

# Cook Islands



## KEY FACTS:

- ◆ Capital: Avarua on Rarotonga
- ◆ Population: 21,750 (2007)
- ◆ Time: GMT minus 10hr
- ◆ Currency: New Zealand dollar (NZ\$)

## Current vulnerabilities and threats

### 1. What are the health risks from current or future climate change impacts that are of most concern to your country?

- ◆ Injury and death associated with increased frequency and intensity of extreme events like cyclones, floods and storm surge.
- ◆ Reduced food security, a less nutritional diet, increased reliance on imports due to impacts on both agricultural productivity and fisheries e.g. Pukapuka: following the cyclones of 2005 it took over a year to re-establish key crops. In turn a diet high in imported food tends to be associated with lifestyle diseases. Sea level rise and associated salt water intrusion, temperature and rainfall shifts, increased pests and diseases, all impact on productivity.
- ◆ Vector-borne diseases (encephalitis, dengue) and risk of introduction of Anopheles malaria carrying mosquito into more suitable climate conditions. A study of dengue outbreaks in the Cook Islands showed linkages to El Nino climate pattern induced drought episodes which are expected to become more frequent with climate change.
- ◆ Skin diseases, rashes, fungal and bacterial infections increase in prevalence.
- ◆ Availability of potable water.
- ◆ Diarrhoeal incidence associated with high bacterial growth rate in warmer temperatures and potential contamination of potable water (both ground and tank) through flooding, storm surge, salt water intrusion and droughts.
- ◆ Heat stress productivity, respiratory illnesses and asthma.
- ◆ Ciguatera fish poisoning wells; it is still uncertain if there is a linkage between climate factors such as cyclone damage, sea surface temperatures that impact reefs and ciguatera incidence.
- ◆ Algal blooms triggered by high sea surface temperatures and increased runoff from land flooding can produce toxins that negatively affect human health.
- ◆ Recent studies indicate that some past pandemics such as Spanish flu might have had a climate related driver, this would be a concern in the face of SARS and bird flu and other potential diseases.
- ◆ There are also some health risks from burning of waste, and air pollution from vehicles which also contribute to green house gas emissions, so are not a climate change impact but addressing them benefits both the climate and human health.

### 2. What population groups in your country are most vulnerable to the health impacts of climate change and what are the impacts likely to be?

- ◆ Atoll populations (for all the above reasons as well as delayed access to treatment due to isolation and potential lack of transport and supply to or from islands, along with sea level rise threatening dwellings, water potability and viability of their already limited crops).
- ◆ The elderly: heat stress, diarrhoeal incidence, vector-borne diseases.
- ◆ Children: respiratory illness, vectorborne diseases, nutritional deficiencies, injury and death during extreme events e.g. Cyclone Martin.
- ◆ Disabled: injury and death during extreme events if not mobile.

## Strategy and policy

### 3. How much of a priority is addressing the impacts of climate change on health for your country?

Mid-level priority.

### 4. Please describe the strategies your country has developed (for example, health and climate change adaptation strategies) that address the health impacts of climate change.

None specifically on climate change, but there are relevant strategies to reduce health risks that will be exacerbated by climate change:

- ◆ A national action plan for disaster risk management has recently been completed that considers both health and climate change.
- ◆ Pandemic and vector response plans are being developed.
- ◆ Septic regulations have recently been established under the Health Act to limit nutrient flow into the lagoon which will help minimise contamination of the lagoon and ground water in light of expected increases in flooding and storm surges.
- ◆ Building codes and health regulations minimise potential health hazards like poorly built housing.
- ◆ The Tutaka inspection of properties run by the Public Health Department is also seen as a useful tool for minimising health risks linked to climate change related impacts such as inadequate/insecure housing, mosquito breeding areas, septic contamination, etc.
- ◆ The National Sustainable Development Plan (NSDP) has a goal for Safe, Secure, and Resilient Cook Islands which includes health and

disaster management and adaptation indicators.

- ◆ The Ministry of Health is represented on the National Climate Change Country Team which provides oversight to reporting to the United Nations Convention on Climate Change (UNFCCC) as well as national climate change related activities.

#### **5. Has health been integrated into national climate change mitigation and adaptation strategies?**

Yes:

- ◆ As above in terms of disaster risk management, building permits, etc.
- ◆ Also health is key consideration in the Second National Communication Adaptation Technology Needs Assessment currently being drafted.
- ◆ In addition, site specific vulnerability and adaptation assessments have been conducted for several islands in the Cook Islands using a community participatory approach, and in many cases the communities themselves have identified actions to reduce health risks that will be exacerbated by climate change, such as changing planting practices and encouraging vector control through inspections and clean ups.
- ◆ Further captured in sectoral plans, such as the National Environment Strategic Action Framework, the Health Sector Plan.

