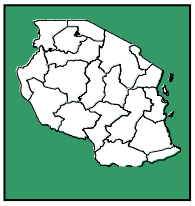
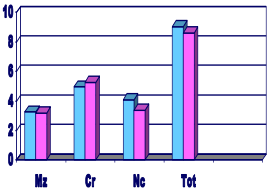


United Republic of Tanzania
Ministry of Agriculture Food Security and Cooperatives

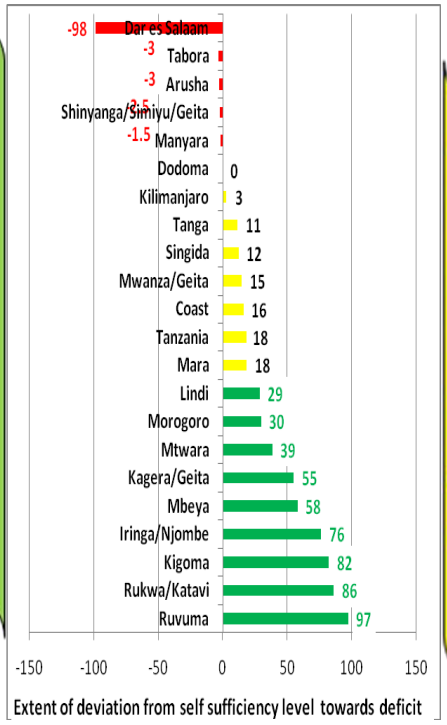


AGSTATS FOR FOOD SECURITY

VOLUME 1: The 2012/13 Preliminary Food Crop Production Forecast for 2013/14 Food Security

EXECUTIVE SUMMARY

The 2012/13 Preliminary Food Crop Production Forecast amounts 14,383,845 tonnes grain equivalent of which 7,613,221 tonnes constitute cereals and 6,770,624 tonnes comprise non-cereals. Requirement for 2013/14 marketing year amounts 12,149,120 tonnes of which cereals make up 7,656,673 tonnes and non-cereals constitute the rest 4,492,447 tonnes.



While Tanzania, during 2013/14, will be 118% food self sufficient, there is evidence to indicate that: 5 regions (RED) will be definitely deficit, 7 regions (YELLOW) will be definitely self-sufficient and 9 regions (GREEN) will definitely produce surplus. Here and there, pockets of vulnerable areas are signaled in 61 districts in 16 regions.

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Dar es Salaam **August, 2013**

Foreword

Starting 1992/93, the then Ministry of Agriculture through its National Early Warning System has developed and operated the food security assessment procedure with some specially designed tools to capture data, initially at a seasonal frequency involving the use of a sample survey questionnaire, (FSQ1) to address 'subjectivity' problems and later on at a weekly and a monthly frequency involving routine reporting forms (WRS1-5 and RRS1) to address 'early warning issues for food security.

Overtime, following challenges and opportunities surrounding the system these forms and questionnaires have been evolving towards the currently improved version where 10 different forms retrieving data from districts and sample villages towards assessing food situation and reporting with a reasonable statistical accuracy around the "AGSTATS for Food Security" Report to forecast eminent food security situation at national and sub-national level while opening doors of opportunities towards deeper insights of short-term to long-term interventions. While sample surveys using FSQ1 is now 20 years old addressing subjectivity problems in district estimates the routine reporting system using WRS1-5 and RRS1 has prevailed for 10 years addressing urgency and ad hoc issues amidst stringent budgetary constraint.

In recent years following rampant data gaps occasionally experienced in some retrievals it was necessary to introduce three additional forms which are retrieving more data to harmonize food security reflection at ground level to address the data gaps. The forms are TSA, Jed 6 and Jed 7 which are respectively intended to get local authority and expert opinion on general aspects of agriculture and food security as well as prices and rainfall data on record. For effectiveness purposes, the forms are used at the beginning and at the middle of consumption year which runs from 1st June to 31st May every year during respective preliminary and final forecast surveys conducted for validation purposes in company of the other structured forms explained earlier above. The outcome of these tools contributes to the output given by AGSTATS for Food Security and enables us to analyse production, requirement and food security status both at national and sub-national levels. Actions taken in sustaining food security acknowledge the need to involve stakeholders in all areas which must be supported by dissemination of this report. Improvement of data reliability accuracy and precision in this output has been 100% subject to resource availability by Government and commitment on the part of professional capacity in place.

Amidst the implementation of this Preliminary Forecast exercise the team recognizes the presence of 4 newly instituted regions viz. Geita, Katavi, Njombe and Simiyu and in due respect initiated the process of disentangling them from parent affiliates namely Mwanza, Rukwa, Iringa and Shinyanga regions respectively. While the process continues from 2011/12 final forecast, the results presented in this report reflects presence of 'compound' regions namely: Rukwa/Katavi, Kagera/Geita, Mwanza/Geita, Shinyanga/Geita/Simiyu and Iringa/Njombe, implying that while the administrative regions are already established the process of disentangling continues towards establishing statistical baselines into the future of the institutionalized regions viz. Katavi, Geita, Njombe and Simiyu. The disentangling process will ultimately add the new regions into the list of 21 to 25 regions once done. With compound regions the number of regions remains 21 at SSR analysis level but despite the challenges around the process attempts have been made to present vulnerable areas in 25 regions.

Back in the history of Early warning system a similar exercise happened while disentangling Dar es Salaam and Manyara regions from the hitherto Coast and Arusha regions respectively. The eventuality of this process will pave way to a lower level disentangling process that will cover new districts which are relatively numerous.

Main Highlights

- ***The 2012/13 Preliminary Food Crop Production Forecast amounts 14,383,845 tonnes grain equivalent of which 7,613,221 tonnes constitute cereals and 6,770,624 tonnes comprise non-cereals. Requirement for 2013/14 marketing year amounts 12,149,120 tonnes of which cereals make up 7,656,673 tonnes and non-cereals constitute the rest, 4,492,447 tonnes.***

- ***Based on these availability and requirement figures, a self sufficient status of 118% is attainable in terms of total food crops whereby cereals make up 99% and non-cereals make up 151%. In terms of gap/surplus analysis, this is respectively, 2,234,726 tonnes surplus of total food, of which a cereal gap amounting 43,452 tonnes coexists with a non-cereal surplus amounting 2,278,177 tonnes.***

- ***While at national level the upper end self sufficiency is impressively evidenced by 9 regions (GREEN) that will definitely produce surplus and 7 regions (YELLOW) which will be definitely self-sufficient, there is evidence to indicate that: 5 regions (RED) will be definitely deficit. Towards operational setting to curb food insecurity in the country vulnerable areas are well signaled in 61 districts in 16 regions out of the current total of 25 regions (151 LGAs).***

- ***The identified vulnerable areas will be closely monitored while in-depth vulnerability assessments will be carried out as a necessary step towards appropriate intervention actions.***

- ***Compared to previous season, production increase of 8% has been observed in total food (15% in non-cereals and 2% in cereals). While leading cases of increase were notable in bananas (56%), Potatoes (33%), millets (28%) and rice (12%) the decline was most evident in two digits in wheat (16%) and pulses (10%). Other crops which show single digit changes are as per Table 3 and Appendix 6. The 8% broad gain is due to, among other causes, relatively better rains in respect of timely onset and a fairly appropriate distribution experienced over the season.***

- ***An analysis of carryover stocks (COS) shows that, on the eve of new marketing year 2013/14 a total of 336,060 tonnes food stock was carried over into 2013/14 marketing year of which 26,801 tonnes was held in NFRA (National Food Reserve Agency) warehouses while 141,229 tonnes was held by private stockists and 168,030 tonnes was estimated as farm retention. Together with the 2,234,726 tonnes of food surplus arrived at as above, the total food availability, over and above the national requirement becomes 2,570,786 tonnes.***

- ***It is however cautioned that the forecast is sensitive to vuli performance and about 466,236 tonnes is likely to deplete off, substantially reducing the amount in forecast. The Vuli contribution which would normally be 2,496,289 tonnes is currently predicted to stand at 2,030,053 tonnes signifying a possible draw-down impact as indicated if trends maintain the usual performance.***

- ***It is highly recommended that the earmarked food surplus areas and food deficit areas are seen as opportunities and challenges that need to be appropriately addressed. Local market potential as per deficit signals should be well exploited prior to external orientation of any surplus food.***

Background

During the month of June[1], 2013 the National Food Security Division (Crop Monitoring and Early Warning) carried out a regular Preliminary food crop production forecast survey to predict food crop harvest status for 2012/13 and the corresponding availability for 2013/14. While the main objective was to establish the preliminary status concluded through capturing the effect of influential crop production factors that ruled over the growth stages from seed germination towards maturity, specific objectives were threefold: **first,** to establish statistically if food crop production has a substantial influence in agricultural performance, **secondly,** if national and local level food security status can be accounted for using the forecasts and, **thirdly,** if food security vulnerability is satisfactorily perceived to warrant vulnerability assessment.

The exercise involved collection of the 2012/13 data and information from all *151 LGAs* of mainland Tanzania in collaboration with Regional Agricultural Advisors (RAAs) and the District Agricultural and Livestock Development Officers (DALDOs) partly through routine crop monitoring and early warning tools and partly through actual fielding of MAFC teams of experts to ground proof crop performance in both unimodal and bimodal areas correspondingly in respect of *msimu, vuli* and *masika* rainfall patterns of the 2012/13 crop season. Comprehensive analyses covering different retrievals were undertaken and results are presented in this report. The results concentrate on national and regional level food security status with main highlights of regions and districts bearing areas at risk.

