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# 2014 U.S. Dry Bean Outlook

**Steven Zahniser and Hodan Farah Wells**  
**USDA Economic Research Service**

Presentation delivered at U.S. Dry Bean Convention  
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The views expressed are those of the author(s) and should not be attributed to the Economic Research Service or USDA.

## Purpose

- To provide a snapshot of the 2013 U.S. dry bean crop
- To place the 2013 crop in the context of long-term trends in the dry bean sector

### Main data sources:

- USDA/ERS, *Vegetables and Pulses Outlook*
- USDA/AMS, *Bean Market News*
- USDA/NASS, *Crop Production*, July 2014
- USDA/FAS, *Global Agricultural Trade System*



# 2013 U.S. Dry Bean Crop



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## 2013 U.S. Dry Bean Crop at a Glance

Production	24 million cwt
Area planted	1.3 million acres
Area harvested	1.7 million acres
Yield	1867 lbs./acre

Much smaller crop than in 2012:

Area planted, down 29 percent

Area harvested, down 28 percent

Yields, 1 percent smaller

Total production, down 23 percent



## U.S. Dry Bean Production, 2013 vs. 2012

Variety	2012	2013	Change	Historical Comparisons 5-Year average (2008-12)	
	1,000 cwt		Percent	1,000 cwt	Percent
Total	31,925	24,486	-23.3	26,920	-9.0
Pinto	13,534	8,486	-37.3	10,879	-22.0
Navy (pea bean)	4,906	3,402	-30.7	4,159	-18.2
Black	3,739	2,545	-31.9	3,470	-26.7
Red Kidney, total	1,707	1,680	-1.6	1,754	-4.2
Garbanzo, total	3,332	3,469	4.1	2,007	72.8
Great Northern	1,222	1,515	24.0	1,284	18.0
Other	3,485	3,389	-2.8	3,368	0.6

Source: Prepared by USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (production).



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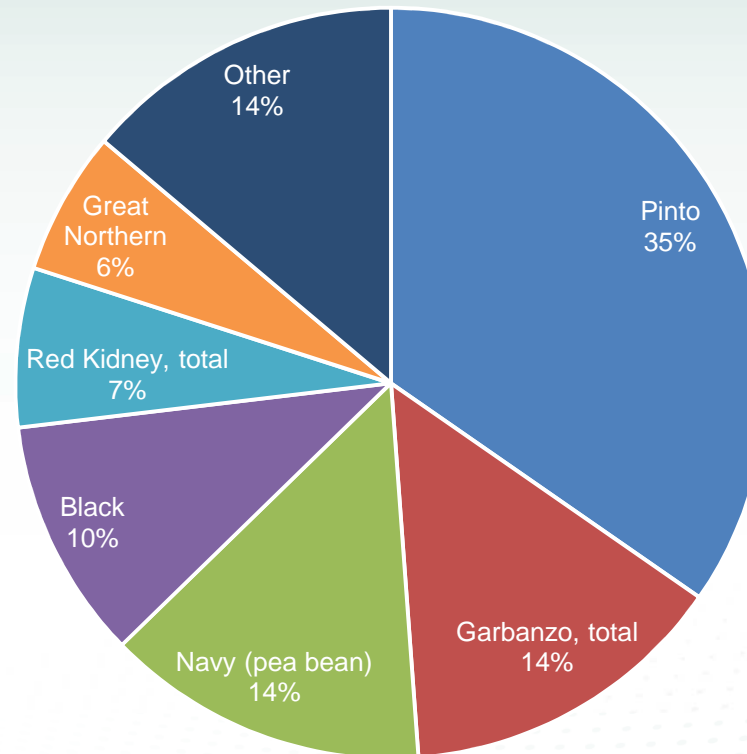
# Composition of 2013 Dry Bean Crop by Variety

## Varieties by share of total, 2013:

- Pinto, 35%
- Garbanzo, 14%
- Navy (pea bean), 14%
- Black, 10%
- Red Kidney, 7%

## Varieties by share of total, 2010-12:

- Pinto, 40%
- Navy (pea bean), 15%
- Black, 14%
- Garbanzo, 9%
- Red Kidney, 6%



Source: Prepared by USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (production).



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## U.S. Dry Bean Acres Planted, 2013 vs. 2012

Variety	2009	2010	2011	2012	2013	Change
	1,000 cwt					Percent
Total, dry beans	1,540	1,911	1,218	1,743	1,355	-22.3
Pinto	690	843	387	730	485	-33.5
Garbanzo, total	96	146	136	208	216	3.8
Navy (pea bean)	195	280	204	263	174	-33.7
Black	187	284	184	217	143	-34.0
Great Northern	54	79	62	56	76	35.8
Red Kidney, total	107	102	86	86	90	4.1
Other	211	179	159	183	171	-6.6

Source: Prepared by USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (acres planted).



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## Several major changes in area planted took place between 2012 and 2013 at the state level

State	Variety					
	Total	Black	Red kidney	Garbanzo	Pinto	Other
CALIFORNIA	-8.5	-0.3	0.7	0.2	0	-0.6
COLORADO	-11	0	-0.6	0	-12	-11.4
IDAHO	-20	-1.2	-2	2	-11.5	-10.6
KANSAS	-3	0	0	0	-3.1	-3.1
MICHIGAN	-25	-11.5	0.7	0	0.3	-0.9
MINNESOTA	-35	-10.5	4.5	0	-10.1	-12.2
MONTANA	-8	0	0	-5	-3.2	-3.2
NEBRASKA	-15	2	0.2	1	-28.7	-28.9
NORTH DAKOTA	-260	-49.5	-0.1	-2.1	-153	-153
OREGON	-2.2	-0.6	0.5	-0.9	-0.8	-0.8
SOUTH DAKOTA	-1	0	0	1.1	0	0
US TOTAL	-387.8	-73.7	3.5	7.8	-244.6	-247.6

Source: Prepared by USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (acres planted).



