

Mapping the Use of Gridded Population Data Across the United Nations

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Data & Analytics Section | UNICEF

World Food Programme

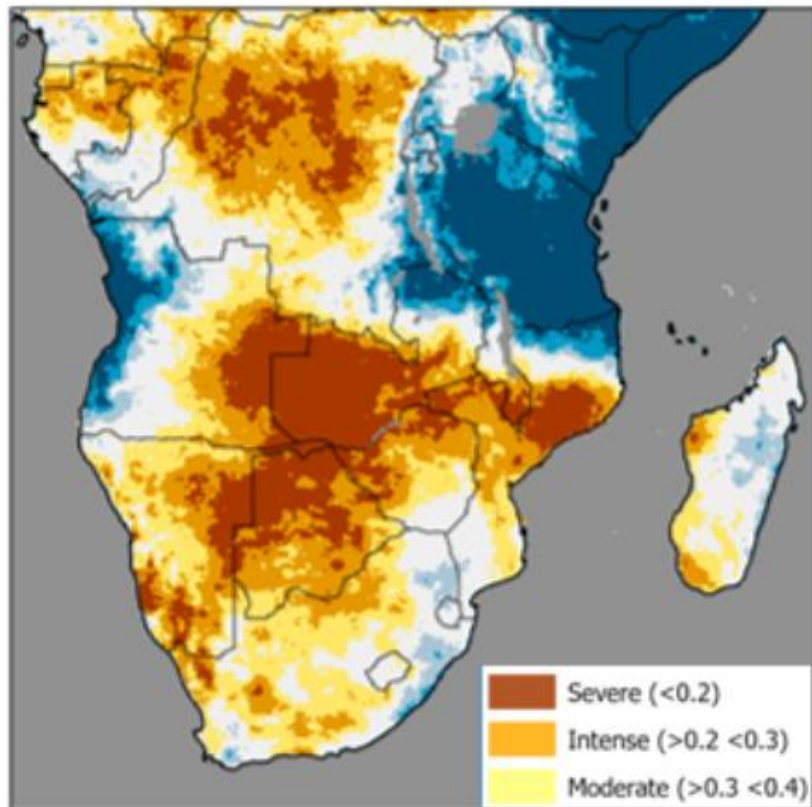
Disaster Preparedness & Response

- WFP's Advanced Disaster Analysis and Mapping (ADAM) takes advantage of Worldpop's API to automatically generate population impacted for Earthquakes, Tropical Storms and Floods
- Worldpop is also widely used to assess the exposure to droughts

