

Timor Leste

Food Security Bulletin

Issue No. 7 April -June 2014

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Highlights

- The 2014 main season maize production is 12% higher than the same season in 2013, because of the sufficient rains during the vegetative period months from November to early February. At the same time main season rice production is also forecasted to increase slightly compared to the same season last year (2013) due to the increase of the planted area.
- Availability of seeds during the main season was adequate following increased Government program on seed multiplication and as an outcome of other programs that support far-saved seeds management and storage.
- A deficit of 7,159 tonnes of maize and 71,820 tonnes of rice is estimated for 2014/15 marketing year (April/March).
- Total rice imports in 2013/14 marketing year (April/March) were at 45,865 tonnes, including 8,171 tonnes of rice purchased by the Government (Ministry of Commerce Industry and Environment -MCIE).
- The general inflation stood at 0.4% in March and a deflation of -0.3% in June and -0.6% year - on - year.
- The average price for commercial rice and maize increased from January to February, while price for subsidy rice decreased. Maize price decreased right after the harvest of the first crop from March to May from \$0.71/kg to \$0.61/kg and in June maize price stood at \$ 0.66/kg, commercial rice stood at \$ 0.69/kg and \$0.65/kg for subsidized rice.
- Overall food security improved in most parts of the country during the first quarter, while the price for cereals, fish and beans increased during the second quarter.
- The districts of Ermera, Ainaro, Liquiça, Lautem, Manufahi and off grid areas in Dili were identified to be the most food insecure due to deficits of both maize and rice in the 2014 main season production.
- The nutritional status of children under five years old shows improvement from January to June. Severely underweight children were 4% during the first quarter and 3% during the second quarter.

*The Timor-Leste Food Security Bulletin (FSB) is a product of the EU and FAO supported project on establishing a sustainable National Information and Early Warning System (NIEWS) on Food Security in Timor-Leste. The FSB aims of reporting and providing information on national and household food security situation in a quarterly basis. This is a MAF led innovation of ensuring the timely delivery of information to decision makers and wider stakeholders on the general overview of the food security situation in the country as an early warning to mitigate the serious impact of food shortages and hunger. This **second quarter** issue provides the final production estimates for maize and forecast for rice as well as cereal deficits & surplus. It also includes market information for the main food products, price indexes, rainfall and vulnerability.*

The European Union funds this product. The views expressed in this publication do not necessarily reflect the views of the European Union.



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CROP PRODUCTION

Table 1: Timor -Leste Crop Calendar

In normal years, coinciding with the rainy season, the agricultural cycle in Timor-Leste begins in October with land preparation and planting of maize, followed by nursery preparation and transplanting of rice in December/January. Maize is harvested in February and main season rice around May/June. In southern areas, where there is a second rainy season and in areas with some supplementary irrigation it is possible to grow a second crop of maize or rice.

Crops	J	F	M	A	M	J	J	A	S	O	N	D
Rice (main season)												
Maize (main season)												
Rice (second season)												
Maize (second season)												
	lean period										lean period	
	Sowing	Growing	Harvest									

Source: MAF

Main season crop production

- **Paddy**

The main season rice production this year is forecasted at 85,596 tonnes and is about 11 percent higher than that of the same season in 2013, although the yield is projected to be lower this year, following intermittent rains during the months from April to July at the time when paddy was at its vegetative stage. Below average rains were recorded in most areas of the country particularly in main producing areas, including Baucau, Manatuto, Covalima, Viqueque and Bobonaro districts. The increase in production is mainly attributed to the increase of the planted area, about 3% compared to the same season in 2013. Possible paddy surplus will happen in Bobonaro and Covalima districts, while highest deficits is projected to occur in districts Ermera, Liquiça, Ainaro, Lautem, Manufahi, Oecusse and off grid areas in Dili.

- **Maize**

The above average rains right after the planting and during the vegetative stage from November contributed to the increase yield of this year first crop maize production. The Ministry of Agriculture and Fisheries (MAF) confirmed an increase of 12% of the production compared to same season last year. The average yield of maize is estimated at 2.8 tonnes per hectare higher than last year 2.4 tonnes per hectare. Latest estimates from MAF put this season's maize production at 102,473 tonnes. The increase in yield and production was also associated to the revival of the government mechanization program and agriculture support and investments. Maize surplus is observed in Bobonaro, Oecusse, Covalima and Manufahi and deficits is in Ermera and Ainaro.

