

# ERS Resources: A Story and Exploration of U.S. Dry Bean Statistics

**2023 U.S. Dry Bean Convention  
Seattle, Washington  
August 2023**

**Presenter: Wilma V. Davis<sup>1</sup>**

**Greg Astill<sup>1</sup>, Gary Lucier<sup>1</sup>, Skyler Simnitt<sup>1</sup>, Helen Wakefield<sup>1</sup>, Catharine Weber<sup>1</sup>, Seth Wechsler<sup>1</sup>, and D. Adeline Yeh<sup>1</sup>**

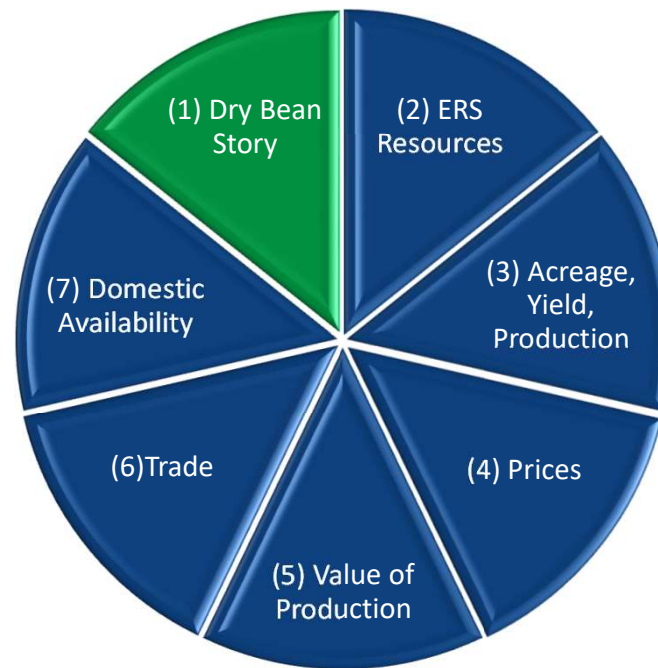
<sup>1</sup> United States Department of Agriculture (USDA), Economic Research Service (ERS).

Note: Names listed with presenter first and all other members of the Specialty Crop Team listed in alphabetical order by last name.

Disclaimer: The findings and conclusions in this presentation are those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination or policy. This presentation was supported by the U.S. Department of Agriculture, Economic Research Service.



# Key Slices — Presentation Outline





# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





Expensive Application



Key Metrics



Annual Meeting



# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





# Bailey Farm Bet — Experience vs. Youth



## A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





Vegetables and Pulses

Overview

Market Outlook

Commodity Highlights

Data



Overview

- Recent ERS publications related to vegetables and pulses

The U.S. vegetables and pulses sector comprises hundreds of independent markets within the food-marketing system. During 2017-19, U.S. farm cash receipts from the sale of vegetables and pulses (including potatoes and mushrooms) averaged \$19.4 billion—10 percent of U.S. crop cash receipts. This amount was generated on less than 2 percent of all U.S. harvested acreage. Annual per capita availability (a proxy for consumption) of vegetables and pulses over the same period averaged 404 pounds—down 4 percent from a decade earlier.

ERS provides a range of data products and reports on vegetable and pulse markets including domestic supply, demand, trade, and prices.

Periodic, Scheduled Outputs

- Outlook reports are published two times a year and provide current intelligence and forecasts on changing conditions in the U.S. vegetable and pulses sector. Interactive charts and highlights of the most recent Outlook report are available on the Market Outlook. Historical Vegetables and Pulses Outlook reports are available from the Mann Library under historical titles: The Vegetable Situation, Vegetables and Melons Outlook, and Vegetable and Pulses Outlook.
- Vegetables and Pulses Data are updated monthly and provide prices, price indexes and trade for the sector and for individual commodities.
- Vegetables and Pulses Yearbook Tables updated annually and contain Excel spreadsheets detailing a 40 year time series of supply, availability (including per capita use), and price for a range of U.S. fresh and processing vegetables.

Recent ERS Reports Relating to Vegetables and Pulses

In addition to the periodic Outlook reports and data products, ERS disseminates reports covering issues important to vegetable and pulse crop markets in the United States and around the world. Recent ERS reports relating to vegetable and pulse crops include:

- Reports +
- Amber Waves Articles +
- Data +
- Topics +



# A Dry Bean Story

\* Bailey Farms \*

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





So, who won?

Bailey Experience or Bailey Youth?



# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.







# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.





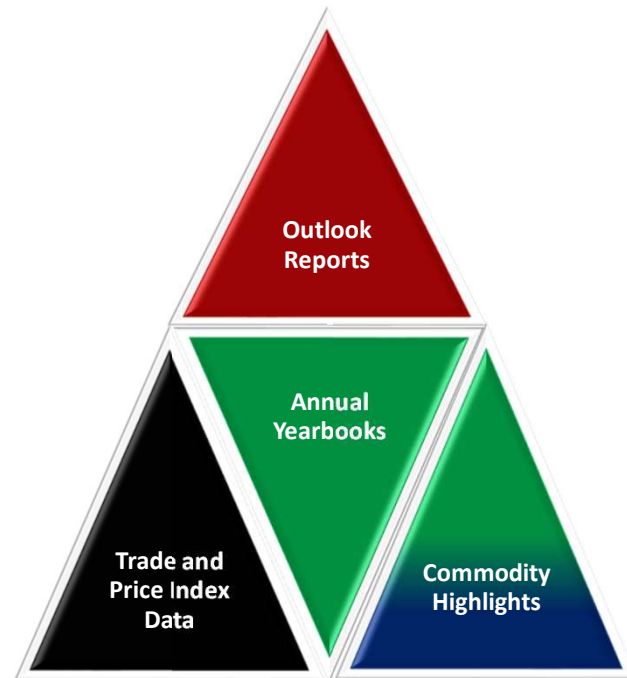
# A Dry Bean Story

**\* Bailey Farms \***

Disclaimer: 'Bailey Farms' is a fictional example used for illustration in this presentation. The story does not reflect real events or individuals.



# ERS Specialty Crop Resources for Pulse Crops



# Annual Yearbook Tables – High Level Inventory

## Pulse Yearbook Tables

Supply and availability (13)

Import and export value (2)

Per capita availability (2)

Harvest, production, and crop value (1)

Table 60-U.S. dry edible beans and chickpeas: supply, availability, and price, farm weight<sup>1</sup>

