

# Can we feed 10 billion *and* save the Planet?

World population trends, food security and 'sustainable' agriculture

Canterbury WEA

Craig Anderson, Plant and Food Research, 2019



# World population statistics...

- Currently ~7.7 billion, of which:
- ~1 billion hungry
- ~2 billion malnourished

Hans Rosling – World population Statistics

<https://www.youtube.com/watch?v=kh7nfnUIAvA>

Ouch! This is the backdrop.

What about the future?

See also : [www.gapminder.org](http://www.gapminder.org) - Don't Panic – The Facts About Population (1 hr)

# Impacts of agriculture...



High country erosion



Soil erosion rolling low country

Sustainability: “The use of resources at rates that do not exceed the capacity of the earth to replace them”

“Dependency on non-renewable inputs is unsustainable, even if in the short term it is necessary as part of a trajectory toward sustainability.”



Wetland degradation

# Food Security...

- Impacts already high from agriculture...
- The FAO estimates we will need to increase food production by **70%** by 2050 (~9 billion)!

But is a 70% gain really necessary?

Tristram Stuart – Global Food Waste

[https://www.ted.com/talks/tristram\\_stuart\\_the\\_global\\_food\\_waste\\_scandal](https://www.ted.com/talks/tristram_stuart_the_global_food_waste_scandal)



# What does this transition look like in real life?

Gabe Brown – Regenerative Agriculture Fundamentals

<https://soilcarboncoalition.org/Gabe-Brown-TED/>

# Summary...



# References:

- Regenerative organic agriculture and climate change – A down to earth solution to global warming. Report 2014, Rodale Institute, PA. 20 pp.
- Wake up before its too late: Make agriculture truly sustainable now for food security in a changing climate. UNCTAD Trade and Environment Review 2013. 341 pp.
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- Plus many more anecdotes from many sources...