



## Information brief



Photo credit: Etienne Voss/Getty images

## Imports of rice and wheat flour in selected Pacific Island countries and territories

Nilima Lal, Economic Statistics Adviser, Statistics for Development Division, Pacific Community

### A. Introduction

Rice and wheat flour are important food items imported by Pacific Island countries and territories (PICTs).

This information brief explores the levels and trends of imports of these items in eight PICTs where data were available, namely Cook Islands, Fiji, French Polynesia, Kiribati, Papua New Guinea (PNG), Samoa, Tonga and Tuvalu.

Rice and wheat flour classified according to the Pacific Harmonized Commodity Description and Coding System 2017 (PACHS17),<sup>1</sup> as illustrated in Table 1, was used for the analysis. This ensured that all types of rice (e.g. long grain and broken) in every country was selected for the study. Use of the PACHS17 also allowed the analysis of the imports of rice be calculated as a per cent of total *cereals* imported and wheat flour as a per cent of all *the products of the milling industry*<sup>2</sup> imported, highlighting the significance of the imports of these commodities compared to all other commodities in their respective PACHS17 categories.

Table 1: Classification of rice and wheat flour in the PACHS17

| PACHS17      | Description | PACHS17      | Description  |
|--------------|-------------|--------------|--|
| Chapter 10   | Cereals     | Chapter 11   | Products of the milling industry; malt; starches; inulin; wheat gluten |
| Heading:1006 | Rice        | Heading:1101 | Wheat or meslin flour <sup>3</sup>                                     |

For details on other commodities included in Chapter 10, refer to Appendix 1 and for those in Chapter 11, Appendix 2.

Section B provides a regional perspective of the imports of rice and wheat flour based on data reported by the eight countries. According to SPC's 2018 and 2020 midyear population estimates (Appendix 3) it was estimated

<sup>1</sup> PACHS17 has been derived from the World Customs Organization's multipurpose international goods nomenclature.

<sup>2</sup> The milling industry also imports malt; starches; inulin; wheat gluten.

<sup>3</sup> Includes sharps and flour.

that these countries cover around 86 per cent of the Pacific<sup>4</sup> region's population. The data are therefore considered to be a reasonable regional overview of import trends for these commodities.

Section C provides individual country perspectives on the value of imports of rice and wheat flour and their percentage contribution to the total imports in their respective PACHS17 categories. The analysis further looks at the trends in the imports of the two commodities and between the two of them the share of imports of each. It also looks at the per capita imports of both commodities for 2018 and 2020. The reasons for the fluctuations in the imports of rice and wheat flour could not be provided by the countries but are assumed to be mostly related to domestic demand in the countries driven by conditions prevailing in the producing countries, domestic and foreign prices and exchange rates, weather conditions and catastrophic events. Each country analysis concludes with a table that provides data, including the value of imports in national currencies, of the two commodities.

Section D provides a brief summary of the findings discussed in the paper and the conclusion.

The paper also includes three appendices. Appendix 1 supplies details of the commodities classified in Chapter 10 under Cereals in the PACHS17. Appendix 2 supplies details of the commodities classified in Chapter 11 under Products of the milling industry; malt; starches; inulin; wheat gluten in the PACHS17. Appendix 3 supplies information on all PICTs midyear population estimate; as well as land area, population density and average annual growth rate.

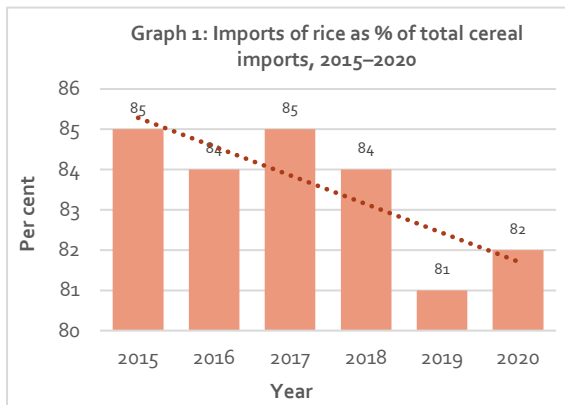
**Note: totals in this brief are subject to rounding errors and data for more recent years are provisional and subject to revisions.**

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<sup>4</sup> Excludes Australia and New Zealand.

## B. Regional analysis

The study targeted the analysis of data for the 11-year period, 2010–2020. Unfortunately, Cook Islands was unable to provide data prior to 2015; therefore, for the regional analysis, data for the years 2015–2020 have been used. Further it should be noted that only imports of rice as a per cent of total cereal imports and imports of wheat flour as a per cent of total milling industry imports are shown.

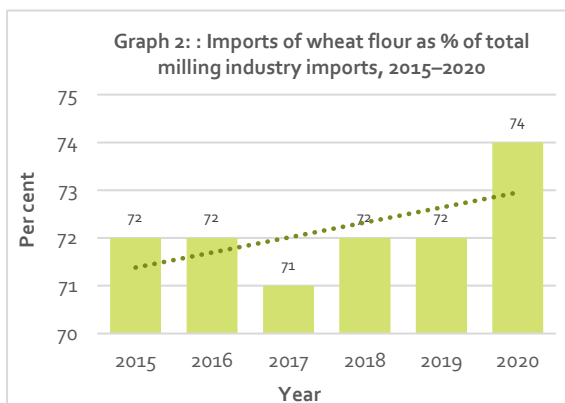


cent in 2015 to 82 per cent in 2020.

### Rice imports

Graph 1 shows that rice was the main cereal imported by PICTs from 2015 to 2020. The 6-year average (2015–2020) shows that rice amounted to 84 per cent of the total value of cereals imported.

Imports of rice as a share of the total cereals showed little year-to-year variation during the period: it was highest at 85 per cent in 2015 and 2017 and lowest at 81 per cent in 2019. Overall, rice imports as a proportion of the total show a declining trend; a decline of 3 percentage points from 85 per

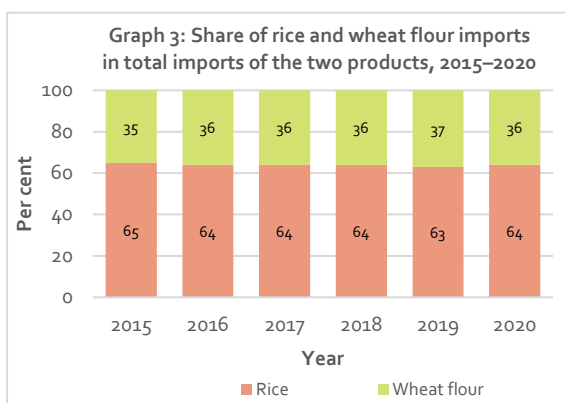


### Wheat flour imports

Graph 2 shows that wheat flour was the main product of the milling industry imported by PICTs from 2015 to 2020. The 6-year (2015–2020) average shows that imports of wheat flour amounted to 72 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a share of total milling industry showed little year-to-year variation during the period: it was highest at 74 per cent in 2020 and lowest at 71 per cent in 2017.

Overall, wheat flour imports as a proportion of the total showed an increasing trend; an increase of 2 percentage points from 72 per cent in 2015 to 74 per cent in 2020.



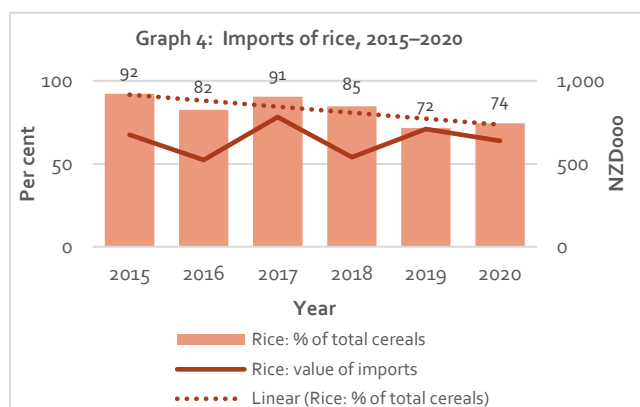
### Share of rice and wheat flour imports

Graph 3 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively constant.

The 6-year (2015–2020) average shows that of the total imports of rice and wheat flour, rice amounted to 64 per cent and wheat flour 36 per cent.

## C. Country analysis

### Cook Islands



#### Rice imports

Rice is the main cereal imported by Cook Islands.

Graph 4 shows imports of rice in absolute values as well as its share in per cent of total cereals imported from 2015 to 2020.