Year	Supply				Availability				Per capita availability		Season average price	
	Production <sup>2</sup>	Imports <sup>3</sup>	Beginning stocks <sup>4</sup>	Total supply	Exports <sup>3</sup>	Seed use <sup>5</sup>	Ending stocks <sup>4</sup>	Domestic availability	Pounds	U.S. dollars/cwt	Current dollars <sup>6,7</sup>	Constant 2012 dollars <sup>7</sup>
1984	2,107.0	58.3	921.3	3,086.6	593.8	84.0	1,130.8	1,278.0	5.41	18.70	18.70	35.35
1985	2,217.5	58.1	1,130.8	3,406.4	638.4	84.9	1,034.9	1,648.2	6.91	17.60	17.60	32.25
1986	2,288.6	47.5	1,034.9	3,376.9	646.0	93.4	901.2	1,530.2	6.36	19.10	19.10	34.31
1987	2,603.1	53.3	901.2	3,557.6	756.6	78.6	1,413.3	1,307.2	5.38	16.50	16.50	28.93
1988	1,923.3	84.5	1,413.3	3,421.1	838.7	82.2	794.6	1,877.6	6.85	29.90	29.90	58.83
1989	2,372.9	97.2	794.6	3,264.7	822.1	110.0	901.6	1,340.5	5.42	29.50	29.50	45.14
1990	3,237.9	90.3	901.6	4,309.7	1,107.3	97.1	1,422.2	1,683.2	6.73	18.50	18.50	39.06
1991	3,376.5	75.8	1,422.2	4,874.5	1,011.3	81.3	1,919.4	1,862.5	7.35	15.60	15.60	23.70
1992	2,261.5	87.7	1,919.4	4,245.7	620.3	82.2	1,527.7	2,088.5	7.82	19.90	19.90	29.56
1993	2,188.2	67.4	1,527.7	3,783.3	683.2	99.4	1,116.0	1,800.8	7.23	24.60	24.60	35.69
1994	2,886.7	75.9	1,116.0	4,068.5	797.0	104.5	1,158.5	2,030.5	7.71	22.50	22.50	31.96
1995	3,089.0	84.8	1,158.5	4,332.3	831.7	93.6	1,386.2	2,000.8	7.51	20.80	20.80	29.94
1996	2,791.2	88.0	1,386.2	4,265.4	754.3	96.7	1,409.6	2,004.8	7.43	23.50	23.50	32.11
1997	2,937.0	100.8	1,409.6	4,447.4	803.2	105.2	1,520.0	2,018.7	7.40	19.30	19.30	25.93
1998	3,941.8	92.4	1,520.0	4,654.5	1,190.3	105.7	1,438.0	2,004.4	7.26	19.60	19.60	25.24
1999	3,314.6	125.0	1,438.0	4,877.6	843.9	91.9	1,762.7	1,719.1	7.80	16.40	16.40	21.47
2000	2,654.3	128.9	1,762.7	4,545.9	788.4	75.7	1,512.2	2,169.7	7.68	15.50	15.50	19.85
2001	1,961.0	122.5	1,512.2	3,665.7	755.5	109.4	600.8	2,099.0	7.04	22.10	22.10	27.70
2002	3,031.2	245.8	800.8	4,077.8	673.2	73.8	1,368.0	1,962.8	6.81	17.10	17.10	21.10
2003	2,249.2	190.6	1,368.0	3,807.7	645.4	70.3	1,119.0	1,969.2	6.77	18.40	18.40	22.29
2004	1,774.3	207.1	1,119.0	3,191.2	561.4	84.6	697.9	1,737.3	6.96	25.70	25.70	33.31
2005	2,657.8	224.9	697.9	3,580.4	564.1	84.6	1,113.3	1,813.4	6.12	18.50	18.50	21.16
2006	2,415.5	237.2	1,113.3	3,771.1	791.5	79.8	971.9	1,927.5	6.45	22.10	22.10	24.54
2007	2,558.8	253.8	971.9	3,814.5	666.3	78.1	1,145.4	1,920.6	6.37	28.50	28.50	31.14
2008	2,558.8	327.1	1,145.4	4,029.3	816.0	81.0	1,086.5	1,968.5	6.45	34.60	34.60	36.70
2009	2,542.7	296.9	1,086.5	3,306.1	3,306.1	99.9	1,002.4	1,768.7	5.75	30.00	30.00	31.58
2010	3,180.1	288.8	1,002.4	4,471.3	1,000.6	65.3	1,194.7	2,228.0	7.17	28.00	28.00	27.66
2011	1,989.0	320.3	1,194.7	3,493.9	963.3	91.3	772.9	1,646.4	5.28	42.10	42.10	40.79
2012	3,162.5	316.2	772.9	4,275.6	1,237.5	72.2	1,257.7	1,708.2	6.44	38.00	38.00	36.13
2013	2,458.7	265.7	1,257.7	3,982.1	1,086.0	90.1	1,172.5	1,632.6	5.16	39.10	39.10	36.57
2014	2,891.0	335.0	1,172.5	4,398.5	1,179.3	84.2	1,211.3	1,913.2	5.61	32.30	32.30	29.72
2015	3,055.7	348.5	1,211.3	4,615.0	946.6	88.3	1,248.3	2,283.2	7.12	27.20	27.20	26.05
2016	2,872.4	339.3	1,248.3	4,460.5	1,023.3	114.2	1,160.4	2,162.5	6.69	29.20	29.20	27.56
2017	3,596.1	350.7	1,160.4	5,115.4	1,181.1	116.0	1,246.0	2,472.3	7.60	26.70	26.70	24.79
2018	3,774.5	392.9	1,246.0	5,421.3	1,121.3	93.9	1,779.2	2,741.3	8.39	26.40	26.40	23.02
2019	2,701.2	314.2	1,779.2	4,794.2	1,127.7	107.8	1,586.6	1,972.2	6.00	31.80	31.80	28.32
2020	3,675.2	439.3	1,586.6	5,700.6	1,144.1	96.4	1,602.7	2,683.4	8.07	30.89	30.89	27.16
2021	2,552.2	420.9	1,602.7	4,786.7	1,031.3	91.5	1,286.6	2,397.4	7.23	38.98	38.98	32.85

— = Not available. Cwt = hundredweight. Most recent year is preliminary.

<sup>1</sup> Includes garbanzo beans (chickpeas).

<sup>2</sup> Source: USDA, National Agricultural Statistics Service.

<sup>3</sup> Source: U.S. Department of Commerce, U.S. Census Bureau.

<sup>4</sup> Assumes no carryover into next crop year. Approximated from State dry bean marketing patterns.

<sup>5</sup> Estimated by USDA, Economic Research Service.

<sup>6</sup> Season-average grower price across all classes. Estimated by USDA, ERS after 2019.

<sup>7</sup> Deflated by the Gross Domestic Product implicit price deflator, 2012=100.

Source: USDA, Economic Research Service.



**Economic Research Service**  
www.ers.usda.gov



# Commodity Highlights – High Level Inventory

## Pulse Visualizations

Production and Prices (13)

Area Harvested (2)

Imports and Exports (13)

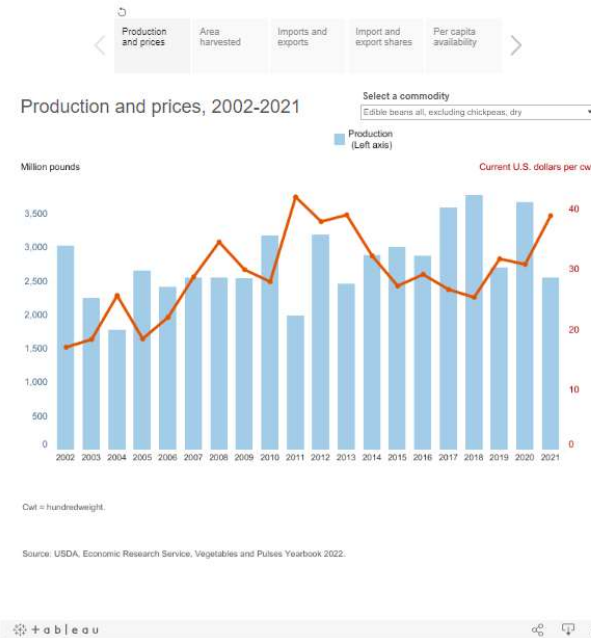
Import and Export shares (13)

Per Capita Availability (13)



### Commodity Highlights

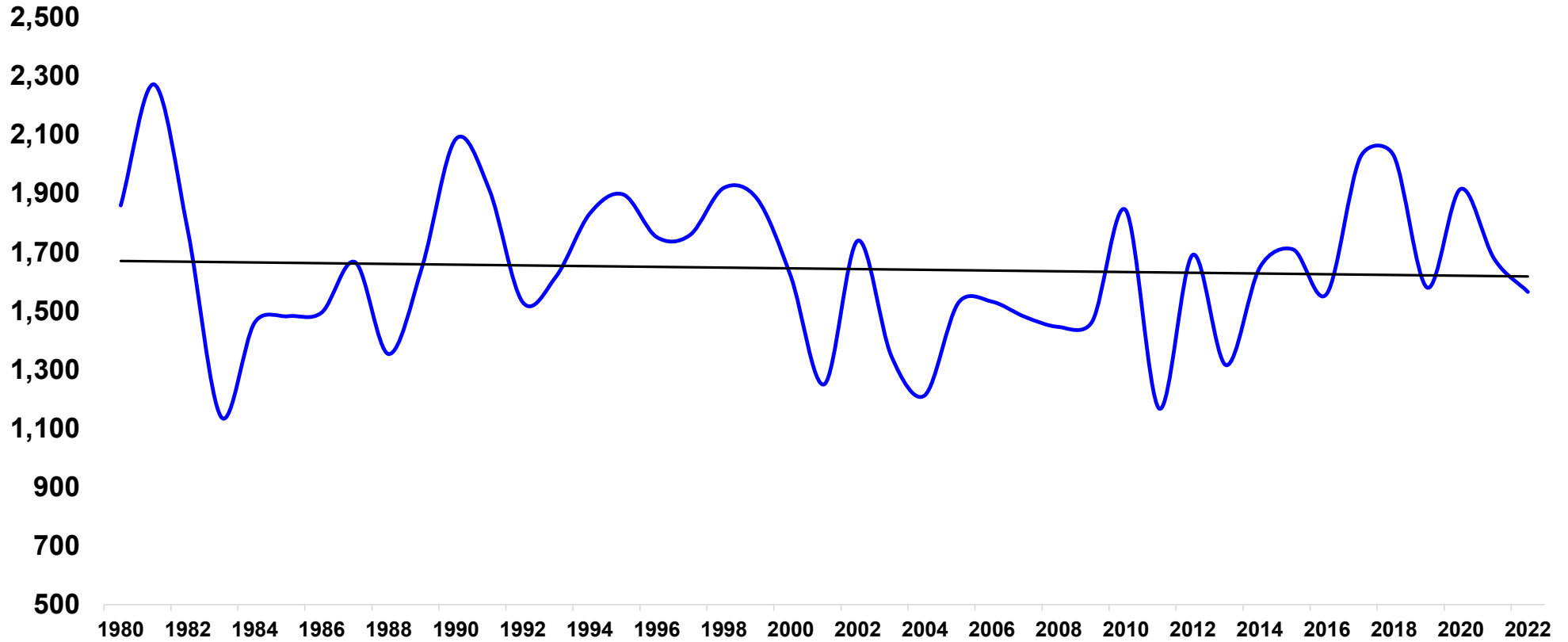
The statistics shown in these interactive charts are available for download in a machine readable .csv file format. Download the complete [Commodity Highlights Data file](#).



