



**CHANGE YOUR FOOD
CHANGE YOUR FUTURE**

FOOD CONSUMPTION
THE WORLD GAME



TEAM MEMBERS



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AGENDA

FOOD SYSTEM OVERVIEW

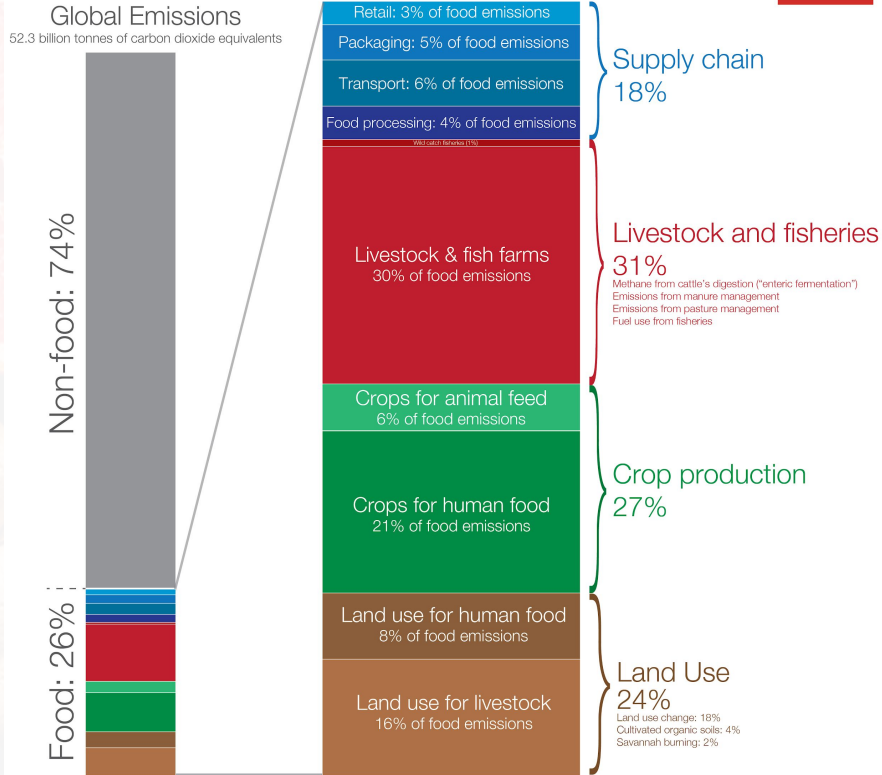
PUBLIC HEALTH AND PLANT-BASED DIETS

FOOD WASTE MANAGEMENT

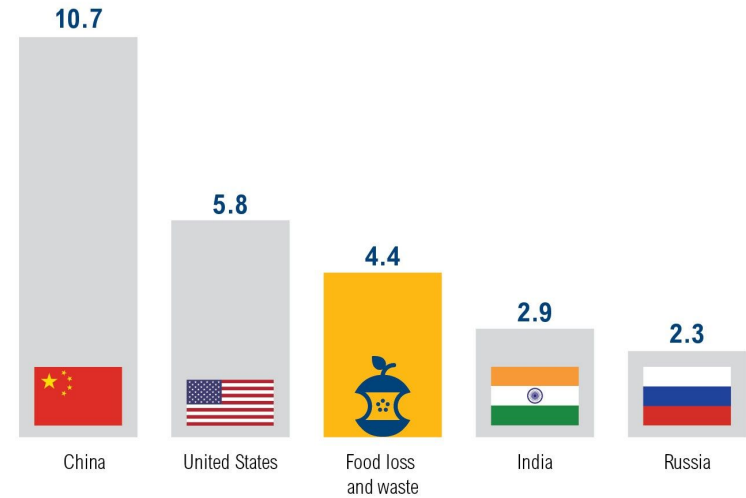
GHG MITIGATION IN THE FOOD SYSTEM

THE ISSUE WITH FOOD

Global greenhouse gas emissions from food production Our World in Data



If Food Loss and Waste Were its own Country, it Would Be the Third-Largest Greenhouse Gas Emitter



GT CO₂e (2011/12)*

* Figures reflect all six anthropogenic greenhouse gas emissions, including those from land use, land-use change, and forestry (LULUCF). Country data is for 2012 while the food loss and waste data is for 2011 (the most recent data available). To avoid double counting, the food loss and waste emissions figure should not be added to the country figures.

Source: CAIT, 2015; FAO, 2015. *Food wastage footprint & climate change*. Rome: FAO.

TIMELINE FOR HALVING GLOBAL EMISSIONS

2020

2025

2030

**ACTION
NOW**

**TRANSITIONAL
PERIOD**

**NEW FOOD
SYSTEM**

MISSION STATEMENT

Reduce carbon emissions by promoting plant-based diets and limiting food waste, while ensuring equitable access to healthy food.

COVID-19 AND THE FOOD SYSTEM



Gap analysis: Millions of pounds of produce is being **wasted** while millions of **food-insecure** Americans line up outside of food banks.

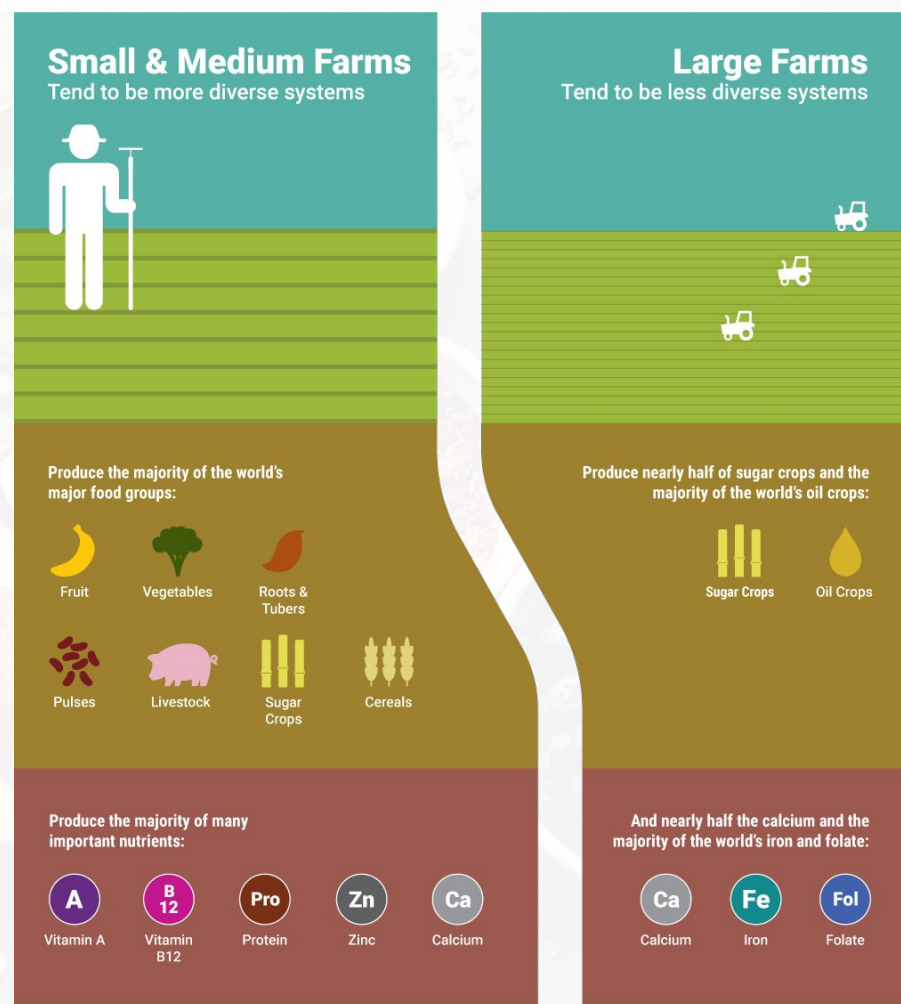
WE NEED A MORE
RESILIENT
FOOD SYSTEM

MEET FARMER JENNY



“Globally, small and medium farms produce **51–77% of nearly all commodities and nutrients**”

- Herrero, M. et al. Farming and the geography of nutrient production for human use: a transdisciplinary analysis. The Lancet Planetary Health 1, e33–42 (2017).