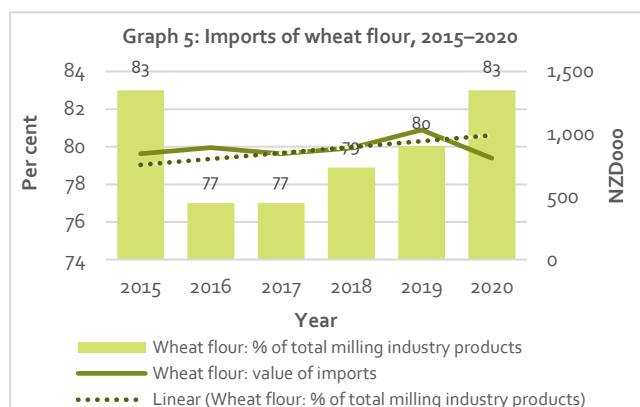
In terms of the value of imports, the highest value of rice imported was NZD 782,000 in 2017 and the lowest was NZD 523,000 in 2016. Imports of rice showed a lot of variation over the years: the greatest increase was 50 per cent from 2016 to 2017 and the greatest decline was

31 per cent from 2017 to 2018.

In terms of its contribution to total cereals imported, the 6-year (2015–2020) average shows that rice amounted to 83 per cent of the total value of cereals imported.

Imports of rice as a share of the total cereals showed some year-to-year variation during the period: it was highest at 92 per cent of the total value in 2015 and lowest at 72 per cent in 2019. Overall, rice imports as a proportion of the total showed a declining trend; a decline of 18 percentage points from 92 per cent in 2015 to 74 per cent in 2020.

Per capita imports of rice in Cook Islands stood at NZD 36 in 2018 and NZD 42 in 2020. The 17 per cent increase in per capita rice imports is driven by an increase in the value of rice imports.



#### Wheat flour imports

Wheat flour is the main milling industry product imported by Cook Islands.

Graph 5 shows imports of wheat flour in absolute values as well as its share in per cent of total milling industry products imported from 2015 to 2020.

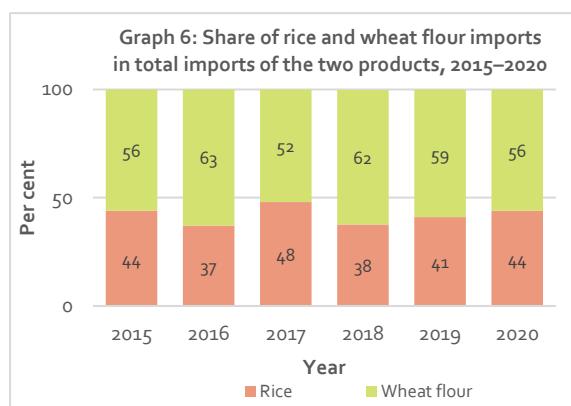
In terms of the value of imports, the highest value of wheat flour imported was NZD 1.034 million in 2019 and the lowest value was NZD 0.808 million in 2020. Imports of wheat flour did not show much fluctuation except in

2019 when compared to 2018 imports increased by 16 per cent but then declined by 22 per cent in 2020 compared to 2019 to return to its normal level.

In terms of its contribution to total milling industry products imported, the 6-year (2015–2020) average shows that wheat flour amounted to 80 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a share of total milling industry imports showed slight year-to-year variations during the period: it was highest at 83 per cent of the total value in 2015 and 2020 and lowest at 77 per cent in 2016 and 2017. Overall, wheat flour imports as a proportion of total milling industry imports showed an increasing trend; after a 6-percentage point decline from 83 per cent in 2015 to 77 per cent in 2016 and 2017, share of wheat flour then gradually increased from 77 per cent in 2017 to reach 83 per cent of the total again in 2020.

Per capita imports of wheat flour in Cook Islands stood at NZD 59 in 2018 and NZD 53 in 2020. The 10 per cent decline in per capita wheat flour imports was driven by a decline in the value of wheat flour imports.



### Share of rice and wheat flour imports

Graph 6 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively steady.

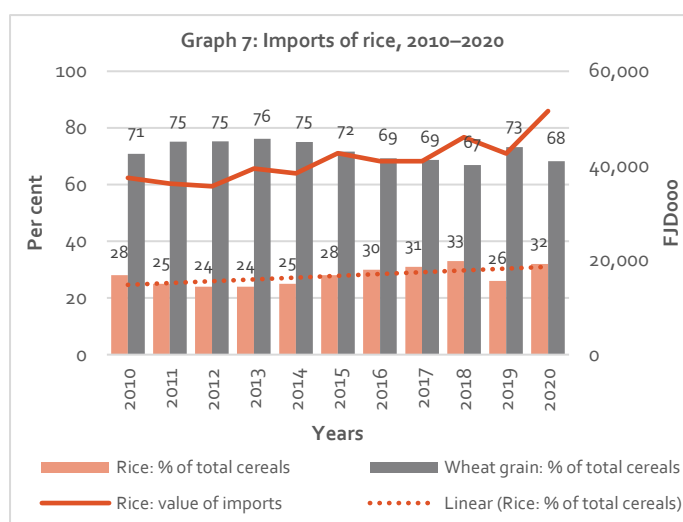
The 6-year (2015–2020) average shows that of the total imports of rice and wheat flour, wheat flour was 58 per cent and rice was 42 per cent.

Table 2: Imports of rice and wheat flour

| Cook Islands                       |  |            | 2010 | 2011 | 2012 | 2013 | 2014 | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|------------------------------------|--|------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Chapter 10                         | Total cereals  | NZ\$ [000] | na   | na   | na   | na   | na   | 733   | 634   | 864   | 637   | 991   | 858   |
| Heading:1006                       | Rice   |            | na   | na   | na   | na   | na   | 675   | 523   | 782   | 539   | 709   | 639   |
|                                    | Rice: % of total cereals                                 | %          | na   | na   | na   | na   | na   | 92    | 82    | 91    | 85    | 72    | 74    |
| Chapter 11                         | Total products of the milling industry                   | NZ\$ [000] | na   | na   | na   | na   | na   | 1,021 | 1,152 | 1,100 | 1,128 | 1,292 | 971   |
| Heading:1101                       | Wheat flour  |            | na   | na   | na   | na   | na   | 843   | 892   | 844   | 890   | 1,034 | 808   |
|                                    | Wheat flour: % of total products of the milling industry | %          | na   | na   | na   | na   | na   | 83    | 77    | 77    | 79    | 80    | 83    |
| Total rice and wheat flour imports |  | NZ\$ [000] | na   | na   | na   | na   | na   | 1,518 | 1,415 | 1,626 | 1,429 | 1,743 | 1,447 |
|                                    | of which: Rice imports                                   | %          | na   | na   | na   | na   | na   | 44    | 37    | 48    | 38    | 41    | 44    |
|                                    | Wheat flour imports                                      |            | na   | na   | na   | na   | na   | 56    | 63    | 52    | 62    | 59    | 56    |

## Fiji

While looking at the import data of rice and wheat flour of Fiji, it was observed that wheat grains and not rice (which is also domestically produced) is the major cereal imported. It was also noted that imports of wheat flour were negligible because imported wheat grains were processed into flour for domestic consumption and exported to other PICTs. This paper focusses on the imports of rice and wheat flour, however supplementary information is provided on the imports of wheat grains (Graph 7), production of paddy rice (Graph 8), production of wheat flour (Graph 10) and exports of wheat flour (Graph 11).



### Rice imports

Wheat grain and not rice was the main cereal imported by Fiji.

Graph 7 shows imports of rice in absolute values as well as its share in per cent of total cereals imported from 2010 to 2020.

In terms of the value of imports, the highest value of rice imported was FJD 51.576 million in 2020 and the lowest value was FJD 35.645 million in 2012. Imports of rice showed little fluctuation throughout the period: the greatest increase was 21 per cent from 2019 to 2020 and the greatest decline was 7 per cent from 2018 to 2019.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 28 per cent of the total value of cereals imported, compared to an average of 72 per cent for wheat grain.

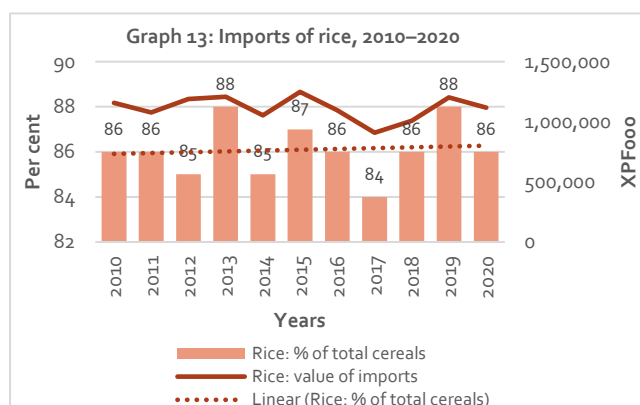
Imports of rice as a share of the total cereals showed slight year-to-year variations during the period: it was highest at 33 per cent of the total value in 2018 and lowest at 24 per cent in 2012 and 2013. Overall, rice imports as a







## French Polynesia



### Rice imports

Rice is the main cereal imported by French Polynesia.

Graph 13 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2010 to 2020.