Methodology

Briefly, the methodology of crop forecasting fundamentally combined 3 consecutive steps, Eye estimation approaches (EEM) used by DALDOs, Projective-forecasting Method (PFM) used by MAFC and the Food crop production forecasting sample survey (FCPFS) with background of joint design, test and approval by National Bureau of Statistics (NBS) and MAFC under the technical guidance of the United National Food and Agriculture Organization (FAO) and later manned by MAFC. Later on, in the process of analyzing Self Sufficiency Ratios (SSRs) and National Food Balances Sheets (NFBS) also following the technical guidance of FAO, the methodology extends to the calculation of food production in *grain equivalent terms*.

While Area and Production estimates largely borrows from DALDO estimates and partially improved by projective forecasting methods, Yield is largely improved by Agrometeorological approaches that borrow from plant-water-satisfaction indices and production is computed and presented in grain equivalent terms. Calculation of Self Sufficiency Ratios (SSRs) follows a simple food adequacy principle whereby production is related with local food crop requirement surrounding consumption and other uses based on requirement parameters employed by CMEW (See Appendix 8) and are presented in percentage terms.

The difference between preliminary forecast and final forecast is best based on the principle of *kobechakuota* whereby different phenological stages are monitored and estimated in percentage terms and cropped area. The area estimated during preliminary forecast focuses at planted area while

[1] The month when preliminary forecast data is due for collection/retrieval.

during final forecast the area switches to harvested area and the *kobechakuota* principle guides the estimates towards mature and harvestable crop.

Initially, the crop is largely in the vegetative and germination stages which is later promoted into mature and grain filling stages. In both these extreme stages, only traces of flowering stages are visible.

Methodological development has often corresponded with challenges surrounding imminent parameters been estimated. Arguably, concerns have been raised around how challenging is it to address statistical reflection of newly formed regions born from hitherto existing regions? For example, the 4 newly established regions viz. Katavi, Geita, Simiyu and Njombe are to be untied from old affiliates through Disentangling. Given a newly born region, disentangling is a process of revisiting situational settings while acknowledging inherited background of parent region towards present (2012/13) baselines. For example, in food security situations, statistics associated with SSR, Gap/Surplus analysis and vulnerable areas must be revisited based on agricultural measures/parameters used to measure food security. Disentangling is essentially a 5 step process covering (i) Identification and location, (ii) Establishing agric. potential and (iii) determining active crop cultivation trends, (iv) examining food supply and (v) mapping vulnerability trends. Thus, while the process continues through these steps, the results presented in this report reflect presence of compound regions namely: Rukwa/Katavi, Kagera/Geita, Mwanza/Geita, Shinyanga/Geita/Simiyu Iringa/Njombe, reflecting that while the administrative regions are already established the process of disentangling continues towards establishing statistical baselines into the future of new regions namely Katavi, Geita, Njombe and Simiyu.

With compound regions the number of regions remains 21 at SSR analysis level but despite the challenges around the process, attempts have been made to present vulnerable areas in 25 regions.

Findings

SSR shows the extent of deficits and surpluses as a locally available and accessible surplus sink and emergency based vulnerability management before considering external market opportunities available in neighbouring countries or elsewhere. From the analysis, it has been found that ***14,383,845*** tonnes of food crops will be available from farm production comprising ***7,613,221*** tonnes of cereals[2] and ***6,770,624*** tonnes of non-cereals[3] (Table 1, Figure 1, Appendix 1 and Appendix 2) and will meet national food requirement amounting ***12,149,120*** tonnes of food by 118 percent implying a ***2,234,726*** tonnes of surplus food (Table 1, Appendix 2). An alternative approach is the national food balance sheet which relates country to country food balance status to guide policies of whether to export or import and the extent thereof.

2 The cereal crops covered under CMEWS include maize, sorghum, millets, rice and wheat.
3 The non-cereals include pulses, cassava, banana and potatoes

Figure 1a: Tanzania Preliminary Food Crop Production Forecast for 2012/13 (With Cropwise Proportional Contribution)

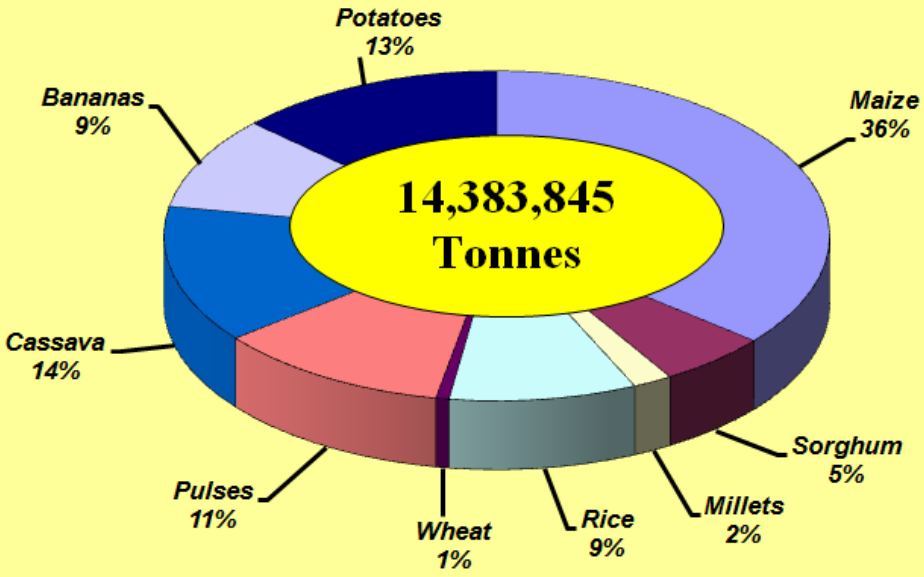


Figure 1b:Tanzania Preliminary Food Crop Requirement Forecast for 2013/14 Consumption Year (With Cropwise Proportional Contribution)

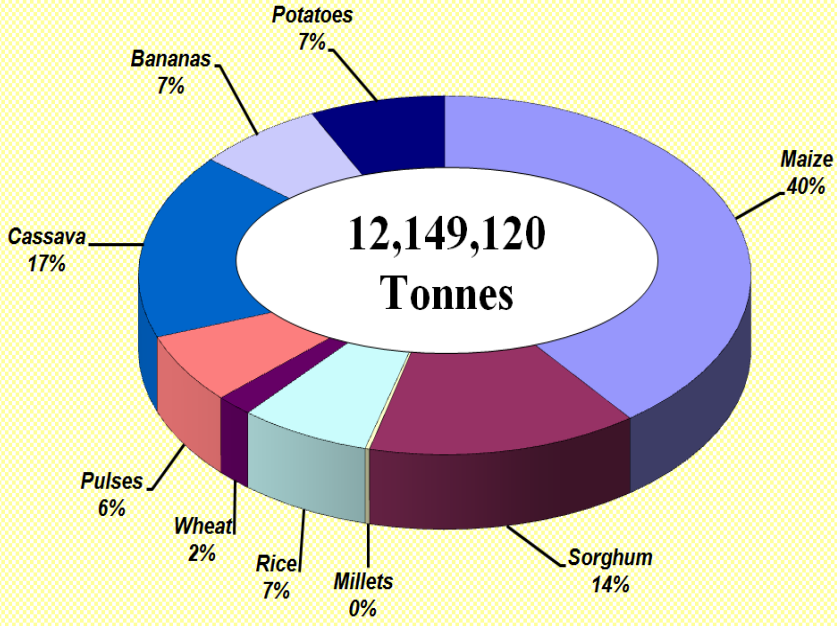


Table 1: The 2012/13 National Level Preliminary Food Crop Production versus Requirement and gap (-)/surplus(+) analysis for 2013/14 (GRAIN EQUIVALENT tonnages)

Cereals	**Maize**	**Sorghum&Millets**	**Rice**	**Wheat**	**Cereals**
Production	5,173,666	1,040,730	1,307,308	91,517	7,613,221
Requirement	4,819,651	1,762,750	840,487	233,784	7,656,673
Gap (-)/ Surplus(+)	**354,015**	**-722,021**	**466,821**	**-142,267**	**-43,452**
Non-cereals	**Pulses**	**Banana**	**Cassava**	**Potatoes**	**Non-cereals**
Production	1,641,493	1,306,628	1,943,222	1,879,280	6,770,624
Requirement	771,818	815,545	2,036,224	868,860	4,492,447
Gap (-)/ Surplus(+)	**869,675**	**491,083**	**-93,001**	**1,010,420**	**2,278,177**
TOTAL	***Cereals***	***Non-cereals***			***TOTAL***
Production	7,613,221	6,770,624			14,383,845
Requirement	7,656,673	4,492,447			12,149,120
Gap (-)/ Surplus(+)	**-43,452**	**2,278,177**			**2,234,726**

