: 15 MTs received, entered into the NCPB books and distributed.

E.Oil: 5.6 MTs were received out of which only 3.6 MTs were entered into the NCPB

books, and 1.88 MTs distributed. The district authorities said 2 MTs were delivered to an unnamed chief's store in Mokowe but details of distribution were not available.

The Catholic Mission received in January 1993, 1 MT of wheat which was distributed to 87 families, April 1993. 9 Mts of maize distributed to 120 families. As at reporting date, they have a balance of 1 Mt maize and 10 bags of beans due for distribution on 14/06/93. The beneficiaries list was made available to the team.

There seem to be figure discrepancy between the WFP officially reported dispatch figure of 608 MT of cereals between June 1992 to April 1993 and the supposed received figure of 184.83 MT until June 11, 1993 in the district.

The district authorities did not seem to have any idea or record of what quantity of food that is allocated to them at any time. This points to a serious communication breakdown between Nairobi and the district which needs to be corrected.

WFP needs to monitor the food related activities in the district and efforts should be made to have a good method of record keeping. There is a serious need to standardize the record keeping to reflect the true situation on the ground, making it easy to obtain such information at the shortest moment. There is need for periodic monitoring of the program in the district.

There seem to be some degree of abuse as part of the relief food is being used for certain other purposes styled "Food for Work". Such activities include a central water supply project in Mkunumbi in which about 200 beneficiaries dig water trenches for drinking and agricultural purposes. In Hindi, the farmers organize themselves as vigilante groups for chasing baboons that come to destroy the crops in the farms. The team, however, did not see these supposed activities but strongly advised the District Commissioner that this is contrary to the objectives of the project. GTZ was mentioned to be involved in this activity but the GTZ coordinator was said to be away on leave.

The District Commissioner also said that some of the food is used to feed Somali refugees who occasionally stray into the district. The current number is put at about 9,000. This anomaly was also pointed out to the District authorities and was advised to contact the UNHCR for all refugee related matters.

Food transportation charges to Panda Nguo (about 22 Kms from Witu) should be higher than the normal rate used because the road is water-logged and reported extremely dangerous as it is paraded by bandits. The mission was able to verify this fact. Transportation charges will also be higher than normal in other parts of the district where food transport has to be done by water and land.

Quantity of Relief Food Currently Stored

The NCPB store balance as at reporting date is Yellow maize 53 MTs, beans 8 MT and Oil 2.2 MTs for WFP commodities only.

The above store balance does not tally with the data below from the NCPB Mokowe Main store and that reported by the District authorities.

The difference can be seen as below:

COMMODITY	QUANTITY MOKOWE	REPORTED DISTRICT	BALANCES DIFFERENCE
Cereals	* 150.83 MT 53 MT	59.11 MT	-6.11 MT
Beans	* 15 MT 8 MT	7.4 MT	+ 1.4 MT
E. Oil	* 3.6 MT 2.2 MT	.2 MT	-2.0 MT

* Only figures reported by the Mokowe Main Store.

ONGOING AND PLANNED DEVELOPMENT ACTIVITIES:

GTZ is currently involved in the Mpeketoni settlement scheme.

The district authorities have listed many possible planned development activities out of which the team has listed as below:

1. Construction of Jabias in Faza and Kiunga Divisions which will benefit 30,000 people.
2. Construction of livestock wells in Amu ranch aimed at benefitting 24,300 people.
3. Mechanization of the agricultural station in Mpeketoni, Kiunga and Faza Divisions.
4. Construction of livestock breeding camps in Witu, Faza and Mpeketoni Divisions.
5. Construction of Kiunga roads D568 and E865 in Amu and Witu Divisions.
6. Training of local carpenters in KTBH assemblage.
7. Registration and issuance of title deeds in the Lake Kenyatta scheme.
8. Construction of Siu foot bridge.

F. RECOMMENDATIONS

1. Studies for a Food-For-Work program should be carried out and appropriately implemented. The district should continue to receive famine relief commodities for 2,903 being the current official beneficiaries for the next three months until the next assessment period.

2. The district authorities should go by the official beneficiaries figures, rather than continue to be used for "Food-For-Work" projects as described in Section E General Rations.

3. Distribution and record keeping has to be improved. A simple format should be introduced and used at all levels of distribution.

4. All dispatch data from Nairobi has to be communicated to the district authorities in ample time to enable them to make the necessary logistical arrangements on the ground.

5. Secondary transportation charges should be reviewed to cater for difficult and risky areas.

6. WFP should quickly decide on the reported bad maize in Mokowe.

The team did not get feed back from any beneficiary as they were not shown any. In this light:-

1. It is difficult to ascertain the impact of the program on the beneficiaries.

2. This casts further doubt on the exact numbers of beneficiaries and the authenticity of the district call for an increase in the current number.