



Impact of Climate Change on Crop Production, Food and Nutrition Security in South Africa

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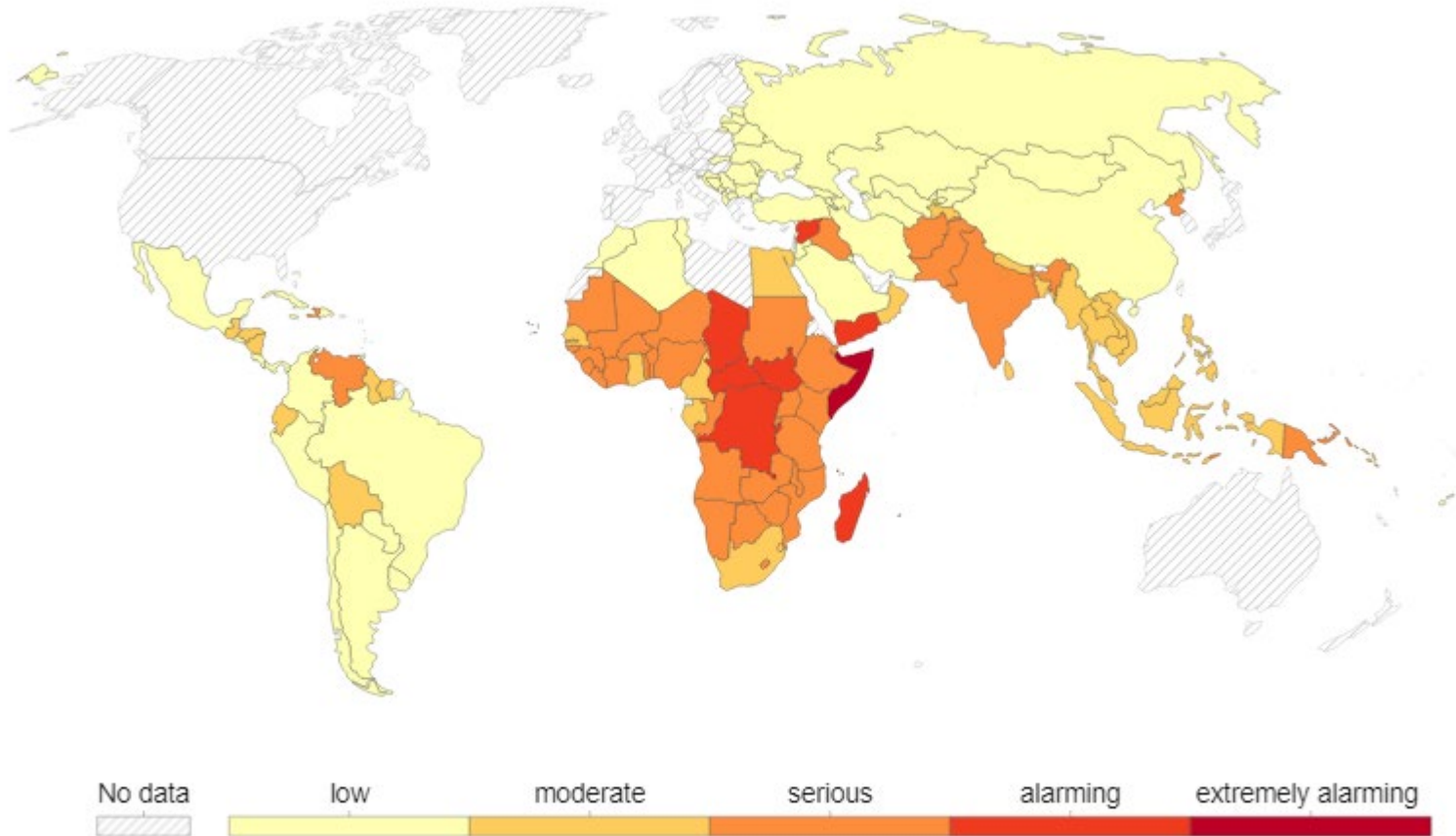
Cape Town

SOUTH AFRICA

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Increase in Hunger In South Africa?

yes
SA Undernourishment: 3.9% in 2002 \Rightarrow 6.9% in 2021
> 4 000 000
Moderate Hunger



