

Timor-Leste

Food Security Bulletin

Issue No.11 April – June 2015

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Highlights

- The overall food security situation in Timor-Leste during the second quarter of 2015 has improved with the harvest of the first season maize completed in May and the ongoing first season rice harvest.
- The maize final production estimates is at 64,795 tonnes (excluding Oe-Cusse) lower by 37% compared to 2014, with yield decreased to 2.1 tonne per hectare from a total estimated area harvested of 30,164 hectares lower compared to 2014.
- For marketing year 2015/16 Timor-Leste maize requirement is estimated at 83,421 tonnes, however, if including the other food utilization such as seed and animal feeds, the total requirement was estimated at 113, 738 tonnes.
- Maize deficit for the marketing year 2015/16 (April/March) was revised from the initial forecast of 291 tonnes to 44,003 tonnes, following a significant decrease of maize harvest in 2015,
- Despite reported low maize production, the Ministry of Commerce, Industry and Environment (MCIE) did not arrange any rice import except the reported rice import of 18,925 tonnes from the private sector, lower than the projected cereal (maize and rice) deficits of 124,282 tonnes for marketing year 2015/16.
- In June, the general month-on-month inflation stood at 104.9, while year-on-year inflation stood at 104.3.
- In general, the average price for rice and maize decreased in the month of April to June 2015 compared to quarter two of 2014. For maize it stood at USD 0.36/kg from USD 0.63/kg, subsidy rice at USD 0.20/kg from USD 0.63/kg and commercial rice stood at USD 0.65/kg from USD 0.67/kg.
- From April to June 2015, rainfall remains erratic in most municipalities, except the southern west bimodal rainfall areas that received good rain in June 2015, reason to have lower maize yield.
- During the second quarter of 2015, the percentage of children in Timor-Leste who have utilized the health facilities increased from 23% (Q1) to 28.5%, with severely underweight decreased to 2%, but with moderately underweight increased to 10%.

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. In this quarter issue provides final maize production estimates of 2015, the expected increased maize deficit and general food security outlook. This also includes market information and price for main food products, as well as information on 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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Food Production

• Maize

Maize harvest was completed in May, with lower yield due to erratic rainfall throughout the season. A crop assessment was carried out from February to May that allowed updating the area planted, as well as accounted harvested areas that finalized the yield and production estimates calculations. The maize final production estimates is at 64,795 tonnes (excluding Oecussi) lower by 37% compared to 2014, with yield decreased to 2.1 tonne per hectare from a total estimated planted area of 30,164 hectares (excluding Oecussi). It is estimated that high maize production and a surplus in the municipalities of Covalima, Baucau, Lautem and Liquiça, accounted to 71% shares from the total maize production in 2015. The municipalities with lower production and high deficits are Ainaro, Dili, Viqueque, Aileu and Manatuto. The municipalities of Liquiça, Covalima and Lautem reported to have higher yield while the opposite is true for the municipalities of Viqueque, Baucau and Aileu.

• Rice

In this period, harvesting of the first crop season rice is ongoing. At the beginning of 2015, initial rice production forecast for the year 2015 is at 94,708 tonnes, however, considering the unfavourable rainfall particularly in key rice producing municipalities, it is anticipated that the production this year will decrease. A crop assessment team led by the Ministry of Agriculture and Fisheries (MAF) was organized in June to carry out the yield and production estimates.

Table 1: Comparison on Cultivation, Yield and Production of maize in 2014 to 2015.

Commodity	Maize				
	Year	Cultivated Area (ha)	Harvested Area (ha)	Yield (t/ha)	Total Production (t)
	2014	36,961	36,486	2.81	102,473
	*2015	37,051	30,164	2.1	64,795
Percent Change (%)		0.2%	-17%	-25%	-37%

Source: MAF

*Note: Final maize production estimates

Table 2: Maize Production Estimates for 2015

Municipality	Maize				
	Potential Area (ha)	Cultivated Area (ha)	Harvested Area (ha)	Yield (t/ha)	Production (t)
Aileu	13,000	1,617	1,617	1.5	2,502
Ainaro	9,000	332	332	1.6	519
Baucau	16,000	7,998	7,998	1.4	11,373
Bobonaro	25,477	2,489	2,489	2.3	5,624
Covalima	56,113	6,138	6,138	2.7	16,750
Dili	3,200	215	215	2.1	454
Ermera	5,000	1,895	1,895	1.7	3,181
Lautem	20,000	4,283	4,283	2.6	11,129
Liquisa	5,000	1,985	1,985	3.5	7,034
Manatuto	19,896	1,021	1,021	1.9	1,957
Manufahi	10,000	1,099	1,099	2.4	2,582
Viqueque	19,435	1,093	1,093	1.5	1,690
Oecusse	12,500	0	0	0	0
Total	214,621	30,164	30,164	2.1	64,795