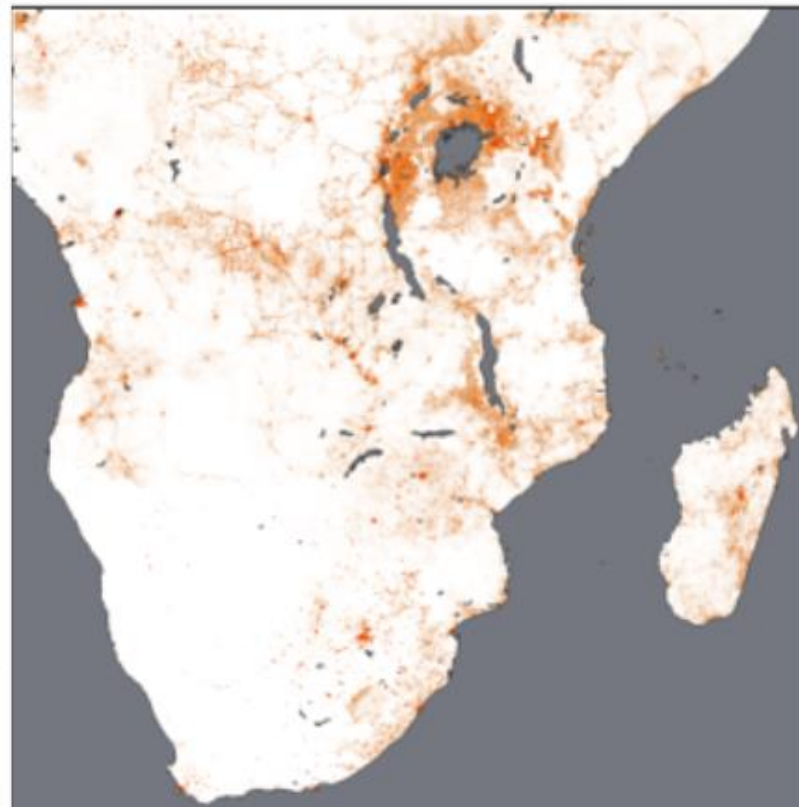
Rapid Impact Analysis Breakdown

**estimated number of people living in the flooded areas with at least 100 people potentially affected per district. Vulnerable population within flooded area are estimates from WorldPop data.*

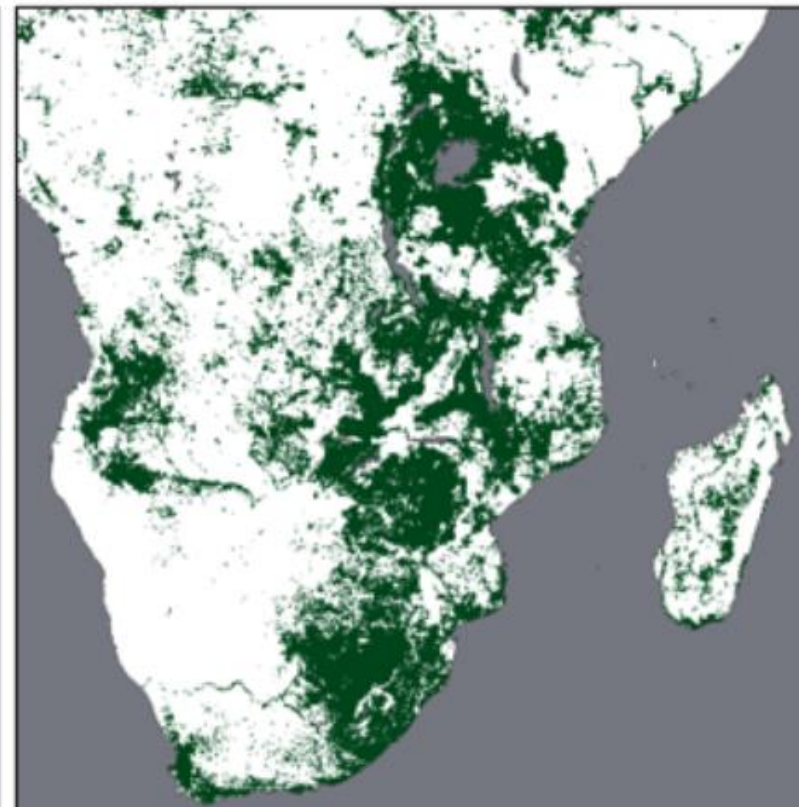
Country Code	Region (Admin unit 1)	District (Admin unit 2)	Flooded Area (hectares)	Flooded Cropland (hectares)	Potentially Impacted Population*		
					Total in District	Children (0-9 y.o.)	Elderly (>60 y.o.)
MOZ	Gaza	Bilene	16,673	528	6,110	417	1,642
		Chibuto	43,808	12,225	21,558	1,617	6,037
		Chicualacuala	19,112	4,107	849	50	248
		Chigubo	90,686	811	2,320	188	697
		Chokwe	31,136	20,450	31,301	1,805	8,697
		Chongoene	9,231	6,784	9,292	691	2,593
		Cidade De Xai-Xai	1,450	4,894	19,437	768	4,613
		Guija	26,232	5,379	7,713	522	2,276
		Limpopo	16,521	15,930	13,519	919	3,752
		Mabalane	14,439	6,018	1,640	101	495
		Mandlakaze	36,183	4,310	16,662	1,605	4,701
		Mapai	52,335	1,698	739	55	220
		Massangena	15,126	295	902	67	260
		Massingir	14,376	4,514	2,821	162	794
	Inhambane	Cidade De Inhambane	3,829	171	19,328	991	4,585
		Funhalouro	57,940	910	1,453	119	435
		Govuro	17,615	1,399	2,754	177	760
		Homoine	16,008	580	4,991	442	1,436
		Inharrime	36,943	779	11,655	887	3,535
		Inhassoro	26,636	63	5,304	372	1,420
		Jangamo	10,723	184	7,356	616	2,152
		Mabote	103,972	2,258	2,689	207	766
		Massinga	14,256	1,178	4,511	333	1,261
		Maxixe	4,023	414	19,884	1,229	4,886
		Morrumbene	5,574	472	3,058	272	843
		Panda	35,299	653	2,796	276	831