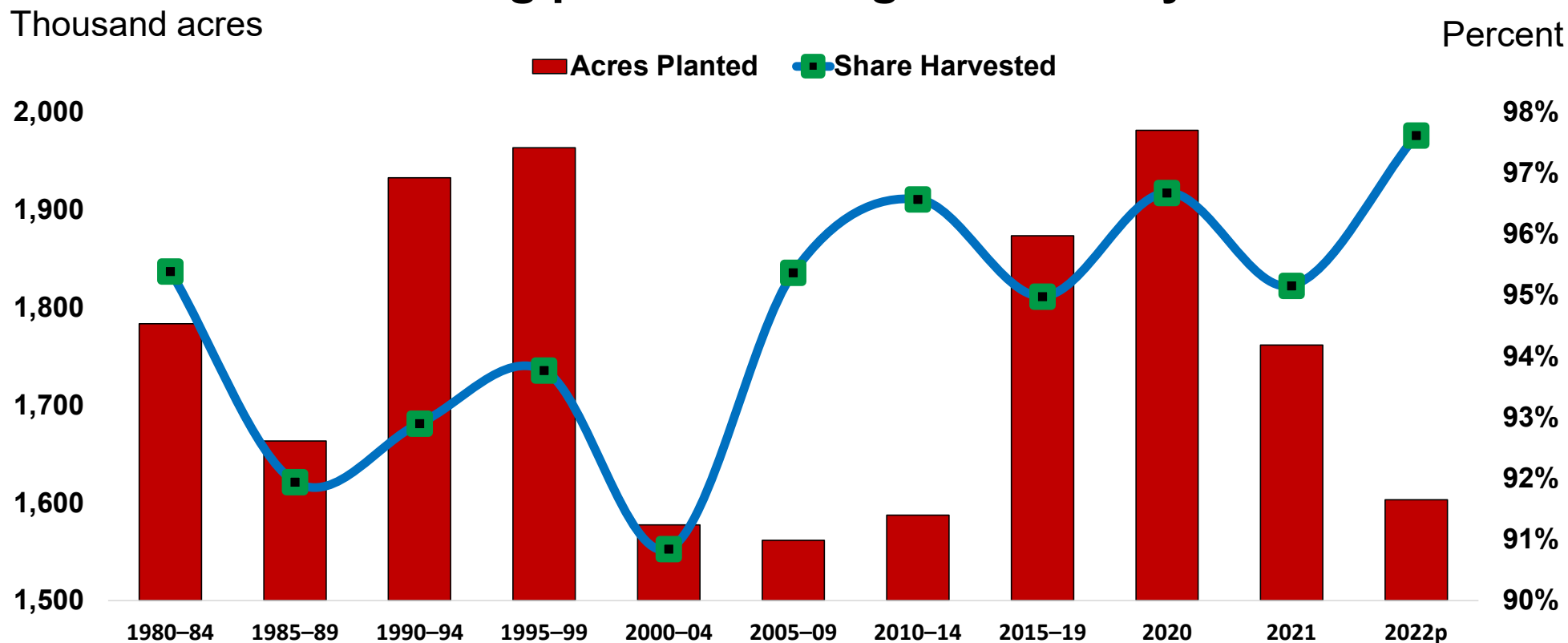
# U.S. dry beans: Acres harvested trending lower



