

# FOOD, FARMING, HUNGER

## FACTS TO MOTIVATE ACTION

### THE CHALLENGE

**Hunger:** For each of us, the world produces 2,960 calories a day, one-fifth more than were available 50 years ago.<sup>1</sup> Yet, 800 million+ people go hungry, and those facing high levels of food insecurity has more than doubled since 2020.<sup>2</sup> One in five children is stunted by malnutrition, causing multiple, enduring harms.<sup>3</sup>

**Meat Heart Hazard:** In 2015, the World Health Organization declared red meat a probable carcinogen and processed meat a carcinogen. The latter—bacon, cold cuts, and hot dogs—are a fifth of the meat Americans eat.<sup>4</sup>

**Ultra-Processed Food Health Hazard:** Almost 60 percent of calories Americans eat now come from ultra-processed food. They are loaded with sugar and salt but offer little nutrition, and they expose us to “up to 5,000—mostly untested—food additives.”<sup>5</sup>

**Diabetes Worsening:** Diabetes is predicted to afflict one in three Americans by 2050.<sup>6</sup> Processed food, with sugar and fat, is a major risk factor, along with being overweight.<sup>7</sup> Among youth, the U.S. has the world’s highest diabetes rate.<sup>8</sup>

**Climate Crisis & Food:** Largely because of the shift to corporate-chemical practices and a heavy reliance on meat, our food systems globally could generate 37 percent of greenhouse gas emissions.<sup>9</sup>



## THE CHALLENGE

**Farming Inequity:** “In 1920, 14 percent of U.S. farmers were Black, but endemic racism has reduced that share to just over 1 percent today.”<sup>10</sup>

**Farming & Water Pollution:** Nitrogen runoff from fields seeps into streams and rivers, into the Mississippi and the Gulf of Mexico. There, the run-off has created a “dead zone” the size of Massachusetts, killing marine life.”<sup>11</sup>

**Water Cost of Meat:** Producing one pound of beef uses 1,800 gallons of water—nearly 50 times more than for a pound of vegetables and roughly 9 times more than for grain.<sup>12</sup>

**Harm to Farmworkers from Pesticide Exposure:** Globally, about “44 percent of farmers, farmworkers, and pesticide applicators experience at least one incident of acute pesticide poisoning on the job every year.” Eleven thousand die yearly from “accidental pesticide poisoning.”<sup>13</sup>

**Waste of Farmland:** We devote 80 percent of global agricultural land to livestock that provide only 17 percent of our calories.<sup>14</sup>

**Deforestation:** Cattle ranching causes 80 percent of deforestation in virtually every Amazon country.<sup>15</sup>



## SOLUTIONS ARISING

**Plant-Centered Diets:** Plant-centered diets are reducing greenhouse gases. Making a “societal shift toward plant-based diets” could “reduce greenhouse gas emissions from farming by as much as 70 percent by 2050—and by even more if we cut food loss and waste,” predict University of Minnesota scholars.<sup>17</sup>

**Health:** “Centering our eating in the plant world could cut the incidence of type 2 diabetes by up to 41 percent.”<sup>16</sup>

**Organic Acres Are Growing:** “Over just one decade in the United States (2005 to 2015), organically farmed acres almost doubled.”<sup>18</sup>

**Organic Food Sales Are Up:** “Rising at more than twice the rate of food sales in general, organic-food sales hit \$50 billion in 2019” in the US.<sup>19</sup>

**Community Supported Agriculture:** The number of Community Supported Agriculture groups (CSAs) is increasing. “Since their birth in the 1980s, CSAs have grown to include 13,000 farms,” says the US Department of Agriculture.<sup>20</sup>



## SOLUTIONS ARISING

**Agroforestry Is Spreading:** Mixing trees and crops—restoring the soil while absorbing carbon—is spreading. In western Africa, an area the size of Texas has converted to agroforestry.<sup>21</sup>

**Community Gardens Are Spreading:** More than 29,000 community gardens enrich lives across the country. Garden plots in city parks have increased by almost half since 2012, and the 100 largest U.S. cities have more than 29,000 plots in city parks.<sup>22</sup>