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## Grower Prices Reflect Changes in U.S. Production for Pinto, Navy, and Black

Variety (Location)	Average of monthly grower prices, Sept. - July		2012/13 vs. 2013/14 change in:	
	2012/13	2013/14	Grower price	U.S. output
	\$/cwt		Percent	
Pinto (ND/MN)	33.3	33.3	0.02	-37.30
Navy (peas beans) (MI)	35.0	41.7	19.25	-30.66
Black (MI)	36.9	42.2	14.23	-31.93
Light red kidney (NE/CO)	50.0	52.9	5.87	5.36
Dark red kidney (MN/WI)	52.4	56.9	8.68	-7.73
Garbanzo (WA/ID)	39.9	30.1	-24.67	4.11
Great Northern (NE/WY)	41.7	49.4	18.41	23.98

Source: Prepared by USDA, Economic Research Service using data from USDA, Agriculture Marketing Service (prices) and USDA, National Agricultural Statistics Service (production).



# U.S. dry beans, all: Monthly grower prices

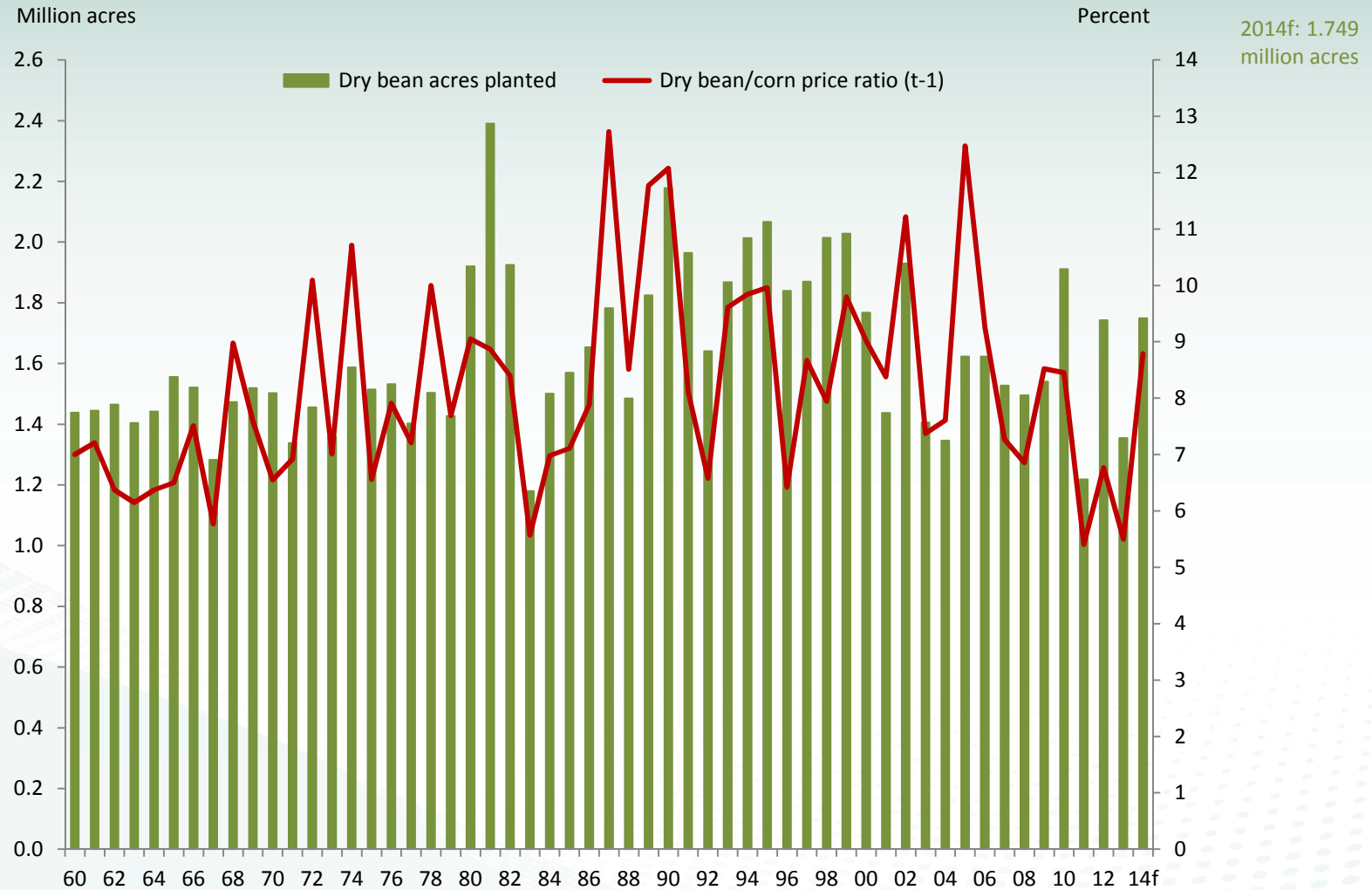


Source: USDA, National Agricultural Statistics Service.



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# Ratio of average dry bean price to corn price



Sources: USDA, Economic Research Service (price ratio) and USDA, National Agricultural Statistics Service (acres planted).



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# Trends in Domestic Production



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# U.S. dry bean production in 2013 down 23 percent



Source: USDA, National Agricultural Statistics Service (production).



