

Kiribati – relocation and adaptation

CASE STUDY

Maryanne Loughry and Jane McAdam

As well as developing adaptation strategies, the people of Kiribati are having to consider the possibility of permanent relocation.

According to the Intergovernmental Panel on Climate Change (IPCC)¹, sea-level rise is expected to threaten vital infrastructure and structures supporting the livelihood of many Pacific island communities. By the middle of the 21st century, climate change is expected to reduce their water supplies to the point where they become insufficient to meet demand in low rain periods. Already a significant numbers of people in the Carteret Islands of Papua New Guinea are preparing to evacuate to Bougainville in 2008, and scientists suggest that these islands and the Pacific nations of Tuvalu and Kiribati are at risk of disappearing altogether by the middle of the century.

The Republic of Kiribati is an island nation consisting of one island and 32 low-lying atolls (with a total land area of 811 square kilometres) in the Pacific Ocean. The people of Kiribati – known as I-Kiribati – all share one common language, Gilbertese. Kiribati includes the largest coral atoll in the world, Kirimati or Christmas Island. Most of the land of Kiribati is less than three metres above sea level and on average only a few hundred metres wide.

The population is approximately 92,000, of whom nearly 50,000 live in South Tarawa, a highly dense area with a population growth rate of 3% per year. Most of the I-Kiribati are engaged in subsistence activities, including fishing and the growing of bananas and copra (dried coconut). The soil on the atolls is very poor and there is little opportunity for agricultural development. However, the fishing grounds are rich and copra and fish represent the bulk of production and exports. Nevertheless, Kiribati has one of the highest poverty rates in the Pacific.

Kiribati is also thought to be one of the nations most vulnerable to the impact of climate change. This is due in combination to the low-lying land mass with the population having no recourse to higher lands, the nation's limited sources of income, and the concentration of the majority of the population on one dominant atoll. These factors, combined with increasing changes in climate, pose a threat to Kiribati's food and water security, health and infrastructure, as well as the ability of the Kiribati government to cope with increasing climate-related disasters.

In 2004, the people of Kiribati acknowledged, in the Otini Taai Declaration,² that human-induced climate change will have an extensive range of negative impacts on peoples of the Pacific Islands, including:

- loss of coastal land and infrastructure due to erosion, inundation and storm surges
- increase in frequency and severity of cyclones with risks to human life, health, homes and communities
- loss of coral reefs with implications for the sea eco-systems on which the livelihood of many Islanders depends
- changes in rainfall patterns with increased droughts in some areas and more rainfall with flooding in other areas
- threats to drinking water supplies due to changes in rainfall, sea-level rise and inundation
- loss of sugarcane, yams, taro and cassava due to extreme temperatures and rainfall changes

- human health impacts with an increase in the incidence of dengue fever and diarrhoea.

They are clearly aware of the effects of climate change on their environment and fishing patterns. However, they are unsure of the science of climate change and frequently attribute the changes they are experiencing to the actions of God rather than human activities. Some believe that the current changes and water surges are signs of God punishing wrongdoing. Others believe that the future of Kiribati, though grim, is assured because God promised in the Book of Genesis that there would never again be a flood like the one experienced by Noah. Both explanations restrict the people of Kiribati's sense that they can be active in addressing the climate changes they are experiencing.

Regardless of explanation, the immensity of the problem facing the I-Kiribati calls into question whether adaptation is merely putting off the inevitable. A 2006 World Bank report, aptly called *Not If but When*,³ stressed the inevitability of these extreme climate events for nations such as Kiribati – and the likelihood of them becoming more extreme. The report stops short, however, of saying that populations may need to migrate to avoid these extreme climate events. Rather, the onus is put on Pacific nations to address risk management of natural hazards and to build adaptation plans into their national development policies.

Relocation?

At the 60th session of the UN General Assembly in 2005, Kiribati's President, Anote Tong, mentioned the need for nations to seriously consider the option of relocation – the ultimate form of adaptation to climate change. He acknowledged that other forms of adaptation might be too late for his nation, and that now is the time to be discussing what might need to happen in the coming decades.

