EQUALITY INSIGHTS

Making gender visible in environment and climate data

Gender and climate change
10th Global Forum on Gender Statistics, Tblisi

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Understand Poverty.
Inspire Change.

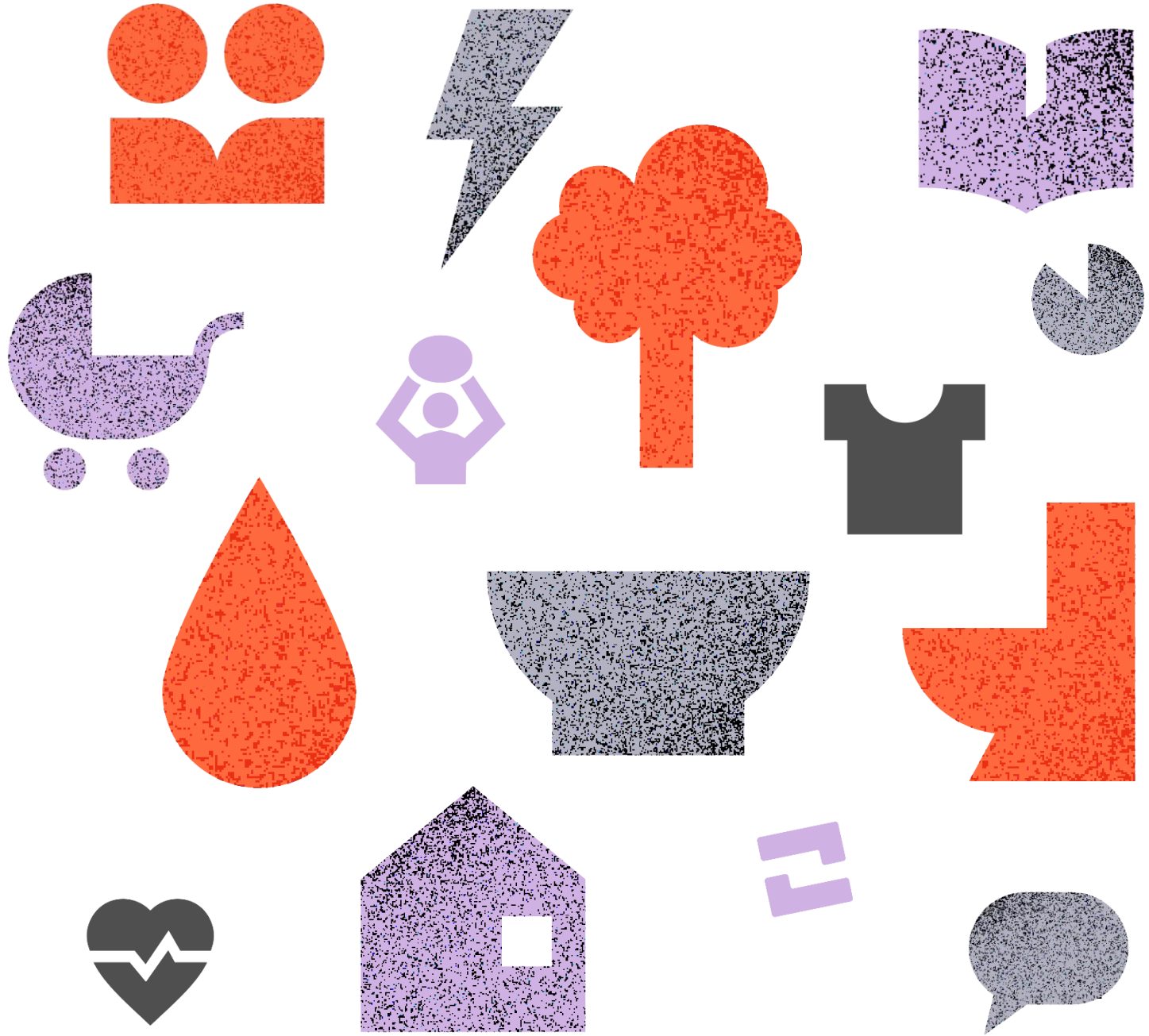
02 October 2025

Role of individual-level data for making gender visible in environment and climate data