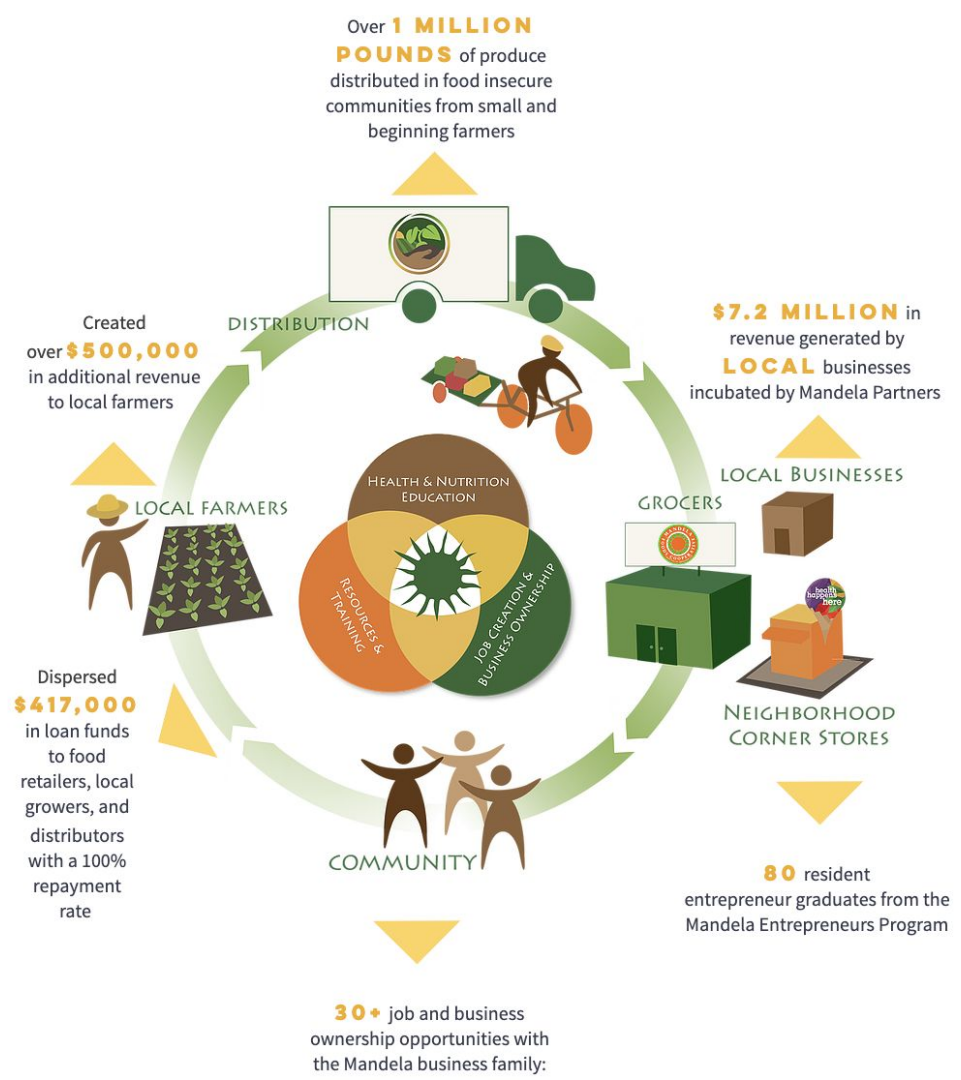



Data refers to total agricultural production, or the amount of each food item and nutrient produced in total on the world's croplands. Since the extent of aquaculture farms globally is uncertain, fish are not included as a food source.

FOOD HUBS

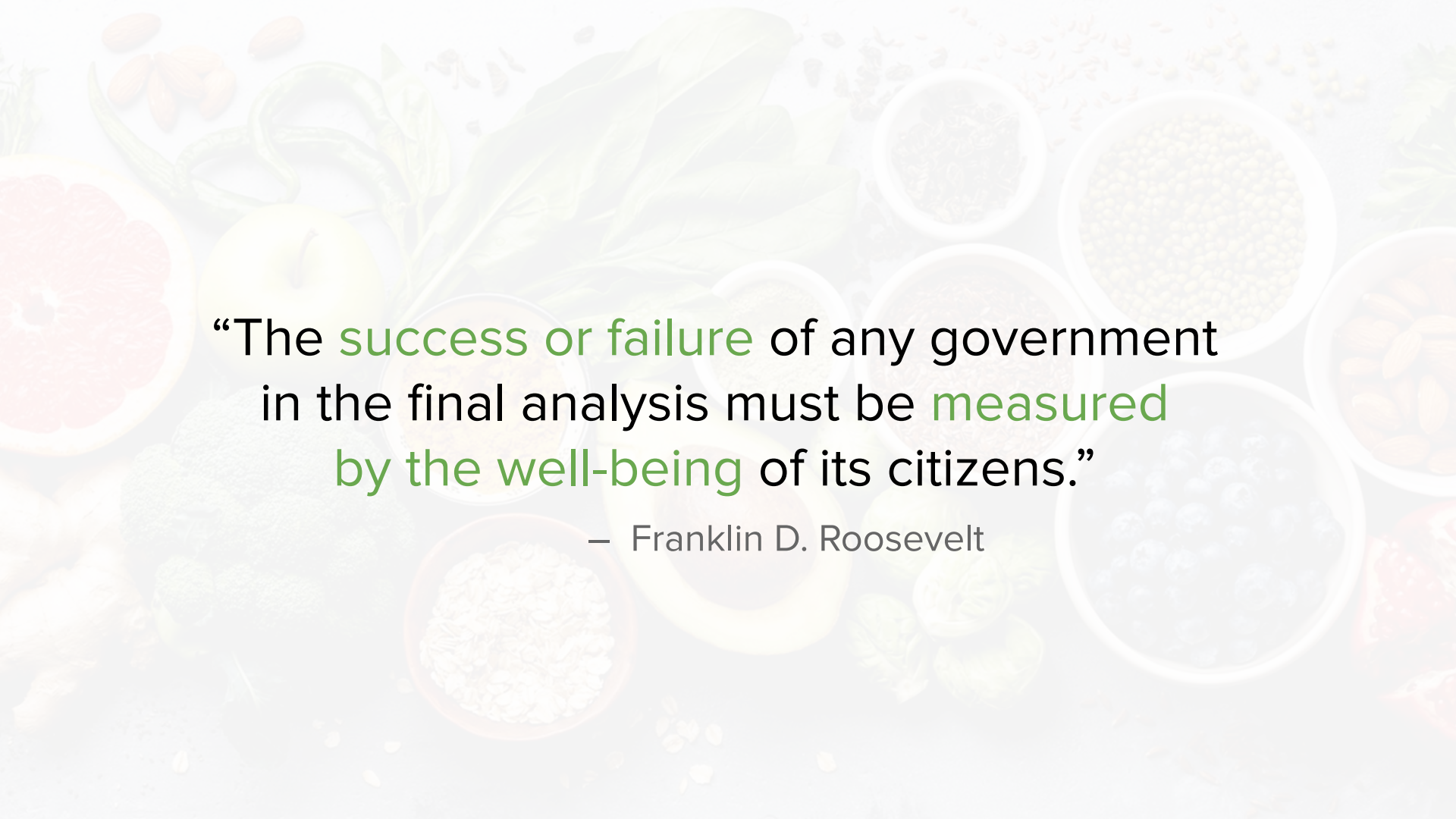
“work in partnership with local residents, family farmers, and community-based businesses to improve health, create wealth, and build assets through local food enterprises in low-income communities.”

