



Construction of a survey module on climate change

Alison Culpin & Monica Madrid

(c Mike Sharp, & Andrea Borlizzi) Pacific Community, October 2022

Why the Pacific Community (SPC) wanted to develop a survey module on Climate Change



Addressing climate change is a priority for Pacific Leaders

This survey module will provide disaggregated data to support statements on impact.

SDG13 targets are big picture

The targets and indicators under SDG13 are not delivering the data needed for subnational planning and climate financing Pacific Island NSOs are already starting to include climate questions in their surveys

This module will support our countries to collect standard data for climate change indicators

75



Community Communauté

How climate change and natural disasters are impacting households and communities in the Pacific Methodological review for the collection of data on the impact of climate change in household surveys in the context of Small Island Developing States

Context for designing a Climate Change and Disaster Survey Module





LSMS GUIDEBOOK SECOND EDITION December 2021

Capturing What Matters

Essential Guidelines for Designing Household Surveys

Global mapping









- 1. Climate change will likely increase the frequency and intensity of drought, floods and storms in the region.
- 2. Main consequences include adverse effects on humans, households' assets, food production, freshwater availability, households' livelihoods, income, and employment.
- Certain countries, especially those that are the most impacted by natural disasters/climate change, are starting to include questions that go beyond the usual scope of Population and Housing Censuses, for example, to cover aspects related to the environment and climate change.
- 4. In Census of Agriculture, Fiji and Benin included a more comprehensive section on Climate Change and Challenges.
- 5. However, the coverage of climate change in censuses and surveys should be better standardized.
- 6. LSMS-ISA, created knowledge on climate change as they relate to household-level adaptation choices and mitigation strategies.
- 7. The National socio-economic surveys in forestry have dedicated climate change modules.
- 8. The questionnaires of the 50x2030 initiative propose a solid set of questions on the environment and climate change for the agricultural sector.
- 9. Nepal and Bangladesh are the only two countries that have conducted national household surveys on climate change.

First draft of the Climate Change Core Module

General objective

To gather nationally relevant and internationally comparable (and over time) socio-economic data on the effects and impacts of climate change and natural disasters in the communities of the Pacific Islands.



Impact of natural disasters on households (Core module)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
NATURAL DISASTER	In the last 12 months, was your household impacted by the following natural disasters? YES1 NO2	Has this natural disaster impacted your household's: Dwelling1 Agricultural/Livestock /Fishery assets2 Other productive assets (specify)3 Health4 Access to work facilities5 Access to school6 Access to basic services7 Other, specify8	(If Q2=1): What is the estimated value of the damages inflicted to your dwelling? \$	(If Q2=2): What is the estimated value of the damages inflicted to your productive assets? \$	(If Q2=4): How many people were injured in your household as a consequence of the natural disaster?	(If Q2=4): How many people got sick in your household as a consequence of the natural disaster?	(If Q2=5): How many days of work did you and your household members lose as a consequence of this natural disaster?	(If Q2=6): How many days of school did your children lose as a consequence of this natural disaster?	<pre>(If Q2=7): Which basic services were disrupted as a consequence of this natural disaster? Electricity1 Water/Sanitation2 Transport3 Telecommunications4 Garbage collection5 Other, specify6 None7</pre>	How many of your household members have been forced to relocate elsewhere as a consequence of this natural disaster?
1. Flood										
2. Drought										
3. Storm										
4. Landslide										
5. Extreme temperature										
6. Wildfire										
7. Other, specify										
8. None ► END OF MODULE										



Pacific Community Communauté du Pacifique

Proposed Indicators from the Module

CLIMATE CHANGE IMPACT CATEGORY	Correspondence to Global Set of Climate Change indicators, SDGs,					
Impact of natural disasters on households	SENDAI Framework, or FDES indicators					
Distribution of households according to the type of natural disaster that last affected them	GS #39 Frequency of hazardous events and disasters					
	GS #41 Direct economic loss in the housing sector attributed to disasters					
Percentage of households with dwellings damaged, by	SDG 1.5.2; SDG 11.5.2					
natural disaster category	FDES 4.1.2.b Economic losses due to natural extreme events and disasters					
	Sendai C-3: Direct economic loss to all other damaged or destroyed productive assets attributed to disasters					
Percentage of households with productive assets damaged,	GS #40 Direct economic loss to all other damaged or destroyed productive assets attributed to disasters					
	SDG 1.5.2; SDG 11.5.2					
by natural disaster category	Sendai C-4: Direct economic loss in the housing sector attributed to disasters.					
No. of persons sick or injured, by natural disaster category	GS #44 Incidence of cases of climate-related diseases					
	GS #41 Direct economic loss in the housing sector attributed to disasters					
Economic value of damages on dwellings, by natural disaster						
category	FDES 4.1.2.b Economic losses due to natural extreme events and disasters					
	Sendai C-3: Direct economic loss to all other damaged or destroyed productive assets attributed to disaster					
	GS #40 Direct economic loss to all other damaged or destroyed productive assets attributed to disasters					
Economic value of damages on productive assets, by natural	SDG 1.5.2; SDG 11.5.2					
disaster category	Sendai C-4: Direct economic loss in the housing sector attributed to disasters					
new stars of her shall also the first of from her is a single	GS #75 Direct economic loss in the housing sector attributed to disasters					
Percentage of households that suffered from basic services	GS #77 Impacts of climate change on transport					
disruption due to natural disasters	Sendai D-1 (compound): Damage to critical infrastructure attributed to disasters.					
Naturity tion of households according to the type of heats	GS #75 Direct economic loss in the housing sector attributed to disasters					
Distribution of households according to the type of basic	GS #77 Impacts of climate change on transport					
service disrupted due to natural disasters	Sendai D-1 (compound): Damage to critical infrastructure attributed to disasters					
	GS #43 Number of climate refugees, climate migrants and persons displaced by climate change					
	Sendai B-1: (Compound) Number of directly affected people attributed to disasters, per 100,000 population					
Number of persons forced to leave their locality because of	B-2: Number of injured or ill people attributed to disasters, per 100,000 population.					
he natural disaster	B-3: Number of people whose damaged dwellings were attributed to disasters.					
	B-4: Number of people whose destroyed dwellings were attributed to disasters.					
	B-5: Number of people whose livelihoods were disrupted or destroyed, attributed to disasters.					

Outline of the proposed accompanying sourcebook

1. Introduction

2. Constructing data on climate change: Summary of the findings of the literature review

2.1. Characteristics of Climate Change and Natural Disasters in PICTs.

2.2. Findings from the global mapping of censuses and surveys that include climate change related questions.
 2.3. Results from internal consultation with SPC Divisions.

3. Information needs and indicators

This section describes what should be measured and how it should be measured, providing examples of indicators that can be derived from the climate change and natural disasters module.

- 3.1. Socio-economic characteristics Climate change perceptions.
- 3.2. Impacts of natural disasters and slow-onset climate change events.
- 3.3. Adaptation to climate change.
- 3.4. Gender and climate change.

3.5. Migration.

4. Collecting climate change and natural disasters data: questionnaire proposal

- 4.1. Objectives of the survey module.
- 4.2. Sampling strategy.
- 4.2.1. Target population.
- 4.2.2. Sampling unit, analysis unit.
- 4.2.3. Sampling design.
- 4.3. Reference period, frequency and timing.
- 4.3. Questionnaire structure and content.

5. Constructing and disseminating climate change indicators

5.1. Estimation strategy.

5.2. Data presentation: Presentation level, data reliability, uncertainty, disaggregation, geographical representation, etc. 5.3. Data dissemination and access.

6. Conclusion



Thank You