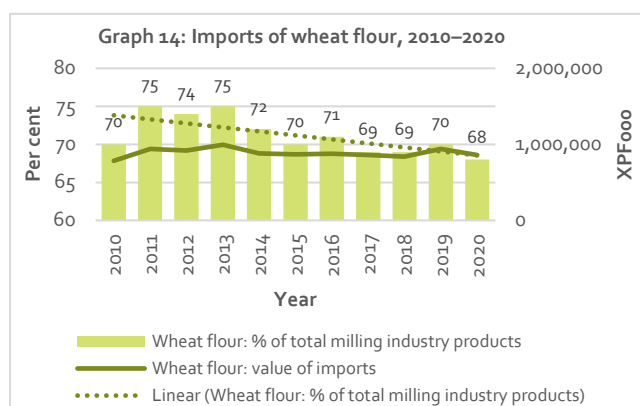
In terms of the value of imports, the highest value of rice imported was XPF 1,248.3 million in 2015 and the lowest value was XPF 908.8 million in 2017. Imports of rice showed considerable variation over the years; the highest year-on-year increase was 19 per cent between

2014 to 2015 and between 2018 to 2019. The highest decline was 17 per cent between 2016 to 2017.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 86 per cent of the total value of cereals imported.

Imports of rice as a share of total cereals imported showed slight year-to-year variations during the period: it was highest at 88 per cent of the total value in 2013 and 2019 and lowest at 84 per cent in 2017. Overall, rice imports as a proportion of the total show a very slight upward trend.

Per capita imports of rice in French Polynesia stood at XPF 3642 in 2018 and XPF 4004 in 2020. The 10 per cent increase in per capita rice imports was driven by an increase in the value of rice imports.



### Wheat flour imports

Wheat flour is the main milling industry product imported by French Polynesia.

Graph 14 shows imports of wheat flour in absolute values as well as a proportion of total milling industry products imported between 2010 to 2020.

In terms of the value of imports, the highest value of wheat flour imported was XPF 994.8 million in 2013 and the lowest value was XPF 783.5 million in 2010. Imports of wheat flour showed small variations over the years;

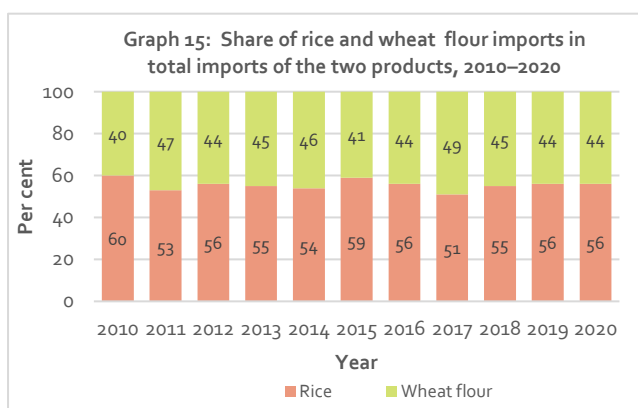
the greatest increase was 20 per cent from 2010 to 2011 and the greatest decline was 11 per cent from 2013 to 2014.

In terms of its contribution to total milling industry products imported, the 11-year (2010–2020) average shows that wheat flour amounted to 71 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a proportion of total milling industry imports showed slight year-to-year variations during the period: it was highest at 75 per cent of the total value in 2011 and 2013 and lowest at 68 per cent in 2020. Overall, wheat flour imports as a proportion of the total showed a declining trend; a decline of 2 percentage points from 70 per cent in 2010 to 68 per cent in 2020.

Per capita imports of wheat flour in French Polynesia stood at XPF 3032 in 2018 and XPF 3085 in 2020. The 2 per cent increase in per capita wheat flour imports was driven by an increase in the value of wheat flour imports.





## Share of rice and wheat flour imports

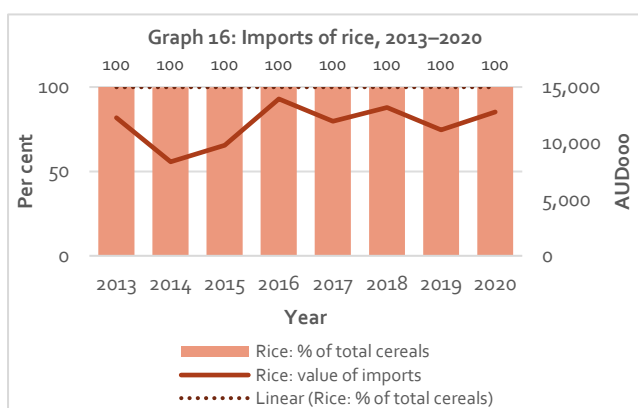
Graph 15 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively steady.

The 11-year (2010–2020) average shows that of the total imports of rice and wheat flour, rice was 56 per cent and wheat flour was 44 per cent.

**Table 4: Imports of rice and wheat flour**

| French Polynesia |  |                  | 2010             | 2011             | 2012             | 2013             | 2014             | 2015             | 2016             | 2017             | 2018             | 2019             | 2020             |
|------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Chapter 10       | Total cereals  | XPF [000]        | 1,341,615        | 1,255,113        | 1,399,787        | 1,377,468        | 1,238,388        | 1,436,322        | 1,281,123        | 1,077,423        | 1,173,085        | 1,370,190        | 1,296,070        |
| Heading:1006     | Rice   |                  | 1,156,520        | 1,076,493        | 1,188,272        | 1,207,076        | 1,052,107        | 1,248,310        | 1,096,566        | 908,837          | 1,008,530        | 1,201,350        | 1,116,604        |
|                  | Rice: % of total cereals                                 | %                | 86               | 86               | 85               | 88               | 85               | 87               | 86               | 84               | 86               | 88               | 86               |
| Chapter 11       | Total products of the milling industry                   | XPF [000]        | 1,124,772        | 1,245,042        | 1,245,810        | 1,324,679        | 1,223,534        | 1,235,059        | 1,229,080        | 1,248,852        | 1,215,500        | 1,335,752        | 1,258,952        |
| Heading:1101     | Wheat flour  |                  | 783,496          | 939,051          | 917,415          | 994,817          | 880,415          | 870,089          | 876,449          | 861,601          | 839,574          | 938,279          | 860,514          |
|                  | Wheat flour: % of total products of the milling industry | %                | 70               | 75               | 74               | 75               | 72               | 70               | 71               | 69               | 69               | 70               | 68               |
|                  | <b>Total rice and wheat flour imports</b>                | <b>XPF [000]</b> | <b>1,940,016</b> | <b>2,015,544</b> | <b>2,105,687</b> | <b>2,201,893</b> | <b>1,932,522</b> | <b>2,118,399</b> | <b>1,973,015</b> | <b>1,770,438</b> | <b>1,848,104</b> | <b>2,139,629</b> | <b>1,977,118</b> |
|                  | of which: Rice imports                                   | %                | 60               | 53               | 56               | 55               | 54               | 59               | 56               | 51               | 55               | 56               | 56               |
|                  | Wheat flour imports                                      |                  | 40               | 47               | 44               | 45               | 46               | 41               | 44               | 49               | 45               | 44               | 44               |

## Kiribati



## Rice imports

Rice is the main cereal imported by Kiribati.

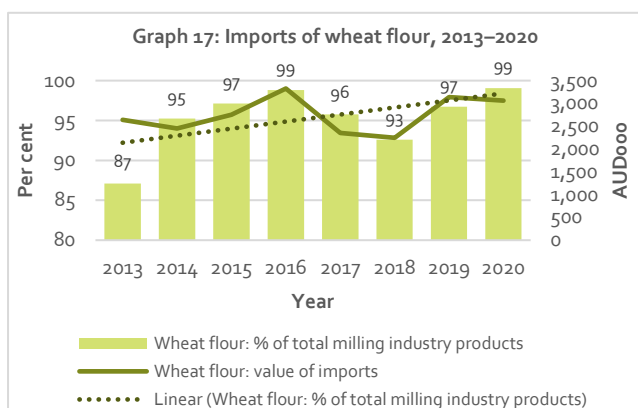
Graph 16 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2013 to 2020.

In terms of the value of imports, the highest value of rice imported was AUD 13.943 million in 2016 and the lowest value was AUD 8.356 million in 2014. Imports of rice showed a significant decline of 32 per cent from 2013 to 2014. The highest growth recorded was 42 per cent

from 2015 to 2016.

In terms of its contribution to total cereals imported, the 8-year (2013–2020) average shows that rice amounted to 100 per cent of the total value of cereals imported for all the years.

Per capita imports of rice in Kiribati stood at AUD 115 in 2018 and AUD 108 in 2020. The 6 per cent decline in per capita rice imports was driven by a decline in the value of rice imports.



## Wheat flour imports

Wheat flour is the main milling industry product imported by Kiribati.

Graph 17 shows imports of wheat flour in absolute values as well as its share in per cent to total milling industry products imported from 2013 to 2020.

