FARM POLICY: FOCUS ON SPECIALTY CROPS
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USDA FY22 PRIORITIES INCLUDE...

- Addressing Climate Change via Climate Smart Agriculture & Forestry
- Advancing Racial Justice, Equity and Opportunity
- Creating More and Better Market Opportunities
- Tackling Food and Nutrition Insecurity

Secretary Vilsack, January 7, 2022
BROADER CONTEXT FOR FARM BILL NEGOTIATIONS

- Rising input prices AND rising food prices
- Supply chain sustainability and responsiveness
- Risk management
- Agriculture and climate change
- Global competitiveness and food security
- Market transparency
Typically refer to the farm support programs included in Farm Act’s Title I

Generally (but not always) specialty crops have been excluded. High market prices for Title I commodities may decrease focus in this round of Farm Bill negotiations

Historically perishability called for specialty crop programs not dependent on long-term storage; marketing orders were a tool that allowed for both quantity and quality controls. Number and use of marketing orders has declined over time

Possible policy questions for specialty crops

- What is impact of perishability in determining specialty crop coverage: some specialty crops can be dried or processed for longer-term storage?
- What is sustainability of marketing orders?
- Could voluntary shorter-term loan programs be tailored for perishable crops as an alternative to marketing orders? Could specialty crops be incorporated into historical acreage-based entitlements? Will Fruit/Vegetable and Wild Rice restriction be retained?
- Could “flexible” payment limitations address high-cost/high-value specialty crops: for example, using percentage of average revenues or some other formula?
RISK MANAGEMENT

- Risk Management Agency (RMA) Federal Crop Insurance Program (FCIP) Title XI (Crop Insurance)
  - Coverage for specialty crops has grown, albeit slowly
  - Federal Crop Insurance Reform and Department of Agriculture Reauthorization Act of 1994
- Farm Service Agency (FSA) Noninsured Crop Disaster Assistance Program (NAP)
- Possible policy questions for specialty crops
  - What kinds of insurance policy changes might better serve specialty crops: for example, greater use of index insurance for extreme weather-prone areas or crops like Hurricane Index insurance?
  - How well has NAP buy-up satisfied demand for farm-level insurance-like disaster coverage?
DISASTER ASSISTANCE

A risk management tool often (but not always) more ad hoc

- The Tree Assistance Program (TAP) and The Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) offer standing disaster protection with established eligibility and payment levels: standardized commodity rates simplify payment process
- Supplemental Revenue Assistance Program (SURE): offered standing crop disaster protection for crop production and quality losses due to natural disasters tied to individual farm revenue, which slowed payments
- Wildfires and Hurricane Indemnity Program (WHIP): offer ad hoc disaster response, largely tailored to individual losses, but not whole-farm revenue and linked to crop insurance
- Programs for unexpected market disruption events like the ad hoc market assistance in the early 2000s and more recently the Coronavirus Food Assistance Program (CFAP) and Market Facilitation Program (MFP) have included specialty crops

Possible policy questions for specialty crops

- What is extent of use for ad hoc programs, time to enact, time to implement – would time savings accrue if a standing program were enacted? How would that impact markets and production incentives?
- What disasters have been covered (or not); where has crop insurance been more and less effective in providing for losses experienced by specialty crops (e.g., Hurricane Index insurance vs traditional yield or revenue policies)?
- What would be the characteristics of an effective standing program? Does linking to crop insurance encourage pre-event risk management? Does tailoring to individual losses prevent over- and under-payment?
Research developed as a cornerstone of programs for specialty crops in 2000s Title VII (Research, Extension, and Related Matters) and has grown since

- Specialty Crop Block Grants (SCBG); Specialty Crop Research Initiative (SCRI); NAREEE Board Specialty Crop Advisory Committee (Citrus Disease Subcommittee); Emergency Citrus Disease Research and Extension Program; Urban, Indoor, and Other Emerging Agriculture Production Research, Education, and Extension Initiative

- Specific Studies (e.g. Mechanization and Automation for Specialty Crops, Methyl Bromide Use in Response to an Emergency Event)

- Possible policy questions for specialty crops
  - Funding levels –SCRI and SCBG, Sustainable Ag Systems
  - What are the emerging sectors and innovations (i.e. defining “specialty crops”)? How do these impact research directions?
EXAMPLE: SPECIALTY CROP RESEARCH INITIATIVE

NIFA Competitive Grants Program for Specialty Crops: defined in law as fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops, including floriculture

1. Research in plant breeding, genetics, genomics, and other methods to improve crop characteristics

2. Identify and address threats from pests and diseases, including threats to specialty crop pollinators

3. Improve production efficiency, handling and processing, productivity, and profitability over the long term

4. New innovations and technology, including improved mechanization and technologies that delay or inhibit ripening

5. Methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production efficiency, handling and processing of specialty crops, including fresh produce
EXAMPLE: UNMANNED AIRCRAFT SYSTEMS (UAS) – DRONES

