Final Report

The Rapid Vulnerability Assessment (RVA) of Food Insecure Districts in Tanzania Mainland For the 2005-06 Market Year

DROUGHT HITS HARD

Maize wilts at grain filling stage	Diversification by introducing perennial crops impaired	Pastoralists livelihood at risk

By the Food Security Information Team (FSIT)

Coordinated by the Prime Minister's Office
And
Ministry of Agriculture Food Security and Cooperatives.

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

Executive Summary

Many parts of the country continue to experience food shortages of varying magnitude following failure of the short rains (*vuli)* in the bimodal rainfall areas which in a normal year, contributes about 30% of the annual production in the bimodal areas. Reduced harvests compounded by poor condition of livestock due to lack of pasture and water has affected food availability and accessibility by resource-weak households. In the unimodal rainfall areas, the ongoing seasonal rains have been performing poorly as well, affecting crops at various growth stages to permanent wilting point. Poor rainfall in these areas has reduced significantly pasture and water availability, resulting to massive emaciation including deaths of livestock, notably cattle in the pastoral and agro-pastoral livelihoods. Food insecurity has also been exacerbated by the acute shortage of food in neighbouring countries including Kenya, Malawi, Zambia and the Democratic Republic of Congo (DRC), which has led to extensive cross-border trade, further reducing the in-country stocks. Consequently, the combination of these factors resulted into sharp increases in staple foods prices such that in some places they area as high 85% above normal prices.

In response to the current food shortage crisis, various measures have been instituted by government and other partners to avert wide scale starvation. Since November last year, following the assessments carried out earlier in August, 2005 and later in November, about 613,405 food insecure people in 36 districts have been targeted with emergency food distribution, totaling 21,499 mts of maize from the government owned Strategic Grain Reserve (SGR), at a highly subsidized price of Tshs 50 per kg. This intervention, has been going on with a continuous routine monitoring of food situation in the regions by the Ministry of Agriculture, Food Security and Cooperatives and other stakeholders, using early warning indicators such as food and livestock prices, market supplies, rainfall and crop performance, cross border trade, food imports/exports and household coping mechanisms.

The observation on the rapid deterioration of food security across the country, followed by an outcry for intervention from affected population, called for the need for a thorough food security assessment to determine the magnitude of the problem and come up with remedial measures. This necessitated the Government in collaboration with the Food Security Information Team (FSIT)[1] to launch a Rapid Vulnerability Assessment (RVA) in 77 districts located in 17 regions, considered mostly affected by drought. The assessment's main objective, among others, was to identify and define characteristics and number of food insecure households and explore available coping mechanisms and establish appropriate intervention measures. Field assessment was carried out from 22-31 January 2006 by 20 teams deployed from the national level, which worked jointly with technical staff from local government and field based NGOs.

The assessment shows that food shortage is acute and widespread; affecting all assessed districts, accounting to nearly 85% of all districts in the country. It is further revealed that food insecurity has affected an estimated 3,764,843 people who would need food assistance of 99,676 mts up to next harvest in May 2006 (Appendix 1). Vulnerability analysis further revealed that out of the said food insecure population, about 564,726 people as destitute and in need of emergency food handouts estimated at 14,951 mts of cereals. To enable farmers to recover through engagement in agricultural activities during the current agricultural season, provision of early maturing seeds is considered inevitable. The assessment estimates that 3,434 mts of various types of seeds, depending on agro-ecological zones, will be required during this season.

To mitigate the possible negative effects of severe food insecurity, several recommendations are put across including, continued sale of subsidized food and provision of emergency seeds to the most, vulnerable households and distribution of free food handouts to the destitute persons. It is further recommended that price stabilization measures be enhanced including free food stuff movement through market networks and support to food imports at lower duties. Close monitoring should continue, using basic early warning indicators.

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1. BACKGROUND

According to the estimates of the preliminary forecast conducted by the Ministry of Agriculture and Food Security and Cooperatives (MAFSC) in May, 2005, the country produced 9.70 million tons of food at a 103 percent self sufficiency ratio. Furthermore, the forecast indicated that 12 regions would face food deficits of varying magnitudes in 41 districts with pockets of food shortages. Subsequently, in August/September, 2005, the Government through stakeholders under the Food Security Information Team (FSIT) conducted a Rapid Vulnerability Assessment (RVA) in the identified affected regions.

The RVA indicated that there were 594,499 food insecure people in 34 districts requiring 20,932 tonnes of food between October 2005 and February, 2006. Among other things, the FSIT recommended that the Government intervene by distributing food assistance from its Strategic Grain Reserve (SGR) to the affected people. Furthermore, the FSIT emphasized the need for continued monitoring of food situation,
Routine monitoring reports combined with updates from the regions indicated new emerging pockets of food insecurity. Reports from two districts of Njombe and Mufindi in Iringa regions indicated deteriorating food security situation in some locations triggering a Rapid Assessment conducted by MAFSC and PMO in collaboration with regional and districts staff. The RVA revealed that 18,904 most of whom were expected to purchase food at affordable price became food insecure due to rapidly rising prices attributed to increased cross border trade.

The Government endorsed both recommendations of the August 2005 and the MAFS/PMO November, 2005 assessment in Iringa region. The distribution of subsidized maize began in October 2005 in 36 districts identified by FSIT and MAFS/PMO as having persons facing acute food insecurity.

The MAFSC continued to monitor the country's food security situation and factors that govern it mainly rainfall performance, crop production and food prices on a routine basis. The monitoring reports indicated failure of both rainfall and poor crop performance as well as rapidly increasing food prices across the country. Whereas *Vuli* rains performed poorly in bimodal areas, seasonal (*msimu*) rains delayed and were poorly distributed in most of the unimodal areas. As a result, crops planted during the *Vuli* season failed in most of bimodal areas with close to total or total failure and crop growth in most of the unimodal rainfall areas has been seriously affected as crops have wilted and growth impaired.

Similar, reports of prevalence of food shortages with prices of major staple foods rising sharply to levels unaffordable by resource weak households have been received from other sources including NGOs and humanitarian organizations. In several districts, the affected households are coping with difficulty. Further to that, livestock have been severely affected as availability of pasture and water has deteriorated fast, causing livestock emaciation, deaths and consequent drastic fall of their prices. Information collected recently by MAFSC and PMO prompted the government to deploy the FSIT to conduct a RVA in January instead of the earlier planned February with a view to provide updates on current food situation and crop performance to facilitate informed decisions by Government and other stakeholders.