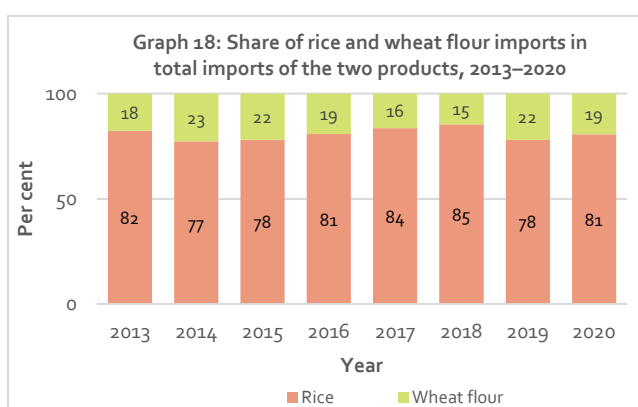
In terms of the value of imports, the highest value of wheat flour imported was AUD 3.327 million in 2016 and the lowest value was AUD 2.246 million in 2018. Imports of wheat flour showed small to moderate variations

over the years: the greatest increase was 34 per cent from 2018 to 2019 and the greatest decline was 27 per cent from 2016 to 2017.

In terms of its contribution to total milling industry products imported, the 8-year (2013–2020) average shows that wheat flour amounted to 95 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a proportion of total milling industry imports showed slight year-to-year variations during the period: it was highest at 99 per cent of the total value in 2016 and 2020 and lowest at 87 per cent in 2013. Overall, wheat flour imports as a proportion of the total showed an upward trend; an increase of 12 percentage points from 87 per cent in 2013 to 99 per cent in 2020.

Per capita imports of wheat flour in Kiribati stood at AUD 20 in 2018 and AUD 26 in 2020. The 30 per cent increase in per capita wheat flour imports was driven by an increase in the value of wheat flour imports.



## Share of rice and wheat flour imports

Graph 18 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively steady.

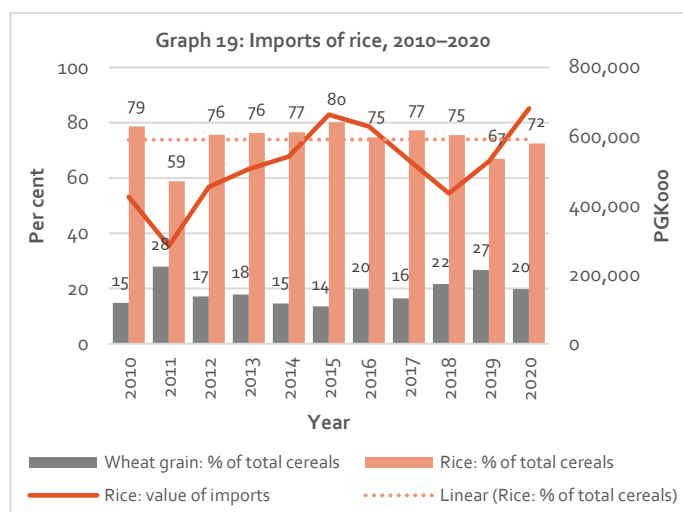
The 8-year (2013–2020) average shows that of the total imports of rice and wheat flour, rice was 81 per cent and wheat flour was 19 per cent.

**Table 5: Imports of rice and wheat flour**

| Kiribati   |   |            | 2010 | 2011 | 2012 | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|--|---|------------|------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| Chapter 10                                       | Total cereals                                     | AU\$ [000] | na   | na   | na   | 12,285 | 8,364  | 9,853  | 13,946 | 11,973 | 13,195 | 11,206 | 12,797 |
| Heading:1006                                     | Rice: value of imports                            |            | na   | na   | na   | 12,278 | 8,356  | 9,837  | 13,943 | 11,965 | 13,185 | 11,194 | 12,791 |
|  | Rice: % of total cereals                          | %          | na   | na   | na   | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    |
| Chapter 11                                       | Total products of the milling industry            | AU\$ [000] | na   | na   | na   | 3,028  | 2,571  | 2,836  | 3,367  | 2,455  | 2,426  | 3,242  | 3,090  |
| Heading:1101                                     | Wheat flour: value of imports                     |            | na   | na   | na   | 2,638  | 2,449  | 2,755  | 3,327  | 2,351  | 2,246  | 3,136  | 3,061  |
|  | Wheat flour: % of total milling industry products | %          | na   | na   | na   | 87     | 95     | 97     | 99     | 96     | 93     | 97     | 99     |
| Total rice, wheat grains and wheat flour imports |   | AU\$ [000] | na   | na   | na   | 14,916 | 10,805 | 12,592 | 17,270 | 14,316 | 15,431 | 14,330 | 15,852 |
| of which:  | Rice imports                                      | %          | na   | na   | na   | 82     | 77     | 78     | 81     | 84     | 85     | 78     | 81     |
|  | Wheat flour imports                               |            | na   | na   | na   | 18     | 23     | 22     | 19     | 16     | 15     | 22     | 19     |

## Papua New Guinea

PNG not only imports rice and wheat flour, but also imports wheat grains and mills them into flour therefore imports of wheat grains are provided as supplementary information in Graph 19.



### Rice imports

Rice is the main cereal imported by PNG.

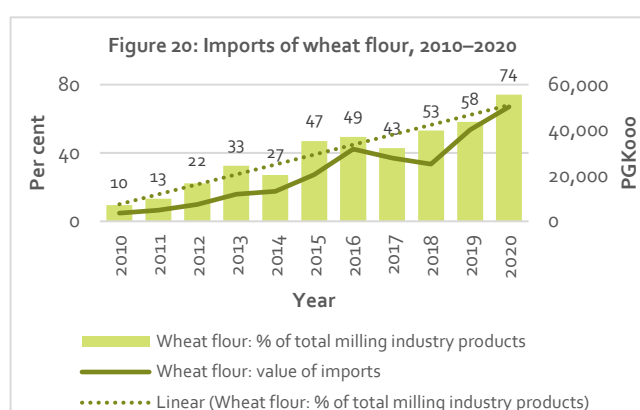
Graph 19 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2010 to 2020.

In terms of the value of imports, the highest value of rice imported was PGK 681.216 million in 2020 and the lowest value was PGK 283.129 million in 2011. Imports of rice showed a decline of 33 per cent from 2010 to 2011 and 18 per cent from 2017 to 2018. The highest year-on-year increase was 60 per cent from 2011 to 2012.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 74 per cent of the total value of cereals imported.

Except for 2011 when rice imports declined by 20 percentage points from 79 per cent in 2010 to 59 per cent in 2011, imports of rice as a share of the total cereals showed slight year-to-year variations during the period: it was highest at 80 per cent of the total value in 2015 and lowest at 59 per cent in 2011. Overall, rice imports as a proportion of the total show a somewhat flat trend.

Per capita imports of rice in PNG stood at PGK 51 in 2018 and PGK 76 in 2020. The 49 per cent increase in per capita rice imports was driven by the value of rice imports.



### Wheat flour imports

Wheat flour is the main milling industry product imported by PNG.

Graph 20 shows imports of wheat flour in absolute values as well as its share in per cent to total milling industry products imported from 2010 to 2020.

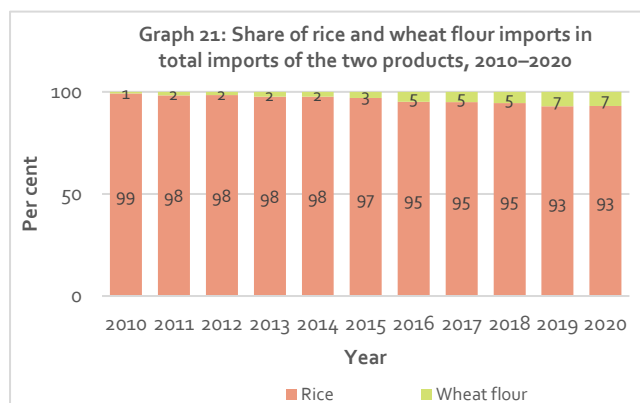
In terms of the value of imports, the highest value of wheat flour imported was PGK 50.256 million in 2020 and the lowest value was PGK 3.590 million in 2010. Imports of wheat flour showed moderate increases during the period except from 2016 to 2017 when it registered a decline of 13 per cent and 2017 to 2018, a decline of 10 per cent.

The highest year-on-year increase was 60 per cent from 2012 to 2013 and again between 2018 to 2019.

In terms of its contribution to total milling industry products imported, the 11-year (2010–2020) average shows that wheat flour amounted to 39 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a proportion of total milling industry imports showed considerable year-to-year variations during the period: it was highest at 74 per cent in 2020 and lowest at 10 per cent in 2010. Overall, wheat flour imports as a proportion of the total showed an increasing trend; an increase of 64 percentage points from 10 per cent in 2010 to 74 per cent in 2020.