Table 2: Forecast of Area, Productivity and Production of the main season rice and maize crop (2012/13 – 2013/14)

Commodity	Maize				Rice					
	Main Cropping Year	Planted Area (ha)	Harvested Area (ha)	Yield (t/ha)	Total Production (t)	Planted Area (ha)	Harvested Area (ha)	Yield (t/ha)	Total Production (t)	Milled rice Equivalent (t)
2012/2013		38,905	37,572	2.4	91,360	26,521	23,941	3.2	77,017	46,210
2013/2014		36,961	36,486	2.8	102,473	27,263 (F)	27,232 (F)	3.1 (F)	85,596 (F)	51,358 (F)
Change (%)	(5)	(3)	16	12	3	14	(2)	11	11	

Source: MAF

Note: F - Forecast

Table 3: Main Season Maize Final Estimate

District	Potential Area (Ha)	Area Planted (Ha)	Harvested Area (Ha)	Yield (t/ha)	Total Production (t)
Aileu	13,000	1,655	1,607	2.13	3,428
Ainaro	9,000	647	646	2.16	1,396
Baucau	16,000	2,237	2,237	3.39	7,582
Bobonaro	25,477	8,490	8,450	3.61	30,481
Covalima	56,113	6,352	6,352	1.32	8,385
Dili	3,200	1,008	705	2.31	1,631
Ermera	6,126	1,813	1,729	2.86	4,944
Lautem	20,000	992	992	3.85	3,817
Liquisa	5,000	1,876	1,876	2.60	4,879
Manatuto	19,896	1,119	1,119	3.36	3,760
Manufahi	10,000	1,336	1,336	3.78	5,051
Oecusse	19,435	7,761	7,761	2.91	22,563
Viqueque	12,500	1,677	1,677	2.72	4,558
Total	215,747	36,961	36,486	2.81	102,473

Source: MAF

Table 4: Main Season Rice Production Forecast as of June

District	Potential Area (Ha)	Area Planted (Ha)	Yield (t/ha)	Total Production (t)	Milled rice Equivalent (t)
Aileu	776	485	4.1	1,989	1,193.1
Ainaro	6,076	259	4.3	1,106	663.6
Baucau	14,423	9,782	3.1	30,520	18,311.9
Bobonaro	7,662	2,685	3.8	10,122	6,073.5
Covalima	5,615	3,830	3.6	13,788	8,272.8
Dili	150	80	3.0	240	144.0
Ermera	2,419	1,890	3.1	5,936	3,561.5
Lautem	3,864	906	2.6	2,374	1,424.2
Liquisa	1,866	250	3.6	910	546.0
Manatuto	12,731	1,403	3.2	4,419	2,651.7
Manufahi	9,942	144	2.6	367	220.3
Oecusse	5,705	2,316	1.6	3,706	2,223.4
Viqueque	9,793	3,233	3.1	10,119	6,071.6
Total	81,022	27,263	3.1	85,596	51,358

Factors affecting production

Agro-meteorology

Following a good start of the 2014 main cropping season, above -average rains were recorded since November right after most of the farmers finished their maize planting. This good rain also facilitated the early land preparation and planting of rice in the main rice growing areas including Baucau, Bobonaro, Covalima and Viqueque. However, intermittent rains were recorded in April and May, will negatively affects the rice yield, although favorable for the harvest of the first crop maize.

Maize harvest was started as early as February particularly in the upland areas of Ermera, Covalima and Bobonaro districts, while most of the districts completed in May 2014. Some areas in Manufahi also reported harvest of upland and irrigated rice in May, while some areas in the east started planting the first season rice in June 2014.

The VHI informs the overall vegetation conditions and indicates vegetation stress level particularly early indication on drought in the country. The Vegetation Health Index (VHI) is a composite index and the elementary indicator used to compute the Agricultural Stress Index (ASI) that combines both the Vegetation Condition Index (VCI) and the Temperature Condition Index (TCI).

Timor-Leste Vegetation Health Index during the main cropping season indicates improvement compared to the same season in 2013, particularly the reduction of areas with index less than 0.45-0.55, therefore an indicator for better yield.