Factors Affecting Production

Agro-meteorology

- The 2015 main cropping season experienced unfavourable weather conditions. Rainfall was generally below the long term average in most of the municipalities. During the second quarter of 2015, the precipitation anomaly relative difference to long term average showed below normal rainfall in most areas of the country particularly in the south and eastern part.
- Although having low rainfall in April and May 2015 was supportive in the efficient completion of main season maize harvest, but impacted negatively to the rice production this year.
- 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) 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).
- Figure 2 shows that during the second quarter of 2015, areas that consistently indicated having a Vegetation Health Index (VHI) more than 0.65 to 0.85 (dark green colour) were the west and central regions. The areas with VHI from 0.45 were the coastal areas of the municipalities of Manatuto, Baucaum Viqueque and Covalima. While, the highlands of the municipalities of Bobonaro, Covalima, Ermera and Ainaro indicated a VHI higher than 0.55. Considering that most of the irrigated rice is located in the coastal areas, a lower VHI indicates lower yield.

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

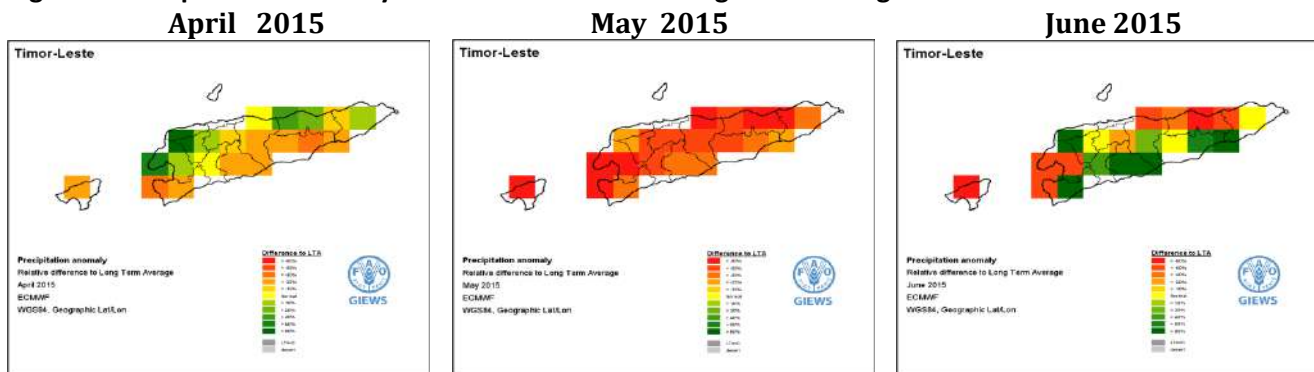
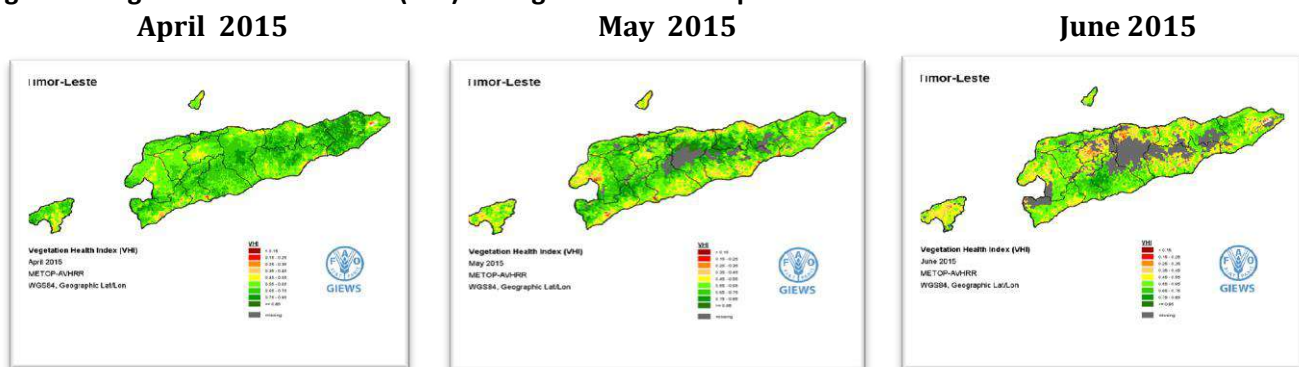