- UAS are increasingly being used for:
  - Precision agriculture, data collection, field and forest monitoring/assessment, wildfire monitoring, tree health, and species surveys/monitoring

- Future applications include:
  - Precision pest control, delivery of beneficial insects, heat stress, supply delivery in fire control areas, and many other applications

- USDA supports research for UAS applications and development internally (ARS), through extramural grants (NIFA – Engineering for Ag Production Systems; Cyber-Physical Systems, National Robotics Initiative interagency programs), and through State grants (AMS – Specialty Crop Block Grant Initiative)

- Domestic manufacturing of sensors, software, and critical components is essential for usage and control of data, and to create a robust UAS supply chain (~70% of small UAS are manufactured by companies in China)
EXAMPLES: RESEARCH IN FOOD AND AG MANUFACTURING

- **Agriculture Research Service (ARS)**
  - Food: Developed new manufactured foods from wasted food; Nature Seal, a food preservation system to reduce food waste.
  - Clothing: Antibacterial, flame retardant, wrinkle-free, and ‘stretchy’ cotton fabrics; Shrink-proofing and permanent wool trousers and pleated skirts; A ‘green’ environmentally safe tanning process.

- **National Institute of Food and Agriculture (NIFA)**
  - Novel Foods and Innovative Manufacturing Technologies: Develop risk-based approaches to ensure the quality, safety and nutrition of novel foods and food ingredients.
    - Seeks to advance food manufacturing competitiveness to ensure a more sustainable, resilient and healthy food supply.
    - Develop innovative manufacturing technologies that increase productivity, improve food quality and/or nutritional value of foods and food ingredients that are more energy, water and resource efficient.
    - Advance sciences and develop technologies to improve shelf life and minimize food waste and loss throughout the food supply chain including consumer empowering tools.
Global competitiveness is critical to U.S. agriculture, and specialty crops face some unique challenges in terms of both imports and exports.

Relevant Farm Bill provisions affecting specialty crop competitiveness include Title III (Trade), Title X (Horticulture), and Title XII (Miscellaneous).

USDA is re-engaging in international trade missions:
- United Arab Emirates: February 2022
- London, United Kingdom: June 20-23
- Manila, Philippines: July 18-21
- Nairobi, Kenya (including buyers from across East Africa): Oct. 31-Nov. 3
- Madrid, Spain (including buyers from Portugal): Nov. 29-Dec. 3

Possible policy questions for specialty crops:
- What are relative competitive factors for U.S. specialty crops?
- Did the COVID-19 experience identify supply chain weaknesses of particular concern for perishable crops?
COMPETITIVENESS: BUILDING DOMESTIC SOURCES

Broader USDA initiative to stabilize markets for American producers (March 11, 2022)

- $250 million through a new grant program this summer to support independent, innovative and sustainable American fertilizer production to supply American farmers. Supporting resiliency as well as efficiency. (Details on grant programing coming summer 2022)

- Solicit information through public inquiry regarding seeds and agricultural inputs, fertilizer, and retail markets including the way seed patents are currently being used. The comment period will be open for 60 days once the requests for information are published in the Federal Register. USDA will seek information specifically on:
  - Fertilizer
  - Seed and agricultural inputs, in particular as they relate to the intellectual property system
  - Retail, including access to retail through wholesale and distribution markets

Controlled Environment Agriculture, Urban Agriculture, Vertical Farming

- Office of Urban Agriculture and Innovative Production was established by the 2018 Farm Bill

- Secretary’s Advisory Committee for Urban Agriculture to provide input on policy development and to help identify barriers to urban agriculture (inaugural meeting Mar 23-24, 2022)
U.S. dietary guidelines call for substantial increases in fruit and vegetable consumption for all Americans Title IV (Nutrition)

USDA has historically moved selected commodities from markets to nutrition programs through a variety of mechanisms (e.g. Produce Prescription Program)

COVID highlighted both need and supply chain challenges for food distribution programs. Announced Sept 2021, up to $1.5 billion to provide assistance to help schools respond to supply chain disruptions

Global Food Security Strategy – released Sept 2021 (analyzing pest & disease risk, promote efficient & stable markets)

Action on Nutrition Security – released March 17, 2022 (nutrition security builds on food security, emphasizing the co-existence of food insecurity and diet-related diseases and disparities)

- Providing nutrition support throughout all stages of life
- Connecting all Americans with healthy, safe, affordable food
  - Promoting and supporting fruit and vegetable consumption
  - Using incentive programs to promote access to healthy eating
  - Providing USDA Foods directly to people in need
- Developing, translating, and enacting nutrition science through partnership
- Prioritizing equity
NUTRITION AND FOOD SECURITY

Possible policy questions

- How effective were adaptations implemented during COVID-crisis to meet emergency needs, differences in distribution? Did the emergency highlight any strengths and weaknesses in already existing processes/programs?
- What are trends and impacts in U.S. food purchase programs – on consumer diets and health, on specialty crop markets?
- What are impacts of rising food prices on access to nutritional foods?
- What are the links between federal nutrition programs and dietary guidelines?