Figure 1: Precipitation Anomaly- Relative difference to Long Term Average

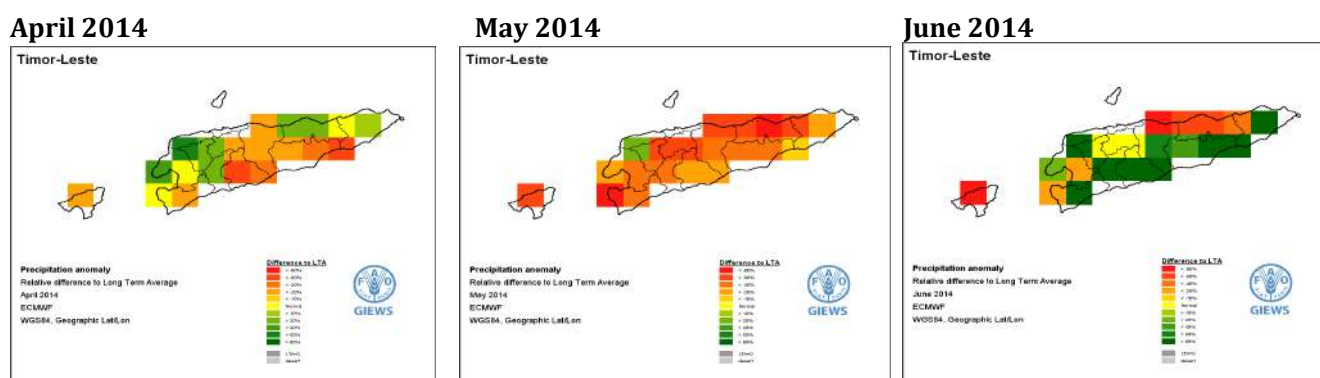
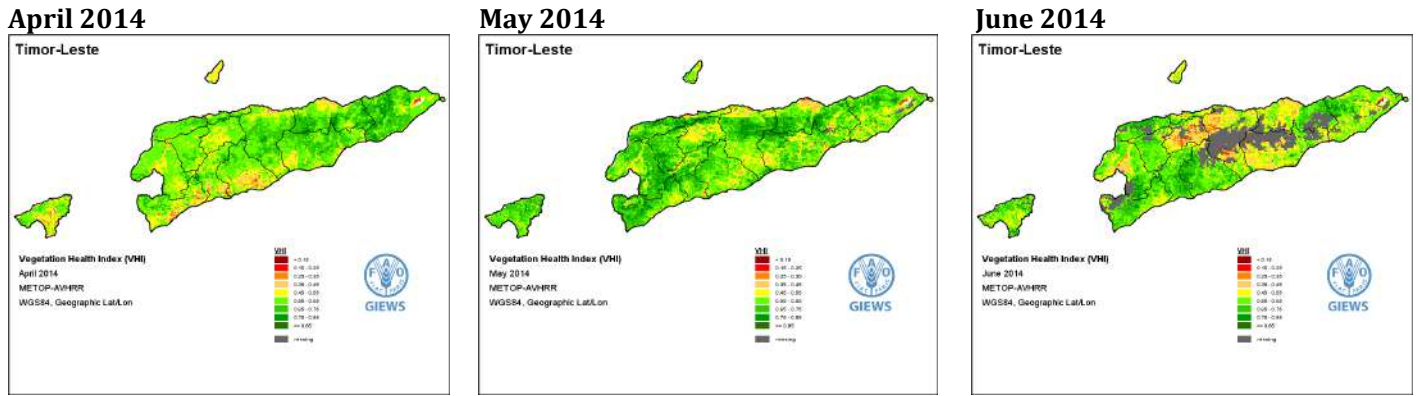
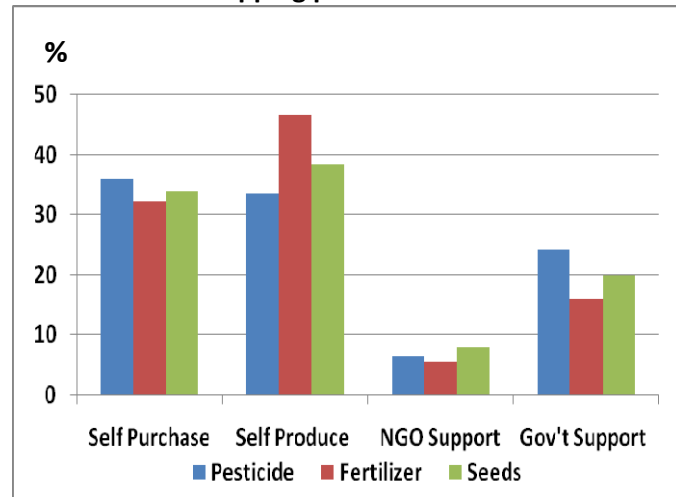


Figure 2: Vegetation Health Index during the 2014 main cropping period



Means of Production and Input

Figure 3: Farmers access to inputs, by sources during the 2014 main cropping period



Source: Suco Level Food Security Monitoring System (SLMS) - MAF

The availability and cost of agricultural inputs, including fertilizers, seeds and fuel varies markedly throughout the country. Government distribution of free seeds, fertilizers and pesticides as well as fuel support for mechanization continued in 2014 main cropping period, lower compared to the average of the previous two years (Figure 4).

The government reduced support on seed distribution, amplified the coverage on seed multiplication, farmers self-produced and saved seeds increased sharply along with the number of farmers purchase seeds, fertilizers and pesticides, due to programs that promote access to improved storage systems and commercialization of agricultural inputs. Self-purchase of seeds by farmers increased sharply this season from 23% same season in 2012 to 27% in 2013 and this year, while farmers used their self produced and saved seeds increased from 28% to 33%.