- Mandela Marketplace



A background collage of various plant-based foods including almonds, leafy greens, lentils, chickpeas, and other legumes in small bowls, all rendered in a soft, faded style.

PUBLIC HEALTH AND PLANT-BASED DIETS



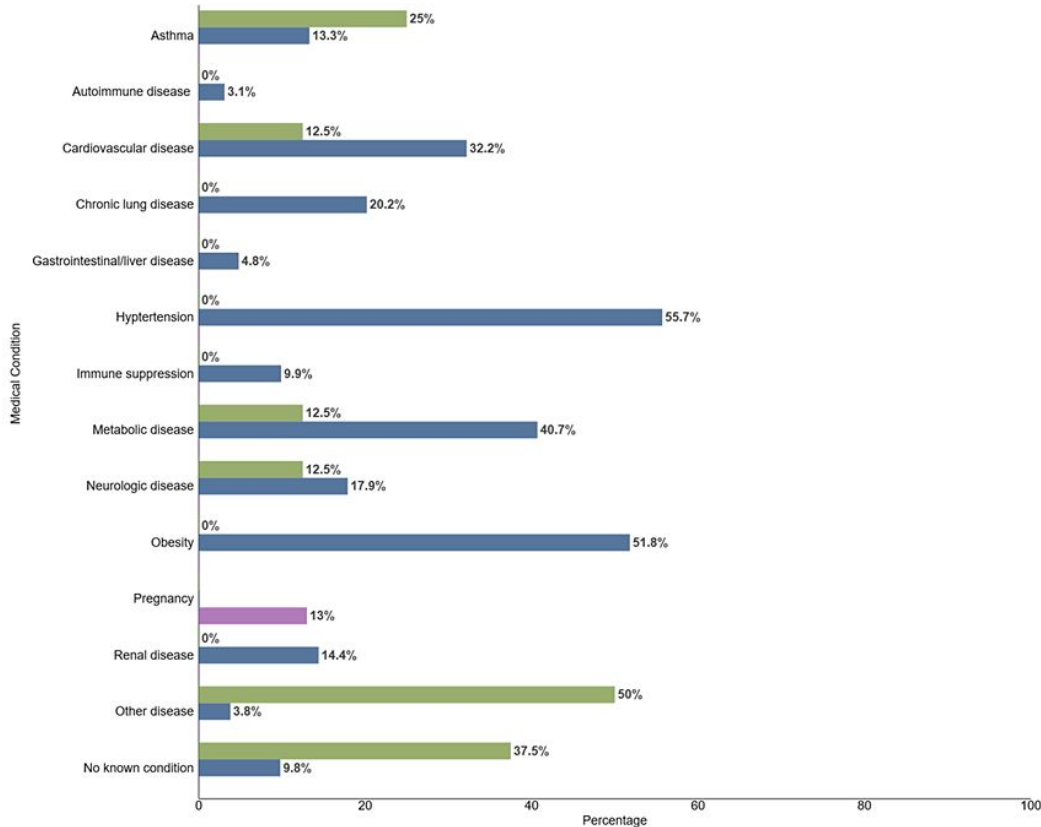
“The **success or failure** of any government
in the final analysis must be **measured**
by the well-being of its citizens.”

– Franklin D. Roosevelt



Selected Underlying Medical Conditions

Pediatric Adult Pregnant



90% of 1,393 patients who contracted the virus had **at least one** underlying medical condition:

- Obesity
- Hypertension
- Diabetes
- Cardiovascular disease

Food Systems Around the World



Jose Luis Chicoma

Executive Director,
Ethos Public Policy Lab
in Mexico City

“The Irony is, the one diet we have invented for ourselves
– the **Western diet** – is the one that’s making us **sick.**”

Michael Pollan

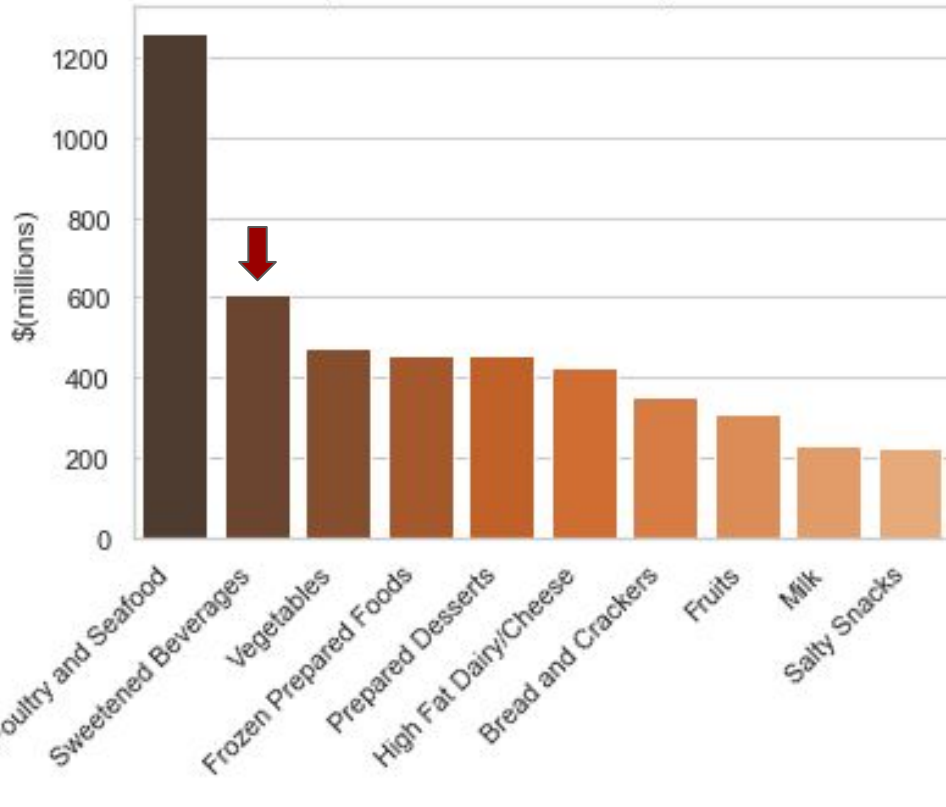
 TOGETHER
LET'S BEAT NCDs
#beatNCDs

 World Health
Organization
REGIONAL OFFICE FOR
Europe



UNHEALTHY DIET is a leading cause
of ill health in the WHO European Region,
linked to **cardiovascular disease,**
cancer & diabetes

Top 10 SNAP Household Expenditures



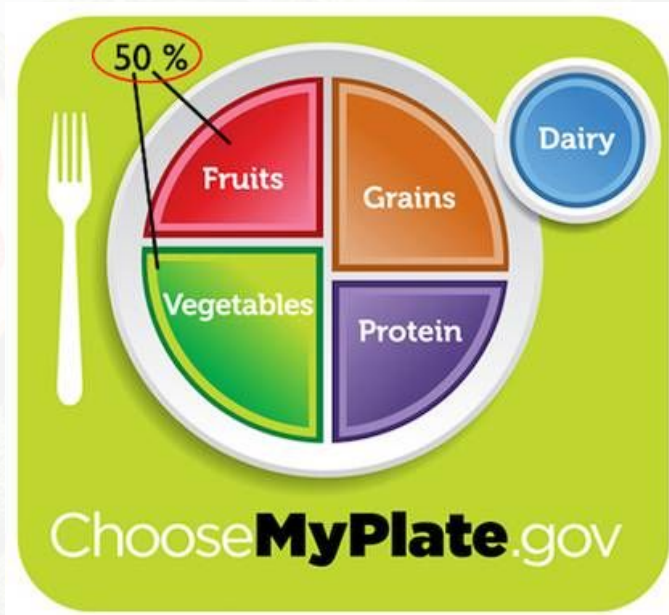
Reform Supplemental Nutrition Assistance Program:

