

Sources:

1. "Dr. Cynthia Rosenzweig," NASA Goddard institute for Space Studies GISS Personnel Directory. <https://www.giss.nasa.gov/staff/crosenzweig.html>
2. "Chocolate shortage: Scientists working to fix cacao crisis," ABC 7 Eyewitness News, January 2, 2018. <https://abc7.com/chocolate-shortage-cacao-crisis-declining-production-crop/2851573/>
3. "Climate change shrinking seafood availability," NBC News, September 19, 2021. <https://www.nbcnews.com/nightly-news-netcast/video/climate-change-shrinking-seafood-availability-121310789561>
4. "For many, coffee really is a matter of life and death" CBS News, December 8, 2016. <https://www.cbsnews.com/news/climate-change-killing-coffee-uganda-hitting-worlds-poorest-hard/>
5. "Why our love for avocados is not sustainable," Sustainable Food Trust, January 31, 2020. <https://sustainablefoodtrust.org/articles/why-our-love-for-avocados-is-not-sustainable/>
6. "Avocado: the 'green gold' causing environment havoc," World Economic Forum, February 24, 2020. <https://www.weforum.org/agenda/2020/02/avocado-environment-cost-food-mexico/>
7. "Socio-Environmental Impacts of the Avocado Boom in Meseta Perpecha, Michoacan, Mexico," Sustainability, June 29, 2021. <https://www.mdpi.com/2071-1050/13/13/7247/htm>
8. "Persea americana," Missouri Botanical Garden. <https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=281661>
9. "Persea americana, Avocado," USDA Forest Service. http://hort.ufl.edu/database/documents/pdf/tree_fact_sheets/peramea.pdf
10. "Movement of Hass Avocados From Areas Where Mexican Fruit Fly or Sapote Fruit Fly Exist," Federal Register Proposed Rules, Department of Agriculture, April 2, 2008. <https://www.govinfo.gov/content/pkg/FR-2008-04-02/pdf/E8-6799.pdf>
11. "Avocado Varieties," California Avocado Commission. <https://californiaavocado.com/avocado101/avocado-varieties/>
12. "A planting plan for avocados," University of California Agriculture and Natural Resources' Science-based Solutions for Ventura County's Communities, Farms and Environment. https://ceventura.ucanr.edu/Com_Ag/Subtropical/Avocado_Handbook/Horticulture/A_planting_plan_for_avocados/
13. "Pruning Avocado Trees," California Avocado Society 1962 Yearbook. http://www.avocadosource.com/CAS_Yearbooks/CAS_46_1962/CAS_1962_PG_42-43.pdf
14. "Avocado Leaves," Specialty Produce. https://specialtyproduce.com/produce/Avocado_Leaves_11454.php
15. "How to Identify the Leaves on an Avocado Trees," Garden Guides. <https://www.gardenguides.com/119662-identify-leaves-avocado-tree.html>

16. "Persea Americana: Avocado," University of Florida IFAS Extension. <https://edis.ifas.ufl.edu/publication/ST435>
17. "Avocados," Agricultural Marketing Resource Center. <https://www.agmrc.org/commodities-products/fruits/avocados>
18. "The U.S. Market for Avocados," USAID. https://pdf.usaid.gov/pdf_docs/PA00KP28.pdf
19. Interpretive Summary of book chapter on avocado history, biodiversity and production, USDA Agricultural Research Service, publication acceptance date August 7, 2014. <https://www.ars.usda.gov/research/publications/publication/?seqNo115=308288>
20. FAOSTAT. <https://www.fao.org/faostat/en/#data/QV>
21. "Avocado Annual: Mexico" USDA Foreign Agricultural Service, October 5, 2021. <https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Avocado%20Annual%20Mexico%20City%20Mexico%2012-01-2021.pdf>
22. "When to pick avocados," University of California's Science-Based Solutions for Ventura County's Communities, Farms and Environment. https://ceventura.ucanr.edu/Com_Ag/Subtropical/Avocado_Handbook/Harvesting/When_to_pick_avocados/
23. "Avocados," Colorado Integrated Food Safety Center of Excellence, Colorado State University. <https://fsi.colostate.edu/avocados/>
24. "Shipping Avocados from Mexico to the United States," Cross Border Freight. <https://mexicocrossborderfreight.com/shipping-avocados-from-mexico-to-the-united-states/>
25. "All about avocados: Did you know?" Hamburg Süd. https://www.hamburgsud-line.com/liner/en/liner_services/red_notes/articles_2020/avocado-boom-refrigerated-transport.html
26. "Extension of Avocado Fruit Postharvest Quality Using Non-Chemical Treatments," Agronomy, February 2, 2020. <https://www.mdpi.com/2073-4395/10/2/212/html>
27. "Are You Storing Food Safely? U.S. Food and Drug Administration. <https://www.fda.gov/consumers/consumer-updates/are-you-storing-food-safely>
28. "Transport: A Guide to Best Practices," Hass Avocado Board. <https://hassavocadoboard.com/wp-content/uploads/Hass-Avocado-Board-03-Transport.pdf>
29. "How Does a Coffee Cherry Taste?" Paulig Barista Institute. <https://www.baristainstitute.com/behind-bean/how-does-coffee-cherry-taste>
30. "Coffee (*Coffea arabica* L.) by-Products as a Source of Carotenoids and Phenolic Compounds—Evaluation of Varieties With Different Peel Color," Frontiers in Sustainable Food Systems, October 21, 2020. <https://www.frontiersin.org/articles/10.3389/fsufs.2020.590597/full>
31. "Descriptors for Coffee, (*Coffea* spp. and *Psilanthus* spp.)," Biodiversity International. https://www.biodiversityinternational.org/fileadmin/migrated/uploads/tx_news/Descriptors_for_coffee_Coffea_spp_and_Psilanthus_spp_365.pdf
32. "The Coffee Tree," FAO. <https://www.fao.org/3/x6939e/X6939e01.htm>
33. "What is Coffee?" National Coffee Association. <https://www.ncausa.org/About-Coffee/What-is-Coffee>

