

**Rapid Vulnerability Assessment Report on
Food Insecure Areas in Tanzania for the
2006/07 Marketing Year**

Main Report

**Coordinated by the Disaster Management Department in the
Prime Minister's Office and
the National Food Security Division of the Ministry of
Agriculture, Food and Co-operatives.
Dar es Salaam**

**In collaboration with Tanzania Food Security Information
Team (FSIT)¹**

August 2006

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FSIT is composed of members from Government Departments, International Agencies and NGOs and was established in May 2000.

Executive Summary

The Rapid Vulnerability Assessment (RVA) of August 2006 was conducted against the background of an overall improved food production during the 2005/2006 crop production year as highlighted in the June 2006 Preliminary Food Production and Supply Forecast produced by the Ministry of Agriculture, Food Security and Cooperatives (MAFC).

The objectives of the assessment were to (i) identify the most vulnerable and food insecure population in rural areas affected by prolonged dry spells during the 2005/2006 season; (ii) define characteristics and number of people likely to be affected and (iii) determine appropriate interventions in the short, medium and long term. The assessment focused on 58 districts in 14 regions of Iringa, Mbeya, Lindi, Morogoro, Manyara, Kilimanjaro, Arusha, Tanga, Coast, Tabora, Dodoma, Singida, Mwanza and Shinyanga.

At the time of the assessment, most unimodal rainfall regions had either completed or were in the process of harvesting, while bimodal rainfall regions were at different stages of harvesting. Livestock conditions were found to have improved much compared to the situation observed during the January 2006 RVA, when animals were dying in large numbers due to shortage of pasture and water. Both of these improved following the rains that fell between March and June this year. Due to their current good conditions, in most locations livestock are fetching prices that are generally higher than during the same period time last year and much higher than early this year. Although animal conditions are satisfactory, they still face threats of diseases like CBPP, ECF, FMD and tick borne diseases, which increase when availability of pasture decline causing weakening of the animals.

The assessment established presence of tight food situation in 29 districts even though currently the people there are still accessing sufficient food and no extreme coping mechanisms were reported among the vulnerable households. The assessment has revealed that about 651,655 people, which equals approximately 3 percent of the total population of about 21,646,632 found in the affected areas, will have difficulty to access food during the months of November and December this year. These people would require food assistance amounting to 15,622 MT over the two months period. A total of 8,952 MT of free food assistance to be sourced from current EMOP under WFP is recommended for a total of 360,000 highly vulnerable and destitute people. It is further recommended that the remaining 7,030 MT of food be sourced from the Government's Strategic Grain Reserve (SGR) for targeting a total of 293,000 affected people. This food from SGR should be distributed to these people at a subsidized price of TShs. 100 per kg.

Furthermore, the assessment established that the affected households would require seed assistance of various varieties amounting to 1,221 MT. It is recommended that most of this seed be sourced from the ongoing FAO coordinated donor support, which is in response to the February 2006 Government appeal. Seed aid will enable 122,101 affected households to plant their fields during the next crop production year, starting in September/October.

In order to mitigate against future food shortages amongst livestock keepers, they are advised to consider adopting better husbandry practices and keep small herds economically rather than large herds, which do not provide them with economic gains. In the meantime, where terms of trade between livestock and grain are good,

livestock keepers are advised to sell part of their livestock now to buy grain and stock for future use.

FSIT recommends that the Local Government Authorities (LGAs) enact and continue to enforce existing by-laws that require households that had good harvest to store adequate amounts of food to meet their requirements through the next harvest. Moreover, the LGAs should enforce by-laws requiring farmers to plant crops according to their agro-ecological suitability to reduce food shortages attributed to failure to observe crop production requirements. This was observed as one of the factors that can be remedied for improving household food security and avert the food and seed assistance dependency syndrome, which is growing among the rural communities.

The FSIT observed that the current approach to conduct RVAs relies highly on the national level, with the LGAs assuming a minor role. This tendency is not cost effective and timely in the production and dissemination of the food security information, it denies the LGAs ownership of the food security information and perpetuates their dependency on central government to respond even to small and localized food insecurity concerns they can handle. The latter delays response too. FSIT recommends that the Local Government Authorities be mandated, and provided with capacity, to carry out the vulnerability assessments locally but maintaining strong links with the PMO and MAFC. Such increased responsibility to the LGAs would address most of the narrated FSIT concerns.

I. Background

The Preliminary Food Production and Supply Forecast (PFPSF) released by the Ministry of Agriculture Food and Cooperatives (MAFC) in June, 2006, indicated an overall good food crop production in 2005/06 and satisfactory food availability for the 2006/07 marketing year. The report indicated a 110% self-sufficiency ratio (SSR) at national level. The latter (SSR) implies that, before considering trade and stocks changes, with efficient internal food distribution mechanism matched with satisfactory purchasing power, the domestically produced food crops would enable the population to access adequate food throughout the year until next harvest and a marginal level of net food stocks balances would be realized.

However, despite this satisfactory level of food sufficiency nationally, only five regions of Mtwara, Ruvuma, Rukwa, Kigoma and Mara will have food surpluses or will be self-sufficient although they can have few pockets of food shortages due to trade element. Seven regions of Tanga, Mbeya, Lindi, Kagera, Morogoro, Iringa and Manyara will have surpluses of varying magnitudes but will also have several pockets of food shortages. Other food self-sufficient regions that will also have several pockets of food shortages include Coast, Kilimanjaro, Tabora and Arusha. The remaining five regions of Shinyanga, Dodoma, Singida, Mwanza and Dar es Salaam will have food deficits of varying degrees at regional level and in nearly all districts.

The MAFC's forecast report pointed out a total of 50 districts, located mainly in the northern half of the country, which in 2005/06 produced below their 2006/07 food requirements therefore are likely to experience considerable food shortages mainly between November 2006 and next harvesting season. While the next harvest is expected to begin in February next year in bimodal rainfall areas, it will be from April 2007 in unimodal areas. Food crop production shortfalls in the identified districts were mainly attributed to poor rainfall performance; incidences of pest outbreaks such as armyworms; limited access of the resource weak households to adequate and suitable planting materials and floods. Rainfall started late in unimodal areas and ended much earlier than expected, leading to crop failure in some areas. In the bimodal rainfall areas the 2005/06 *vuli* season performed poorly, and in extreme cases farmers failed completely to plant any crops, while the *masika* rains were generally better than the past 3-5 years but were still unsatisfactory in some locations, therefore impairing crop production activities. Floods hit parts of Kilimanjaro and Manyara Regions in May and destroyed hundreds of crop fields.

Similarly, during 2005/2006 extended periods of dry spells affected availability of pasture and water which, subsequently, adversely affected livestock health and livelihoods of the pastoral and agro-pastoral communities particularly in the central and northern regions of Dodoma, Singida, Mwanza, Shinyanga, Arusha and Manyara. The assessment teams established that pasture and water availability improved substantially with rains that fell between March and June this year and as a result, brought recovery of livestock conditions in areas that were hit hard. Currently livestock condition is satisfactory except in only a few locations, such as Kahe ward in Kilimanjaro Region, which suffered floods before full recovery from prolonged dry spells. However, according to Links/LEWS², areas affected by long dry spells in the central and northern parts of the country during 2005/2006 are predicted to suffer

² Links/LEWS – refer to Livestock Information Network and Knowledge System and Livestock Early Warning System

rapid forage conditions decline between now and the next rainy season, a situation that is likely to cause recurrence of conditions deterioration of the livestock and adversely affect pastoral and agro-pastoral livelihoods.

On the basis of MAFC's Preliminary Forecast and additional information from other sources (for example the regional and district authorities, LEWS and NGOs active in the agriculture and food sub-sector), the FSIT carried out a Rapid Vulnerability Assessment (RVA) in 58 districts in 14 regions of Tanzania Mainland (**Appendix II**) in July/August 2006. Regions not covered by the recent RVA include those identified to have no pockets of food shortages which are Kigoma, Rukwa, Ruvuma, Mtwara and Mara, Kagera due to its improved food security situation and Dar es Salaam, which is predominantly non agricultural and access to food depends on incomes derived from other economic activities. While the main objective of the RVA is to identify the most vulnerable and food insecure people in rural areas affected by lower than normal production levels, it should be noted that the RVA does take into account indicators of food security other than just food availability by including analysis on other attributes like food prices and purchasing power which reflects accessibility.³

The FSIT deployed a total of 14 teams from the national level, which were joined by technical staff from other stakeholder institutions at the district and regional level in the visited areas. At regional level, the mission teams consulted relevant authorities and jointly reviewed the regional food security situation and agreed on the districts that required assessment. This led to additional districts being covered in some regions. Similarly, at the district level, the mission teams together with relevant authorities reviewed the district food security situation and agreed on appropriate villages to visit and assess.

II. Objectives of the Assessment

The main purpose of this exercise was to determine if there will be food insecure population in rural areas affected by different shocks in the 2005/06 production year and identify the most vulnerable segments. More specifically, the RVA was carried out to fulfill the following objectives:

- On the basis of areas indicated by MAFC's Preliminary Assessment report and consultations with regional and district authorities to identify the lowest geographical areas (wards/villages), which are likely to experience high levels of food shortages.
- To define characteristics and number of people likely to face food shortages and explore coping mechanisms available to them.
- To determine appropriate interventions as well as support needed by affected population to enable them to cope and to engage fully in their productive activities in the coming agricultural season.
- To put forward recommendations that enhances implementation of short, medium and long-term strategies to reduce household food insecurity in the country.

³ Food security is commonly defined as "a situation in which all people at all times have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO).

III. Methodology

The teams visited and collected information at regional, district, village and household levels. Further information was also collected from traders and markets using a set of checklists and a combination of methodologies including components of rapid rural appraisal techniques and household economy analysis on sampled villages and households or units. All teams used the same set of tools to facilitate consistent information collection from the field as elaborated below.

A - Geographical targeting of the most affected areas

In order to identify geographical areas likely to experience food shortages, villages in each district visited (figure 1) were classified into three categories according to the performance of the 2005/2006 cropping season. Levels of food production by households were used as a basic entry point for assessment of food situation because agriculture is the main source of livelihood for most of the rural communities. However, other food security related indicators were considered in the assessment.