Carryover Stocks Analysis and its reflection to total surplus availability

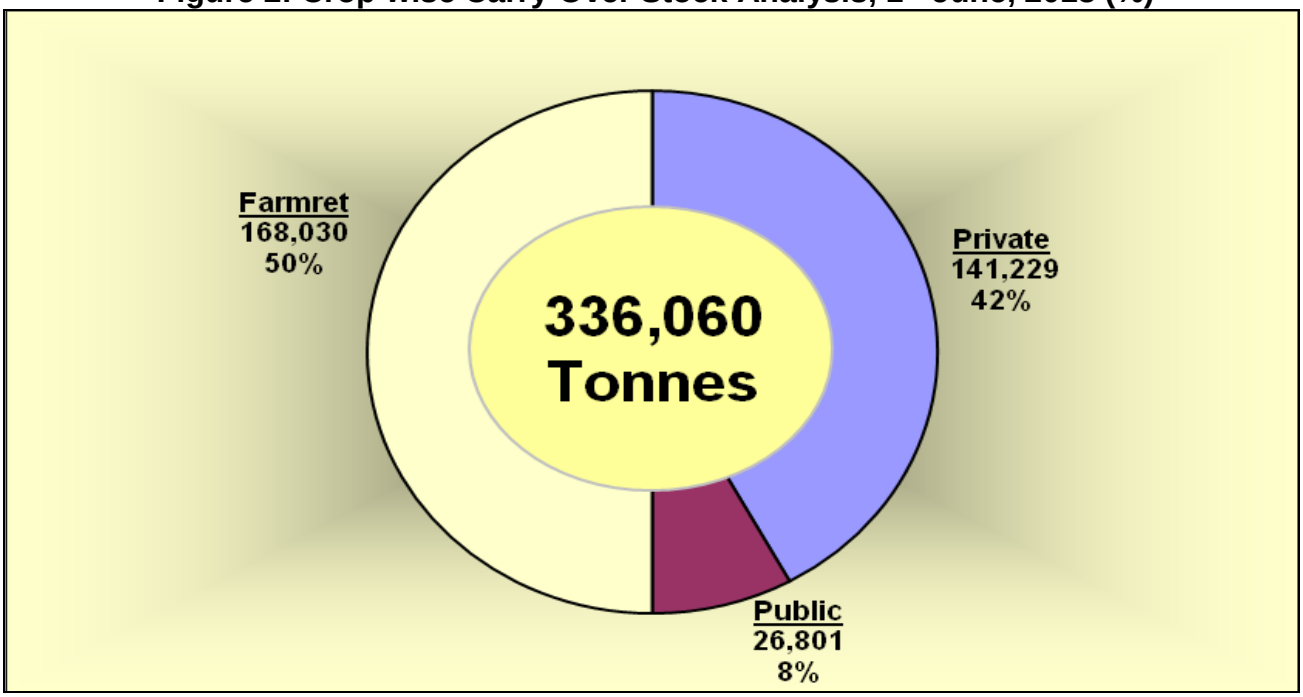
An analysis of Carryover Stocks (COS) shows that, on the eve of new food marketing year (1st June, 2013) a total of 336,060 tonnes of food stock was carried over into 2013/14 marketing year, of which 26,801 tonnes was held in NFRA premises while 141,229 tonnes was held by private stockists and 168,030 tonnes retention was estimated at farm level (Table 2 and Figure 2).

Table 2: Carryover Stocks Analysis, 1 June, 2013 (Tonnes)

May, 2013	private stocks	NFRA stocks	Farm retention	Total Stocks
Maize	2,218	26,799		29,017
Rice	6,479			6,479
Wheat	116,005			116,005
Sorghum	-	2		2
Pulses	16,527			16,527
COS	**141,229**	**26,801**	**168,030**	**336,060**

Added to the 2,234,726 tonnes preliminary forecast of food surplus arrived at as above, the total food available, over and above national requirement is 2,570,786 tonnes. On the crop wise basis, wheat is the largest followed by maize, pulses and rice. Sorghum is the minor and is only been attempted at public premises, the NFRA (Fig. 2).

Figure 2: Crop-wise Carry-Over Stock Analysis, 1st June, 2013 (%)



Time series analysis

Time series analysis shows that, compared to previous season, production increase of 8% has been observed in total (2% in cereals and 15% in non-cereals). Crop-wise swings vary from -16% in wheat to 55% in banana with other crops standing as per Table 3 below and Appendix 6.

Table 3: A comparative analysis of Preliminary Production of Major Food Crops for 2012/13, based on available series (1986/87 - 2012/13) (Thousand tonnes and percentages as indicated)

2012/13 (Preliminary	5,174	768	273	1,307	92	7,613	1,641	1,943	1,307	1,879	6,771	14,384	2012/13 (Preliminary)
%age change from 25y-average	79	5	46	96	11	67	127	15	57	141	68	68	%age change from 25y-average
%age change from 5y-average	24	-4	3	8	-3	17	18	13	33	32	23	19	%age change from 5y-average
%age change from Trend Values	20	-3	3	2	-8	13	5	11	25	15	13	13	%age change from Trend Values
%age change from year t-1	1	-8	28	12	-16	2	-10	7	55	33	15	8	%age change from year t-1

Compared to trend values computed from 1992/93-2011/12 (a reasonable period of reliable food crop statistics adopted by CMEW), total tonnage for 2012/13 (14,383,846 tonnes) stands at up by 13%. Compared to last year, the total stands up by 8% with total cereals standing up by 2% and non-cereals up by 15%.

Comparisons with other measures in trend analysis such as 25 years average and 5 years average for total food crops, cereals and non-cereals as well as for different crops are as per Table 3 and Appendix 6.

SSR variations overtime back to 1994/95 shows that except for 5 years where food shortage was generally felt in the range of 5-12%, the nation was on average self sufficient in the range of 102-117%. This year breaks the record by achieving an SSR level of 118% (Appendix 7).

Vuli Contribution

Based on most recent proxy value of seasonal crop performance, the normal vuli contribution to total food crop production during 2012/13 Preliminary Forecast revises to 33% bimodal area perspective or 17% national aggregate perspective. As of current availability, it contributes 27% bimodal areas perspective or 14% national aggregate perspective. In tonnage terms, this would normally amount **2,496,289** tonnes but currently stands at **2,030,053** tonnes (Table 4).

Table 4: Vuli contribution to 2012/13 total production - Normal and Current

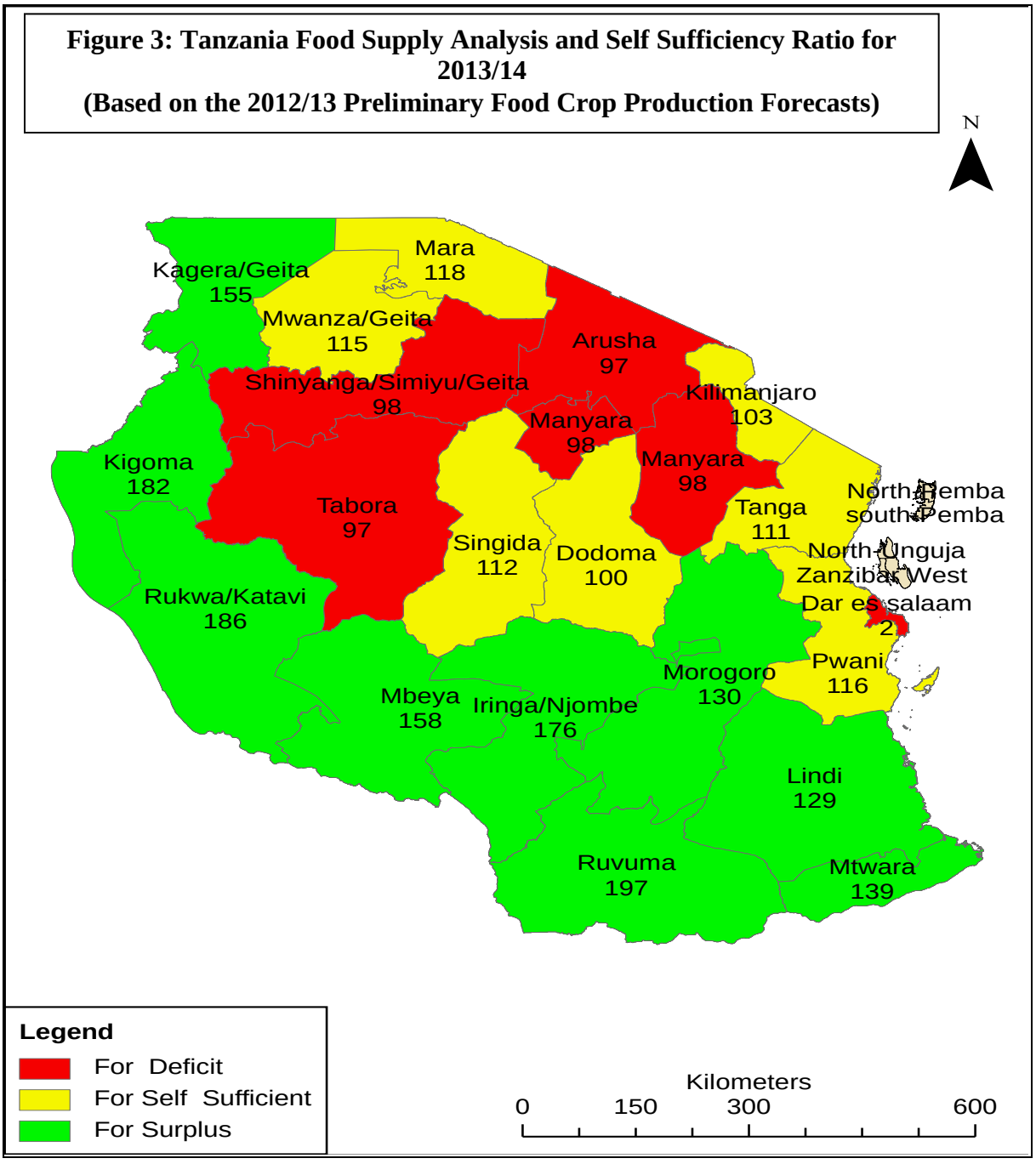
REGION	Production (Tonnes)	Vuli contribution (%)- Normal Scenario	Normal-Vuli contribution (T)	Vuli contribution (%) - 2012/13	2012/13-Vuli contribution (T)
Bimodal-Tz	7,514,001	33 (last year 32)	2,496,289	27 (last year 26)	2,030,053
Total-Tz	14,383,845	17 (last year 17)	2,496,289	14 (last year 14)	2,030,053
Estimated draw down			**466,236** (Last year 434,396)		

