

# SOLOMON ISLANDS



## HEALTH & CLIMATE CHANGE **COUNTRY PROFILE 2020**

Small Island Developing States Initiative



United Nations  
Framework Convention on  
Climate Change

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## Acknowledgements

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“Strengthening health systems resilience is a high priority; act now.”



## EXECUTIVE SUMMARY

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Despite producing very little greenhouse gas emissions that cause climate change, people living in small island developing States (SIDS) are on the front line of climate change impacts. These countries face a range of acute to long-term risks, including extreme weather events such as floods, droughts and cyclones, increased average temperatures and rising sea levels. Many of these countries already have a high burden of climate-sensitive diseases that may be exacerbated by climate change. Some of the nations at greatest risk are under-resourced and unprotected in the face of escalating climate and pollution threats. In recent years, the voice of the small island nation leaders has become a force in raising the alarm for urgent global action to safeguard populations everywhere, particularly those whose very existence is under threat.

Recognizing the unique and immediate threats faced by small islands, WHO has responded by introducing the WHO Special Initiative on Climate Change and Health in Small Island Developing States (SIDS). The initiative was launched in November 2017 in collaboration with the United Nations Framework Convention on Climate Change (UNFCCC) and the Fijian Presidency of the 23rd Conference of the Parties (COP23) to the UNFCCC, held in Bonn, Germany in 2017, with the vision that by 2030 all health systems in SIDS will be resilient to climate variability and climate change. It is clear, however, that, in order to protect the most vulnerable from climate risks and to gain the health co-benefits of mitigation

policies, building resilience must happen in parallel with the reduction of carbon emissions by countries around the world.

The WHO Special Initiative on Climate Change and Health in (SIDS) aims to provide national health authorities in SIDS with the political, technical and financial support required to better understand and address the effects of climate change on health.

A global action plan has been developed by WHO that outlines four pillars of action for achieving the vision of the initiative: empowerment of health leaders to engage nationally and internationally; evidence to build the investment case; implementation to strengthen climate resilience; and resources to facilitate access to climate finance. In March 2018, ministers of health gathered in Fiji to develop a Pacific Islands Action Plan to outline the implementation of the SIDS initiative locally and to identify national and regional indicators of progress.

As part of the regional action plan, small island nations have committed to developing a WHO UNFCCC health and climate change country profile to present evidence and monitor progress on health and climate change.

This WHO UNFCCC health and climate change country profile for Solomon Islands provides a summary of available evidence on climate hazards, health vulnerabilities, health impacts and progress to date in health sector efforts to realize a climate-resilient health system.

# KEY RECOMMENDATIONS

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1

## **INSTITUTIONALIZE CLIMATE CHANGE IN THE MINISTRY OF HEALTH AND MEDICAL SERVICES ORGANIZATIONAL STRUCTURE**

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A division within the Ministry of Health and Medical Services with existing supportive legislation to include climate change and health as a core function, to oversee the implementation of the Solomon Islands National Climate Change and Health Adaptation Plan 2011 and to strengthen the weak collaboration within the health sector and with other sectors. Relevant climate change and health activities to be streamlined into respective department's annual operational plan where relevant.

2

## **STRENGTHEN IMPLEMENTATION OF THE CLIMATE CHANGE AND HEALTH STRATEGIC ACTION PLAN**

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The Ministry of Health and Medical Services has approved the National Climate Change and Health Adaptation Plan 2011. This plan is to be updated with inclusion of key performance indicators and specific budget requirements. It is to be aligned to the National Health Strategic Plan 2016–2020, the National Climate Change Policy 2012, the National Development Strategy 2016–2019 and the United Nations (UN) Sustainable Development Goals. However, implementation remains moderate. Main barriers to implementation have been identified as insufficient funding and a lack of adequate information systems and reporting with respect to health and climate change issues.

3

## **ASSESS HEALTH VULNERABILITY, IMPACTS AND ADAPTIVE CAPACITY TO CLIMATE CHANGE**

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Conduct a national assessment of climate change impacts, vulnerability and adaptation for health in collaboration with the Climate Change Division, Ministry of Environment, Climate Change and Disaster Management (MECCDM). Cover both community and health care facilities in the assessment and use results of the assessment for policy prioritization and allocation of resources.

4

## **STRENGTHEN INTEGRATED RISK SURVEILLANCE AND EARLY WARNING SYSTEMS**

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The current surveillance system to incorporate climate data, geographical and other relevant environmental data with the purpose of surveillance and early warning system for health. There is a need for human resources and institutional capacity-building for this purpose, including strengthening the National Public Health Laboratory to provide scientific support.

