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Fiji: Poor Nutrition and Agricultural Decline has Caused Food Security Slump

Phoebe Sleet
Research Analyst
Global Food and Water Crises Research Programme

Key Points

- Food is widely available in Fiji, especially compared to many other Pacific islands. In contrast, rates of obesity and micronutrient deficiencies are high.
- Consumption of cheap imported food is increasing rapidly, while consumption of nutrient-dense traditional food has decreased, especially among urban Fijians.
- Agriculture is a key sector of the economy and is vital to rural food security.
- Despite that, the sector has declined over several decades, as a result of agricultural, trade and land policy, as well as climate change.

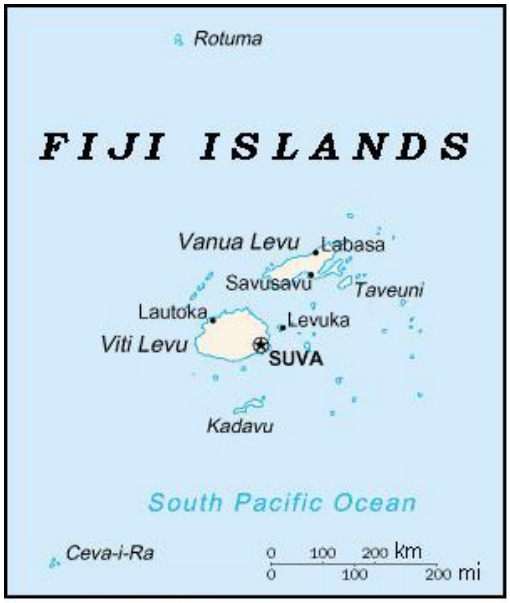
Summary

Food availability in Fiji is generally good, especially when compared to other Pacific islands. While this has led to lower food security concerns, Fiji suffers from a double burden of over- and under-nutrition. Adult obesity affects nearly a third of Fijians and rates of non-communicable diseases, such as type 2 diabetes, are correspondingly high. Meanwhile, micronutrient deficiencies are common, with many nutrients consumed below recommended levels among all age groups. Much of Fiji's poor nutrition rate stems from an increasing dependence on cheap imported food and a decreased intake of traditional food. Not only are nutritionally inadequate imported foods cheap, but many traditional foods are now grown for export, which has increased prices, especially for urban Fijians.

Agriculture has seen a steady decline in the last several decades, which has been compounded by Fiji's vulnerability to climate change. Fiji experiences frequent storms, cyclones, floods and drought, which can be devastating to agriculture, while trade policies, such as reducing tariffs on agricultural exports, have also weakened the sector.

Analysis

The Republic of Fiji is an upper-middle income country, consisting of over 300 islands in the Pacific. The country claims the second-largest economy in the region (after Papua New Guinea) and levels of extreme poverty are low. Food poverty is also particularly low, at 2.5%. Despite those advantages, frequent natural disasters often leave people vulnerable to periods of heightened food and water insecurity. In 2016, for instance, Cyclone Wilson caused significant economic damage, with costs totalling around 2 billion Fijian Dollars ($1.36 billion), or 20 per cent of Fiji's Gross Domestic Product. While Fiji is generally better off than other Melanesian states, it still suffers from many of the difficulties that are typical of small island economies. In particular, it is vulnerable to fluctuations in international markets and its geographic isolation from major international markets can make imports and exports expensive.



Source: Wikimedia Commons

Nutrition

Most Fijians have access to energy-dense food and the country's energy supply adequacy is above the global average. While that situation ensures that most people have enough nutrition to meet their base energy needs on a day-to-day basis, heavy consumption of energy-dense processed food has led the country to experience high levels of over-nutrition and non-communicable disease (NCD). There has been a steady rise in calorie availability over the last several years. By 2009, an average of 3,421 kilocalories (kcal) was available per person, per day, compared to 2,819 kcal in 1985 and 3,298 kcal in 2006. Rising food energy availability has caused a spike in obesity rates and associated NCDs. In 1993, the recorded

adult obesity rate was 9.8%. The most recently available statistics, from 2011, indicate that the adult obesity rate is now around 32.1% and the prevalence of type 2 diabetes has more than doubled since 1980. It is estimated that NCDs are responsible for between 70 and 75 per cent of all deaths in the region. In Fiji, NCDs that were the leading causes of death were diseases of the circulatory system (44 per cent), endocrinal, nutritional or metabolic disease (13 per cent) and cancer (ten per cent). Obesity is a contributing factor to all of the listed conditions.

Other nutritional indicators are relatively poor in Fiji. While rates of childhood stunting (low height for age, caused by malnutrition) are fairly good for the region (eight per cent compared to 12 per cent across the Pacific and East Asia), the rate of childhood wasting (low weight for height, caused by acute malnutrition) is six per cent, which is higher than the regional average. Rates of anaemia in children are also high, affecting between 37 and 50 per cent of children under five (competing sources give different estimates) and between 33 and 42 per cent in women aged 12 to 44. The prevalence of vitamin A deficiency in under-fives was around 14 per cent, while the prevalence of zinc deficiency was 14.5% in children aged six months to two years. Among all ages, nutrients are consumed at levels below (fibre, iron and zinc) or significantly below (vitamin A and calcium) recommended levels.

