

Specialty Crops Program: Economic Support Services for Marketing Orders

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Specialty Crops Program/AMS

Economic Support Services

- Data compilation and analysis
- Rulemaking – preparation of Regulatory Flexibility Analyses
- Economic Assessments – market conditions for setting priorities for feeding program purchases
- Situation and Outlook reports for commodities

Commodity responsibilities of the four PED economists

- **Essence Hales** – Blueberries, Green Beans, Green Peas, Pears, Potatoes
- **Don Hinman** -- Concord Grape Juice, Dried Beans, Spearmint Oil, Tart Cherries and Tree Nuts
- **Katy Looft** – Apples, Corn, Peaches, Pecans, Strawberries, Sweet Potatoes and Tomatoes
- **Marc McFetridge** – Carrots, Citrus, Cranberries, Dates, Prunes and Raisins

Economic Support Services

- Specialty crop marketing orders
- Research and Promotion programs for specialty crops
- Commodity Procurement
- Specialty Crop Inspection
- Other agencies in USDA and in other departments
 - PED helped FDA identify number of farms and acres of FSMA “covered produce” in each state
 - Purpose - to help states prioritize FSMA outreach and training
 - Data source – Agricultural Census

Economic Support Services

- Marketing order promulgations – PED works to ensure strong economic content in hearing record
 - California Pistachios promulgated in 2004
 - Order later amended to add AZ and NM
 - Pecans in 15 states – 2016

What commodities are covered?

- Fruits, vegetables, tree nuts
- Other specialty crop
 - Spearmint oil (Far West)
- Summary of marketing orders, first table in Appendix
 - Overview of marketing orders for new managers
 - Presented as example of PED data compilation to support MOAD's work
- Similar version of table is used in:
 - MOAD annual reports
 - USDA/NASS *Agricultural Statistics*

Who do we work with?

- 28 specialty crop marketing order programs
- More than 30,000 growers
- **Big Numbers**
 - 8,000 citrus growers in FL
 - 6,400 almond growers in CA
 - 8,290 growers of other tree nuts
- Small Numbers
 - 41 desert grape growers in Southern CA
 - 21 onion growers in Walla Walla Valley, WA and OR

Who do we work with?

- 28 marketing order programs
- About 1,200 handlers
- **Big Numbers**
 - 250 pecan handlers across 15 states
 - 105 almond handlers in CA
- Small Numbers
 - 8 spearmint handlers in Far West
 - 2 olive handlers in California

What crops are covered?

- 25 crops in 28 marketing orders
- Citrus – FL (4) and TX (2)
 - Oranges, grapefruit in both states; FL includes tangerines, tangelos
- Dried fruits – CA (3 marketing orders)
 - Raisins, prunes, dates
- Other fruit (9 marketing orders)
 - Sweet cherries, tart cherries, pears, cranberries, olives, desert grapes, kiwifruit, avocados, apricots
- Tree nuts (5)
 - Almonds, Walnuts (CA)
 - Pistachios (CA, AZ, NM)
 - Hazelnuts (OR, WA)
 - Pecans (15 states)

What crops are covered?

- Vegetables(3)
 - Tomatoes (FL)
 - Onions – 4 orders (ID/OR, WA, TX, GA)
 - Potatoes (4 active orders; 1 suspended)
 - WA
 - ID /OR
 - CO – two marketing orders

What crops are covered?

- Additional specialty crop – spearmint oil
 - WA, ID, OR, parts of UT, NV

What is area covered under a marketing order?

- Area covered is usually a major producing district or region. Examples:
- Part of a state
 - Sweet cherries, parts of Washington; Onions in South Texas; Avocados in South Florida
 - All of a state – CA almonds, FL tomatoes
 - Multi-state area-
 - Tart cherries, 7 states; Cranberries, 10 states; Pecans, 15 states

PED Economic analysis

- Track market conditions
 - Crops covered by marketing orders
 - Foods purchased for school lunch, other feeding programs
- Marketing order changes-rulemaking
 - Example: Change in quality standard (minimum grade, size)
 - Benefit -- more efficient market from updating standards to reflect current conditions
 - Possible increased cost of inspection, grading

Economic analysis

- Marketing order changes; benefit vs cost
 - Quality standards for food safety
 - Benefit is reduced probability of food scare
 - Pistachios
 - Cost to collect sample, lab test for **afatoxin**
 - Almonds
 - Cost for steam treatment for **salmonella**
- Compute cost per pound for treatment/
testing