2. OBJECTIVES OF THE ASSESSMENT

The broad objectives for carrying out the RVA in January 2006 were to:

- Assess performance of the *Vuli* season (October to December) crops in bimodal areas;
- Assess performance of the *msimu* (November through May) rainfall and on farm crop situation in unimodal rainfall areas;

- Evaluate the food security situation within a livelihoods approach framework and establish if there are segments of communities at risk to face food insecurity;

- Identify the lowest geographical areas (wards/villages) with households already facing or likely to face food insecurity;

- Define characteristics and number of households with food insecure persons and explore available coping mechanisms and their related significance to the food needs of vulnerable households;

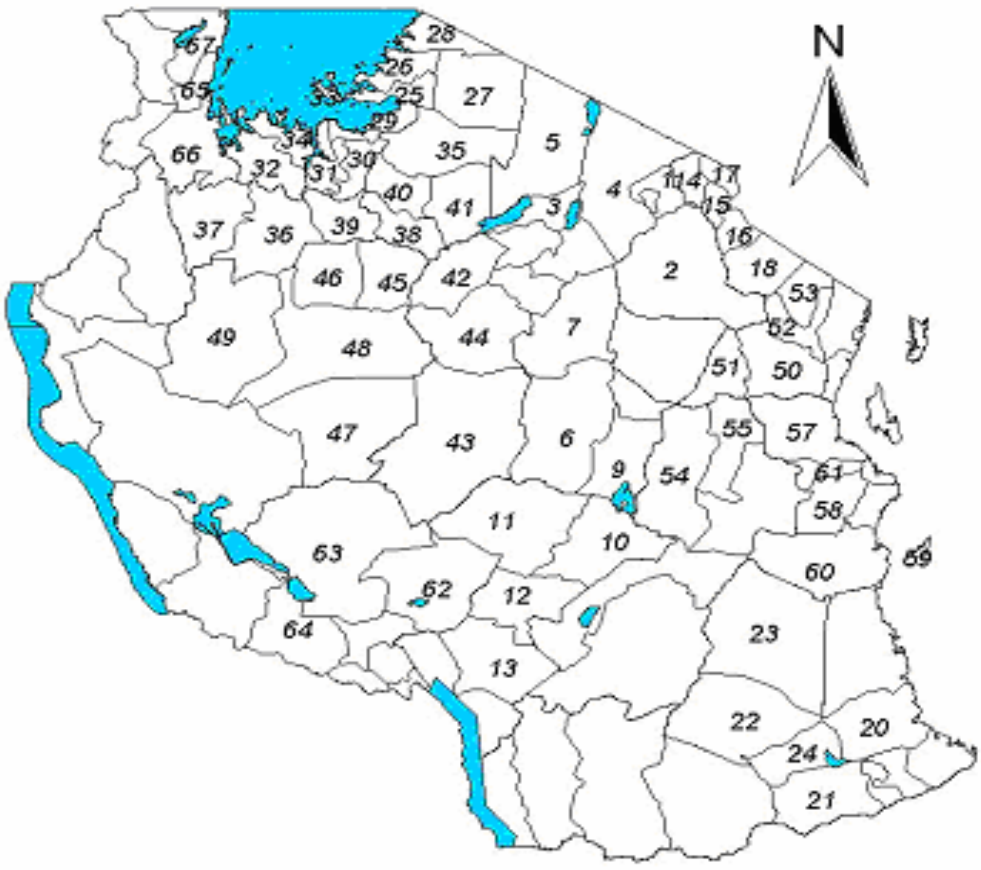
- Determine and recommend appropriate interventions and support needed by affected persons to enable them cope, sustain their means of livelihoods and engage themselves fully in their productive and reproductive activities on return of favourable conditions; and

- Put forward recommendations that enhance implementation of short, medium to long-term strategies to reduce household food insecurity in the country.

3. METHODOLOGY

The FSIT sent a total of 20 teams from the national level to conduct RVA in 77 districts in 17 regions during 22nd through 31th January, 2006 (Figure 1).

Figure 1: Districts assessed during the January 2006 RVA (See appendix 1 district names)



Source: RVA, January 2006

The teams from the national level were joined by technical staff from other stakeholder institutions at the district and regional level in the selected areas. The teams visited and collected information at regional, district, village and household levels as well as from traders and markets using a combination of methodologies including components of rapid rural appraisal techniques and livelihoods analysis. 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. Similarly, at the district level, the mission teams together with relevant authorities reviewed the district food security situation and agreed on appropriate wards and villages to be assessed. At village level, discussions were held with village leaders and influential persons, who also helped to classify households into three wealth categories. This was followed by focus group discussions held separately with individual wealth categories comprised of representatives from between 6 to 10 households. Same set of tools were used to facilitate consistent information collection from the field as elaborated below.

3.1. Agro-economic zoning

To ease the process of assessment, FSIT adopted the use of agro-economic zones as a tool of analysis. Sketch maps of the districts showing the main agro-economic zones were prepared with assistance of experienced district staff. Each village was assigned to a particular zone although, sometimes, a village fell in more than one agro-economic zone. The purpose of these sketches was to get an idea of variations in the main means of livelihoods and ultimately determine the zones with persons experiencing adverse conditions.

3.2. Sampling of wards and villages to visit

The criteria for selecting the wards and villages differed slightly between the bimodal and unimodal rainfall areas.

For the bimodal rainfall districts, villages were classified into three categories according to performance of the 2005/2006 *Vuli* cropping season. Although livelihoods in these areas are determined by a wide range of factors, crop performance was singled out because it contributes significantly to peoples' acquisition of food and cash. Other factors would be considered at later stages of the assessment. The three categories of villages include:

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

Since each village (or a good part of it) is associated to one agro-economic zone, a minimum of 2 villages per agro-economic zone identified as food insecure were selected for assessment representing that particular zone. The assessment mainly focused on villages where the crop failure was acute (category 1). However, category 2 (mild crop failure) villages were also considered for assessment since resource weak households in this category could be experiencing food insecurity as well. The reason for this is that these households may fall in the acute food insecure category in the event of food prices rising beyond affordable levels and available coping mechanisms exhausted.

For the unimodal rainfall areas, selection of sample villages was based on information available at district level on acuteness of food insecurity, considering availability of household food reserves and supplies on markets. Other factors were prevailing market prices, opportunities available to villagers to generate income and other potential coping strategies. The villages were then classified into three categories namely acute, mild and normal food security situation.

