PATHWAYS TO MORE SUSTAINABLE, RESILIENT, AND INCLUSIVE U.S. FOOD SYSTEMS

The United States strongly supports the UN Food Systems Summit’s goals of accelerating progress towards ending hunger and malnutrition and building more sustainable, inclusive, and resilient food systems. The Biden-Harris Administration is working to advance these goals internationally and domestically. Domestically, the pathways forward are informed by past experiences and current conditions, the evolving complex goals and demands of U.S. food systems, and by stakeholder input. The Administration is committed to building food systems that support the health of Americans, combat climate change, and address the needs of the most vulnerable by empowering youth, women, and disadvantaged communities.

Informing the Pathways Forward: Historical Trends and Stakeholder Input

A pathway forward is necessarily informed by current conditions, past experiences, and lessons learned. In the United States, the long history of agriculture and food systems is underpinned by steady agricultural productivity growth, as reflected by an increase in the production of staple commodities of over 400 percent between 1929 and 2017 and a simultaneous decrease in cropland area of 9 percent. Since 1980, U.S. farmland has decreased over 20 million hectares while forest increased over 1.4 million hectares.

Over the long run, as U.S. production has increased, food prices have fallen despite growing demand and limited cropland acres. Productivity growth in agriculture has supported economic expansion in other sectors of the economy and GDP growth. As a result of GDP growth, rising income and falling food prices, Americans spend less than other countries on food as a percent of household expenditures. In 2020, U.S. consumers spent an average of 8.6 percent of their disposable personal income on food—divided between food at home (5.0 percent) and food away from home (3.6 percent). This is down from 2019’s 9.6 percent, due to the COVID-19 pandemic and a reduction in expenditures at restaurants and other food away from home establishments.

Nevertheless, in 2020, 10.5 percent (13.8 million) of U.S. households were food insecure at some time, meaning that at times during the year, these households were uncertain of having, or unable to acquire, enough food to meet the needs of all their members because they had insufficient money or other resources for food. This percentage was unchanged from 2019. Food insecurity exists alongside obesity. Nearly two of three adult Americans are either overweight or have obesity. The U.S. obesity prevalence was 42.4% in 2017-2018.

To help chart a pathway forward to strengthen U.S. food systems, the Biden-Harris Administration has prioritized robust and inclusive stakeholder engagement.
As part of the runup to the UN Food Systems Summit, the U.S. Department of Agriculture (USDA) hosted the U.S. National Food Systems Dialogues with the objective of facilitating inclusive dialogue in the United States on sustainable food systems. For these discussions, USDA followed the UN three-stage dialogue framework. Over 200 participants, leaders in U.S. food and agriculture organizations, engaged in forty small breakout discussions led by USDA, U.S. Food and Drug Administration (FDA), the U.S. Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA) programs leaders and researchers.

As observed by USDA Deputy Secretary Bronaugh in her comments at the UN Food Systems Summit Pre-Summit, “The Dialogues were an excellent opportunity for participants to bridge their differences and connect over the common desire to build more sustainable food systems together.”

In Dialogue discussions, participants discussed cross-cutting challenges around nutrition, equitable and inclusive food systems, and climate change and the environment. They also discussed several possible solutions to these challenges, including those focused on innovation and investment in infrastructure such as broadband and other technologies to foster connection and build more inclusive and resilient systems. U.S. National Food Systems Dialogue participants discussed pathways forward for sustainable food systems focusing on:

- Nutrition security, equitable livelihoods, and inclusion ensured by collaboration
- Climate-smart agriculture enabled by innovation, incentives, and markets
- Resilient, efficient, and productive food systems based on fair and competitive markets

USDA also hosted a youth food systems dialogue which engaged youth in food and agriculture to discuss challenges and overarching solutions to strengthen food systems. Participants discussed solutions involving school-based nutrition and agricultural education as well as harnessing technology, research, and innovation to optimize food systems.

In addition to the U.S. National Food Systems Dialogues, in 2021 USDA hosted numerous stakeholder listening sessions to solicit input on racial justice and equity efforts in underserved communities, food supply chains, competition in agriculture, and agriculture and climate change mitigation and adaption to inform the development of USDA’s Climate Smart Agriculture and Forestry Strategy (CSAF).7

The U.S. Vision for Pathways Forward

Building on current strengths, lessons learned, and stakeholder input, the Biden-Harris Administration is setting a pathway forward for sustainable, resilient, and inclusive food systems. This vision seeks to deliver on the three overarching priorities overviewed above: food security and healthy diets for all, climate change mitigation and adaptation, and inclusive and equitable food systems that address the needs of the most vulnerable by empowering youth, women, and disadvantaged communities.