The Fijian diet has changed rapidly over the last several decades and many of the changes have contributed to increasingly poor nutritional outcomes. Traditional diets consisted of fish, seafood, root crops, fruit, wild plants and legumes. By 2014, however, the typical Fijian diet was quite different, with 50 per cent eating rice daily, 43 per cent eating roti daily and 15 per cent eating instant noodles daily. Consumption of processed snack foods such as crisps is also rising rapidly. In total, discretionary foods and drinks (which are not necessary for nutrition and are often energy dense and high in saturated fat, sugars and/or salt) account for 26 per cent of the average Fijian diet, while 58 per cent of calories and 60 per cent of protein is derived from nutritionally inadequate sources, the highest rate in Melanesia. In contrast, fruit and vegetable consumption tends to be low, with only 15 per cent of adults consuming the recommended five or more servings a day and ten per cent consuming no fruits or vegetables. Consumption of fresh fish has also fallen, as tinned fish is generally cheaper.

While traditional foods are more nutrient-dense than their modern replacements, they are often expensive or not available to purchase at all. The cultivation of many traditional root crops, for instance, has been superseded by the cultivation of taro hybrids for export. As a result, many traditional crops are now more expensive. Similarly, a decline in the agricultural sector has made much of the population increasingly dependent on cheap, imported food. That is particularly true in urban areas, where home food production is low – urban Fijians grow five per cent of the food they consume, compared to 35 per cent for rural residents. As a result, urban Fijians are particularly sensitive to the cost of fresh fruits and vegetables. Although extreme poverty is fairly rare in Fiji, per capita purchasing power parity is significantly below the global average, which indicates impaired access to food. The poor are particularly affected, with poor households spending 29 per cent of their income on food, compared to 18 per cent for those above the poverty line.

Source: Wikimedia Commons

Agriculture

Agriculture is a key pillar of the Fijian economy: 65 per cent of Fijians derive at least part of their income from agriculture and the agriculture sector employs 45 per cent of the population. More than 50 per cent of low-income households live in rural areas and agriculture is the main source of food, income and employment for these households. While sugarcane once dominated Fijian agriculture, the importance of the crop has diminished (as has subsistence agriculture) and other crops, horticulture and livestock are now increasingly important to the sector. The share of other crops to Fiji's agricultural GDP has doubled since 2001, surpassing sugarcane as the primary agricultural product. The 'other' crop subsector is dominated by root crops and horticulture, particularly dalo (taro), ginger, papaya, pineapples and cassava, among other crops. Fiji also possesses one of the larger commercial pork and chicken industries in the region (along with Papua New Guinea), as well as significant dairy and goat industries.

Although agriculture plays an important role in the economy, the sector has contracted in recent decades, due to the continuing decline of the sugar industry. While other crops have grown in importance, they have not been able to offset the sector's troubles. The country's rice industry has also become increasingly irrelevant. In the 1980s, Fiji was 70 per cent self-sufficient in rice production, but must now import more than 80 per cent of its rice needs each year. This is especially disappointing, as the country has exceptionally good conditions for rice cultivation. As a result of these losses, the share of agriculture in Fiji's GDP is the lowest in Melanesia, at 13 per cent. Low agricultural growth (and a number of coups) is also partly responsible for slow economic growth, which is also the lowest in Melanesia.

Additionally, an over-reliance on food imports also makes it vulnerable to external shocks, as happened during the 2008 food crisis.

A number of factors have put pressure on Fijian agriculture. Climate change, in particular, has brought long-term changes that will continue to cause problems for the agricultural sector, as Fiji's location makes it especially vulnerable. The intensity of cyclones is expected to increase as a result of climate change, which is likely to negatively impact agriculture. In 2016, Tropical Cyclone Winston caused significant levels of damage across Fiji. Agriculture was the worst-hit part of the economy, with losses of F$542 million ($368 million). Additionally losses in income and food caused significant hardships, especially in rural areas. In total, cyclones cause an estimated F$152 million ($103 million) in damage each year.

Source: Wikimedia Commons

Tropical cyclones are also the main driver of extreme sea levels and flooding in Fiji and rising sea levels are also expected to worsen flood risk. Not only will cyclones and floods have direct impacts on food security, through the destruction of crops and infrastructure, but will also have indirect consequences for food security. The destruction caused by floods and cyclones also causes increases in poverty, further limiting access to food. In Fiji, 25,700 people are pushed into poverty by floods and cyclones each year and disasters such as Cyclone Winston, albeit rare, have an even more devastating impact. Fiji is also exposed to

other natural hazards including drought and extreme temperatures, which pose their own threats to agricultural production and incomes.

While climate change is likely to have a significant impact on Fijian agriculture, other issues have also put pressure on the sector. Decreasing soil productivity and land degradation has led to declining yields of both staple and cash crops due to shifting cultivation patterns. Agricultural policies have also led to a gradual decline in the agricultural sector. Agricultural deregulation began in the late 1980s, with the withdrawal of supports for domestic rice farmers. Tariffs on rice imports were cut between 1990 and 2010, leading to a significant increase in rice imports over this period. Domestic rice and sugarcane farming has also been made more difficult by Fiji's system of land leases (tenure), which have stifled production and investment in agriculture. Most land in Fiji is native-owned, with most sugarcane and rice farms leased to Indo-Fijian farmers, usually on a 30-year basis. Many of the leases began to expire in the late 1990s and a refusal to renew the leases led many experienced farmers to leave for urban areas. Leases continue to expire each year and will continue to do so for the next decade.

Fiji is more food secure than many of its neighbours in the Pacific, but problems persist even with its relatively high level of development. In order to combat poor nutrition, natural disasters and agricultural stagnation, Fiji will need to invest in climate-resilient agriculture and promote native crops, as well as foster inclusive economic development that would allow its population to afford to eat healthy food.

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Suite 5, 202 Hampden Road, Nedlands WA 6009, Australia.
Tel: +61 8 6389 0211
Web: www.futuredirections.org.au