Likewise, a minimum of 2 villages were selected for assessment from each of the affected agro-economic zones to represent that particular zone.

3.3. Wealth distribution at village level for various agro-economic zones

In every village visited, focus group discussions were held with village leaders and key informants. Towards the end of these discussions households were divided in three (3) wealth categories namely resource weak, middle class and better-off ones. The wealth categories were predefined based on three major parameters, i.e. (i) acreage under cultivation, (ii) livestock holding and (iii) other key income generating activities.

Percentages of households falling in each wealth category per assessed village were established and used later to determine generally the percentages of the three wealth groups in a particular agro-economic zone.

3.4. Semi-structured interviews with household representatives of wealth groups

Representatives from different households were invited and divided into the three wealth categories, with village leaders helping to sort and assign each of these representatives to a particular and appropriate wealth category, based on the leaders' own judgment of the villager's wealth. Each wealth group was interviewed separately, subdividing the groups further by gender for separating men and women interviews where it was necessary and possible.

The core discussion focused on the current sources of food and income and purchasing power levels. Information on coping strategies that households use or plan to resort to in the coming months if food insecurity heightens was also gathered.

3.5. Identification and estimation of food and seed insecure households/persons

The analysis was done in order to estimate the number of households/people that are highly vulnerable to food insecurity who will need food and seed assistance.

For each zone, wealth groups in need of relief assistance were identified based on the options they are currently using to meet their basic food and non-food requirements. The sustainability of the present coping strategies and alternative sources of food and cash for the forthcoming months (until the next harvest) were explored. Commodity prices and availability of casual employment were also considered during the analysis.

The percentages of food insecure households/people to be targeted for food and seed interventions were defined for each agro-economic zone and ultimately for each village.

Period and duration for interventions are context specific and were defined for each agro-economic zone.

- Recommended food requirements (to be availed as free and subsidized) were based on cereal equivalent of 400 gms/person/day, amounting to 12 kg of maize per beneficiary per month. This ration is normally used in Tanzania by WFP and Government and provides a minimum of energy requirement (nearly 1900 kcals/person/day) that allows an individual to carry out basic necessary activities.

- Free food and subsidized rations are recommended based on the price and market analysis as well as vulnerability analysis that looked at the sources of income vis-a-vis purchasing power of the most food insecure people.

- Recommended seeds requirements are based on maize equivalent seed rate to enable a food insecure household grow one-acre.

4. OVERVIEW OF CURRENT FOOD SITUATION IN THE COUNTRY

The assessment has revealed an unsatisfactory overall national food security situation mainly due to three major reasons: (i) the *Vuli* season performed poorly, (ii) there was delayed onset and unsatisfactory performance of the *msimu* season and ((iii) food shortages in neighbouring countries, which has attracted increasing formal and informal exports from Tanzania. While all these factors combined have triggered increase in prices of major food staples, poor rainfall caused livestock health deterioration. Ultimately, livestock prices have fell drastically in pastoral and several agro-pastoral locations. The current adverse food security situation has exacerbated the already fragile food security situation, which normally prevails during lean periods between the end of one season and the next harvest period.

4.1. Rainfall Performance and Impact

4.1.1. Failure of the *Vuli* season

The *Vuli* normally start in September and continue through December. Although the rains started early in some parts such as Kagera region, monitoring reports have shown that most areas receiving those rains experienced delayed onset with well below normal amounts coupled with poor distribution. An assessment of performance of *Vuli* rains in some selected weather stations attest to this. For example, in November, 2005 Arusha received some 86.5 mm compared to an average of 101.6 mm, Same received 15.8 mm compared to 54.7 mm, Mwanza received 34.5 mm compared to 150.5 mm and Musoma received 53.2 mm compared to 89.2 mm. A similar trend has been observed for December 2005 in most of the bimodal rainfall areas.

The *Vuli* crop harvest contributes nearly 30 percent to the national annual food crop production. The *Vuli* crop normally increases food supplies, which farmers in the bimodal rainfall areas depend on until the *Masika* season harvest begins around June to July. These supplies reduce domestic demand pressure on previous year retentions in the unimodal rainfall areas. This year, like other years when the *Vuli* rains fail, almost the entire country relied on the 2004/05 harvest retained in the unimodal rainfall areas and by traders in different locations. Such unusual food transfers induced food shortages even in locations that originally had potential surpluses.

Failure of the *Vuli* rains brought about two other main negative consequences, which impacted on food unavailability and impaired accessibility. First, rainfall failure reduced water levels in some water bodies, causing fish catches to diminish and consequently, reduced fish availability that could supplement agricultural commodities. This increased consumption of agricultural produce particularly grain. Second, when rainfall is promising from start of the season, availability of casual labour opportunities is assured such that villagers earn income with which they buy a wide range of other necessities but this year, due to rainfall unreliability, villagers were forced to continue selling part of grain they retained for on farm consumption to earn cash to pay for their other pressing needs.

4.1.2. The delayed onset and unsatisfactory performance of the *msimu* season

In normal years the seasonal rains starts in mid November, followed by a brief dry spell in January/February, and resumes through April/May. However, during the current season, most of the unimodal rainfall areas had a late onset of rainfall for about two months and when the rains started, very low amounts were recorded with poor distribution. For example, between November, 2005 and January, 2006 Singida region has had rainfall amounting to only 40.1 mm compared to 193 mm and 192 mm for the same period in 2003 and 2004, respectively.

In view of the overall poor performance of seasonal rains, different parts of the country have crops at different stages of growth whereas, in some areas, due to continued dry conditions, farmers have not yet planted. For example, in some parts of Kigoma region crops are at vegetative and top dressing stages while maize is at tussling stage in parts of Mpanda district, Rukwa region. Most parts of Mbeya region have had satisfactory rains with crops at vegetative stages in satisfactory performance. However, the majority of farmers have not yet planted at all in Chunya, Mbozi and Mbarali districts, which have received scanty rains so far. Crop performance in Iringa region is mixed as in most parts crops are at growing and vegetative stages while in Iringa Rural district planting is still underway. Ruvuma region and the south eastern regions of Lindi and Mtwara continue to receive some rainfall and crops are at emergence and vegetative stages.

The central regions of Dodoma, Singida, Shinyanga and Tabora continue to experience scarcity of rain. Inadequate rainfall and persistent drought conditions in most parts of these regions have not supported crop growth such that some farmers have not planted, some crops have dried up and others are stressed. In a number of instances farmers are yet to replant awaiting for rainfall. Thus, with prevalent drought conditions, crop yield prospects are poor and it is unlikely that crop production targets will be achieved this season.