5

## **ADDRESS BARRIERS TO ACCESSING INTERNATIONAL CLIMATE CHANGE FINANCE TO SUPPORT HEALTH ADAPTATION**

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Strengthen local policy, institutional, technical and knowledge capacities, to support preparation of a country proposal for specific funding. There must be ongoing dialogue between the health sector and potential funders in order to provide relevant information for funding purposes. A technical working group is to be established to drive resource mobilization for the health sector.

6

## **INCLUDE THE HEALTH CO-BENEFITS OF MITIGATION AND ADAPTATION ACTIONS IN THE NATIONAL CLIMATE CHANGE POLICY INCLUDING SECTOR-SPECIFIC POLICIES FOR SOLOMON ISLANDS**

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The Ministry of Health and Medical Services to advocate for health co-benefits to be incorporated into the National Climate Change Policy and other sector-specific policies.

# BACKGROUND

Solomon Islands is a scattered archipelago of over 900 small islands located in the 'Ring of Fire', the earthquake belt of the Pacific Region (1). Geographically, the islands are a combination of mountainous lands and low-lying coral atolls (2). Similar to other islands in the Pacific Region, the Solomon Islands are vulnerable to extreme weather events such as drought and flooding, which are associated with food and water shortage, flooding, and landslides (1). Other potential hazards include tropical cyclones, volcanic activity, earthquakes and tsunamis (1) that threaten public health, ecosystems and infrastructure.

Recent trends have indicated increases in temperature, sea level rise, ocean acidification and coral bleaching associated with global climate change (3). This poses a risk to more than 80% of the population that resides in low-lying coastal areas (1). Accelerated coastal erosion and salinization of well water is an additional risk for several of the smaller, low-lying islands (1).

Health risks of considerable concern include vector-borne diseases, respiratory diseases, waterborne and foodborne diseases, malnutrition, and noncommunicable diseases (4,5). Measures to address these health concerns include creating a national policy framework, capacity-building and institutional strengthening, and increased public awareness and education (1).

The Solomon Islands face socioeconomic challenges that exacerbate existing vulnerabilities (1). In addition to being vulnerable to natural disasters and extreme events, other obstacles include a lack of access to electricity and roads for inland villages, limited government services, and political instability that make it difficult for government agencies to implement effective national programmes (1).

## HIGHEST PRIORITY CLIMATE-SENSITIVE HEALTH RISKS FOR SOLOMON ISLANDS

Direct effects	
Health impacts of extreme weather events	✓
Heat-related illness	✓
Indirect effects	
Water security and safety (including waterborne diseases)	✓
Food security and safety (including malnutrition and foodborne diseases)	✓
Vector-borne diseases	✓
Zoonoses	
Respiratory illness	✓
Disorders of the eyes, ears, skin and other body systems	✓
Diffuse effects	
Disorders of mental/psychosocial health	✓
Noncommunicable diseases	✓
Health systems problems	
Population pressures	

Source: Adapted and updated from reference (4).

Please refer to reference (4) for further information on each category.



# CLIMATE HAZARDS RELEVANT FOR HEALTH

## Climate hazard projections for Solomon Islands

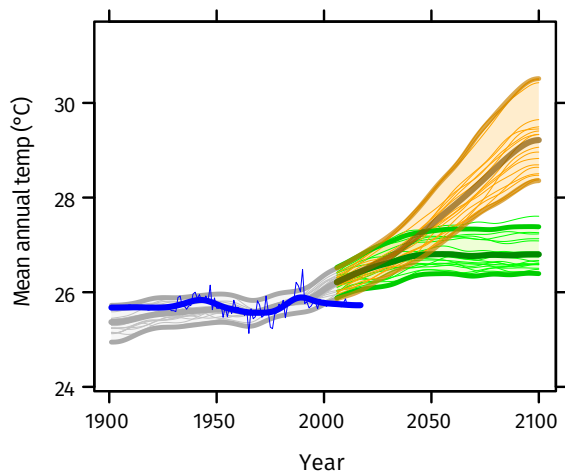
Country-specific projections are outlined up to the year 2100 for climate hazards under a 'business as usual' high emissions scenario compared to projections under a 'two-degree' scenario with rapidly decreasing global emissions (see Figures 1–5).