DROUGHT INDICATOR

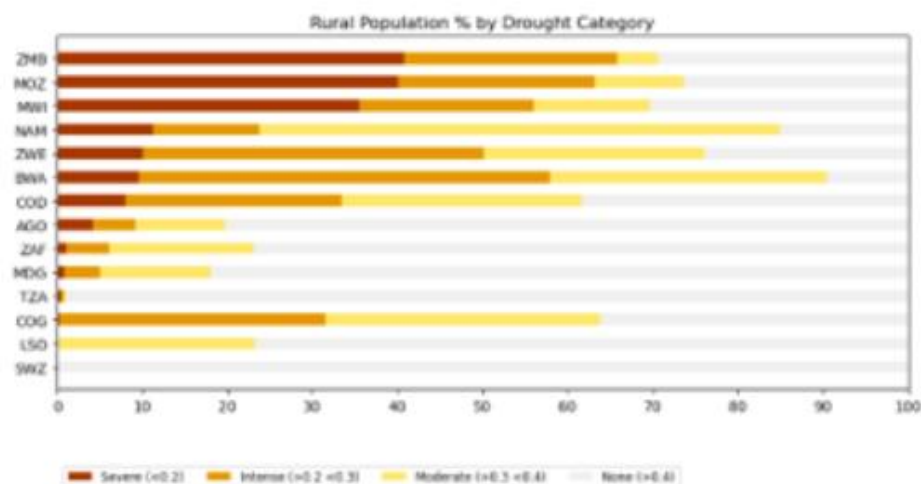


POPULATION



CROPPING AREA

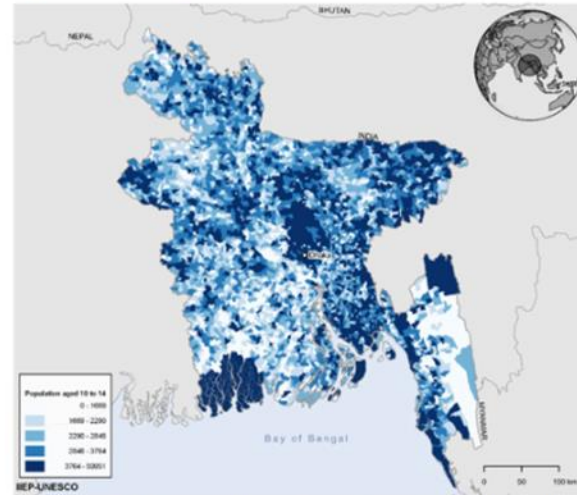
**RURAL
 POPULATION
 EXPOSED TO
 DROUGHT**



Education planning

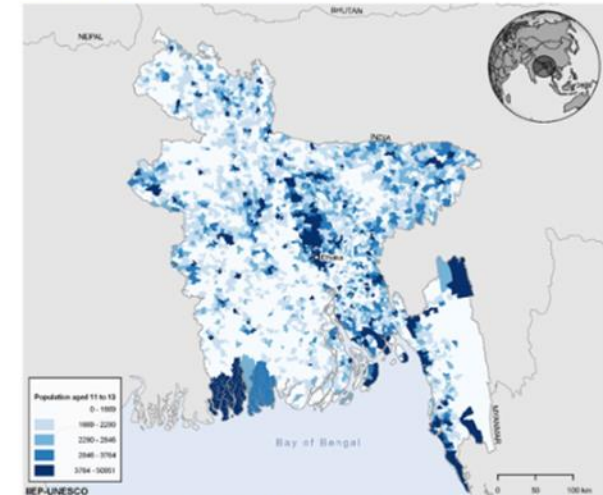
- UNESCO has extensively used and improved upon the existing WorldPop datasets to calculate school age populations such as single-year cohorts and sex-disaggregated datasets
- Having a reliable method of estimating the number of children and young people by relevant age group is crucial for educational planning

