

Pacific Wheat: Import dependence & global shocks



KEY MESSAGES

- Wheat is an important component in Pacific diets, with imports of grain to the region increasing threefold since 1995.
- Australia is the only major exporter of wheat grain to the region.
- The vast majority of wheat flour consumed in the region is sourced from within-region milling of imported grain.
- Within-region milling, predominantly in Fiji, supplies seven smaller Pacific nations with almost all their flour.
- Global price shocks including the current conflict in Ukraine, are likely to impact on the price and availability of wheat-based products, and on wheat-dependent economic activity within the Pacific region.

CONTEXT

The carbohydrate dense component of the diets of people in the Pacific was traditionally dominated by domestically produced starchy root crops. While these crops are still essential to Pacific diets, particularly in rural settings, imported rice and wheat are now an important component of diets. Rice has consistently been consumed in large quantities since the 1990s and is often preferred for its long shelf life, convenience and affordability relative to starchy vegetables. Consumption of wheat in the Pacific, primarily as bread and biscuits, was historically limited, but with the development of mills in several countries, wheat flour consumption has increased dramatically and now rivals rice, particularly in urban settings. Growing dependence on imported wheat combined with increasing frequency of global shocks that can disrupt supply chains and drastically alter wheat prices¹ highlights the need to better understand the

role of wheat in Pacific diets and the broader food system.

The recent development of the Pacific Food Trade Database (PFTD)² provides detailed food and beverage trade data to offer insights into the contemporary Pacific food system, including into specific commodities including wheat (see [Pacific Food System Brief 3](#)). Here we present some wheat grain and flour data from the PFTD to show some dominant trends through time and across geographies. Reference to wheat grain in this brief includes durum wheat (HS100110) and meslin and wheat other than durum (HS100190), and reference to wheat flour includes only wheat and meslin flour (HS110100). Wheat also forms the basis of a range of processed foods, including pasta, crackers and noodles which are imported as packaged foods (e.g. HS 1902 and 1904); these foods are not included in this summary.