34. "Climate & Coffee," Climate.gov, June 19, 2015. <https://www.climate.gov/news-features/climate-and/climate-coffee>
35. "Food Security," Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land, 2019. https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08_Chapter-5_3.pdf
36. "Brazil's 2021 Coffee Production Seen Plunging," Gro Intelligence, March 15, 2021. <https://gro-intelligence.com/insights/brazil-2021-coffee-production-seen-plunging>
37. "Coffee: World Markets and trade," USDA, December 2021. <https://apps.fas.usda.gov/psdonline/circulars/coffee.pdf>
38. "Coffee in a Hot Planet," Case Studies in the Environment, April 20, 2021; article downloaded from: https://www.researchgate.net/publication/351008324_Coffee_on_a_Hot_Planet
39. "Climate Change, Carbon Dioxide, and Pest Biology, Managing the Future: Coffee as a Case Study," Agronomy, August 17, 2018. <https://www.mdpi.com/2073-4395/8/8/152/htm>
40. "The Most Unexpected Effect of Climate Change," Inter-American Development Bank, undated, but has 2019 data. <https://www.iadb.org/en/improvinglives/most-unexpected-effect-climate-change>
41. "Brazil Battered by drought," NASA Earth Observatory, last updated June 17, 2021. <https://earthobservatory.nasa.gov/images/148468/brazil-battered-by-drought>
42. "Freak Brazil frost hits heart of coffee belt, damaging crops," Reuters, July 21, 2021. <https://www.reuters.com/world/americas/freak-brazil-frost-hits-heart-coffee-belt-damaging-crops-2021-07-21/>
43. "Impacts of drought and temperature stress on coffee physiology and production: a review," Brazilian Journal of Plant Physiology, 18(1):55-81, 2006. <https://www.scielo.br/j/bjpp/a/bDfpJwLr4xLcznSwy4b9zkf/?format=pdf&lang=en>
44. "Impact of drought associated with high temperatures on *Coffea canephora* plantations: a case study in Espirito Santo State, Brazil," Nature Scientific Reports, November 12, 2020. <https://www.nature.com/articles/s41598-020-76713-y>
45. "You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local," Our World in Data, February 24, 2020, last updated February 23, 2021. <https://ourworldindata.org/food-choice-vs-eating-local>
46. "Climate Change 2021: The Physical Science Basis," IPCC, August 7, 2021. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf
47. "If your coffee's going downhill, blame climate change," Reuters," August 16, 2021. <https://www.reuters.com/world/the-great-reboot/if-your-coffees-going-downhill-blame-climate-change-2021-08-16/>
48. "The global challenge of adapting coffee to a changing climate," Stockholm Environment Institute, December 15, 2021. <https://www.sei.org/featured/global-challenge-adapting-coffee-changing-climate/>
49. "The Fifth Assessment Report of the IPCC," United Nations Climate Change. <https://unfccc.int/topics/science/workstreams/cooperation-with-the-ipcc/the-fifth-assessment-report-of-the-ipcc>