Pistachio rule making example

- Representative total cost to comply with marketing order requirement that lots shipped domestically be tested for aflatoxin level
 - 15 ppb standard
- Show cost per lot (50,000 pounds), cost per pound for aflatoxin testing

Pistachio rule making example

- Compare to price per pound received by growers, handlers
 - Can provide evidence of low burden on stakeholders

Arizona Pistachios: Cost Scenario for Sampling and Aflatoxin Testing for Representative Handler

		Dollars per LOT (50,000 pounds)
1	Inspector Travel Time to Plant	\$33
2	Inspector Sampling Time	\$70
3	Value of Pistachio Sample	\$61
4	Shipping Cost to Laboratory	\$200
5	Aflatoxin Testing Cost	\$90
	Total Cost	\$453

Arizona Pistachios: Cost Scenario for Sampling and Aflatoxin Testing for Representative Handler

		Dollars per LOT (50,000 pounds)	Description of Cost Elements
1	Inspector Travel Time to Plant	\$33	Sampler time \$35/hour; 40 cents per mile travel
2	Inspector Sampling Time	\$70	Sampler time \$35/hour; 2 hours-draw 100 samples
3	Value of Pistachio Sample	\$61	22 pounds @\$2.75 per lb.
4	Shipping Cost to Laboratory	\$200	Shipping cost of 22 lbs.
5	Aflatoxin Testing Cost	\$90	\$90 lab fee per lot
	Total Cost	\$453	

Arizona Pistachios: Cost Scenario for Sampling and Aflatoxin Testing for Representative Handler

		Dollars per POUND (50,000 pounds)	Description of Cost Elements
1	Inspector Travel Time to Plant	\$0.0007	Sampler time \$35/hour; 40 cents per mile travel
2	Inspector Sampling Time	\$0.0014	Sampler time \$35/hour; 2 hours-draw 100 samples
3	Value of Pistachio Sample	\$0.0012	22 pounds @\$2.75 per lb.
4	Shipping Cost to Laboratory	\$0.0040	Shipping cost of 22 lbs.
5	Aflatoxin Testing Cost	\$0.0018	\$90 lab fee per lot
	Total Cost	\$0.0091	

Pistachio rule making example

Arizona Pistachios: Cost Scenario for Sampling and Aflatoxin Testing for Representative Handler			
	Total Cost per pound	\$0.0091	
	Cost as percent of price:		
	Received by handler	0.3%	\$2.75 per pound, AZ industry estimate
	Received by grower	0.7%	\$1.35 NASS 2007 price, CA (AZ price not available)

- Complete tables in the Appendix
 - Table 2 for Arizona, Table 1 for California
 - California costs were less than half of Arizona's; onsite labs and inspectors already in plants (no travel cost)

Almond rule example

- Cost of steam treatment for prevention of salmonella contamination
- Appendix has one page of March 2007 Federal Register
 - Table 4 (p. 15027); part of Regulatory Flexibility Analysis (RFA)
- Range of handler annual treatment capacities
- Range of equipment costs, annual use costs; Combine with operating costs

Almond rule example

- Total costs in cents per pound for almonds treated range from 2.3 cents to 7.3 cents
- 1 to 3 percent of grower price; smaller percentage of prices received by handlers

Almond rule example

- Hazelnut marketing order involved in formal rule-making to add authority to mandate treatment methods for toxins
 - Almond order already had such authority

Tart Cherry Volume Control – Informal Rulemaking Example

- Cherry Industry Administrative Board (CIAB) voted on volume control on Sept. 14, 2017
- CIAB and USDA collaboration-Coordinate differing formats to present restricted percentage
- Worksheets shown on two following slides (same spreadsheet)
 - CIAB staff computation presented to CIAB Board
 - MOAD computation for publishing rule in Fed. Reg.
 - PED version with greater detail (not shown here)