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## U.S. dry bean production partially shifted from the Northern Plains to the Northwest over the past 4 years

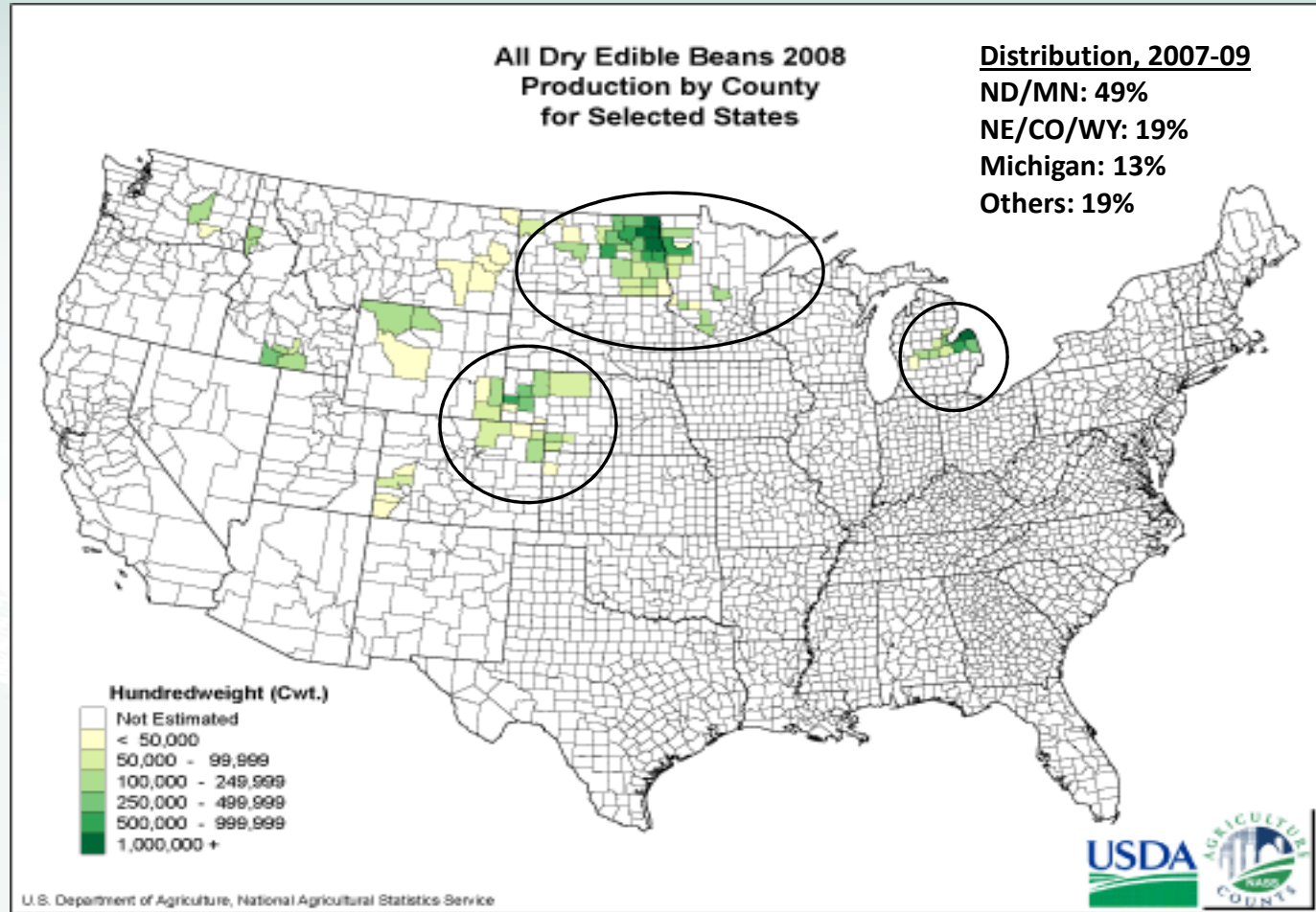
States	Average annual production		Share		Change in share
	2007-09	2011-13	2007-09	2011-13	
	1,000 cwt		Percent		Percentage points
North Dakota	9,782	7,898	38	31	-7
Michigan	3,412	3,385	13	13	0
Nebraska	2,588	2,681	10	11	1
Minnesota	2,653	2,575	10	10	0
Idaho	1,681	2,420	7	10	3
Washington	1,015	1,919	4	8	4
California	1,249	1,179	5	5	0
Other	3,144	3,377	12	13	1
Total	25,524	25,434	100	100	--

Source: Prepared by USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (production). Individual values may not total precisely due to rounding.



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# Geographic Distribution of U.S. Dry Bean Production, 2007-09



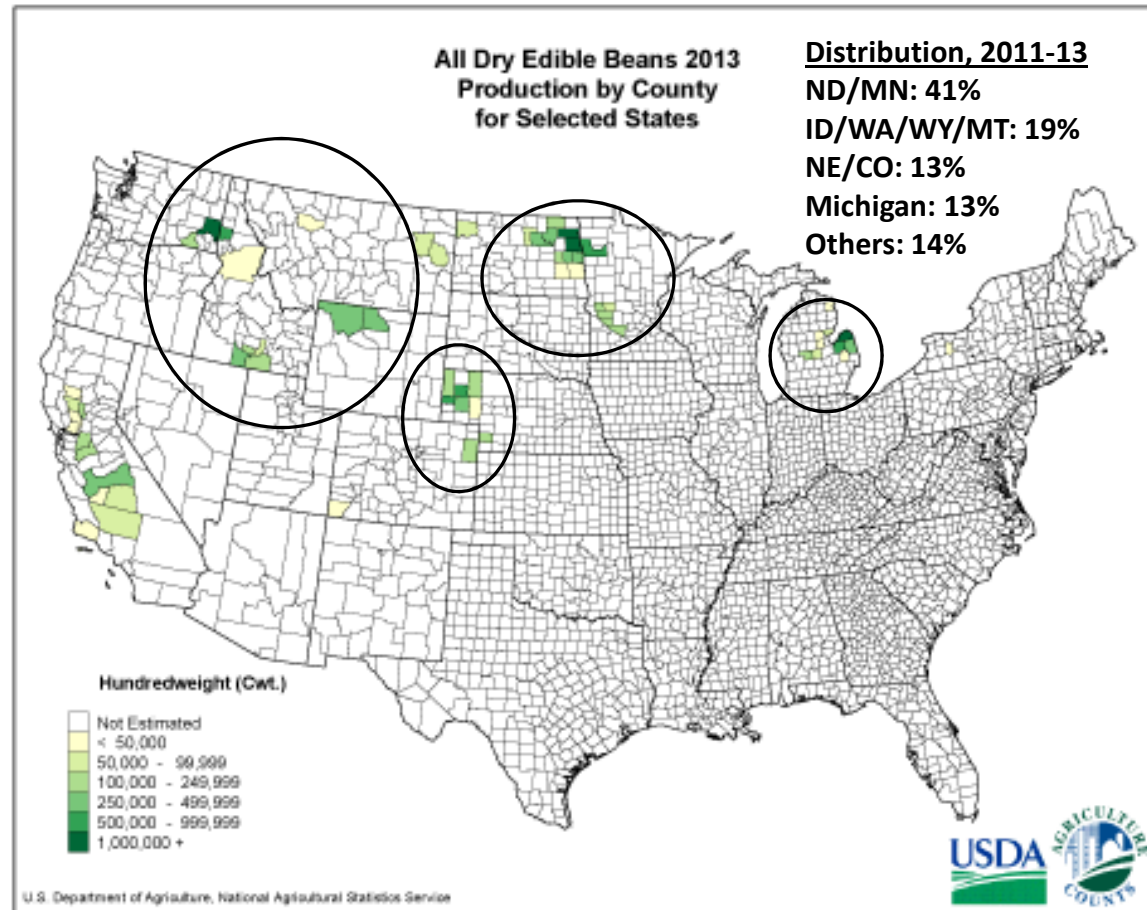
Map depicts data for 2008 and is used to illustrate production areas