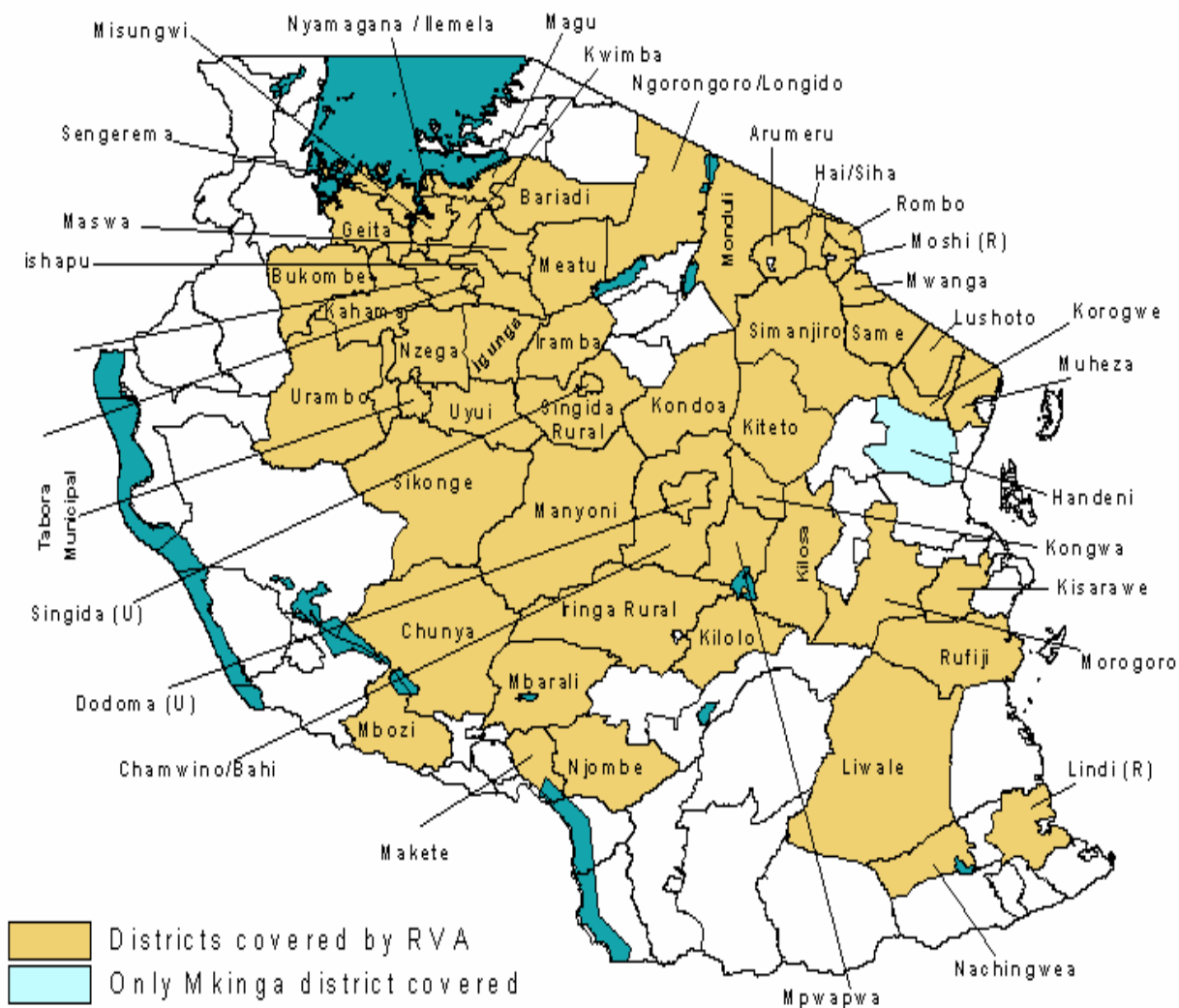
- Category number 1: Acute crop failure, i.e. 0 to 30% crop production compared to normal production
- Category number 2: Mild crop failure, i.e. 31 to 60% crop production compared to normal production
- Category number 3: Normal crop production, i.e. 61% and above compared to normal production.

The assessment mainly focused on villages where crop failure was acute (category number 1 above) and that is where most households experiencing food inadequacies are likely to be found. However, category 2 villages (mild crop failure) were also considered because the resource weak households in this category may drift into food insecure category in the event of food prices rising beyond affordable levels and available coping mechanisms are exhausted. Areas with near normal to normal food production were also identified but not assessed as it is assumed that people will continue to lead their lives as normally.

The villages were mapped in order to identify the agro-economic zones⁴ they belong to. Each village characterized by crop failure was therefore associated to one agro-economic zone. A minimum of 2 villages per agro-economic zone were then selected as representative villages for collecting information at village level.

⁴ An agro-economic zone is a geographical area where households are using nearly the same combination of means to access food and generate income and are also at risk of being affected by similar factors or shocks.

Figure 1: Districts covered by FSIT during the August 2006 RVA



Source: Food Security Information Team (FSIT)

B - Interviews with village leaders and wealth ranking at village level

In each village visited, focus group discussions were held with key informants including village Government and opinion leaders. Thereafter the key informants helped to group households found in their village into three (3) wealth categories namely resource weak, middle and better off and determine the percentages of households falling into each category. The wealth categories were predefined based on three major parameters, i.e. acreage under cultivation, livestock holding and other key income generation activities.

The different percentages of households falling in the three wealth ranks determined in the visited villages in a particular agro-economic zone were used to generate the overall percentages of households falling in a particular wealth category (rank) in all villages encompassed in the same agro-economic zone.

C - Interviews with household representatives of wealth groups

Representatives from each of the identified wealth groups were interviewed separately using a semi-structured questionnaire. Wherever necessary, men and women were interviewed separately. The core of the discussion focused on the current sources of food and income as well as on their level of purchasing power. Information on coping strategies that households currently use or plan to resort to in the coming months should food shortages arise was also gathered.

D - Identification of problems and required interventions

The analysis was done in order to estimate the number of households/people likely to be highly vulnerable to food insecurity.

- Information on the food security problems encountered by different wealth groups for each zone and the required interventions were identified based on the current options they are using to meet their basic requirements in terms of food and non-food items. The sustainability of the present coping strategies and alternative sources of food and cash for the forthcoming months (until the next harvest) were explored. Food commodity prices were also ascertained in the interview process.
- The analysis showed that some of the persons whom the key informants in the villages considered as resource weak households are able to cope with the current situation devoid of external assistance until next harvest. This group of people was therefore excluded from those requiring assistance. Finally, the percentages of food insecure households/people to be targeted for interventions were defined in each agro-economic zone identified to be vulnerable to food insecurity.

E - Criteria used in identification of the vulnerable

- Districts and areas with likelihood of suffering from food shortages due to production shortfalls during the 2005/2006 production year indicated by preliminary assessment report produced by the Ministry of Agriculture Food and Cooperatives in June, 2006.
- Available coping mechanisms used in the respective areas visited.
- Exclusion of townships and trading centers supporting a large population.
- Specific underlying causes of food insecurity attributed to adverse weather conditions or outbreaks of diseases and pests for both crops and livestock during the 2005/2006 production year
- Focus on rural households and communities with livelihoods dependent entirely on crop production and livestock keeping rather than on other economic activities.
- Exclusion from Central Government intervention districts with localized food shortages in small administrative areas, which can be managed by their respective Local Government Authorities.

IV. Overview of the National Food Security Situation for 2006/2007 Market Year

The Ministry of Agriculture, Food and Cooperatives (MAFC) conducted a preliminary food production forecast for the 2005/2006 cropping year in May 2006. MAFC estimated overall national food crop production to reach 10.73 million metric tones (MT), which exceeds production estimated for the previous three years: 9.67 million MT for 2004/05, 8.84 million MT for 2003/04 and 7.37 million MT for and 2002/03. Improvement in food crop production in 2005/06 is particularly attributable to favourable rainfall and use of inputs in the main food producing areas in the Southern Highlands and in some districts in regions with a bimodal rainfall regime.

MAFC estimates national food requirements in the 2006/07 marketing year to stand at approximately 9.7 million MT. Comparison of the estimated production in 2005/06 and these requirements indicate that in general the country will attain a 110 percent Food Self Sufficiency Ratio (SSR). This SSR is also better than in the 2005/06 and 2004/05 consumption years when corresponding SSR were nearly 103 percent and 97 percent, respectively.

Although the overall food availability situation at national level looks satisfactory, there are major inter and intra-regional and district variations. Based on last season production alone, MAFC predicted five regions including Mtwara, Ruvuma, Rukwa, Kigoma and Mara as likely to experience either food surpluses or be about food self-sufficient. On the same grounds MAFC identified seven regions composed of Tanga, Mbeya, Lindi, Kagera, Morogoro, Iringa and Manyara as likely to have surpluses at regional level with a few pockets of food shortages in some districts at varying magnitudes. The regions of Coast, Kilimanjaro, Tabora and Arusha are expected to be food self-sufficient but also with many pockets of food shortages. The remaining five regions of Shinyanga, Dodoma, Singida, Mwanza and Dar es Salaam will have food deficits of varying degrees at regional level and in nearly all their districts. Before considering inter and intra regional trade, MAFC predicts about 50 districts in different parts of the country with potential to experience localized food deficits of varying magnitudes between now and the next harvesting seasons, beginning in February 2007 in bimodal rainfall areas and April/May 2007 in unimodal rainfall areas.

The food production situation for 2005/2006, which determines to a large degree the food availability situations for 2006/2007 discussed in the preceding paragraphs, has largely been influenced by poor rainfall performance, farmers' inadequate access to production resources, reluctance by some farmers to heed to experts advice to plant crop types and varieties that suit particular agro-ecological conditions and outbreaks of armyworms and field invasions by quelea quelea birds during the 2005/2006 cropping season. Pasture and water availability were also affected by poor rainfall performance, which in turn affected livestock health and productivity.