Links between multidimensional poverty and climate vulnerability

- Findings from Equality Insights

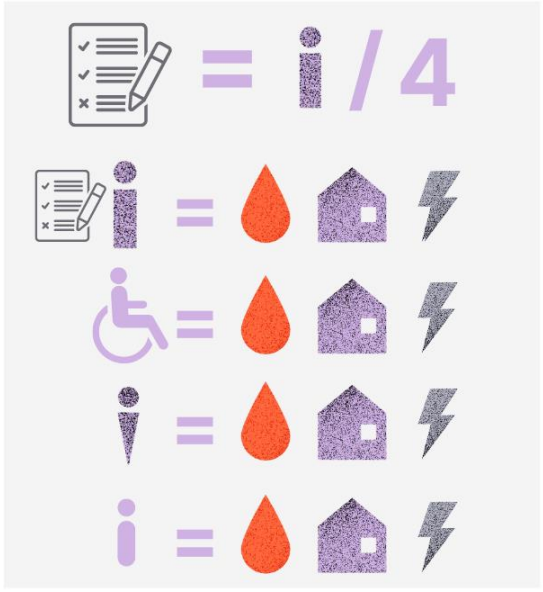
Promoting data use and engagement



Individual-level measurement matters for inclusive measurement

MEASURING POVERTY AT A HOUSEHOLD LEVEL

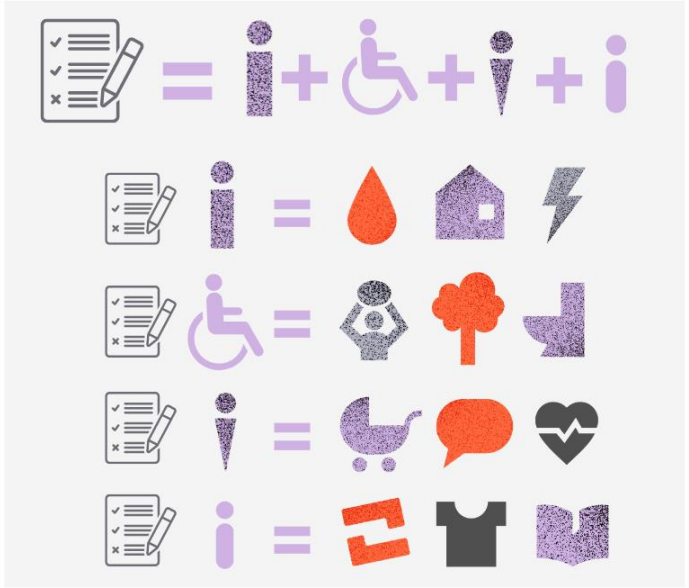
WHEN HOUSEHOLD-LEVEL DATA IS DISAGGREGATED...



IT HIDES INDIVIDUAL EXPERIENCES OF POVERTY & HOUSEHOLD DATA IS LESS ACCURATE

MEASURING POVERTY AT AN INDIVIDUAL LEVEL

WHEN INDIVIDUAL-LEVEL DATA IS DISAGGREGATED...



IT REVEALS THE DIFFERENT EXPERIENCES OF INDIVIDUALS & ALLOWS FOR BETTER INFORMATION ABOUT THE HOUSEHOLD

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
- 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 ways that 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