Figure 2: Vegetation Health Index (VHI) during the month of April to June 2015

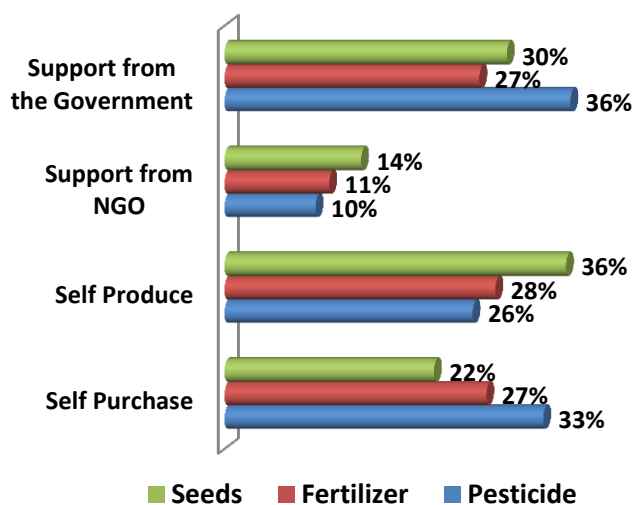


Means of Production and Input

- The Ministry of Agriculture and Fisheries (MAF) continue to provide farm inputs subsidies such as seeds, fertilizers and pesticides with an objective of increasing the productivity of maize and rice. These inputs were distributed in addition to the free ploughing program (programa fila rai gratuita). The Suco Level Food Security Monitoring System (SLMS) reported that during the second quarter many famers received most of their seeds from the government (30%) along with pesticides (36%) and fertilizers (27%), while 29% reported to either produced or purchased their farm inputs. On the other hand, 12% claimed that received farm inputs from NGOs.

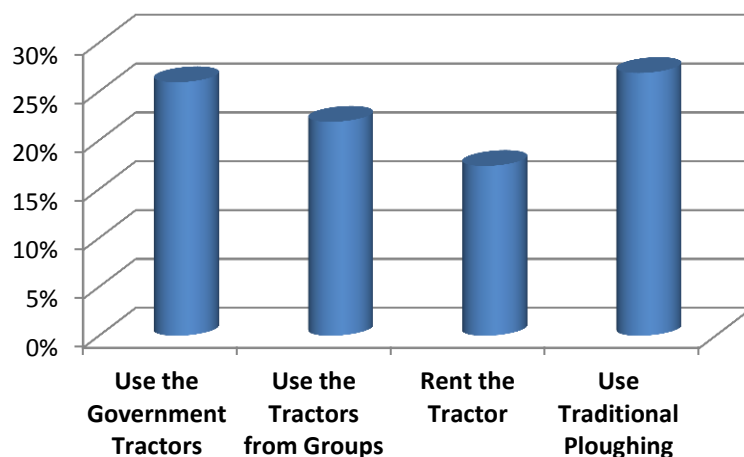
- The SLMS also reported that 26% of the cultivated field used the government tractors while 27% used traditional ploughing practices.

Figure 3: Farmers Access to inputs, by sources during the period of quarter 2, 2015



Source: SLMS-MAF

Figure 4: Farmers Access Government Mechanization Program in 2015



Source: SLMS-MAF

FOOD SUPPLY AND DEMAND SITUATION

Revised National Cereal Balance Sheet for 2015/16 marketing year (April/March)

This National Cereal Balance for marketing year of 2015/16 was revised to reflect the 2015 final maize production estimates. The rice production figure remains a forecast, considering the ongoing harvest. With a lower maize production, the deficit increased to 48,943 tonnes.

Part of this deficit is expected to be covered from the 2014 rice stocks, although high deficits often addressed by increasing cereal imports instead of increasing domestic markets by utilizing end to end value chain approach. Part of the deficits could also be covered by other food crops such as roots and tubers, the typical coping strategy of most of the rural households particularly during lean season.

Table 3: Updated National Food Balance Sheet Marketing Year 2015/16 (April/March)

	Rice (T)	Maize(T)
Domestic Availability	68,575	64,795
Opening stocks 1/	11,750	
Final Production estimates 2/	56,825	64,795
Total utilization	143,914	113,738
Food use 3/	131,979	83,421
Seed requirement 4/	570	1,358
Feed use 5/		16,000
Post-harvest losses 6/	11,365	12,959
Targeted closing stocks 7/		
Deficit/Surplus	-75,339	-48,943
Import Requirements		
Anticipated commercial Imports	75,339	48,943

Source: NIEWS-MAF

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

- only government stocks (data from MCIE) as of March 2015
- Milling rate of paddy to rice is estimated at 60 percent
- Based on 106 kg per year/person of rice consumption and 67 kg per year/person of maize and a population of 1,245,085 (Source:DNE Monografiku Projeksaun Populasaun Vol.8)
- According to the Directorate National of Agriculture and Horticulture (DNAH) of MAF, standard use of seed for: rice 25-35 kg/ha, maize 40-50 kg/ha
- 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 feed. Only chicken feed is used for this calculation, based on MAF's standard consumption rate.
- DNAH/MAF estimates 15-20% post-harvest losses in both rice and maize
- It may include contingency stock.

