

Measuring environment as part of gender-sensitive poverty statistics

Gender mainstreaming in official statistics: Gender and environment statistics, 9th Global Forum on Gender Statistics, Johannesburg

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Equality Insights in brief

Link between multidimensional poverty and climate vulnerability

Demonstrating the value of gender-inclusive environmental data

Strategies for promoting data use and engagement



Equality Insights in brief

- *Equality Insights* program leads **individual-level gender-sensitive** measurement of **multidimensional poverty** and works with partners to collect, analyse and communicate that data
 - **Shift global poverty measurement standards** towards disaggregatable, gender-sensitive data as a norm via quantitative measurement of 15 dimensions of life plus assets
- The measure's development was informed by **participatory research** with more than 3000 people across 6 countries in Africa, Asia and the Pacific, and use in 7 countries
- ***Equality Insights Plus*** is the extended and face-to-face survey, developed to inform robust poverty and inequality assessment and response.
- ***Equality Insights Rapid*** is a shorter version of the face-to-face survey, developed to enable surveying by phone in the context of COVID-19.



Equality Insights — key measurement features



Intersectional

- Provides insight into how multiple characteristics such as gender and disability, age (all ages over 18) and gender intersect to influence the experience of poverty



Multidimensional

- Assesses 15 dimensions of life, based on participatory research across 6 countries with some 3000 people with lived experience of poverty



Gender-sensitive

- Includes aspects of life that are shaped by gender, rather than only focusing on what people have in common, and uses gender-sensitive indicators where possible



Scalar

- Assesses each dimension on a scale, to show multiple levels of deprivation; how poor you are influences what you need to be not poor



Within-household

- Samples multiple adults in a household to reveal differences between household members and capture inequalities inside households, where an estimated 1/3 of global inequality is found



Dimensions measured (*Equality Insights Plus, Equality Insights Rapid*)

FINANCIAL INSIGHTS

MULTIDIMENSIONAL INSIGHTS

ASSETS



CLOTHING



EDUCATION



ENERGY



ENVIRONMENT



FAMILY PLANNING



FOOD



HEALTH



RELATIONSHIPS



SAFETY



SANITATION



SHELTER



TIME-USE



VOICE



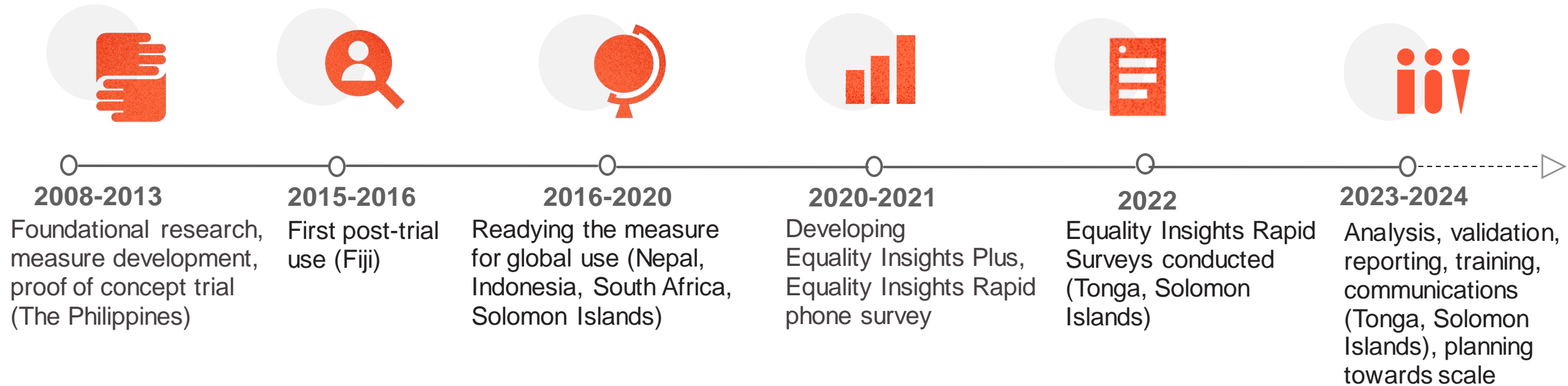
WATER



WORK



Equality Insights: A 15-year story



Tonga survey and sample

Representative 3-stage sampling approach

Sample frame

- Based on Census Data

Geography

- Nationally representative
- Where phone coverage exists

Final sample size

- 2,551 households
- 6,703 individuals

Data collection

- Undertaken by the Tonga Statistics Department
- 17 May - 30 June 2022
- Three months after a significant natural disaster – the eruption of the Hunga Tonga–Hunga Ha‘apai undersea volcano and related tsunami
- Tongatapu-based call centre set up by TSD
- First national phone survey in Tonga