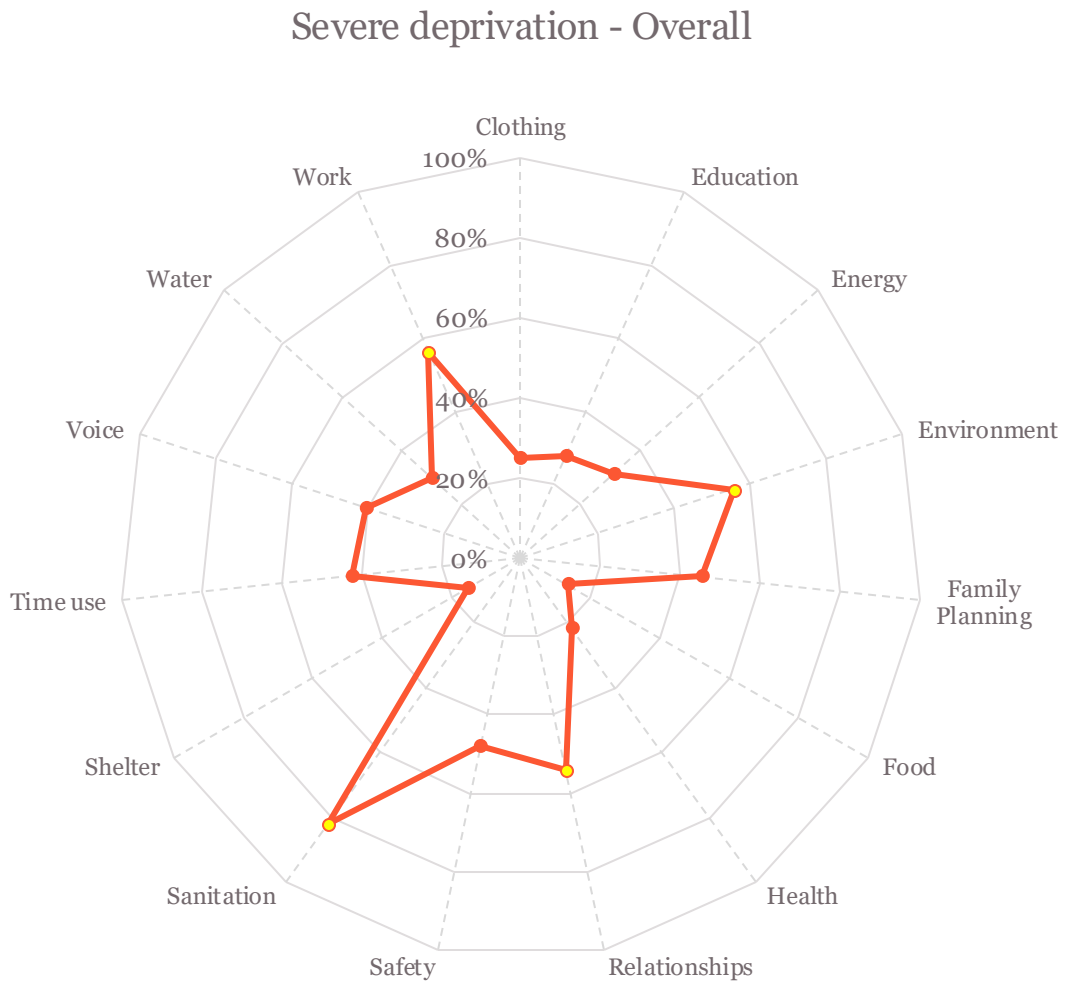
Dimensions measured (*Equality Insights Plus, Equality Insights Rapid)*

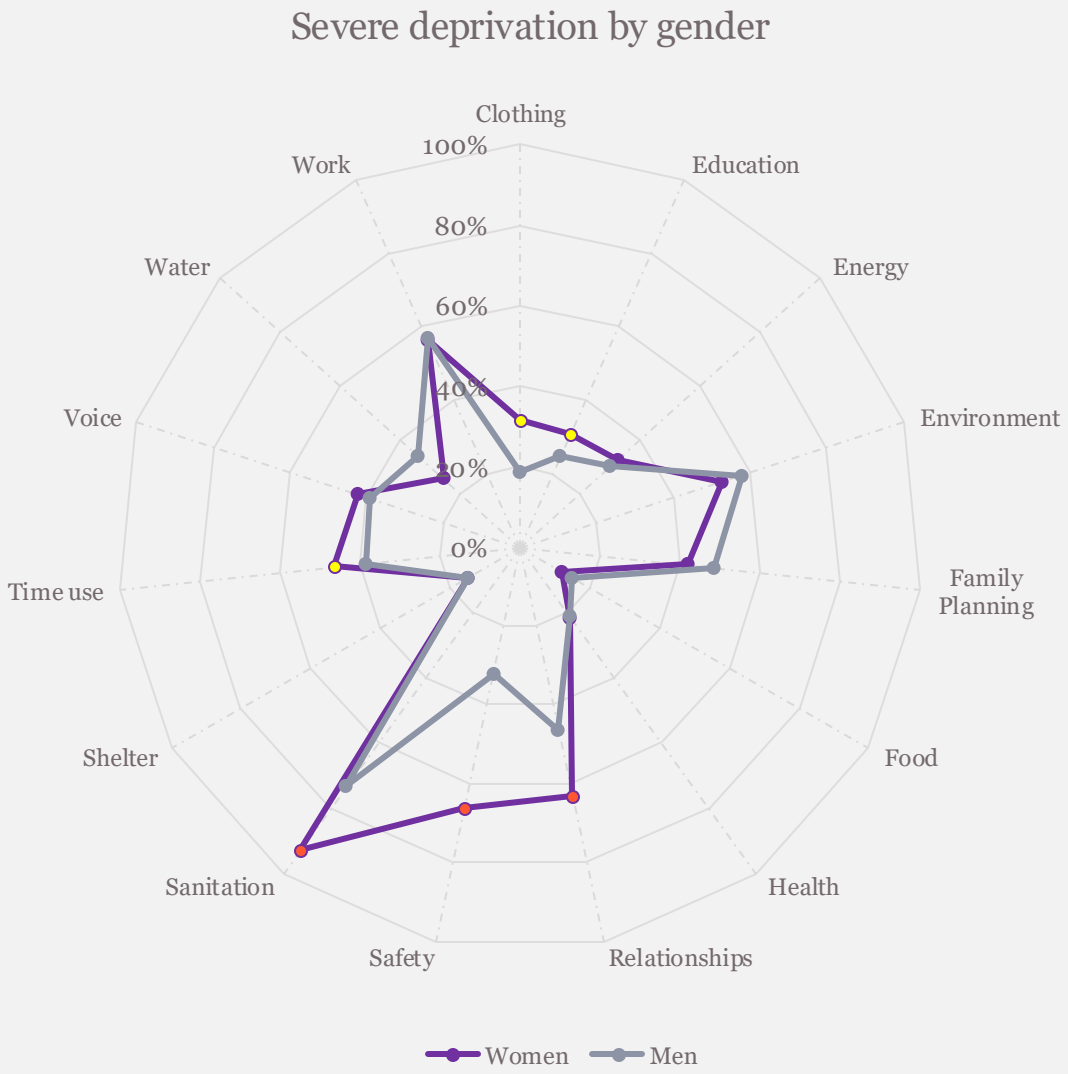
Deprivation categories for *Equality Insights Rapid**