Cereal Imports

Table 4: Rice imports during marketing years

	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	134	331	3,856	1	1	500	10,607	0.11	3,042	3	251	51	18,777
2013/14	3,010	-	1,999	9,754	487	6,905	2,029	6	2,475	8,307	845	10,047	45,864
2014/15	8,954	640	131	5,529	28,810	14,695	3,710	5,925	131,237	4,606	4,675	5,857	214,769
2015/16	7,602	10,944	379										18,925

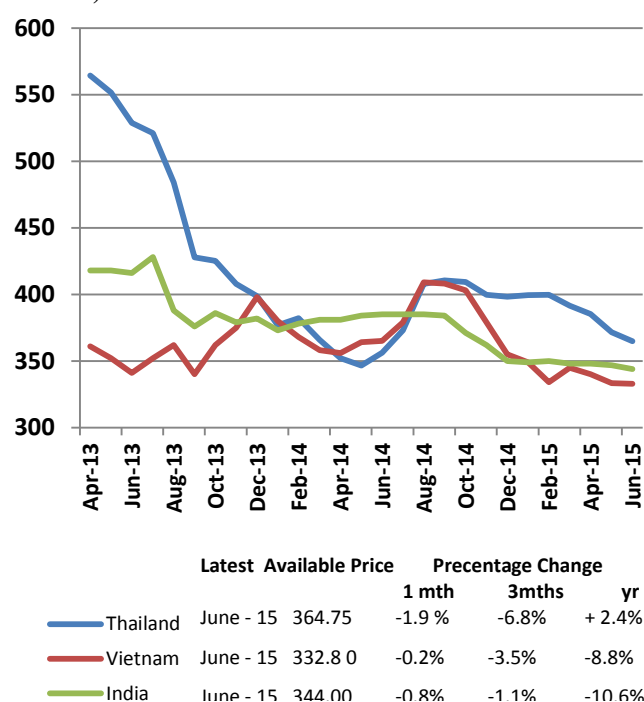
Source: Alfandega-MoF

- At the beginning of the year, rice importation was forecast to about 75,339 tonnes, however, with a significant low maize harvest, rice import estimates increased to 124,00 tonnes, although, the huge rice import in 2014/15, could cover a proportion of the cereal deficits for the marketing year 2015/16.
- The Ministry of Commerce, Industry and Environment (MCIE) confirmed that the National Logistic Center did not arrange rice import considering the significant quantity of remaining rice stocks, although 18,925 tonnes of rice was imported by the private sector, in addition to the huge (214,765 tonnes) rice import in 2014/15. With high influx of rice import in 2014/15 it make sense that the government will establish a proper food stock monitoring system to properly account cereals and other food importation, otherwise having consistent influx of food imports will negatively affects domestic food production that disadvantage the local producers.
- The MCIE confirmed that the government local food acquisition program was put on hold due to the changes in the government structure, instead 1,908 tonnes of rice was distributed to local markets through the contracted distributors and retailers, delivered 590.5 tonnes to the Ministry of Education to support the school feeding and distributed 60 tonnes for humanitarian support from the remaining rice stocks, this bring a total remaining stocks to 9,196 tonnes at the end of quarter two in 2015.

Food Price

Cereal Export Price

Figure 5: Export prices of rice (25% broken, USD per tonne)



Source: FAO-GIEWS

The FAO Global Food Monitor reported that international cereal prices declined in May and continued well below their levels a year earlier. In June, the FAO all Rice Price Index (2002-2004=100) dropped by 1.5 percent, marking the ninth consecutive month of declines. Among the various segments, fragrant rice prices fell the most. In Thailand, the benchmark Thai 100%B white rice shed 16 points, or 3.9 percent, but prices for parboiled and fragrant rice also incurred marked losses, reflecting a lacklustre demand from importers and the announcement of new sales of rice from public stocks through tenders in June and July. As competition for markets intensified, prices were also down in India and Viet Nam.