Per capita imports of wheat flour in PNG stood at PKG 3 in 2018 and PKG 6 in 2020. The 100 per cent increase in per capita wheat flour imports was driven by an increase in the value of wheat flour imports.



### Share of rice and wheat flour imports

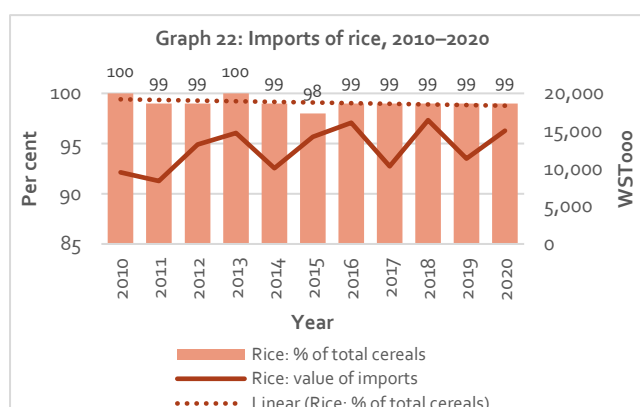
Graph 21 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively stable.

The 11-year (2010–2020) average shows that of the total imports of rice and wheat flour, rice was 96 per cent and wheat flour was 4 per cent.

Table 6: Imports of rice and wheat flour

| Papua New Guinea                   |  |            | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    |
|------------------------------------|--|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Chapter 10                         | Total cereals  |            | 540,455 | 481,343 | 600,172 | 661,882 | 708,488 | 827,406 | 841,756 | 689,268 | 577,231 | 787,946 | 939,905 |
| Heading:1001                       | Wheat grain  | Kina [000] | 79,786  | 134,518 | 102,442 | 117,801 | 103,569 | 111,703 | 167,874 | 113,260 | 125,104 | 210,317 | 186,199 |
| Heading:1006                       | Rice   |            | 424,832 | 283,129 | 453,828 | 505,548 | 542,372 | 663,220 | 628,933 | 532,169 | 435,589 | 527,858 | 681,216 |
|                                    | Wheat grain: % of total cereals                          | %          | 15      | 28      | 17      | 18      | 15      | 14      | 20      | 16      | 22      | 27      | 20      |
|                                    | Rice: % of total cereals                                 | %          | 79      | 59      | 76      | 76      | 77      | 80      | 75      | 77      | 75      | 67      | 72      |
| Chapter 11                         | Total products of the milling industry                   | Kina [000] | 37,568  | 36,640  | 33,512  | 36,650  | 48,479  | 43,596  | 64,343  | 64,863  | 47,149  | 68,934  | 67,716  |
| Heading:1101                       | Wheat flour  |            | 3,590   | 4,848   | 7,459   | 11,925  | 13,102  | 20,492  | 31,730  | 27,752  | 25,080  | 40,127  | 50,256  |
|                                    | Wheat flour: % of total products of the milling industry | %          | 10      | 13      | 22      | 33      | 27      | 47      | 49      | 43      | 53      | 58      | 74      |
| Total rice and wheat flour imports |  | Kina [000] | 428,422 | 287,977 | 461,287 | 517,473 | 555,474 | 683,712 | 660,663 | 559,921 | 460,669 | 567,985 | 731,472 |
| of which:                          | Rice imports   | %          | 99      | 98      | 98      | 98      | 98      | 97      | 95      | 95      | 95      | 93      | 93      |
|                                    | Wheat flour imports                                      | %          | 1       | 2       | 2       | 2       | 2       | 3       | 5       | 5       | 5       | 7       | 7       |

## Samoa



### Rice imports

Rice is the main cereal imported by Samoa.

Graph 22 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2010 to 2020.

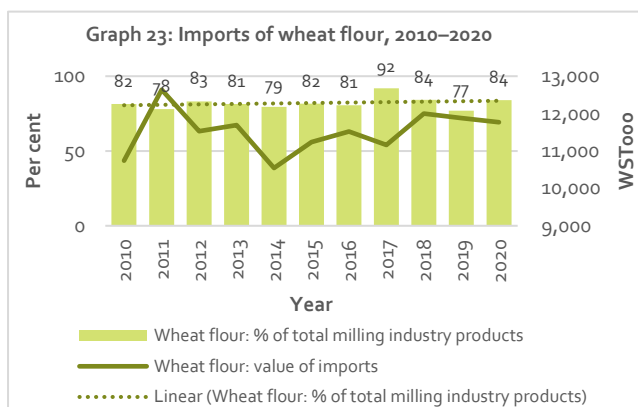
In terms of the value of imports, the highest value of rice imported was WST 16.442 million in 2018 and the lowest value was WST 8.365 million in 2011. Imports of rice showed considerable variations during the period: the highest annual increase was 60 per cent from 2017

to 2018 and the largest decline was 36 per cent from 2016 to 2017.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 99 per cent of the total value of cereals imported.

Imports of rice as a share of the total cereals showed very little year-to-year variations during the period: it was highest at 100 per cent in 2010 and 2013 and lowest at 98 per cent in 2015. Overall, rice imports as a proportion of the total show a slight downward trend; a decline of 1 percentage point from 100 per cent in 2010 to 99 per cent in 2020.

Per capita imports of rice in Samoa stood at WST 84 in 2018 and WST 76 in 2020. The 10 per cent decline in per capita rice imports was driven by a decline in the value of rice imports.



### Wheat flour imports

Wheat flour is the main milling industry product imported by Samoa.

Graph 23 shows imports of wheat flour in absolute values as well as its share in per cent of total milling industry products imported from 2010 to 2020.

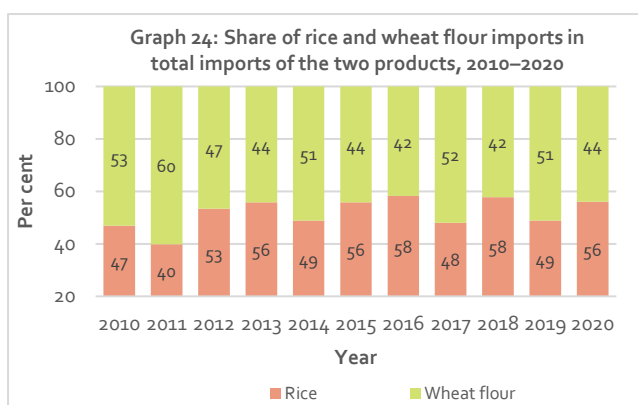
In terms of the value of imports, the highest value of wheat flour imported was WST 12.638 million in 2011 and the lowest value was WST 10.744 million in 2010. Imports of wheat flour grew by 18 per cent from 2010 to

2011 and declined by 10 per cent from 2013 to 2014.

In terms of its contribution to total milling industry products imported, the 11-year (2010–2020) average shows that wheat flour amounted to 82 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a share of proportion of total milling industry imports showed some year-to-year variations during the period: it was highest at 92 per cent of the total value in 2017 and lowest at 77 per cent in 2019. Overall, wheat flour imports as a proportion of the total showed a slight upward trend; an increase of 2 percentage points from 82 per cent in 2010 to 84 per cent in 2020.

Per capita imports of wheat flour in Samoa stood at WST 61 in 2018 and WST 59 in 2020. The 3 per cent decline in per capita wheat flour imports was driven by the value of wheat flour imports.



### Share of rice and wheat flour imports

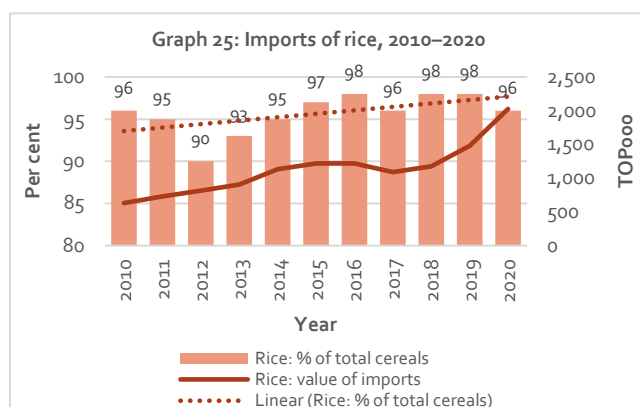
Graph 24 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice and wheat flour have remained relatively steady.

The 11-year (2010–2020) average shows that of the total imports of rice and wheat flour, rice was 52 per cent and wheat flour was 48 per cent.

