

People of Polynesian descent, who first inhabited the islands some 2000 years ago ... have become accustomed to living in Tuvalu's fragile and ever-changing environment, but recent climate changes may overwhelm their ability to adapt. It is believed that in the next few decades the small island state will be rendered uninhabitable due to rising sea levels, and evidence of future inundation is increasing (Parks and Timmons 2006, 14). In 2007, one of Tuvalu's small islets, where plant and animal life once thrived, disappeared beneath the sea. In 2000, Tuvalu experienced an unusually long flood season that normally lasts for only a few months. However, during this period, the floods lasted for over 5 consecutive months. The flooding percolated up through the porous limestone soil, soaking many of Tuvalu's islands from the inside out. Climate change forecasts indicate that this occurrence may become the norm in the near future.

Over the past few decades, the capital island of Funafuti has seen an influx of migrants from the outer islands. With a land area of 2.79 km², Funafuti supports a population of approximately 5000 people, and as in the case of Kiribati, most migrants are isolated in a central area (Government of Tuvalu 2006). In Funafuti, squatters have taken sanctuary in Fongafale, a make shift village in the centre of Funafuti — of which 35% of the village is built on water and garbage-filled borrow pits, a legacy of World War II (Hunt 1996, 225). Due to overpopulation, deforestation, lack of potable water and an eroding shoreline, the Tuvaluan government's capacity to cope with a growing urban population has been severely hindered. ...

Sharp increases in population density on Funafuti over the last 30 years have had other effects on human development indicators. Funafuti has a relatively high annual death rate in comparison with the next most populated island of Tuvalu, Nukufetau. Although Nukufetau's population is only half that of Funafuti, Nukufetau's annual death rate is over 100 times less per year than that of Funafuti (Government of Tuvalu 2006). Health workers attribute the higher death rate on Funafuti to a poor diet, rooted in a dependency on imported goods, which are high in fat and low in fibre, while Tuvaluans on the outer islands maintain a more traditional diet of taro root, fish, breadfruit, papaya and coconut.

Bearing the brunt of changes in climate and, in effect, the customary lifestyles of Tuvaluans, are young women. Recent reports from the Women's Environment Development Organization and the World Conservation Union show that the adverse effects of climate change are affecting women most, in places like Tuvalu (Kallmeyer 2008, 1). According to studies, young women in Tuvalu are spending an increased amount of time securing water and fuel, due to the scarcity of potable water and resources (Kallmeyer 2008, 1). Increased time spent working to ensure the basic needs of the family can be linked to decreased girls' attendance in school and lower literacy rates, particularly among young girls. ...

As climate change intensifies, and food and water supplies become more unreliable, populations will undoubtedly respond by migrating to places that offer better livelihoods. ... Needless to say, the populations that will bear the brunt will be those with the fewest resources.

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-Justin T. Locke, "Climate Change-Induced Migration in the Pacific Region" (2009)
excerpt