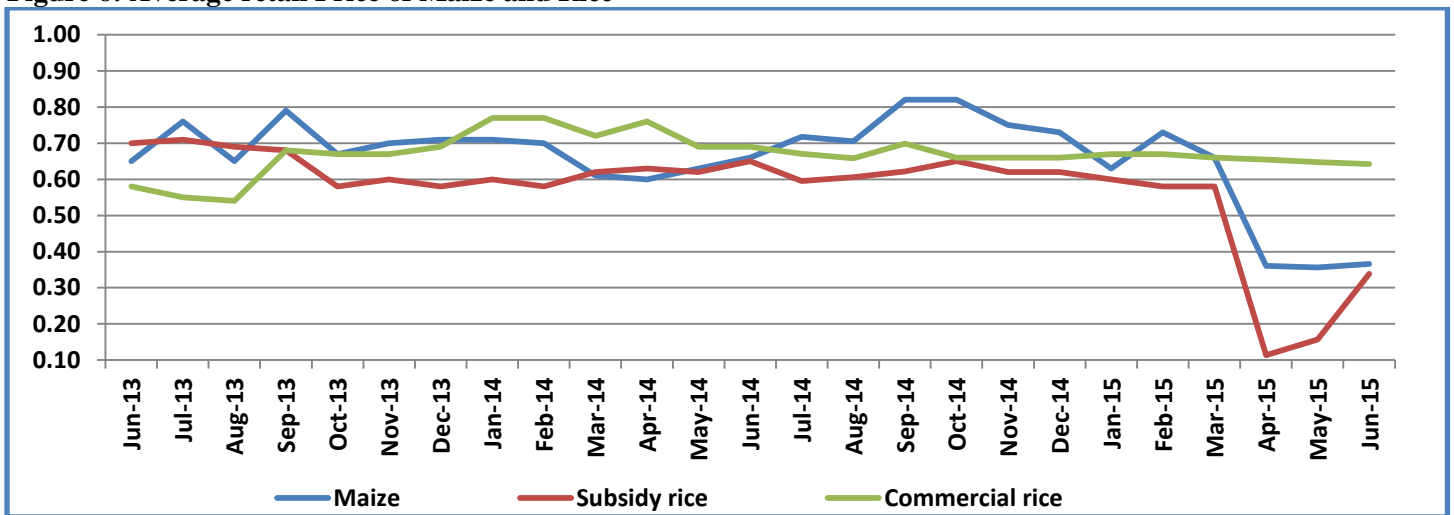
In ASIA region, domestic rice prices remained relatively stable in most countries of the sub region in May. Despite the ongoing secondary season harvest, prices were unchanged in main exporters, Thailand and India, as the outputs are anticipated to be reduced, as well as in China, where Government procurement programmes provide market support.

In the neighboring Indonesia, the national average price for the medium quality rice was declined to 9,892.37 rupiah per kg.

Domestic Price

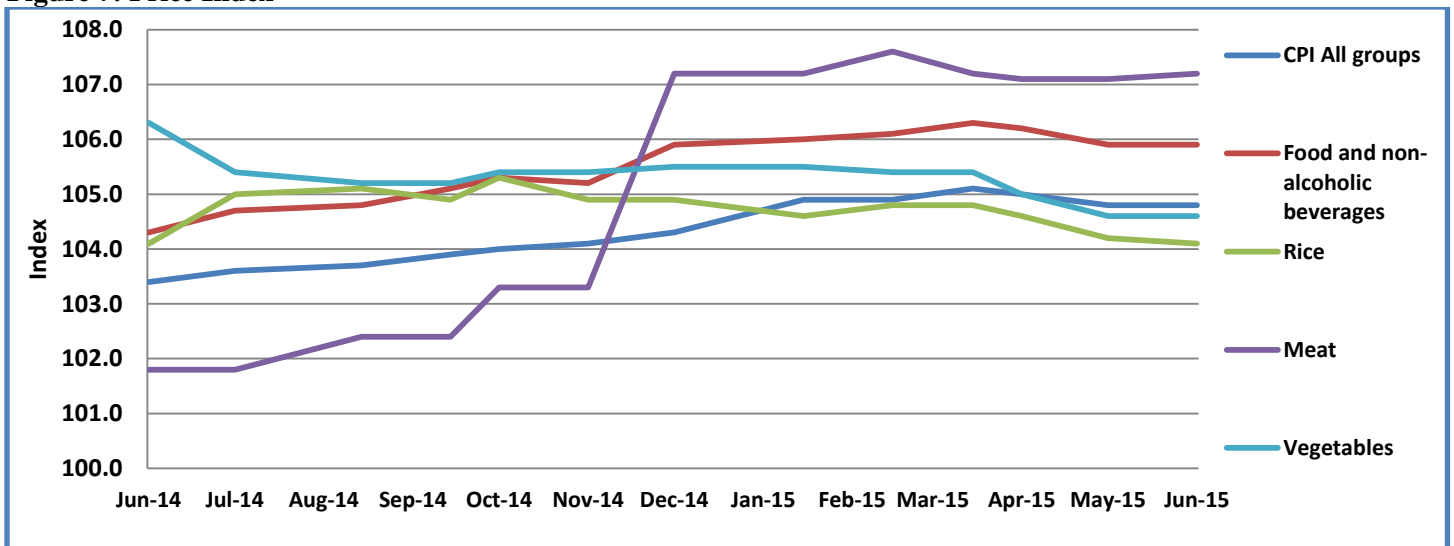
- The price of the subsidy rice sharply declined at USD 0.11 cents per kilogram at the beginning of quarter two of 2015, significantly influenced the average price to fall at USD 0.20/kg, way below the average price of USD 0.59/kg from the previous quarter and USD 0.63/kg same period in 2014.
- Irrespective of the significant reduction on maize harvest in 2015, maize average price declined at a lower-than-normal pace to USD 0.36/kg compared to USD 0.63/kg same period in 2014
- Domestic rice prices remained relatively stable in most communities during the second quarter of 2015, in spite of the ongoing main season harvest, the average price stood at USD 0.65/kg, lower from USD 0.71/kg same period in 2014.
- The Suco Level Food Security Monitoring System (SLMS) reported that there were 6 upland remote villages (with fewer access to market) belonging to the municipalities of Baucau, Covalima, Manufahi, and Liquisa recorded higher prices on maize and rice ranges from USD 1.50/kg to USD 4.00/kg for maize and USD 0.60/kg to USD 1.00/kg for subsidy rice.
- The month-on-month inflation during the second quarter in 2015 stood at 104.9 with year-on-year inflation stood at 104.3, higher compared to previous year 2014. The contributors to the increase of the monthly and annual inflation were from food and non-alcoholic beverages (1.5%), and education (18.6%), although transport (-6.2%), recorded the largest offsetting movement through the year to June 2015, due to a significant reduction in the operation of personal transport equipment (-13.4%).