Australian wheat field. Photo by John Larson

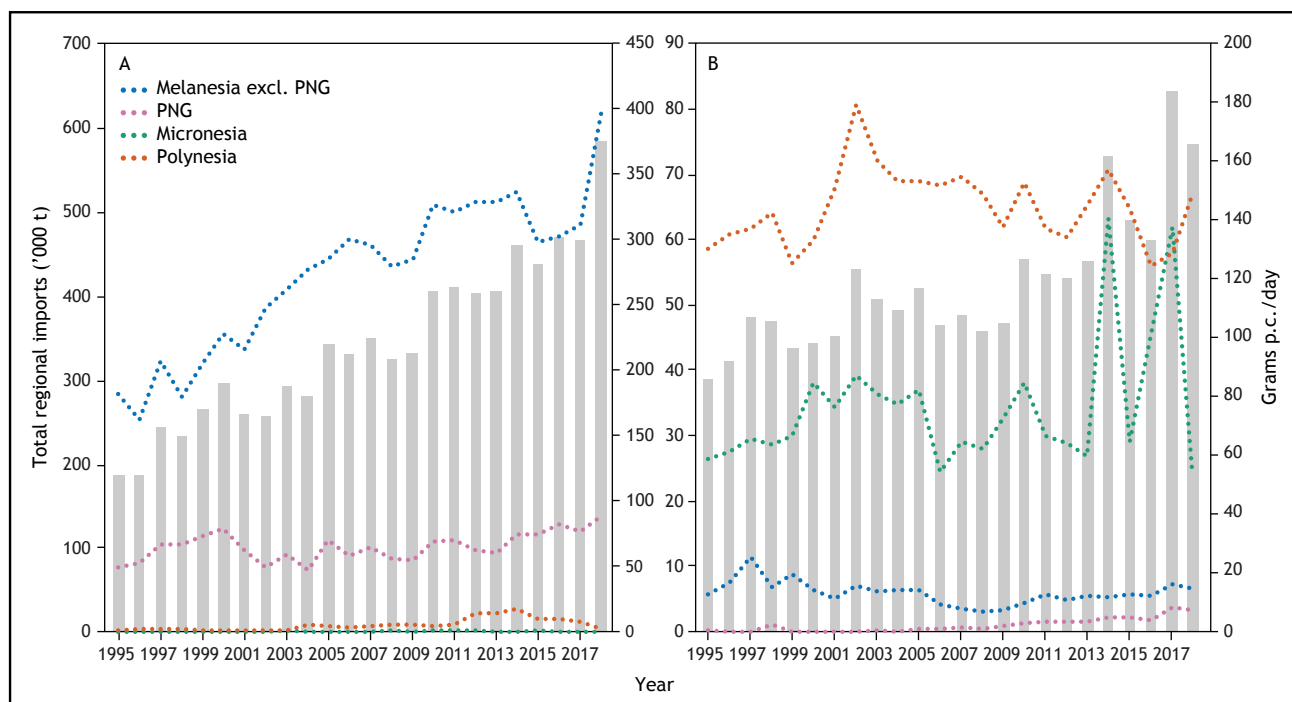


Figure 1. Regional imports of a) wheat grain and b) wheat flour through time. Y axis relates to total imports portrayed as grey bars. Z axis relates to sub-regional trends portrayed as dot lines. Population data sourced from United Nations population division: <https://population.un.org/wpp/Download/Standard/Population/>

WHEAT GRAIN

All wheat consumed in PICTs is imported from elsewhere. Total wheat grain imports to the region have increased from 187,000 t in 1995 to 587,000 t in 2018 (Figure 1a) reflecting a dramatic increase in dependence, even when accounting for regional population growth. Melanesia is the primary importing sub-region, explained by the significantly larger population and wheat milling capacity. For the years 2014-2018, 99% of the total tonnage of wheat grain imports was from Australia. Incidental quantities are imported from a number of countries including exports from France to its Pacific territories. Wheat grain from Australia is imported principally by Papua New Guinea, Fiji, New Caledonia and Solomon Islands where it is milled for domestic consumption and export to smaller PICTs. Their imports of wheat grain (by average annual tonnage for 2014-2018) are 236,277 t (Papua New Guinea), 196,683 t (Fiji), 33,094 t (New Caledonia), and 17,093 t (Solomon Islands). Geographic proximity, existing shipping routes, and political and cultural ties between Australia and the Pacific explain the current trade flow patterns. However, the bilateral dependence on imports from Australia highlights a potential supply vulnerability, should Australia have a poor season or choose to prioritize alternate markets.

WHEAT FLOUR

Trade flows of wheat flour include imports from countries other than PICTs and imports from PICTs with mills to PICTs that consume the milled flour. While necessary to interpret in the context of domestic milling, imports of wheat flour have nearly doubled since 1995 (Figure 1b). Polynesia (~150 grams per cap/day) and Micronesia (~80 grams per cap/day) import significantly more wheat flour than Melanesia on a per capita basis, primarily due to the absence of milling. PICTs with flour mills provide for the vast majority of domestic production and export to non-milling countries² (Figure 2). Papua New Guinea, the largest importer of wheat grain, consumes the majority of its milled flour production. Fiji is the most important hub for wheat milling and export to other PICTs, providing the vast majority of wheat-based foods to seven non-milling PICTs (Figure 2). New Zealand, included in 'other' in Figure 2, provides the majority of wheat flour imports to Cook Islands and Niue. Marshall Islands is the only PICT of the 18 in the PFTD that obtains the majority of their wheat flour from outside the region, with three large imports from Ukraine between 2014 and 2018.