#### **6. What steps have been made towards implementation of these strategies?**

Limited steps have been taken because climate change is an additional burden on our existing development and health priorities, which will require external assistance, and any resources for climate change and health to date have primarily been for studies and mainstreaming not for implementation.

#### **7. What are the current policy gaps in addressing climate change and health?**

- ◆ Institutional arrangements and mandate to consider climate change risks to all aspects of health e.g. although there is a health representative on the climate change country team, it is not their job description to look at these issues. Similarly it is not part of vector preparedness plans to look at scenarios that are likely under climate change or new threats such as heat stress.
- ◆ There is no policy or strategy for monitoring the impacts of climate change on health, and some key health baselines are still not digitised are publicly available (such as respiratory illness frequency on outer islands or water quality monitoring results) therefore it will be difficult to assess and determine the impacts or risks.
- ◆ While there have been some studies and strategy development there has been little implementation of health and climate change actions or policies. Resources are not available for this important aspect.
- ◆ Infrastructure design to address climate related issues such as heating and cooling, flooding, and energy efficiency is not required for public buildings such as hospitals or residences.

#### **8. How well equipped is your health system to cope with the impacts of climate change?**

Not very well; significant capacity building is required. In some cases this will mean expansion of existing programmes, while in others new programmes will need to be established. These will need to build on existing programmes in the areas of public health, epidemiology,

monitoring, statistics, and database management, risk assessment, education and awareness, and so forth.

#### **9. Have you made any changes to your health system in response to increased risks resulting from climate change and if so what changes have you made?**

None; although recent studies and advise may contribute to some changes being initiated. There is also some use of GIS and other technologies for incidence mapping of dengue cases.

#### **10. What are the main constraints to addressing the health impacts of climate change in your country and how will these be addressed?**

- ◆ Competing national priorities (the provision of basic health services).
- ◆ Limited institutional arrangements to address health and climate change.
- ◆ Insufficient resources (financial and capacity) to address these issues.

#### **11. Have national resources been allocated to address climate change and health in your country? If so, approximately how much has been allocated and for what issues?**

- ◆ Consideration of climate change and health issues has been the subject of national policy development including the National Millennium Development Goals, NSDP and sectoral plans for environment and disaster management as well as indirectly in the health plan. Environmental and Septic Regulations and their enforcement are linked as described above and are supported by National Budget through the OPM Policy and Planning Unit as well as the various agencies concerned.
- ◆ Activities that address climate change and health risks have primarily been contributions in kind for two small pilot activities in the Cook Islands implemented as projects of the National Environment Service and Ministry of Infrastructure and Planning.
- ◆ Capacity Building to Enable the Development of Adaptation Measures in PICs, addressed the community identified issue of increased salinisation of ground water in Aitutaki through their solution of increased rain water harvesting and subsidising of household tanks, as well as improvements to and water quality testing of community tanks and awareness campaigns. \$250,000
- ◆ Asia Development Bank supported an \$300,000 Climate Change Adaptation in the Pacific project which included assessment of El Nino and Dengue incidence, as well as reviewing the building codes to climate proof them.

#### **12. Is the Ministry of Health working together with other ministries (such as Ministries of Agriculture, Environment, Fisheries and Finance) to address health and climate change issues?**

Yes .

#### **13. Has your country been involved in work to manage climate change and health at the international level?**

Yes, through Cook Islands Red Cross and Emergency Management Cook Islands officials have been involved mainly in the area of Disaster Risk Management. Government representatives have also attended workshops under the UNFCCC which have looked at this issue.

**14. How would you describe the capacity of your country to participate at the global level on climate change and health?**

Moderate, needs further development.

***Any other comments or information you would like to provide***

While we do have the capacity in terms of expertise to address many health and climate related impacts we are constrained by our limited population and resources to focus on this issue when basic healthcare provision and existing development needs must take precedence.

Nonetheless we have taken some initial steps in terms of identifying key health and climate change issues through both community based approaches and scientific studies. The Cook Islands is now at a stage where on-the-ground actions are required rather than further assessments, particularly for our outer island communities.

Therefore, Cook Islands is very concerned about the current and future impacts of climate change on the health of our people.

We are interested in being supported to build our capacity to address climate change related issues, including health, actual response initiatives and ideally would like to become a regional centre of excellence for adaptation to climate change in all sectors.