The climate model projections below present climate hazards under a high emissions scenario, Representative Concentration Pathway 8.5 (RCP8.5 – in orange) and a low emissions scenario (RCP2.6 – in green).<sup>a</sup> The text describes the projected changes averaged across about 20 global climate models (thick line). The figures<sup>b</sup> also show each model individually as well as the 90% model range (shaded) as a measure of uncertainty and the annual and smoothed observed record (in blue).<sup>c</sup> In the following text the present-day baseline refers to the 30-year average for 1981–2010 and the end-of-century refers to the 30-year average for 2071–2100.

Modelling uncertainties associated with the relatively coarse spatial scale of the models compared with that of small island States are not explicitly represented. There are also issues associated with the availability and representativeness of observed data for such locations.

### Rising temperature

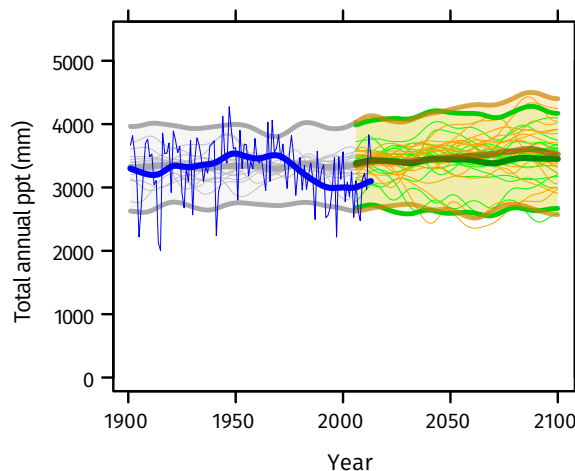
**FIGURE 1:** Mean annual temperature, 1900–2100



Under a high emissions scenario, mean annual temperature is projected to rise by about 2.9 °C on average by the end-of-century (i.e. 2071–2100 compared with 1981–2010). If emissions decrease rapidly, the temperature rise is limited to about 0.8 °C.

### Small increase in total precipitation

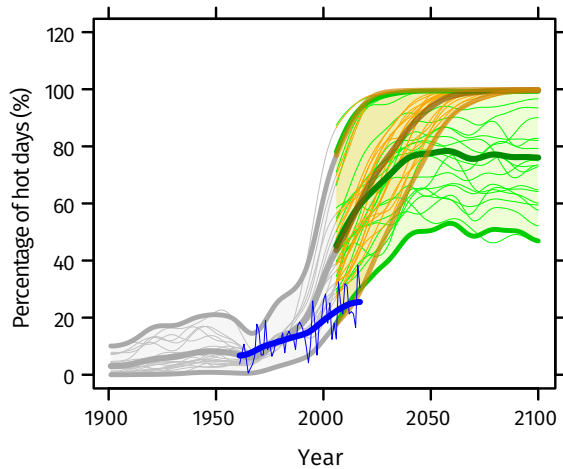
**FIGURE 2:** Total annual precipitation, 1900–2100



Total annual precipitation is projected to increase by about 6% on average under a high emissions scenario, although the uncertainty range is large (-6% to +23%). If emissions decrease rapidly there is little projected change on average: an increase of 3% with an uncertainty range of -8% to +12%.

### More high temperature extremes

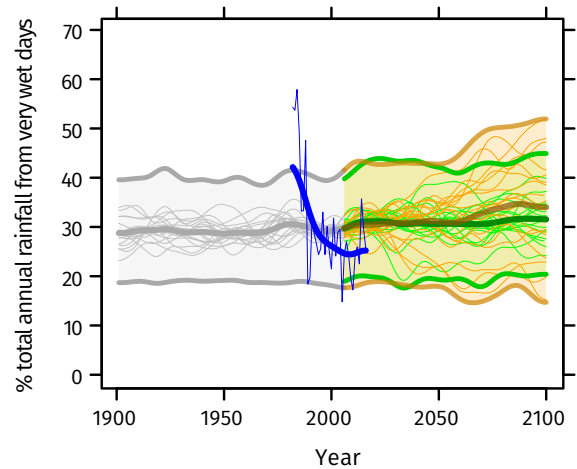
**FIGURE 3:** Percentage of hot days ('heat stress'), 1900–2100



The percentage of hot days<sup>d</sup> is projected to increase substantially from about 15% of all observed days on average in 1981–2010 (10% in 1961–1990). Under a high emissions scenario, almost 100% of days on average are defined as 'hot' by the end-of-century. If emissions decrease rapidly, about 75% of days on average are 'hot'. Note that the models tend to over-estimate the observed increase in hot days (by about 10% on average for 1981–2010). Similar increases are seen in hot nights<sup>d</sup> (not shown).