Source: Concern Worldwide and Welthungerhilfe

OurWorldInData.org/hunger-and-undernourishment • CC BY

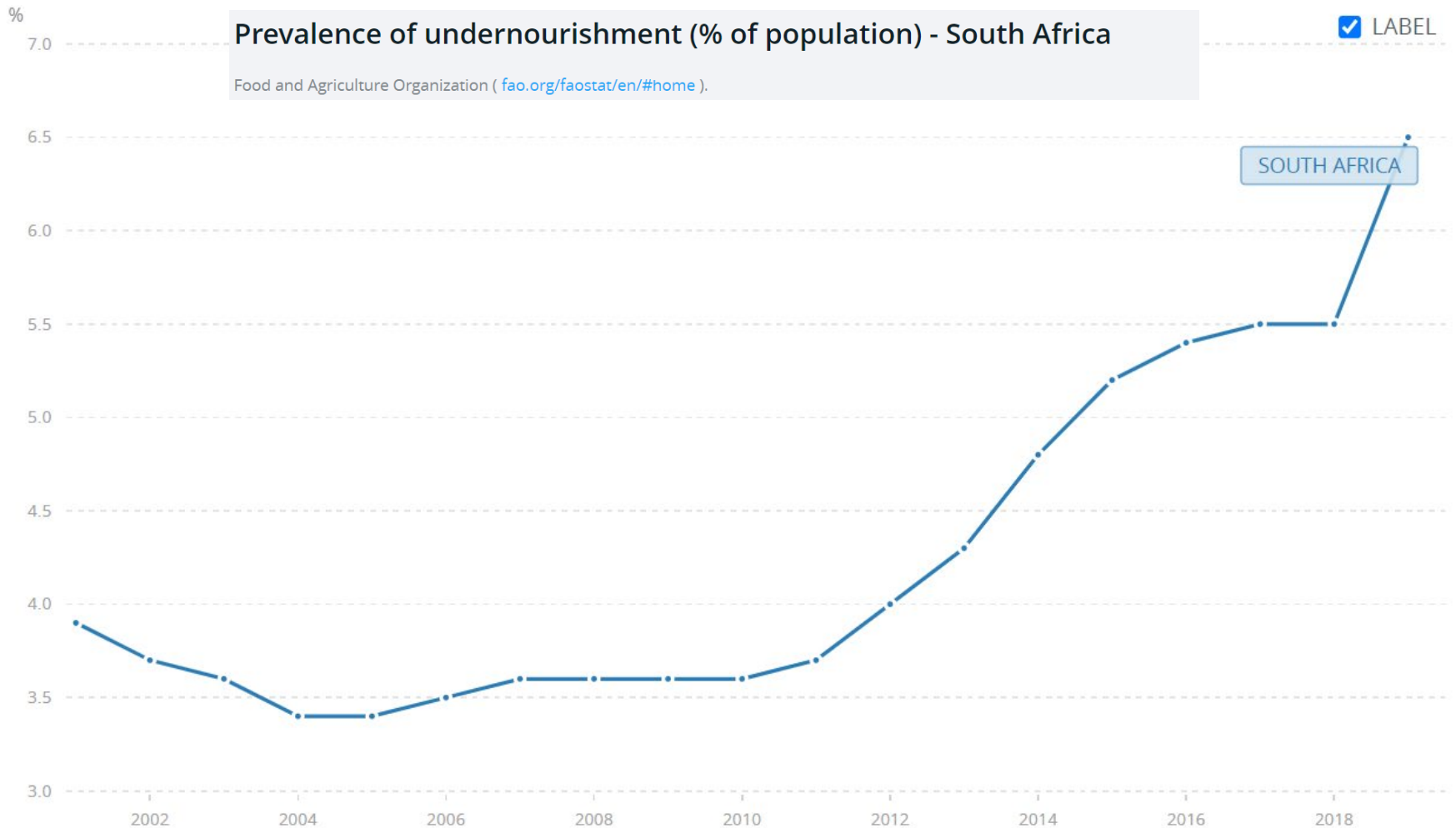
Upward Trends in Undernourishment

Prevalence of undernourishment (% of population) - South Africa

Food and Agriculture Organization (fao.org/faostat/en/#home).