Poor rainfall performance has as well caused unseasonable loss of vegetation and reduced water availability. These conditions have affected pasture and water availability with livestock suffering health losses including emaciation, reduced calving and milk production and some deaths in areas severely affected by drought. There are reports and evidence that livestock deaths have reached thousands in the central and Lake Victoria Basin regions of Dodoma, Singida, Shinyanga and Mwanza. Livestock deaths have also been reported in Arusha and Manyara Regions.

Box 1

In Singida district the assessment team visited a livestock keeper in Mwiboo village, Chikuyu Ward and witnessed carcases of 20 dead cattle. Following interview with the livestock keeper's son, he explained that between November, 2005 and 26th January, 2006, his father lost 670 cattle due to drought which has severely affected pasture and water availability. During the same period he himself lost 80 in similar circumstances and now remains with only 10. The village leaders explained that during the same period the village lost a total of 3,497 cattle. Other livestock which died of drought related causes include 3,888 goats and 2,018 sheep.

Aged persons in the affected areas when interviewed compared the current drought to the one that occurred in 1949. Others particularly in central regions compared the situation to that of 1961.

Figure 2: Cattle carcasses in Manyoni district, Singida Region

Source: RVA, January 2006 (picture taken on 26 January, 2006)

Note: ***The postmortem results of these carcases showed that the cause of death is hunger; no diseases were detected on liver, lungs, heart, spleen, intestines, stomach and flesh. There were small ingesta found in the stomach***.

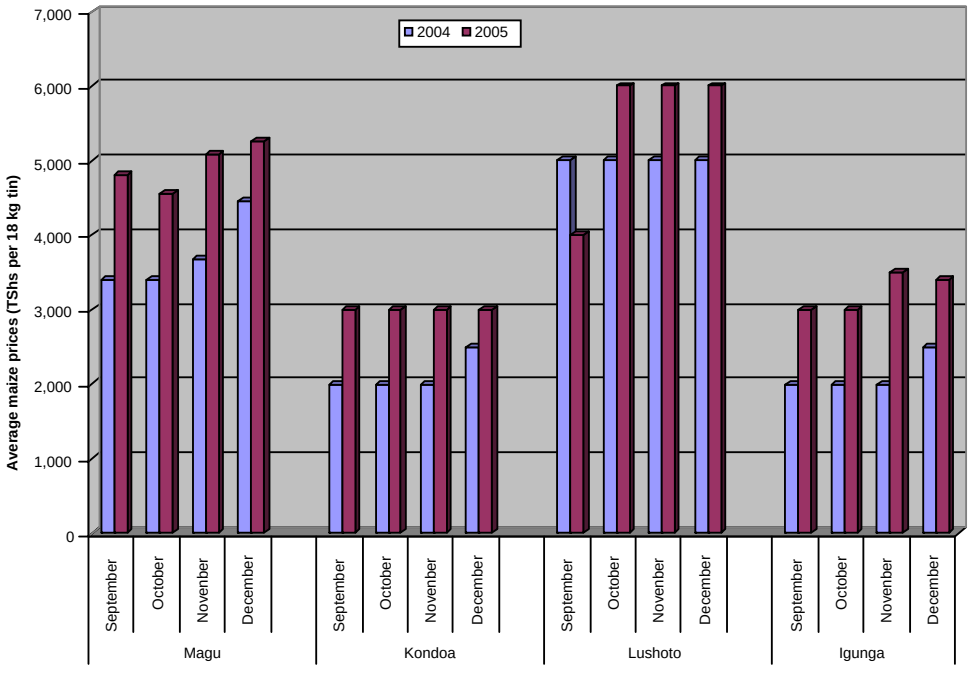
4.1.3. Informal food commodity trade to neighbouring countries

Food shortages have been persistent in most countries neigbouring Tanzania including Kenya, Burundi, DRC, Zambia and Malawi. As a result of the shortages grain prices in those countries escalated significantly to attract maize flow from Tanzania and petty traders to take advantage of this situation. Government liberalized trade several years ago, and is keen to remain firm on its positive policy decisions. This policy measure however, requires all traders to have appropriate trading documents. Unfortunately, government efforts on this part are being hindered by the long porous borders, which make the whole formal trade difficult to realise. Although grain sold informally across borders is carried in small amounts, frequencies are too high such that overall food exported through these roots end up in substantial quantities.

4.1.4 Major staples and livestock prices

Monitoring reports indicate that market prices for food commodities and especially cereals have risen sharply between November, 2005 and January, 2006. Monthly national average price of maize for the month of January 2005 is 85 percent higher than the one recorded during the same period last year. In January, 2006 maize average wholesale price per 100 kg was Tsh. 21,945 compared to Tsh. 16,221 in January, 2005. The high increase in prices is evidenced across the country in both food surplus and deficit areas. For example, the price of maize in Sumbawanga, a maize surplus producing area and that of Dar es Salaam, a major urban centre rose from Tsh. 9,550 and Tsh.15, 986 in January, 2005 to Tsh. 27,000 and Tsh. 29,500 respectively in January, 2006. Sumbawanga is one of the major suppliers of maize in the country where prices are often lower than in other parts of the country. With the exception of Songea (Tsh. 21,750), Iringa (Tsh. 22,500) and Bukoba (Tsh. 25,000) all other markets had higher than average monthly prices of maize for January, 2006. It should be noted that current prices of maize are even higher than those recorded during the same period in 2003/2004 which was a deficit year as shown in fig. 3 below.