### Small increase in extreme rainfall

**FIGURE 4:** Contribution of very wet days ('extreme rainfall' and 'flood risk') to total annual rainfall, 1900–2100

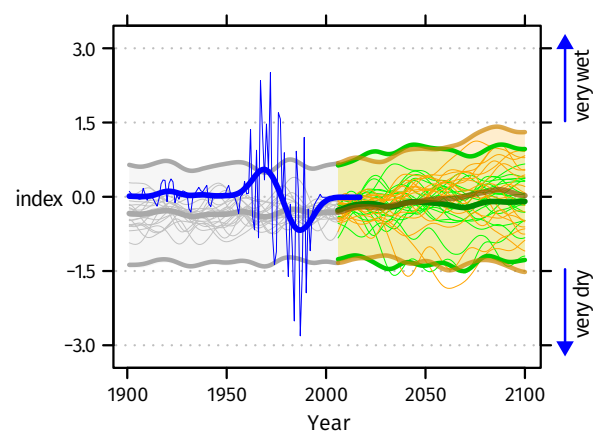


Under a high emissions scenario, the proportion of total annual rainfall from very wet days<sup>e</sup> (about 30% for 1981–2010) could increase a little by the end-of-century (to around 34% on average with an uncertainty range of about 15% to 50%), with less change if emissions decrease rapidly. These projected changes are accompanied by small projected increases in total annual rainfall (see Figure 2).

**FIGURE 5:** Standardized Precipitation Index ('drought'), 1900–2100

The Standardized Precipitation Index (SPI) is a widely used drought index which expresses rainfall deficits/excesses over timescales ranging from 1 to 36 months (here 12 months, i.e., SPI12).<sup>f</sup> It shows how at the same time extremely dry and extremely wet conditions, relative to the average local conditions, change in frequency and/or intensity.

Under a high emissions scenario, SPI12 values are projected to increase from about -0.4 to about 0.1 on average by the end of the century (2071–2100), with a number of models indicating substantially larger increases and hence more frequent and/or intense wet episodes. Year-to-year variability remains large with dry episodes continuing to occur into the future.



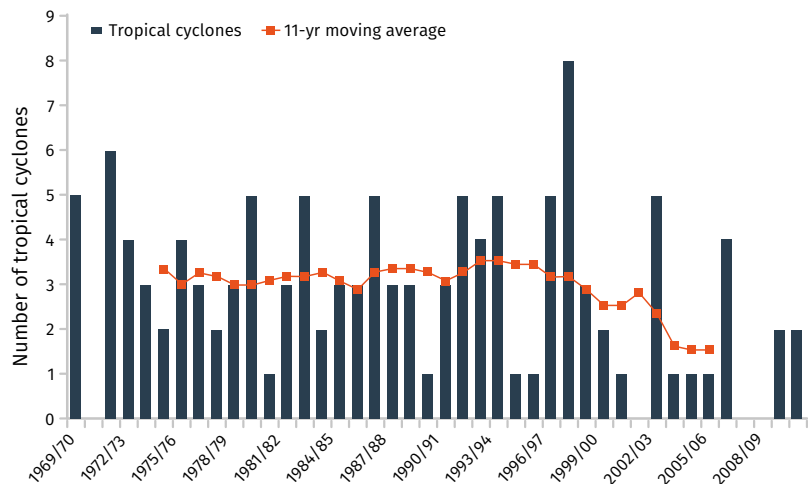
### NOTES

- <sup>a</sup> Model projections are from CMIP5 for RCP8.5 (high emissions) and RCP2.6 (low emissions). Model anomalies are added to the historical mean and smoothed.
- <sup>b</sup> Analysis by the Climatic Research Unit, University of East Anglia, 2018.
- <sup>c</sup> Observed historical record of mean temperature is from CRU-Tsv3.26 and total precipitation is from GPCC. Observed historical records of extremes are from JRA55 for temperature and from GPCC-FDD for precipitation.
- <sup>d</sup> A 'hot day' ('hot night') is a day when maximum (minimum) temperature exceeds the 90th percentile threshold for that time of the year.
- <sup>e</sup> The proportion (%) of annual rainfall totals that falls during very wet days, defined as days that are at least as wet as the historically 5% wettest of all days.
- <sup>f</sup> SPI is unitless but can be used to categorise different severities of drought(wet): above +2.0 extremely wet; +2.0 to +1.5 severely wet; +1.5 to +1.0 moderately wet; +1.0 to +0.5 slightly wet; +0.5 to -0.5 near normal conditions; -0.5 to -1.0 slight drought; -1.0 to -1.5 moderate drought; -1.5 to -2.0 severe drought; below -2.0 extreme drought.