Dimension	Measure
Clothing	Sufficiency Appropriateness Protection
Education	Level of educational attainment Degree of functional literacy
Energy	Exposure to unclean fumes Sufficiency of energy supply
Environment	Exposure to natural hazards Exposure to pollution
Family Planning	Unmet need for contraception
Food	Food Security (FIES)
Health	Physical health Mental health (K6)
Relationships	Perceived degree of support available to meet everyday needs and in crisis
Safety	Perceptions of safety
Sanitation	Quality of toilet facility (JMP) Sufficiency of menstrual products Soap for handwashing

Dimension	Measure
Shelter	Security of tenure Sufficient household items Sufficient privacy Sufficient protection from elements
Time use	Consequences of time poverty Dual burden of un/paid work
Voice	Involvement in community decision making Autonomy Involvement in household decision making
Water	Quality of drinking water Water security (iWISE) Water access during menstruation
Work	Status in paid work Dignity of work Harm from work
Assets	Household asset ownership

Deprivation categories for *Equality Insights Rapid**

Severely deprived	<ul style="list-style-type: none">- Deprivation in relation to multiple indicators- Deprivation in one indicator that is considered severe
Moderately deprived	<ul style="list-style-type: none">- Deprivation in relation to one indicator- Vulnerability that makes deprivation foreseeable
Does not meet threshold	<ul style="list-style-type: none">- Does not meet either of the above categories