Pending the anticipated 2013/14 vuli observation, the draw-down impact of 466,236 Tonnes is sensitively expected from the preliminary forecast. The draw down is 7% harsher than the 434,396 tonnes observed last year (Table 4, Appendix 3).

Sub-national level Food Security

At sub-national level, the 2012/13 production is predicted to meet food requirement for 2013/14 marketing year in 16 regions of which 9 regions will produce surplus with SSR of 129% upwards to 197% and 7 regions will produce at SSR of 100%-118%. The rest (5 regions) will produce at a definitely deficit status with SSR of 2%-98% (See Fig. 3).

Figure 3: Tanzania Food Supply Analysis and Self Sufficiency Ratio for 2013/14
(Based on the 2012/13 Preliminary Food Crop Production Forecasts)



Notwithstanding, here and there, pockets of vulnerable areas are scattered over 61 LGAs in 16 regions of which 4 have produced surplus, 6 have only meet local demand and 6 have produced at deficit levels. Implicitly, 9 regions out of 25 regions (new list) are declared free of agriculture related vulnerability nightmare (See Appendix 4).

Vulnerability

From the above, it is notable that except for Dar es Salaam, which is largely non-agricultural, the deficit regions (4 therefore) bear 20 LGAs with high level vulnerability and a serious warning is accordingly sent out. Further warnings are focused to 12 additional regions bearing pockets of food shortage in 41 additional LGAs, 28 from 8 definitely self sufficient regions and 13 from 4 definitely surplus regions.

The rampant vulnerability amidst self sufficient and surplus food security status signify that, the lower down from national level, the worse and the national self sufficient status masks the true colors that are better reflected at lower levels down towards households. Accordingly the following recommendations are worth implementation.

Recommendations

- From above, a total of 61 LGAs in 16 regions have been identified to bear vulnerable areas and should be subjected to an in-depth vulnerability assessment towards a necessary intervention by Government.

- The food surplus regions (9 in total) and food deficit regions (5 in total) should be seen as opportunities and challenges that need to be appropriately addressed. Local market potential reflected by deficit indicator signals should be well exploited prior to external orientation of predicted surplus and before worrying too much from any perceived shortfall.

- Whilst working towards liberalized market with neighbouring countries, the initiative to establish local import-export interaction points should be enhanced for transparency purposes and in an endeavour unofficially gain from trade and regional integration. Concurrently, the recent initiatives towards improved *food access* and *utilization* information should be encouraged and supported beyond existing initiatives towards *availability* and *stabilization*.

- The foreign market sink, though apparently challenging should be seen as opportunities that are encouragingly unraveling national growth potential beyond existing local market. Nevertheless, local market supplies are more paramount to adequately saturate before any trigger towards an external orientation now.

Appendix 1: Tanzania Preliminary Food Crop Production Forecast by Region - 2012/13 (as of 31/05/2013)

(Area and Production in Hectares and Tonnes Respectively, Yield in Tonnes per Hectare)

Cereals

Region	Maize			Sorghum			Millets			Rice			Wheat			Cereals		Region
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Production	
Arusha	125,354	1.2	150,425	43,889	0.8	35,111	10,989	1.0	10,989	115,144	0.9	103,630	15,553	1.0	15,553	310,929	315,708	Arusha
Coast	52,963	0.3	15,889	17,697	0.5	8,849	-	-	-	57,576	0.9	51,818	-	-	-	128,236	76,556	Coast
Dar es Salaam	3,651	0.6	2,191	-	-	-	-	-	-	3,517	0.8	2,813	-	-	-	7,168	5,004	Dar es Salaam
Dodoma	137,432	0.5	68,716	195,765	1.1	215,341	86,342	0.8	69,074	11,570	0.7	8,099	-	-	-	431,109	361,230	Dodoma
Iringa/Njombe	489,545	1.3	636,409	8,865	1.0	8,865	2,393	0.8	1,914	14,382	0.9	12,944	36,450	1.0	36,450	551,635	696,582	Iringa/Njombe
Kagera/Geita	139,241	2.0	278,482	21,827	1.3	28,375	12,955	1.2	15,546	5,743	1.4	8,040	-	-	-	179,766	330,444	Kagera/Geita
Kigoma	210,552	2.0	421,103	16,657	1.2	19,988	5,679	1.1	6,247	50,853	1.6	81,365	-	-	-	283,741	528,704	Kigoma
Kilimanjaro	121,026	1.0	121,026	2,737	0.9	2,464	1,006	1.0	1,006	15,799	1.0	15,799	8,028	1.1	8,831	148,596	149,125	Kilimanjaro
Lindi	102,876	0.4	41,150	58,812	0.8	47,050				18,511	1.0	18,511	-	-	-	180,199	106,711	Lindi
Manyara	254,332	0.7	178,032	7,108	1.1	7,819	3,160	1.0	3,160	2,204	1.2	2,645	17,800	1.1	19,580	284,604	211,236	Manyara
Mara	72,432	2.3	166,594	38,371	1.3	49,882	15,589	1.0	15,589	1,615	1.5	2,423	-	-	-	128,007	234,488	Mara
Mbeya	393,211	1.8	707,779	38,673	1.1	42,540	15,944	1.1	17,538	61,222	2.0	122,444	4,801	1.2	5,761	513,851	896,063	Mbeya
Morogoro	403,241	0.8	322,593	9,356	1.0	9,356	5,054	0.9	4,548	143,727	1.2	172,473	118	0.5	59	561,496	509,029	Morogoro
Mtwara	62,435	0.4	24,974	71,431	0.7	50,002	22,971	1.0	22,971	78,611	0.9	70,750	-	-	-	235,448	168,697	Mtwara
Mwanza/Geita	206,322	1.4	288,851	17,807	1.2	21,368	6,071	1.1	6,678	92,818	1.6	148,509	-	-	-	323,018	465,406	Mwanza/Geita
Rukwa/Katavi	256,329	2.1	538,291	45,671	1.0	45,671	19,427	1.2	23,312	72,968	1.6	116,749	9,322	0.5	4,661	403,717	728,684	Rukwa/Katavi
Ruvuma	193,212	2.3	444,388	11,297	1.1	12,426	4,269	1.2	5,123	44,687	1.3	58,093	-	-	-	253,465	520,031	Ruvuma
Shinyanga/Geita/Simiyu	413,654	0.8	330,923	48,833	1.1	53,716	16,815	1.2	20,178	73,735	1.5	110,603	-	-	-	553,037	515,420	Shinyanga/Geita/Simiyu
Singida	145,920	0.5	72,960	63,510	1.0	63,510	40,470	0.8	32,376	6,261	0.7	4,383	-	-	-	256,161	173,228	Singida
Tabora	241,402	1.0	241,402	33,321	1.1	36,654	13,512	1.0	13,512	97,393	1.5	146,090	-	-	-	385,629	437,657	Tabora
Tanga	121,488	1.0	121,488	9,558	0.9	8,602	3,071	1.1	3,378	40,940	1.2	49,128	622	1.0	622	175,679	183,218	Tanga
Total	4,727,556	1.1	5,173,666	761,186	1.0	767,590	285,716	1.0	273,139	1,009,278	1.3	1,307,308	92,694	1.0	91,517	6,295,492	7,613,221	Total