# Tropical cyclones







Tropical cyclones affect Solomon Islands mainly between November and April. An average of 29 cyclones per decade developed within or crossed the Solomon Islands Exclusive Economic Zone (EEZ) between the 1969/70 and 2010/11 seasons (see Figure 6). The interannual variability in the number of tropical cyclones in Solomon Islands EEZ is large (3).

**FIGURE 6:** Time series of the observed number of tropical cyclones developing within and crossing the Solomon Islands Exclusive Economic Zone. The 11-year moving average is in orange.



Source: Australian Bureau of Meteorology and CSIRO. Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports, 2014 (3).

**POTENTIAL FUTURE CHANGES IN TROPICAL CYCLONES: A GLOBAL PERSPECTIVE (6-13)<sup>a</sup>**

 <b>Total number</b>	 <b>Intensity</b>	 <b>Frequency of category 4 and 5 events</b>	 <b>Average precipitation rates near storm centre</b>
 Increase  Decrease			

# Sea level rise

Sea level rise is one of the most significant threats to low lying areas on small islands and atolls. Research indicates that global mean sea level rise rates are almost certainly accelerating as a result of climate change. The relatively long response times to global warming mean that sea level will continue to rise for a considerable time after any reduction in emissions.





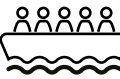



**0.4-0.9 m**

**Further rise in Solomon Islands by 2090 (3)**

High emissions scenario (RCP8.5). With variation in models and emissions scenarios.

## Impacts of sea level rise include

-  Coastal erosion
-  Higher storm surges
-  Water contamination and disruption
-  Ecosystem disruption
-  Population displacement
-  Mental health

<sup>a</sup> Information and understanding about tropical cyclones (including hurricane and typhoons) from observations, theory and climate models has improved in the last few years. Despite this, robust projections for specific ocean basins or for changes in storm tracks are difficult. As such, presented here is a synthesis of the expected changes at the global scale.



# HEALTH VULNERABILITY TO CLIMATE CHANGE

## SDG indicators related to health and climate change

Many of the public health gains we have made in recent decades are at risk due to the direct and indirect impacts of climate variability and climate change. Sustainable development across sectors can strengthen health resilience to climate change.

### 1. NO POVERTY



Proportion of population living below the national poverty line (2013) (14,15)

12.7%

### 3. GOOD HEALTH AND WELL-BEING



5.2%

Current health expenditure as percentage of gross domestic product (GDP) (2016) (17)

50

Universal Health Coverage Service Coverage Index (2015)<sup>a</sup> (16)

20.6

Under-five mortality rate (per 1000 live births) (2017) (18)

### 6. CLEAN WATER AND SANITATION

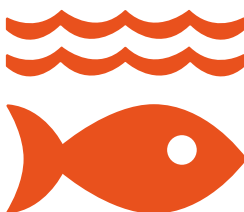


Proportion of total population using at least basic drinking-water services (2017)<sup>b</sup> (19)

68%

Proportion of total population using at least basic sanitation services (2017)<sup>b</sup> (19)

34%



### 13. CLIMATE ACTION

Total number of weather-related disasters recorded between 2000–2018<sup>c</sup> (20)

14

Highest total number of persons affected by a single weather-related disaster between 2000–2018<sup>c</sup> (20)

52 000

<sup>a</sup> The index is based on medium data availability. Values greater than or equal to 80 are presented as ≥80 as the index does not provide fine resolution at high values; 80 should not be considered a target.