*There are additional deprivation categories for *Equality Insights Plus*



Tonga findings - Overall

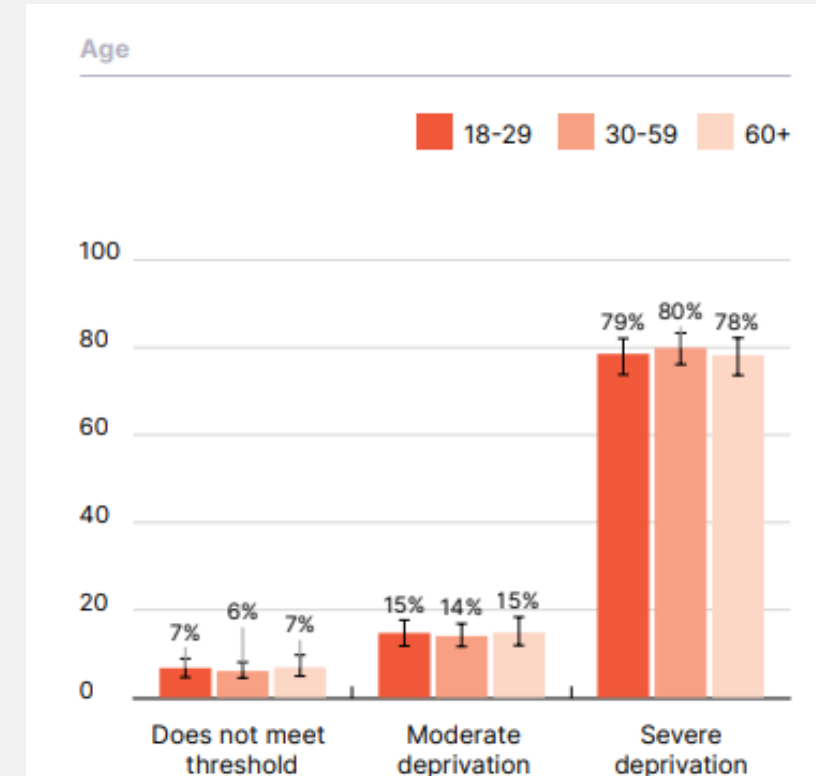
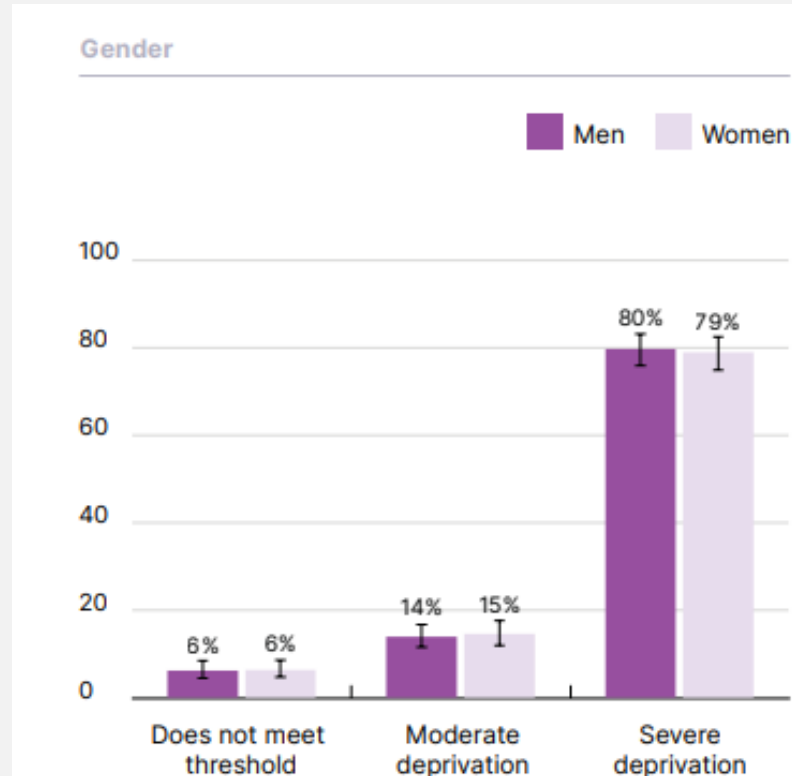
Dimension	aOR (Direct association)	aOR (Age x Gender)		aOR (Disability x Gender)	aOR (Location x Gender)
		18-29	60+		
Clothing	0.835**	0.751	1.195	1.191	0.913
Education	0.847**	0.767*	1.429*	0.765	2.241
Energy	0.656***	0.969	1.089	1.454	0.934
Environment	0.966	1.308	1.14	1.692	1.069
Family Planning	0.909	0.886		1.320	1.144
Food	0.944	1.179	1.061	0.766	0.90
Health	1.209*	1.151	1.723*	0.882	1.337
Relationships	0.971	1.095	1.328	0.553*	1.098
Safety	2.193***	1.411**	0.889	1.11	1.013
Sanitation	1.057	0.876	0.88	0.578	1.177
Shelter	1.009	1.002	1.112	1.697	0.944
Time Use	1.410***	1.009	1.160	0.736	1.234
Voice	1.177**	0.929	1.261	0.955	0.646***
Water	0.980	1.361*	1.213	0.823	0.704
Work	1.066	1.312*	1.012	0.740	0.842