CIAB REGULATION CALCULATION			
CROP YEAR 2017			
(UNITS = MILLION POUNDS RPE)			
	<u>Crop</u>		<u>Not-</u>
PRODUCTION	<u>Size</u>	<u>Regulated</u>	<u>Regulated</u>
NORTHWEST MICHIGAN	128.0	128.0	0
WEST CENTRAL MICHIGAN	35.1	35.1	0
SOUTHWEST MICHIGAN	33.6	33.6	0
UTAH	25.0	25.0	0
WASHINGTON	24.5	24.5	0
WISCONSIN	9.2	9.2	0
NEW YORK	7.4	7.4	0
PENNSYLVANIA	6.5	0	6.5
OREGON	1.1	0	1.1
Orchard Diversion		-11.7	
TOTAL ---	270.4	251.1	7.6
AVAILABLE SUPPLY			
U. S. CROP	270.4		
CARRY IN @ 7/1	110.5		
TOTAL SUPPLY AVAILABLE	380.9		
OPTIMUM SUPPLY FORMULA			
3 YR. SALES AVERAGE	205.0		
TARGETED CARRYOUT	45.0		
OPTIMUM SUPPLY	250.0		
REGULATION % DETERMINATION			
SURPLUS	130.9		
MARKET GROWTH FACTOR	(20.5)		
ECONOMIC ADJUSTMENT	(33.0)		
Regulated Quantity/ PCT	78	31%	

CIAB REGULATION CALCULATION (2017-2018)		Millions of pounds
(1)	Average sales of the prior three years	205.0
(2)	Plus desirable carry-out	45.0
(3)	Optimum supply calculated by the Board	250.0
(4)	Carry-in as of July 1, 2017	110.5
(5)	Adjusted optimum supply (item 3 minus item 4)	139.5
(6)	Board reported production	270.4
(7)	Surplus (item 6 minus item 5)	130.9
(8)	Total economic adjustments	33.0
(9)	Market growth factor	20.5
(10)	Adjusted Surplus (item 7 minus items 8 and 9)	78.0
(11)	Supply in regulated districts	262.8
(12)	In-Orchard Diversion (final)	11.7
(13)	Production minus in-orchard diversion	251.1
Final Percentages:		Percent
	Restricted (item 10 divided by item 13 × 100)	31
	Free (100 minus restricted percentage)	69

Pecan marketing order

Cost- benefit example

- PED worked with proponent group economist
- Numerous phone calls and emails
- Emphasized importance of developing “representative farms” to communicate impact of promotion
- Cost is FMO assessment
- Benefit is estimated grower price increase from promotion

Costs and Benefits of Pecan Marketing Order Promotion on Three Sizes of Representative Pecan Farms			
	Small Farm	Medium Farm	Large Farm
Representative Farms: Acres and Production			
Acres per farm	30	175	500
Production per Farm (Yield of 1666.67 lbs. per acre)	50,000	291,667	833,335
Improved production (78% of farm acres)	39,000	227,500	650,001
Native production (22% of farm acres)	11,000	64,167	183,334
COST per farm: FMO assessment			
Improved (2.5 cents per lb.)	\$975	\$5,688	\$16,250
Native (1.5 cents per pound)	\$165	\$963	\$2,750
Total cost per farm	\$1,140	\$6,650	\$19,000
BENEFIT per farm: Price increase per pound from promotion			
Improved (6.3 cents per lb.)	\$2,457	\$14,333	\$40,950
Native (3.6 cents per lb.)	\$396	\$2,310	\$6,600
Total benefit per farm	\$2,853	\$16,643	\$47,550

Analyzing price trends

- Example using Market News fresh pear prices to assess market conditions

AMS Market News Portal –download prices

The screenshot displays the AMS Market News Portal website. At the top, the USDA logo and "United States Department of Agriculture Agricultural Marketing Service" are visible. The page features a navigation menu with links for "AMS Home", "Newsroom", "Opportunity", "Online Forms", "About Us", "Contact Us", and "Help". A search bar is located in the top right corner. The main content area is titled "Specialty Crops" and is divided into three columns: "BY COMMODITY", "BY REPORT TYPE", and "CUSTOM REPORT".

BY COMMODITY

- Fruit
- Onions & Potatoes
- Vegetables
- Herbs
- Nuts
- Ornamentals
- Honey

BY REPORT TYPE

- Terminal Market
- International Market
- Shipping Point
- Movement
- Retail
- Daily Movement
- Truck Rate

CUSTOM REPORT

- Terminal Market (including Organic)
- Shipping Point (including Organic)
- Movement (including Organic)
- Retail (including Organic)
- Organic Report
- Custom Average Pricing

Popular Reports

- Shipping Point High/Low Highlights
- Daily Movement Report
- National Shipping Point Trends
- National Retail Report - Specialty Crops
- National Specialty Crops Organic Summary
- National F.O.B Review
- Mexico Crossings Report
- National Honey Report
- Tomato FAX Report
- Specialty Crop Truck Rate Report
- Western Fruit Report Table Grape Supplement
- Western Fruit Grape Cold Storage Summary

Standard Reports

- Terminal Markets
- International Markets
- Shipping Point
- Movement
- Miscellaneous Specialty
- Local Farmers Markets and Auctions

ANNOUNCEMENTS

For a brief video titled "USDA Market News, 100 Years: the Trusted Source - Then, Now & Always" please click [here](#).