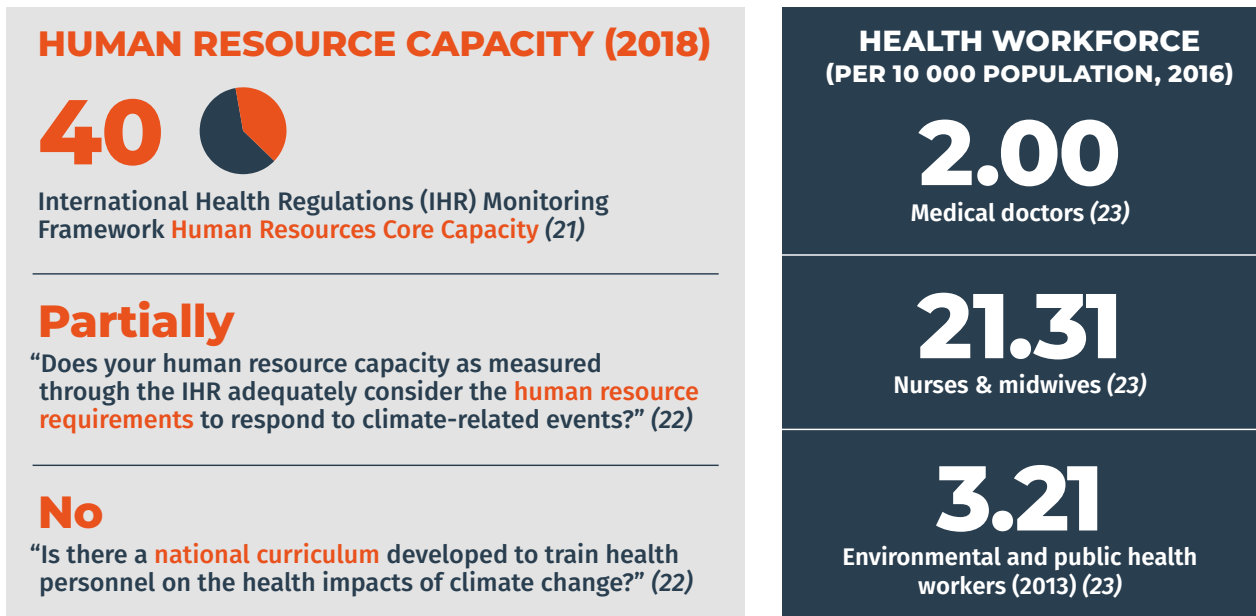
<sup>b</sup> Data for SDG6 safely managed drinking-water and sanitation services are not consistently available for all SIDS at this time, therefore 'at least basic services' has been reported on for comparability.

<sup>c</sup> Data for SDG13.1 are currently not available. Alternative indicators and data sources are presented.

NOTE: Figures presented here may differ from national estimates. For more information see: Solomon Islands descriptive health core indicator report, 2018. Honiara: Solomon Islands Government; 2019 (5).

## Health workforce

Public health and health care professionals require training and capacity-building to have the knowledge and tools necessary to build climate-resilient health systems. This includes an understanding of climate risks to individuals, communities and health care facilities and approaches to protect and promote health given the current and projected impacts of climate change.



## Health care facilities

Climate change poses a serious threat to the functioning of health care facilities. Extreme weather events increase the demand for emergency health services but can also damage health care facility infrastructure and disrupt service provision. Increased risks of climate-sensitive diseases will also require greater capacity from often already strained health services. In SIDS, health care facilities are often in low-lying areas, subject to flooding and storm surges making them particularly vulnerable.



# HEALTH IMPACTS OF CLIMATE CHANGE

## Heat stress

Climate change is expected to increase mean annual temperature and the intensity and frequency of heatwaves resulting in a greater number of people at risk of heat-related medical conditions. Heatwaves, i.e. prolonged periods of excessive heat, can pose a particular threat to human, animal and even plant health, resulting in loss of life, livelihoods, socioeconomic output, reduced labour productivity, rising demand for and cost of cooling options, as well as contribute to the deterioration of environmental determinants of health (e.g. air quality, soil, water supply).

Heat stress impacts include:

- heat rash/heat cramps;
- dehydration;
- heat exhaustion/heat stroke;
- death.

Particularly vulnerable groups include:

- elderly people;
- children;
- individuals with pre-existing conditions (e.g. diabetes);
- the socially isolated.

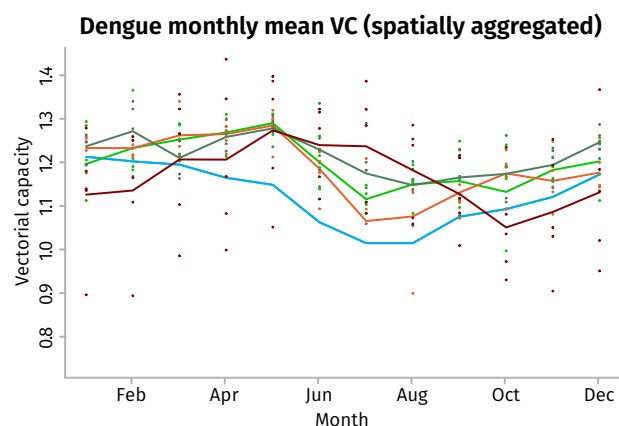
## Infectious and vector-borne diseases

Some of the world's most virulent infections are also highly sensitive to climate: temperature, precipitation and humidity have a strong influence on the life-cycles of the vectors and the infectious agents they carry and influence the transmission of waterborne and foodborne diseases (25,26).