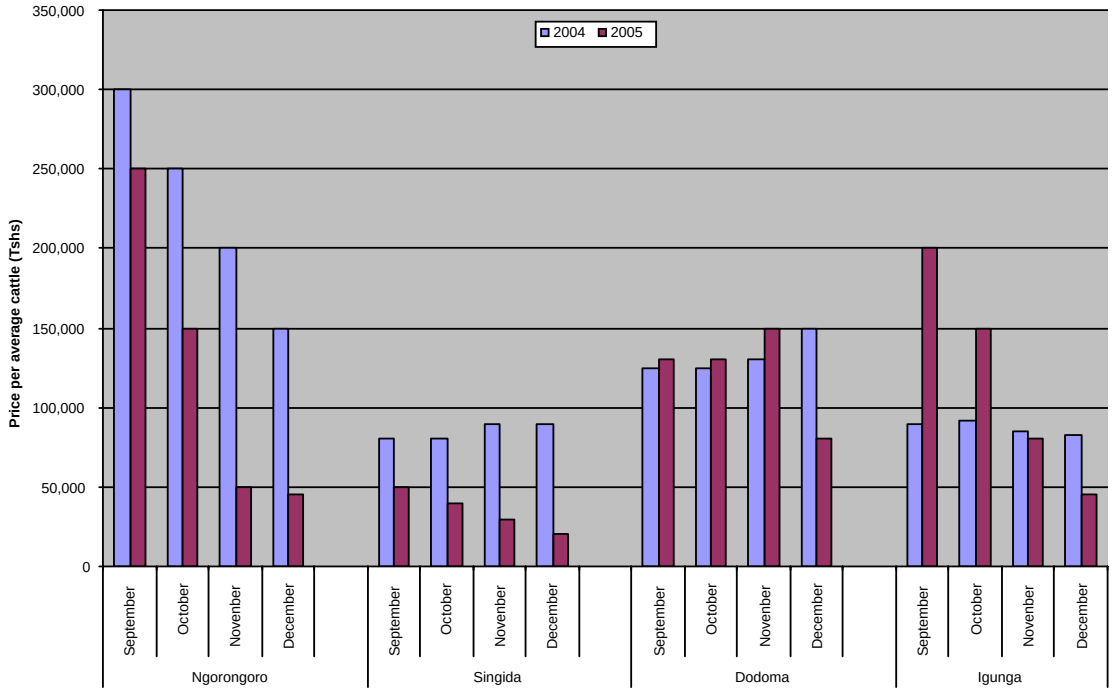
FIGURE: 3 Maize prices comparisons for selected Districts markets



SOURCE: RVA, January 2006

The assessment observed that, the prolonged dry conditions caused loss of pasture and reduced water for livestock, some of which were emaciated and died in several locations. This problem has plummeted livestock prices in most locations and are currently much lower than during the same time last year (Figure 4), with some animals being not worth selling.

Figure 4:Average cattle prices in selected districts



Source: RVA, January 2006

Due to the rapidly rising prices of food commodities and falling livestock prices, the terms of trade for pastoralists and agro-pastoralists have deteriorated terribly. As a result, livestock keepers who did not sell their animals before this situation developed can now purchase very small amount of grain than before by selling a unit of cattle. Livestock keepers who have lost their animals have no means to access grains.

5. VULNERABILITY ANALYSIS

5.1. Food availability and accessibility

The assessment established that food availability has declined substantially in most of the assessed districts, with much of the available supplies being transported from distant districts. Most villages are obtaining supplies from central regional markets, with traders handling small amounts. Consequently food prices have escalated to levels that resource weak households fail to afford.

Food insecure households were found in almost all villages, including those that had mild to good harvest in the 2004/05 crop production year. Most of the food insecure households have a weak resource base, cultivating an average of less than 3 acres on which they plant basically food crops and keep very few livestock mostly small stocks comprising of chicken, sheep and goats (ranging between 0 and 5). Their harvests are normally enough to satisfy their food needs for only a short period therefore they depend on market supplies to meet their food needs.

During favourable climatic conditions, the resource weak households work on better-off households' fields for cash, which they spend on food and other necessities; off farm income generating opportunities are limited in most locations. Due to poor rainfall performance this year (from September 2005 to-date), agricultural and casual labour opportunities are scarce. Even when available, wages have dropped drastically hence one has to work for a prolonged period to earn enough for a household's food needs. This is happening at a time when members of the resource-weak households are physically and nutritionally feeble because they no longer eat enough food. Most rural communities on average have 2 meals per day. But with the current food shortages, most have reduced the number of meals they take per day from 2 to 1, with others eating once in 2 days. Moreover, the meals are often light, sometimes composed of only porridge.

Households whose livelihoods are based on livestock keeping and fishing have also become food insecure as poor rains and drought conditions caused serious water shortages and loss of vegetation. As a result fish catches particularly in areas with inland water bodies such as Mtera Dam, Nyumba ya Mungu Dam, Usiulize dam, lake Manyara as well as Ruvu and Rufiji rivers were reported to have drastically dwindled with some fishermen abandoning fishing. Livestock health and productivity have deteriorated. In most locations livestock have massively emaciated and many deaths reported from Simanjiro, Ngorongoro, Monduli, Singida, Manyoni, Magu, Kwimba, Misungwi, Meatu, Maswa, Kishapu and Dodoma rural districts. Poor livestock conditions have caused livestock prices to fall, with the terms of trade between livestock and grain worsening.

The continued deteriorating food security situation in many parts of the country has posed a challenge to the vulnerable households and those that have lost their means of livelihoods in coping with hardships. The period of food insecurity is location specific, but requiring interventions over the next three to four months (February-May) when harvesting of the new crop is expected. A much longer adverse situation would occur if *msimu* rains continue to perform poorly and the *Masika* rains expected to start in March in bimodal areas delay or fail.

The assessment identified a total of 3,764,843 persons in 3,635 villages as being acutely food insecure, in the assessed districts. The acute food insecure persons account for 38.4 percent of the total population in the food insecure villages. These numbers were established by considering the limitations in availability of coping mechanisms, the dynamics of market supplies and prices as well as the expectations of the next harvesting period as the major exit strategy from food shortages.

5.2. Seed availability and accessibility

In normal years, most farmers use seeds retained from previous harvest. Following poor harvests last season, most of the harvest was used for consumption, with little or no seed retained. Beside lack of seed in some areas replanting exacerbated the problem of seed. As such, poor households will be subjected to seed shortages and uncertainty to cultivate to their potential should the expected rains resume. Even those who depend on seed obtained from commercial sources, accessibility may be limited due to lack of cash inadequate distribution channels. Furthermore, this year such production has as well been reduced in the drought-affected areas therefore locally produced seeds are not available in sufficient quantities.

5.3. Coping Strategies

Uncertainties due to reduced agricultural activities have curtailed availability of opportunities to employ agricultural labour, impairing income earning by the resource weak households and their access to market food supplies. As a consequence, some households have resorted to indiscriminate tree felling to make charcoal for example, in areas of Singida, Rufiji, Kisarawe, Dodoma Rural and Kondoa districts. There has also been increased use of tree branches for feeding livestock as seen in Arumeru, resulting to tree destructions. In another extreme

incidents, cases of heads of households abandoning families to venture in other areas in search of jobs such as in Shinyanga and migrating to distant places for example, pastoralists moving from northern districts of Kondoa to other areas, Simanjiro and Monduli to Bagamoyo in Coast region. This has detrimental effects on the environment such as reduced forest cover and soil erosion (Fig. 5).