Source: USDA, National Agricultural Statistics Service.



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# Geographic Distribution of U.S. Dry Bean Production, 2011-13



Map depicts data for 2013 and is used to illustrate production areas

Source: USDA, National Agricultural Statistics Service.



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## Planting intentions for dry beans in 2014 suggest a lessening of this shift

State	Area planted			Change, 2014 v. 2013
	2012	2013	2014(I)	
	<i>Thousands of acres</i>			<i>Percent</i>
United States	1,743	1,355	1,686	24
North Dakota	700	440	620	41
Michigan	200	175	185	6
Nebraska	145	130	180	38
Minnesota	160	125	170	36
Idaho	145	125	135	8
Washington	115	115	130	13
Other States	278	245	266	9

I = Intended plantings as indicated by reports from farmers.

Source: USDA, National Agricultural Statistics Service.



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## Average U.S. dry bean area per farm grew slightly between 2007 and 2012, and the number of dry bean farms increased

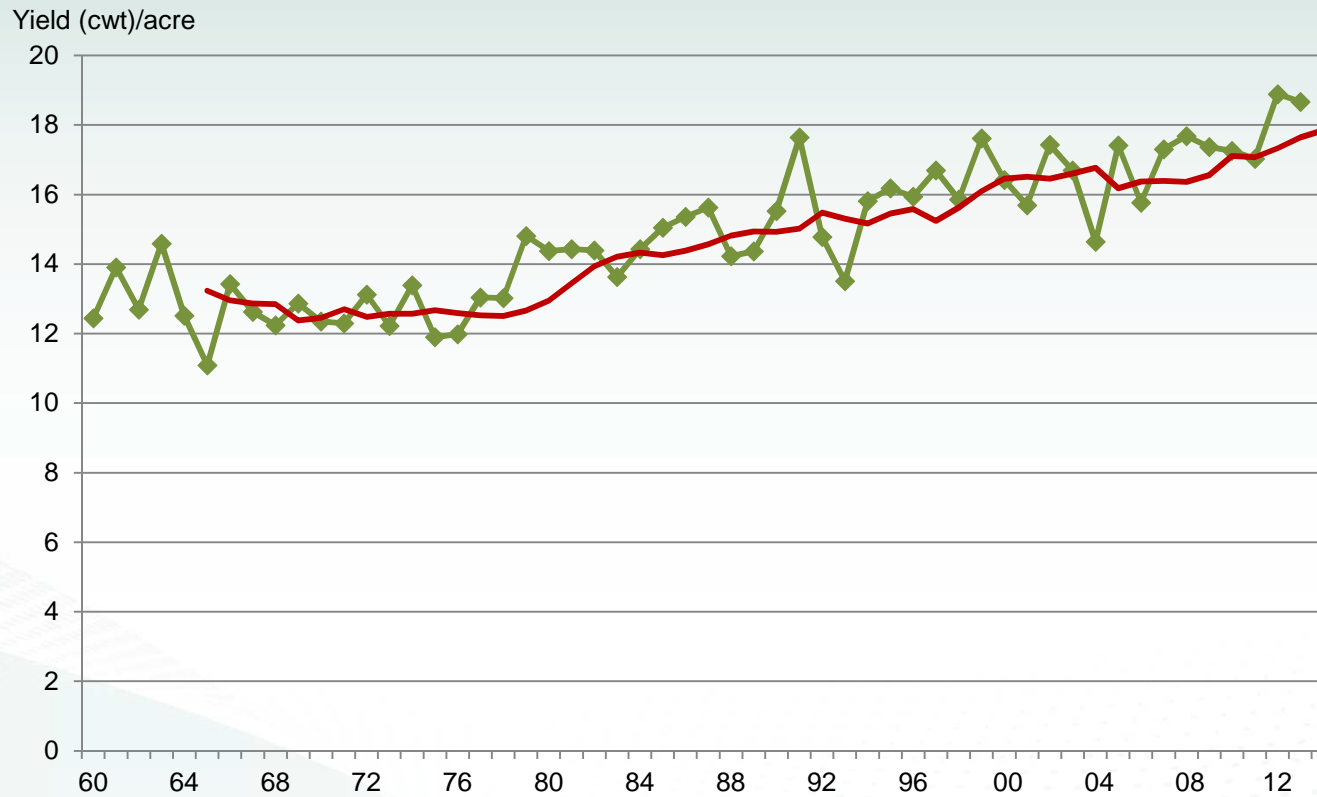
Census Year	Number of farms	Area harvested	Average dry bean area per farm
	Number	Acres	
2012	6,896	1,642,797	238
2007	6,236	1,455,549	233
2002	8,647	1,691,775	196
1997	11,348	1,731,898	153
1992	13,201	1,548,766	117
1987	15,914	1,670,097	105

Source: USDA, National Agricultural Statistics Service.