\$1.30 on the dollar for wholesome and fresh produce

70 cents on the dollar for processed and unhealthy foods/drinks

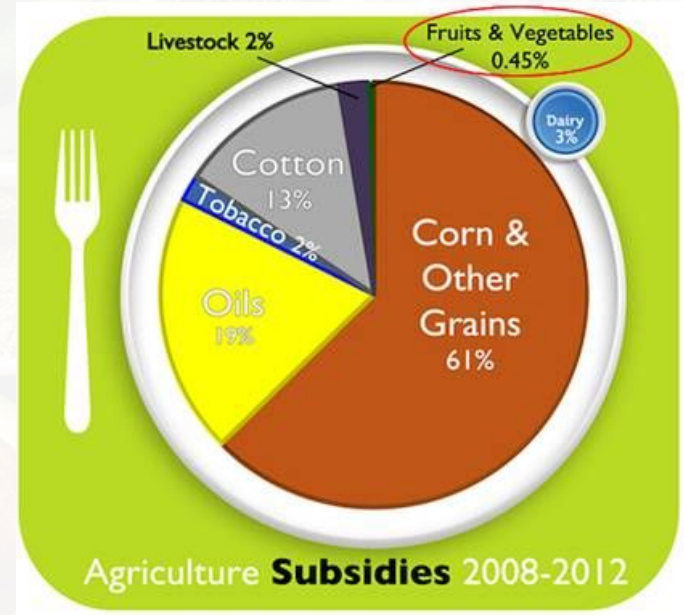
“Vegetables are called *specialty crops*! Don’t ask me to explain why.”

Rep. Chellie Pingree, Maine



Policy **prioritizes plant-based** options & specialty crops

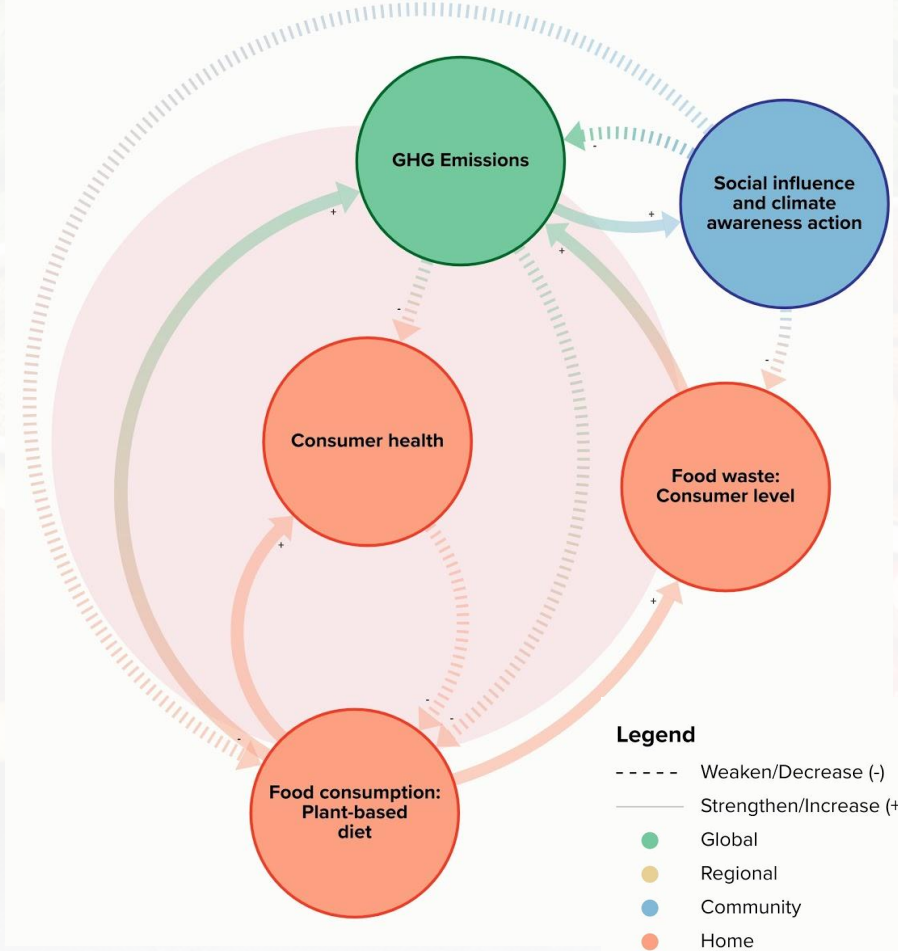
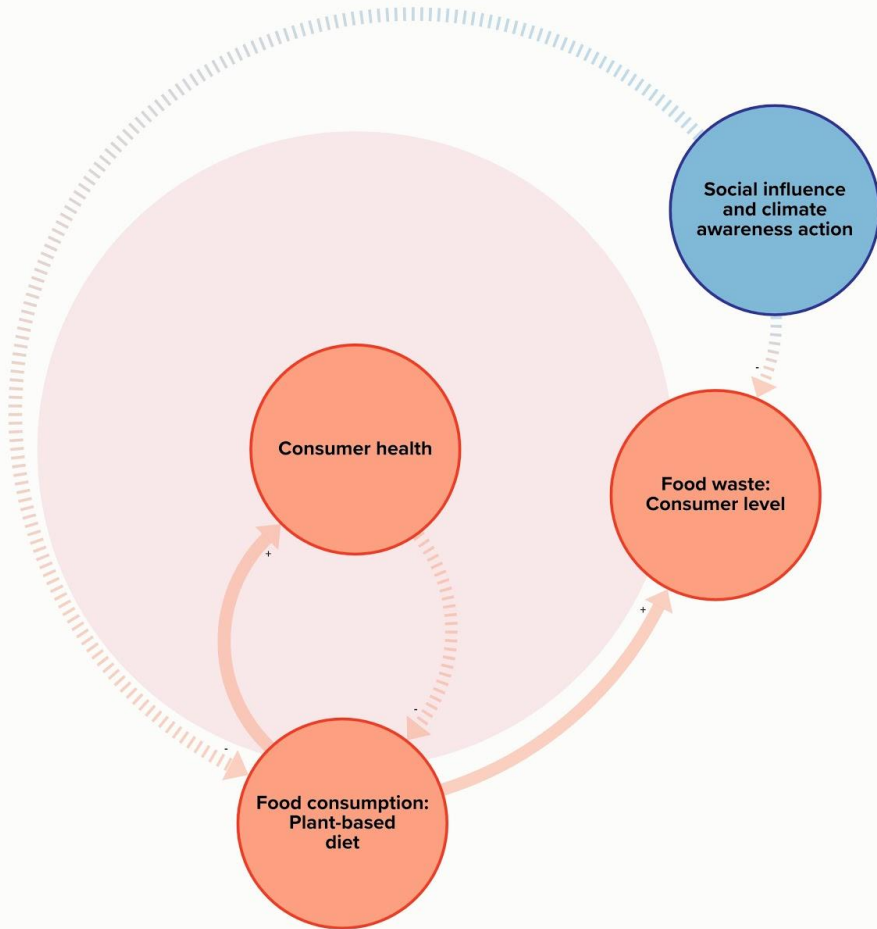
Shift meat & Dairy **subsidies**



