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The Human Problem: How Anthropogenic Climate Change is Leading to Malnutrition and Famine in Madagascar

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Title: The Human Problem:
How Anthropogenic Climate
Change is Leading to
Malnutrition and Famine in
Madagascar



PRESENTER:
Angelina Orduña

BACKGROUND: As a result of anthropogenic effects on the environment, climate change has seen a rapid increase, specifically in Madagascar. These changes have added to the accelerating levels of malnutrition and famine amongst the Malagasy people. The implications of famine and malnutrition are extensive, resulting in starvation, stunting of growth in children, and a lack of adequate resources to support the population.



PURPOSE AND RATIONALE: There is an urgent need to hold countries with a large carbon footprint accountable for the harm they are doing to countries such as Madagascar. It is crucial to understand why Madagascar is at a greater risk of experiencing the effects of climate change and to develop methods in which aid can be brought to the Malagasy people.

SOURCES:

- 1. Data sets from Our World In Data that document global CO2 emissions
- 2. Scholarly Articles
- 3. Data sets from World Weather Attribution that document annual rainfall since Madagascars last drought in 1990



Recent large-scale anthropogenic changes that have emerged as a result of the rapid acceleration of climate change are having a negative impact on the health of millions of Malagasy people. Global climate change has had a direct effective change has had a direct effect.

climate change has had a direct effect on Madagascar's species, and ecosystems, causing a **severe**drought, which is very dangerous considering Madagascar is a

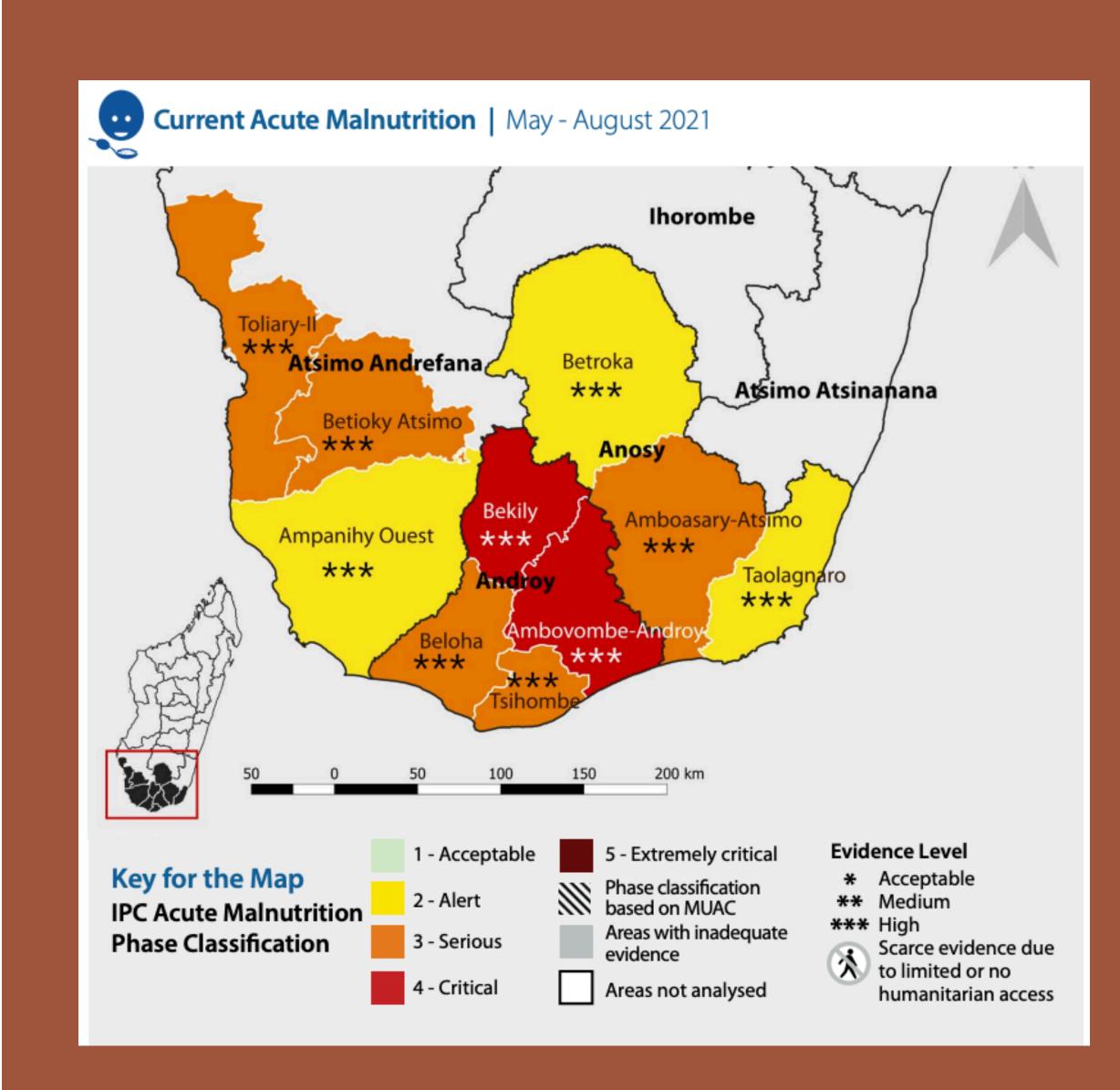
biodiversity hotspot, and is home to nearly 75% of species that cannot be