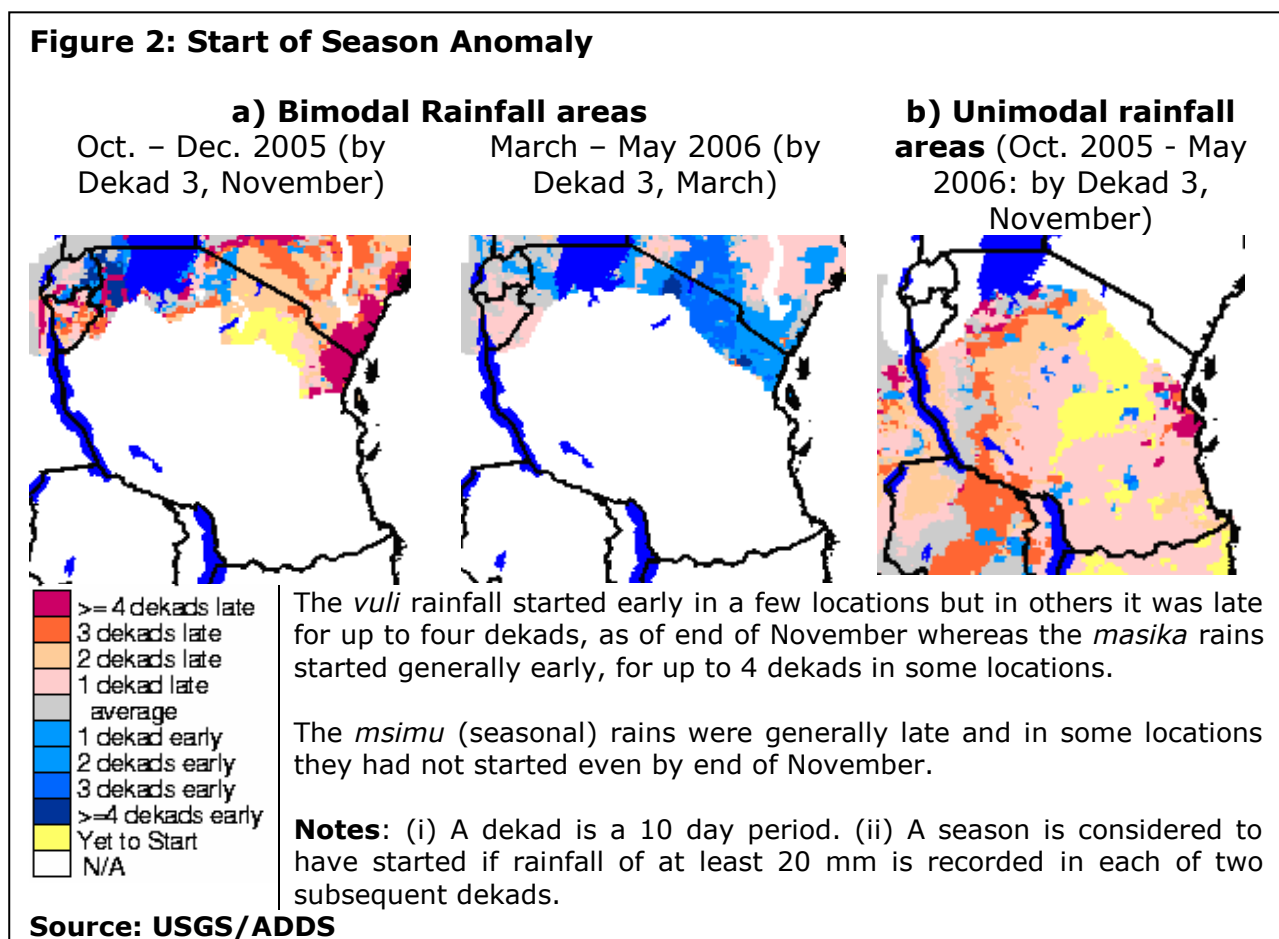
Rainfall performance

The *Vuli* rains, which normally start in September/October through December in the bimodal rainfall areas, performed poorly and the *masika* rains, which normally fall in these areas in March through May, were relatively better this year compared to the past 3-5 years. However, in some locations rainfall onset was late, sporadic accompanied with poor distribution over the season, early cessation and overall below average amounts. Furthermore, the *vuli* and *masika* rains failed notably in the districts of Magu, Kwimba and Misungwi – Mwanza region; in the low lands of Mwanza

and Same districts – Kilimanjaro region; Ngorongoro, Monduli and Longido districts in Arusha region and parts of Korogwe, Lushoto and Mkinga districts in Tanga region.

In unimodal rainfall areas, the *msimu* rains normally starts in mid November to April/May, with a short dry spell between January and February. However, this year the onset of *msimu* rains was delayed throughout the unimodal areas and aggravated by poor distribution, below average amounts and early cessation in several locations.

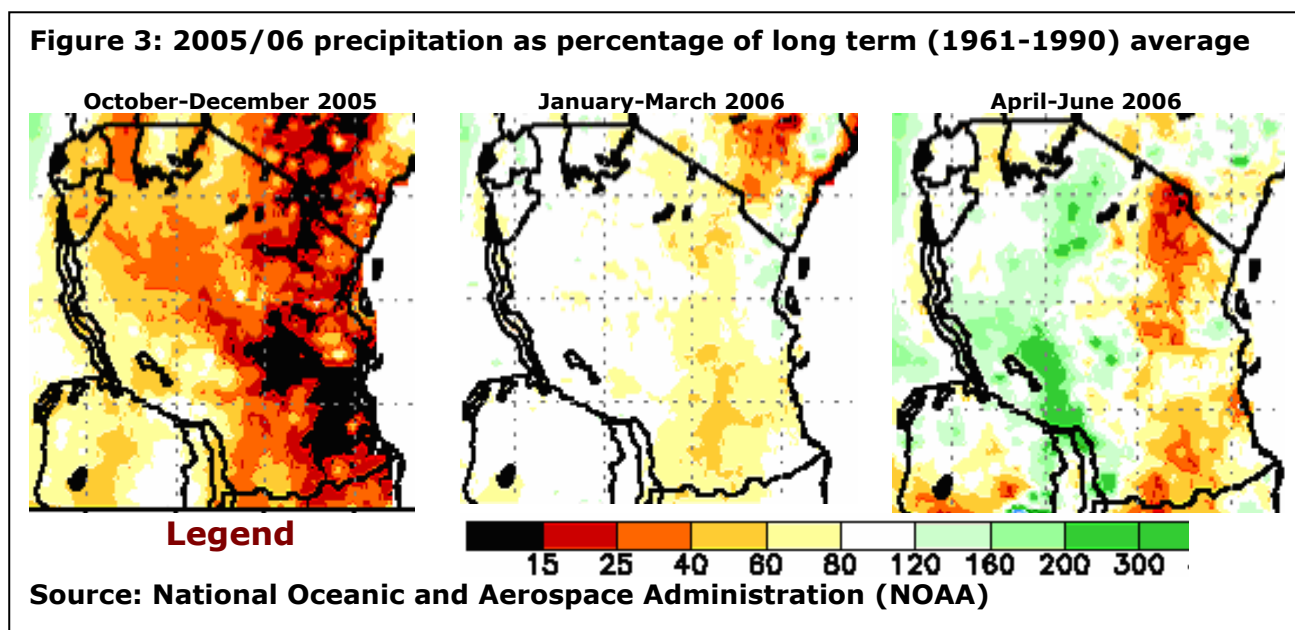
While Figure 2 shows how the start of season varied from normal, Figure 3 shows the variation of rainfall intensity during 2005/06 compared to the long-term average.



Erratic rains did also cause flooding in May 2006 in the lowlands of Moshi Rural District (Kilimanjaro region), Simanjiro district in Manyara region and Mkongo and Mbwera wards in Rufiji district (Coast Region).

Rainfall was very much below normal in most parts of the country at onset of both *vuli* (in bimodal rainfall areas) and long rains (in unimodal rainfall areas), ranging between 15 percent and 40 percent of the long term average in much of the eastern parts of the country. The period January through February this year remained normally dry but onset was late in March, resulting in below normal intensities, again mostly over the country's eastern parts. Rains performed satisfactorily in western Tanzania during April through June, recording up to 200 percent of the long-term average, but remained disappointingly low in the eastern sector.

In unimodal areas, *msimu* rains generally starts in mid November to April/May, with a short dry spell between January and February. This year onset of *msimu* rains delayed throughout the unimodal areas, associated with low intensities that were poorly distributed and with early cessation.



Crop performance

In general poor rainfall performance in the 2005/05 seasons had a negative impact on crop production. Overall, the late onset and early cessation of rainfall shortened the agricultural season substantially, in the central corridor from Northern Iringa to Shinyanga. The late start, also, deterred some farmers from planting whereas some of the planted seed failed to germinate due to moisture stress. Moreover, the harsh conditions scotched some crops to wilting point beyond recovery. Such occurrences were noted in several parts for example in the regions of Shinyanga, Kilimanjaro (Same and Mwanza districts), Mwanza, Arusha (Ngorongoro, Monduli and Longido districts) and Manyara (Simanjiro and Kiteto districts).

Despite the failure of *vuli* rains and delayed and early ending of the *msimu* rains, some areas had good crop production resulting to generally increased crop harvest compared to the past four years. Localized food production deficits have been experienced in Mbarali, Mbozi, and Chunya districts of Mbeya region; all districts of Dodoma region with the exception of some villages in Kondoa and Mpwapwa; and Iringa, Kilolo and Ludewa districts in Iringa region. Other districts with potential food shortages are Igunga, Sikonge, Uyui, Tabora Municipal (rural areas) in Tabora region; Manyoni and Singida rural districts in Singida region; Nachingwea and Liwale in Lindi region and Kiteto and Simanjiro in Manyara region. Poor performance of *vuli* and *masika* rains in bimodal areas tremendously caused a significant reduction of food production in Magu, Kwimba and Misungwi districts of Mwanza region; the low lands of Mwanza and Same districts of Kilimanjaro region; Ngorongoro, Monduli and Longido districts in Arusha region and parts of Korogwe, Lushoto and Mkinga districts in Tanga region. Other food deficit areas affected by poor rainfall performance includes all districts of Shinyanga region and Rufiji district in Coast region.

Crop Pest and Disease Outbreaks

Outbreak of armyworms earlier this year negatively affected crop performance in the regions of Lindi, Kilimanjaro, Coast, Arusha, Mbeya, Morogoro, Manyara, Dodoma and Iringa. Although adequate measures were taken to combat the problem, crop damage was experienced in these areas. In some areas farmers had to replant crops more than twice. Numerous farmers in resource weak households could not replant a factor which, together with pest outbreaks, further reduced areas planted. Replanting also affected the period of crop growth cycle. Incidences of Cassava Mosaic Disease (*Batobato kali*) were reported in the regions around Lake Victoria and *head smut* in Sorghum in Shinyanga region.

Furthermore, rats incidences in some areas of Dodoma region and vermin in areas bordering game reserves such as Selous (Coast region) and Ngorongoro in Arusha region reduced production of both cereal and root (cassava and sweet potatoes) crops.

Planting materials and crop types/varieties planted

Poor food crop performance exhibited in many parts of the country in the 2004/05 production season caused the resource weak households in such locations to neither manage nor reserve seed from their meagre harvest. Such households could not even afford to buy appreciable seed amounts for planting in 2005/06. Farmers in the bimodal rainfall areas faced a similar situation of inadequacy planting materials and seeds during the 2005/06 *masika* season due to production failures during the 2005/06 *vuli* season and several previous *vuli* and *masika* seasons. The Government and development partners provided some farmers in parts of the bimodal rainfall areas with seed, which were planted in *masika*. However, the seed aid amounts were diminutive compared to actual requirements. Due to limitations of seed availability and accessibility, farmers in several parts of the country cultivated and planted food crops on reduced acreage than in an average year. Reduction on areas cultivated under food crops was exacerbated by delayed and poor rainfall, which either prevented seed from germinating or caused crop wilt. As a result, the resource weak households could not effectively work in their own fields but rather sought other coping mechanisms.

Although agricultural experts continue to emphasize and advise farmers to cultivate crop types and varieties consistent with their agro-ecological suitability, this has been persistently unheeded by some farmers. Farmers in arid and semi-arid areas found for example in the central and north-eastern sectors of the country have continued to plant maize, in some instances the long maturing traditional varieties, instead of the improved varieties of drought tolerant crops like sorghum and cassava. In areas that experienced adverse rainfall performance during the 2005/06 production seasons, farmers who planted improved varieties of sorghum on time harvested a reasonable crop while those who planted maize experienced total crop loss because the former is able to withstand moisture stress more than the latter. Reasons outlined for farmers' persistence to grow maize as observed during the assessment include the changing consumption preferences and easy maize processing, quality and marketability versus sorghum and cassava.