Table 7: Imports of rice and wheat flour

| Samoa                                     |   |            | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|---|---|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Chapter 10</b>                         | <b>Total cereals</b>                              | Tala [000] | 9,554  | 8,419  | 13,286 | 14,832 | 10,164 | 14,447 | 16,208 | 10,446 | 16,613 | 11,483 | 15,182 |
| Heading:1006                              | Rice: value of imports                            |            | 9,524  | 8,365  | 13,206 | 14,759 | 10,072 | 14,223 | 16,101 | 10,308 | 16,442 | 11,357 | 15,047 |
|   | Rice: % of total cereals                          | %          | 100    | 99     | 99     | 100    | 99     | 98     | 99     | 99     | 99     | 99     | 99     |
| <b>Chapter 11</b>                         | <b>Total products of the milling industry</b>     | Tala [000] | 13,182 | 16,181 | 13,857 | 14,365 | 13,276 | 13,756 | 14,305 | 12,155 | 14,247 | 15,459 | 13,999 |
| Heading:1101                              | Wheat flour: value of imports                     |            | 10,744 | 12,638 | 11,528 | 11,690 | 10,545 | 11,240 | 11,521 | 11,163 | 12,002 | 11,880 | 11,768 |
|   | Wheat flour: % of total milling industry products | %          | 82     | 78     | 83     | 81     | 79     | 82     | 81     | 92     | 84     | 77     | 84     |
| <b>Total rice and wheat flour imports</b> |   | Tala [000] | 20,268 | 21,003 | 24,734 | 26,449 | 20,617 | 25,463 | 27,622 | 21,471 | 28,444 | 23,237 | 26,815 |
| <b>of which:</b>                          | Rice imports                                      | %          | 47     | 40     | 53     | 56     | 49     | 56     | 58     | 48     | 58     | 49     | 56     |
|   | Wheat flour imports                               | %          | 53     | 60     | 47     | 44     | 51     | 44     | 42     | 52     | 42     | 51     | 44     |

## Tonga



### Rice imports

Rice is the main cereal imported by Tonga.

Graph 25 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2010 to 2020.

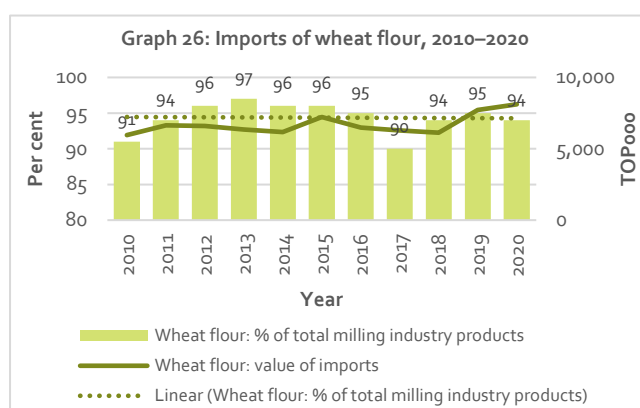
In terms of the value of imports, the highest value of rice imported was TOP 2.026 million in 2020 and the lowest value was TOP 0.631 million in 2010. Imports of rice showed an increasing trend despite a 10 per cent decline from 2016 to 2017. The highest annual increase was 37

per cent from 2019 to 2020.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 96 per cent of the total value of cereals imported.

Imports of rice as a share of the total cereals showed some year-to-year variations during the period: it was highest at 98 per cent of the total value in 2016, 2018 and 2019 and lowest at 90 per cent in 2012. Overall, rice imports as a proportion of the total show an increasing trend; after a 6-percentage point decline from 96 per cent in 2010 to 90 per cent in 2012 share of rice then gradually increased by 6 percentage points from 90 per cent in 2012 to reach 96 per cent in 2020.

Per capita imports of rice in Tonga stood at TOP 12 in 2018 and TOP 20 in 2020. The 67 per cent increase in per capita rice imports is driven by an increase in the value of rice imports.



### Wheat flour imports

Wheat flour is the main milling industry product imported by Tonga.

Graph 26 shows imports of wheat flour in absolute values as well as its share in per cent to total milling industry products imported from 2010 to 2020.

In terms of the value of imports, the highest value of wheat flour imported was TOP 8.116 million in 2020 and the lowest value was TOP 5.959 million in 2010. Imports of wheat flour showed some variation over the years:

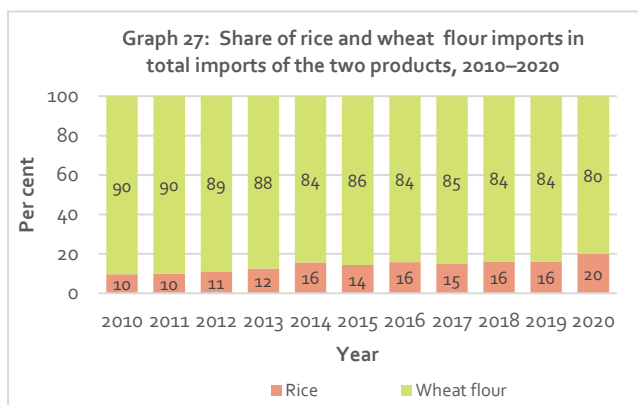
the largest annual increase was 37 per cent from 2019 to 2020 and the biggest annual decline was 10 per cent from 2015 to 2016.

In terms of its contribution to total milling industry products imported, the 11-year (2010–2020) average shows that wheat flour amounted to 94 per cent of the total value of products of the milling industry imported.

Imports of wheat flour as a proportion of total milling industry imports showed some year-to-year variations during the period: it was highest at 97 per cent of the total value in 2013 and lowest at 90 per cent in 2017. Overall, wheat flour imports as a proportion of the total showed a flat trend.

Per capita imports of wheat flour in Tonga stood at TOP 61 in 2018 and TOP 81 in 2020. The 24 per cent increase in per capita wheat flour imports is driven by an increase in the value of wheat flour imports.





## Share of rice and wheat flour imports

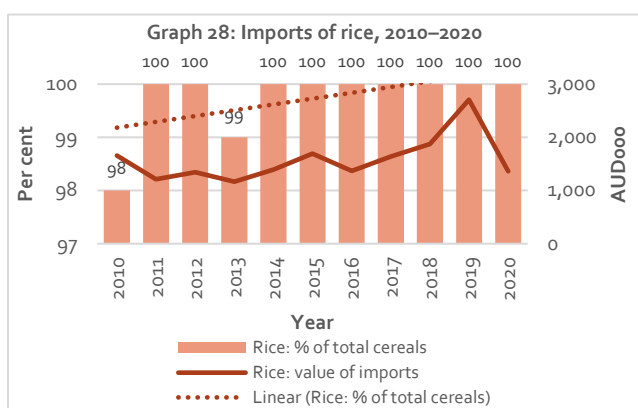
Graph 27 shows that of the total imports of rice and wheat flour the proportions of rice has slightly increased over the years and wheat flour has declined.

The 11-year (2010–2020) average shows that of the total imports of rice and wheat flour, wheat flour was 86 per cent and rice was 14 per cent.

Table 8: Imports of rice and wheat flour

| Tonga                              |  |           | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020   |
|------------------------------------|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Chapter 10                         | Total cereals  | TOP [000] | 658   | 767   | 903   | 971   | 1,195 | 1,257 | 1,245 | 1,140 | 1,202 | 1,506 | 2,116  |
| Heading:1006                       | Rice   |           | 631   | 732   | 815   | 907   | 1,135 | 1,217 | 1,218 | 1,093 | 1,177 | 1,479 | 2,026  |
|                                    | Rice: % of total cereals                                 | %         | 96    | 95    | 90    | 93    | 95    | 97    | 98    | 96    | 98    | 98    | 96     |
| Chapter 11                         | Total products of the milling industry                   | TOP [000] | 6,543 | 7,100 | 6,828 | 6,542 | 6,447 | 7,564 | 6,802 | 7,021 | 6,499 | 8,136 | 8,623  |
| Heading:1101                       | Wheat flour  |           | 5,959 | 6,651 | 6,587 | 6,360 | 6,163 | 7,231 | 6,488 | 6,294 | 6,136 | 7,729 | 8,116  |
|                                    | Wheat flour: % of total products of the milling industry | %         | 91    | 94    | 96    | 97    | 96    | 96    | 95    | 90    | 94    | 95    | 94     |
| Total rice and wheat flour imports |  | TOP [000] | 6,590 | 7,383 | 7,402 | 7,267 | 7,298 | 8,448 | 7,706 | 7,387 | 7,313 | 9,208 | 10,142 |
| of which: Rice imports             |  | %         | 10    | 10    | 11    | 12    | 16    | 14    | 16    | 15    | 16    | 16    | 20     |
| Wheat flour imports                |  |           | 90    | 90    | 89    | 88    | 84    | 86    | 84    | 85    | 84    | 84    | 80     |

## Tuvalu



## Rice imports

Rice is the main cereal imported by Tuvalu.