Figure 7 presents modelled estimates for Solomon Islands of the potential risk of dengue fever transmission.<sup>a</sup> While globally-projected climate change scenarios tends to correlate with increasing temperatures and thus increasing vectorial capacity in those areas – moving towards a vector-borne transmission disease thermo-optimum – some areas including some SIDS are projected to experience conditions warmer than optimal conditions for disease epidemics. In those cases, baseline conditions may be more permissive to outbreaks of vector-borne diseases than the future, assuming continued trajectories. Most estimates shown exceed the threshold for ongoing epidemic transmission ( $VC > 0.2$ ), with seasonal variations indicated. Monthly mean vectorial capacity (VC) estimates were also modelled for malaria, chikungunya and Zika. Similar trends in transmission risks of these diseases were observed (plots not shown but available upon request) (27–30).<sup>b,c</sup>

**FIGURE 7:** Monthly mean vectorial capacity (VC) in Solomon Islands for dengue fever. Modelled estimates for 2015 (baseline) are presented together with 2035 and 2085 estimates under low emissions (RCP2.6) and high emissions (RCP8.5) scenarios.

- 2015, baseline
- 2035, low emissions scenario RCP2.6
- 2035, high emissions scenario RCP8.5
- 2085, low emissions scenario RCP2.6
- 2085, high emissions scenario RCP8.5



<sup>a</sup> A suite of mathematical models was systematically developed, then applied and interpreted by a team of researchers at Umeå University (Sweden) to assess the potential for mosquito-borne disease outbreaks (e.g. dengue, chikungunya, Zika and malaria) in terms of climate-dependent vectorial capacity (VC). Baseline year is 2015, Climatic Research Unit CRU-TSv4.01. Future projections are represented for two emissions futures (Representative Concentration Pathways: RCP2.6, RCP8.5), five climate change projections (Global Climate Models: gfdlesm2m, hadgem2-es, ipsl-cm5a-lr, miroc-esm-chem, noresm1-m). (2018) Umeå University, Sweden.

<sup>b</sup> Given the climate dependence of many vector-borne diseases' transmission cycles, seasonality of epidemic risk is common; however, many SIDS, due to tropical latitudes, tend to have less seasonality than more temperate areas.

<sup>c</sup> The actual occurrences/severity of epidemics would be quite different for each disease in each setting and could depend greatly on vector- and host-related transmission dynamics, prevention, surveillance and response capacities that are not captured in this model.

## Noncommunicable diseases, food and nutrition security

Small island developing States (SIDS) face distinct challenges that render them particularly vulnerable to the impacts of climate change on food and nutrition security including: small, and widely dispersed, land masses and populations; large rural populations; fragile natural environments and lack of arable land; high vulnerability to climate change, external economic shocks, and natural disasters; high dependence on food imports; dependence on a limited number of economic sectors; and distance from global markets. The majority of SIDS also face a 'triple-burden' of malnutrition whereby undernutrition, micronutrient deficiencies and overweight and obesity exist simultaneously within a population, alongside increasing rates of diet-related NCDs.

Climate change is likely to exacerbate the triple-burden of malnutrition and the metabolic and lifestyle risk factors for diet-related NCDs. It is expected to reduce short- and long-term food and nutrition security both directly, through its effects on agriculture and fisheries, and indirectly, by contributing to underlying risk factors such as water insecurity, dependency on imported foods, urbanization and migration, and health service disruption. These impacts represent a significant health risk for SIDS, with their particular susceptibility to climate change impacts and already over-burdened health systems, and this risk is distributed unevenly, with some population groups experiencing greater vulnerability.

## NONCOMMUNICABLE DISEASES IN SOLOMON ISLANDS

61.9

Healthy life expectancy (2016) (31)



12.3%

Adult population considered undernourished (2015–17 3-year average) (32)



20.5%

Adult population considered obese (2016) (33)

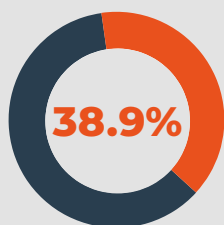


10.8%

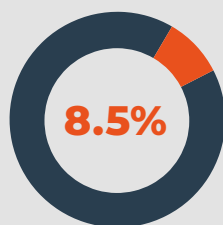
Prevalence of diabetes in the adult population (2014) (34)



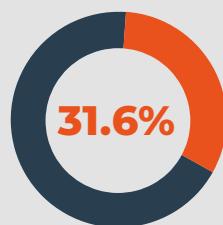
## MOTHER AND CHILD HEALTH



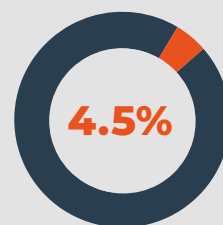
Iron deficiency anaemia in women of reproductive age (2016) (35)



Wasting in children under five years of age (2015) (36)



Stunting in children under five years of age (2015) (36)






Overweight rate in children under five years of age (2015) (36)

# HEALTH SECTOR RESPONSE: MEASURING PROGRESS

The following section measures progress in the health sector in responding to climate threats based on country-reported data collected in the 2018 WHO Climate and Health Country Survey (22). Key indicators are aligned with those identified in the Pacific Islands Action Plan.