Severely deprived	- Deprivation in relation to multiple indicators - Deprivation in one indicator that is considered severe
Moderately deprived	- Deprivation in relation to one indicator - Vulnerability that makes deprivation foreseeable
Does not meet threshold	- Does not meet either of the above categories

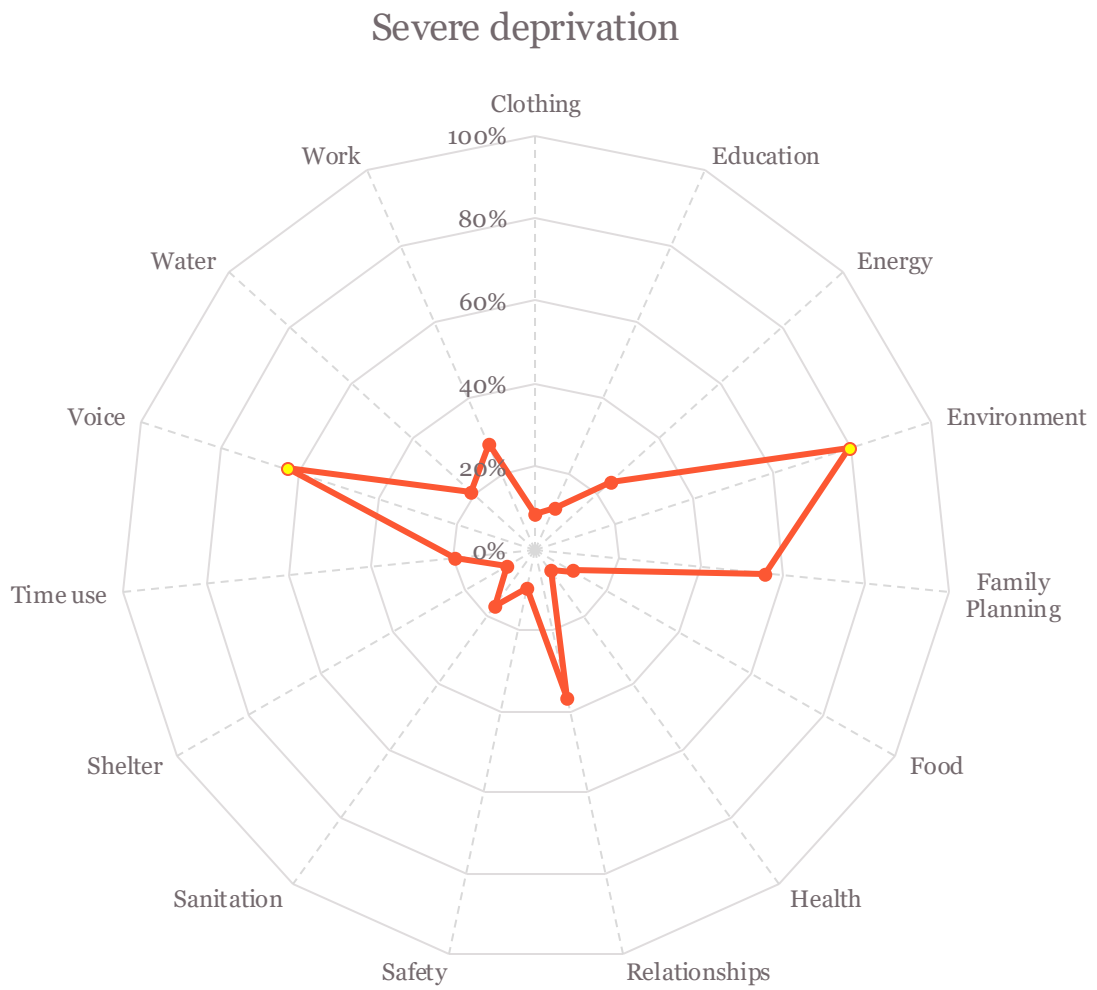
*There are additional deprivation categories for *Equality Insights Plus*

