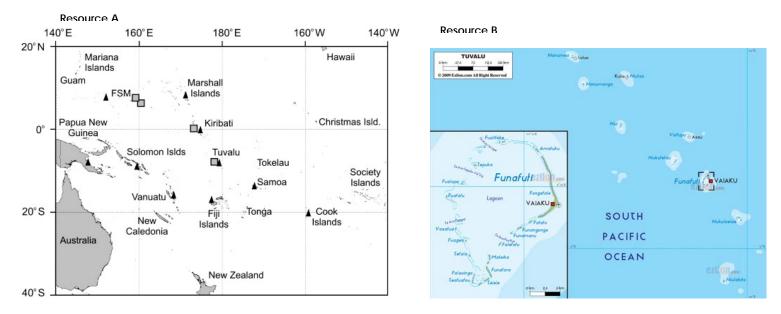
Skills Resource: TUVALU



Resource C

The world's smallest nation confronts rising tides and the possible loss of its homeland

The 11,000 Tuvaluans live on nine coral atolls totalling 10 square miles scattered over 500,000 square miles of ocean south of the equator and west of the International Dateline. Tuvalu is the smallest of all nations, except for the Vatican. Tuvalu has no industry, burns little petroleum, and creates less carbon pollution than a small town in America. This tiny place nevertheless is on the front line of climate change. The increasing intensity of tropical weather, the increase in ocean temperatures, and rising sea level -- all documented results of a warming atmosphere -- are making trouble for Tuvalu.





Tuvalu PM calls for urgent attention on climate change issues



Photo: Leaders at the Pacific Islands Forum in Majuro, Marshall Islands (Supplied: Pacific Islands Forum Secretariat)

Tuvalu's Prime Minister Enele Sopoaga is urgently calling for global leaders to commit to addressing climate change.

The issue was a major focus of last week's Pacific Island Forum leaders meeting in Majuro, where many delegates expressed concern that the issue is slipping in prominence on the international agenda.

Mr Sopoaga has called on major greenhouse gas emitters to follow the lead of smaller Pacific nations in battling climate change.

He's told Pacific Beat the most vulnerable Pacific Island countries need to urgently implement concrete adaptation strategies.

"There have been quite a number of initiatives to address climate change but we have a worry that these are maybe focussing too much on finances, on things like commercial trade bar interests and so on," he said.

"They are turning away from the real issue which is to address climate change."

Mr Sopoaga says climate change has created a dire situation for many small Pacific nations.

He says larger developed nations must shoulder more responsibility in tackling the problem.

"We need to elevate this issue on the global level to the highest possible level and make strong political leadership commitment on addressing climate change," he said.

"We have witnessed so many catastrophes happening in our planet."



TU VALU OR NOT TU VALU, THAT IS THE QUESTION!







Climate change on Tuvalu

The nine islands of Tuvalu are located in the middle of the Pacific. Funafuti, the main island and capital, is at 1000 km North of Fiji. Tuvalu became, notably thanks to the climate conference in Copenhagen in 2009, the international symbol of the consequences of climate change. Sea-level rise, one of the most known consequences, is a major threat for Tuvalu, considering that this country's highest point is 4.5 meters above sea-level (whereas most of the land is way below that point). The consequences of climate change will have and already have considerable impacts on these islands.



In the National Adaptation Programme of Actions (NAPA), the government of Tuvalu has identified seven main and immediate threats for the livelihoods of Tuvaluans. These seven adverse effects are presented here:

Coastal: Following the Intergovernmental Panel on Climate Change, sea-level has already risen by 20 centimetres between 1870 and nowadays. Considering the low-lying position of Tuvalu, this trend is going to dangerously affect the islands. The objective of the government is to increase the resilience of coastal areas and settlement to climate change.

Agricultural: Due to sea-level rise, the ground of Tuvalu is prone to increasing salinization, threatening the habitats of some plants, such as pulaka and coconut trees. Considering that Pulaka traditionally is the staple food in Tuvalu, the adaptation strategy is to introduce salt-tolerant pulaka.

Water: The islands of Tuvalu have progressively lost their fresh groundwater resources, not only due to sealevel rise, but also because of human pollution. In consequence, Tuvaluans only rely on rainwater storage to meet their needs. However, the seasons on Tuvalu are getting irregular and difficult to forecast, leading to droughts and water shortage. In order to ameliorate this situation, the adaptation plan recommends improved and increased water collection and water conservation techniques.