Tools

- Email Standard Reports
- Market News Digital Dataset Downloads

Resources

- Animal and Plant Health Inspection Service (APHIS)
- FV Industry Advisory Committee
- Grades and Standards
- Grading and Inspections
- Marketing Orders
- National Agricultural Library

Download daily fresh pear prices covering many years

--Shipping point

The screenshot shows the USDA Fruit and Vegetable Market News Portal. The report is for Bittermelon in Miami, Florida, covering the period from January 1, 2012, to December 31, 2012. The report type is Terminal Market. The data is aggregated daily. The table below shows the price range (Low-High) and the origin (Dominican Republic) for each day in 2012. The price is consistently 42.00 - 42.00.

Location: MIAMI
Commodity: BITTERMELON Report Type: Terminal Market
Aggregate by: Daily Date(s): 01-Jan-2012 to 31-Dec-2012
Download as: Excel Text XML PDF (adobe reader required) Printable View (adobe reader required)
Edit Query Hide Empty Columns:

Location: MIAMI

BITTERMELON	Package: 30 lb cartons																			
Date	Low-High Price	Mostly Low-High Price	Origin	Origin District	Item Size	Environment	Color	Unit of Sale	Quality	Condition	Storage	Appearance	Crop	Trans Mode	Repacked	Comment				
01/03/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/04/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/05/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/06/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/09/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/10/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/11/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/12/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/13/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/17/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/18/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/19/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/20/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/23/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/24/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/28/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/26/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/27/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				
01/30/2012	42.00 - 42.00	-	DOMINICAN REPUBLIC													See Towner				

**Take daily price data and use “pivot table” techniques to organize into WEEKLY data. Select variety, district, size, grade to analyze trends.
 --This example focuses on Bartlett pears, CA-Mendocino, US One grade, 36 lb. carton, two sizes**

Fresh Bartlett Pear f.o.b. Prices* per Carton, U.S. One Grade, Through Week Ending 10/29/2011
 80s and 110s, Weekly Average of Daily High-Low Price Range Midpoints
 California - Mendocino - Lake County (36-lb. Carton)
 Washington -Yakima Valley - Wenatchee District (4/5 bu. Carton)

	9/10/2011	9/17/2011	9/24/2011	10/1/2011	10/8/2011	10/15/2011	10/22/2011	10/29/2011
CA-Mendocino								
Bartlett 80s	--	\$18.25	\$18.00	\$18.00	\$16.60	\$16.00	\$16.00	\$16.00
Bartlett 110s	--	\$12.75	\$12.25	\$12.00	\$11.60	\$11.00	\$11.00	\$11.00
WA-Yakima								
Bartlett 80s	--	\$26.00	\$23.80	\$23.00	\$23.00	\$23.00	\$23.00	\$23.00
Bartlett 110s	--	\$19.00	\$18.25	\$17.10	\$17.00	\$17.00	\$17.00	\$17.00
WA-Yakima								
Anjou 80s						\$24.00	\$24.00	\$24.00
Anjou 110s						\$20.00	\$19.20	\$19.00

*Prices are representative averages for indicative size and pack types, based on AMS Market News f.o.b. prices. Each price presented is a weekly average of the midpoints of the daily high and low prices (or “mostly prices”, if available).

Prices for small pears (110) show significant declines compared to average of earlier year.

Evidence that large crop is having big impact on shipping point prices. Expect similar impact on grower prices.