Increase funding for research labs & data collection

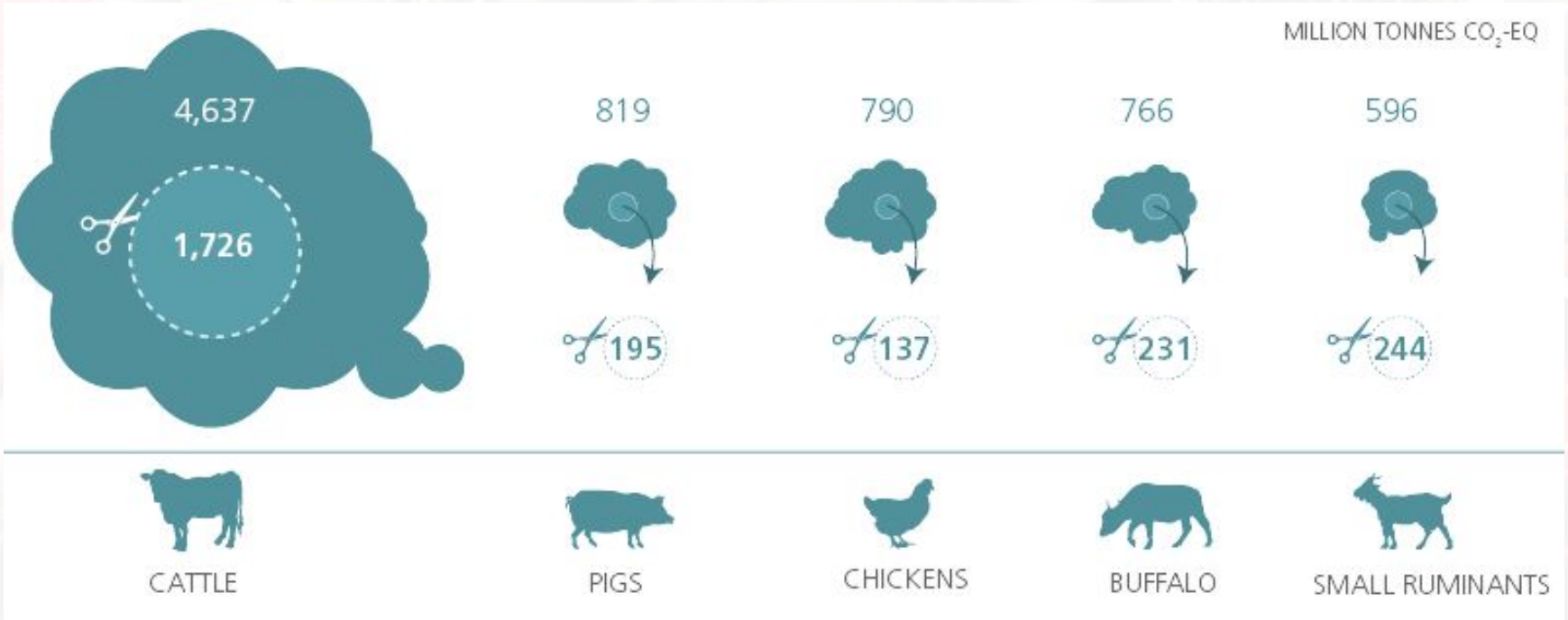
Increase its allocated **cropland**

Norms, Values & Consumer Practices



Plant-Based Diets

Can reduce GHG emissions associated with livestock production and consumption by an **estimated 33%** or about **2.5 gigatonnes CO₂-eq**



UN Climate Change Report: Food and Land

By adopting a balanced diet featuring **plant-based foods**, we can take major steps to fight climate change.



Many sustainable land management technologies and practices **are profitable within 3-10 years.**



The power is on your plate. Learn how you can fight climate change:
foodprints.earthday.org

#JoinEatShare #SRCCCL

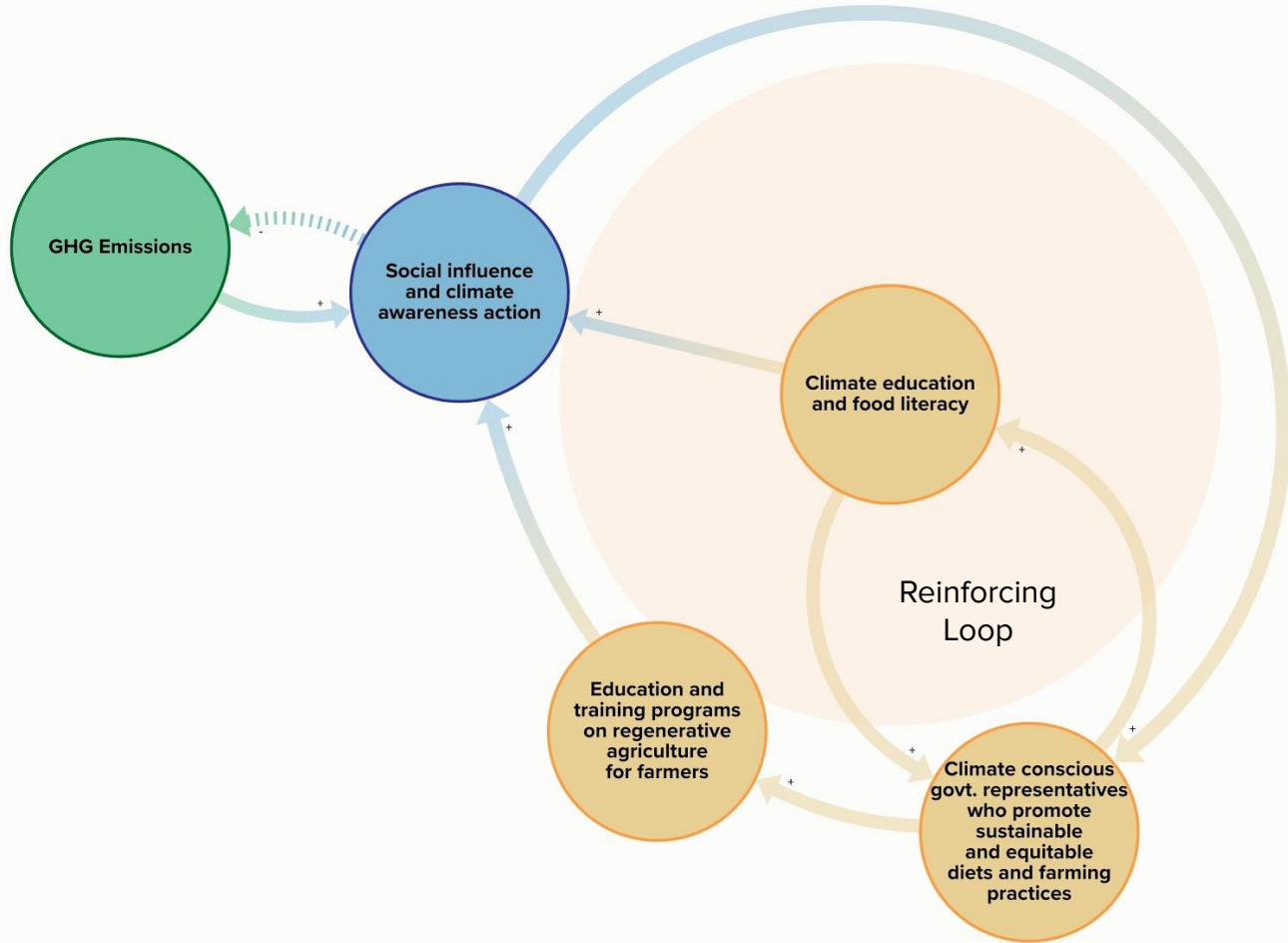


Diets must be reflective of the **culture, geography, and demography** of their citizens.