## Empowerment: Supporting health leadership

### National planning for health and climate change







<b>Has a national health and climate change strategy or plan been developed?<sup>a</sup></b>		
Title: Health Impacts of Climate Change in the Solomon Islands: An Assessment and Adaptation Action Plan Year: 2011		
<b>Content and implementation</b>		
Are health adaptation priorities identified in the strategy/plan?		
Are the health co-benefits of mitigation action considered in the strategy/plan?		
Performance indicators are specified		N/A
Level of implementation of the strategy/plan		<b>MODERATE</b>
Current health budget covers the cost of implementing the strategy/plan		<b>MINIMALLY</b>

=yes, = no, O=unknown, N/A= not applicable

<sup>a</sup> In this context, a national strategy or plan is a broad term that includes national health and climate strategies as well as the health component of national adaptation plans (H-NAPs).

### Intersectoral collaboration to address climate change

Is there an agreement in place between the ministry of health and other sectors in relation to health and climate change policy?

Sector <sup>a</sup>	Agreement in place
Transportation	
Electricity generation	
Household energy	
Agriculture	
Social services	
Water, sanitation & wastewater management	

=yes, = no, O=unknown, N/A= not applicable

<sup>a</sup> Specific roles and responsibilities between the national health authority and the sector indicated are defined in the agreement.

## Evidence: Building the investment case

### Vulnerability and adaptation assessments for health

**Has an assessment of health vulnerability and impacts of climate change been conducted at a national level?**
✕

**TITLE:** N/A

Have the results of the assessment been used for policy prioritization or the allocation of human and financial resources to address the health risks of climate change?

Policy prioritization

Human and financial resource allocation

N/A

None                      Minimal                      Somewhat                      Strong

Level of influence of assessment results

## Implementation: Preparedness for climate risks

### Integrated risk monitoring and early warning

Climate-sensitive diseases and health outcomes	Monitoring system is in place <sup>a</sup>	Monitoring system includes meteorological information <sup>b</sup>	Early warning and prevention strategies in place to reach affected population?
Thermal stress (e.g. heatwaves)	✕	✕	✕
Vector-borne diseases	✓	✓	✓
Foodborne diseases	✕	✕	✓
Waterborne diseases	✓	✕	✓
Nutrition (e.g. malnutrition associated with extreme-climatic events)	✓	✕	✓
Injuries (e.g. physical injuries or drowning in extreme weather events)	✕	✕	✕
Mental health and well-being	✓	✕	✓
Airborne and respiratory diseases	✓	✕	✓

✓=yes, ✕= no, O=unknown, N/A= not applicable

<sup>a</sup> A positive response indicates that the monitoring system is in place, it will identify changing health risks or impacts AND it will trigger early action.

<sup>b</sup> Meteorological information refers to either short-term weather information, seasonal climate information OR long-term climate information.

### Emergency preparedness

Climate hazard	Early warning system in place?	Health sector response plan in place?	Health sector response plan includes meteorological information?
Heatwaves	✓	✗	✗
Storms (e.g. hurricanes, monsoons, typhoons)	✓	✓	✗
Flooding	✓	✓	✗
Drought	✓	✓	✗

✓=yes, ✗= no, O=unknown, N/A= not applicable

## Resources: Facilitating access to climate and health finance

### International climate finance

<b>Are international funds to support climate change and health work currently being accessed?</b>	<b>✗</b>
If yes, from which sources?	
<input type="checkbox"/> Green Climate Fund (GCF)	<input type="checkbox"/> Global Environment Facility (GEF)
<input type="checkbox"/> Bilateral donors	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Other multilateral donors	

### Funding challenges

Greatest challenges faced in accessing international funds			
Lack of information on the opportunities	✓	Lack of country eligibility	
Lack of connection by health actors to climate change processes	✓	Lack of capacity to prepare country proposals	✓
Lack of success in submitted applications		None (no challenges/challenges were minimal)	
Other (please specify):		Not applicable	

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