Fig. 5: Tree Felling with detrimental effect to the environment in Mwitikira, Dodoma (R) District

Cases of poor school attendance and dropping out due to lack of food and in search of food have been reported in districts such as Sengerema, Geita, Karatu, Ngorongoro and Arumeru. Selling of assets and household amenities and corrugated iron sheets withdrawn from existing houses has been reported in some areas such as Bariadi, Lindi, and Masasi. Some herders have been forced to migrate to other areas including invading protected areas. There have been increased incidents of poaching in game reserves by food insecure people from the districts bordering the reserves**.** All these occur on the pretext of widening income earning opportunities and protecting livelihoods.

2**6. INTERVENTION OPTIONS**

The assessment found that the affected persons are experiencing two major threats namely: i) prevalence of acute and mild food shortages and ii) looming seed shortage. These call for food and seed aid interventions.

6.1. Food aid and availability interventions

The assessment established that the coping strategies employed by resource weak households are nearly exhausted and cannot support them beyond February. It was further established that other alternatives these households resort to are environmentally and socially unacceptable as explained above. This situation is calling for interventions from as early as mid February 2006 to protect livelihoods and save the environment.

Given the various combinations of the factors affecting the food security situation of the two groups, and availability of coping strategies which are geographically defined, multiple interventions are proposed in order to address the pending food insecurity.

The proposed interventions are: providing free food amounting to 14,951 tons to the 564,726 destitute persons and subsidized food sales amounting to 84,725 tons to the 3,200,117 acutely affected persons while closely monitoring the situation for the mildly affected persons. Both of these types of food aid should be carefully targeted using the Community Managed Targeting and Distribution (CMTD) mechanism to enable the needy households access free grains and that to be sold at a fairly affordable price**.** The CMTD has been successfully used in previous food assistance programmes implemented by government and other partners.

It was also established that households with some cash are also facing difficulty to access food due to the widespread shortages and low supplies to markets. Support entailing facilitating trade and grain movement from surplus to deficit locations is required to ensure market supplies. Sustained food supply in markets would potentially stabilize prices and ensure food access by market dependent households. In this regard, authorities in areas experiencing food shortages should mobilize private traders to move in food supplies from surplus areas. Another option is for the Government to release maize for commercial sales where normal markets are malfunctioning. In order to ensure price stabilization in the local markets, private traders should be allowed to purchase maize from the Strategic Grain Reserve (SGR) and sale at a fairly affordable price.

6.2 Seed aid intervention

Availability of seeds is very crucial to reactivate the households that have been hard hit by prolonged dry spell this year to re-engage in agricultural activities, should rains resume in unimodal areas and *Masika* starts as expected from March in bimodal areas. Since most of the food insecure households have no own seed reserves and cash, there is a need to support them by giving them appropriate, reliable and high quality types of seeds to enable them plant and realise good harvest. About 3,434 mt of maize seed equivalent will be required (Annex II). This seed should also be highly targeted. The government should allocate some funds and solicit donor/partner's assistance to procure and distribute the seeds timely.

Authorities in most of the affected districts have requested that resource weak households be supplied with seeds to enable them concentrate on own farm activities instead of wondering around in search for inputs or cash to buy seed should rains resume. The recommended crop varieties include maize, sorghum, pulses (beans, cowpeas, pigeon peas etc), cassava, sweet potatoes and *Lab lab* sufficient for planting on one acre per household.

Observations made during the field assessment revealed that a number of the regions in the Central, Western, Lake Victoria Basin and parts of the Northern Highlands zones, have started adopting the use of drought tolerant crops including sorghum. However, in some other areas such as Maswa and Meatu districts in Shinyanga region, and Same and Mwanga districts in Kilimanjaro region, farmers still continue with maize production syndrome despite consecutive crop failures. This calls for an intensive sensitisation of agronomic requirements for various agro-ecological areas. Proper targeting and provision of suitable cultivars would be necessary during seeds intervention programmes.

Proposed seeds interventions are required to the food insecure households to enable them recover from next planting season. It is extremely important that seeds are provided on time in order to optimally use the expected rains. To cover the needs of the 618,816 food insecure households (3,764,843 people), a total of 3,434 mt of various seeds varieties will be required.

7. RECOMMENDATIONS

Based on the findings from the field assessment, FSIT recommends the following:

- The Regional and District authorities, as well as the community at large solicit all possible coping strategies available in their respective areas based on sustained livelihoods before requesting for interventions from the national level.

- The Regional and District authorities to mobilize private traders to move food for sale in deficit areas.

- The Government to preposition for timely release of approximately **14,951** mt of maize from SGR for free distribution to the **564,726** destitute persons lacking support, and sale of **84,725** mt to **3,200,117** vulnerable persons at a subsidized price of Tsh. 50 per kilo of maize. These distributions should be through the CMTD mechanism. Adequate resources and logistical support should be provided at all levels prior to undertaking the operation.

- The Government procures **3,434** mt of various seed types for distribution to the **618,816** households facing acute food shortages. Distribution of the seeds should be based on agro-ecological patterns for planting during the current *msimu* season and the coming *masika* season.

- The government and partners continue to monitor the food security situation in areas identified to have shortages and those areas that are currently not facing shortages. Monitoring should focus on any negative changes on the early warning indicators such as prices and market supplies as well as deterioration of the locally available coping mechanisms.

- A follow up rapid vulnerability assessment be carried out not later than May this year, and trained district teams should fully participate. In order to enhance ownership of the assessments by the respective regional and district authorities, the FSIT at the National level should undertake capacity building of the technical staff and decision makers at the regional and district levels. This will improve timeliness and facilitate judicious use of resources.

- Local Government Authorities should enforce existing by-laws on cultivation of crops in their respective areas suitable for their agro-ecological zones.