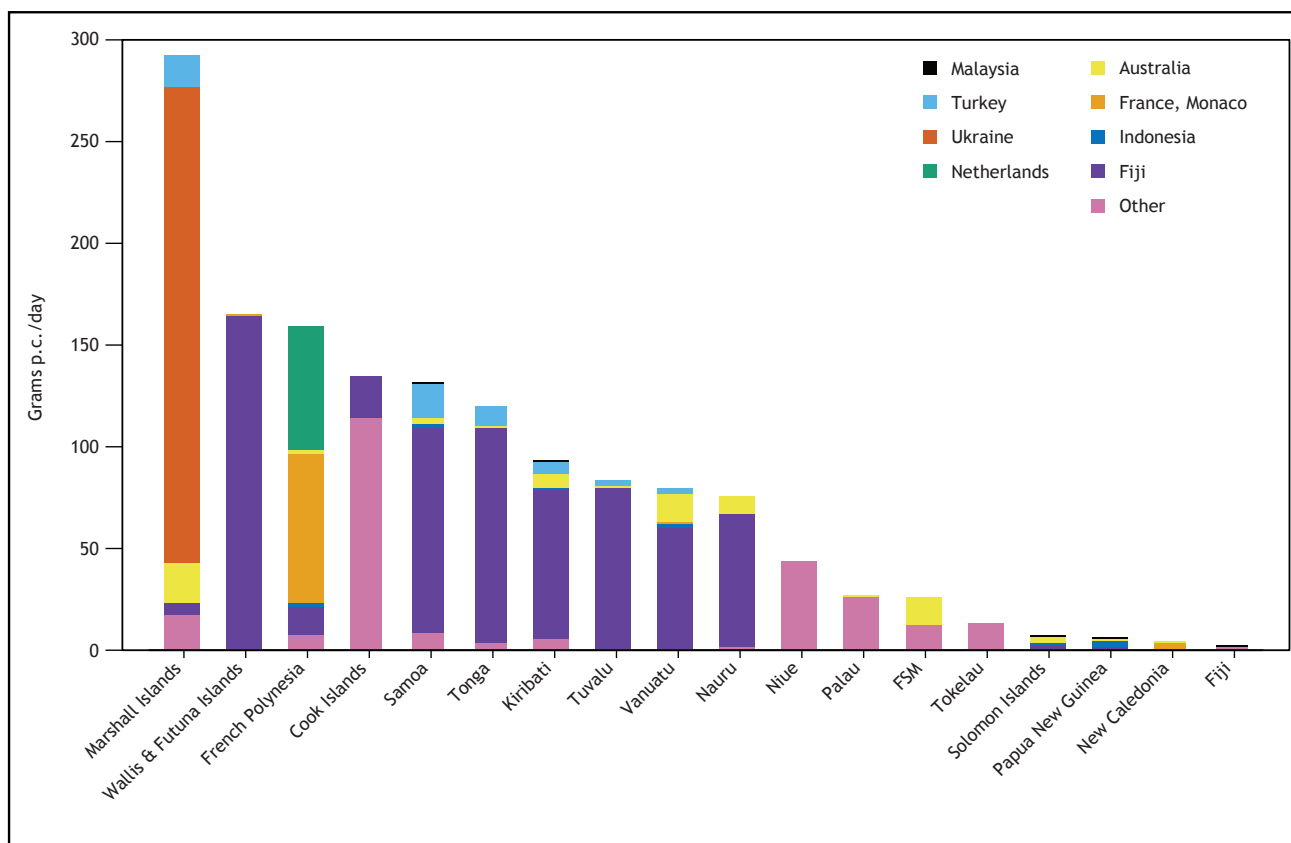


Figure 2. Imports of wheat flour to PICTs, disaggregated by exporting country. Quantities are averaged across the years 2014-2018. Population data sourced from United Nations population division: <https://population.un.org/wpp/Download/Standard/Population/>

CONTRIBUTION TO PICT ECONOMIES

Compared to rice, the other major imported staple, wheat and wheat products have a complex value chain in the Pacific, providing significant employment through within-country trade and value adding. Major employers include the flour mills

and bakeries³, from large employers right through to small-scale enterprises in provincial towns and villages. The importance of wheat to the Pacific economy is not well understood and warrants detailed investigation.