Non-cereals

	Pulses			Cassava			Banana			Potatoes			Non-cereals		Food		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production	Area	Production	Area	Production	
Arusha	66,289	0.9	59,660	2,059	2.2	4,530	35,614	2.0	71,228	1,463	2.0	2,925	105,425.0	138,344	416,354	454,052	Arusha
Coast	15,677	0.5	7,839	84,798	2.0	169,596				44,590	1.6	71,344	145,065.0	248,779	273,301	325,334	Coast
Dar es Salaam	772	0.4	309	4,922	1.8	8,860				3,255	1.5	4,883	8,949	14,052	16,117	19,056	Dar es Salaam
Dodoma	177,472	0.6	106,483	46,594	1.2	55,913				35,737	1.3	46,458	259,803.2	208,854	690,912	570,084	Dodoma
Iringa/Njombe	39,209	1.0	39,209	1,386	2.1	2,910	730	1.7	1,241	81,394	2.1	170,927	122,719.0	214,288	674,354	910,870	Iringa/Njombe
Kagera/Geita	68,535	1.1	75,388	129,817	2.4	311,561	164,306	2.5	410,766	27,599	2.3	63,478	390,257.5	861,194	570,024	1,191,637	Kagera/Geita
Kigoma	121,727	1.0	121,727	25,015	2.3	57,536	196,620	1.7	334,253	41,340	2.1	86,815	384,702.2	600,330	668,443	1,129,034	Kigoma
Kilimanjaro	46,343	1.0	46,343	4,349	2.1	9,133	79,767	2.1	167,511	35,054	2.0	70,108	165,512.6	293,094	314,108	442,219	Kilimanjaro
Lindi	52,882	0.7	37,017	58,509	2.5	146,272							111,391	183,290	291,590	290,001	Lindi
Manyara	140,662	1.2	168,794	307	2.1	644	7,175	2.0	14,350	3,586	2.1	7,531	151,730	191,319	436,333	402,555	Manyara
Mara	30,146	1.1	33,160	71,591	2.3	164,659	27,312	2.1	57,355	33,409	2.1	70,159	162,458	325,334	290,465	559,822	Mara
Mbeya	47,059	1.2	56,470	11,285	2.3	25,957	51,191	2.3	117,740	87,053	2.2	191,516	196,588	391,683	710,439	1,287,746	Mbeya
Morogoro	54,496	1.0	54,496	53,671	2.0	107,342	43,675	1.5	65,512	38,438	1.9	73,033	190,280	300,383	751,776	809,412	Morogoro
Mtwara	97,190	0.8	77,752	82,074	2.6	213,393				1,071	1.7	1,822	180,336.1	292,967	415,784	461,664	Mtwara
Mwanza/Geita	115,643	1.2	138,772	119,772	2.1	251,520	9,531	2.0	19,061	135,138	2.1	283,790	380,083.0	693,142	703,100	1,158,548	Mwanza/Geita
Rukwa/Katavi	67,802	1.0	67,802	20,337	2.6	52,875	15,919	2.1	33,429	28,180	2.2	61,995	132,237	216,102	535,954	944,786	Rukwa/Katavi
Ruvuma	89,464	1.2	107,357	29,813	2.5	74,531	1,462	1.6	2,340	65,372	2.2	143,817	186,110	328,045	439,575	848,076	Ruvuma
Shinyanga/Geita/Simiyu	101,112	1.1	111,223	61,324	1.1	67,456	96	1.2	115	159,524	1.5	239,286	322,056.0	418,081	875,093	933,501	Shinyanga/Geita/Simiyu
Singida	93,870	1.0	93,870	65,930	1.5	98,895				40,218	1.3	52,284	200,018.1	245,048	456,179	418,277	Singida
Tabora	45,573	1.0	45,573	45,313	0.8	36,250				67,321	1.4	94,249	158,207.0	176,073	543,836	613,730	Tabora
Tanga	213,610	0.9	192,249	34,745	2.4	83,388	7,329	1.6	11,726	71,430	2.0	142,860	327,114.0	430,223	502,793	613,441	Tanga
Total	1,685,532	1.0	1,641,493	953,610	2.0	1,943,222	640,727	2.0	1,306,628	1,001,173	1.9	1,879,280	4,281,042	6,770,624	10,576,533	14,383,845	Total

Appendix 2: Total Food Supply Forecast at Regional level for the 2013/14 Marketing Year
(Based On 2012/13 Preliminary Food Crop Production Forecasts)

Appendix 2: Tanzania Food Supply Analysis and Self Sufficiency Ratio for 2013/14
(Based on the 2012/13 Preliminary Food Crop Production Forecasts)

REGION	Total Cereals				Total Non-cereals				Total Food					REGION
	PROD.	REQ.	Gap/ Surplus	SSR (Cer)	PROD.	REQ.	Gap/ Surplus	SSR (Nce)	PROD.	REQ.	Gap/ Surplus	SSR (Tot)	Deficit indicator (*)	
Ruvuma	520,031	284,463	235,568	183	328,045	145,592	182,453	225	848,076	430,055	418,020	197		Ruvuma
Rukwa/Katavi	728,684	343,485	385,200	212	216,102	163,885	52,217	132	944,786	507,370	437,416	186		Rukwa/Katavi
Kigoma	528,704	397,302	131,401	133	600,330	221,842	378,488	271	1,129,034	619,144	509,890	182		Kigoma
Iringa/Njombe	696,582	352,584	343,998	198	214,288	164,071	50,217	131	910,870	516,655	394,215	176		Iringa/Njombe
Mbeya	896,063	540,559	355,504	166	391,683	274,019	117,664	143	1,287,746	814,578	473,168	158		Mbeya
Kagera/Geita	330,444	479,591	-149,147	69	861,194	288,505	572,688	299	1,191,637	768,097	423,541	155		Kagera/Geita
Mtwara	168,697	203,180	-34,483	83	292,967	130,025	162,942	225	461,664	333,205	128,459	139		Mtwara
Morogoro	509,029	399,654	109,376	127	300,383	224,043	76,340	134	809,412	623,697	185,715	130		Morogoro
Lindi	106,711	139,150	-32,439	77	183,290	86,380	96,910	212	290,001	225,530	64,471	129		Lindi
Mara	234,488	297,130	-62,643	79	325,334	175,483	149,851	185	559,822	472,614	87,208	118		Mara
Tanzania	**7,613,221**	**7,656,673**	**-43,452**	**99**	**6,770,624**	**4,492,447**	**2,278,177**	**151**	**14,383,845**	**12,149,120**	**2,234,726**	**118**		**Tanzania**
Coast	76,556	171,589	-95,033	45	248,779	108,606	140,173	229	325,334	280,195	45,139	116		Coast
Mwanza/Geita	465,406	625,506	-160,101	74	693,142	384,200	308,942	180	1,158,548	1,009,706	148,842	115		Mwanza/Geita
Singida	173,228	228,087	-54,858	76	245,048	144,169	100,879	170	418,277	372,256	46,021	112		Singida
Tanga	183,218	330,828	-147,610	55	430,223	219,939	210,284	196	613,441	550,768	62,674	111		Tanga
Kilimanjaro	149,125	265,373	-116,248	56	293,094	164,308	128,786	178	442,219	429,681	12,538	103		Kilimanjaro
Dodoma	361,230	353,355	7,875	102	208,854	214,721	-5,867	97	570,084	568,076	2,008	100		Dodoma
Manyara	211,236	249,240	-38,004	85	191,319	159,565	31,753	120	402,555	408,805	-6,250	98	*	Manyara
Shinyanga/Simiyu/Geit	515,420	598,991	-83,570	86	418,081	358,050	60,030	117	933,501	957,041	-23,540	98	*	Shinyanga/Geita/Simiyu
Arusha	315,708	293,648	22,060	108	138,344	173,915	-35,571	80	454,052	467,563	-13,511	97	*	Arusha
Tabora	437,657	402,843	34,815	109	176,073	232,625	-56,553	76	613,730	635,468	-21,738	97	*	Tabora
Dar es Salaam	5,004	700,115	-695,111	1	14,052	458,502	-444,450	3	19,056	1,158,617	-1,139,561	2	*	Dar es Salaam

Note: * General food deficit indicator

NB:

1. Iringa/Njombe combines all districts of Iringa and Njombe regions.

2. Kagera/Geita combines all Kagera districts and Chato district of the Geita Region

3. Mwanza/Geita combines all districts of Mwanza region as well as Geita and Nyang'hwale districts of Geita region.

4. Rukwa/Katavi combines all districts of Rukwa and Katavi regions.

5. Shinyanga/Simiyu/Geita combines all districts of Shinyanga and Simiyu regions and Bukombe and Mbogwe districts of Geita region.

=> All these regions are in the process of been disentangled from the old afiliates.

Appendix 3: Vuli contribution to total production - Normal and Current Based on Preliminary Forecast 2012/13

REGION	Production (Tonnes)	Vuli contribution (%)- Normal Scenario	Normal-Vuli contribution (T)	Vuli contribution (%) - 2012/13	2012/13-Vuli contribution (T)
Arusha	454,052	20	90,810	16	73,850
Coast	325,334	10	32,533	8	26,457
Dar es Salaam	19,056	10	1,906	8	1,550
Dodoma	570,084		-	-	-
Iringa/Njombe	910,870		-	-	-
Kagera/Geita	1,191,637	80	953,310	65	775,259
Kigoma	1,129,034		-	-	-
Kilimanjaro	442,219	35	154,777	28	125,869
Lindi	290,001		-	-	-
Manyara	402,555		-	-	-
Mara	559,822	45	251,920	37	204,868
Mbeya	1,287,746	5	64,387	4	52,362
Morogoro	809,412	15	121,412	12	98,736
Mtwara	461,664		-	-	-
Mwanza/Geita	1,158,548	55	637,201	45	518,190
Rukwa/Katavi	944,786		-	-	-
Ruvuma	848,076		-	-	-
Shinyanga/Geita/S	933,501	7	65,345	6	53,140
Singida	418,277		-	-	-
Tabora	613,730		-	-	-
Tanga	613,441	20	122,688	16	99,774
Bimodal-Tz	**7,514,001**	33	**2,496,289**	27	**2,030,053**
Total-Tz	**14,383,845**	17	**2,496,289**	14	**2,030,053**