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APPENDIX 1:

FOOD SHORTAGE REGIONS AND DISTRICTS - NATIONAL SUMMARY

Region	Districts	Total Population in the Assessed Villages	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Total Food Required (mt)	Food Relief to 15% destitute*	Total population destitute
Arusha	Karatu	144,580	86,748	60	2	2,082	312	13,012
	Monduli	128,697	70,058	54	2	1,681	252	10,509
	Ngorongoro	89,318	40,193	45	2	965	145	6,029
	Arumeru	56,610	25,475	45	2	611	92	3,821
Sub total		**419,205**	**222,473**			**5,339**	**801**	**33,371**
Coast	Kibaha	18,645	4,260	23	2.5	128	19	639
	Kisarawe	8,331	2,022	24	2.5	61	9	303
	Bagamoyo	158,795	46,827	29	2.5	1,405	211	7,024
	Mafia	12,597	1,260	10	2.5	38	6	189
	Rufiji	38,894	11,668	30	2.5	350	53	1,750
Sub total		**237,262**	**66,037**			**1,981**	**297**	**9,906**
Dodoma	Dodoma (R)	425,458	159,758	38	2	3,834	575	23,964
	Kondoa	153,224	59,398	39	2	1,426	214	8,910
	Mpwapwa	197,448	32,985	17	2	792	119	4,948
	Kongwa	273,613	90,610	33	2.5	2,718	408	13,592
	Dodoma (U)	73,401	20,688	28	2	497	74	3,103
Sub total		**1,123,144**	**363,440**			**9,266**	**1,390**	**54,516**
Iringa	Iringa	89,599	35,840	40	2	860	129	5,376
	Kilolo	39,318	15,727	40	2	377	57	2,359
	Mufindi	15,015	6,006	40	2.5	144	22	901
	Njombe	73,282	**28,755**	39	2.5	690	104	4,313
	Makete	3,975	1,590	40	2.5	48	7	239
Sub total		**221,189**	**87,918**			**2,120**	**318**	**13,188**
Kagera	Bukoba Rural	**28,232**	**11,293**	3	2.5	**339**	51	1,694
	Muleba	**57,917**	**14,479**	3	2.5	**434**	65	2,172
	Biharamulo	**353,532**	**35,353**	8	2.5	**1,061**	159	5,303
Sub total		**439,681**	**61,125**			**1,834**	**275**	**9,169**

Region	Districts	Total Population in the Assessed Villages	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Total Food Required (mt)	Food Relief to 15% destitute*	Total population destitute
Kilimanjaro	Same	195,818	78,327	40	2	1,880	282	11,749
	Mwanga	17,587	8,794	50	2	211	32	1,319
	Rombo	85,701	34,280	40	2.5	1,028	154	5,142
	Hai	38,711	15,484	40	2	372	56	2,323
	Moshi	123,461	49,384	40	2	1,185	178	7,408
Sub total		**461,278**	**186,270**			**4,676**	**701**	**27,940**
Lindi	Ruangwa	34,502	10,351	30	2	248	37	1,553
	Kilwa	101,449	30,435	30	2	730	110	4,565
	Lindi Rural	114,738	30,502	27	2	732	110	4,575
	Nachingwea	29,569	8,871	30	2.5	266	40	1,331
	Liwale	21,319	6,396	30	2	153	23	959
Sub total		**301,577**	**86,554**			**2,131**	**320**	**12,983**
Manyara	Kiteto	12,906	5,808	45	2.5	174	26	871
	Simanjiro	111,510	50,180	45	2	1,204	181	7,527
	Hanang	9,708	4,369	45	2.5	131	20	655
	Mbulu	51,514	23,181	45	2.5	695	104	3,477
Sub total		**185,638**	**83,537**			**2,205**	**331**	**12,531**
Mara	Musoma	121,936	48,774	40	2	1,171	176	7,316
	Bunda	104,232	41,693	40	2	1,001	150	6,254
	Tarime	149,120	44,736	30	2	1,074	161	6,710
	Serenngeti	66,592	19,978	30	2.5	599	90	2,997
	Musoma U	108,242	21,648	20	2.5	649	97	3,247
Sub total		**550,122**	**176,829**			**4,494**	**674**	**26,524**
Mwanza	Misungwi	194,812	116,887	60	2	2,805	421	17,533
	Magu	236,714	142,028	60	2	3,409	511	21,304
	Kwimba	228,660	137,196	60	2	3,293	494	20,579
	Sengerema	197,990	98,995	50	2.5	2,970	445	14,849
Sub total		**858,176**	**495,107**			**12,477**	**1,871**	**74,266**

Region	Districts	Total Population in the Assessed Villages	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Total Food Required (mt)	Food Relief to 15% destitute*	Total population destitute
Shinyanga	Kishapu	145,175	87,105	60	2.5	2,613	392	13,066
	Meatu	273,500	164,100	60	2	3,938	591	24,615
	Maswa	330,254	132,102	40	2	3,170	476	19,815
	Bariadi	227,501	136,501	60	2	3,276	491	20,475
	Kahama	93,474	37,390	40	2.5	1,122	168	5,608
	Shinyanga (U)	58,637	23,455	40	2.5	704	106	3,518
	Shinyanga (R)	287,692	172,615	60	2.5	5,178	777	25,892
Sub total		**1,416,233**	**753,267**			**20,002**	**3,000**	**112,990**
Singida	Singida	182,279	64,829	36	2	1,556	233	9,724
	Manyoni	192,927	55,335	29	2	1,328	199	8,300
	Iramba	206,815	61,766	30	2	1,482	222	9,265
	Singida (U)	43,766	13,130	30	2	315	47	1,969
TOTAL		**625,787**	**195,060**			**4,681**	**702**	**29,259**
Tabora	Igunga	361,909	137,118	38	2	3,291	494	20,568
	Sikonge	145,341	40,382	28	2	969	145	6,057
	Nzega	422,949	163,233	39	2	4,897	735	24,485
	Uyui	270,062	81,433	30	2.5	2,443	366	12,215
	Tabora (U)	61,778	18,953	31	2.5	569	85	2,843
	Urambo	180,641	72,256	40	2.5	2,168	325	10,838
Total		**1,442,680**	**513,374**			**14,336**	**2,150**	**77,006**
Mbeya	Mbarali	77,956	31,182	40	2.5	**935**	140	4,677
	Mbozi	82,074	32,830	40	2.5	**985**	148	4,924
	Chunya	70,136	28,054	40	2.5	**842**	126	4,208
Sub total		**230,166**	**92,066**			**2,762**	**414**	**13,810**
Morogoro	Morogoro	77,504	38,752	50	2.5	1,163	174	5,813
	Kilosa	123,918	49,567	40	2.5	1,487	223	7,435
	Ulanga	198,895	89,503	45	2.5	2,685	403	13,425
	Mvomero	63,540	30,452	48	2.5	914	137	4,568
Sub total		**463,857**	**208,274**			**6,248**	**937**	**31,241**
Mtwara	Masasi	99,318	13,492	14	2	324	49	2,024
Sub total		**99,318**	**13,492**			**324**	**49**	**2,024**

Region	Districts	Total Population in the Assessed Villages	Food Insecure Population	% of Food Insecure Population	Duration for Intervention (months)	Total Food Required (mt)	Food Relief to 15% destitute*	Total population destitute
Tanga	Kilindi	32,869	13,148	40	2.5	394	59	1,972
	Handeni	247,065	111,179	45	2.5	3,335	500	16,677
	Pangani	4,101	1,845	45	2.5	55	8	277
	Lushoto	72,212	33,847	47	2.5	1,015	152	5,077
Sub total		**356,247**	**160,020**	**45**		**4,801**	**720**	**24,003**
TOTAL		**9,431,560**	**3,764,843**			**99,676**	**14,951**	**564,727**

Note: * It is estimated that about 15% of food insecure people will need free food as they can not afford subsidized food.