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# Yields: A gentle upward trend



Sources: USDA, Economic Research Service (5-year moving average) and USDA, National Agricultural Statistics Service (yield).



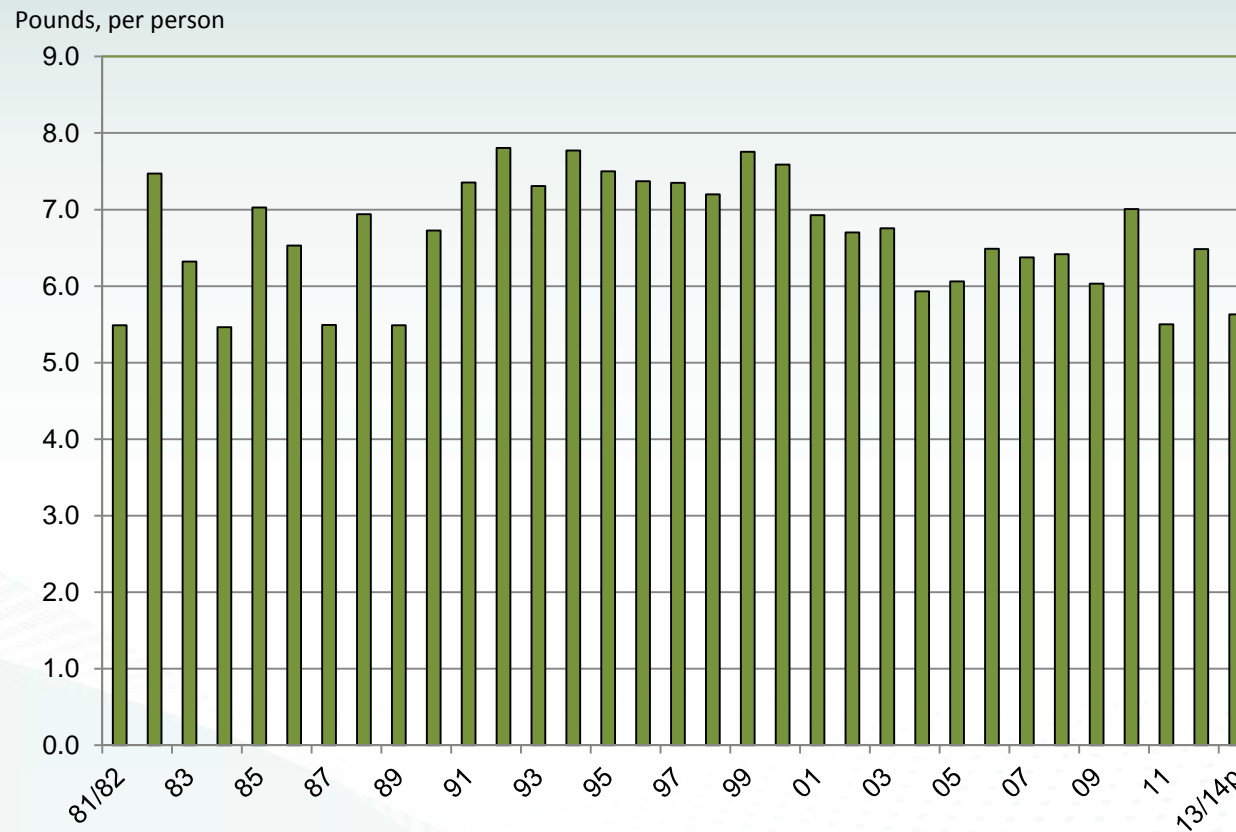
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# Trends in Demand and Trade



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# Annual U.S. dry bean use/availability is about 6.0 pounds per person



Source: Prepared by USDA, Economic Research Service using data from 2013 *Vegetables and Pulses Yearbook* report.



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# U.S. dry bean trade, 1991/92-2013/14\*