**More Americans Are Gardening:** More than half of Americans garden, and the COVID-19 pandemic created 18.3 million new gardeners, largely millennials.<sup>23</sup>

**Alternatives to Dairy Foods Gain Popularity:** Oat and soy milk are gaining market share over dairy.<sup>24</sup> Even Philadelphia Cream Cheese is offering a non-dairy version.<sup>25</sup>

**More Americans Are Composting Food Waste.** Community composting has more than doubled since 2016.<sup>26</sup>

**Small Farms:** Small farms produce a third of the world's food on a quarter of the land.<sup>27</sup> But the number of small farms is declining, and solutions require reversing the trend.

**For sources, please email [info@smallplanet.org](mailto:info@smallplanet.org)**

**Published 05/24/2024**



@FRANCESMOORELAPPE



@FMLAPPE

WWW.SMALLPLANET.ORG

# FOOD, FARMING, HUNGER SOURCES

- [1] United Nations, UN News, December 2022. <https://news.un.org/en/story/2022/12/1131637>
- [2] World Food Programme. “A Global Food Crisis.” World Food Programme, n.d. <https://www.wfp.org/global-hunger-crisis>.
- [3] Shekar, Meera, and Chiara Dell’Aira. “New Data Exposes Alarming Child Malnutrition Trends.” World Bank Blogs, June 15, 2023. <https://blogs.worldbank.org/health/new-data-exposes-alarming-child-malnutrition-trends>.
- [4] Daniel, Carrie, Amanda Cross, Corinna Koebnick, and Rashmi Sinha. “Trends in Meat Consumption in the United States.” *Public Health Nutrition* 14, no. 4 (April 2011): 575–83. <https://doi.org/10.1017/S1368980010002077>.
- [5] Poti, Jennifer, Bianca Braga, and Bo Qin. “Ultra-Processed Food Intake and Obesity: What Really Matters for Health—Processing or Nutrient Content?” *Current Obesity Reports* 6 (2017): 420–31. <https://doi.org/https://doi.org/10.1007/s13679-017-0285-4>.
- [6] Center for Disease Control. “Number of Americans with Diabetes Projected to Double or Triple by 2050.” CDC Archive, October 22, 2010. <https://www.cdc.gov/media/pressrel/2010/r101022.html#:~:text=The%20report%20predicts%20that%20the,1%2%200in%205%20by%202050>.
- [7] Ardisson Korat, Andres, Walter Willett, and Frank Hu. “Diet, Lifestyle, and Genetic Risk Factors for Type 2 Diabetes: A Review from the Nurses’ Health Study, Nurses’ Health Study 2, and Health Professionals’ Follow-up Study.” *Current Nutrition Reports* 3, no. 4 (December 1, 2014): 345–54. <https://doi.org/10.1007/s13668-014-0103-5>.
- [8] Sherrell, Zia, and Angela Bell. “How Do Diabetes Rates Vary by Country?” *Medical News Today*, August 31, 2022. <https://www.medicalnewstoday.com/articles/diabetes-rates-by-country>.
- [9] Crippa, M., E. Solazzo, D. Guizzardi, F. Monforti-Ferrario, F. Tubiello, and A. Leip. “Food Systems Are Responsible for a Third of Global Anthropogenic GHG Emissions.” *Nature Food* 2 (2021): 198–209. <https://doi.org/https://doi.org/10.1038/s43016-021-00225-9>.
- [10] Ficara, John, and Juan Williams. “Black Farmers in America.” npr, February 22, 2005. <https://www.npr.org/2005/02/22/5228987/black-farmers-in-america>.
- [11] National Oceanic and Atmospheric Administration. “NOAA Forecasts Very Large ‘Dead Zone’ for Gulf of Mexico.” NOAA, June 12, 2019. <https://www.noaa.gov/media-release/noaa-forecasts-very-large-dead-zone-for-gulf-of-mexico#:~:text=NOAA%20scientists%20are%20forecasting%20this,the%20land%20mass%20of%20Massachusetts>.