Livestock production

Prolonged dry periods that were experienced in many parts of the country during the 2005/06 year (mainly from September through February) affected pasture and water availability. According to the Ministry of Livestock Development (MLD), about 250,900 cattle, 133,237 goats, 122,069 sheep and 744 donkeys died and productivity declined due to poor animal health. Areas hit hard were found in the regions of Arusha, Manyara, Dodoma, Singida and Mwanza. Pastoralists migrated unseasonably in search of pasture and water and in turn, livestock were concentrated in limited areas exerting pressure on scarce available resources (pasture and water) and increasing the risk to contagious diseases prevailing in the areas that livestock keepers moved to. Incidences of diseases outbreaks like East Coast Fever (ECF) and tick borne diseases (including Red Water and Heart Water) increased.

Following the falling of rains that commenced or resumed in March/April, forage and water availability improved resulting in improved livestock conditions and return of migrant livestock keepers and their animals to their traditional settlements. Although the situation is now reverting to normal, much remains to be desired in the reduction of susceptibility of the animals to diseases and loss of health and productivity whenever pasture and water availability decline due to poor rainfall performance. It has been noted, for instance that in many locations there are no livestock dips, which help in the control of tick borne diseases. Where available, some of the existing dips are not operating due to lack of acaricides.

Moreover, water for livestock is not readily available in locations without natural water bodies like rivers whereas construction of charco dams could help harvesting and storage of rain water for use during the dry seasons. Furthermore, the majority of the livestock keepers graze on free-range basis and neither grow pasture nor retain crop residues for use when pasture availability dwindle. There are concerns that if pasture deteriorates rapidly between August and the next rainy season in areas affected by the 2005/2006 prolonged dry spell (including the central and north eastern parts of the country) as predicted recently by LINKS/LEWS, it will impact negatively on livestock conditions and productivity, degenerating the pastoralists' livelihoods.

V. Recent and ongoing food and non-food interventions

Following the shocks caused by the prolonged dry spell that communities experienced in various parts of the country, in February this year the government appealed to development partners and other stakeholders for food and non-food assistance. The appeal received positive responses from local and international donors. Donor contributions were used to complement government efforts to implement various interventions aimed at protecting mainly the livelihoods but in some cases lives of persons in the most needy locations and households. The main interventions, as detailed below, were in the form of free and subsidized food, seeds, livestock vaccination and pest control.

(A) Government interventions

Between October 2005 and April 2006, the Government distributed relief food totalling about 120,000 MT of maize, as shown in table 1 below.

Table 1: Food distributed by the Government in the year 2005/2006.

Phase number	Months of implementation	Districts covered (No.)	Maize distributed (MT)
1	Oct./Nov. 2005	33	9,039
2	January 2006	38	12,360
3	February 2006	86	59,131
4	April 2006	81	39,830
Total			120,360

The Government did also finance the Local Government Authorities to procure and distribute seed to the mostly affected resource weak households in a number of districts to enable them re-engage productively in agriculture during the 2005/06 *masika* season in the bimodal rainfall areas and at resumption of the *msimu* rains in March 2006 in the unimodal rainfall areas.

Furthermore, the Government in collaboration with other stakeholders is presently putting in place a number of corrective measures to address problems caused by inappropriate livestock management or affecting the livestock sector and pastoral livelihoods. These include: (i) advising farmers to sell their animals when in good health to earn better prices and buy their future food crop needs when prices are relatively low; (ii) adopting better land use planning by controlling stock movements and demarcating grazing grounds; (iii) sensitizing pastoralists on the economic importance of de-stocking livestock to less but profitable numbers, which they can manage better within the available limited resources like pasture; and (iv) sensitizing and assisting livestock keepers to establish associations to rehabilitate and operate livestock dips to reduce effects of tick borne diseases.

It is acknowledged that these measures are necessary even though they may take time to implement and bear fruits.

(B) Food assistance under EMOP

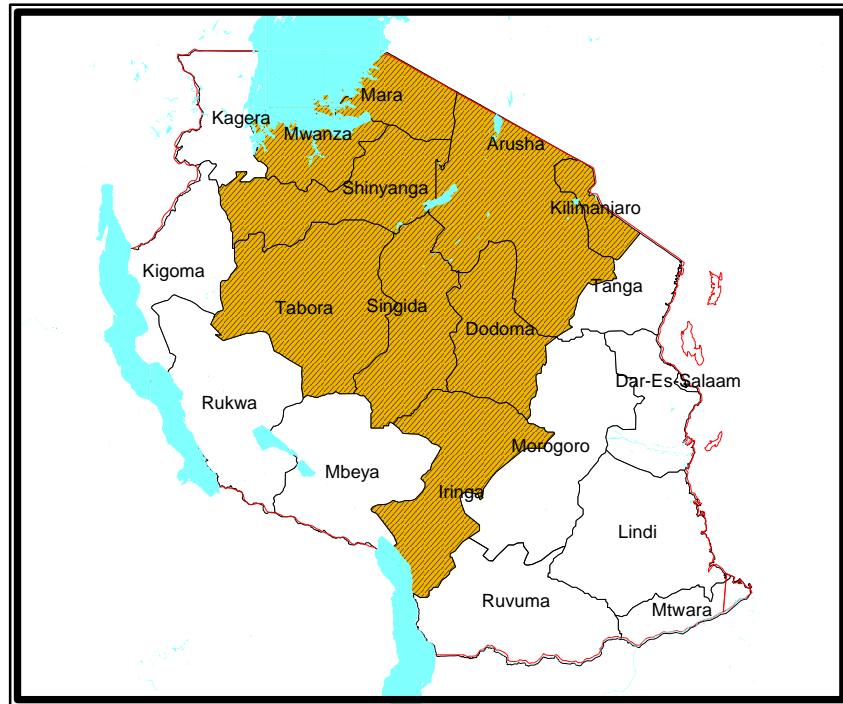
Government appeal for food aid assistance through WFP resulted to Emergency Operation (EMOP), which commenced in mid May to reach a total of 565,000 highly food insecure and destitute people, located in regions shown in Figure 4.

A total of 33,900 MT of maize was pledged from various donors.. As of end of August 2006, a total of 21,643 MT of maize grain were mobilized through cash and in kind donations. Out of the 21,643 MT, a total of 14,174 (60%) have been distributed to nearly 410,000 people. Most of the food was distributed in unimodal rainfall regions where majority of the food insecure population is concentrated.

The results of the Preliminary production Forecast

released in June by the Ministry of Agriculture, Food Security and Cooperatives indicating food insecure areas for 2006/2007 prompted WFP to prepare a contingency plan by pre-positioning over 7,500 MT (part of EMOP) of food stocks in strategic grain reserve regions. This move is further supported by the observed slow recovery of the food insecure and destitute people that were identified during the January/February RVA in the EMOP targeted areas. Dodoma, Singida, Shinyanga, Tabora, Mwanza and Iringa are among the areas with food insecure population that need continued food assistance beyond the current EMOP phase of September 2006.

Figure 4: Location of food insecure and destitute people



Source: World Food Programme

(C) Seeds, agrochemicals and animal vaccines assistance through FAO

Based on the Government request, FAO coordinated the agricultural components of the February appeal to help in mitigating the effects of the 2005/2006 prolonged dry spells. The agricultural components encompassed (i) providing seed aid to households, whose crop production in 2004/05 was affected adversely, (ii) mobilizing resources to control the armyworm outbreak and (iii) vaccinating calves against East Coast Fever (ECF) to reduce susceptibility of the animals to a wide range of diseases.

With good response from the donor community, FAO managed to implement the following interventions in collaboration with government and other partners.

(i) Seed

i) 306 MT of maize seed were procured, distributed and planted in bimodal rainfall areas in the 2005/06 *masika* seasons;

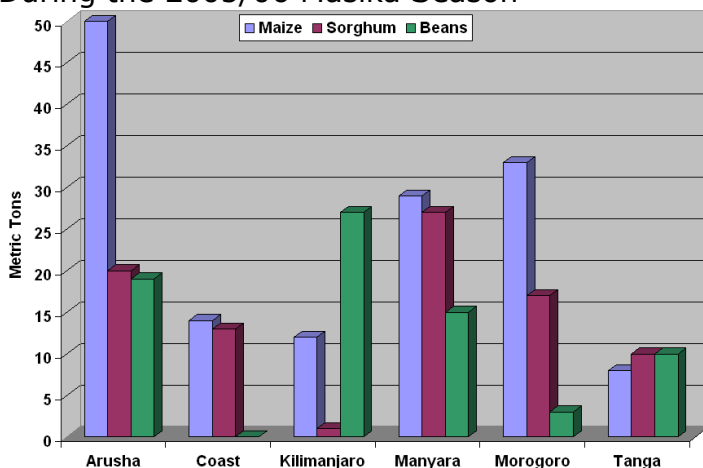
(ii) 30 MT of beans seeds were procured and distributed to communities affected by floods in Kilimanjaro and Manyara Regions in May; and

(iii) procurement of nearly 1,200 MT of seed comprising maize, sorghum, beans and rice seeds is currently an ongoing exercise for ultimate distribution mainly in the unimodal rainfall areas for planting in the forthcoming *msimu* season, as shown in Figure 5.

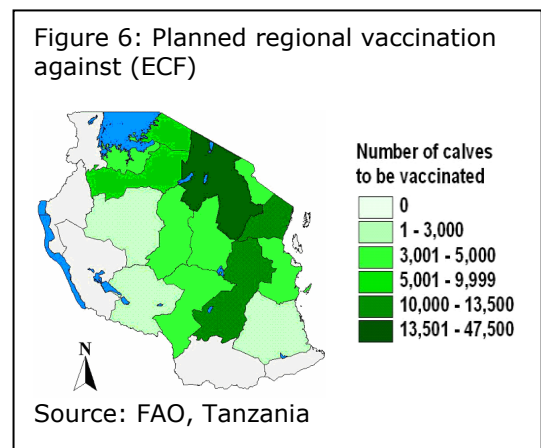
(ii) Armyworms

Procurement included 17,000 litres of pesticides, 1,550 units of sprayers and 3,000 sets of protective gear, with each set made up of overalls, gum boots and goggles. The supplies were delivered at the MAFC Tengeru Research Institute in Arusha, and were in turn distributed to needy regions and districts and subsequently utilized to control armyworm outbreak.

Figure 5: Seed Aid Distributed and Planted During the 2005/06 Masika Season



Source: FAO



(iii) Vaccinating calves against ECF

Finally, the donor contributions have been spent on procuring veterinary equipment and vaccines sufficient to vaccinate around 120,000 calves against East Coast Fever (ECF). The vaccination exercise begun in early August and will continue through October 2006. Only female calves have been targeted and their regional concentrations are shown in Figure 6.