The option of migration is not unfamiliar to the people of Kiribati. In the 1940s, Kiribati's Banaba Island was decimated by phosphate mining and the vast majority of the population moved to the island of Rabi in Fiji. There has also been a movement of the population of Kiribati to the atoll of South Tarawa, resulting in over half of the total population of Kiribati residing on this one atoll. In reaction to the high population density there, in the 1990s the Kiribati government moved nearly 5,000 people to outlying atolls.

The infrastructure of Kiribati is under huge pressure. Many of the houses lack modern sanitation and are frequently not connected to the town sewage system (where it exists). Beaches and other agricultural land are frequently used for washing and toilet needs. In addition, the South Tarawa sewage system is over 25 years old and, because of limited funds, was not constructed of sufficient length to take sewage beyond the reef, resulting in effluent returning to the atoll with the tide. This, coupled with more extreme weather conditions and extra high tides, has meant that the domestic water supply is already compromised, with ground water at risk and the Tawara lagoon polluted. These pressures on the population add to the urgency of an adequate response for the I-Kiribati.

President Tong has called for urgent discussions on adaptation options,

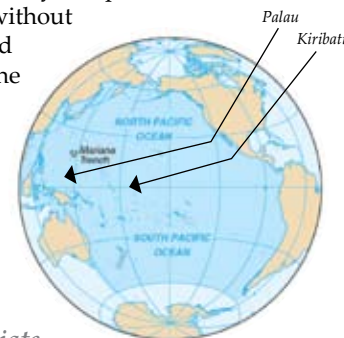
including migration, for the people of Kiribati. In particular, he hopes for increased labour migration options so that family members can support their extended family in Kiribati through remittances. Not surprisingly, Australia and New Zealand are two of the countries that President Tong is asking to be more receptive to increased labour migration from Kiribati. However, this is seen as a short-term response, pending a more comprehensive and radical response to be considered in the next decades.

Significant actors like the World Bank⁴, in collaboration with partners such as AusAID and NZAID (the Australian and New Zealand governments' overseas aid programmes), and the European Union have invested in adaptation projects such as increasing popular awareness in Kiribati of the effects of climate change and developing infrastructure such as building higher and stronger sea walls. What is still not in place at present, however, is an adequate forum for discussions of realistic options available. Nor is there an institution mandated to assist the population of Kiribati to negotiate the most appropriate response to their pending plight.

In September 2007 the Pacific Conference of Churches called upon the churches of the Pacific to be welcoming and compassionate to those people of Kiribati, Tuvalu and the Marshall Islands who wish to resettle in Pacific countries.

The statement also called for a regional immigration policy giving citizens most affected by climate change rights to resettle in other Pacific Island nations or Pacific regional countries of their choice.

For many people and nations, climate-induced displacement is a reality. However, the assistance and protection needs of the displaced are still being addressed primarily by the world's poorer, more vulnerable nations, frequently in a piecemeal manner and without the weight and resources of the international community.



Maryanne Loughry (maryanne.loughry@googlemail.com) is Associate Director, Jesuit Refugee Service Australia (www.jrs.org.au). Jane McAdam (j.mcadam@unsw.edu.au) is Senior Lecturer and Director of International Law Programs in the Faculty of Law, University of New South Wales (www.law.unsw.edu.au).

1. Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change 2007: *The Physical Science Basis: Summary for Policymakers*, www.aas.org/news/press_room/climate_change/media/4th_spm2feb07.pdf

2. www.oikoumene.org/index.php?id=2607

3. World Bank, *Not If but When: Adapting to Natural Hazards in the Pacific Islands Region* (2006) <http://siteresources.worldbank.org/INTPACIFICISLANDS/Resources/Natural-Hazards-report.pdf>

4. through the Global Environment Facility (GEF) Trust Fund www.undp.org/gef