FOOD SUPPLY AND DEMAND SITUATION

National Cereal Balance 2014/15

Although this year production slightly increase, however, a deficit of 71,820 tonnes of rice and 7,159 tonnes of maize is estimated for marketing year 2014/15 (April/March). This is because of the increasing population of the country. In fact, rice deficit is higher than last year, while deficit for maize is lower. Part of this deficit is expected to be covered by rice imports of 71,820 tonnes, 57% above the previous year level, otherwise less rice imports will forced households to use coping strategies such as eating less, eating the saved seeds and higher consumption of other food crops, mainly roots and tubers.

Figure 4: Farmers access to inputs, by sources during the 2011-2013 main cropping period

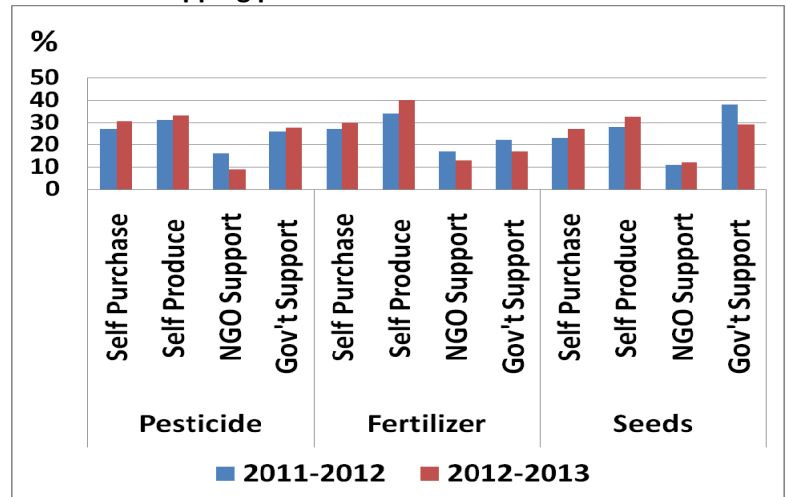


Table 5: National Cereal Balance Sheet Marketing Year 2014/15 (April/March)

	Rice (T)	Maize (T)
Domestic Availability	67,505	112,721
Opening stocks 1/	11,012	
Final Estimate (maize only) Production from main season2/	51,358	102,473
Early Forecast production from second season	5,135.8	10,247
Total utilization	139,325	119,880
Food use 3/	128,484	81,211
Seed requirement 4/	570	2,174
Feed use 5/		16,000
Post harvest losses 6/	10,272	20,495
Targeted closing stocks 7/		
Deficit/Surplus	-71,820	-7,159
Import Requirements		
Anticipated commercial Imports	71,820	
Uncovered deficit/ to be covered by other crops/food		7,159

Source: MAF

In order to calculate the national cereal balance, the following assumptions were used:

1/ Only government stocks as of March 2014 (end of marketing year 2013/2014)

2/ Milling rate of paddy to rice is estimated at 60 percent

3/ Based on 106 kg per year/person of rice consumption and 67 kg per year/person of maize and a population of

1,212,110 in 2014, according to 2012 estimated population of 1,118,429 + 2.41% per year increase.

4/ According to the Directorate of Agriculture and Horticulture (DAH) of MAF, standard use of seed for: rice 25-35 kg/ha, maize 40-50 kg/ha

5/ There is no information available on the use of grains to feed animals. However, it is known that the 60% extraction rate of rice already takes into account and 6% that remains in the husk is given to animals. Maize, in turn is extensively used as feeding. Only chicken feeding is used for this calculation, based on MAF's standard consumption rate.

6/ DAH/MAF estimates 15-20% post-harvest losses in both rice and maize

7/ It may include contingency stocks.

Cereal imports

Table 6: Rice Imports during marketing year

Rice Imports Marketing year April/March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/2013	134	331	3,856	1	1	500	10,607	0.11	3,042	3	251	51	18,778
2013/2014	3,010	-	1,999	9,754	487	6,905	2,029	6	2,475	8,307	845	10,047	45,864