Original population estimates for people aged 10 to 14, by Union, 2019

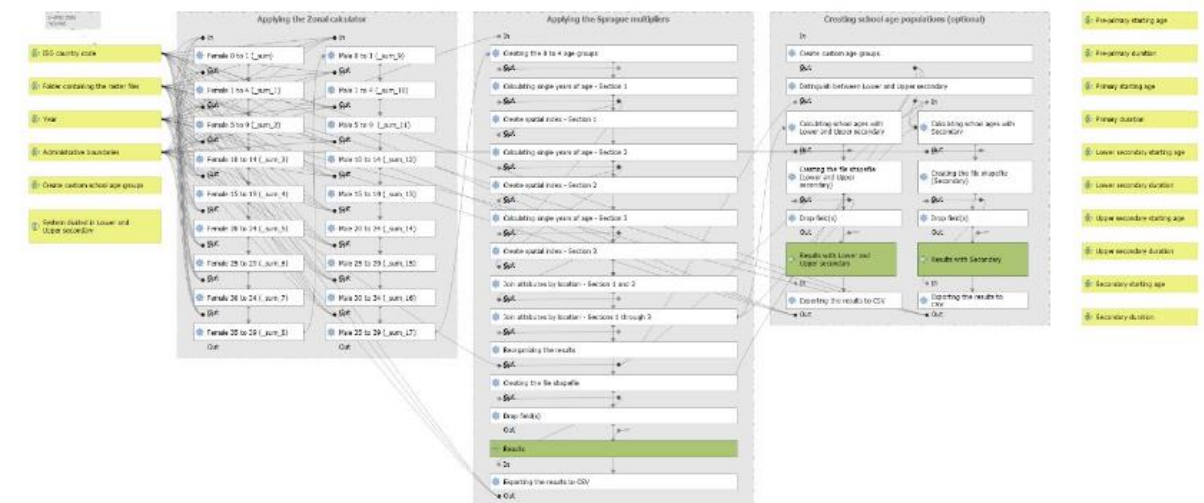


Source: Authors' calculations based on WorldPop (2018), accessed 21 September 2020. Made with QGIS.

Reconstructed population estimates for people aged 11 to 13, by Union, 2019



Source: Authors' calculations based on WorldPop (2018), accessed 21 September 2020. Made with QGIS.



Micro-planning for Service delivery

- Using spatial data on the location of populations, health resources and the surrounding environment, microplanning maps can be produced in alternative to traditional, hand-drawn maps, to ensure
 - all populations are accounted for
 - identify gaps in access to care
 - optimize planning for outreach activities to ensure equitability and reach of services based on geographic evidence.
- It is critical for UNICEF to locate and Link Unreached Children with Immunization and Birth Registration.
 - Worldpop has been a key partner in delivering the "Reach the Unreached" initiative in five countries across West and Central Africa, helping us with high-resolution estimates of zero-dose and under-immunized children