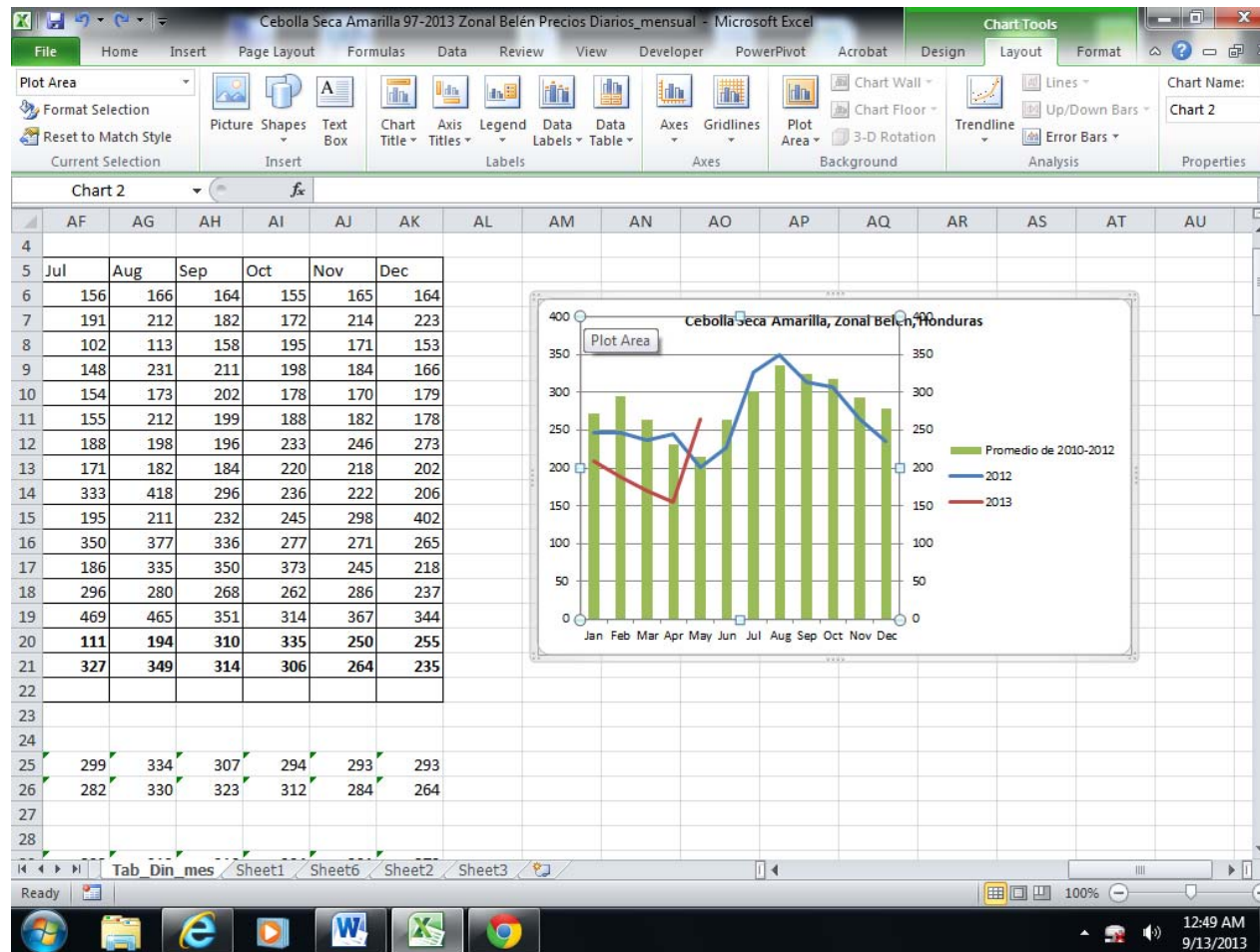
Fresh Bartlett Pear f.o.b. Prices per Carton, U.S. One Grade, Through Week Ending 10/29/2011								
80s and 110s, <u>Percent Change from Comparable Week in 2010/11</u>								
California - Mendocino - Lake County (36-lb. Carton)								
Washington -Yakima Valley - Wenatchee District (4/5 bu. Carton)								
	9/10/2011	9/17/2011	9/24/2011	10/1/2011	10/8/2011	10/15/2011	10/22/2011	10/29/2011
CALIF. Mendoc.								
Bartlett 80s	--	+7%	+6%	+9%	+4%	0%	0%	0%
Bartlett 110s	--	-2%	-6%	-4%	-7%	-12%	-12%	-12%

PED also prepares graphs to illustrate market conditions.