The Food and Land Use Coalition **alternative protein suggestions:**

- Plant-based meat substitutes
- Proteins from insects
- Algae and worms
- Proteins grown in the laboratory (“clean-meat”)

Climate Education and Food Literacy





Food literacy programs increase understanding of healthy food practices



Widespread climate change literacy by K-12 teachers and students



Climate change education is integrated into curriculum worldwide



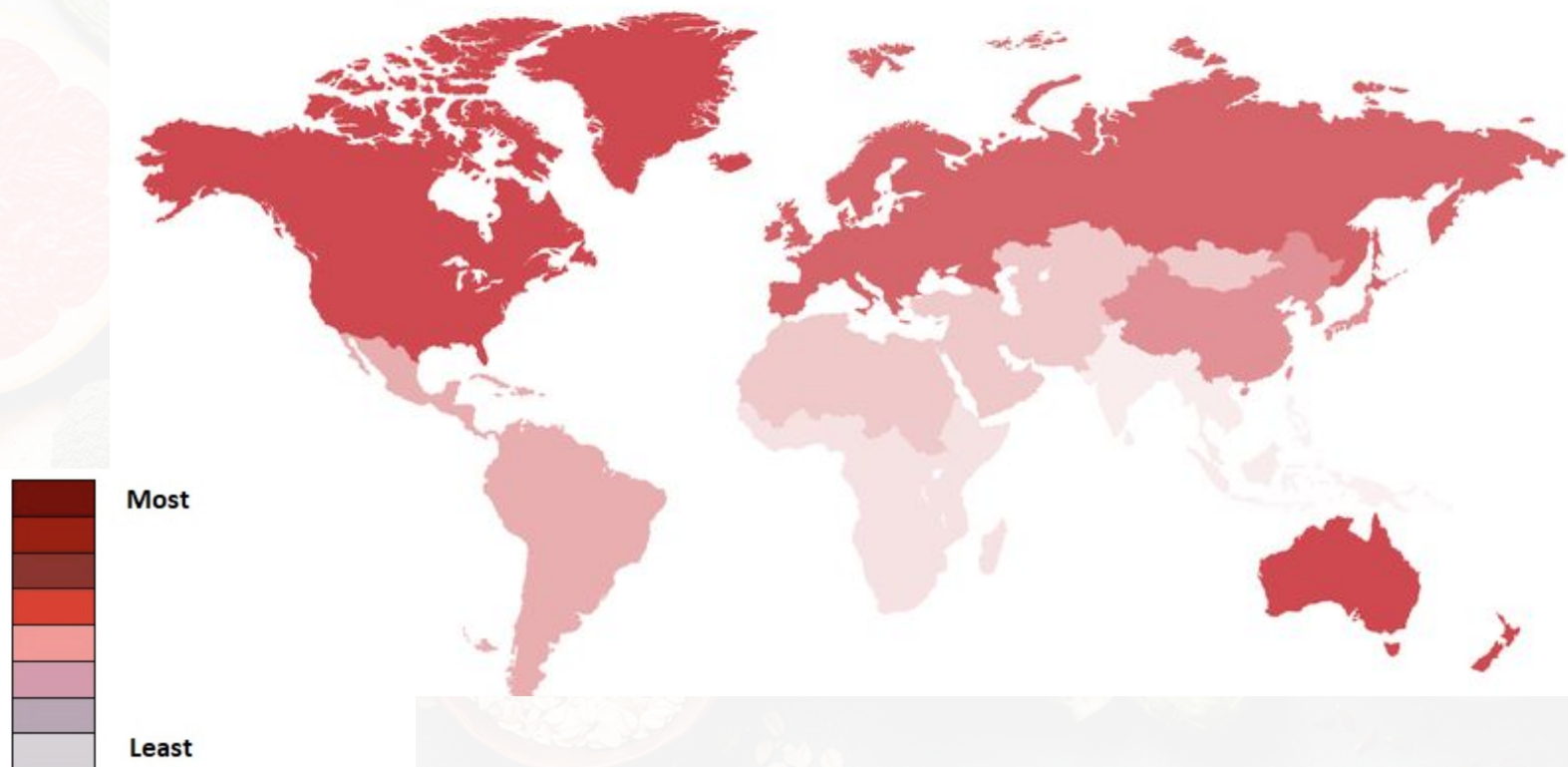
32% of California Thursdays network districts conducted instructional school gardening or orchard activities as part of a school curriculum, and **28%** as part of an after-school program

Freshly prepared school meals with state-grown produce while educating students on food ecology



FOOD WASTE MANAGEMENT

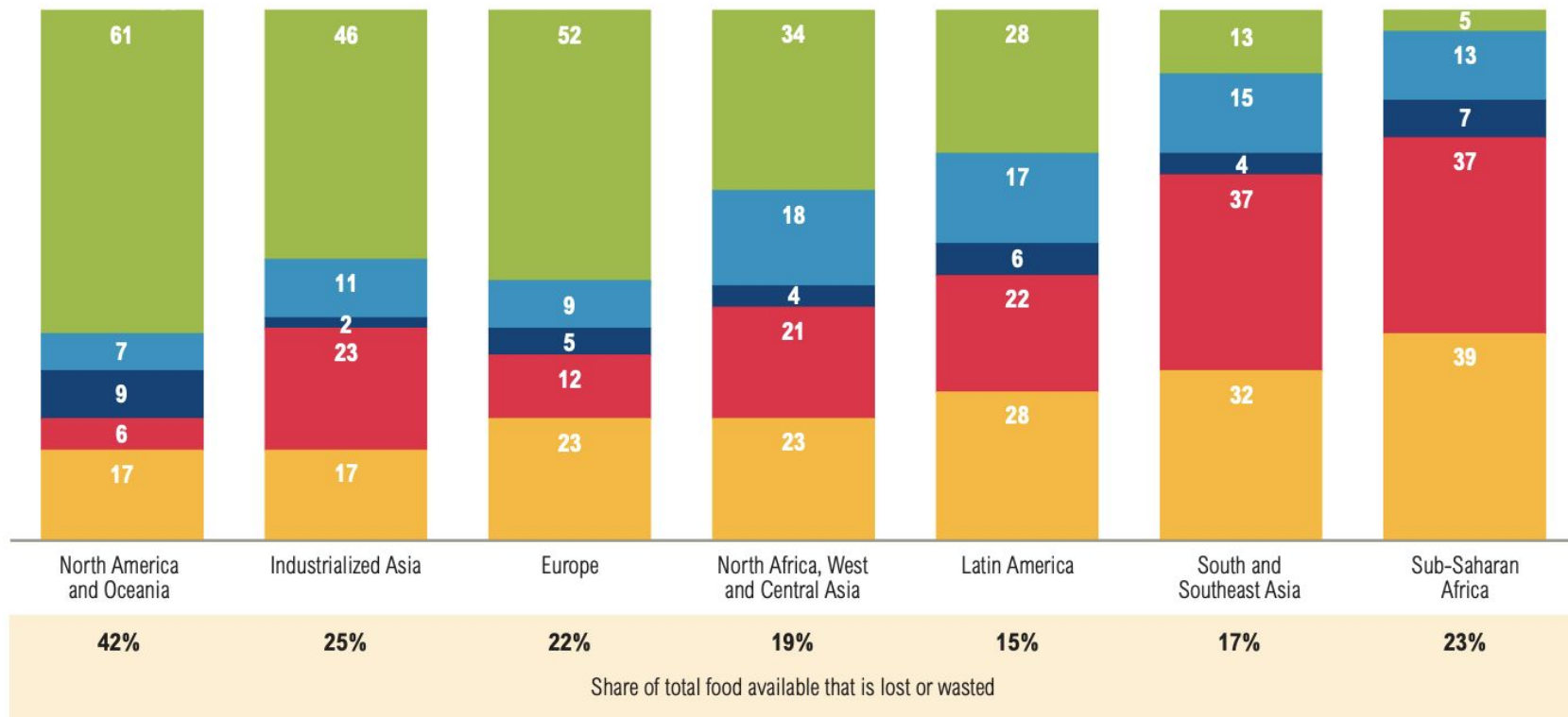
The biggest food wasters around the world