The Biden-Harris Administration vision for transforming America’s food systems includes a focus on ensuring access to safe, healthy, and nutritious food in all communities, more resilient
local and regional food systems, building new markets domestically and internationally, and streams of income for farmers and producers using climate smart food and forestry practices, and making historic investments in infrastructure and clean energy capabilities in rural America.\textsuperscript{8}

The Biden-Harris Administration’s vision includes a strong focus on increased access and affordability of healthy diets for all Americans, with special emphasis on rural, remote, and underserved communities. It aims for food systems that support health with access to healthy, affordable food.\textsuperscript{9} Through the Build Back Better Agenda, which builds on the provisions of the American Rescue Plan, the Biden Administration has proposed advancing nutrition security through robust investments in child nutrition programs. The plan would ensure children who receive free and reduced priced lunch during the school year receive resources to purchase food during the summer months. The plan would also expand the national school meal programs to allow more high-poverty schools to provide meals free of charge to all of their students—breaking down barriers for students who may be eligible for school meals but may not apply for them due to stigma or not fully understanding the application process. The Build Back Better Agenda also proposes significant investments in agricultural research and climate-smart agriculture.

The Biden-Harris Administration is committed to combatting the climate crisis. Executive Order 14008 \textit{Tackling the Climate Crisis at Home and Abroad}, signed by President Biden on January 27th, 2021, lays out a bold direction, including for agriculture. Through investments in science, research, and infrastructure and relying on the innovation and ingenuity of the U.S. food and agriculture community, President Biden is committed to making the American agriculture sector the first in the world to achieve net-zero emissions.

The Administration’s strategy to advance its goals on agriculture and climate change are laid out in USDA's Climate-Smart Agriculture and Forestry Strategy. This strategy positions American agriculture and forestry to lead the world in solutions that will increase climate resilience, sequester carbon, enhance agricultural productivity, and maintain critical environmental benefits. It is the beginning of a process to position USDA to adapt to and mitigate climate change in ways that build strong communities, fair markets, and are inclusive of all Tribes and stakeholders.

The Administration has also set a historic goal of conserving 30 percent of U.S. lands and waters by 2030 through locally led, voluntary conservation efforts by farmers, ranchers, fishers, and others. Conserving nature has biodiversity and climate benefits and enhances resiliency of food systems. Breaking down silos, the Secretaries of Agriculture, Interior, and Commerce as well as the Chair of the White House Council on Environmental Quality, are co-leading the interagency working group charged with making this vision a reality. They note in a 2021 preliminary report to the National Climate Task Force, “The ambition of this goal reflects the urgency of the challenges we face: the need to do more to safeguard the drinking water, clean air, food supplies, and wildlife upon which we all depend; the need to fight climate change with the natural solutions that our forests, agricultural lands, and the ocean provide; and the need to give every child in America the chance to experience the wonders of nature.”\textsuperscript{10}
Recognizing that inefficient food systems that result in high levels of food loss and waste are not sustainable, the United States set a national goal in 2015 to reduce food loss and waste by 50% by 2030. Under the Biden Administration, USDA, the U.S. Environmental Protection Agency (EPA), and the U.S. Food and Drug Administration (FDA) are working more closely than ever to make this goal a reality. The Administration’s vision for reducing food loss and waste targets multiple goals, including improving food security and nutrition, increasing farmer income and rural prosperity, reducing pressure on natural resources, and meeting greenhouse gas emissions reduction targets. The interagency working group has prioritized six areas of collaborative action: 1) enhance agency cooperation, 2) increase consumer education and outreach efforts, 3) improve coordination and guidance on food loss and waste measurement, 4) clarify and communicate information on food safety, food date labels, and food donations, 5) collaborate with private industry to reduce food loss and waste across the supply chain, and 6) encourage food waste reduction by federal agencies in the respective facilities.