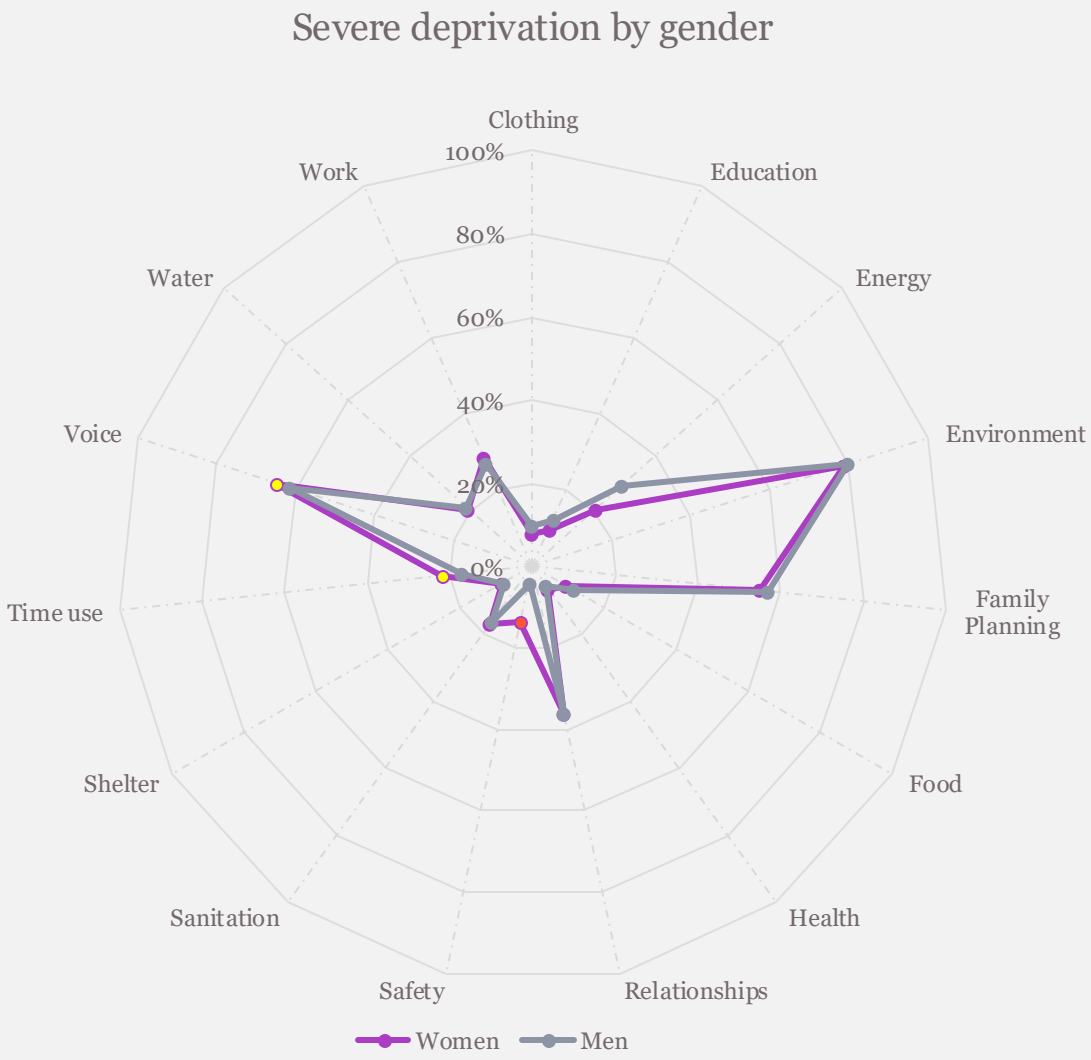
Solomon Islands – Percentage of people experiencing severe deprivation