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Appendix 4: Vulnerable Areas for 2013/14 Based on 2012/13 Preliminary Forecast

S/N.	Region *(Ranked by extent of districts containing vulnerable areas)*	SSR Status	Districts (Number in list)	Districts *(Listed in order of dicreasing vulnerability)*
1	Tabora	97	6	Igunga, Sikonge, Tabora (M), Urambo, Uyui, Nzega
2	Dodoma	100	6	Bahi, Chamwino, Dodoma (M), Kondoa, Kongwa, Mpwapwa
3	Lindi	129	6	Kilwa, Lindi M, Lindi V, Liwale, Nachingwea, Ruangwa.
4	Arusha	97	5	Arusha DC, Longido, Meru, Monduli, Ngorongoro
5	Tanga	111	5	Kilindi, Lushoto, Mkinga, Korogwe(M), Korogwe (V)
6	Singida	112	5	Iramba, Manyoni, Mkalama, Singida (M), Singida (V)
7	Shinyanga	98	4	Kahama, Kishapu, Shinyanga M, Shinyanga (V)
8	Morogoro	130	4	Mvomero, Morogoro (V), Kilombero, Kilosa.
9	Mara	118	3	Bunda, Musoma V, Rorya
10	Kilimanjaro	103	3	Hai, Mwanga, Same
11	Manyara	98	3	Babati M, Babati DC, Mbulu
12	Mwanza	115	3	Magu, Misungwi, Kwimba
13	Pwani	116	3	Kibaha (M), Kibaha DC, Mkuranga
14	Mtwara	139	2	Masasi, Mtwara V
15	Simiyu	98	2	Maswa, Meatu
16	Kigoma	182	1	Kigoma V
17	Iringa	176	-	-
18	Kagera	155	-	-
19	Mbeya	158	-	-
20	Rukwa	186	-	-
21	Ruvuma	197	-	-
22	Katavi	186	-	-
23	Geita	155	-	-
24	Njombe	176	-	-
25	Dar es Salaam	2	-	-
	Total	118	61	Total
	TANZANIA: Food Security Status: Self Sufficient (SSR=118%), Vulnerability: 16 regions, 61 districts	**Regions** containing Vlnerable areas 16: 5 Deficit, 7 Self Sufficient, 4 Surplus	**Districts** containing Vulnerable areas 61: 20 in deficit regions, 28 in self sufficient regions, 13 in Surplus regions	**In general,** While at national level Tanzania during 2013/14 will be 118% food self sufficient, 16 regions contain vulnerable areas in 61 districts: 20 in 5 deficit regions, 28 in Self Sufficient regions and 13 in surplus regions….=>=> **Hence an early warning against likely adversity!!**

Appendix 5: Recall food situation at regional and district levels back to 2008/09

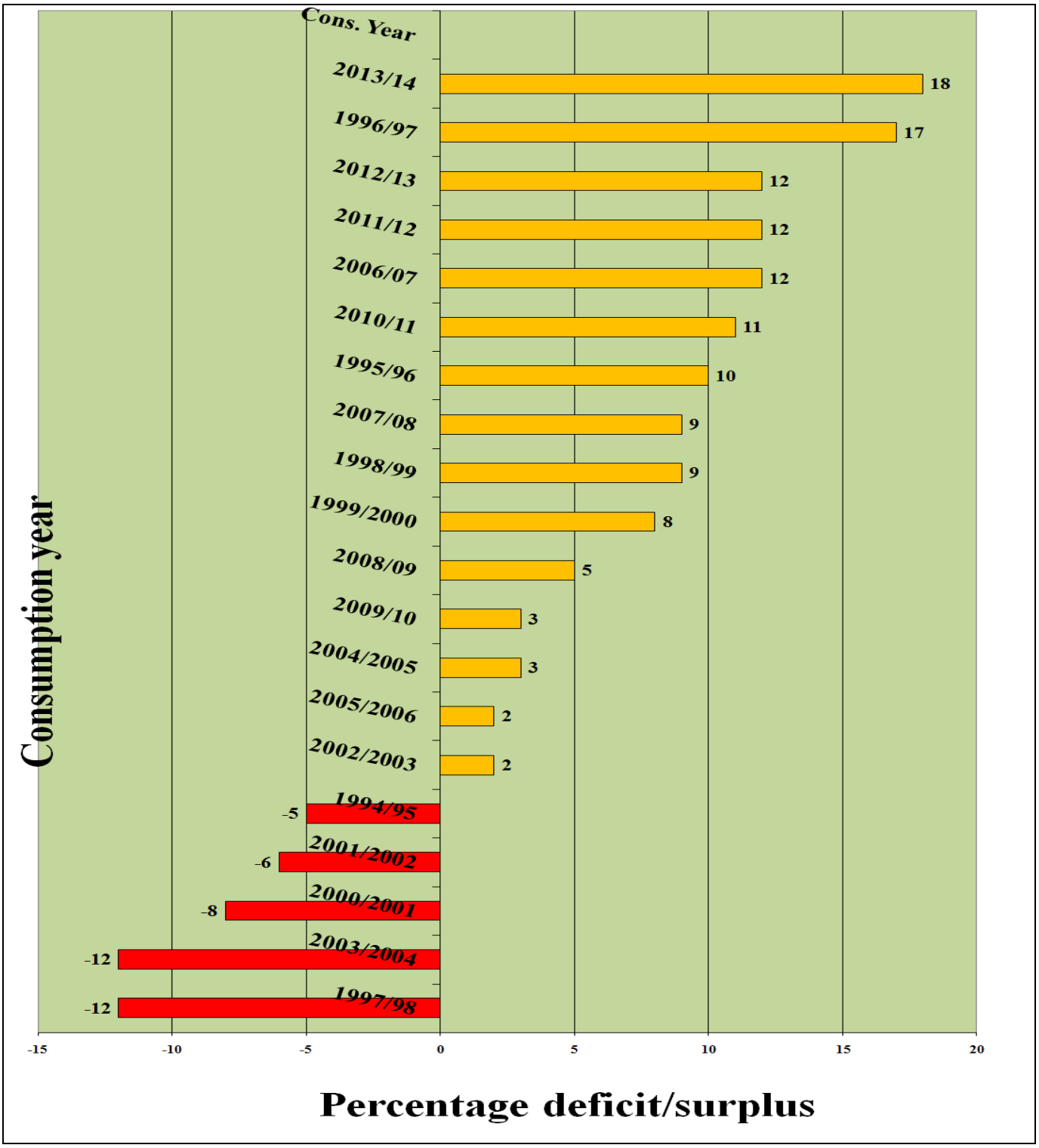
REGION	2008/09		2009/10		2010/11		2011/12		2012/13		2013/14		REGION
	Deficit regions (*)	Districts with Vulnerable areas	*Deficit regions (*)*	Districts with Vulnerable areas	*Deficit regions (*)*	Districts with Vulnerable areas	*Deficit regions (*)*	Districts with Vulnerable areas	*Deficit regions (*)*	*Districts with Vulnerable areas*	*SSR (%)*	*Districts with Vulnerable areas*	
ARUSHA & MANYARA	*	3- Arusha, Longido, Monduli	*	5-Longido, Monduli, Arusha, Ngorongoro, Meru		1: Longido	*	7: Arusha DC, Arusha MC, Karatu, Longido, Meru, Monduli, Ngorongoro	*	7: Karatu, Monduli, Meru, Ngorongoro, Longido, Arusha MC, Arusha DC	97	5: Arusha DC, Longido, Meru, Monduli, Ngorongoro	ARUSHA
COAST	*	1- Mafia	*	4-Kisarawe, Bagamoyo, Kibaha (V), Mafia				5: Kibaha TC, Kibaha DC, Bagamoyo, Mafia, Rufiji		3: Kibaha (M), Mafia, Rufiji	116	3: Kibaha (M), Kibaha DC, Mkuranga	COAST
COAST &/DSM	*		*		*		*		*		2		DAR ES SALAAM
DODOMA			*	5-Bahi, Chamwino, Kondoa, Kongwa, Mpapwa	*	5: Mpwapwa, Kongwa, Chamwino, Bahi, Dodoma M				6: Bahi, Chamwino, Dodoma M, Kondoa, Kongwa, Mpwapwa	100	6: Bahi, Chamwino, Dodoma (M), Kondoa, Kongwa, Mpwapwa	DODOMA
IRINGA		1-Njombe		2-Iringa (V), Kilolo		1: Iringa (V)				1: Kilolo	176		IRINGA/Njombe
KAGERA								2: Muleba, Bukoba V		1: Chato	155		KAGERA
KIGOMA											182	1: Kigoma V	KIGOMA
KILIMANJARO	*	2- Same, Rombo	*	6-Same, Rombo, Mwanga, Siha, Hai, Moshi		1: Mwanga		5: Hai, Moshi V, Mwanga, Same, Siha	*	6: Hai, Mwanga, Moshi DC, Moshi TC, Rombo, Same	182	3: Hai, Mwanga, Same	KILIMANJARO
LINDI				4-Lindi(V), Ruangwa, Nachingwea, Kilwa		2: Lindi (V), Liwale				2: Kilwa, Lindi	129	6: Kilwa, Lindi M, Lindi V, Liwale, Nachingwea, Ruangwa.	LINDI
MANYARA		5- Babati, Hanang, Kiteto, Mbulu, Simanjiro	*	5-Simanjiro, Kiteto, Babati V, Mbulu, Hanang				3: Babati DC, Mbulu, Simanjiro,	*	5: Babati DC, Hanang, Kiteto, Mbulu, Simanjiro,	98	3: Babati M, Babati DC, Mbulu	MANYARA
MARA	*	1- Bunda	*	3-Rorya, Bunda, Musoma (V)			*	3: Musoma V, Musoma M, Bunda		2: Musoma V, Rorya,	118	3: Bunda, Musoma V, Rorya	MARA
MBEYA				1-Mbarali						1: Mbozi	158		MBEYA
MOROGORO		*2- Morogoro R, Mvomero*		*3-Ulanga, Morogoro V, Kilosa*		*2: Mvomero, Morogoro (V)*				2: Morogoro V, Mvomero	130	4: Mvomero, Morogoro (V), Kilombero, Kilosa.	MOROGORO
MTWARA				2-Nanyumbu, Masasi		2: Mtwara (V), Masasi		1: Masasi		1: Masasi	139	2: Masasi, Mtwara V	MTWARA
MWANZA	*		*	*4-Magu, Misungwi, Kwimba, Ukerewe*		*1: Kwimba*	*	5: Magu, Ilemela, Nyamagana, Geita, Misungwi		3: Magu, Kwimba, Misungwi	115	3: Magu, Misungwi, Kwimba	MWANZA/Geita
RUKWA											186		RUKWA/Katavi
RUVUMA				1-Tunduru							197		RUVUMA
SHINYANGA	*	2- Bariadi, Meatu	*	6-Maswa, Shinyanga(M), Kishapu, Kahama, Shinyanga(V), Meatu		4: Shinyanga (V) Kishapu, Meatu, Shiyanga (M)	*	5: Shinyanga M, Shinyanga V, Kishapu, Kahama, Meatu	*	7: Bariadi, Kishapu, Meatu, Maswa, Kahama, Shinyanga M, Shinyanga (V)	98	4:Kahama, Kishapu, Shinyanga M, Shinyanga (V); SIMIYU 2: Maswa, Meatu	SHINYANGA/Geita/Simiyu
SINGIDA	*		*	2-Iramba, Manyoni						4: Manyoni, Iramba, Singida V, Singida M	112	5: Iramba, Manyoni, Mkalama, Singida (M), Singida (V)	SINGIDA
TABORA	*			2-Uyui, Igunga		1: Nzega		4: Nzega, Igunga, Sikonge, Tabora M	*	6: Nzega, Igunga, Tabora M, Uyui, Sikonge, Urambo	97	6: Igunga, Sikonge, Tabora (M), Urambo, Uyui, Nzega	TABORA
TANGA		4-Kilindi, Korogwe, Lushoto, Mkinga		6-Kilindi, Handeni, Pangani, Korogwe V, Lushoto, Mkinga		1: Tanga (M)		5: Lushoto, Mkinga, Pangani, Kilindi, Tanga TC		6: Tanga M, Mkinga, Pangani, Korogwe M, Korogwe V, Handeni	111	5: Kilindi, Lushoto, Mkinga, Korogwe(M), Korogwe (V)	TANGA
TOTAL	9 (Prel2008: 14)	21 (Prel2008: 29)	10	57 districts (Prel2009: 61)	2	22 districts (Prel2010: 36)	5	45 (Prel2011: 56)		63 districts:17 regions	118	61 districts:16 regions	TOTAL