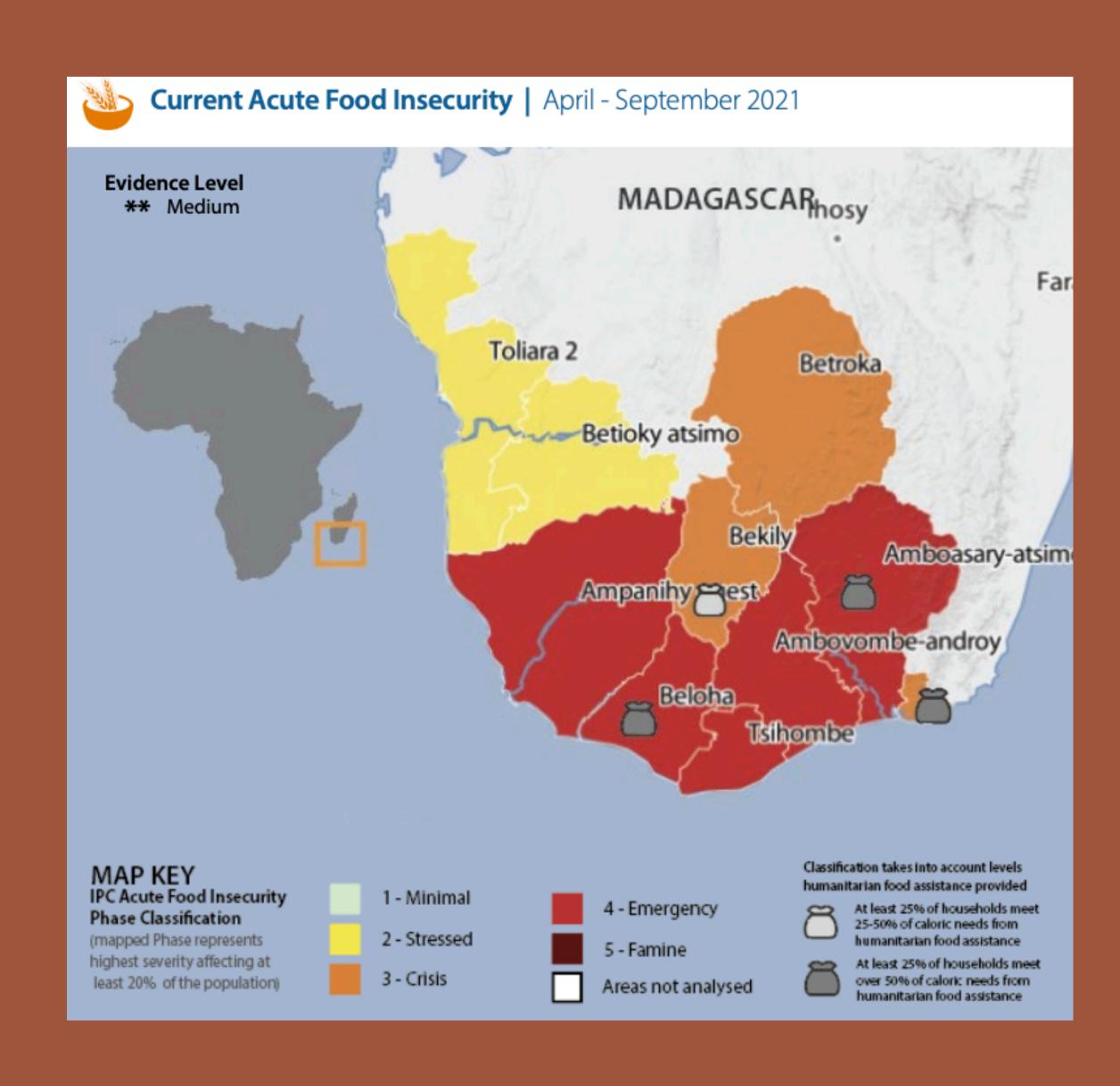
Rainfall in Androy, South Madagascar

End year of 24-month period (ending in June)

July 2019 and June 2021



found anywhere else.