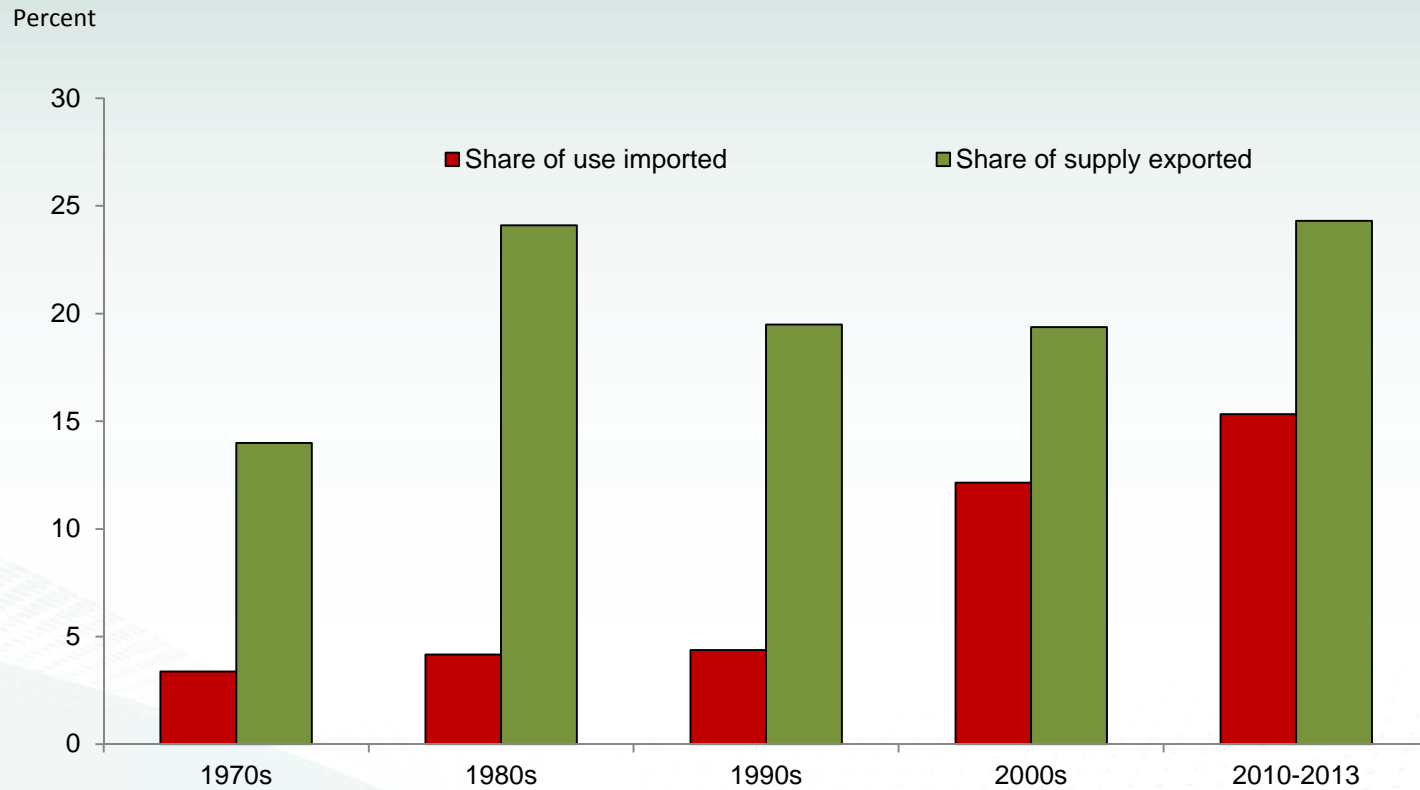


\*2013/14 is ERS estimate based on year-to-date trade.  
Source: U.S. Department of Commerce, U.S. Census Bureau.



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# U.S. dry beans: Global Integration, 1970-2013

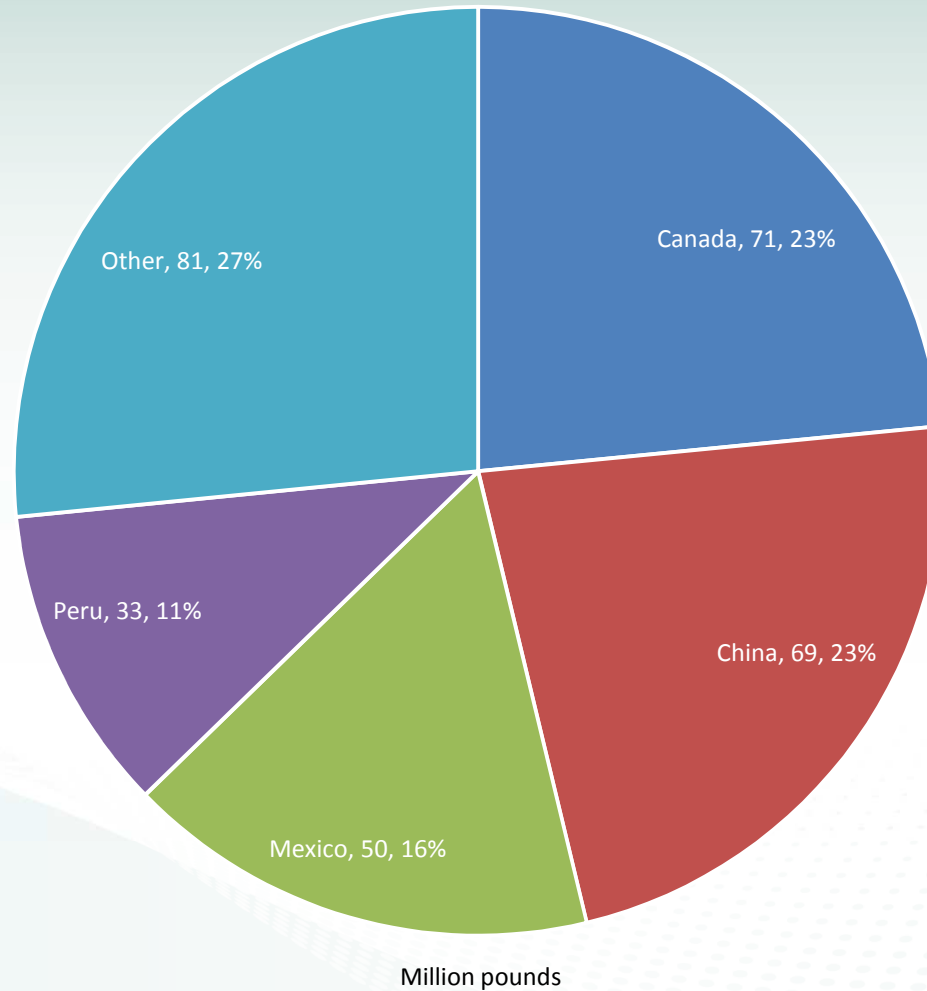


Source: USDA, Economic Research Service.