Figure 6: Average retail Price of Maize and Rice



Source: NIEWS-SLMS-MAF

Figure 7: Price Index

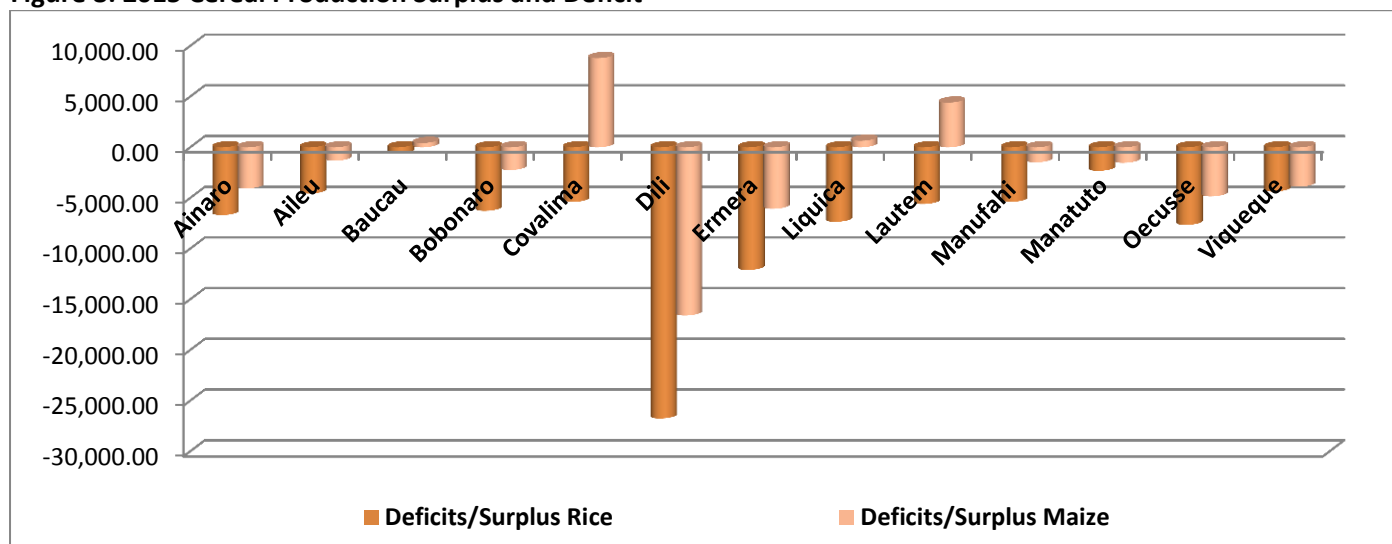


Source: DNE-MF

Household Food Security and Vulnerability Analysis

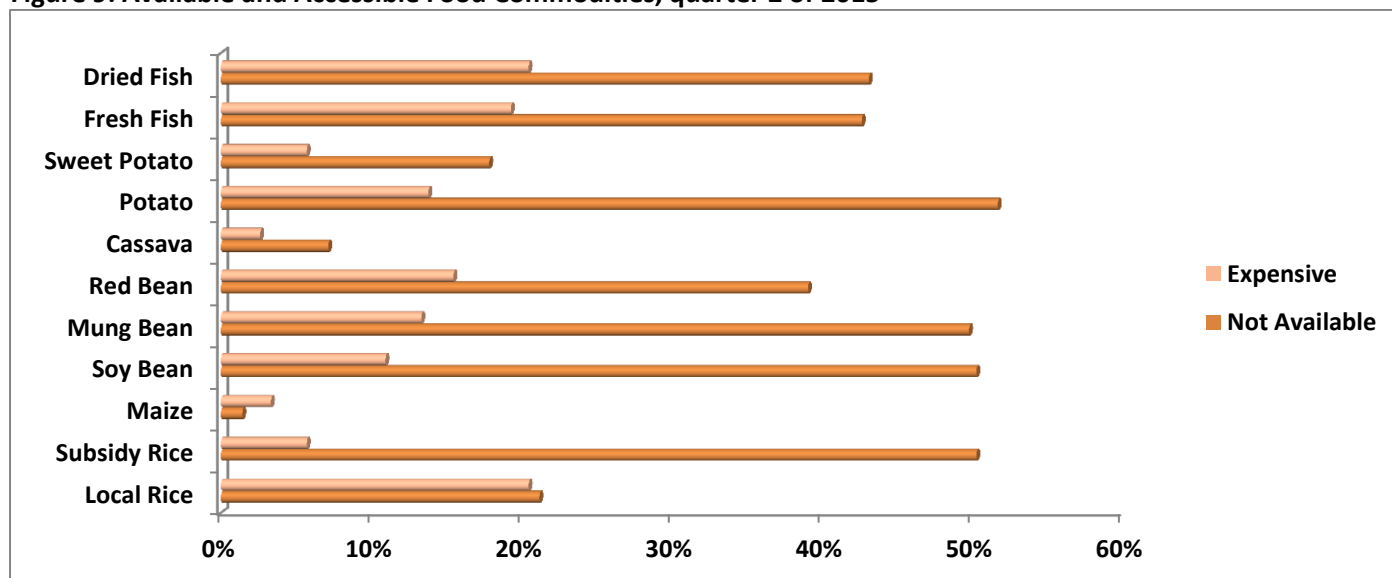
- Food security situation improves with the bulk of 2015 maize and rice harvests entering the markets. The SLMS reported that the price of subsidy rice was affordable, the same with maize, however, prices for protein based food such as beans and fish remains high in most of the rural upland communities.
- The main season maize production appears lower compared to the initial forecast set by the Ministry of Agriculture and Fisheries (MAF). Many Municipalities reported to have very low yield and production. Maize main season production was finalized at 64,795 tonnes (excluding Oecusse) lower by 37% compared to 2014, with average yield at 2.1 tonne per hectare from a total estimated planted area 30,164 hectares, 18 percent lower compared to 2014. High maize deficits in the municipalities of Ermera, Ainaro and Viqueque but some surplus in the municipalities of Covalima, Lautem and Baucau.