The Biden-Harris Administration seeks to strengthen the resilience of America’s supply chains to revitalize and rebuild domestic manufacturing capacity, maintain America's competitive edge in research and development, and create well-paying jobs. Resilient supply chains will also support small businesses, promote prosperity, advance the fight against climate change, and encourage economic growth in communities of color and economically distressed areas. Executive Order 14017 America’s Supply Chains, signed by President Biden on February 24, 2021, highlights the need to build resilient, diverse, and secure supply chains ensure our economic prosperity and national security. In response to the Executive Order, the USDA is engaging in a Department-wide effort to improve and reimagine the supply chains for the production, processing, and distribution of agricultural commodities and food products.

The Biden-Harris Administration is committed to pursuing a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Executive Order 13985 Advancing Racial Equity and Support for Underserved Communities, signed by President Biden on January 20th, 2021, lays out a bold vision for advancing equity and inclusion in food and agriculture. Through the Executive Order, President Biden directed agencies to assess programs and policies to identify and address systemic barriers to opportunities for people of color and other underserved groups.

Making the Vision a Reality

The Biden Administration is making historic investments to strengthen U.S. food systems and support affordable, accessible healthy diets for all.

These investments include $5 billion from the American Rescue Plan and from pandemic assistance funds. Of this, $4 billion are to strengthen food systems from farm to plate, including support for food production, improved processing, investments in distribution and aggregation, and market opportunities. The additional $1 billion will help bridge the gap from pandemic assistance to food systems transformation, supporting more efficient and effective systems and infrastructure to ensure access to healthy diets for all.
These and other investments are reflected in all-of-government efforts to deliver on the three overarching priorities outlined above: food security and healthy diets for all, climate change mitigation and adaptation, and inclusive and equitable food systems that address the needs of the most vulnerable by empowering youth, women, and disadvantaged communities.

**Food Security and Healthy Diets for All**
Address shortcomings in food assistance programs laid bare by COVID-19 and boost longer-term access to safe and healthy diets for all:

- Strengthen food security in response to the COVID-19 pandemic. Expand access to emergency food assistance to allow families with children receiving school meals to purchase healthy food more easily in the summer months and when schools are closed due to the pandemic, extend additional Supplemental Nutrition Assistance Program (SNAP) benefits for food insecure households, expand resources to mothers and young children to purchase healthy, fresh foods, expand nutrition for seniors, and deliver nutrition aid to U.S. territories. Increase perishable, whole, fresh foods available for distribution through food banks and nonprofit organizations to help feed families in need and at the same time support farmers by purchasing their products.\(^{13}\)  
- Modernize SNAP benefits and increase the ability of SNAP recipients to afford healthy foods.\(^{14}\)  
- Invest in technological improvements to expand access to SNAP and purchase groceries online. Support grocery stores in areas with limited access to healthy food.\(^{15}\)  
- Ensure long term recovery from the COVID-19 pandemic and access to healthy and sustainable food through synchronizing federal efforts.\(^{16}\)  
- Prevent obesity through improving support of nutrition standards and access to and availability of nutritious foods in early care and childhood education settings.\(^{17}\)  
- Reduce exposure to toxic elements including lead, arsenic, cadmium and mercury from foods eaten by babies and young children.\(^{18}\)

Invest in nutrition information, education, and data and evidence to strengthen nutrition programs and outreach:

- Set data-driven national objectives to improve health and wellbeing over the next decade, specifically tracking household food insecurity and hunger and child food security.\(^{19}\)  
- Screen underserved communities and vulnerable populations for food insecurity and social determinants of health and refer individuals to resources. U.S. Health Resources and Services (HRSA), the Centers for Disease Control and Prevention (CDC), and the U.S. Department of Veterans Affairs (VA) screen for food and nutrition insecurity, and collaborate to ensure maternal, infant, and child health through referrals to USDA’s WIC and SNAP Programs. The CDC also prioritizes culturally tailored strategies through the program Racial and Ethnic Approaches to Community Health.  
- Prepare the future nutrition workforce, increasing the availability of practitioners with expertise in food and nutrition security.\(^{20}\)  
- Ensure that information on healthy diets reflects the best science and conduct extensive nutrition outreach programs, including the contributions of seafood to a healthy diet and planetary health.\(^{21}\)
Climate Change and Environment

Pursue a whole of government approach to address the climate crisis, including through investments in rural infrastructure and clean energy capabilities in rural America:

- Invest in renewable energy infrastructure and rural economic development to help rural communities, businesses, and agricultural producers build back better. Initiatives include supporting with $464 million increased access to rural broadband, climate-smart solutions to lower energy costs, and rural water and wastewater infrastructure.22
- Meet aviation fuel demand with lower emissions intensity fuels and support U.S. farmers and ranchers to meet the rising demand for sustainable aviation fuels.23