- [12] Water Footprint Network. “Do You Know How Much Water Was Used to Grow Your Food and to Produce Your Clothes and the Things You Buy? .” Water Footprint Network, n.d. <https://www.waterfootprint.org/time-for-action/what-can-consumers-do/>.
- [13] Boedeker, Wolfgang, Meriel Watts, Peter Clausing, and Emily Marquez. “The Global Distribution of Acute Unintentional Pesticide Poisoning: Estimations Based on a Systematic Review.” *BMC Public Health*, 1875, 20, no. 1 (December 7, 2020). <https://doi.org/10.1186/s12889-020-09939-0>.
- [14] Ritchie, Hannah. “How Much of the World’s Land Would We Need in Order to Feed the Global Population with the Average Diet of a given Country?” *Our World in Data*, October 3, 2017. <https://ourworldindata.org/agricultural-land-by-global-diets>.
- [15] Nepstad, Daniel, Claudia Stickler, Britaldo Soares-Filho, and Frank Merry. “Interactions among Amazon Land Use, Forests and Climate: Prospects for a near-Term Forest Tipping Point.” *Philosophical Transactions of the Royal Society B Biological Sciences* 363, no. 1498 (May 27, 2008): 1737–46. <https://doi.org/10.1098/rstb.2007.0036>.
- [16] Orlich, Michael, Pramil Singh, Joan Sabaté, Karen Jaceldo-Siegl, Jing Fan, Synnove Knutsen, Lawrence Beeson, and Gary Fraser. “Vegetarian Dietary Patterns and Mortality in Adventist Health Study 2.” *JAMA Internal Medicine* 173, no. 13 (July 8, 2013): 1230–38. <https://doi.org/doi:10.1001/jamainternmed.2013.6473>.
- [17] Springmann, Marco, Charles Godfray, Mike Rayner, and Peter Scarborough. “Analysis and Valuation of the Health and Climate Change Cobenefits of Dietary Change.” *PNAS* 113, no. 15 (March 21, 2016): 4146–51. <https://doi.org/https://doi.org/10.1073/pnas.1523119113>.
- [18] Economic Research Service of the U.S. Department of Agriculture. “ERS Charts of Note.” ERS USDA, March 9, 2022. <https://www.ers.usda.gov/data-products/charts-of-note/charts-of-note/?topicId=f575ba4b-a80b-4786-ad83-bf5af5c0aa2d>.
- [19] Ibid
- [20] National Agricultural Library of the U.S. Department of Agriculture. “Community Supported Agriculture.” NAL USDA, n.d. <https://www.nal.usda.gov/farms-and-agricultural-production-systems/community-supported-agriculture>.
- [21] Personal communication, Gray Tappan, U.S. Geological Survey, October 2020.
- [22] Mayers, Katie. “Community Garden Statistics in 2023 (Latest U.S. Data).” *Garden Pals*, April 28, 2023. <https://gardenpals.com/community-garden/>.
- [23] Ibid.
- [24] Starostinetskaya, Anna. “Why 2022 Was Oat Milk’s Biggest Year Yet.” *VegNews*, January 6, 2023. <https://vegnews.com/2023/1/2022-oat-milk-biggest-year>.
- [25] Wiener-Bronner, Danielle. “Philadelphia Is Launching a Plant-Based Cream Cheese.” *CNN Business*, December 6, 2022. <https://www.cnn.com/2022/12/06/business/philadelphia-cream-cheese-plant-based/index.html>.
- [26] Rucker, Reggie. “Media Release: New Survey Reveals Community Composting Is a Rapidly Growing Sector in the Recycling Industry.” *Institute for Local Self-Reliance*, March 22, 2023. <https://ilsr.org/release-2022-community-composter-census/>.
- [27] Food and Agricultural Organization of the United Nations. “Small Family Farmers Produce a Third of the World’s Food.” FAO UN, April 23, 2021. <https://www.fao.org/news/story/en/item/1395127/icode/>.



@FRANCESMOORELAPPE



@FMLAPPE

WWW.WSM.SAMLLAPLLAP