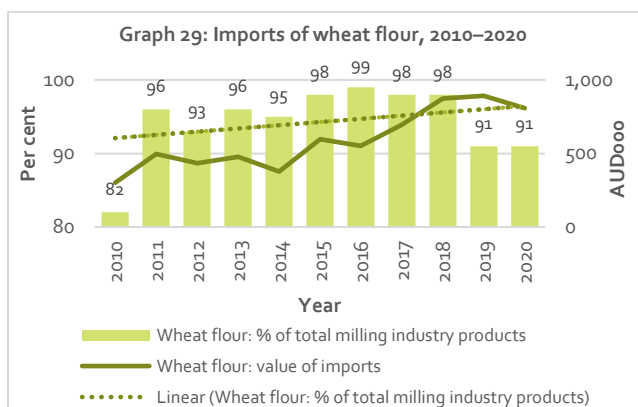
Graph 28 shows imports of rice in absolute values as well as its share in per cent to total cereals imported from 2010 to 2020.

In terms of the value of imports, the highest value of rice imported was AUD 2.707 million in 2019 and the lowest value was AUD 1.166 million in 2013. Imports of rice showed an increase of 45 per cent from 2018 to 2019 and a decline of 50 per cent from 2019 to 2020.

In terms of its contribution to total cereals imported, the 11-year (2010–2020) average shows that rice amounted to 100 per cent of the total value of cereals imported.

Imports of rice as a share of the total cereals showed little year-to-year variations during the period: it was highest at 100 per cent of the total value in 2011, 2012 and 2014–2020. Overall, rice imports as a proportion of the total show an increasing trend; an increase of 2 percentage points from 98 per cent in 2010 to 100 per cent in 2020.

Per capita imports of rice in Tuvalu stood at AUD 180 in 2018 and AUD 128 in 2020. The 29 per cent decline in per capita rice imports was driven by a decline in the value of rice imports.



## Wheat flour imports

Wheat flour is the main milling industry product imported by Tuvalu.

Graph 29 shows imports of wheat flour in absolute values as well as its share in per cent of total milling industry products imported from 2010 to 2020.

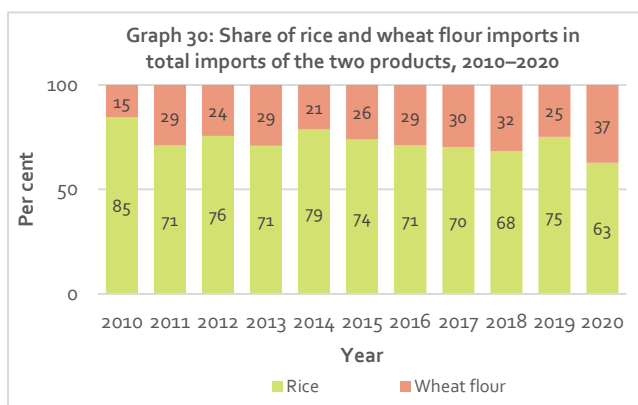
In terms of the value of imports, the highest value of wheat flour imported was AUD 892,000 in 2019 and the lowest value was AUD 301,000 in 2010. Imports of wheat flour showed considerable variations over the

years: the highest annual increase was 65 per cent from 2010 to 2011 and the largest decline was 21 per cent from 2013 to 2014.

In terms of its contribution to total milling industry products imported, the 11-year (2010–2020) average shows that wheat flour amounted to 94 per cent of the total value of products of the milling industry imported.

Except for the 14 percentage points increase from 82 per cent in 2010 to 96 per cent in 2011 imports of wheat flour as a proportion of total milling industry imports showed some year-to-year variations during the period: it was highest at 99 of the total value per cent in 2016 and lowest at 82 per cent in 2010. Overall, wheat flour imports as a proportion of the total showed an increasing trend; an increase of 9 percentage points from 82 per cent in 2010 to 91 per cent in 2020.

Per capita imports of wheat flour in Tuvalu stood at AUD 84 in 2018 and AUD 76 in 2020. The 10 per cent decline in per capita wheat flour imports was driven by a decline in the value of wheat flour imports.



## Share of rice and wheat flour imports

Graph 30 shows the share of rice and wheat flour in total imports of the two products. Compared to each other it can be seen that the proportions of rice slightly declined over the years and the proportion of wheat flour slightly increased.

The 11-year (2010–2020) average shows that of the total imports of rice and wheat flour, wheat flour was 27 per cent and rice was 73 per cent.

**Table 9: Imports of rice and wheat flour**

| Tuvalu  |  |            | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|---|--|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Chapter 10</b>                                       | <b>Total cereals</b>                                     | AU\$ [000] | 1,689 | 1,220 | 1,350 | 1,173 | 1,397 | 1,693 | 1,366 | 1,643 | 1,876 | 2,709 | 1,362 |
| Heading:1006  | Rice   |            | 1,660 | 1,214 | 1,344 | 1,166 | 1,395 | 1,692 | 1,366 | 1,641 | 1,873 | 2,707 | 1,361 |
|   | Rice: % of total cereals                                 | %          | 98    | 100   | 100   | 99    | 100   | 100   | 100   | 100   | 100   | 100   | 100   |
| <b>Chapter 11</b>                                       | <b>Total products of the milling industry</b>            | AU\$ [000] | 366   | 519   | 466   | 496   | 397   | 610   | 559   | 709   | 889   | 980   | 885   |
| Heading:1101  | Wheat flour  |            | 301   | 496   | 433   | 478   | 377   | 596   | 552   | 696   | 873   | 892   | 809   |
|   | Wheat flour: % of total products of the milling industry | %          | 82    | 96    | 93    | 96    | 95    | 98    | 99    | 98    | 98    | 91    | 91    |
| <b>Total rice, wheat grains and wheat flour imports</b> |  | AU\$ [000] | 1,961 | 1,710 | 1,777 | 1,644 | 1,772 | 2,288 | 1,918 | 2,337 | 2,746 | 3,599 | 2,170 |
| of which:   | Rice imports   | %          | 85    | 71    | 76    | 71    | 79    | 74    | 71    | 70    | 68    | 75    | 63    |
|   | Wheat flour imports                                      |            | 15    | 29    | 24    | 29    | 21    | 26    | 29    | 30    | 32    | 25    | 37    |

## D. Conclusion

This paper looked at the imports of rice and wheat flour in eight PICTs (Cook Islands, Fiji, French Polynesia, Kiribati, PNG, Samoa, Tonga and Tuvalu) and the analysis shows that between the imports of rice and wheat flour:

- From a regional perspective rice is the leading import, followed by wheat flour: of the share of rice and wheat flour in total imports rice amounted to 64 per cent and wheat flour 36 per cent.
- From an individual country perspective:
  - rice imports are dominant in Cook Islands, Fiji, French Polynesia, Kiribati, PNG and Tuvalu;
  - wheat flour imports are dominant in Tonga; and
  - rice and wheat flour are both important imports in Samoa.

The share of rice and wheat flour imports as a percentage of the total of the two commodities has remained steady in all countries, so it is expected that rice will continue to be the dominant import, followed by wheat flour, as indicated in Graph 3.

The growth in the import values of the two commodities, judging from past performance, will continue to fluctuate depending on the demand and supply of the commodities which, as mentioned in the introduction will be influenced by the conditions prevailing in the producing countries. These influences include international prices and weather conditions, for example a cyclone in Fiji that causes flooding of rice crops, will result in Fiji importing more rice in that period. Other catastrophic events can also cause similar impacts; anecdotal evidence suggests that the variation in the value of the per capita rice and wheat flour imports from 2018 to 2020 may have been driven by the impacts of the COVID-19 global pandemic.


Whatever situation befalls rice and wheat flour import levels are likely to hold as they are a major source of energy and eaten regularly by the people of PICTs.