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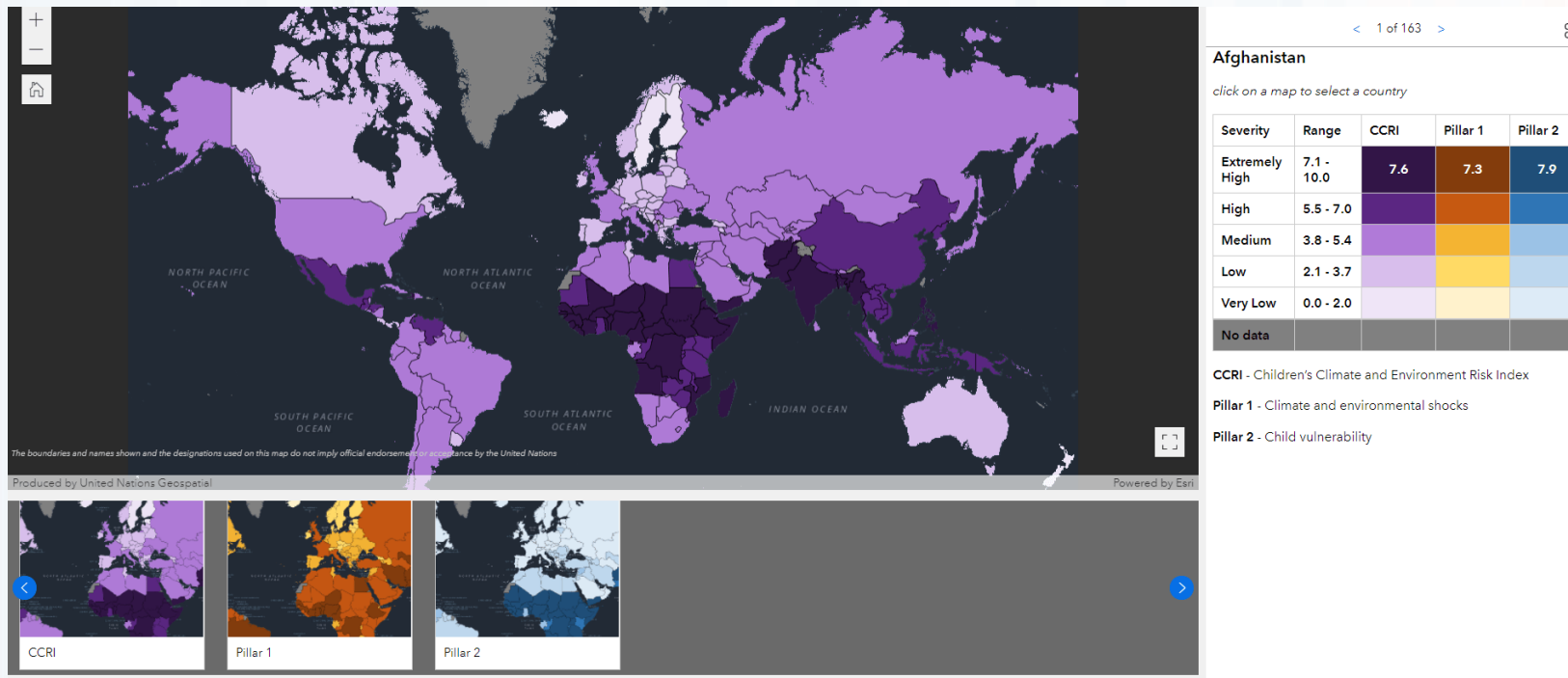
Disaster Preparedness and Response

- Subnational age/sex-based identification of population exposed to various hazards is crucial for emergency preparedness, planning and response
- In the absence of up-to-date census or population statistics from countries, Worldpop remains one of our critical sources of population data