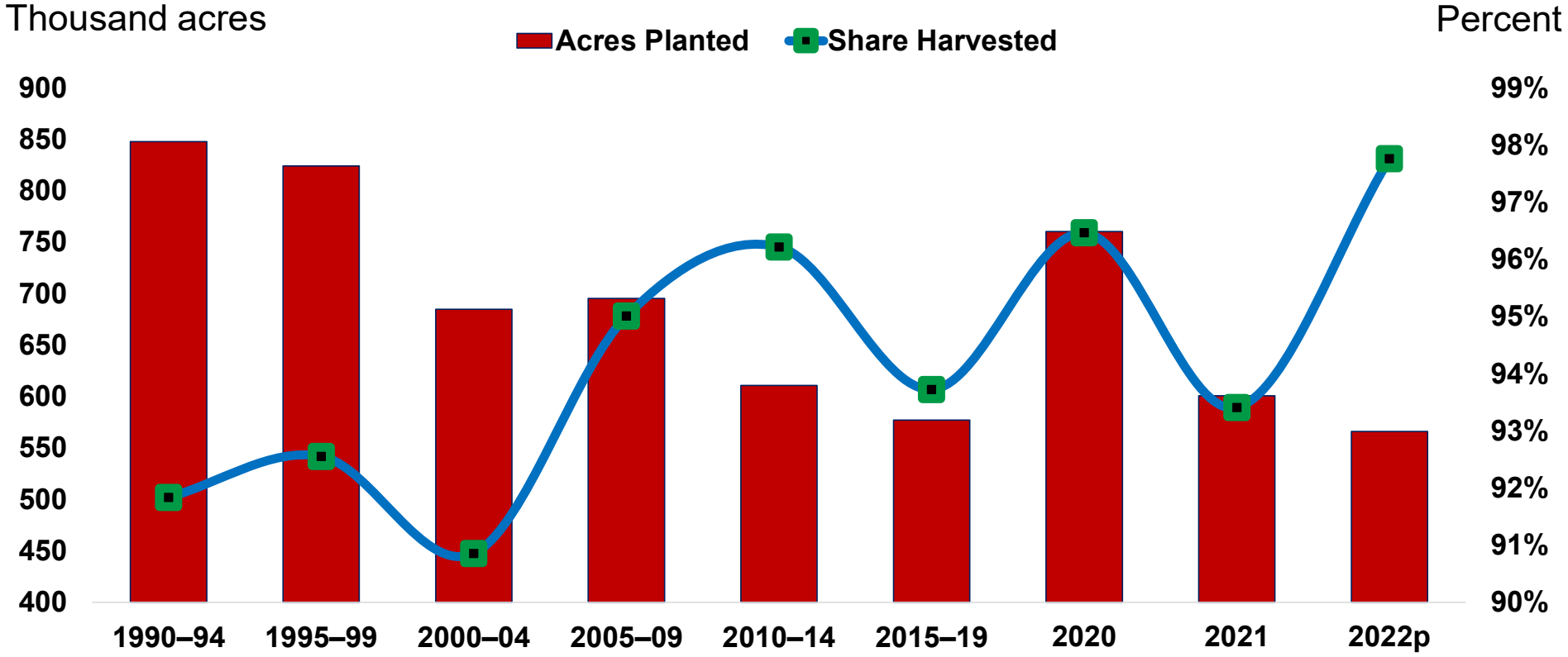
Million acres



# U.S. dry beans: Area seeded and share harvested with declining planted acreage in recent years

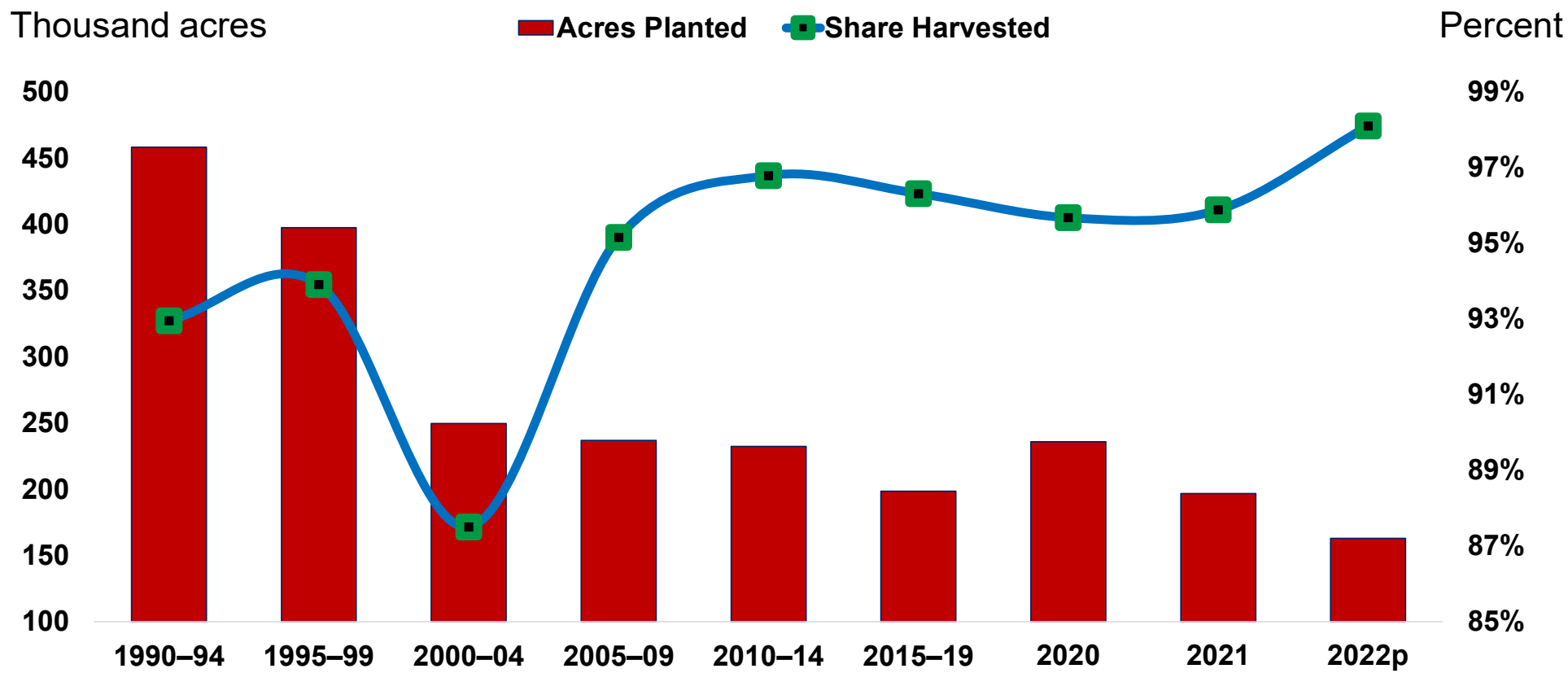


# U.S. pinto beans: Area seeded and share harvested





# U.S. navy beans: Area seeded & share harvested

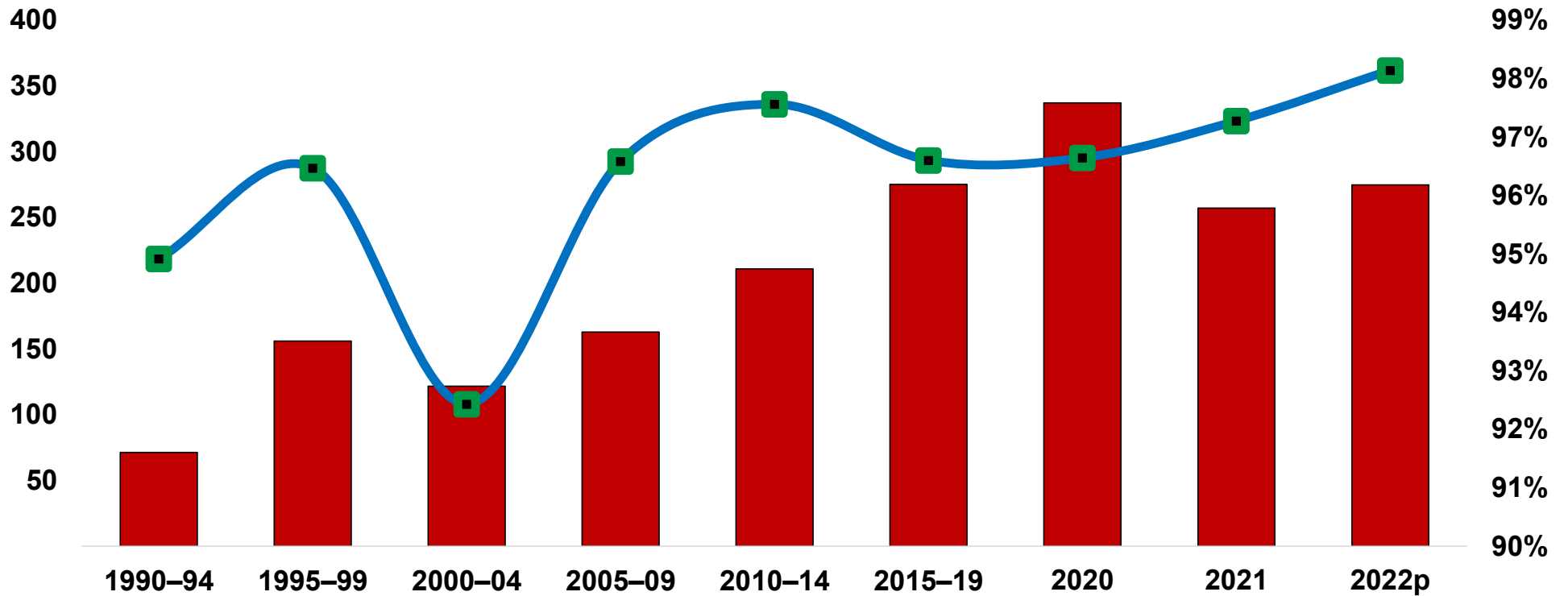