Appendix 6: Time Series Analysis of Production of Major Food Crops in Tanzania, based on available series (1986/87 - 2012/13)

(Thousand Tonnes and Percentages as indicated)

Year	Maize	Sorghum	Millets	Rice	Wheat	Cereals	Pulses	Cassava	Bananas	Potatoes	Non-cereals	Total	Year
2012/13 (Preliminary)	5,174	768	273	1,307	92	7,613	1,641	1,943	1,307	1,879	6,771	14,384	2012/13 (Preliminary)
25yaverage	2,884	730	187	668	83	4,551	724	1,690	831	781	4,025	8,577	25yaverage
5yaverage	4,161	801	264	1,215	94	6,535	1,391	1,721	984	1,426	5,522	12,057	5yaverage
Trend Values	4,324	788	264	1,277	100	6,752	1,567	1,747	1,042	1,638	5,994	12,747	Trend Values
%age change from 25y-average	79	5	46	96	11	67	127	15	57	141	68	68	%age change from 25y-average
%age change from 5y-average	24	-4	3	8	-3	17	18	13	33	32	23	19	%age change from 5y-average
%age change from Trend Values	20	-3	3	2	-8	13	5	11	25	15	13	13	%age change from Trend Values
%age change from year t-1	1	-8	28	12	-16	2	-10	7	55	33	15	8	%age change from year t-1

Appendix 7: Self Sufficiency Variations Overtime in Tanzania, 1994-2014 (Percentage deviation from 100%)



Appendix 8: Methodological Considerations-I.

Production expressed in Tonnes (Grain Equivalent) = Area (in Hectare) x Yield (in Tonnes/Hectare). NB: **Grain equivalent calculations** assume a common denominator among all cereals while roots, tubers and plantains compare at 1:3 ratio.

Requirement R = Average Per capita Consumption requirement of 650g/day + Parameter % estimates of production that is committed to other uses. Consumption requirement is estimated as average kg. per person per crop as follows: Maize 86kg, Millets 18kg, Rice16 kg, Sorghum 18 kg, Wheat 5 kg, Bananas18 kg, Cassava 44 kg, Potatoes 19 kg, Pulses 13 kg totaling up to 237 kg. Respective "other uses" are estimated as percentage extraction from produced crop that is used for mainly seed, feed, losses and trade as shown on the Table below.

Food Requirement Table
Parameters used for estimating food requirement per crop

Crop		Consumption Requirement per capita	Other uses (% removed from Production)				
			Seed[2]	Feed[2]	Losses[2]	Trade[2]	Total
		Kilograms	Percent	Percent	Percent	Percent	% removed
Cereals	Maize[3]	86	1.3	2	8.7	4.4	16.4
	Millet[5]	18	2.3	0.6	7.7	0	10.6
	Rice[4]	16	2.5	0	2.5	1.8	6.8
	Sorghum	18	1.5	0.6	8.5	0	10.6
	Wheat	5	2.5	0	2.5	0	5
Non-Cereals	Bananas[7,8]	18	0	0	0	0	0
	Cassava[7]	44	0	0	0	0	0
	Potatoes[7,9]	19	0	0	0	0	0
	Pulses[6]	13	5	0	2.5	2.5	10
Total		237					

P/R=SSR (expressed in %). SSR Categories are: Deficit (<100%), Self Sufficient <=100<120%, Surplus >=120%)

Vulnerable areas (VA): derived directly from RRS1 questionnaire as filled-in by DALDO statistical experts is based on households expected to produce <=30% of norm.

Requirement per day per person = 0.650 kilograms Cereal Equivalent
1 = Per capita annual consumption Cereal Equivalent
2 = Percent used from total production
3 = Whole grain
4 = Paddy converts to rice at 65 percent ratio.
5 = Includes bulrush and finger millet
6 = Mainly beans but other pulses (groundnuts, peas, grams etc) included
7 = Based on dry weight from which waste is already subtracted
8 = Includes sweet and cooking
bananas
9 = Includes round and sweet potatoes.

Source: Ministry of Agriculture and Cooperative, Dar es Salaam, Food Security Bulletin, July 14, 1993

Appendix 9: Methodological Considerations-II.

As highlighted in the Foreword to this report, the early warning system has been increasingly worked around subjectivity towards Objectivity, absence or late availability of data towards timeliness and inability to access data sources towards a staunch ability to address urgency and ad hoc data needs. While sample surveys using FSQ1 is now 20 years old addressing subjectivity problems the routine reporting system using WRS1-5 and RRS1 has prevailed for 10 years addressing ad hoc data needs for generating food security reports for decision making amidst stringent budgetary constraint common in Tanzania.