Tonga– Percentage of people experiencing severe deprivation



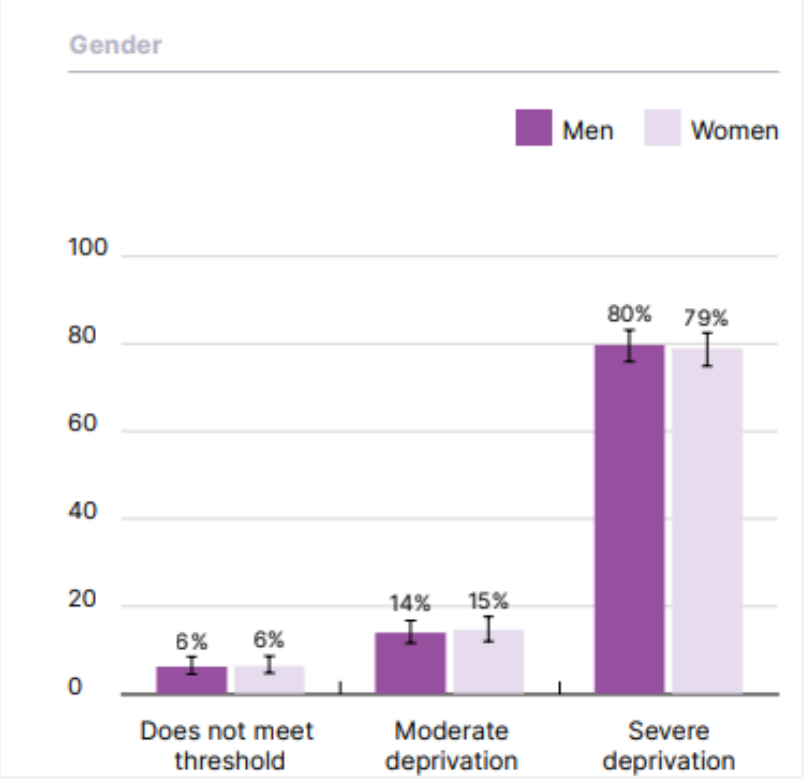


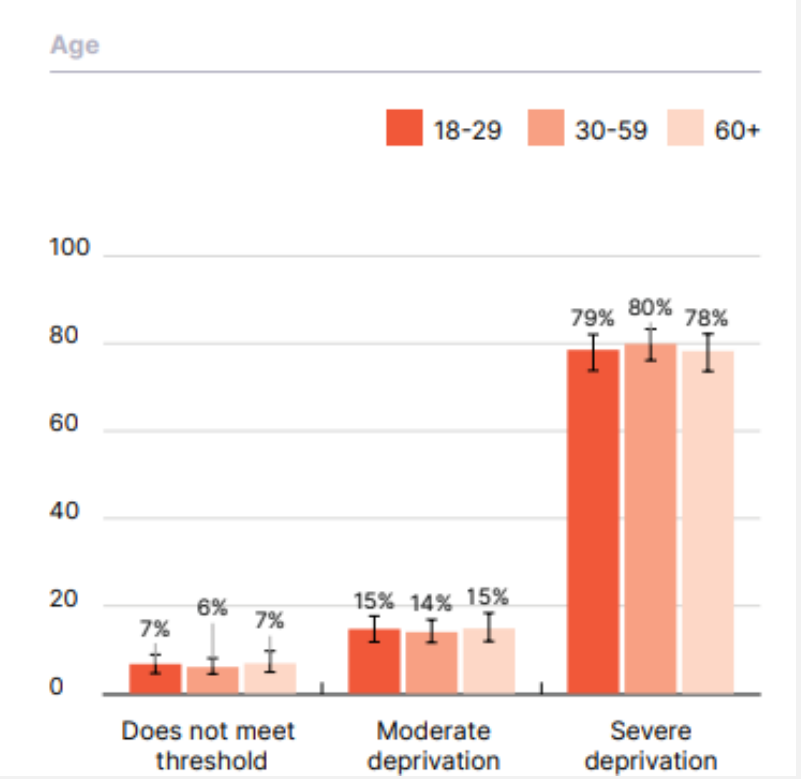
The Environment dimension in Equality Insights