50. "Impact of COVID-19 in food supply chain: Disruptions and recovery strategy," Current Research in Behavioral Sciences, November 2021.
<https://www.sciencedirect.com/science/article/pii/S2666518221000048>
51. "US food supply chain: disruptions and Implications from COVID-19," McKinsey & Company, July 2, 2020. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/us-food-supply-chain-disruptions-and-implications-from-covid-19>
52. "Apples and More: Apple Facts," University of Illinois Extension.
<https://web.extension.illinois.edu/apples/facts.cfm>
53. "eApples: A Case Study in Using eXtension to Increase Access to Research-based Information," HortTechnology, October 2012.
<https://journals.ashs.org/horttech/view/journals/horttech/22/5/article-p576.xml>
54. "Native Potato Varieties," International Potato Center.
<https://cipotato.org/potato/native-potato-varieties/>
55. "FDA Strategy for the Safety of Imported Food," FDA.
<https://www.fda.gov/food/importing-food-products-united-states/fda-strategy-safety-imported-food>
56. "Summary data on annual food imports, values and volume by food category and source country, 1999-2017," USDA Economic Research Service; PDF downloaded from:
<https://www.ers.usda.gov/data-products/us-food-imports/>
57. "Diverse approaches to crop diversification in agricultural research. A review," [Agronomy for Sustainable Development](#), April 20, 2020.
58. "From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems," [IPES-Food](#), 2016.
59. "Food Loss and Waste," FDA. <https://www.fda.gov/food/consumers/food-loss-and-waste>
60. "Food Loss: Estimates of Food Loss at the Retail and Consumer Levels," USDA Economic Research Service <https://www.ers.usda.gov/data-products/food-availability-per-capita-data-system/food-loss/>
61. "The carbon footprint of foods: are differences explained by the impacts of methane?" [Our World in Data](#), March 10, 2020; last updated January 8, 2021.
62. "Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods," [Nature Food](#), September 2021.
63. "Greenhouse gas emissions from food systems: building the evidence base," [Environmental Research Letters](#), June 8, 2021.
64. "Cattle ranchers and deforestation, in the Brazilian Amazon: Production, location, and policies," Global Environmental Change, May 2021.
<https://www.sciencedirect.com/science/article/pii/S0959378021000595>
65. "How Cows Eat Grass," FDA. <https://www.fda.gov/animal-veterinary/animal-health-literacy/how-cows-eat-grass>
66. "Feedgrains Sector at a Glance," USDA Economic Research Service.
<https://www.ers.usda.gov/topics/crops/corn-and-other-feedgrains/feedgrains-sector-at-a-glance/>

67. "USDA Coexistence Fact Sheets: Soybeans," USDA, February 2015. <https://www.usda.gov/sites/default/files/documents/coexistence-soybeans-factsheet.pdf>
68. "Short on hay this winter? Try corn for mature beef cattle," American Agriculturalist, January 6, 2020. <https://www.farmprogress.com/feed/short-hay-winter-try-corn-mature-beef-cattle>
69. "Grazing Factsheets – Livestock Nutrition: Feeding Cows," USDA Natural Resources Conservation Service Illinois. https://www.blogs.nrcs.usda.gov/wps/portal/nrcs/detail/il/technical/landuse/pasture/?cid=nrcs141p2_030618
70. "Here's How America Uses Its Land," Bloomberg, July 31, 2018. <https://www.bloomberg.com/graphics/2018-us-land-use/>
71. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019," EPA. <https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf?VersionId=yu89kg1O2qP754CdR8Qmyn4RRWc5iodZ>
72. "Overview of Greenhouse Gases: Methane," EPA. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane>
73. "More Rice, Less Methane" World Resources Institute, December 16, 2014. <https://www.wri.org/insights/more-rice-less-methane>
74. "Avocado Production: Water Footprint and Socio-economic Implications," EuroChoices, December 13, 2020. <https://onlinelibrary.wiley.com/doi/full/10.1111/1746-692X.12289>
75. "Other products," OECD-FAO Agricultural Outlook 2021-2030, OECD/FAO 2021. <https://www.fao.org/3/cb5332en/Other.pdf>
76. "list of countries in Latin America," Encyclopaedia Britannica. <https://www.britannica.com/topic/list-of-countries-in-Latin-America-2061416>
77. "Climate Change and Land: Summary for Policymakers," IPCC Special Report, January 2020. https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf
78. "NASA Study: Human Influence on Global Droughts Goes Back 100 Years," NASA Global Climate Change, May 3, 2019. <https://climate.nasa.gov/news/2872/nasa-study-human-influence-on-global-droughts-goes-back-100-years/>
79. "Twentieth-century hydroclimate changes consistent with human influence," Nature, May 1, 2019. <https://www.nature.com/articles/s41586-019-1149-8>
80. "Tropical Expansion Driven by Poleward Advancing Midlatitude Meridional Temperature Gradients," JGR Atmospheres, July 29, 2020. <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020JD033158>
81. Webster's New World College Dictionary, Fifth Edition.
82. "What is enteric methane?" FAO. <https://www.fao.org/in-action/enteric-methane/background/what-is-enteric-methane/en/>