- MAF remains positive on main season rice production, but with the recent dry weather, rice production is expected to be lower than what is forecasted, particularly in the coastal areas that constantly having dry spells.
- The Ministry of Social Solidarity (MSS) distributed approximately 555 tonnes of rice from April to June 2015 mostly to food insecure households but also included institutions such as orphanages and training centers. In addition to rice 79 litters of milk, 177 litters of edible oil, 192 tonnes of canned fish, 121 tonnes of iodized salt, 3.84 tonnes of mung beans and 4.1 tonnes of red beans were also distributed to program beneficiaries in 13 municipalities.
- Other than MSS, the Ministry of Commerce, Industry and Environment (MCIE) also distributed 60 tonnes for humanitarian services and 1,908 tonnes subsidy rice to local markets.

Figure 8: 2015 Cereal Production Surplus and Deficit



Source: SLMS-MAF

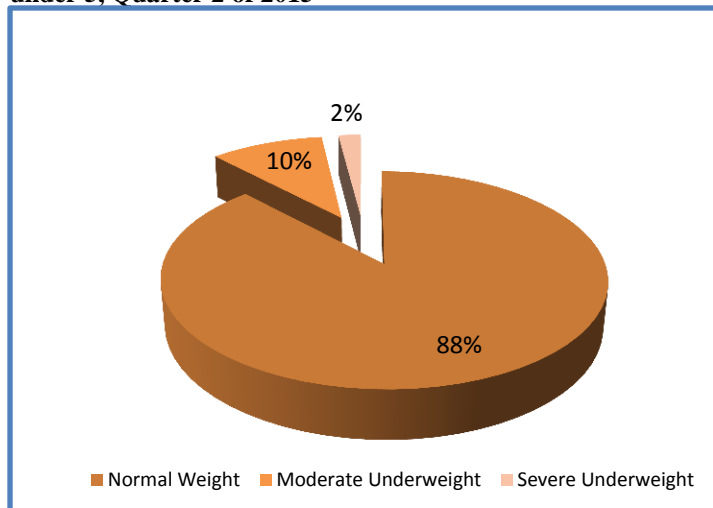
Figure 9: Available and Accessible Food Commodities, quarter 2 of 2015



