Why Food Systems Are Key to Reversing Climate Change and Biodiversity Loss

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Walter Orr Roberts Memorial Public Lecture
Aspen Global Change Institute, June 5, 2024
"You are the hero of your own story."

- Joseph Campbell
TO LIVE LOCAL
Food Practice
Our Work Is Global

WWF is the Largest multinational conservation organization in the world. We have a presence in 100 countries.
Wildlife populations have dropped 69% since 1970

Source: WWF/ZST (2022)
The equivalent of almost **three planets** could be required to provide the natural resources needed to sustain current lifestyles.

The global population could grow to around **8.5 billion in 2030, 9.7 billion in 2050**.
Agriculture accounts for:

- **BiDiversity Loss**: 70%
- **Freshwater Use**: 70%
- **GHG Emissions**: ~30%
- **Soil Erosion**: 50%
70% of biodiversity loss is due to food and agriculture production
Pasture / range
Forest
Cropland
Special use
Miscellaneous
Urban
= 1 million acres

GOAL 1: Consumption and Diets

SOLVING THE GREAT FOOD PUZZLE:
20 LEVERS TO SCALE NATIONAL ACTION
FOOD

The food, beverage, restaurant industry spends around $14 billion per year on advertising.*

DRUGS

In 2023, the pharmaceutical industry spent around $18 billion per year on advertising**

** Data via Statista
GOAL 2: Nature-Positive Production – Zero Conversion

“Sustainable” — “Regenerative” — “Agroecology” — “Permaculture”
REGENERATIVE AGRICULTURE

“RE-GENERATE”
Conversion to row crops, farmers receive higher value in the marketplace.

Invasives, cheatgrass can take over acres, altering ecosystem’s ability to function.

Lack of support for ranchers to develop and implement grazing management plans that enable native grasses to regenerate.
The destruction of grasslands across the Great Plains continues at an unsustainable pace. WWF’s most recent Flowprint analysis found that in 2021, the year that this report analyzes, plow-up destroyed 1.6 million acres of grasslands across the US and Canadian portions of the Great Plains. Within the Northern Great Plains region of the ecosystem—currently one of the world’s most intact temperate grasslands—the number of plowed acres was over 400,000 acres in 2021 alone. In total, 39 million acres have fallen to the plow since 2012, when WWF first began tracking grasslands conversion across the region.

1.6 MILLION ACRES
PLOWED IN A SINGLE YEAR
(An area larger than the state of Delaware)

There is, however, opportunity to change course. Despite all that has been lost, we still have a lot left to fight for. According to WWF’s Flowprint analysis, nearly 377 million acres across the Great Plains, much of which is privately owned and stewarded, remains in grass cover. One of the greatest opportunities we have to ensure that the grasslands of the Great Plains continue to exist, benefiting both people and wildlife, is policy.

As Congress considers the Farm Bill, increased pro-grasslands policy would shore up resources and develop strategies that can support the livelihoods of producers, incentivize grassland stewardship, and discourage sod burning. In addition to the Farm Bill, the North American Grasslands Conservation Act, if passed, would support the efforts of ranchers who are eager to have these majestic Great Plains better-off through improved grazing management, leading to years of positive outcomes for rural communities and nature.

* Pictured at: The Greater Prairie Chicken (Tympanuchus cupido) is a no-longer-threatened species.
Ranch Systems and Viability Planning (RSVP)
Rio Grande Rio Bravo
Freshwater Program

Photo by WWF / Enrique Prunes
The Kavango Zambezi Transfrontier Conservation Area (KAZA)
GOAL 3: Reduce Food Loss & Waste
Driven to Waste: The Global Impact of Food Loss on Farms
We produce enough food to feed everyone on the planet, but it’s estimated that up to **40% of all food produced globally** is lost or wasted.

Source: ReFED, WWF-UK
Global Food Loss Estimates

- **45%** Fruits & Vegetables
- **30%** Cereals
- **20%** Pulses & Oilseeds
- **20%** Dairy
- **52%** Fish & Seafood
- **45%** Roots & Tubers
- **20%** Meat

Source: FAO
In the US, approx. 80M tons (38% of all food) is unsold or uneaten.

* Unsold/uneaten includes small portion of food loss and waste that is composted or donated. (ReFED)
Less known data...

500 million tons of food waste is generated in urban centers, representing 66% of total food wasted.

Only 12% of global food and organic waste is diverted from landfills.

800 million tons of CO$_2$ results from the decomposition of organic waste.

Less than 2% of available all nutrients embedded in food are recycled.
By 2030, the global middle class will hit 5 billion, increasing the demand for resources.
WHAT DO WE DO?
• Only **21 countries** have Food Loss and Waste in their climate commitments (NDC)

• Only **39 countries** have organic waste landfill diversion in their climate commitments (NDC)
BAN FOOD FROM LANDFILLS GLOBALLY
A TOOLKIT FOR COMMUNICATING FOOD WASTE TO GUESTS

Step by Step Guide:
This open-source toolkit can be used according to your organization's needs. Some people may make use of the turnkey messages included, while others will find inspiration to create their own branded campaigns.
Pacific Coast Food Waste Commitment

A Public-Private Partnership to Reduce Food Waste
Impact Investing

$250K equity investment pre-series A

Colombian Software-as-a-Service (SaaS) that enables surplus food matching between food producers, retailers and foodbanks.
Dear Representative,

Please support HB150 and SB124, a grant to reduce food waste by adding a composting program in schools.

Thank you,
From: [Signatures]
School: [School Names]
9,000 Postcards Support of HB150 in Maryland
Reducing Waste = Creating Respect
Food isn’t trash

Mill keeps it from stinking up your kitchen — and the planet.
For great things are not done by impulse, but by a series of small things brought together.

- Vincent Van Gogh
Do More

Do more than belong: participate.
Do more than care: help.
Do more than believe: practice.
Do more than be fair: be kind.
Do more than forgive: forget.
Do more than dream: work.
Do more than teach; inspire.
Do more than earn; enrich.
Do more than give; serve.

Do more than live; grow.
Do more than suffer; triumph.

William Arthur Ward