Variables measured in the Household questionnaire	Variables measured in the Individual questionnaire
Exposure to natural hazard exposure on home	Severity of natural hazards on daily activities
Frequency of natural hazards	
Impact of natural hazards on property	
Exposure to air, water and soil pollution	

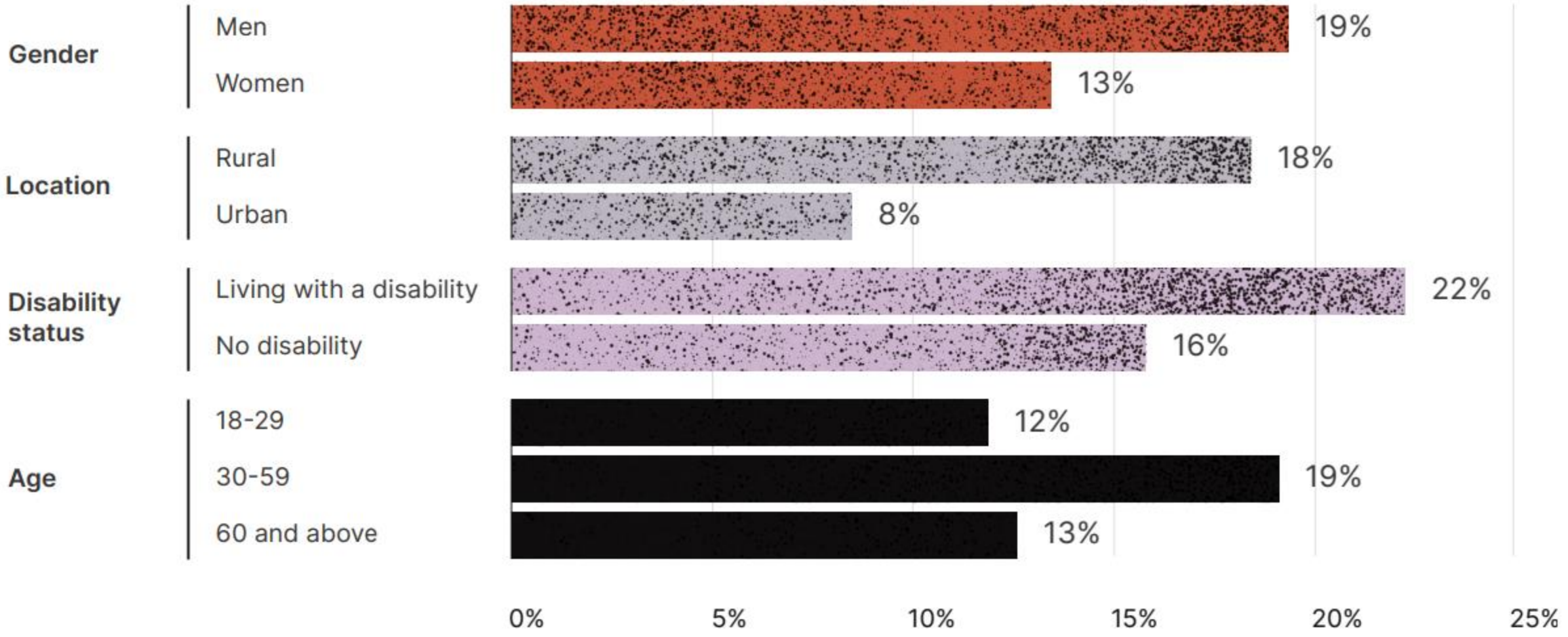
Environment in Tonga

- 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



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

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**

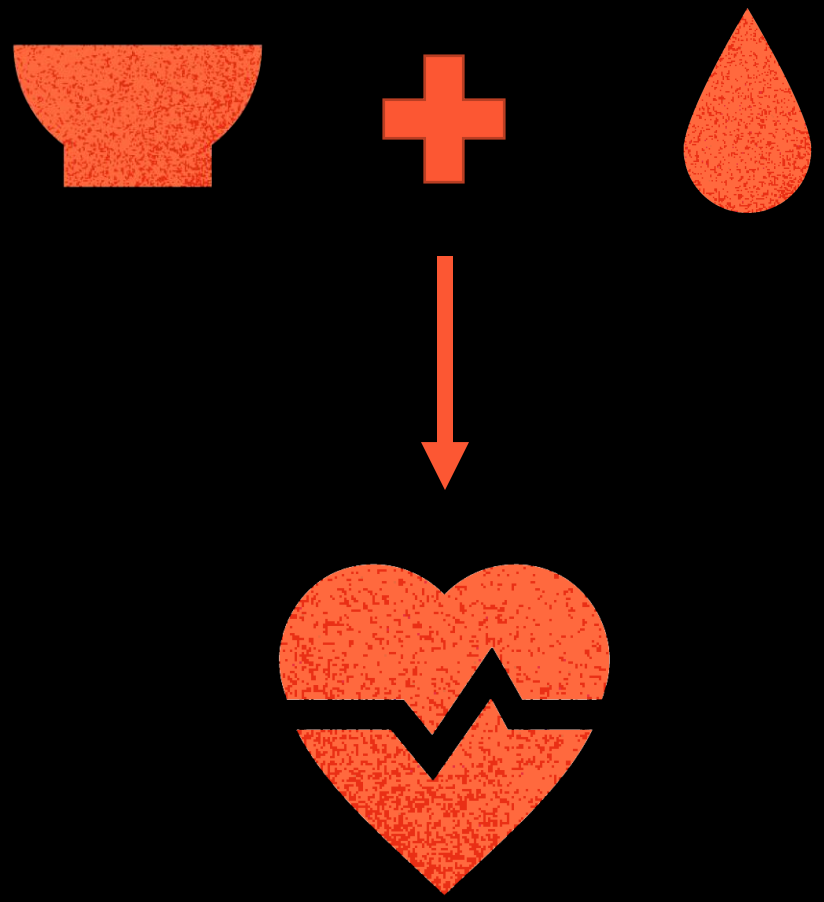
Women

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 $p < 0.05$

Multidimensional analysis

- The impacts of climate and natural disasters are **multiple and inter-related**
- In a recent publication with Northwestern University, Equality Insights Rapid data from Tonga is used to investigate linkages between food insecurity (FIES), water insecurity (IWISE-4), and mental distress (K6)
- Experiencing **concurrent** water and food insecurity **increased risk of experiencing mental distress** vs those experiencing one or neither form of insecurity.
- Findings point to the importance of collecting multidimensional data at the individual level to see the compounding implications of insecurity for mental distress
  - And inform planning and response.



Source: Bethancourt et al. Mental distress and resource insecurity in the Kingdom of Tonga following the 2022 volcanic eruption: Associations of water and food insecurity with mental distress, *Journal of the Academy of Nutrition and Dietetics* (2025) https://doi.org/10.1016/j.jand.2025.08.002

Promoting data use

Towards a future where everyone is counted, and lived realities are visible in the data informing action

Collaborating to centre inclusive data in any post-2030 framework

Individual-level data for revealing climate impacts and resilience

- The Australian Government has provided sustained support for strengthening individual-level measurement and gender-sensitive data, including development and use of Equality Insights and the WASH-Gender Equality Measure
- New investment is now supporting the University of Technology Sydney-Institute for Sustainable Futures and the Equality Insights team to expand application and advocate for use of individual-level measurement tools to support climate resilience.
- Covers

  Expanded use of measurement approaches and strengthened capacity strengthening with partner organisations doing climate-integrated WASH and other sectoral work in Asia and the Pacific

  Increasing visibility and awareness of inclusive and intersectional data innovations, to influence regional and global development and climate adaptation measurement frameworks and approaches

Thank you!

Change requires partnerships. The work to develop an individual-level measure of multidimensional poverty has been made possible by funding from the Australian Research Council, partner organisations, the World Food Programme, philanthropy, and the sustained support of the Australian Government through the Department of Foreign Affairs and Trade since 2015.

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For more information
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