(D) NGOs Food and Non-food Interventions

In March 2006, NGOs and the Tanzanian Red Cross Society (TRCS)/IFRC started planning for distributions of food and non-food interventions to reach the needs of drought-affected populations. The TRCS and the following NGOs started drought response activities, some of which are still continuing: Action by Churches Forum; Oxfam GB; Plan International; Action Aid; Concern Worldwide; Caritas and World

Vision International. The TRCS and NGOs targeted beneficiaries for food aid in the following regions: Shinyanga; Mara; Kilimanjaro; Singida; Arusha; Mwanza and Dodoma. Other regions are Tabora; Morogoro; Mtwara; Kagera; Coast; Manyara and Lindi. To date a total of 4,192 MT of food has been distributed to approximately 350,000 beneficiaries in these regions. A school feeding programme, targeting drought-affected households, has distributed 610 MT of food and 12,695 litres of oil to approximately 170,000 students.

NGOs also responded to non-food needs through the distribution of 726 MT of seeds; 9,498 cassava cuttings; 250 litres of pesticide (for armyworm control), and providing some emergency livestock veterinary support.

VI Vulnerability analysis results

a) Food availability

At the national level, food is available in sufficient quantities as revealed by MAFC's estimates that production from the 2005/06 season surpasses the 2006/07 food needs by nearly 10 percent. However, in rural areas acutely affected by weather conditions and pests, coupled with lack of planting materials, food production was reduced dramatically to below 30 percent of the normal levels. In such areas the locally produced food may be enough for consumption over only three to four months after completing harvesting. Thus compelling farmers, the majority of whom in normal years depend on their own production for a larger part of the year, to turn to markets to obtain their food needs. Due to surplus production in most parts of the country, it is expected that traders will transport food from surplus to deficit areas and ensure sustained supplies on markets.

b) Food access

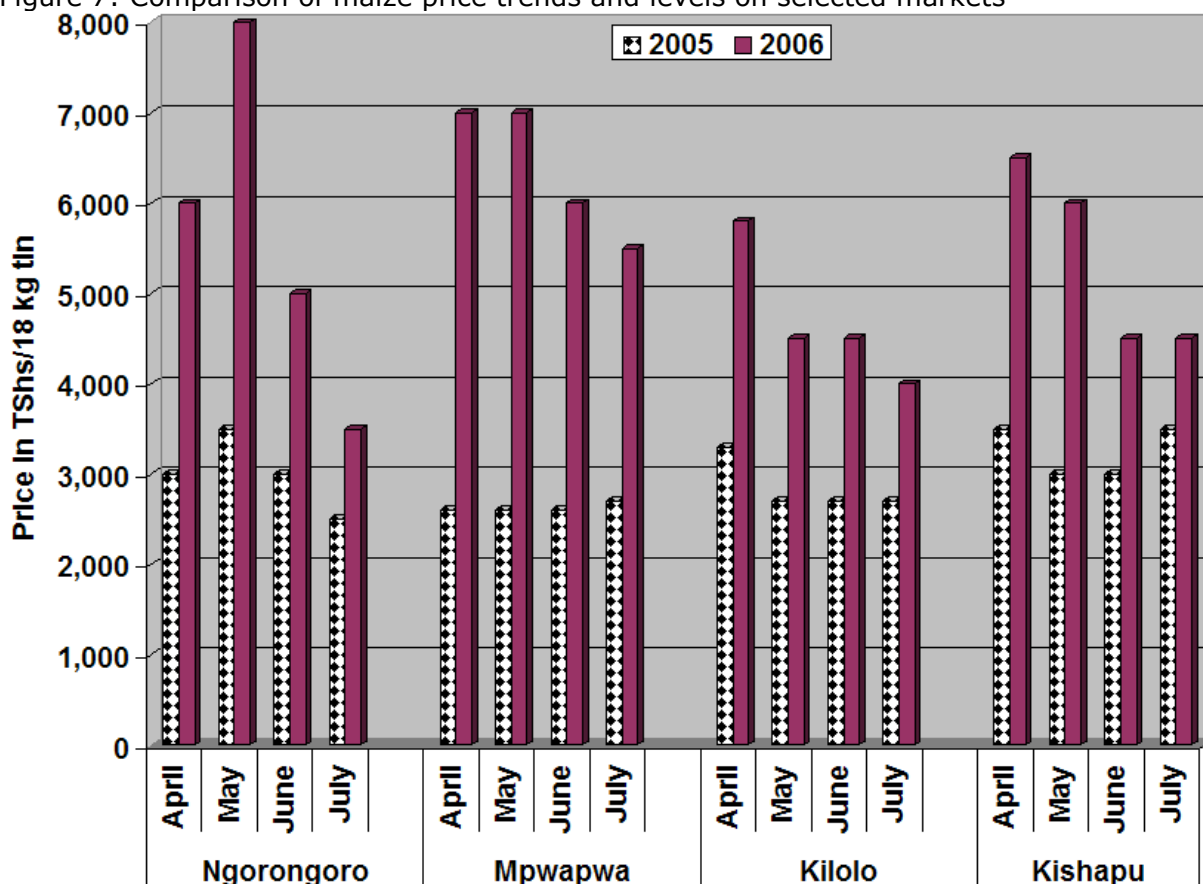
Food availability is expected to remain good over much of the country in the 2006/07 in line with estimated surplus at national level by MAFC and expected transfers from food surplus to deficit locations by traders. However, there is concern that the resource weak households will have difficulty to access food from the markets due to lack of purchasing power. Food crop price analyses, as exemplified by selected markets in Figure 7, shows that between April and July they were falling appreciably as it normally happens after harvest but were higher this year than the same period last year.

Percentage price changes for the period April to June between last year and this year for 35 of assessed districts shows that maize average prices have this year been higher in all except four markets of Njombe, Chunya, Nachingwea and Geita, where they either remained constant or declined by between 22 percent and 40 percent, as shown in Table 2.

Table 2: Percentage difference between average maize prices for April- July 2005 and 2006 same period

Over 100 % increase in price		50 – 100 % increase in price		10 – 50 % increase in price		1 – 10 % increase in price		% decrease in price	
District	%	District	%	District	%	District	%	District	%
Mpwapwa	143	Morogoro (R)	89	Iramba	48	Hai District	8	Geita	0
Kongwa	132	Manyoni	89	Mbarali	48	Magu	7	Njombe	(22)
Kiteto	119	Kilosa	88	Mbozi	48	Ilemela	7	Chunya	(30)
Bukombe	114	Ngorongoro	88	Mbarali	48	Sengerema	5	Nachingwea	(40)
Kondoa	108	Kahama	86	Monduli and Longido	47				
		Shinyanga (U)	83	Simanjiro	42				
		Shinyanga (R)	82	Kwimba	28				
		Kilolo	65	Misungwi	27				
		Maswa	61	Dodoma (U)	18				
		Singida (U)	58	Dodoma (R)	18				
		Makete	56	Liwale	18				

Figure 7: Comparison of maize price trends and levels on selected markets



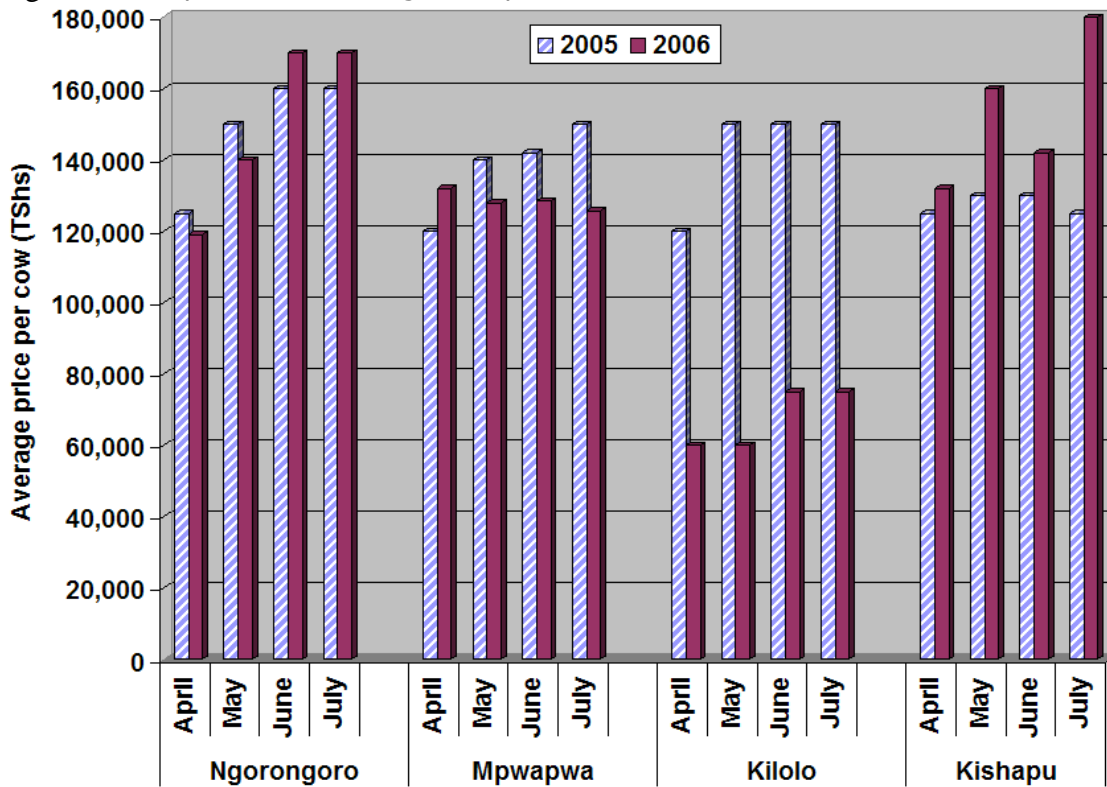
Source: FSIT August 2006 RVA

In view of table 2 and Figure 7, this year's crop harvests have not relieved market dependent households of the burden of accessing grain supplies in markets as the prices have increased over last year levels almost everywhere. However, the observed grain price falls for this year indicates that there was some relief in July compared to April.

There is concern that some livestock keepers are at risk of facing food insecurity basing on livestock prices that show mixed trends on different district markets for last year and this year. For example, while this year prices are higher and have been increasing in Ngorongoro and Kishapu districts between April and July, they increased moderately in Kilolo and remained stable in Mpwapwa (Figure 8).

The terms of trade between cattle and grain is the one that raises concern. The terms of trade generally improved in several locations during the months of April through July for both last and this year, as represented by the selected districts as shown in Figure 9.