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## U.S. dry bean imports by origin 2011-13 average

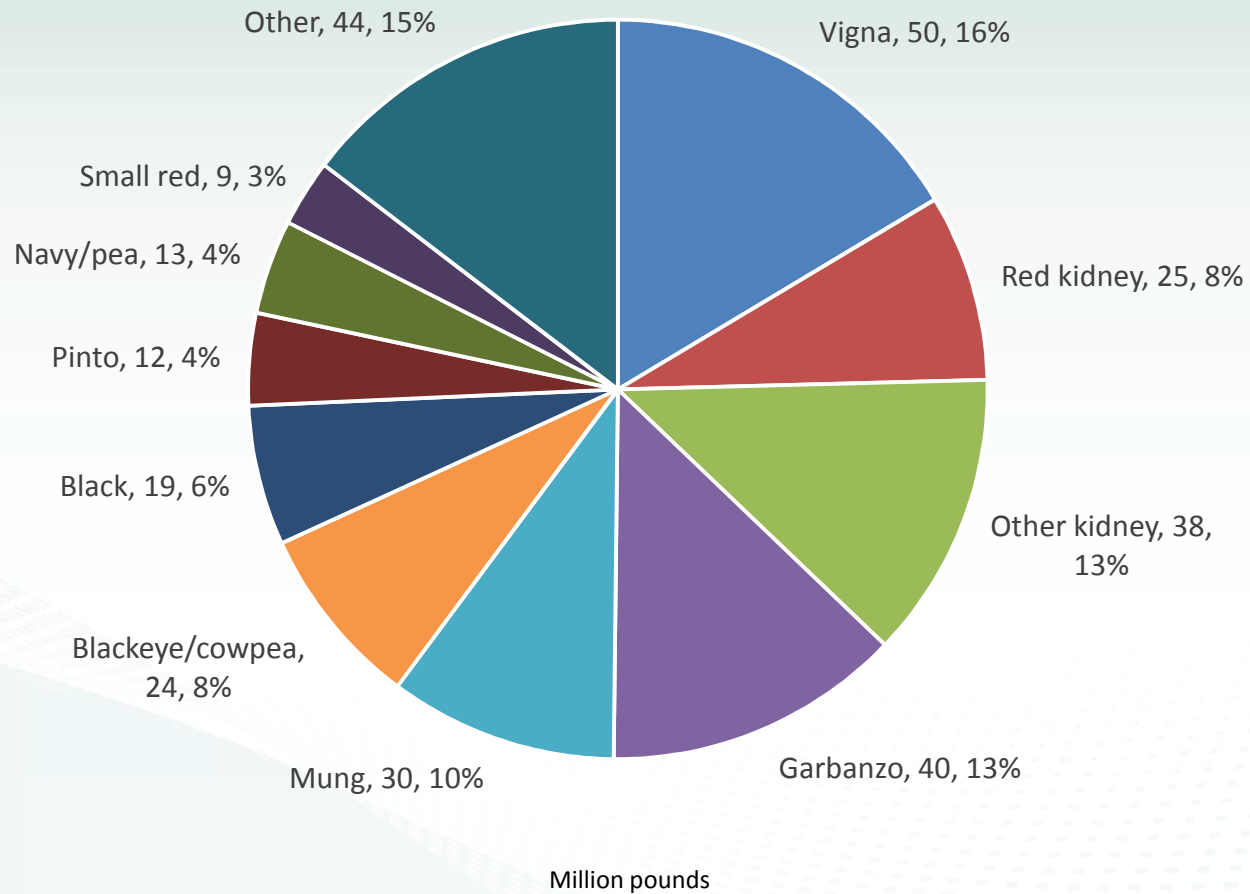


Source: U.S. Dept. of Commerce, U.S. Census Bureau.

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# U.S. dry bean imports by class 2011-13 average



Source: U.S. Dept. of Commerce, U.S. Census Bureau.



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# Mexican peruano beans awaiting export in Nogales, Sonora, July 2014