The FMF Foods Ltd. mill in Suva is the largest in the region. Photo by David McKee.

PACIFIC WHEAT IN THE CONTEXT OF GLOBAL SHOCKS

The ongoing historic trend of growing dependence on imports of both rice and wheat to PICTs remains a significant challenge, in terms of regional nutrition and food security. Most PICT populations are growing, while domestic agricultural production is stagnant, or in decline, exacerbating the need for increase of both total and per capita imports. At no moment is this concern more apparent than during events that destabilize global food value chains, whether it is crop failure across multiple growing regions, a pandemic that disrupts supply chains, or human conflict that causes uncertainty resulting in dramatic price fluctuations¹. At time of writing, the global food system, still reeling from the pressures associated with the COVID-19 pandemic, is suddenly acutely challenged by war in Ukraine. This conflict highlights the vulnerability of global food systems, including supply chains, particularly for low-middle income countries and remote small island developing states. Ukraine and Russia are major wheat producers and exporters; uncertainty around harvest in Ukraine and potential preferential exporting by Russia has caused a spike in global wheat prices (Figure 3). This uncertainty is exacerbated by escalating prices of oil and fertilizers; Russia is a major exporter of both of these commodity classes which are central to global production and distribution of food. Inflation is also surging in most regions; primarily because of oversupply of fiat currencies to support failing economies during the COVID-19 pandemic. The spike in the price of wheat will affect the affordability of wheat flour in the region. The long term impact will depend on how long supply chains are disrupted, quantity of grain currently held at mills, and policy and intervention by Australia, regional milling countries and countries with significant per capita consumption of wheat-based products. It also raises concerns over the short-mid term impact on wheat based industry and employment across the region.

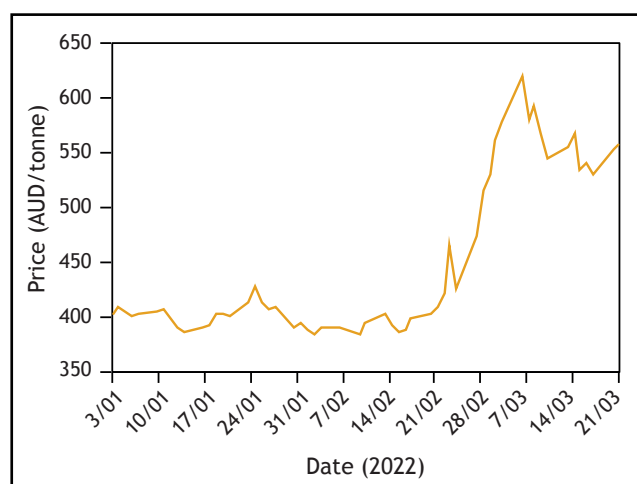


Figure 3. Global wheat price showing dramatic spike caused by the onset of the Ukraine-Russia conflict.

Source: <https://markets.businessinsider.com/commodities/wheat-price>



Bakery products on the shelf, Vanuatu. Photo by David McKee.

SOURCES

1. Bentley, A. 2022. Broken bread — avert global wheat crisis caused by invasion of Ukraine. *Nature* 603, 551. <https://doi.org/10.1038/d41586-022-00789-x>
2. Brewer, T.D, Andrew, N.L, Sharp, M.K, Thow, A.M, Kottage, H, Jones, S (2020). A method for cleaning trade data for regional analysis: The Pacific Food Trade Database (version 2, 1995-2018). Pacific Community working paper.
3. <https://www.world-grain.com/articles/13830-milling-in-the-south-pacific-islands>

ABOUT

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