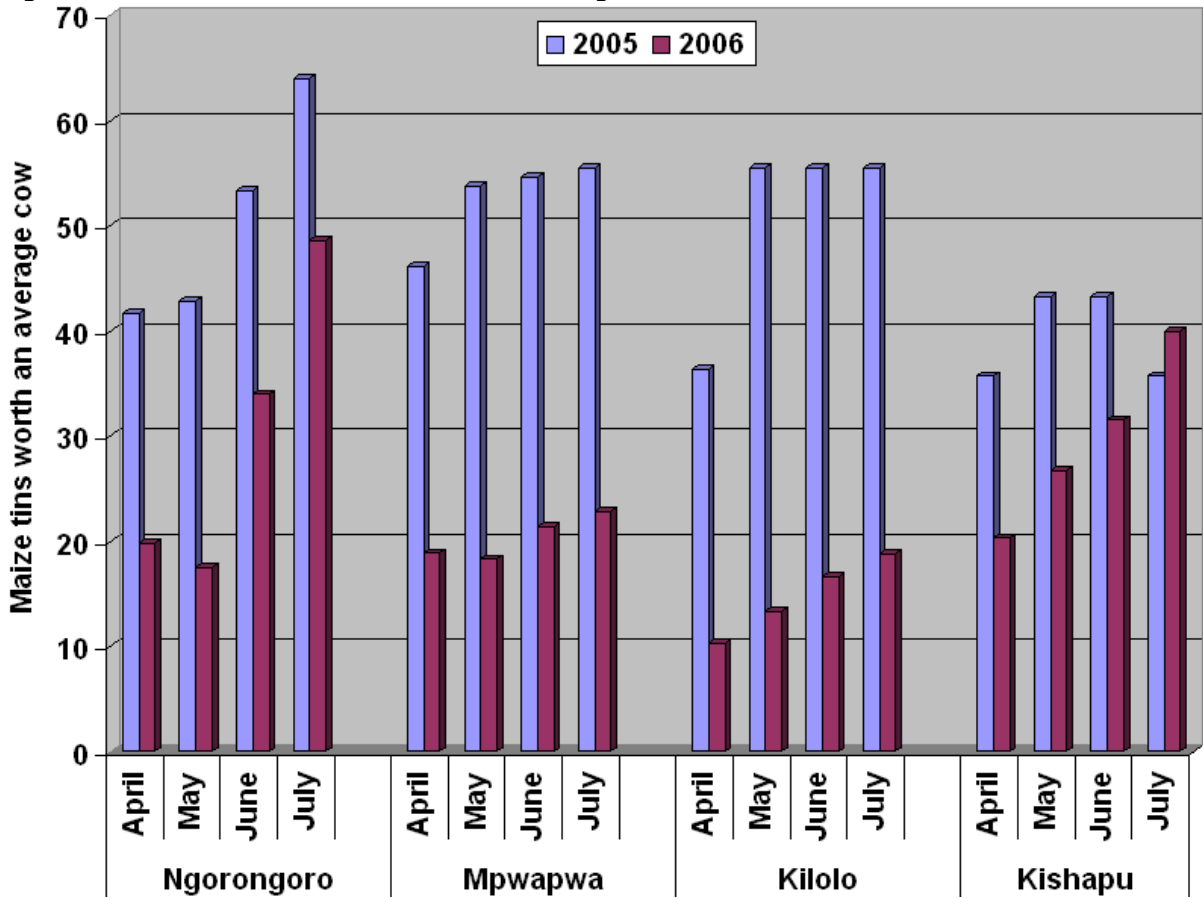
Figure 8: Comparison of average cow price trends and levels on selected markets



Source: FSIT August 2006 RVA

However, the terms of trade have been worse this year compared to last year except for the month of July for Kishapu district. This deterioration is deleterious to the pastoral and agro-pastoral communities, as they have to sell an increased number of their animals to be able to buy same grain quantities as they did last year. Worse still this is happening at a time when livestock keepers are trying to rebuild their stock after massive animal deaths encountered following last year's prolonged dry spell. Herders are facing difficulties to make choice between selling animals to buy grain against spending their cash on rebuilding their animal stocks.

Figure 9: Terms of trade between cows and grain on selected district markets



Source: FSIT August 2006 RVA

VI Intervention options

(a) Food Assistance Intervention

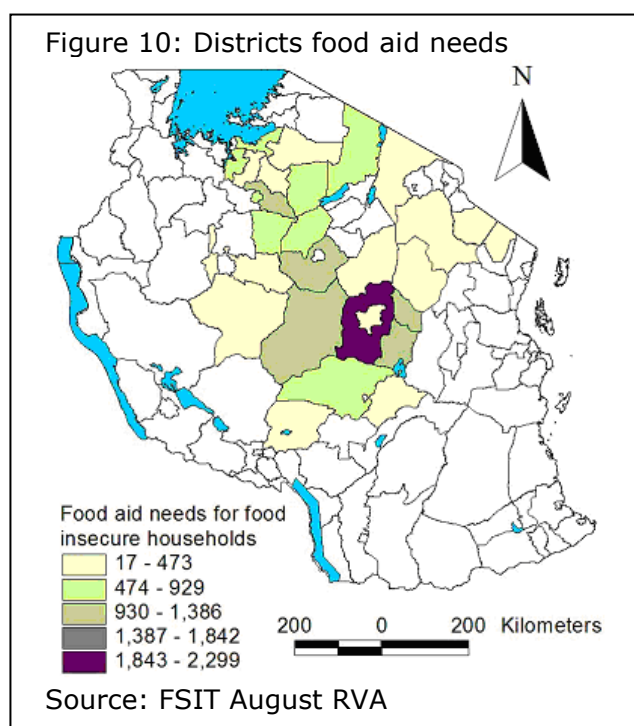
It is predicted that substantial proportions of the resource weak households will have difficulty to obtain sufficient amounts of food starting from November through January next year in the bimodal rainfall areas and from November up to April next year in the unimodal rainfall areas. This prediction is based on their recent low food crop harvests and conflicting choices among firstly, the agriculturalists to choose between looking for labour opportunities to earn cash or food in kind at the expense of tilling their own fields. Secondly the pastoralists who face the difficulty to decide whether to sell animals to buy food, therefore erode further their livelihood to compound animal losses to effects of long dry period, or buy animals to rebuild stocks to regain their livelihood. In these situations FSIT recommends provision of food aid to farming and livestock keeping households affected by the long dry spell so that they can re-engage in their normal production activities during the food shortage period.

Through the RVA, it has been estimated that out of a total population of 21,646,632 found in the assessed regions, a total of **651,655** (equivalent of 3 %) people are highly food insecure. This caseload will need food intervention, amounting to **15,622** MT between November and December 2006⁵. The food aid needs per district are shown in Figure 10.

However, in view of the gradual recovery of the most vulnerable people and the ongoing interventions, destitute households should be assisted during planting period of November and December by providing them with a two months ration of free food handout. A total of **8,952** MT of food grains will therefore be required to reach nearly **360,000** highly vulnerable and destitute people in the food insecure districts. This has also taken into consideration the need to

reduce the proportion of the food subsidy in order to enable the government to rebuild its SGR stocks, which was depleted during the subsidized food distribution between March and June this year. This implies that only extension in time of the current EMOP will be required without additional resource requirements from donors.

On the other hand, about **293,000** food insecure people should be targeted with 7,030 MT of subsidized food at a price of Tsh. 100 per kg from Government SGR in order to enable them engaged actively in agricultural season during the onset of the



⁵ Although the RVA established the hunger period to be November to January in bimodal areas and November to April for unimodal areas, the recommended food intervention period is November and December for both rainfall regimes. This considers the fact that rainfall will have commenced in October/November in both areas therefore by January onwards they will be able to harvest and consume early maturing crops or green crops.

rains in November and December. The subsidy level is based on the price and market analysis and vulnerability analysis that looked at the sources of income vis-a-vis purchasing power of the most food insecure people. Depending on the performance of the next *vuli* season, and the start of rains in the unimodal rainfall areas, these populations could be re-assessed in January next year. Meanwhile, continuous monitoring of food security indicators should be done in the respective areas.

There are also approximately 1,409,761 persons that are mildly food insecure, who will support themselves through the next cropping season unless the expected rains fail to perform or food crop prices happen to rise faster than their ability to earn income. Therefore no intervention has been recommended for this category. However, it is necessary to monitor closely the food security indicators, to be able to notice deterioration of the situation and livelihoods of this category of the population.

(b) Seed Availability and Accessibility

Traditional seeds recycling constitute a major source of planting materials among the resource weak farmers. Reduction in cereal production normally affects food availability but also reduce seeds availability among the drought-affected farmers. This, in turn, reduces the hectareage to be planted in the subsequent season unless alternative sources of seeds are sorted out. Availability of seeds for staple foods notably cereals and beans becomes crucial to farmers whose exit strategy from seasonal food deficit depends on the extent they can re-engage in agricultural production in the following production season. In non-cereal producing areas, availability of cassava cuttings and sweet potato vines gets scarce as drought becomes severe. Multiplication of non-cereal planting materials has always been inadequate and is constrained by distribution problems.

Throughout the assessment, demand for early maturing drought tolerant seeds suitable for particular agro-ecological zones was stressed in the drought prone districts. The most recommended crop varieties to suit such areas include sorghum, millet, pulses (beans, cowpeas, pigeon peas etc), cassava, *Lab lab* and chickpeas at equivalent to one acre for a household based on maize equivalence.

Under well planned and coordinated programme, seed intervention should be made available to the food insecure households on timely basis for planting in the coming cropping season, of 2006/07. In order to ensure proper seeds utilisation, efforts should be made to have seeds distributed to farmers by early October 2006 or earlier for both the long "*msimu*" and short "*vuli*" rain seasons.

The analysis revealed that the resource weak farmers will need seeds intervention to enable them to plant in the new crop season due to start in October in bimodal areas and November and December in unimodal rainfall areas. Based on the RVA results, the analysis shows that a total of **122,101** food insecure and seed shortage households will need seeds assistance of various types estimated at a total of **1,221** MT maize seed equivalent. 10 kg of seed (maize equivalent) per household has been suggested to enable each targeted household to plant about an acre (0.4 of a hectare) during the coming season. Actual types of seeds to be distributed will depend on their agro-ecological suitability. It is expected that most of this seed will be sourced from the ongoing FAO coordinated donor support, which is in response to the February 2006 Government appeal.

(c) Interventions in the livestock sector

There is a need to scale up prevention and control of ECF and other diseases. Using donor contributions, FAO is currently collaborating with the Ministry of Livestock Development to vaccinate nearly 120,000 female calves throughout the country. As this number of calves is relatively small compared to the calves' population, efforts should be made to scale up the exercise. Furthermore, rehabilitation, construction and operationalisation of livestock dips is important in controlling tick borne diseases. As such, MLD should collaborate with LGAs and communities to put these structures in place. Regarding water and pasture limitations, efforts to rehabilitate and construct charcoal dams should be scaled up and extension services intensified to promote pasture development, utilization of supplementary feeds such as molluses, rice bran, minerals and crop residues, particularly during periods of poor pasture supply. Also, MLD should sensitize the resource weak households to adopt improved breeds of small livestock (e.g. chicken and shoats) to increase their income earning base and access to animal sources of food.

