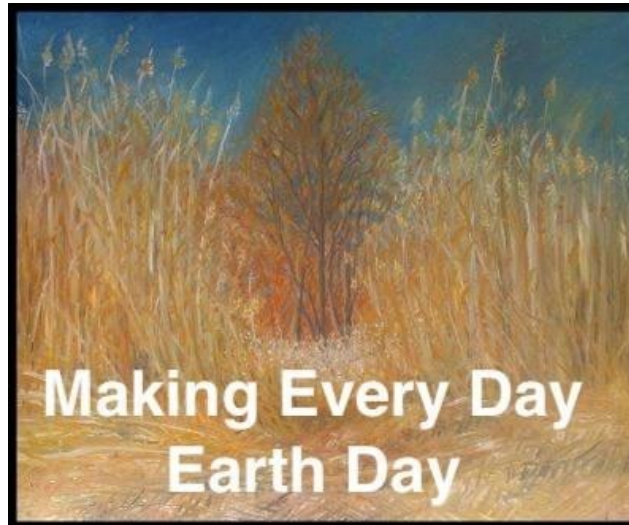




September 1, 2020

Food and Climate Change



Our topic this month is food and its intersections with climate change. We cover a range of local and global issues, highlighting various visions for restructuring food systems to be healthy, sustainable and just.

*...Food sovereignty, our hope!
Comes to restore social justice to humanity,
Ecological sustainability to nature
Biodiversity and cultural diversity to all peoples of Mother Earth!
Arise ye peoples, women and men, the landless, peasants, indigenous farmers, forest and
fisherfolks,
Let your hope be heard in all the corners of the earth!
Climate Justice and Food Sovereignty Now!
Globalise the Struggle, Globalise Hope!
Viva La Via Campesina, Viva*

—From the Poem, "Climate Justice and Food Sovereignty Now!" by [Elizabeth Mpofu](#)

Food production is responsible for at least one-quarter of the world's greenhouse gas emissions. A large portion of these are carbon dioxide (CO₂) emissions involved in the production and application of petrochemical crop inputs, such as synthetic fertilizers, which are increasingly used in industrial agriculture. The destruction of ecosystems (e.g. deforestation) for massive monocropping and livestock operations have debilitated the planet's capacity to absorb the high levels of CO₂ emitted through these practices. The resulting changes to our climate make us more vulnerable to food insecurity.

According to the World Food Programme's 2020 [report](#) on global food crises, 135 million people suffer from acute hunger, which is largely due to man-made conflicts, economic downturns and climate change. On our current trajectory, climate change will contribute to increased food scarcity, which will exacerbate economic, political and social inequalities; and lead to increased conflict over diminishing resources.

Indigenous peoples are uniquely challenged by climate impacts to lands, waters, foods, and other plant and animal species. They are also primary environmental conservation stewards worldwide; as well as leaders in movements for climate change mitigation, food sovereignty and water sovereignty.

"If efforts continue to support our rights to lands, territories, and resources, we can increase the amount of carbon captured...scale-up agroecosystems for sustainable food production, and restore harmony with nature and all life forms. Clearly, we are uniquely positioned to lead transformative change in the face of a climate emergency."

— "[World Indigenous Peoples Initiative to the UNSG Climate Action Summit: Commitments for Action on Climate](#)" (September 23, 2019)

Around the world, there are movements of dispossessed farmers campaigning to have lands returned to them. In the United States, some descendants of African American farmers whose ancestors lost lands after Emancipation through racist policies and land theft are seeking reparations that include land redistribution for the establishment of Black-owned farms.

Globally, women perform the majority of agricultural work and food production. In Iowa, women own or co-own half of farmland. Women's organizations, among others, are calling for agricultural workers to earn a living wage, and for governments to sufficiently engage and support small-scale farms and female farmers through such frameworks as climate change mitigation and adaptation.



[How Women in Iowa are Leading Farmland Conservation Efforts](#) (March 7, 2020) *PBS NewsHour*

Steps We Can Take

Conscientious Consumption

Before purchasing the ingredients for the week's meals consider hidden social and environmental costs: Where is the food from? How far did it travel? Who produced it, and under what circumstances? For foods from far away, can a local seasonal food be substituted?