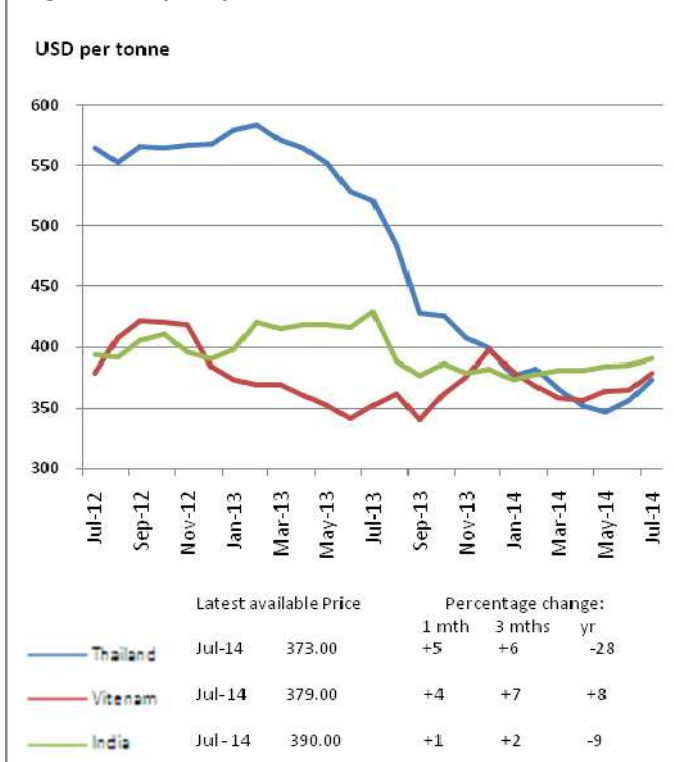
Source: MCIE

- Against the rice import requirement of 71, 820 tonnes for marketing year 2014/15, rice imports until June amounted to 5,009 tonnes, slightly higher than in the same period of the previous year's of 4,321 tonnes.
- Beginning of marketing year 2014/15, the government imported rice amounted to 3,403 tonnes, this is in addition to the government opening rice stocks of 11,012 tonnes.
- MCIE distributed 3,564 tonnes from April to June 2014 to retailers for sub-national and national markets (127 tonnes), support for the school feeding (3,134 tonnes), support for social protection (217 tonnes) and humanitarian support (86 tonnes), therefore, a balance of 10,851 tonnes.

Food Prices

Cereal export prices

Figure 5: Export prices of rice (25% broken)



Source: FAO-GIEWS

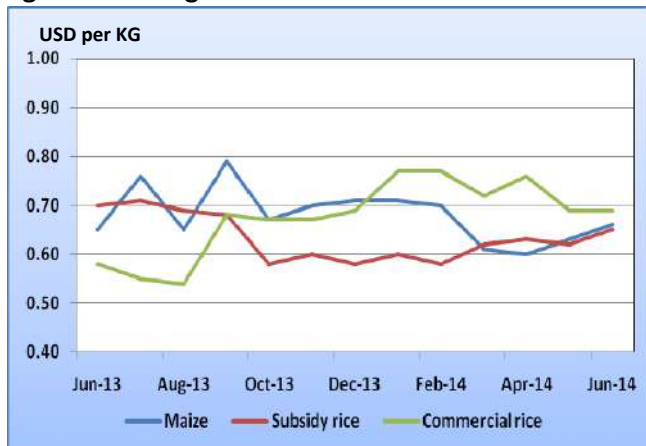
The FAO Global Food Monitor reported Asia's general domestic rice prices remained relatively unchanged in June. The downward pressure from the recent 2013/14 secondary cropping season harvest was offset by sustained export demand and large government purchases.

However, rice prices declined in past quarter in the main exporting countries, including Thailand and Vietnam, mainly reflecting the good supplies from the ongoing 2013/14 harvests, large sales of government stocks and lower export demand. Nevertheless, in India rice price remained relatively stable.

FAO Global Food Monitor mentioned that Asia is anticipated to garner about 679 million tonnes of rice in 2014, a volume only 0.2 percent, or 1.1 million tonnes, higher than in 2013. Such a meager growth reflects expectations of a poor season in India, but also in Indonesia, Nepal, Sri Lanka and Thailand, all of which might face year-on-year contractions. By contrast, Bangladesh, China, Myanmar, Pakistan, the Philippines and Vietnam are anticipated to see production expand.