Source: SLMS-MAF

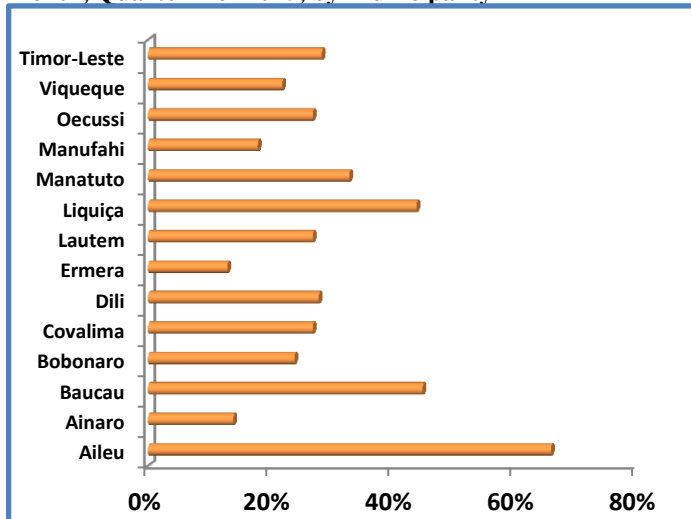
Nutrition and Health

Figure 10: Nutritional Status (Underweight) for Children under 5, Quarter 2 of 2015



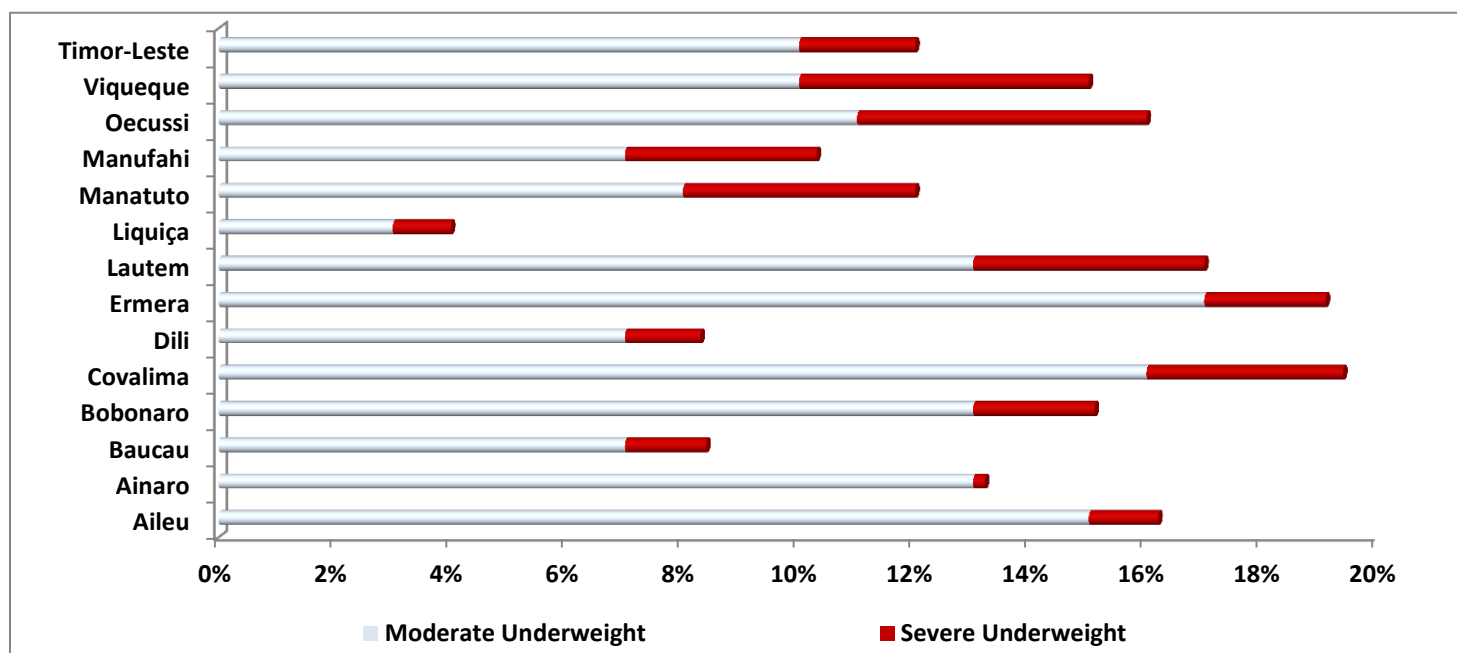
Source: H-MIS- MoH

Figure 11: Average Percentage of Children weighted every month, Quarter 2 of 2015, by Municipality



- During the second quarter of 2015, the Health Monitoring Information System (H-MIS) recorded an increase of children attendance (28.5%) at public health facilities and a reduction of the number of moderate (10%) and severe (2%) malnourished children compared to the same quarter in 2014.
- High percentage of children attendance in the municipalities of Aileu (66%), Baucau (45%), Liquisa (44%) and Manatuto (33%), while low attendance in the municipalities of Ermera (13%), Ainaro (14%), Manufahi (18%) and Viqueque (22%)
- High percentage of severe and moderate underweight children in the municipalities of Covalima (19.4%), Ermera (19.1%), Lautem (17%), Oecussi (17%), Aileu (16.2%) and Viqueque (15%).

Figure 12: Average Percentage of Moderate and Severe Underweight Children under 5, Quarter 2 of 2015, by Municipality



Source : H-MIS- MoH