# U.S. black beans: Area seeded & share harvested

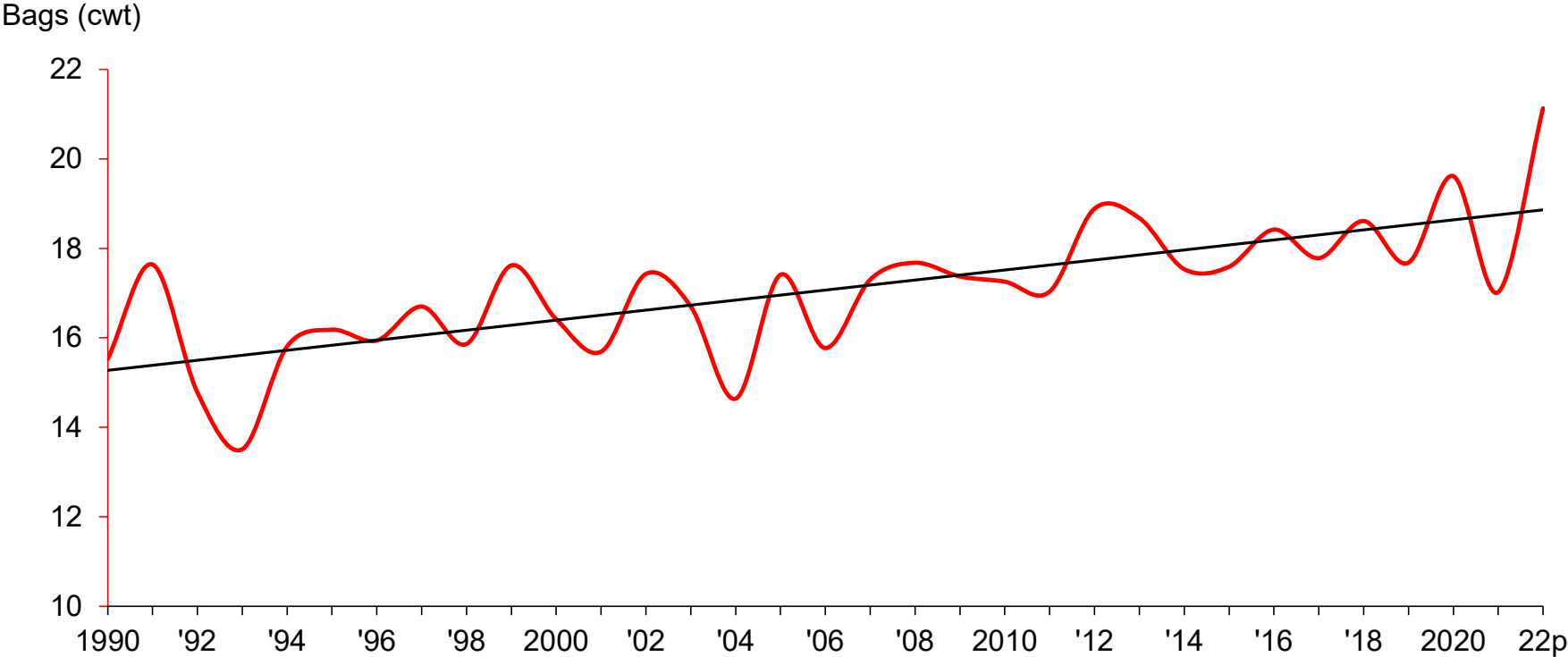
Thousand acres

Percent

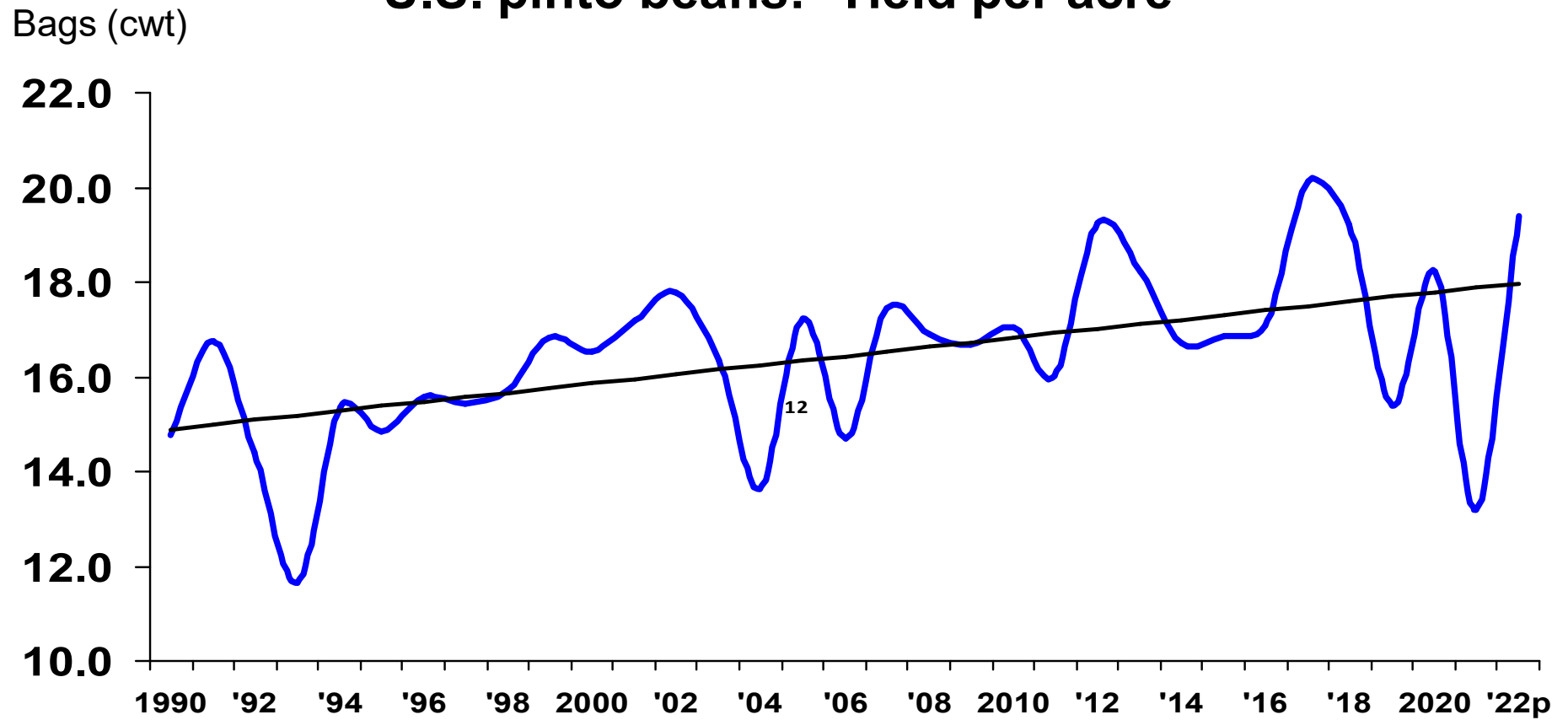
■ Acres Planted    ■ Share Harvested



# U.S. dry beans: Yield per acre

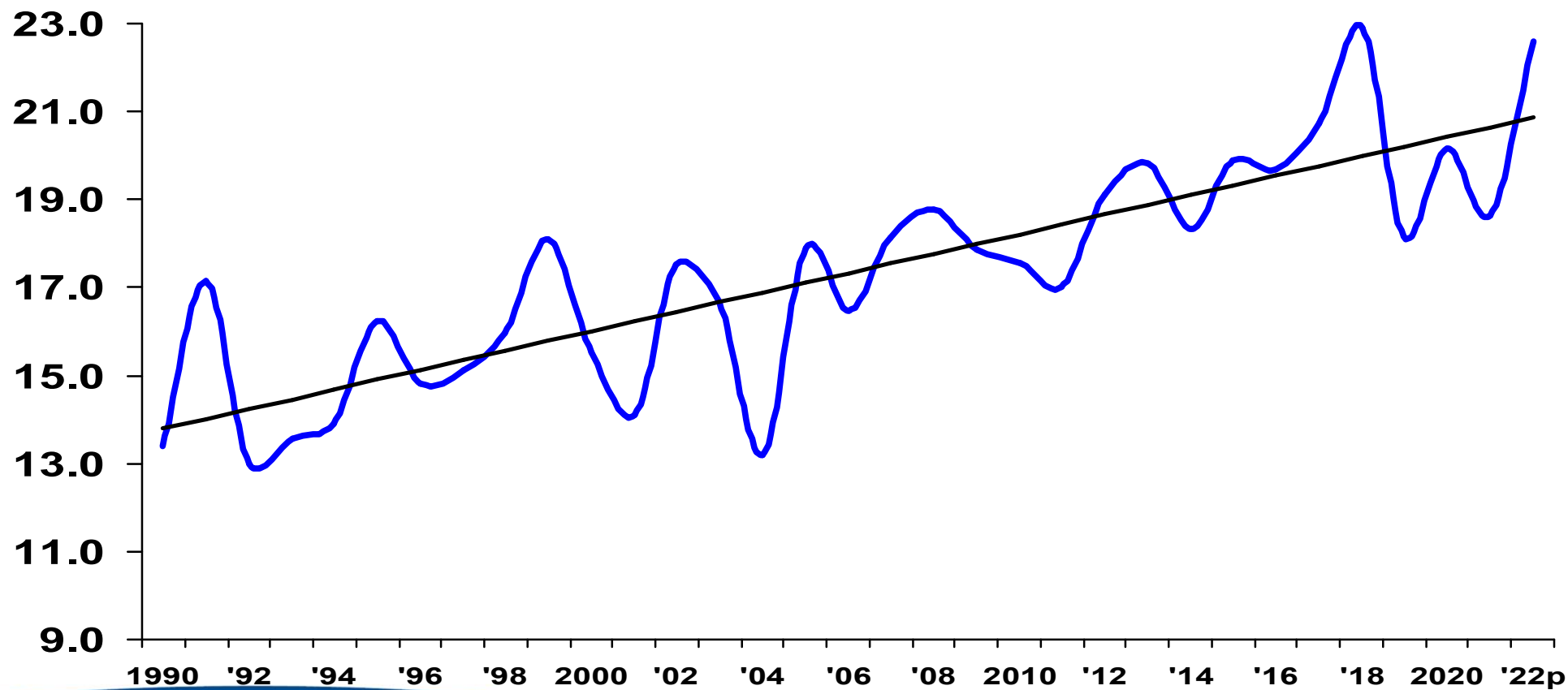


## U.S. pinto beans: Yield per acre



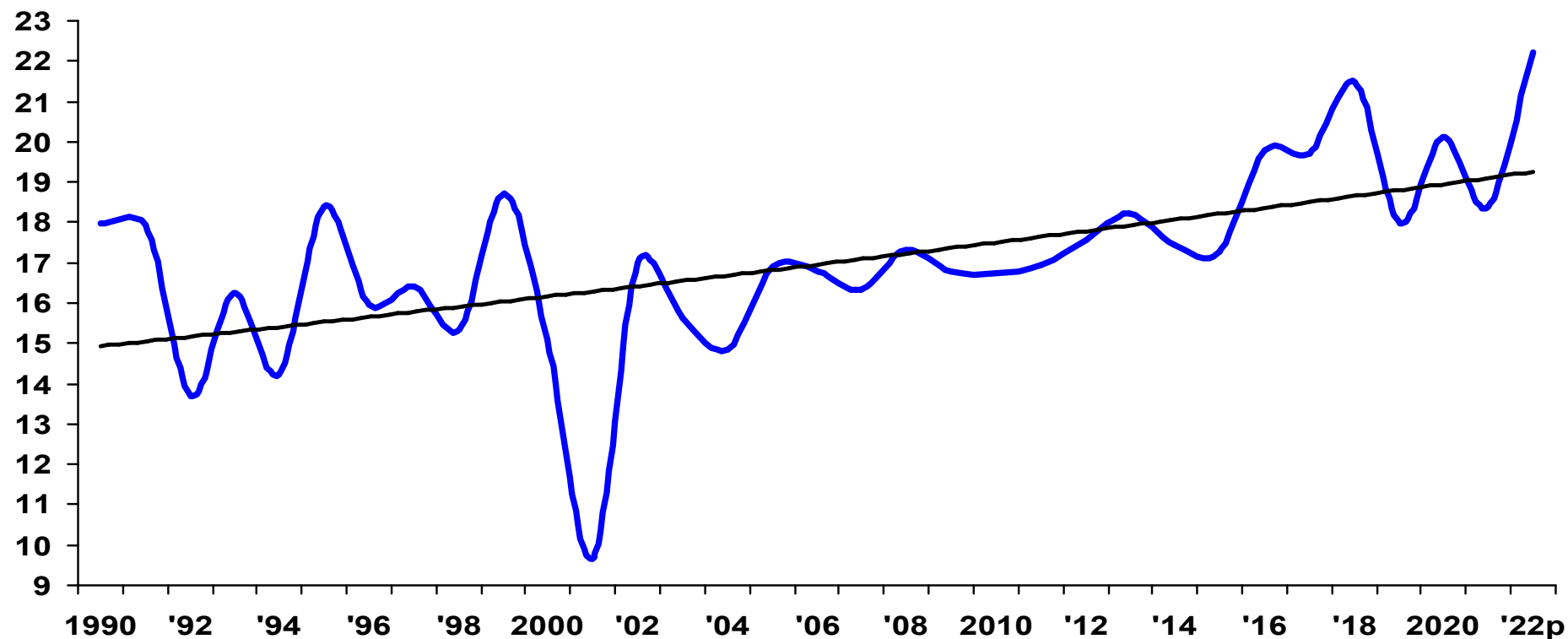
## U.S. navy beans: Yield per acre

Bags (cwt)