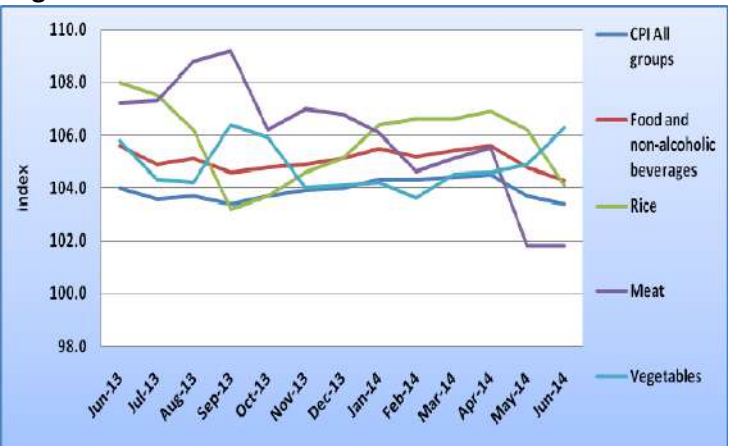
Domestic Prices

Figure 6: Average retail Price of Maize and Rice



Source: SLMS-MAF

Figure 7: Price Indexes



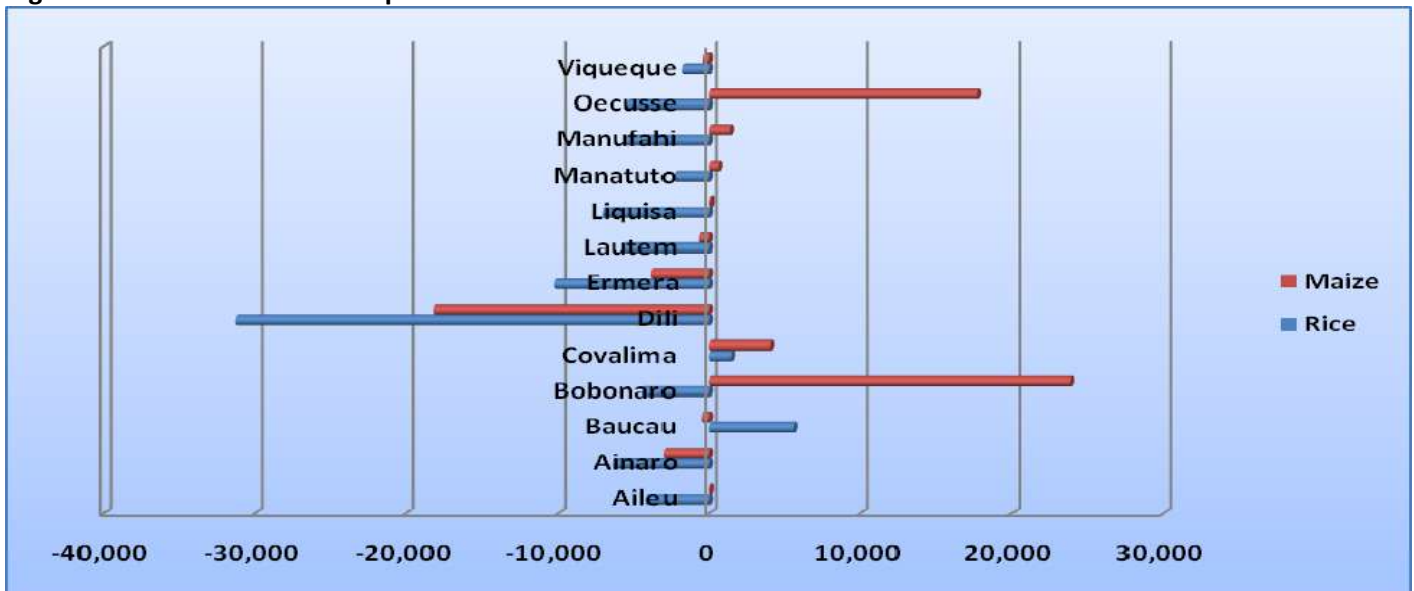
Source: NDS-MoF

- During the second quarter of 2014, the average price of subsidized rice stood at USD 0.63 per kg, while those of commercial rice stood at USD 0.71 per kg, a decrease of USD -0.04 per kg from the first quarter mainly due to the available cereal stocks in the market. Prices of maize decreased by 6% due to adequate supply from the recent main season harvest.
- According to the Suco Level Food Security Monitoring System (SLMS) 8 villages belonging to districts Bacau, Covalima, Oecusse and Manatuto recorded higher prices, averaging USD 1.75 per kg for maize, USD 1.12 per kg for subsidized rice and USD 1.31 kg for commercial rice.
- In June a deflation of -0.6% year-on-year, due to the significant price decreased on food and non-alcoholic beverages (-0.5%), with the main decrease in rice prices (-2%), chocolate and confectionery (-4.2%) and beverages (-5.9%).