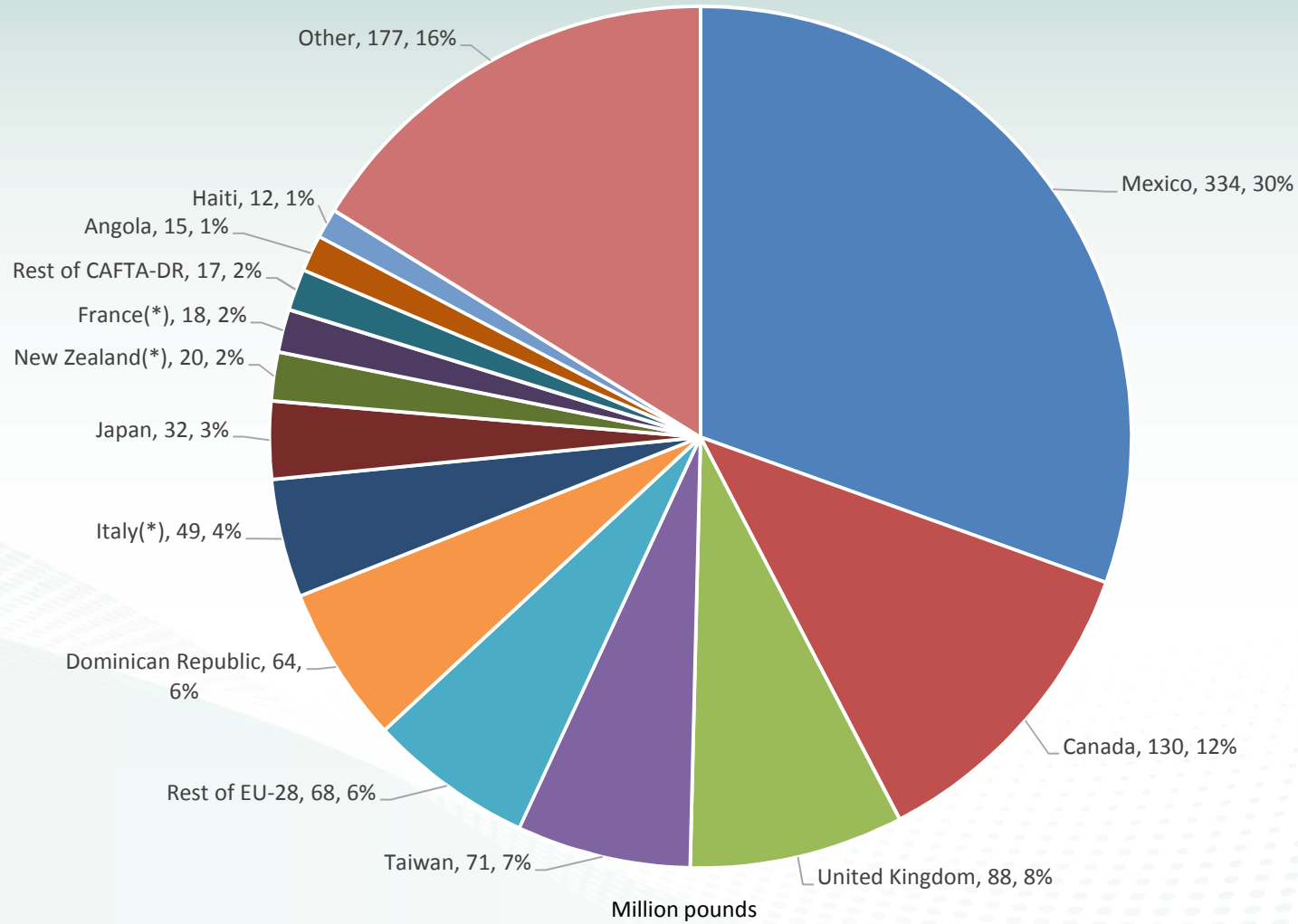


Source: Photograph by Steven Zahniser



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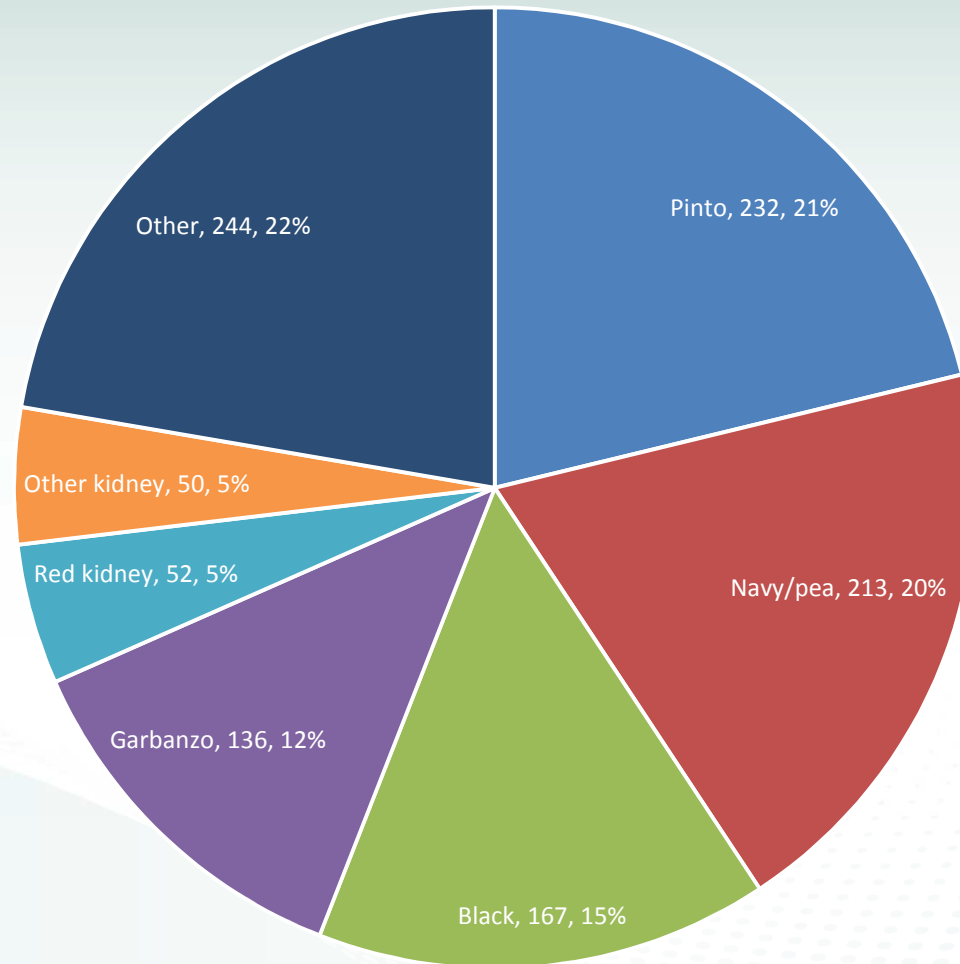
# U.S. dry bean exports by destination: 2011-13 average



Source: U.S. Dept. of Commerce, U.S. Census Bureau.

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# U.S. dry bean exports by class, 2011-13 average



Million pounds



Source: U.S. Dept. of Commerce, U.S. Census Bureau.

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## Conclusions

### 2013 crop:

- Much smaller than in 2012:
  - Area planted, down 29 percent
  - Area harvested, down 28 percent
  - Yields, 1 percent smaller
  - Total production, down 23 percent

### 2014 crop:

- Potentially larger than in 2013:
  - Area planted, up 24 percent
  - Weather permitting, production could reach levels comparable to 2010 or 2012





# Thanks!

Steven Zahniser (zahniser@ers.usda.gov) and Hodan Farah Wells (hfarah@ers.usda.gov)

\*We would like to thank Donita West for her contributions to this presentation.

ERS website: [www.ers.usda.gov](http://www.ers.usda.gov)

ERS Vegetables and Pulses Page: <http://ers.usda.gov/topics/crops/vegetables-pulses.aspx>

ERS Vegetables and Pulses Data : <http://ers.usda.gov/data-products/vegetables-and-pulses-data.aspx>

FAS Global Agricultural Trade System: <http://apps.fas.usda.gov/gats/default.aspx>

National Agricultural Statistics Service: <http://www.nass.usda.gov/>