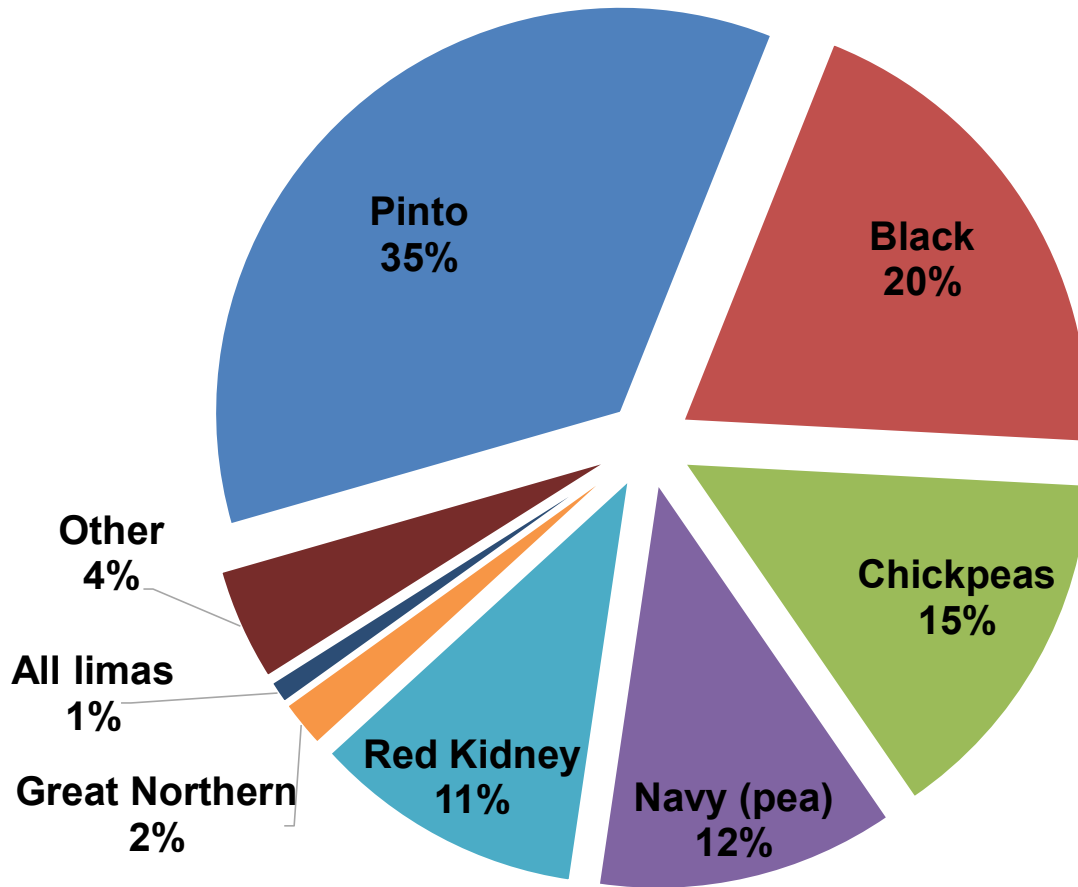


## U.S. black beans: Yield per acre

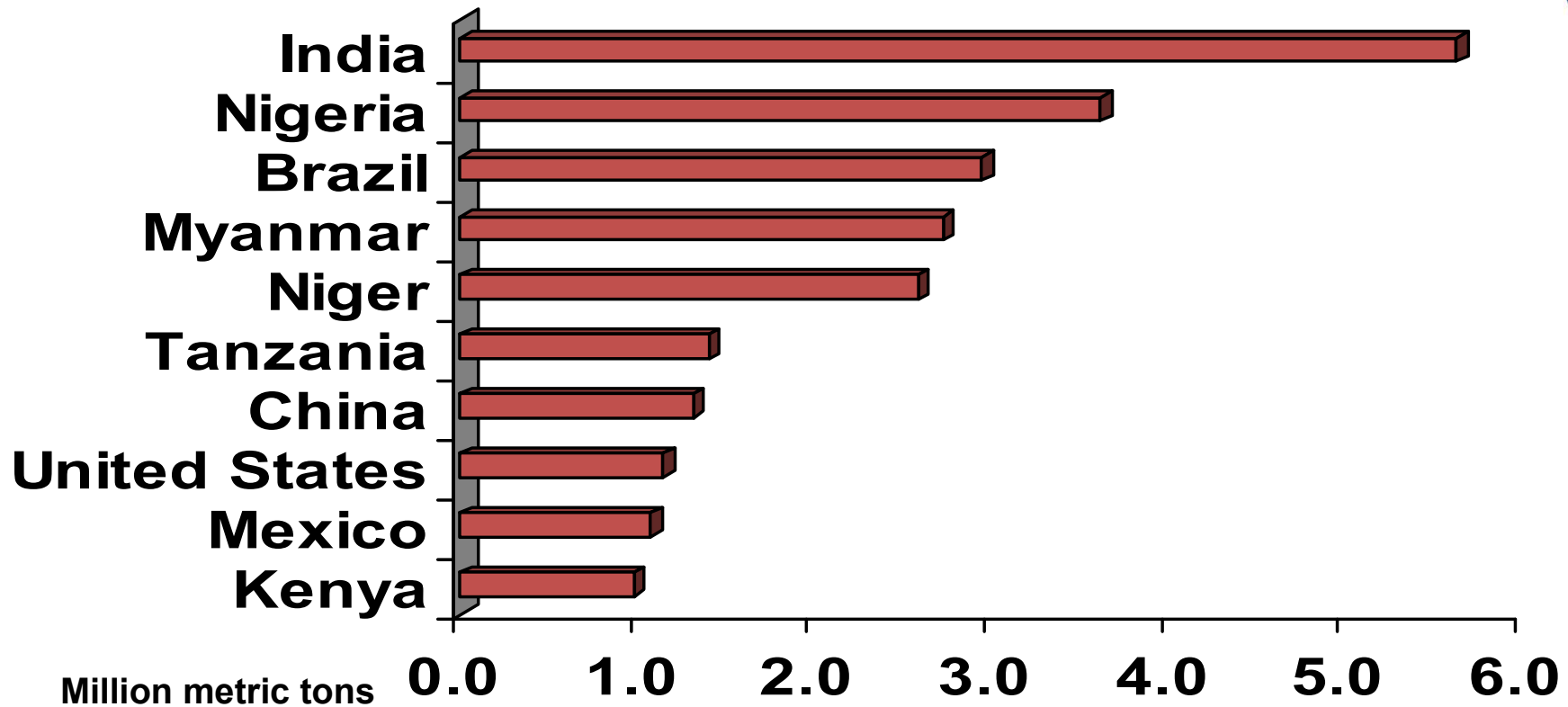
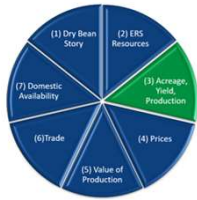
Bags (cwt)



# U.S. dry beans: Production by class, 2022



# World dry beans: Top 10 producers by country, 2019–21



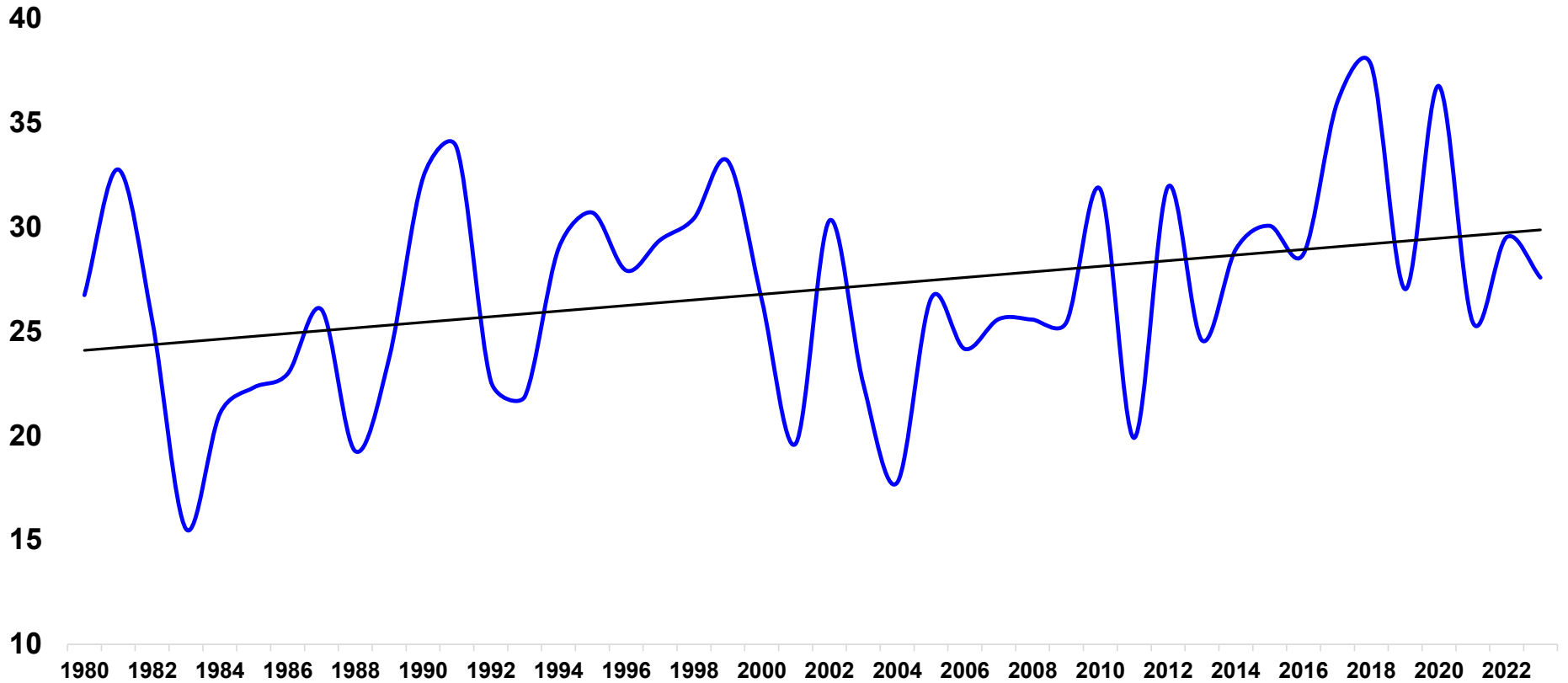
Source: FAOStat, Food and Agriculture Organization of the United Nations. Includes cowpeas but excludes broad beans.