## Appendix 1: Chapter 10 in PACHS17

Table 10: Cereals

| HS HEADING  | HS SUB-HEADING | REGIONAL SUB-HEADING | DESCRIPTION   |
|-------------|----------------|----------------------|---|
| <b>1001</b> |                |                      | <b>Wheat and meslin</b>   |
|             |                |                      | -Durum wheat:   |
|             | 1001.11        | 1001.11.00           | --Seed  |
|             | 1001.19        | 1001.19.00           | --Other   |
|             |                |                      | -Other:   |
|             | 1001.91        | 1001.91.00           | --Seed  |
|             | 1001.99        | 1001.99.00           | --Other   |
| <b>1002</b> |                |                      | <b>Rye</b>  |
|             | 1002.10        | 1002.10.00           | -Seed   |
|             | 1002.90        | 1002.90.00           | -Other  |
| <b>1003</b> |                |                      | <b>Barley</b>   |
|             | 1003.10        | 1003.10.00           | -Seed   |
|             | 1003.90        | 1003.90.00           | -Other  |
| <b>1004</b> |                |                      | <b>Oats</b>   |
|             | 1004.10        | 1004.10.00           | -Seed   |
|             | 1004.90        | 1004.90.00           | -Other  |
| <b>1005</b> |                |                      | <b>Maize (corn)</b>   |
|             | 1005.10        | 1005.10.00           | -Seed   |
|             | 1005.90        | 1005.90.00           | -Other  |
| <b>1006</b> |                |                      | <b>Rice</b>   |
|             | 1006.10        | 1006.10.00           | -Rice in the husk (paddy or rough)                                    |
|             | 1006.20        | 1006.20.00           | -Husked (brown) rice  |
|             | 1006.30        | 1006.30.00           | -Semi-milled or wholly milled rice, whether or not polished or glazed |
|             | 1006.40        | 1006.40.00           | -Broken rice  |
| <b>1007</b> |                |                      | <b>Grain sorghum</b>  |
|             | 1007.10        | 1007.10.00           | -Seed   |
|             | 1007.90        | 1007.90.00           | -Other  |
| <b>1008</b> |                |                      | <b>Buckwheat, millet and canary seed; other cereals</b>               |
|             | 1008.10        | 1008.10.00           | -Buckwheat  |
|             |                |                      | -Millet:  |
|             | 1008.21        | 1008.21.00           | --Seed  |
|             | 1008.29        | 1008.29.00           | --Other   |
|             | 1008.30        | 1008.30.00           | -Canary seeds   |
|             | 1008.40        | 1008.40.00           | -Fonio ( <i>Digitaria</i> spp.)                                       |
|             | 1008.50        | 1008.50.00           | -Quinoa ( <i>Chenopodium quinoa</i> )                                 |
|             | 1008.60        | 1008.60.00           | -Triticale  |
|             | 1008.90        | 1008.90.00           | -Other cereals  |

### Key

 The cereal that is the focus of the study in this paper

## Appendix 2: Chapter 11 in PACHS17

Table 11: Products of the milling industry; malt; starches; inulin; wheat gluten

| HS HEADING  | HS SUB-HEADING | REGIONAL SUB-HEADING | DESCRIPTION  |
|-------------|----------------|----------------------|--|
| <b>1101</b> | 1101.00        |                      | <b>Wheat or meslin flour</b>   |
|             |                | 1101.00.10           | ---Sharps  |
|             |                | 1101.00.20           | ---Flour   |
| <b>1102</b> |                |                      | <b>Cereal flours other than of wheat or meslin</b>   |
|             | 1102.20        | 1102.20.00           | -Maize (corn) flour  |
|             | 1102.90        |                      | -Other   |
|             |                | 1102.90.10           | ---Rice flour  |
|             |                | 1102.90.90           | ---Other   |
| <b>1103</b> |                |                      | <b>Cereal groats, meal and pellets</b>   |
|             |                |                      | -Groats and meal:  |
|             | 1103.11        | 1103.11.00           | --Of wheat   |
|             | 1103.13        | 1103.13.00           | --Of maize (corn)  |
|             | 1103.19        | 1103.19.00           | --Of other cereals   |
|             | 1103.20        | 1103.20.00           | -Pellets   |
| <b>1104</b> |                |                      | <b>Cereal grains otherwise worked (for example, hulled, rolled, flaked, pearled, sliced or kibbled), except rice of 1006; germ of cereals, whole, rolled, flaked or ground</b> |
|             |                |                      | -Rolled or flaked grains:  |
|             | 1104.12        | 1104.12.00           | --Of oats  |
|             | 1104.19        | 1104.19.00           | --Of other cereals   |
|             |                |                      | -Other worked grains (for example, hulled, pearled, sliced or kibbled):  |
|             | 1104.22        | 1104.22.00           | --Of oats  |
|             | 1104.23        | 1104.23.00           | --Of maize (corn)  |
|             | 1104.29        | 1104.29.00           | --Of other cereals   |
|             | 1104.30        | 1104.30.00           | -Germ of cereals, whole, rolled, flaked or ground  |
| <b>1105</b> |                |                      | <b>Flour, meal, powder, flakes, granules and pellets of potatoes</b>   |
|             | 1105.10        | 1105.10.00           | -Flour, meal and powder  |
|             | 1105.20        | 1105.20.00           | -Flakes, granules and pellets  |
| <b>1106</b> |                |                      | <b>Flour, meal and powder of the dried leguminous vegetables of Heading 07.13, of sago or of roots or tubers of Heading 07.14 or of the products of Chapter 8</b>              |
|             | 1106.10        | 1106.10.00           | -Of the dried leguminous vegetables of Heading 07.13   |
|             | 1106.20        | 1106.20.00           | -Of sago or of roots or tubers of Heading 07.14  |
|             | 1106.30        | 1106.30.00           | -Of the products of Chapter 8  |
| <b>1107</b> |                |                      | <b>Malt, whether or not roasted</b>  |
|             | 1107.10        | 1107.10.00           | -Not roasted   |
|             | 1107.20        | 1107.20.00           | -Roasted   |
| <b>1108</b> |                |                      | <b>Starches; inulin</b>  |
|             |                |                      | -Starches:   |
|             | 1108.11        | 1108.11.00           | --Wheat starch   |
|             | 1108.12        | 1108.12.00           | --Maize (corn) starch  |
|             | 1108.13        | 1108.13.00           | --Potato starch  |
|             | 1108.14        | 1108.14.00           | --Manioc (cassava) starch  |
|             | 1108.19        | 1108.19.00           | --Other starches   |
|             | 1108.20        | 1108.20.00           | -Inulin  |
| <b>1109</b> | 1109.00        | 1109.00.00           | <b>Wheat gluten, whether or not dried</b>  |

### Key

The product of the milling industry that is the focus of the study in this paper

## Appendix 3: Population in the Pacific<sup>8</sup> region

Table 12: 2018 and 2020 midyear population estimates

| Country name                     | Land area | 2018                        |                    |                            | 2020                        |                    |                            |
|----------------------------------|-----------|-----------------------------|--------------------|----------------------------|-----------------------------|--------------------|----------------------------|
|                                  |           | Midyear population estimate | Population density | Average annual growth rate | Midyear population estimate | Population density | Average annual growth rate |
| American Samoa                   | 200       | 56,556                      | 283                | 0.2                        | 56,800                      | 285                | 0.3                        |
| Cook Islands                     | 240       | 15,153                      | 63                 | 0.5                        | 15,300                      | 65                 | 0.4                        |
| Fiji                             | 18,270    | 887,394                     | 49                 | 0.5                        | 895,000                     | 49                 | 0.4                        |
| French Polynesia                 | 3,520     | 276,908                     | 79                 | 0.4                        | 278,900                     | 79                 | 0.4                        |
| Guam                             | 540       | 173,339                     | 321                | 1.0                        | 176,700                     | 327                | 0.9                        |
| Kiribati                         | 810       | 114,807                     | 142                | 1.7                        | 118,700                     | 146                | 1.7                        |
| Marshall Islands                 | 180       | 54,645                      | 304                | 0.0                        | 54,600                      | 302                | -0.1                       |
| Micronesia (Federated States of) | 700       | 104,945                     | 150                | 0.3                        | 105,500                     | 150                | 0.3                        |
| Nauru                            | 20        | 11,400                      | 570                | 1.5                        | 11,700                      | 557                | 1.6                        |
| New Caledonia                    | 18,280    | 271,772                     | 15                 | 0.2                        | 273,000                     | 15                 | 0.3                        |
| Niue                             | 260       | 1,606                       | 6                  | -1.1                       | 1,600                       | 6                  | -1.2                       |
| Northern Mariana Islands         | 460       | 56,178                      | 122                | 0.4                        | 56,600                      | 124                | 0.4                        |
| Palau                            | 460       | 17,861                      | 39                 | 0.2                        | 17,900                      | 40                 | 0.2                        |
| Papua New Guinea                 | 452,860   | 8,558,701                   | 19                 | 2.2                        | 8,934,500                   | 19                 | 2.1                        |
| Pitcairn                         | 47        | 51                          | 1                  | 0                          | 50                          | 1                  | n.a.                       |
| Samoa                            | 2,830     | 196,379                     | 69                 | 0.6                        | 198,600                     | 68                 | 0.6                        |
| Solomon Islands                  | 27,990    | 681,184                     | 24                 | 2.3                        | 712,100                     | 25                 | 2.2                        |
| Tokelau                          | 10        | 1,507                       | 151                | 0.3                        | 1,500                       | 125                | 0.0                        |
| Tonga                            | 720       | 100,404                     | 139                | -0.4                       | 99,800                      | 133                | -0.3                       |
| Tuvalu                           | 30        | 10,422                      | 347                | 0.6                        | 10,600                      | 408                | 0.8                        |
| Vanuatu                          | 12,190    | 281,669                     | 23                 | 2.3                        | 294,700                     | 24                 | 2.2                        |
| Wallis and Futuna                | 140       | 11,559                      | 83                 | -1.1                       | 11,400                      | 80                 | -0.5                       |

n.a. – not available

Source: SPC

<sup>8</sup> Excludes Australia and New Zealand