Boost investments in science, evidence, and programs for effective conservation and climate smart practices:

- Support, with investments of $330 million, 85 locally driven, public-private partnerships to address climate change, improve the nation’s water quality, combat drought, enhance soil health, support wildlife habitat and protect agricultural viability.24
- Manage invasive species for ecosystem resilience and a changing climate.25
- Control for the food safety ramifications of natural disasters.26
- Improve data availability and quality to increase durability and resilience within the U.S. food supply.27
- Evaluate analytical and predictive models to accurately mitigate or adapt to environmental or climate change impacts in the food system. The FDA is using the One Health Approach to address issues associated with food and public health, USDA is surveilling emerging zoonotic diseases to mitigate future pandemic risk, NOAA is increasing data collection to model and predict the impact of climate change on fisheries production, and the National Space Agency (NASA) is collaborating with the USDA to share and apply space-based measurements of soil moisture to strengthen predictions of agricultural and climate trends and support research on the carbon cycle.28

Ramp up action to reduce food loss and waste through public-private partnerships, consumer education, recycling, and upcycling:

- Double the number of U.S. Food Loss and Waste 2030 Champions and expand the impact of the program.29
- Move beyond creating awareness of the problem and motivate consumers to change their behavior to prevent food waste by engaging the private sector to identify and test ways to help consumers waste less food more easily. In addition to funding research, EPA will explore partnerships with state and municipal government partners, as well as private sector partners whose involvement will be critical to implementing successful campaigns.30
- Increase anaerobic digestion and recycling capacity, as well as municipal composting and food waste reduction plans. EPA will fund projects that will demonstrate means of accelerating the development of new or enhance/increase existing anaerobic digestion capacity and infrastructure in the United States from food waste. Through its Urban Agriculture Program, USDA is funding projects that develop and test strategies for planning and implementing municipal compost plans and food waste reduction plans.31
- Raise awareness and share best practices. In May 2021, USDA hosted its first ever USDA Food Loss and Waste Innovation Fair. This free, virtual fair highlighted government
programs and businesses that are creating or implementing state-of-the-art technical solutions to reduce food loss and waste throughout the food system – from farm to table. And, in September 2021, USDA hosted a virtual roundtable titled “Exploring Food Waste Solutions: Success Stories from the U.S. and Beyond”, to showcase innovative policies and approaches to reducing food waste in the United States, Europe, and the United Kingdom.

**Equity and Inclusion**

Address equity and inclusion in food systems by supporting historically underserved farmers and ranchers, farm and food workers, business owners, and communities:

- Support socially disadvantaged and veteran farmers, ranchers, and communities through loans and conservation assistance, as well as assistance in resolving land ownership and succession issues which have long been a barrier for producers and landowners including Black farmers and groups who have experienced historic discrimination.

- Support farm and food workers through financial assistance, worker protections, and access to health care. USDA is providing financial relief to farm and food workers impacted by COVID-19. Interagency collaboration (U.S. Department of Labor (DOL), USDA, U.S. Immigration and Customs Enforcement (ICE), Department of Homeland Security (DHS), Occupational Safety and Health administration (OSHA)) is making clear that immigrant workers have the same rights as other workers through refraining from deportation enforcement at workplaces with a significant immigrant workforce and deferred action for people who are witnesses in OSHA cases. The DOL is ensuring that food supply chain workers are protected from hazardous working conditions, wage theft, retaliation for insisting on their rights themselves, and human trafficking. Interagency collaboration (HHS, HRSA, CDC, FDA) is providing COVID-19 vaccination to migratory and seasonal agricultural workers, and HRSA is providing access to comprehensive primary care services at health centers to migrant, seasonal agricultural workers across the U.S.

- Support small food and agriculture businesses through access to capital, contracting opportunities, and encouraging innovation and entrepreneurship. The Small Business Administration (SBA) is increasing access to capital through microloans, 504 and 7(a) loans. The SBA and VA are strengthening federal contracting opportunities from minority-owned, women-owned, or small businesses contracts, including food contracts, through HUBZone and additional programs. The SBA is supporting scientific research that both meets federal research and development objectives and has a high potential for commercialization to encourage innovation amongst small firms.