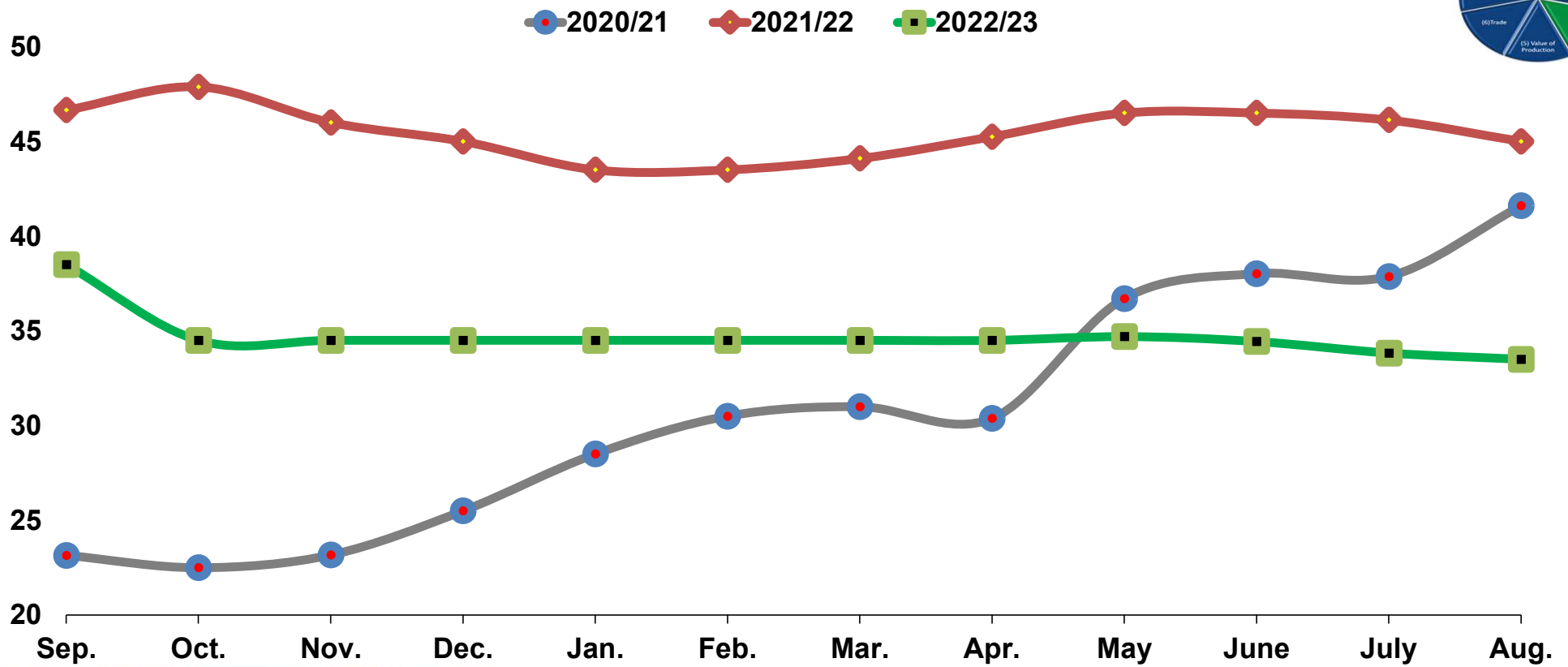


# U.S. dry beans: Production trends higher in the long-term

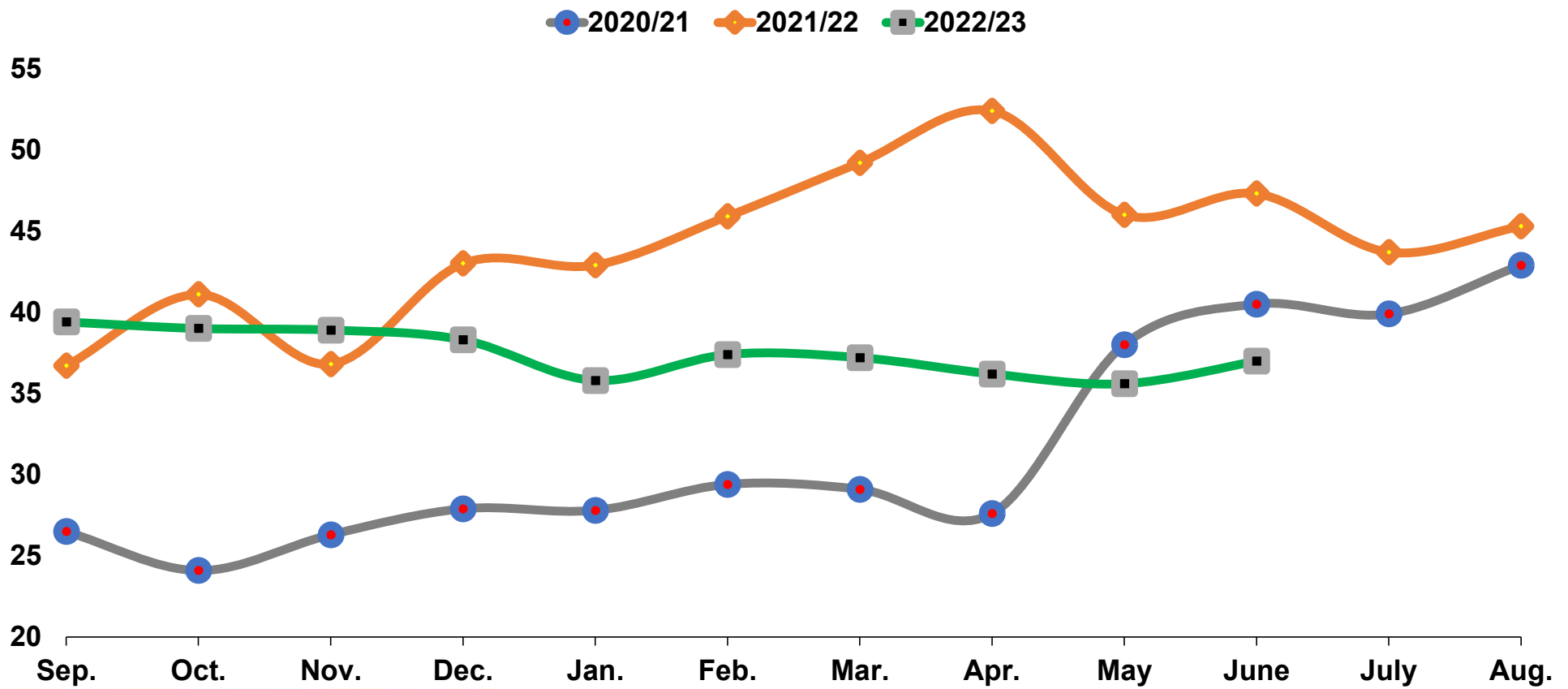
Million cwt



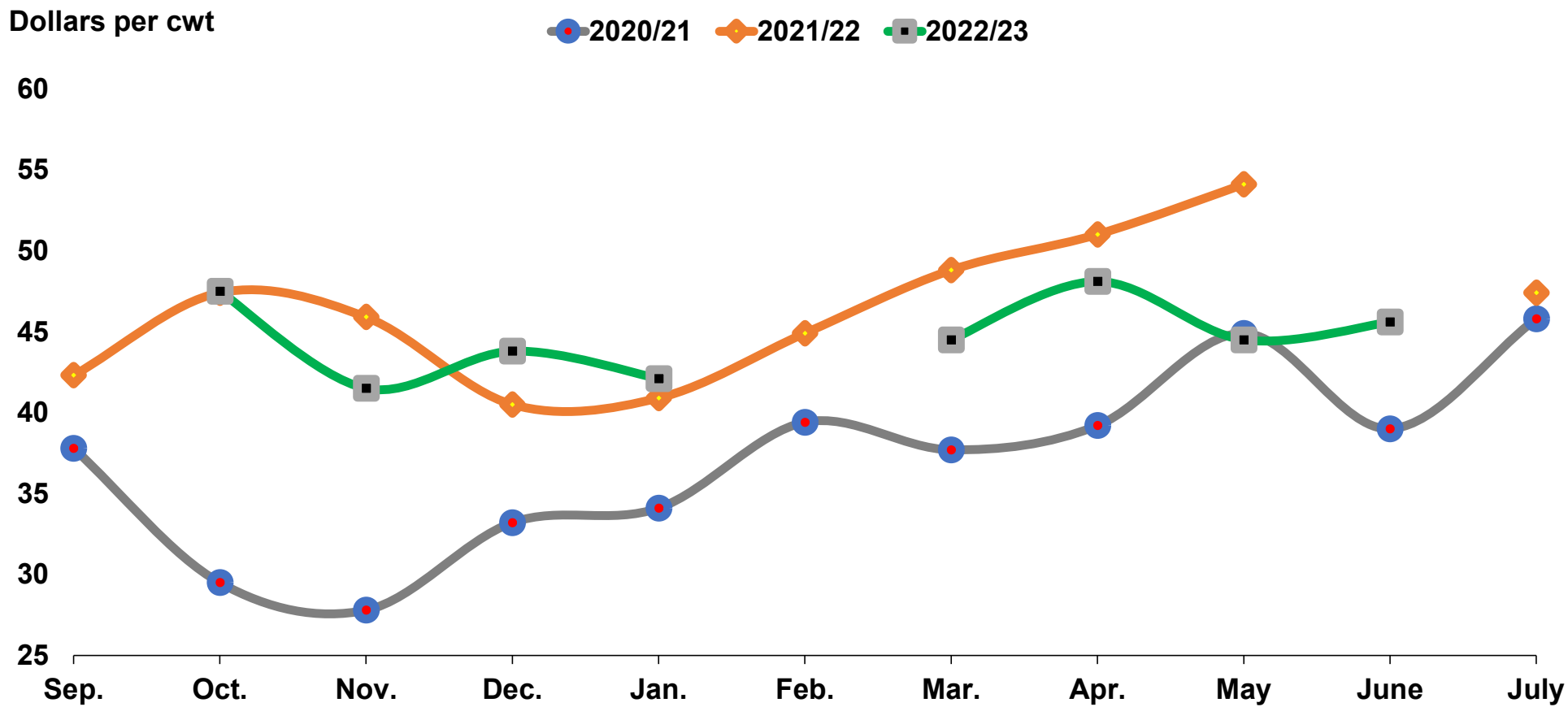
# U.S. dry beans, excluding chickpeas: Monthly grower prices in 2022/23 below the