USDA Food Purchases, Source: USDA AMS
CLIMATE SMART AGRICULTURE

- sustainably increasing agricultural productivity and incomes
- adapting and building resilience
- reducing and/or removing greenhouse gas emissions

USDA’s Cross-Cutting Adaptation Actions:

- 1. Invest in soil and forest health to build resilience to climate change across landscapes
- 2. Increase climate outreach and education to promote climate-smart adaptation strategies
- 3. Broaden access and availability of climate data at regional and local scales
- 4. Increase support for research and development of climate-smart practices and technologies to inform planning, decision-making
- 5. Leverage the USDA Regional Climate Hubs to deliver adaptation science, technology, and tools
Partnerships for Climate-Smart Commodities opportunity to finance pilot projects that create market opportunities for U.S. agricultural and forestry products that use climate-smart practices and include innovative, cost-effective ways to measure and verify greenhouse gas benefits. The goal here is to create additional revenue opportunities that complement the traditional revenue opportunities,” he said, something that could create “two or three additional revenue streams.

Agriculture Innovation Mission for Climate (AIM for Climate) - global effort to accelerate investment in innovative, science-based solutions to increase food security and help agriculture and food systems mitigate and adapt to climate change. 80 countries and non-government partners. The United States intends to mobilize $1 billion in investment in climate-smart agriculture and food systems innovation over five years (2021-2025).

USDA’s Climate Smart Agriculture and Forestry Partnership Initiative connect agricultural producers who are implementing climate-smart practices with retailers, companies and consumers who are demanding low-carbon agricultural commodities.

Climate Hubs and their partners develop locally-specific tools and resources to help build climate change adaptation capacity across the country (10 regional hubs) e.g. Southeast Hub – saltwater intrusion, hurricane resilience.
Energy

- Department of Energy - Solar Energy Technologies Office
- AgroVoltaics - develop technologies, evaluate practices, and conduct research and analysis that enable farmers, ranchers, and other agricultural enterprises to gain value from solar technologies while keeping land available for agricultural purposes
- The AgriSolar Clearinghouse is an information-sharing, relationship-building, public communications hub for all things agrisolar
Executive Order 13917

- Delegating Authority Under the Defense Production Act With Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID-19
- Ensure a continued supply of protein for Americans.
- Ensure that meat and poultry processors continue operations consistent with the guidance for their operations jointly issued by the CDC and OSHA.
- Identify additional specific food supply chain resources
- Determine the proper nationwide priorities and allocation of all the materials, services, and facilities necessary to ensure the continued supply of meat and poultry,

Executive Order 14017

- Recently solicited public comments
- Particularly interested in comments addressing local and regional food systems, creating new market opportunities (including for value-added agriculture and value-added products), facilitating fair and competitive markets (including traceability and supply chain transparency), advancing efforts to transform the food system, meeting the needs of the agricultural workforce, supporting and promoting consumer nutrition security, particularly for low-income populations, and supporting the needs of socially disadvantaged and small to mid-sized producers and processors.
Executive Order 14017: America’s Supply Chains directed the USDA to conduct a 1-year assessment of risks and resilience of U.S. agri-food supply chains and identify potential solutions to address vulnerabilities.

- **Priority 1:** Concentration and Consolidation in Agri-Food Production, Manufacturing, and Distribution
- **Priority 2:** Labor Needs
- **Priority 3:** Ecological and Climate Risks to Crops
- **Priority 4:** Livestock and Poultry Disease Threats
- **Priority 5:** Transportation Bottlenecks
- **Priority 6:** Trade Disruptions
INNOVATION

Advanced Manufacturing
  • Develop and Transition New Manufacturing Technologies
  • Educate, Train, and Connect the Manufacturing Workforce
  • Expand the Capabilities of the Domestic Manufacturing Supply Chain

USDA Science and Research Strategy
  Sustainable Agricultural Intensification
  Climate
  Food and Nutrition Translation
  Innovation
  Agricultural Science Policy Leadership
The Agricultural Improvement Act of 2018 established an Agriculture Advanced Research and Development Agency pilot program (AgARDA). The program was authorized but no funding was appropriated.

Transdisciplinary & Convergent Research

- Funding mechanism supporting co-production of scientific knowledge between multiple disciplines including life sciences, engineering, social sciences and partnerships with internal and external stakeholders
- Forward-looking focused on "big ideas" and innovations for the future
- Address critical research and development needs for technology for specialty crops
- Prevent, protect, and prepare against intentional and unintentional threats to agriculture and food

New Opportunities

- Existing programs have little resources to address new needs and new opportunities and are often focused on short-term needs and incremental changes.
- Focus on Research & Development (R&D) that Industry is unlikely to undertake due to risk and profit uncertainty. Foundational or pre-competitive needs.
- Seek transformative opportunities for the future based on assessment of real-time needs for innovation and opportunities in high risk/high reward science.
THANK YOU