Household Food Security and Vulnerability

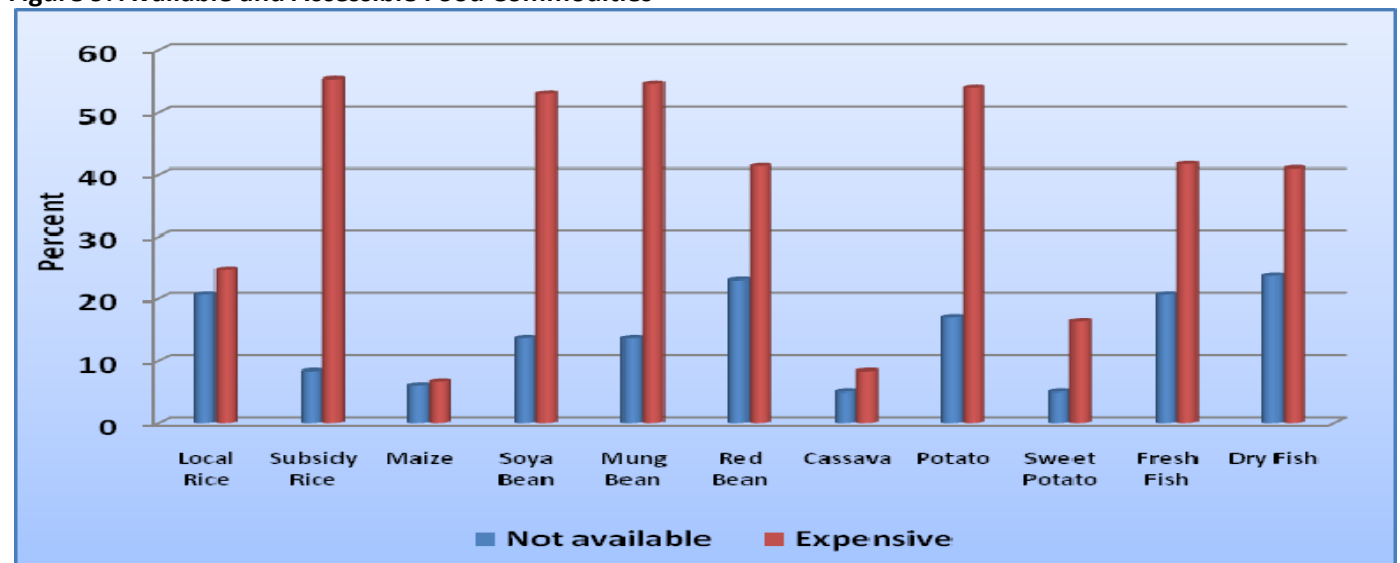
- Generally, the food supply situation across the country has been reported normal from January to June.
- Most parts of the country were classified as minimally food insecure. The districts of Ermera, Ainaro, Liquiça, Lautem, Manufahi and off grid areas in Dili show the highest deficit in comparison to the cereal annual food consumption requirements. By contrast, large maize surplus was recorded in Bobonaro and Oecusse, while large rice surplus was recorded in Baucau. Covalima is the only district that reported with both maize and rice surplus.
- The Ministry of Social Solidarity (MSS) confirmed that in 2014 (April to June), 200 tonnes of rice were distributed in addition to the 233 tonnes that were distributed during quarter one. In addition, the Ministry of Commerce, Industry and Commerce (MCIE) was also distributed 86 tonnes of rice to food insecure households, victims of disasters and to institutions like orphanages and church.
- The Ministry of Commerce, Industry and Environment (MCIE) keep some 10,851 tonnes of imported rice as national food reserve, intended to respond to food shortages during the third quarter of 2014. The reported rice balance does not include rice balance from the local purchase program, with no updated report at this point.

Figure 8: Cereal Production Surplus and Deficit



Source: SLMS- MAF

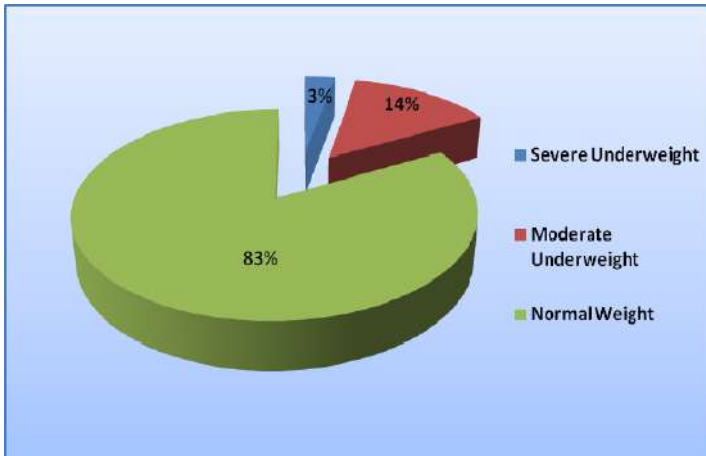
Figure 9: Available and Accessible Food Commodities