In a nutshell, the functions of the Field forms vary but resemble in that they are used by field MAFC staff to record, validate and prepare data for retrieval by Headquarter supervisors as follows:

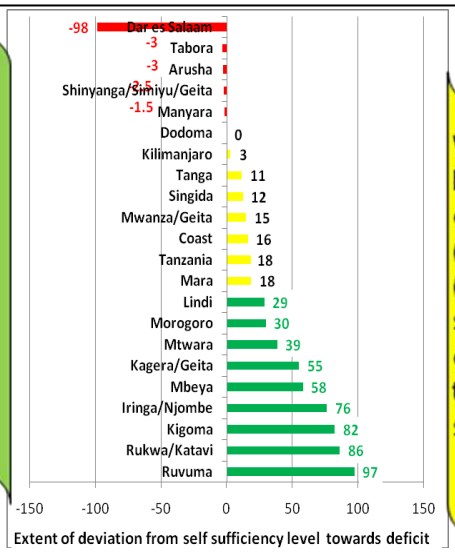
1. *targets and implementation of crop cultivation at field level (**WRS1:** Weekly Retrieval System 1);*
2. *phenological phases applying Kobechakuota principle at field crops (**WRS2:** Weekly Retrieval System 2);*
3. *crop pests both at pre-harvest and post harvest phases (**WRS3:** Weekly Retrieval System 3);*
4. *food availability at local market (**WRS4:** Weekly Retrieval System 4);*
5. *rainfall precipitation as locally perceived (**WRS5:** Weekly Retrieval System 5);*
6. *various food security variables and principally area change per crop from previous season (**FSQ1:** Food Security Questionnaire 1 applied in NBS based sample villages);*
7. *various agricultural and food security variables on monthly basis (**RRS1:** Routine Reporting System 1);*
8. *conventionally reported information by local authority as guided by CMEW short list (**TSA:** TSA=Tripple S Analysis =SSS Analysis = Snap-Shot Stories);*
9. *average monthly prices at local markets (**Jed6:** Price table No. 6);*
10. *monthly rainfall mm and days as received per local station (**Jed7:** Rainfall table No. 7);*

The National Early Warning System has been instrumental in producing regular information to inform on crop target implementation, field crop progress along phenological phases, pest threat afield and awarehouse, food availability and market forces, rainfall prevalence amidst drought/water stressed agriculture in Tanzania, detection of vulnerable areas as locally perceived by experts and improving on objectivity through a village-level sample survey.

With this system we have been able to produce on annual basis, preliminary forecast and final forecast reports and trigger a vulnerability assessment that zooms into detected hotspots at district level towards household level. The system has also been instrumental in preparing monthly food security updates and other ad hoc reports in response to management needs. The other unique contribution has been that of populating and updating national food balance sheets and sharing with the process of integrating regional food security situation in this respect with EAC and SADC along regional food balance sheet approach.

Appendix 10: Total Food Supply Forecast at Regional level for the 2013/14 Marketing Year
(Based on 2012/13 Preliminary Food Crop Production Forecasts)

The 2012/13 Preliminary Food Crop Production Forecast amounts 14,383,845 tonnes grain equivalent of which 7,613,221 tonnes constitute cereals and 6,770,624 tonnes comprise non-cereals. Requirement for 2013/14 marketing year amounts 12,149,120 tonnes of which cereals make up 7,656,673 tonnes and non-cereals constitute the rest 4,492,447 tonnes.

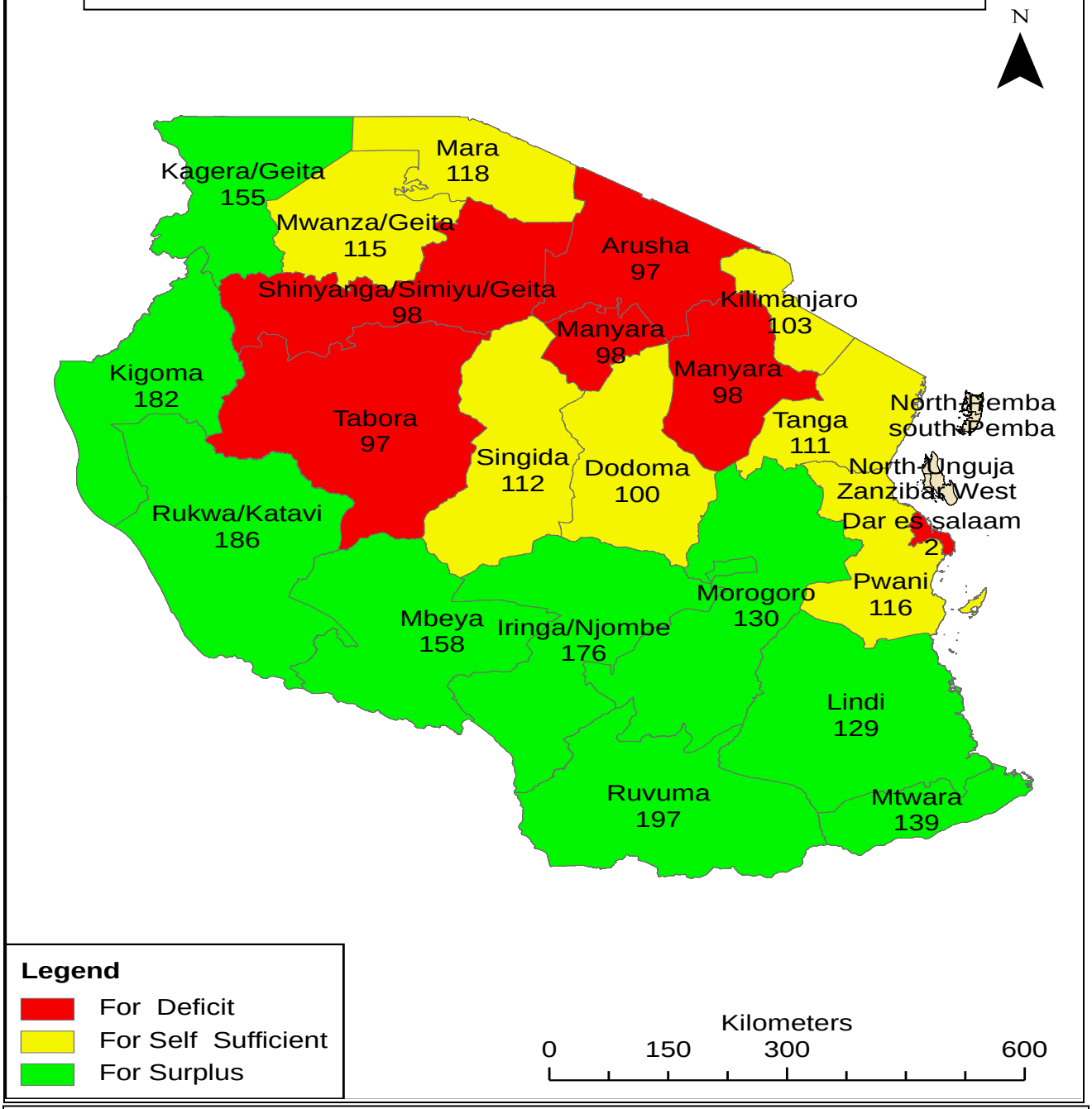


While Tanzania, during 2013/14, will be 118% food self sufficient, there is evidence to indicate that: 5 regions (RED) will be definitely deficit, 7 regions (YELLOW) will be definitely self-sufficient and 9 regions (GREEN) will definitely produce surplus. Here and there, pockets of vulnerable areas are signaled in 61 districts in 16 regions.

S/N.	**Region** *(Ranked by extent of districts containing vulnerable areas)*	SSR Status	Districts (Number in list)	**Districts** *(Listed in order of dicreasing vulnerability)*
1	Tabora	97	6	Igunga, Sikonge, Tabora (M), Urambo, Uyui, Nzega
2	Dodoma	100	6	Bahi, Chamwino, Dodoma (M), Kondoa, Kongwa, Mpwapwa
3	Lindi	129	6	Kilwa, Lindi M, Lindi V, Liwale, Nachingwea, Ruangwa.
4	Arusha	97	5	Arusha DC, Longido, Meru, Monduli, Ngorongoro
5	Tanga	111	5	Kilindi, Lushoto, Mkinga, Korogwe(M), Korogwe (V)
6	Singida	112	5	Iramba, Manyoni, Mkalama, Singida (M), Singida (V)
7	Shinyanga	98	4	Kahama, Kishapu, Shinyanga M, Shinyanga (V)
8	Morogoro	130	4	Mvomero, Morogoro (V), Kilombero, Kilosa.
9	Mara	118	3	Bunda, Musoma V, Rorya
10	Kilimanjaro	103	3	Hai, Mwanga, Same
11	Manyara	98	3	Babati M, Babati DC, Mbulu
12	Mwanza	115	3	Magu, Misungwi, Kwimba
13	Pwani	116	3	Kibaha (M), Kibaha DC, Mkuranga
14	Mtwara	139	2	Masasi, Mtwara V
15	Simiyu	98	2	Maswa, Meatu
16	Kigoma	182	1	Kigoma V
17	Iringa	176	-	-
18	Kagera	155	-	-
19	Mbeya	158	-	-
20	Rukwa	186	-	-
21	Ruvuma	197	-	-
22	Katavi	186	-	-
23	Geita	155	-	-
24	Njombe	176	-	-
25	Dar es Salaam	2	-	-
	Total	118	61	Total
	TANZANIA: Food Security Status: Self Sufficient (SSR=118%), Vulnerability: 16 regions, 61 districts	**Regions** containing Vlnerable areas 16: 5 Deficit, 7 Self Sufficient, 4 Surplus	**Districts** containing Vulnerable areas 61: 20 in deficit regions, 28 in self sufficient regions, 13 in Surplus regions	**In general,** While at national level Tanzania during 2013/14 will be 118% food self sufficient, 16 regions contain vulnerable areas in 61 districts: 20 in 5 deficit regions, 28 in Self Sufficient regions and 13 in surplus regions....=>=> **Hence an early warning against likely adversity!!**

Tanzania Food Supply Analysis for 2013/14

(Based on the 2012/13 Preliminary Food Crop Production Forecasts)



In general, while Tanzania is expected to be food self sufficient at 118% 5 regions are notably definitely deficit and 16 regions are foreseen to continue experiencing vulnerability in 61 LGAs. Vigilance is strongly recommended against likely adversity.