Dietary Change

In the United States, where per capita meat consumption is three times the global average, replacing animal-based products with plant-based food substitutes has the potential to greatly decrease greenhouse gas emissions. There are also numerous health co-benefits to decreasing meat and dairy intake. Those of us who are accustomed to eating meat regularly, may set a goal to have one meat-free day per week.

Local Food Production

We could improve the health of people and our environment by sustainably producing more food locally for local consumption. Support local organic growers with your purchases. Volunteer at public gardening programs, including school gardens.

Reduce Food Waste

It is estimated that between 30-40 percent of the food supply in the US ends up in the garbage, which currently emits significant levels of methane gas. Communities and governments must take swift measures to reduce food waste. From household food scraps to farm waste, high-temperature composting can produce extremely healthy food fertilizer.

Some of you may have, or have seen small vermicomposting bins in cupboards under kitchen sinks. These amazing red worms decompose food scraps into the fresh fertilizer with living micronutrients, which is the ideal natural plant fertilizer. It is relatively cheap and easy to have year-round vermicomposting in your basement.

Advocacy

- Join local efforts to halt the expansion of concentrated animal feeding operations (CAFOs).
- Advocate for safe pesticides, herbicides and fertilizers, to protect our environment, including pollinators, and safe food.
- Investigate and help eliminate public funds that support and promote Industrial Agriculture.
- Promote the preservation and regeneration of Iowa's native ecosystems to fight climate change. Prairies are particularly effective carbon sinks.

Green New Deal

Vote for representatives who support the Green New Deal, which calls for working collaboratively with farmers and ranchers in the US to eliminate pollution and greenhouse gas emissions from the agriculture sector.

Learn More

["Food Insecurity, Covid, Climate Change, Poverty and Job Loss: Will These Take Us Closer To a '2020 Vision' Level Of Discussion of Our World?"](#) [podcast] (August 2020) Dr. Bashyam Iyengar on *The Experts Speak, Florida Psychiatric Society*

["Citrus for Sourdough, Eggs for Yeast"](#) (July 21, 2020) *Life & Thyme Post*

["Pandemic Insights: Brandi Janssen & Carly Nichols on food systems"](#) [video] (June 8, 2020) *Obermann Center for Advanced Studies, University of Iowa*

["MG's Course Correction: Just Transition in The Age Of COVID-19"](#) [e-course series] (May - July, 2020) *Movement Generation*

["The Food & Farm System We Need and Deserve: A Webinar Series"](#) (May 14 – June 4, 2020) *Iowa Citizens for Community Improvement*

["How to Plant a Three Sisters Garden: Corn, Beans and Squash"](#) (May 14, 2020) *The Old Farmer's Almanac*

["Food Waste Causes Climate Change. Here's How We Stop It."](#) [video] (Mar 27, 2020) *Our Changing Climate*

["Water for Food Security, Nutrition and Social Justice – Lyla Mehta and Claudia Ringler"](#) [podcast] (March 5, 2020) *Institute of Development Studies*

["Livestock and Cover Crops as a Solution to a Changing Climate"](#) (March 4, 2020) *Practical Farmers of Iowa*

["Whole Farm Conservation Best Practices Manual"](#) (February 2020) *Conservation Learning Group, Iowa State University*

["Supporting Resurgent Indigenous-led Governance: A Nascent Mechanism for Just and Effective Conservation"](#) (December 2019) *Biological Conservation*
[Denise O'Brien Interview](#) [podcast] (November 2019) *Women, Food and Agriculture Network*

["Climate Action Pathway: Land Use"](#) (November 2019) *United Nations Climate Change and the Marrakech Partnership for Global Climate Action*

["How Climate Change Could Make Our Food Less Nutritious"](#) by Kristie Ebi [video] (October 10, 2019) *TED*

["World Indigenous Peoples' Initiative to the UNSG Climate Action Summit: Commitments for Action on Climate"](#) (September 23, 2019) *The International Indigenous Peoples' Forum on Climate Change*

["Reducing Food's Environmental Impacts Through Producers and Consumers"](#) (June 2018) Joseph Poore and Thomas Nemecek, *Science*

["Determining Factors for Local Food Systems Success"](#) (August 2016) Ahna Kruzic and Carmen Bain, *Iowa State University*

[Habitat and Wildlife Restoration](#) [web page with contact form] *Prairie Rivers of Iowa*

[Alternative Systems and Environmental Quality](#) [web page] *Iowa State University Extension and Outreach*

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