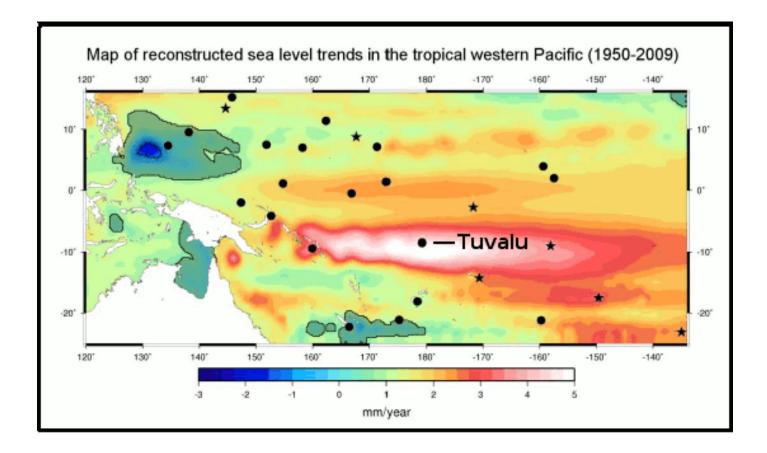
Health: Vectors breeding grounds will have an increasing availability in the next years and decades because of higher tides, inundations and tropical cyclones. The increased availability will exacerbate the exposure of the Tuvaluans to water borne diseases and will increase the epidemic potential of the islands.

Fisheries: Climate change, heating the ocean water, impacts the corals and consequently the marine fauna. The biodiversity of the ocean, and also, in the case of Tuvalu, of the atolls will decrease. In order to prevent this irreparable loss of species due to heat, fragile ecosystems have to be protected.

Fisheries: The biodiversity of the atoll and particularly in the shallower water in the lagoon, will not be the only affected by the impacts of the rising surface water temperature. The rising temperatures will also considerably reduce the shellfish and available fish resources. Considering that the Tuvaluans, on average, eat 500 grams of fish per capita every day, a reduction of the resource will have a disastrous impact of the livelihoods and, thus, also on development.

Disaster: Tuvalu has been increasingly exposed to tropical storms and cyclones since 1990. Between 1970 and 1990, only three tropical storms, hurricanes or cyclones stroke Tuvalu. However, between 1990 and 2005, the islands experienced thirteen similar meteorological events. In order to ease the impacts of the population, the country will have to implement of disaster alert and response potential system.

These different threats that Tuvalu is or will be experiencing in the next years or decades are similar to all Small Island Developing States. During our stay on Funafuti, we will explain thoroughly these different impacts of climate change in further articles.





PM 'rejects' Tuvalu on sea level

Richard Baker, Feb 2007



TUVALU, the Pacific island nation in danger of going under if sea levels rise, was rejected by Prime Minister John Howard when it last sought a meeting on the topic, according to senior officials there.

Ian Fry, adviser to the Tuvalu Government's Environment Department, told *The Age* that Tuvalu Prime Minister Maatia Toafa requested a meeting with Mr Howard at last October's Pacific Islands Forum in Fiji to discuss the looming climate-change crisis facing the island, but was denied.

Islanders may have to move if climate change pushes sea levels up too much.

Mr Fry, an Australian National University environmental law expert, said: "It's unfathomable to me as to why they don't want to discuss it."

A senior Tuvalu Government source said it was the second time in six years that Australia had refused such a request.

Neither Mr Howard's office nor the Department of Foreign Affairs and Trade responded to questions about the claims yesterday.

In November, a senior Foreign Affairs official told a Senate estimates hearing that Australia had never been approached by a Pacific island government to make arrangements for people to come to Australia to escape rising sea levels.

A high-ranking official from Kiribati, another vulnerable island nation, said his country had also considered approaching Australia to discuss population relocation, but decided such action would be futile because the Howard Government was "not sympathetic to the issue".

Pacific islands such as Tuvalu and Kiribati could become uninhabitable within decades because of rising sea levels, reduced rainfall and more extreme weather events. The islands have already suffered flooding from king tides and vegetation loss.

The Tuvalu and Kiribati government officials, who wished to remain anonymous, said Australia had a record of softening the language used in reference to climate change in recent regional communiques.

"Australia effectively blocks discussion on the issue those times where it can and plays a deaf partner in the circumstances that it can't," the Kiribati official said. "This has been the case for the last several years where Australia has been very vocal in opposition to strong language used in the policy directions of the Pacific Islands Forum."

Unlike New Zealand, which in 2001 began accepting 75 Tuvaluans a year, Australia has so far not acknowledged the prospect of climate refugees.

But it may soon be forced to do so, with last year's influential Stern report on climate change predicting millions of people in the Asia-Pacific region could be displaced by global warming.

Documents obtained by *The Age* from the Department of Prime Minister and Cabinet state that although Australia would assist its Pacific neighbours, there is no such thing as an "environmental refugee" because it is not a category under the Refugee Convention.

Immigration Department secretary Andrew Metcalfe told a Senate estimates hearing in November that the Government had done no planning on how people movement caused by climate change in the Asia-Pacific region might affect Australia.