Source: SLMS- MAF

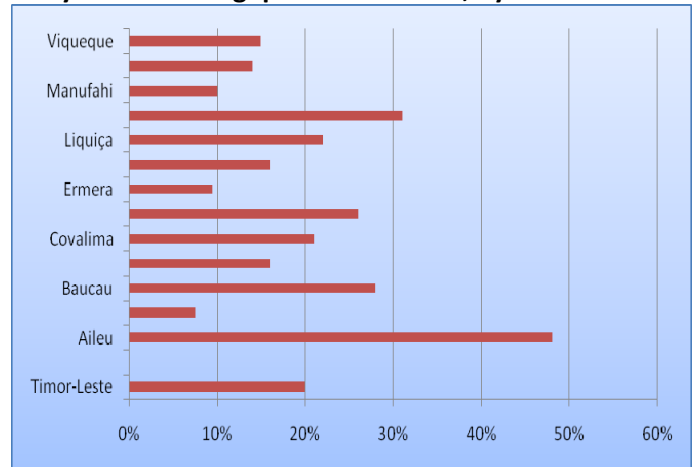
Nutrition and Health

Figure 10: Nutritional Status (Underweight) for Children under 5 during quarter 2 in 2014



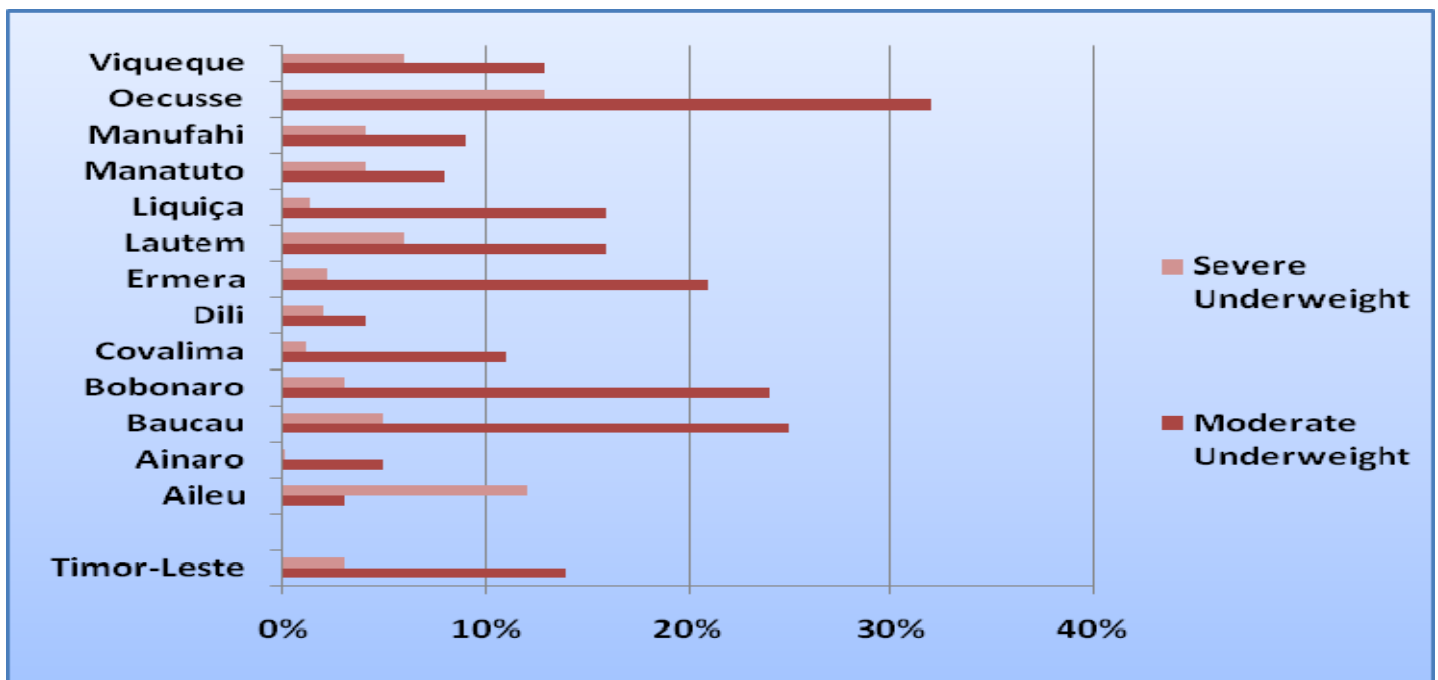
Source: H-MIS - MoH

Figure 11: Average Percentage of Children weighted every month during quarter 2 in 2014, by District



- During the second quarter of 2014, the Health Monitoring Information System (H-MIS) recorded a reduction of the number of moderate and severe malnourished children comparing to same quarter of last year.
- The H-MIS recorded that during this quarter only 20% of the total number of children in Timor-Leste used the health services. The districts with high numbers of children weighted this quarter were in Aileu (48%), Manatuto (31%), Baucau (28%), Dili (26%) and Liquiça (22%).
- The districts that reported with higher malnourished cases were in Oecusse (45%), Baucau (30%), Bobonaro (27%), Ermera (23%) and Lautem (22%).

Figure 12: Average Percentage of Moderate and Severe Underweight Children under 5 during Quarter 2 in 2014, by District



Source: H-MIS - MoH