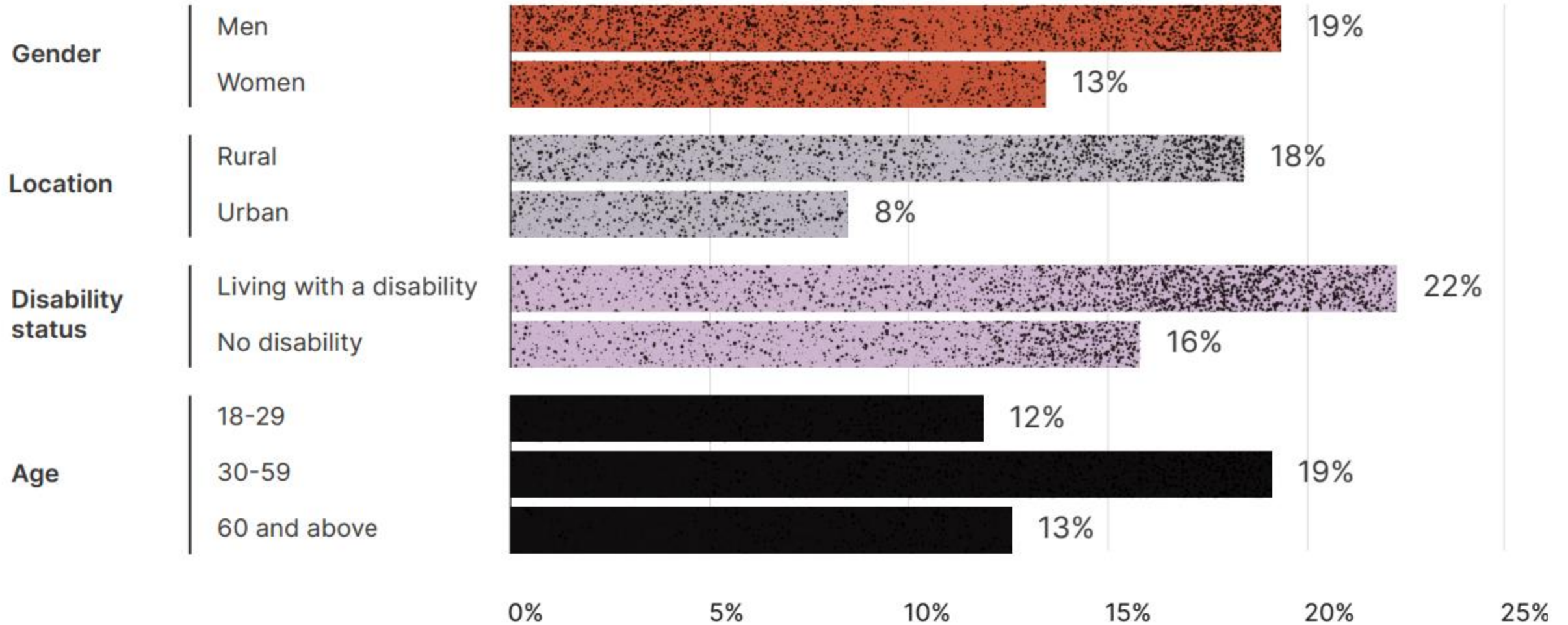
Environment in Tonga

- The widespread impact of the volcanic eruption is evident in the extent of deprivation in the Environment dimension
- Some 93% of the sample experienced some level of deprivation, with 79% experiencing severe deprivation
- There was little difference by gender or age at the dimension level





Severe impact of natural hazards on daily activities



Chi² examining Environment and other dimensions by gender, any deprivation in Tonga

Men

Dimension	P-value
Clothing	0.002
Education	0.003
Energy	0.003
Family Planning	0.996
Food	0.000
Health	0.002
Relationships	0.921
Safety	0.001
Sanitation	0.419
Shelter	0.006
Time Use	0.040
Voice	0.074
Water	0.004
Work	0.000

Women

Dimension	P-value
Clothing	0.000
Education	0.024
Energy	0.219
Family Planning	0.655
Food	0.002
Health	0.076
Relationships	0.127
Safety	0.008
Sanitation	0.910
Shelter	0.006
Time Use	0.291
Voice	0.316
Water	0.008
Work	0.000



Bolded p-values represent $p < 0.05$

Chi² examining Environment and other dimensions by gender, severe deprivation in Tonga

Men

Dimension	P-value
Clothing	0.093
Education	0.162
Energy	0.231
Family Planning	0.213
Food	0.001
Health	0.000
Relationships	0.024
Safety	0.340
Sanitation	0.993
Shelter	0.181
Time Use	0.033
Voice	0.552
Water	0.000
Work	0.002

Women

Dimension	P-value
Clothing	0.040
Education	0.050
Energy	0.667
Family Planning	0.044
Food	0.042
Health	0.038
Relationships	0.001
Safety	0.008
Sanitation	0.004
Shelter	0.004
Time Use	0.005
Voice	0.021
Water	0.000
Work	0.030



Bolded p-values represent $p < 0.05$

Key takeaways

- Individual-level, gender-sensitive measurement is vital to move beyond disaggregation and capture gendered realities.
 - Both what is measured and how are important for understanding gendered implications
 - And for accuracy and visibility
 - And for evidence-informed action that connects to lived realities
- Integrating environment into measurement of multidimensional poverty and inequality illuminates the ways in which individual characteristics and gendered roles and responsibilities shape the experience of environmental shocks and harms
 - and the implications for other areas of life



A changing climate has multidimensional impacts. We need to measure the implications for planet and people in an integrated way that reveals who are most impacted, in what ways.

What's ahead for data use and engagement in Tonga?

- Further analysis of data, collaboration with Tonga Statistics Department, and Ministry of Internal Affairs on analysis priorities
- Including multidimensional analysis
- Capacity development, accompaniment to support use
- Collaboration on opportunities to communicate innovations and insights in global for a
- Open access data portal for interactive exploration



Thank You

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