(d) Rolling the FSIT structure to Local Government level

The national level FSIT has established the need for rolling down the FSIT to the Local Government level to improve efficiency and cost effectiveness in conducting RVAs and quality/reliability of the information and empowering the LGAs to own food security information for facilitating relevant and prompt interventions. The PMO, which is responsible for coordinating disasters and coordinates the RVAs in collaboration with MAFC, should assume a leading role in implementing this proposal. The national level FSIT shall be responsible for training government and development partners' staff within LGAs to build their capacity to carry out the exercise.

VIII CONCLUSIONS

- 1. Good food crop production was recorded for the 2005/06-production year, which is estimated to exceed national food requirements in 2006/2007 by approximately 10 percent (Self Sufficiency Ratio is 110 percent). This situation was attributed mainly to good rainfall and improved production environment in the key food crop producing areas. The rains enhanced pasture rejuvenation and supply of water for livestock, and consequently recovery of their health conditions.**
- 2. While the overall rainfall and crop production at the national level was recorded to be good during the 2005/06 agricultural season, it was noted that rainfall performed poorly in some parts thereby significantly affecting food crop production in such areas. Poor crop production was further exacerbated by farmers' limited access to planting materials and their persistence to grow crops in areas with agro-ecological conditions that do not suit requirements of such crops (mainly maize). Inadequate planting materials and pest outbreaks, predominantly armyworms, further worsened the situation. Consequently, such locations are likely to experience food shortages during the 2006/07 marketing year.**
- 3. Furthermore, despite the favourable SSR, a net cereal gap of over 800,000 MT could be increased by post harvest losses and out flow of grains through cross border trade.**
- 4. Due to favourable food crop production last season and the ongoing harvests, major staple prices were falling on most markets between April and July this year. However, this year prices were generally higher than same time in 2005/06. Livestock prices have been rising between April and July this year and have been consistently higher than last year during the same period, due to their recovered health condition following effects of the 2005/05 prolonged dry spell.**
- 5. Although both food crop and livestock prices have been higher than last year in most locations, the terms of trade (ToT) between livestock and food grains are generally worse in relation to last year. This situation is compromising the position of livestock keepers who, on one hand are compelled to sell more livestock than last year to obtain same amounts of grain but, on the other hand, livestock keepers would like to restock their flocks, which were reduced by effects of prolonged dry spell.**
- 6. In view of the ensuing situations, the assessment team propose the need to provide the vulnerable persons and households with food aid for two (2) months of November and December 2006 and seed aid for planting in the next planting season. The food aid requirement is 15,622 MT for 651,654 people while the amount of seed aid required is 1,221 MT of maize seed equivalent for 122,101 households. While food aid will help protect livelihoods, seed aid will help affected households to re-engage in agricultural production in the coming season. It is expected that most of the food and seed aid needs will be covered with the ongoing EMOP under WFP, releases of subsidized maize by**

government and the planned distribution of seed aid by FAO using the already available resources.

- 7. While food assistance offers significant short-term relief to recipients, lack of proper mitigation exit strategies among the vulnerable households is likely to perpetuate dependency. Nevertheless, it is expected that full recovery will be realised with good performance of the next rainy season, which requires close monitoring. Should the next *vuli* and *msimu* rains fail, there may be a likelihood for the 1,409,761 mildly food insecure persons to drift into the acute food insecure category.**
- 8. It was observed that sustainable improvements and developments on the livestock sector require interventions that will ensure availability of water and pasture or supplements in order to reduce impacts on livestock from the recurring prolonged dry spells. Efforts are also required to develop infrastructure and facilities that can help reduce disease incidences. Efforts should focus, for example, on rehabilitation, construction and operationalisation of livestock dips.**
- 9. Initiatives and capacity to carry out RVAs are centred in Dar es Salaam, the situation that reduces efficiency and cost effectiveness. At the same time it denies local authorities a room to own food security information and confidence to make decisions on localized food insecurity disasters. Since it is acknowledged that there is inadequate technical capacity at Local Governments level to undertake vulnerability assessments, should PMO lead the process to roll the RVA activities to the LGAs, the national level FSIT will provide the necessary training.**

IX. RECOMMENDATIONS

- 1. A total of 651,654 people were identified by the RVA to be highly food insecure and in need of 15,622 MT of food between November and December, 2006. It is recommended that the Government provide a total of 7,030 tons of maize from its SGR at a subsidized price of TSh.100 per kg to about 293,000 people affected by food shortage. It is further recommended that free food handouts amounting to 8,590 MT be provided to the remaining nearly 360,000 food insecure and destitute people as part of the food aid currently being distributed by WFP. This implies an extension in the period of current EMOP without Government requesting for additional donor assistance.**
- 2. Seed has also been identified among critical factors required to enable the affected households recover from effects of the prolonged dry spell in the 2005/2006 season. It is therefore recommended that the resource weak households estimated at 122,101 be provided with various kinds of seeds estimated at 1,221 MT maize equivalent. It is further recommended that most of this seed be sourced from FAO as part of the donor contribution towards the February 2006 appeal. It is not recommended to launch a new seed aid appeal to donors.**
- 3. Local Government Authorities (LGAs) should encourage pastoralists where the terms of trade between livestock and grains are good to sell part of their livestock now and buy food grains rather than later as food crops prices may rise and livestock conditions deteriorate therefore a fall in their prices should the predicted deterioration of pasture availability occur.**
- 4. It is recommended that district authorities reinforce the by-laws regarding growing of crops suitable to agro-ecological zones. The responsibility of acquisition of the relevant seeds rests on the households themselves. However, LGAs and other partners should assist where seed is in short supply. Promotion on production of diversified food crops should go hand in hand with expansion of food commodities production. The surpluses could be purchased and stocked by the Strategic Grain Reserve and, in turn, would be used to address food emergencies. Where possible farm households particularly in drought prone areas should be trained and provided with incentives to adopt conservation agriculture, water harvesting techniques and improved food storage to sustain their agricultural productivity.**
- 5. LGAs should encourage households to store food enough for the whole year and only sell surplus. The LGAs should also disseminate appropriate storage technologies to farmers in order to facilitate minimization of post harvest losses.**
- 6. Since there are significant price differentials between food surplus and food deficit areas, LGAs should mobilize and encourage traders to buy food from surplus areas for selling in deficit areas within the country. Ministry of Industries, Trade and Marketing and LGAs should disseminate price information in local markets.**

- 7. The National Early Warning Units in the Ministry of Agriculture Food and Cooperatives, the Tanzania Meteorological Agency and other partners should continue with monitoring the onset of the new cropping season and food situation. In the event of failure of next *vuli* rains and delayed onset of the *msimu* rains, a re-assessment of vulnerability situation should be done in the identified food insecure areas.**
- 8. The Ministry of Livestock Development should put more effort in animal disease control through vaccinations and prevention. This involves putting in place and making infrastructure and facilities for example cattle dips operational. This should be complemented by intensifying livestock extension services, which are required to sensitize herders to adopt measures that can help feed their animals even during times of poor pasture availability.**
- 9. The Government (PMO) should delegate the responsibility of conducting RVAs to Local Government Authorities in order to improve efficiency, timeliness and cost effectiveness in carrying out the exercise. This would also empower them to own the food security information and implement localised food insecurity threats. It is highly recommended that FSIT-like structures be established at the district level for this purpose. The Government and partners, through the national level FSIT, should undertake capacity building at local level to enable technical staff in government and partners implement this responsibility.**

ANNEX I: NATIONAL SUMMARY OF DISTRICTS AND REGIONS WITH ACUTE FOOD SHORTAGE AND PROPOSED INTERVENTION.

Region	Districts	Total Population	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Relief Food Required (MT)	Food Subsidy (MT)	Food Aid (MT)
ARUSHA	Longido	83,539	5,819	7	2	140	63	77
	Monduli	207,526	6,400	3	2	154	69	84
	Ngorongoro	178,787	28,610	16	2	687	309	378
	Arumeru	516,814	0	0	0	0	0	0
	Arusha	331,467	0	0	0	0	0	0
	Karatu	245,821	0	0	0	0	0	0
TOTAL ARUSHA		1,563,954	40,830	9		980	441	539
DODOMA	Dodoma (R)	462,019	85,870	19	2	2,061	927	1,133
	Dodoma (U)	358,746	3,199	1	2	77	35	42
	Kondoa	451,902	13,491	3	2	324	146	178
	Kongwa	271,854	39,098	14	2	938	422	516
	Mpwapwa	277,013	50,502	18	2	1,212	545	667
TOTAL DODOMA		1,821,534	192,161	11		4,612	2,075	2,537
IRINGA	Iringa	257,190	38,523	15	2	925	416	508
	Iringa urban	112,026	0	0	0	0	0	0
	Kilolo	214,739	12,158	6	2	292	131	160
	Ludewa	135,710	0	0	0	0	0	0
	Makete	104,075	0	0	0	0	0	0
	Mufindi	296,092	0	0	0	0	0	0
	Njombe	446,859	0	0	0	0	0	0
TOTAL IRINGA		1,566,691	50,680	3		1,216	547	669
KILIMA-NJARO	Hai + Siha	258,935	0	0	0	0	0	0
	Moshi (R)	401,365	0	0	0	0	0	0
	Moshi (U)	143,799	0	0	0	0	0	0
	Mwanga	275,904	0	0	0	0	0	0
	Rombo	416,477	0	0	0	0	0	0
	Same	211,738	11,171	5	2	274	123	151
TOTAL KILIMANJARO		1,708,218	11,171	1		274	123	151
MANYARA	Babati	351,763	0	0	0	0	0	0
	Hanang	239,136	0	0	0	0	0	0
	Kiteto	182,807	4,131	2	2	99	45	55
	Mbulu	276,155	0	0	0	0	0	0
	Simanjiro	169,546	6,311	4	2	151	68	83
TOTAL MANYARA		1,219,407	10,442	1		251	113	138
MBEYA	Chunya	216,981	0	0	0	0	0	0
	Ileje	115,472	0	0	0	0	0	0
	Kyela	364,921	0	0	0	0	0	0
	Mbarali	234,908	6,572	3	2	158	71	87
	Mbeya (R)	276,844	0	0	0	0	0	0
	Mbeya (U)	300,521	0	0	0	0	0	0