Source: The Food and Agriculture Organization of the UN

Food Lost or Wasted By Region and Stage in Value Chain, 2009 (Percent of kcal lost and wasted)

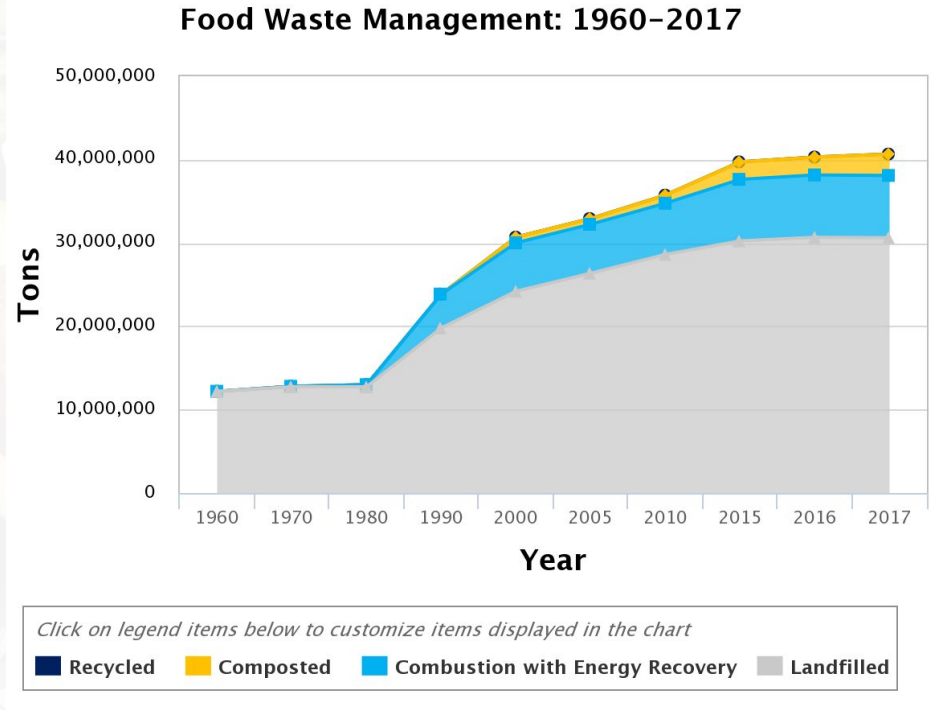
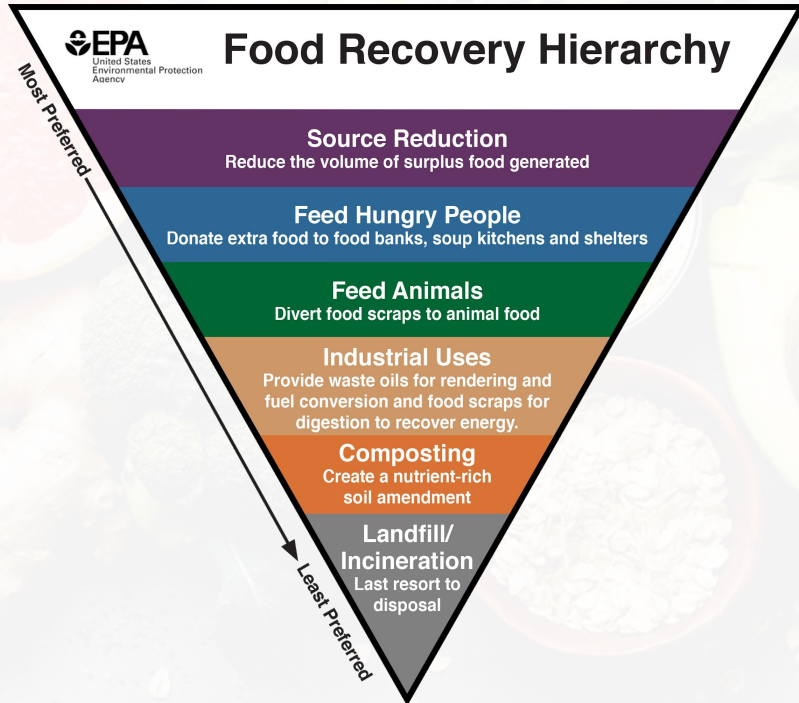
■ Production
 ■ Handling and Storage
 ■ Processing
 ■ Distribution and Market
 ■ Consumption



DEVELOPED COUNTRIES

Where should food waste go?

Where does it actually end up?





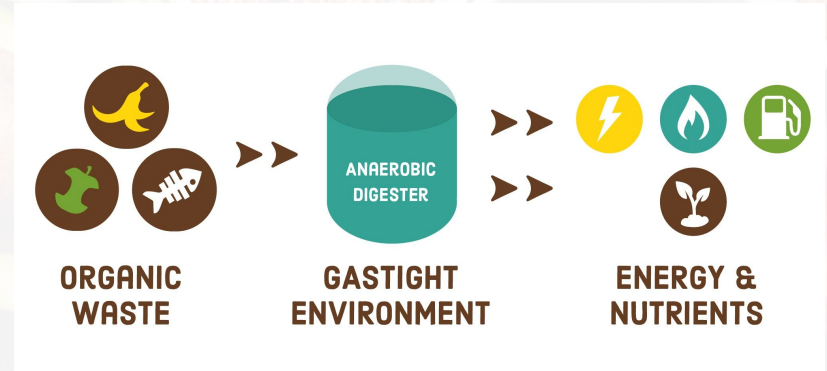
Consumers manage their own food waste



Widespread use of food sharing apps, like Olio



Outlaw food waste in supermarkets



Increase infrastructure : Food Waste → Energy

DEVELOPING COUNTRIES



Access to more efficient storage technology, like solar powered refrigeration for produce



Access to water and efficient irrigation technology to increase drought tolerance

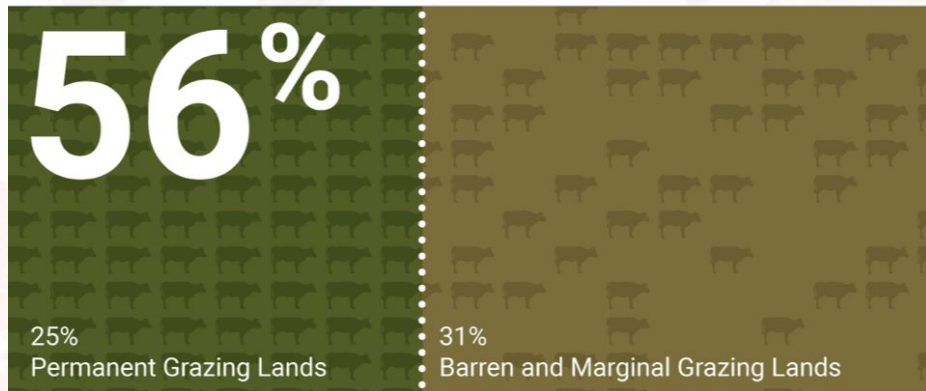


Regenerative agriculture education that organically reduces pests, increases yield, and increases drought tolerance



