

EarthGames 2018

Pre-Jam Mixer

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the problem: feed the world in a changing climate

The world produces ~2,800 calories per person per day – more than enough to feed everybody.

Still, **800 million people are chronically undernourished**, while 1.5 billion people are overweight or obese.

With global population expected to grow to 9 billion by 2050, and people eating increasingly more meat, we will have to **increase food production by ~70%** in 30 years.

climate change → food production

a warming planet threatens food production, because:

extreme heat is detrimental for plant growth

[especially in the Tropics; especially when global temperature rises >2 °C]

pests & diseases love heat

warmer temperatures means more irrigation needed; less available

food production → climate change

Food production is a big contributor to climate change: agriculture emits **13%** of planet-warming gases; deforestation **10%**.

It matters what you eat!

Beef emits 6x as much as chicken;
25x as much as beans.

1/3 of food is currently wasted.

SOLUTIONS

1. Limit climate change!

3. Adapt agricultural practices.

2. Eat more sustainably.

4. Breed heat-resistant crops?

RESOURCES

Lecture by David Battisti

<https://youtu.be/O6ZkcOqT76M>

FAO Report

<http://www.fao.org/3/a-i5188e.pdf>

Feeding 9 Billion video series

<https://bit.ly/2q8FtNQ>

WRI Sustainable Diets

<http://www.wri.org/blog/2016/04/sustainable-diets-what-you-need-know-12-charts>