- Build agricultural capacity at Historically Black Colleges and Universities and Land-grant Universities. The USDA is providing funding to support training the next generation of leaders in agriculture with a focus on historically disadvantaged groups.

Build resilient supply chains and strengthen local and regional food systems:

- Invest in local, regional food production and processing and provide relief to those impacted by COVID-19. USDA is providing relief to small producers, processors, distributors, farmers markets and seafood processing vessels and processors impacted by COVID-19.

- Strengthen farm-to-school programs. USDA is investing in grants to increase students’ access to local foods and agricultural learning.
• Increase access to and availability of healthier food options at the local level, with emphasis on local, culturally appropriate nutrition strategies in Black or African American, Hispanic or Latino, Asian, American Indian, Native Hawaiian and other Pacific Islands and Alaska Native communities.33

• Strengthen small-scale seafood businesses and local aquaculture. NOAA is working to strengthen science and management principles of small-scale seafood businesses in the Caribbean and territories and diversify local economies through aquaculture.

• Strengthen urban agriculture and innovative production projects with $4 million for projects that build food justice, equity and unify communities.”34

Build a fair marketplace for all producers:

• Use new tools and existing law and regulations to create a fair marketplace for all producers. The USDA is committed to enforcing the Packers and Stockyards Act, issuing new rules on “Product of USA” labels, increasing transparency, and increasing market access for small producers to strengthen new market opportunities for U.S. food and agricultural products.35

• Build resilient supply chains through increasing economic opportunities for small and midsized processors and producers. The USDA is working to increase economic opportunities for small and midsized processors and producers by providing pandemic relief for small farms, reducing inspection costs for small and very small poultry and meat processing plants, and increasing processing capacity and efficiency.36

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1 See, for example, the U.S. Factsheet on deliverables to the UN Food Systems Summit.
4 Ibid
7 “Climate-Smart Agriculture and Forestry Strategy: 90-Day Progress Report,” USDA, last modified May 2021. https://www.usda.gov/sites/default/files/documents/climate-smart-ag-forestry-strategy-90-day-progress-report.pdf. Listening sessions were also held for the supply chain EO and a federal register notice received 900+ comments.
USDA is implementing these actions mandated by the American Rescue Plan H.R. 1319.

USDA is implementing these actions through an update to the Thrifty Food Plan. See:

USDA is implementing these initiatives through the Healthy Food Financing Initiative - Reinvestment Fund.

The U.S. Department of Health and Human Services (HHS) is engaging in this effort through the Vital Conditions for Wellbeing framework. The Food and Drug Administration (FDA) also has several initiatives underway to improve nutrition using its tools and authorities to both empower consumers with more informative labeling and facilitate industry innovation towards healthier foods. See: https://www.fda.gov/food/food-labeling-nutrition/fda-nutrition-innovation-strategy

The Centers for Disease Control (CDC) is engaging in these efforts through the ECE and QRIS Programs.

HRSA is undertaking this work through interdisciplinary graduate education and training.

USDA, EPA, and the Department of Energy (DOE) are supporting U.S. farmers and ranchers to meet the rising demand for sustainable aviation fuels through the Sustainable Aviation Challenge. See:

The USDA is increasing enrollment in the Conservation Reserve Program, which supports producers and private landowners in implementing conservation practices on working lands to address climate change and conservation goals. See:

Multiple agencies are establishing a framework for developing a National Food Data Management System Platform to increase resilience. See: https://www.federalregister.gov/documents/2021/03/01/2021-04280/americas-supply-chains


U.S. Food Loss and Waste 2030 Champions are businesses and organizations that have made a public commitment to reduce food loss and waste in their own operations in the United States by 50 percent by the year 2030. Champions include leaders from across the food chain.

EPA is laying the groundwork for a National Food Waste Consumer Campaign. Research would be funded via EPA Science to Achieve Results (STAR) grants and other mechanisms.

EPA anticipates awarding approximately $2,000,000; up to approximately $800,000 of the estimated total will be set-aside specifically for underserved communities and/or tribal projects.

The USDA is providing loans and conservation assistance to farmers who are beginning, limited resource, socially disadvantaged and veteran farmers. The USDA is also helping heirs resolve land ownership and succession issues. See: https://www.usda.gov/media/press-releases/2021/07/26/usda-announces-166-million-funding-opportunities-support-socially

The Centers for Disease Control (CDC) is engaging in these efforts through the State Physical Activity and Nutrition Program and REACH Program.