Region	Districts	Total Population	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Relief Food Required (MT)	Food Subsidy (MT)	Food Aid (MT)
	Mbozi	580,310	0	0	0	0	0	0
	Rungwe	315,545	0	0	0	0	0	0
TOTAL MBEYA		2,405,502	6,572	0.3		158	71	87
MWANZA	Geita	770,597	0	0	0	0	0	0
	Ilemela	313,471	0	0	0	0	0	0
	Kwimba	336,656	7,609	2	2	183	82	100
	Magu	442,625	24,890	6	2	597	269	329
	Misungwi	273,808	20,469	7	2	491	221	270
	Nyamagana	248,426	0	0	0	0	0	0
	Sengerema	558,883	0	0	0	0	0	0
	Ukerewe	286,302	0	0	0	0	0	0
TOTAL MWANZA		3,230,768	52,968	2		1,271	572	699
SHINYA-NGA	Bariadi	668,848	706	0.1	2	17	8	9
	Bukombe	459,309	0	0	0	0	0	0
	Kahama	691,073	0	0	0	0	0	0
	Kishapu	342,469	48,702	14	2	1,145	515	630
	Maswa	327,573	16,946	5	2	407	183	224
	Meatu	273,955	26,275	10	2	631	284	347
	Shinyanga R	395,864	0	0	0	0	0	0
	Shinyanga U	143,959	24,414	17	2	586	264	322
TOTAL SHIYNANGA		3,303,050	117,044	4		2,786	1,254	1,532
SINGIDA	Iramba	395,121	19,870	5	2	477	215	262
	Manyoni	224,614	49,790	22	2	1,195	538	657
	Singida (U)	123,500 ⁰	0	0	0	0	0	0
	Singida (R)	432,046	51,503	12	2	1,236	556	680
TOTAL SINGIDA		1,175,281	121,162	10		2,908	1,309	1,599
TABORA	Igunga	360,060	23,159	6	2	556	250	306
	Nzega	448,878	0	0	0	0	0	0
	Sikonge	147,322	11,062	8	2	265	119	146
	Tabora (U)	219,755	0	0	0	0	0	0
	Urambo	429,487	0	0	0	0	0	0
	Uyui	311,759	6,398	2	2	154	69	84
TOTAL TABORA		1,917,261	40,619	2		975	439	536
TANGA	Handeni	275,052	0	0	0	0	0	0
	Kilindi	159,097	0	0	0	0	0	0
	Korogwe	271,055	0	0	0	0	0	0
	Lushoto	434,760	8,006	2	2	192	86	106
	Muheza	291,558	0	0	0	0	0	0
	Pangani	45,624	0	0	0	0	0	0
	Tanga (R)	257,820	0	0	0	0	0	0
TOTAL TANGA		1,734,966	8,006	0.5		192	86	106
NATIONAL TOTAL		21,646,632	651,654	3		15,622	7,030	8,592

**ANNEX II: SEED REQUIREMENTS FOR ACUTE FOOD SHORTAGE
REGIONS**

Region	Districts	Total Population (No)	Vulnerable Households (No)	Seed Aid Required (MT)
Arusha	Arumeru	516,814	-	0.00
	Arusha	331,467	-	0.00
	Karatu	245,821	-	0.00
	Longido	83,539	1,430	14.30
	Monduli	207,526	1,372	13.72
	Ngorongoro	178,787	5,814	58.14
	Total	1,563,954	8,615	86.15
Dodoma	Dodoma (R)	462,019	19,304	193.04
	Dodoma (U)	358,746	680	6.80
	Kondoa	451,902	2,949	29.49
	Kongwa	271,854	5,906	59.06
	Mpwapwa	277,013	10,464	104.64
	Total	1,821,534	39,303	393.03
Iringa	Iringa	257,190	9,235	92.35
	Iringa urban	112,026	-	0.00
	Kilolo	214,739	3,875	38.75
	Ludewa	135,710	-	0.00
	Makete	104,075	-	0.00
	Mufindi	296,092	-	0.00
	Njombe	446,859	-	0.00
	Total	1,566,691	13,110	131.10
Kilimanjaro	Hai + Siha	258,935	-	0.00
	Moshi (R)	401,365	-	0.00
	Moshi (U)	143,799	-	0.00
	Mwanga	275,904	-	0.00
	Rombo	416,477	-	0.00
	Same	211,738	2,040	20.40
	Total	1,708,218	2,040	20.40
Manyara	Babati	351,763	-	0.00
	Hanang	239,136	-	0.00
	Kiteto	182,807	809	8.09
	Mbulu	276,155	-	0.00
	Simanjiro	169,546	1,056	10.56
	Total	1,219,407	1,865	18.65

Region	Districts	Total Population (No)	Vulnerable Households (No)	Seed Aid Required (MT)
Mbeya	Chunya	216,981	-	0.00
	Ileje	115,472	-	0.00
	Kyela	364,921	-	0.00
	Mbarali	234,908	1,521	15.21
	Mbeya (R)	276,844	-	0.00
	Mbeya (U)	300,521	-	0.00
	Mbozi	580,310	-	0.00
	Rungwe	315,545	-	0.00
	Total	2,405,502	1,521	15.21
Mwanza	Geita	770,597	-	0.00
	Ilemela	313,471	-	0.00
	Kwimba	336,656	1,221	12.21
	Magu	442,625	4,050	40.50
	Misungwi	273,808	3,214	32.14
	Nyamagana	248,426	-	0.00
	Sengerema	558,883	-	0.00
Ukerewe	286,302	-	0.00	
	Total	3,230,768	8,486	84.86
Shinyanga	Bariadi	668,848	116	1.16
	Bukombe	459,309	-	0.00
	Kahama	691,073	-	0.00
	Kishapu	342,469	7,823	78.23
	Maswa	327,573	2,553	25.53
	Meatu	273,955	3,564	35.64
	Shinyanga (R)	395,864	-	0.00
	Shinyanga (U)	143,959	4,002	40.02
	Total	3,303,050	18,058	180.58
Singida	Iramba	395,121	3,914	39.14
	Manyoni	224,614	9,671	96.71
	Singida (U)	123,500	-	0.00
	Singida R	432,046	8,565	85.65
	Total	1,175,281	22,150	221.50
Tabora	Igunga	360,060	2,682	26.82
	Nzega	448,878	-	0.00
	Sikonge	147,322	1,622	16.22
	Tabora (U)	219,755	-	0.00
	Urambo	429,487	-	0.00
	Uyui	311,759	999	9.99
	Total	1,917,261	5,304	53.04

Region	Districts	Total Population (No)	Vulnerable Households (No)	Seed Aid Required (MT)
Tanga	Handeni	275,052	-	0.00
	Kilindi	159,097	-	0.00
	Korogwe	271,055	-	0.00
	Lushoto	434,760	1,650	16.50
	Muheza	291,558	-	0.00
	Pangani	45,624	-	0.00
	Tanga (R)	257,820	-	0.00
	Total	1,734,966	1,650	16.50
NATIONAL TOTAL		21,646,632	122,101	1,221.01

ANNEX III: MILD FOOD SECURE REGIONS

Region	Districts	Total Population	Mild Food Insecure Population	% of Mild Food Insecure Population
Arusha	Arumeru	516,814	54,062	10
	Arusha	331,467	-	-
	Karatu	245,821	-	-
	Longido	83,539	18,354	22
	Monduli	207,526	17,654	9
	Ngorongoro	178,787	25,763	14
	Total		1,563,954	115,833
Dodoma	Dodoma (R)	462,019	13,585	3
	Dodoma (U)	358,746	51,788	14
	Konooa	451,902	25,720	6
	Kongwa	271,854	54,212	20
	Mpwapwa	277,013	29,008	10
	Total		1,821,534	174,312
Iringa	Iringa	257,190	15,109	6
	Iringa urban	112,026	-	-
	Kilolo	214,739	21,458	10
	Ludewa	135,710	10,942	8
	Makete	104,075	4,837	5
	Mufindi	296,092	-	-
	Njombe	446,859	21,998	5
	Total		1,566,691	74,344
Kilimanjaro	Hai + Siha	258,935	8,949	3
	Moshi (R)	401,365	4,336	1
	Moshi (U)	143,799	-	-
	Mwanga	275,904	9,137	3
	Rombo	416,477	18,685	4
	Same	211,738	24,839	12
	Total		1,708,218	65,946
Lindi	Ruangwa	124,516	-	-
	Kilwa	171,850	-	-
	Lindi (R)	215,764	44,737	21
	Lindi (U)	41,549	-	-
	Nachingwea	162,081	35,576	22
	Liwale	75,546	6,543	9
	Total		791,306	86,856
Manyara	Babati	351,763	-	-
	Hanang	239,136	-	-
	Kiteto	182,807	83,807	46
	Mbulu	276,155	-	-
	Simanjiro	169,546	52,652	31
	Total		1,219,407	136,459

Region	Districts	Total Population	Mild Food Insecure Population	% of Mild Food Insecure Population
Mbeya	Chunya	216,981	46,378	21
	Ileje	115,472	-	-
	Kyela	364,921	-	-
	Mbarali	234,908	33,668	14
	Mbeya (R)	276,844	-	-
	Mbeya (U)	300,521	-	-
	Mbozi	580,310	23,598	4
	Rungwe	315,545	-	-
	Total	2,405,502	103,645	4
Mwanza	Geita	770,597	-	-
	Ilemela	313,471	-	-
	Kwimba	336,656	7,609	2
	Magu	442,625	24,890	6
	Misungwi	273,808	20,469	7
	Nyamagana	248,426	-	-
	Sengerema	558,883	-	-
	Ukerewe	286,302	-	-
	Total	3,230,768	52,968	2
Morogoro	Kilombero	280,197	-	-
	Kilosa	527,109	25,070	5
	Morogoro (R)	263,920	-	-
	Mvomero	260,525	-	-
	Ulanga	194,209	28,104	14
	Total	1,525,960	53,174	3
Pwani	Bagamoyo	244,417	-	-
	Kibaha	146,251	-	-
	Kisarawe	103,759	2,479	2
	Mafia	42,669	-	-
	Mkuranga	203,293	-	-
	Rufiji	215,526	14,600	7
	Total	955,915	17,079	2
Shinyanga	Bariadi	668,848	-	-
	Bukombe	459,309	20,934	5
	Kahama	691,073	27,106	4
	Kishapu	342,469	4,505	1
	Maswa	327,573	13,094	4
	Meatu	273,955	4,097	1
	Shinyanga (R)	395,864	17,957	5
	Shinyanga (U)	143,959	4,606	3
	Total	3,303,050	92,299	3
Singida	Iramba	395,121	29,052	7
	Manyoni	224,614	-	-
	Singida (U)	123,500	6,367	5
	Singida R	432,046	105,648	24
	Total	1,175,281	141,067	12

Region	Districts	Total Population	Mild Food Insecure Population	% of Mild Food Insecure Population
Tabora	Igunga	360,060	98,529	27
	Nzega	448,878	37,285	8
	Sikonge	147,322	17,801	12
	Tabora (U)	219,955	22,769	10
	Urambo	429,487	35,668	8
	Uyui	311,759	35,951	12
	Total	1,917,261	248,003	13
Tanga	Handeni	275,052	-	-
	Kilindi	159,097	-	-
	Korogwe	271,055	3,844	1
	Lushoto	434,760	41,237	9
	Muheza	291,558	2,696	1
	Pangani	45,624	-	-
	Tanga (R)	257,820	-	-
	Total	1,734,966	47,777	3
NATIONAL TOTAL		24,919,813	1,409,761	6