

Table S1: Description of candidate indicators of social vulnerability. Rationale of a given variable and references supporting the variable's relevance as of an indicator of social vulnerability. All indicators were taken from the NSA: Inter-censal Demographic Survey 2016.

Indicator	Unit	Rationale	Reference
Total population	Inhabitants	Areas with different population densities have different abilities to respond to hazards	Cutter et al. [7], Cutter et al. [15], Rygel et al. [26], Krishnan[35,36], Silva & Kawasaki [37], Dintwa et al. [42], Luetkemeier & Liehr [43], Chakraborty et al. [101].
Population density	Inhabitants /km ²		
Population in rural area	%	Rural residents may be more vulnerable to natural hazards due to lower incomes and higher dependency on local resources	
Population in urban areas	%	Increase in population density and urbanization increases the populations' vulnerability to natural hazards.	
Female population	%	Women are often more vulnerable to environmental disasters, especially during recovery, often due to sector-specific employment, lower wages, and family responsibilities	
Male population	%	Male population are often less vulnerable to the impacts of hazards than women	
0-4 years old	%	Children are among the most vulnerable groups of the population	
5-14 years old	%		
15-59 years old	%	Young and middle-aged men are vulnerable due to risk-taking behavior. On the other hand, high number of young men reduces vulnerability as they are able to able to carry out activities during emergency situations	
60+ years old	%	Women and the elderly are often considered among the most vulnerable groups to environmental hazards.	
Total unemployment	%	High unemployment rate implies high vulnerability	Cutter et al. [7], Cutter et al. [15], Krishnan [35,36], Silva & Kawasaki [37], Luetkemeier & Liehr [43], Chakraborty et al. [101].
Male unemployment	%		
Female unemployment	%		
Youth unemployment	%		
Average household income	United States dollar (USD)	High income population have better capacity and resources to recover from the impacts of natural hazards faster than poor population.	Cutter et al. [7], Cutter et al. [15], Krishnan [35,36], Silva & Kawasaki [37], Luetkemeier & Liehr [43], Chakraborty et al. [101].
Income per capita	USD/person		
Average household size	inhabitants/hou seholds	Families with large numbers of dependents or single-parent households often have limited resources to carter for the needs of each member during hazards; Households headed by women are more vulnerable to environmental hazards	Cutter et al. [7], Cutter et al. [18], Krishnan[35,36], Chakraborty et al. [101].

Table S1 cont.

Indicator	Unit	Rationale	Reference
Male headed households	%	Families with large numbers of dependents or single-parent households often have limited resources to cater for the needs of each member during hazards; Households headed by women are more vulnerable to environmental hazards	Cutter et al. [7], Cutter et al.[18], Krishnan[35,36], Chakraborty et al. [101].
Female headed households	%		
Child headed households	%		
Farming -dependence	%		
Pension -dependence	%	Occupations, such as farming may be severely impacted by natural hazard and the population which heavily depends on these sources of livelihood might be socially marginalized and usually requires further support to cope with post hazard impacts.	Cutter et al. [15], Krishnan[35,36], Chakraborty et al. [101]
Salaries	%		
Cash remittance	%		
Business - dependence	%		
Drought relief assistance	%	Less educated population lack the capacity to understand hazard awareness and implement adaptation strategies. High number of and well-educated work force will result in a successful management of resources. Even though some parts of the country are more exposed to natural hazards, adaptation measures can still be afforded and some negative impacts can be limited if the communities are wealthy and educated	Cutter et al. [15], Krishnan[35,36], Chakraborty et al. [101]
Literacy rate 15 + years	%		
Population with disabilities	%		
HIV prevalence	%		

Table S2: Description of candidate indicators of natural hazards. * indicates indicator used in the final assessment.

Category	Variable	Abbreviation	Unit	Data source	Rationale	Maximum	Minimum	Mean	Median
Wildfire	Wildfire: Average burned area *(2007-2017)	AreaB	Km ²	Department of Remote Sensing and Forest research, Ministry of Agriculture, Water and Forestry of Namibia	Wildfires are among the most common hazards in Namibia, causing considerable damages to properties and ecosystems. The intensity and severity of fires is expected to intensify with climate change and agriculture expansion.	9108	0	2160	701
	Livestock deaths* (2018-2019)	LivestD	Number of Livestock	Namibia's Agricultural Input and Household Food Security Situation Report (2019)	The impact of climate change is evident in Namibia, particularly on the agriculture sector. Impacts include livestock deaths due to extreme droughts.	17955	0	6301	3590
Drought	Food insecure population due to drought* (2013)	FInsP	Number of people	The United Nations Children's Fund (UNICEF) Situation Report No. 01 (Namibia)	Droughts are common in Namibia, and have a major impact on food production/agriculture. Food insecurity is a frequent consequence of extended droughts.	80720	4928	29403	20497
	Human mortality due to floods* (2009)	HumM	Number of people	World Health Organization (WHO) - Response to the 2009 floods emergency in Namibia, 2010	Floods occur mainly in the northern regions of the country. They are caused by heavy rainfalls and relate to the specific hydrological regimes of this region. Although causalities are typically not high, they are important indicators of flood impacts .	48	0	8	0
Flood	Health facilities affected by floods (2009)	HealF	Number of facilities	WHO- Response to the 2009 floods emergency in Namibia, 2010	Floods disrupt essential services such as education and healthcare, particularly in rural areas. Damage to healthcare facilities compromise the ability to take actions against water-borne diseases triggered by floods.	10	0	3	1
	Schools affected by floods* (2008)	ScholA	Number of schools	UNICEF-Immediate needs report, 2008	Floods disrupt essential services such as education and healthcare, particularly in rural areas. Impact on education facilities ?	44.0	0	8	0
	People displaced by flood* (2017)	PopDis	Number of people	UNICEF: NAMIBIA,2017 Humanitarian Situation Report - #5	Destruction of homesteads and extent of humanitarian interventions are important indicator of flood impacts	2655	0	238	0
	Households displaced by flood (2017)	HousDis	Number of households	UNICEF: NAMIBIA,2017 Humanitarian Situation Report - #5	Destruction of homesteads and extent of humanitarian interventions are important indicator of flood impacts	122	0	11	0
	Population affected by flood (2009)	PopAF	Number people	Namibia's Post Disaster Needs Assessment (PDNA) report 2009	Destruction of homesteads and extent of humanitarian interventions are important indicator of flood impacts	228842	0	48659	3988
	Households affected by floods (2009)	HousAF	Number of households	PDNA report 2009	Destruction of homesteads and extent of humanitarian interventions are important indicator of flood impacts	38140	0	8181	623
	Estimated damages from floods* (2009)	EstDam	US\$ million	PDNA report 2009	Destruction of homesteads and extent of humanitarian interventions are important indicator of flood impacts	37	0	10	7