Rice production
Rice remains the key staple for the majority of the population. However, the 2021 production was earlier projected to significantly outweigh last year’s estimates only to be marred by devastating floods that occurred at near-harvest period. Production estimates are now revised downwards to 43,992 metric tonnes, 2 percent lower than the five-year average and a further 12 percent lower than last year’s estimates. There is an estimated loss of more than 25 percent from earlier calculations. The current production now accounts for only 30 percent of the annual national rice requirement which is estimated at around 140,000 metric tonnes.

Rice Imports and stock levels
In the last five years, rice imports have consistently covered nearly 70 percent of the national requirements. The first quarter of 2021 have seen a twofold increase in rice imports compared to the previous period, reaching almost 40,000 metric tonnes.

Methodology
This Food Security Bulletin (FSB) is based on data emanating from institutions under the KONSSANTIL (Inter-Minister Council for Food Security, Food Sovereignty and Nutrition). The FSB is a product of

1 Joint Appeal & Flood Response Plan-Timor-Leste
As of mid-April, CLN reported having 20,000 metric tonnes in their warehouses while the private sector had a combined total of 27,000 metric tonnes, as such the public and private sector at 47,000 metric tonnes is equivalent to 4 months of stock consumption. To account for rice national requirement, it is estimated that a minimum of 50,000 metric tonnes will need to be imported between now and the next main harvest season in May 2022 after factoring the current stock levels and local production levels only.

**Rice sufficiency ratio**
Considering rice production and stock levels as total availability, a rice sufficiency ratio is constructed by dividing availability by national requirement (Fig. 1) over the whole consumption season, that is, until the next main harvest season in May 2022. In terms of interpretation, if ‘Rice Sufficiency Ratio’ is above the value of 1, it indicates that rice availability at country level is more than the requirement (Value of 1 is a threshold while below 1 denotes deficiency). At the current ratio of 0.65, it means the country will need to import a minimum of 50,000 metric tonnes or equivalent of 4 months of national requirement.

![Fig. 3 Rice sufficiency ratio](image)

**Maize production and requirement**
Maize production, the second most important staple food crop, is estimated at around 90,000 tonnes, an increase of 17 percent compared to previous season. However, a downward revision may be expected emanating from the effects of the floods that occurred at the time of harvest. It is unlikely that there would be a maize cereal deficit even after accounting for such loss as the maize adequacy ratio is likely to be above one.

![Fig. 4. Maize sufficiency ratio](image)

**Other Food Imports**
In the first quarter of 2021, chicken imports were only second to rice in terms of volume at around 4,400 metric tonnes, however, registered a 6 percent decrease compared to previous quarter. While over the same reference period, notable increases were observed for vegetable oil, eggs, pork, and beef (Table 1).

<table>
<thead>
<tr>
<th>Commodity</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken</td>
<td>4,436</td>
<td>-6</td>
</tr>
<tr>
<td>Wheat</td>
<td>3,510</td>
<td>-24</td>
</tr>
<tr>
<td>Vegetable Oil</td>
<td>3,234</td>
<td>5</td>
</tr>
<tr>
<td>Fish</td>
<td>506</td>
<td>-50</td>
</tr>
<tr>
<td>Eggs</td>
<td>729</td>
<td>21</td>
</tr>
<tr>
<td>Pork</td>
<td>227</td>
<td>346</td>
</tr>
<tr>
<td>Beef</td>
<td>11</td>
<td>1274</td>
</tr>
</tbody>
</table>

Source: Customs (Ministry of Finance)

**Agricultural Exports**
A look at the exports of agricultural commodities show a significant in the first quarter of 2021 compared to the previous quarter, however, the current reference period has much lower traded volumes compared to the third quarter of 2020. During the reference period, Arabica coffee at 318 metric tonnes was the most traded commodity seconded by candelnut (252 mt) then dry coconut (199 mt)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabica Coffee</td>
<td>1,526</td>
<td>45</td>
</tr>
<tr>
<td>Candelnut</td>
<td>436</td>
<td>73</td>
</tr>
<tr>
<td>Dry Coconut</td>
<td>390</td>
<td>107</td>
</tr>
<tr>
<td>Conjac</td>
<td></td>
<td>102</td>
</tr>
<tr>
<td>Robusta Coffee</td>
<td>127</td>
<td>29</td>
</tr>
<tr>
<td>Cashew</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: DNQB (MAF)
Access

Nominal rice prices
The first quarter of 2021 saw an upward trend in the price of both imported and local rice, on account of relatively low supplies on the local market as well as supply chain disruptions due to physical accessibility challenges during the rainy season. The uptick in price was more pronounced towards the end of March and the beginning of April, as the devastating floods left significant ‘near-harvest’ rice fields destroyed and rendered supply routes impassable.