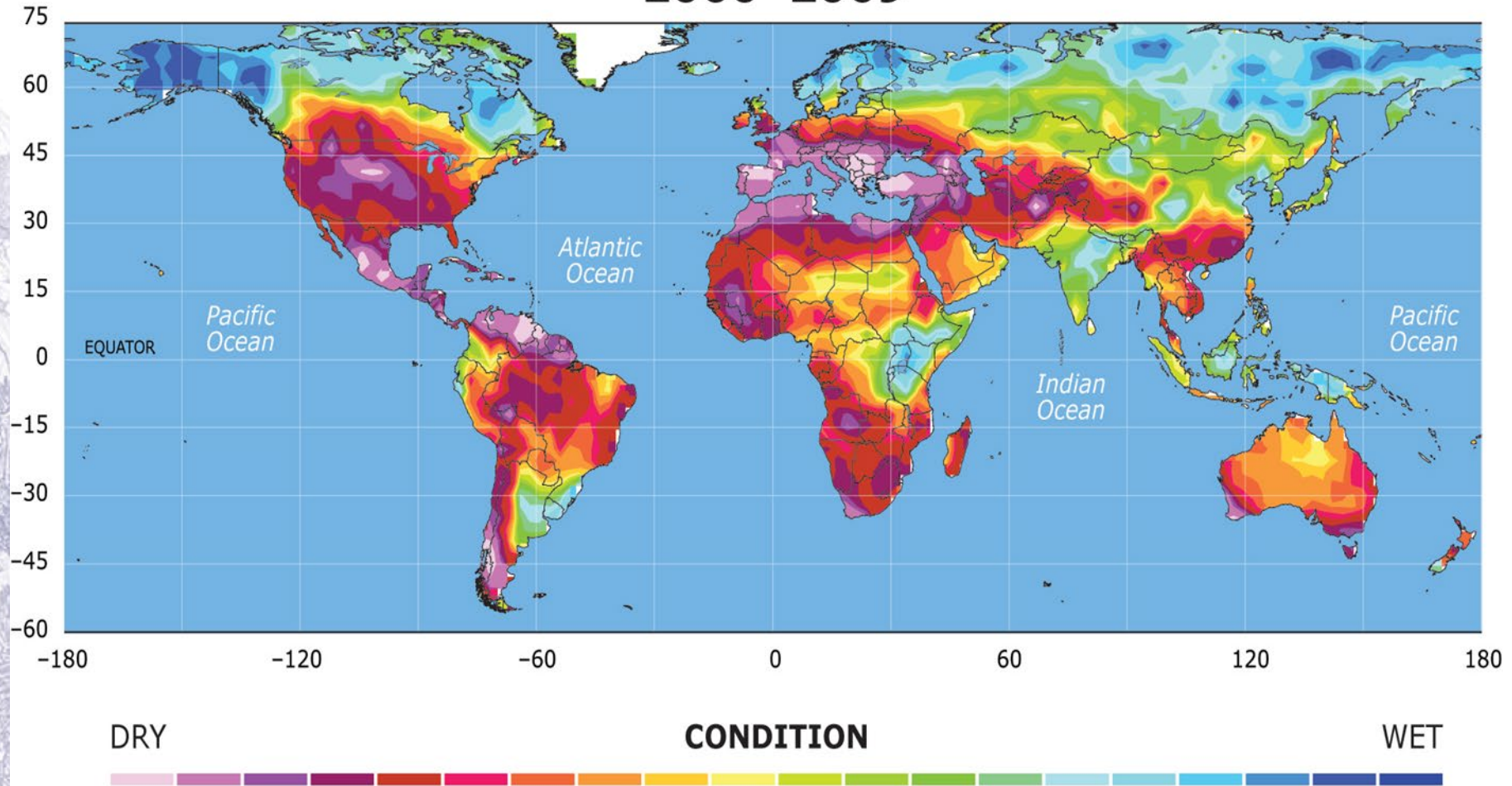
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Climate Change Already and Will Still Negatively Impact Food Security

2060–2069



Climate Change Already and Will Still Negatively Impact Food Security

Human systems	Impacts on water scarcity and food production				Impacts on health and wellbeing				Impacts on cities, settlements and infrastructure				Confidence in attribution to climate change
	Water scarcity	Agriculture/crop production	Animal and livestock health and productivity	Fisheries yields and aquaculture production	Infectious diseases	Heat, malnutrition and other	Mental health	Displacement	Inland flooding and associated damages	Flood/storm induced damages in coastal areas	Damages to infrastructure	Damages to key economic sectors	
Global	±	-	○	-	-	-	-	-	-	-	-	-	● High or very high
Africa	-	-	-	-	-	-	○	-	-	-	-	-	● Medium
Asia	±	±	-	-	-	-	-	-	-	-	-	-	● Low
Australasia	±	-	±	-	-	-	-	not assessed	-	-	-	-	○ Evidence limited, insufficient
Central and South America	±	-	±	-	-	-	not assessed	-	-	-	-	-	na Not applicable
Europe	±	±	-	±	-	-	-	-	-	-	-	-	
North America	±	±	-	±	-	-	-	-	-	-	-	-	
Small Islands	-	-	-	-	-	-	○	-	-	-	-	-	
Arctic	±	±	-	-	-	-	-	-	-	-	-	±	Impacts to human systems in panel (b)
Cities by the sea	○	○	○	-	○	-	not assessed	-	○	-	-	-	- Increasing adverse impacts
Mediterranean region	-	-	-	-	-	-	not assessed	-	±	-	○	-	
Mountain regions	±	±	-	○	-	-	○	-	-	na	-	-	± Increasing adverse and positive impacts

Do We KNOW these Neglected Nutrition Powerhouses?





- **Thank you to:**
 - **The audience**
 - **My current and past students**
 - **Collaborators**



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