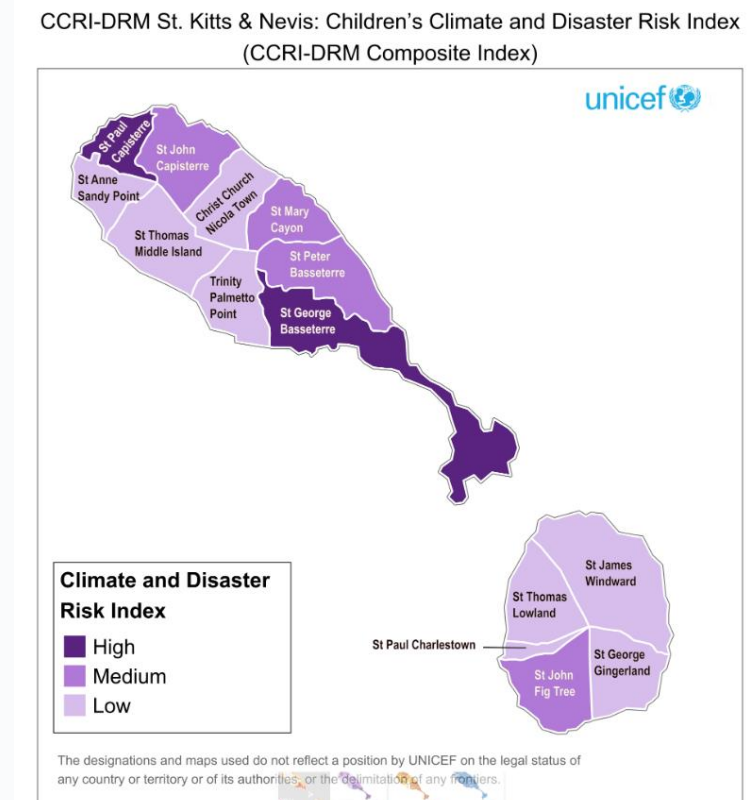
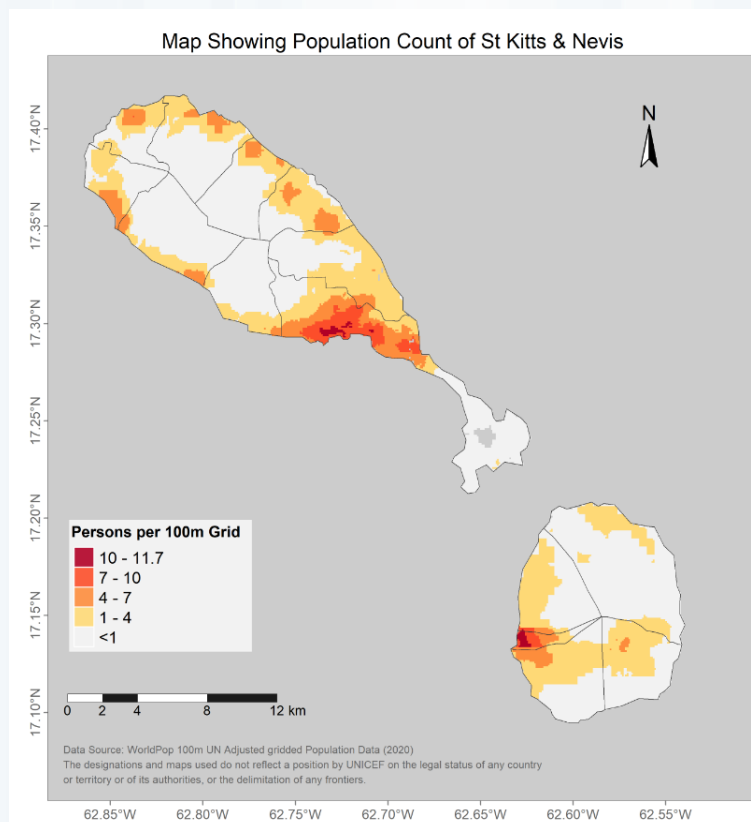
Children Climate Risk Index (CCRI)

- To understand and measure likelihood of climate and environmental shocks and stresses leading to erosion of development, deepening of deprivation and/or humanitarian crisis affecting children or vulnerable households and groups
- Climate Crisis is a child right crisis – estimating the number of children exposed and vulnerable to climate hazards is crucial



Applying World Pop Data in the subnational CCRI-DRM - The case of Saint kits and Nevis.

- Small island developing states (SIDS), like Saint Kitts and Nevis (SKN), are particularly vulnerable due to their exposure to natural hazards and limited spatial variation.
- Integrating the higher resolution 100m WorldPop data allowed us to provide more detailed insights into hazard exposure. This data helps identify specific parishes where children and communities are most vulnerable to environmental risks.



Thank you.

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for every child