Imported rice averaged 0.57 US$/kg in the first quarter of 2021, an increase of 6 percent compared to the previous period; During the reference period local rice averaged 1.39 US$/kg, an increase of 14 percent compared to the previous period.

Looking ahead, the nominal price of rice is likely to slow down in the second quarter of 2021 as harvest season sets in, however the production losses due to floods are likely to tighten supply. In addition, the direction and magnitude will partly depend on level of market intervention and food assistance programs from government and partners as they respond to impacts of floods and COVID-19 pandemic.

Rice and Maize price index
The local price index for local rice (2018=100) averaged 123.9 points in the first quarter of 2021, up 12 percent from previous quarter, the highest value in the current series. Similar increase was observed for imported rice at 4 percent compared to the previous period, and maize price index continues to remain non-responsive, remaining at 0.96 points for fourth time in a row. The imbalance on the supply side are likely the leading cause for the upsurge in rice prices, coming at a typical lean season, and also supply routes being impacted by the floods and COVID-19 confinement rules.

International Rice Prices
Using the FAO All Rice Index as a measure of international rice prices, the Index (2014-2016) reached an all high in February 2021, averaging 116.0 points which is 11.4 percent higher than a year earlier. Since then, sharp monthly drops have been observed with the April value at 3.6 percent below its levels in April 2020. This may signify a good moment to import as 2021 harvests are entering their final stages.

Utilization

Nutrition status of the general under-five population
In terms of the general under-five population, the 2020 Food and Nutrition Survey (FNS) found that 47.1 percent of the children were stunted, which is in ‘very high’ category according to WHO standards. Underweight was calculated at 32.4 percent and wasting at 8.6 percent (a medium level category).
Nutrition Status of Under-5 Children who had Accessed a Health Centre

Based on the Health Management Information System, the number of under-five children that accessed the health facility increased to 66 percent in the first quarter of 2021 from 61 percent in the previous quarter.

In terms of the nutrition status of the under-five children that accessed the health centre in the first quarter of 2021; the percentage who were underweight (moderate and severe) remained almost the same at 6 percent. While those that were wasted there was a marginal decrease from 2 percent to 1 percent.

Climate and Earth Observation

Rainfall Distribution

In the first quarter of 2021, the country experienced significant rainfall amounts ranging from 400mm to 681mm (normal rainfall amounts are usually between 200mm to 400mm) which caused massive flooding and damage to agriculture infrastructure and other sectors in early April.

As show in Figure 10 below, the first quarter saw rainfall amounts being significantly above normal.

Vegetation Health Index

The Vegetation Health Index (VHI) provides the severity of drought based on the vegetation health and influence of temperature on plant conditions. A decrease in the VHI would indicate relatively poor vegetation conditions and warmer temperatures, signifying stressed vegetation conditions.

Seasonal Forecast

Based on the European Centre for Medium-Range Weather Forecasts, the three-month forecast issued May 2021 for the period June to August 2021, shows a highly increase chance of wet season on the western side of the country and a moderately increased chance of unusually wet season on the eastern side.
Policy Response

The Government’s COVID-19 economic recovery plan includes several social protection measures. In May/June 2020, government provided cash transfers to over 300,000 households, and then later in the year initiated ‘Cesta Basika’, a basic basket of in-kind/voucher support for individuals valued up to US$ 50 for two months. The MSSI and Civil Protection continues to provide food support, predominately rice, to vulnerable groups, including the elderly, disabled and students.

The other economic recovery effort includes the purchase of additional food reserves, both domestically and on the international market valued at US$ 12 million in 2021. The National Logistics Centre has embarked on providing 1,000 metric tonnes of rice to each municipality as part of market intervention (subsidised) programme.