GHG MITIGATION IN THE FOOD SYSTEM

Grazing and Barren Lands



Forests



Croplands



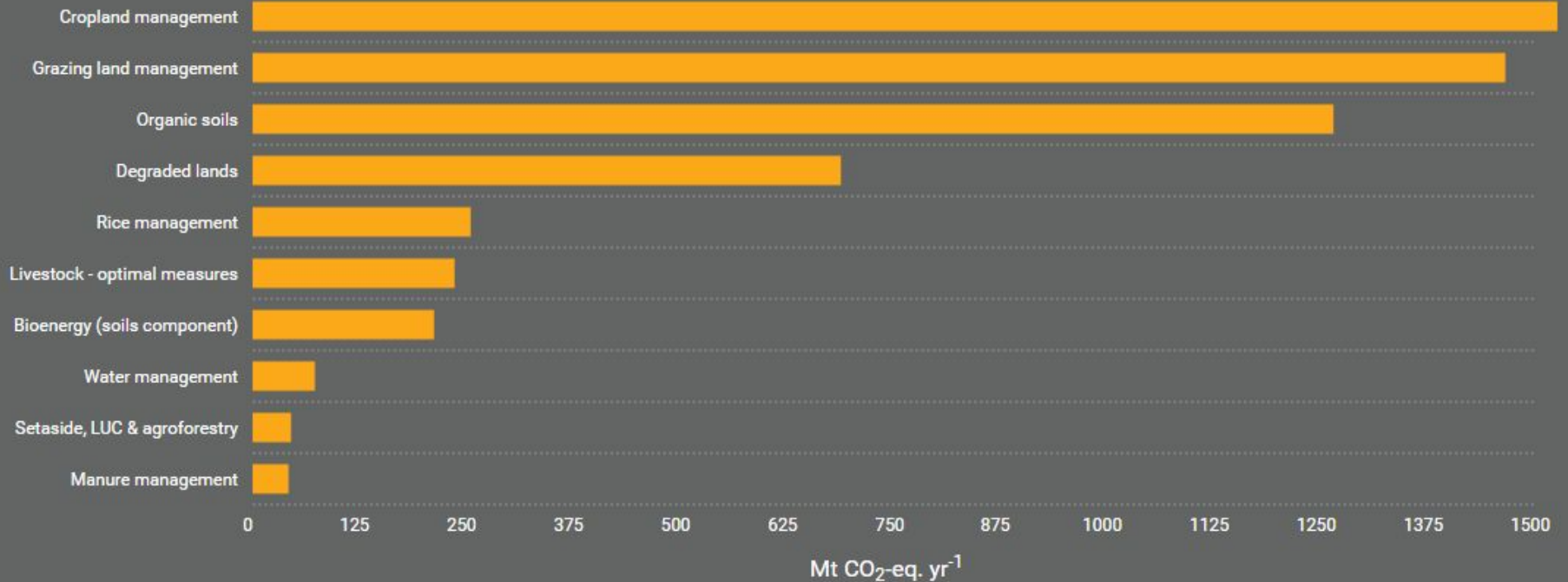
Human Settlement

1%

56% of our global habitable land is used to produce livestock that **only supplies 18% of global caloric supply, but produces 80 percent of non-CO2 emissions.**

— <https://ourworldindata.org/global-land-for-agriculture>

GREENHOUSE GAS MITIGATION POTENTIAL



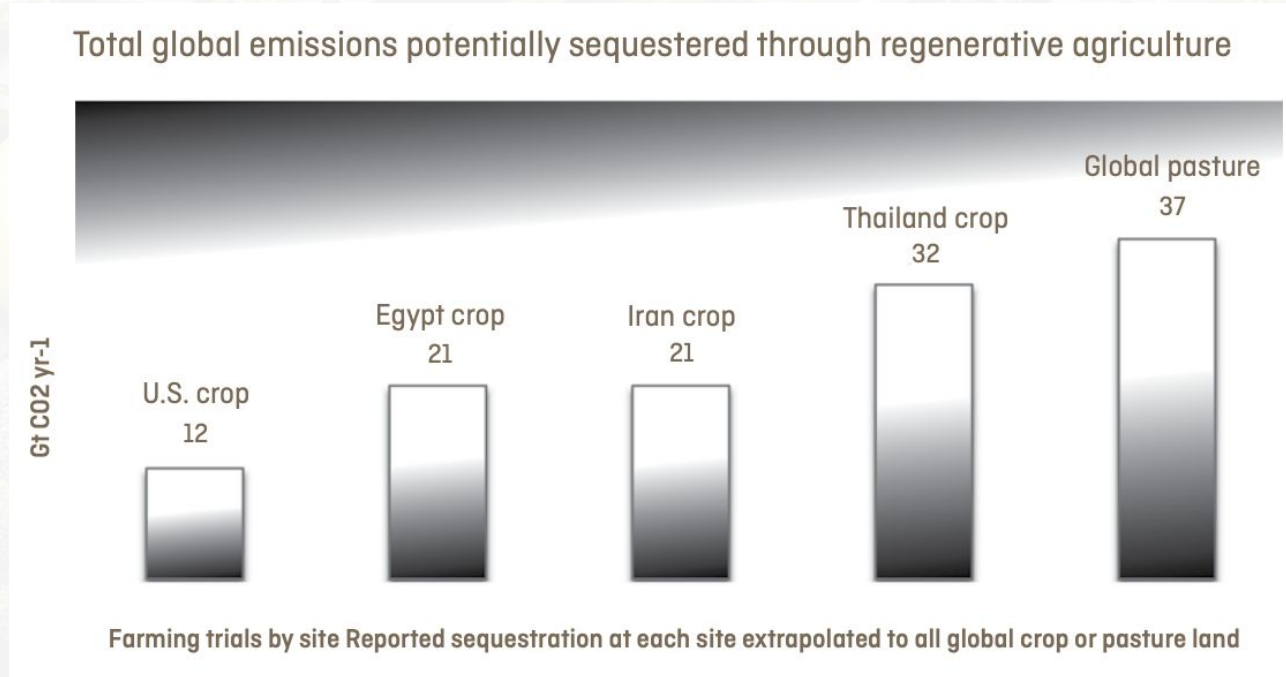
WHAT IS REGENERATIVE AGRICULTURE?



Regenerative Agriculture “describes farming and grazing practices that **reverse climate change** by rebuilding soil organic matter and restoring degraded soil biodiversity – resulting in both **carbon drawdown** and **improving the water cycle.**” – Regeneration International

GLOBALLY, WE EMIT 40-50 GIGATONS OF CO2 PER YEAR

- World Resources Institute



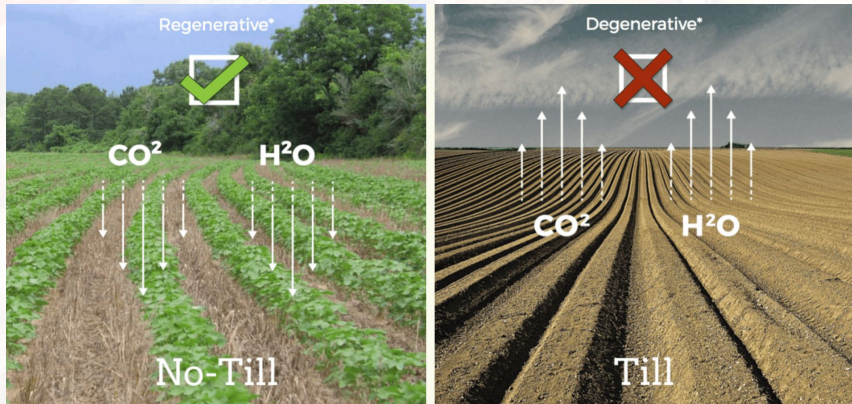
Regenerative practices applied to **global agricultural lands** has the potential to sequester **100%** of global carbon emissions in the soil of agricultural lands. – The Rodale Institute



Cap and trade funds granted to farmers to implement regenerative agricultural practices



Incentives provided to transition livestock grazelands into croplands



All new agriculture required to use organic and regenerative farming practices



Chemical fertilizer is banned and unnecessary as regenerative practices naturally increase soil nutrients

WHAT YOU CAN DO: TAKING ACTION AT HOME





QUESTIONS?