APPENDIX 11:

SEED SHORTAGE REGIONS - NATIONAL SUMMARY

Region	Districts	Total District Population	Food Insecure Population	Seeds Insecure Households	Total Seeds Required (mt)
Arusha	Karatu	245,821	86,748	14,458	72
	Monduli	207,526	70,058	11,676	58
	Ngorongoro	178,787	40,193	6,699	33
	Arumeru	571,998	25,475	4,246	21
Sub total		**1,204,132**	**222,473**	**37,079**	**185**
Coast	Kibaha	146,251	4,260	710	4
	Kisarawe	103,759	2,022	337	2
	Bagamoyo	244,417	46,827	7,804	39
	Mafia	42,669	1,260	210	1
	Rufiji	215,526	11,668	1,945	350
Sub total		**752,622**	**66,037**	**11,006**	**395**
Dodoma	Dodoma (R)	462,019	159,758	26,626	133
	Kondoa	451,902	60,217	10,036	50
	Mpwapwa	277,013	32,985	5,498	27
	Kongwa	271,854	90,610	15,102	76
	Dodoma (U)	358,746	20,688	3,448	17
Sub total		**1,821,534**	**364,260**	**60,710**	**304**
Iringa	Iringa	257,190	35,840	5,973	30
	Kilolo	214,739	15,727	2,621	13
	Mufindi	296,092	6,006	1,001	5
	Njombe	446,859	29,172	4,862	24
	Makete	104,075	1,590	265	1
Sub total		**1,318,955**	**88,335**	**14,723**	**74**
Kagera	Bukoba Rural	**430,692**	**11,293**	1,882	9
	Muleba	**421,098**	**14,479**	2,413	12
	Biharamulo	**447,765**	**35,353**	5,892	29
Sub total		**1,299,555**	**61,125**	**10,188**	**51**
Kilimanjoro	Same	222,760	78,327	13,055	65
	Mwanga	120,052	8,794	1,466	7
	Rombo	257,521	25751	4,292	21
	Hai	275,904	15,484	2,581	13
	Moshi	416,477	49,384	8,231	41
Sub total		**1,292,714**	**177,741**	**29,623**	**148**
Lindi	Ruangwa	166,044	10,351	1,725	9
	Kilwa	176,832	30,435	5,072	25
	Lindi Rural	203,960	30,502	5,084	25
	Nachingwea	173,654	8,871	1,478	7
	Liwale	100,741	6,396	1,066	5
Sub total		**821,231**	**86,554**	**14,426**	**72**
	Kiteto	182,807	5807.7	968	5
	Simanjiro	169,546	78057	13,010	65

Manyara	Hanang	232,965	27918	4,653	23
	Mbulu	231,943	23181.3	3,864	19
Sub total		**817,262**	**134,964**	**22,494**	**112**
Mara	Musoma	351,981	48,774	8,129	41
	Bunda	277,955	41,693	6,949	35
	Tarime	535,671	44,736	7,456	37
	Serenngeti	194,822	19,978	3,330	17
	Musoma U	119,443	21,648	3,608	18
Sub total		**1,479,872**	**176,829**	**29,472**	**147**
Mwanza	Misungwi	273,808	116,887	19,481	97
	Magu	442,625	142,028	23,671	118
	Kwimba	336,656	137,196	22,866	114
	Sengerema	558,883	98,995	16,499	82
Sub total		**1,611,972**	**495,107**	**82,518**	**413**
Shinyanga	Kishapu	342,469	87,105	14,518	73
	Meatu	273,955	164,100	27,350	137
	Maswa	327,573	132,102	22,017	110
	Bariadi	668,848	136,501	22,750	114
	Kahama	691,073	37,390	6,232	31
	Shinyanga (U)	143,959	37,960	6,327	32
	Shinyanga (R)	395,864	29,162	4,860	24
Sub total		**2,843,742**	**624,319**	**104,053**	**520**
Singida	Singida	432,046	64,829	10,805	54
	Manyoni	224,614	55,335	9,223	46
	Iramba	387,342	61,766	10,294	51
	Singida (U)	124,243	13,130	2,188	11
TOTAL		**1,168,246**	**195,060**	**32,510**	**163**
Tabora	Igunga	360,090	137,118	22,853	114
	Sikonge	147,322	40,382	6,730	34
	Nzega	448,878	163,233	27,206	136
	Uyui	311,759	81,433	13,572	68
	Tabora (U)	219,755	18,953	3,159	16
	Urambo	429,487	72,256	12,043	60
Total		**1,917,291**	**513,374**	**85,562**	**428**
Mbeya	Mbarali	234,908	31,182	5,197	26
	Mbozi	513,600	32,830	5,472	27
	Chunya	307,270	28,054	4,676	23
Sub total		**1,055,778**	**92,066**	**15,344**	**77**
Morogoro	Morogoro	263,920	38,752	6,459	32
	Kilosa	527,109	49,567	8,261	41
	Ulanga	194,209	89,503	14,917	75
	Mvomero	260,525	30,452	5,075	25
Sub total	**TOTAL**	**1,245,763**	**208,274**	**34,712**	**174**
Mtwara	Masasi	469,658	46,358	7,726	39
Sub total		**469,658**	**46,358**	**7,726**	**39**
Tanga	Kilindi	159,097	13,148	2,191	11
	Handeni	275,052	111,179	18,530	93

	Pangani	45,624	1,845	308	2
	Lushoto	434,760	33,847	5,641	28
Sub total		**914,533**	**160,020**	**26,670**	**133**
TOTAL		**22,034,861**	**3,712,896**	**618,816**	**3,434**