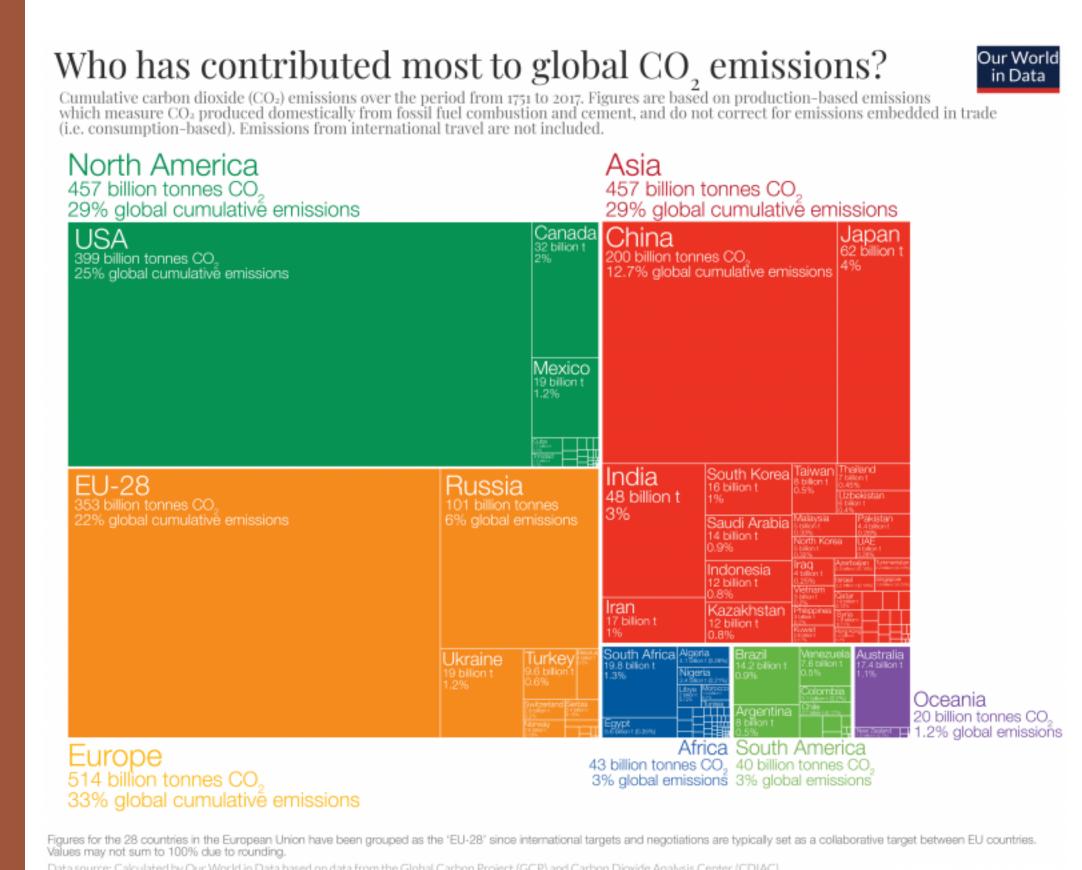


Due to this drought, the Malagasy population has developed emergency levels of acute food insecurity which have led to elevated rates of malnutrition, resulting in one of the most dangerous humanitarian crises in our modern world.

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CONCLUSIONS: Increased CO2 emissions and the depletion of the ozone layer are resulting in rising temperatures in Madagascar that are leading to longer dry seasons and limited rainfall. As a result of decreased rainfall, the cultivation of crops has been insubstantial causing severe food insecurity which has led to famine and malnutrition. Even when enough crops are being produced, Madagascar has such high levels of poverty that many citizens can not afford to purchase food. As a result of these issues, the Malagasy youth are not receiving adequate amounts of food, leading to stunted growth which can have serious consequences later in life.



call to action: Impoverished countries such as Madagascar are more adversely affected by climate change than developed countries are. Data shows that developed countries in North America are responsible for 29% of global cumulative CO2 emissions, this is nearly ten times more than the global cumulative CO2 emissions coming from Africa which is only 3%. First-world countries have a moral obligation to aid Madagascar and other countries they have affected by being high contributors to climate change.

REFERENCES:

Myers, Virah-Sawmy, Lloyd, Aiga, Asgary, McMichael, Pontzer, Ravaoarisoa