--Example with monthly prices – Yellow Onion wholesale prices in Honduras

--Red line shows two months of lower prices compared to same period in prior year (blue line)

--Prices in current year lower than average of prior years (green bar graph)



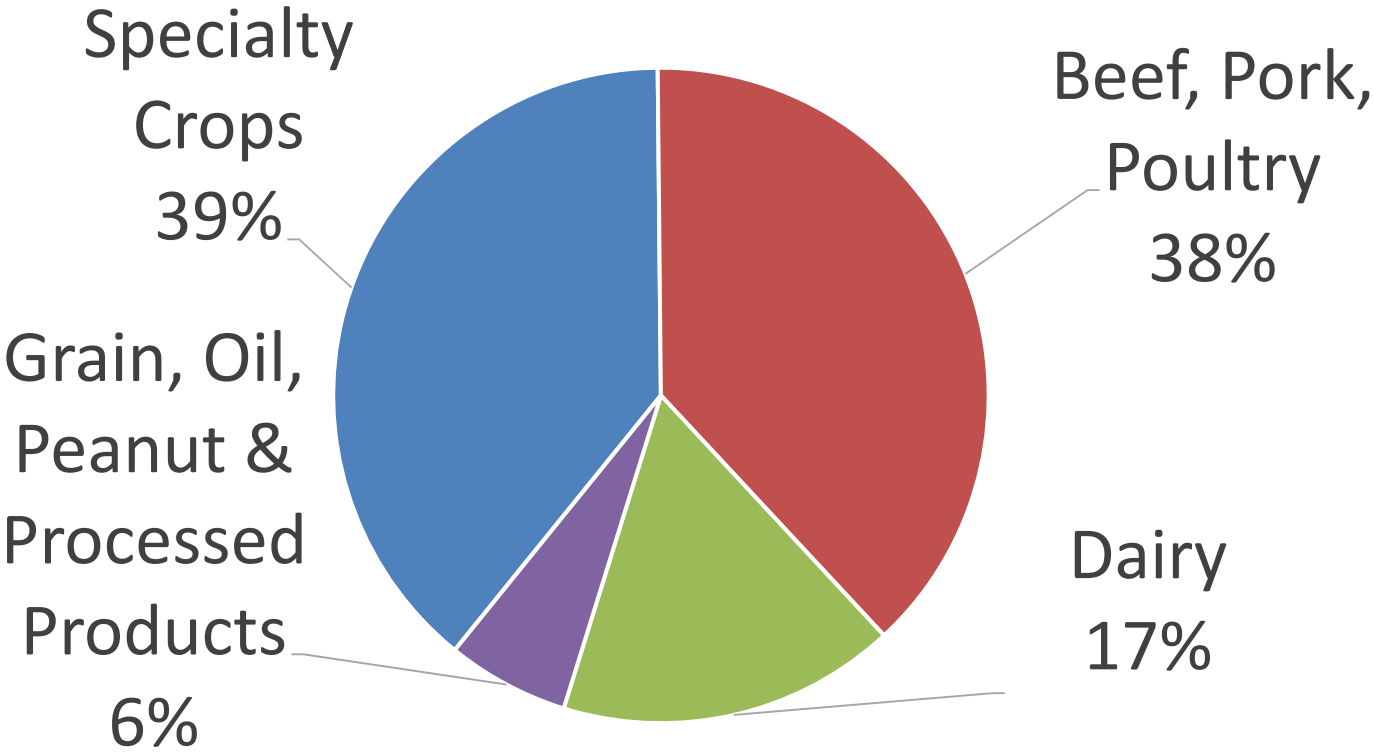
PED Support for Commodity Purchases

- Identify crops with heavy supplies and with supply shortages
 - Production, inventory levels, imports, etc.
 - Role of weather events
 - Describe actions by industries to increase demand, reduce long-term oversupply
- Analyses help to establish purchasing priorities
- PED maintains contacts with industries, helps to keep Commodity Procurement informed

USDA Food Purchases

- For Fiscal Years 2015 and 2016 USDA purchased an average of 2.4 billion pounds of food.
- Cost per year over \$2 billion dollars
- USDA reorganization – additional consolidation of purchasing programs

Percentage of USDA Dollars Spent on Food Purchases for Fiscal Year 2016



PED Support Services

- Previous slides show examples of analyses developed to support crop industries
 - Marketing order rules and promulgations
 - Commodity procurement
- We want to collaborate with you
 - Let us know what data collection and analytical work would be beneficial

PED Contact Information

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