high levels experienced a year earlier



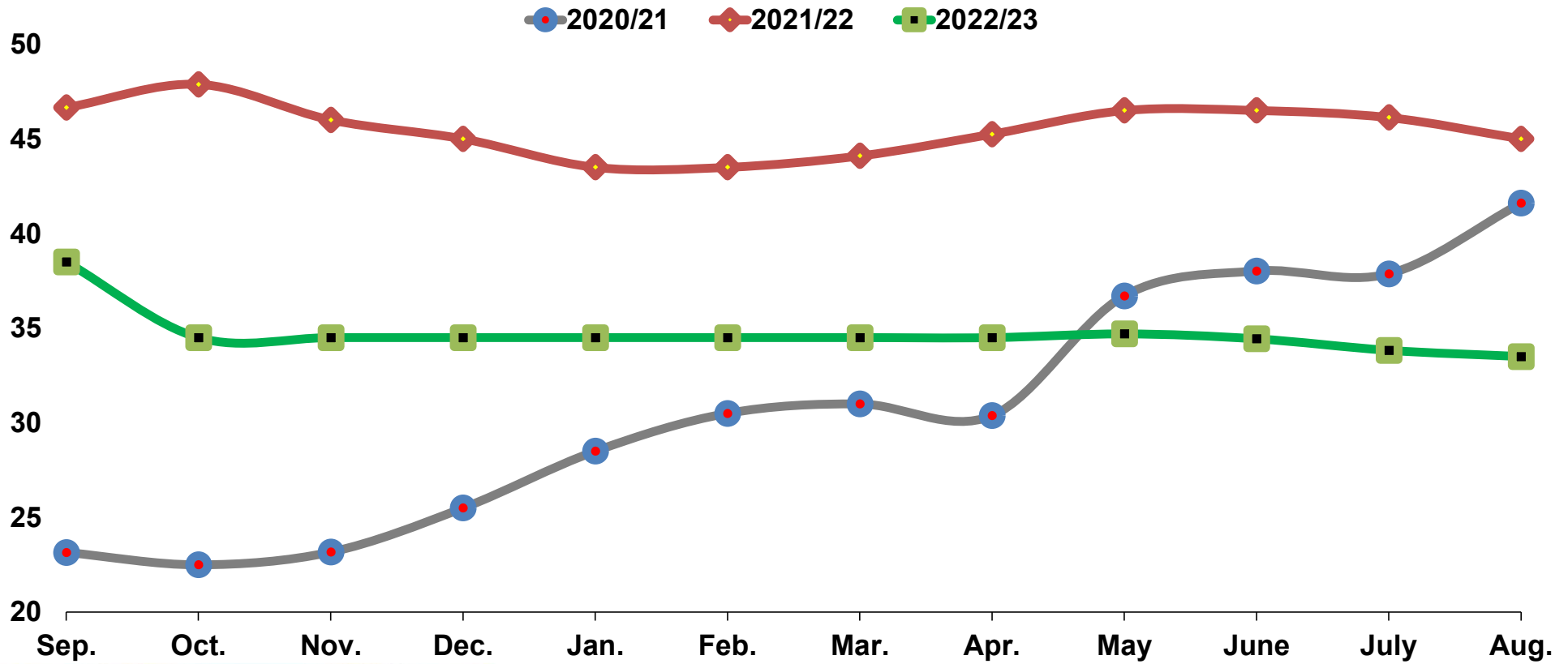
# North Dakota dry beans: Monthly grower prices



# Michigan dry beans: Monthly grower prices



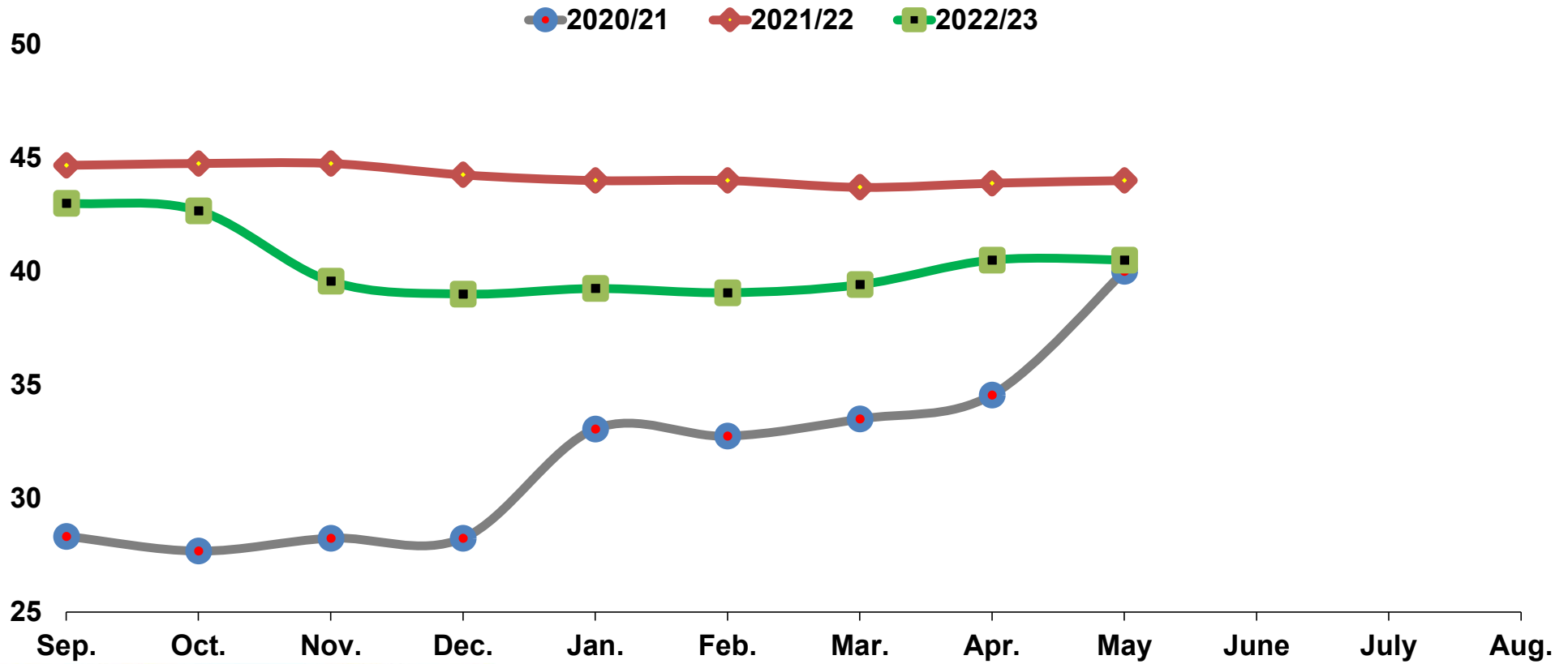
## Pinto beans, ND/MN: Monthly grower prices in 2022/23 below the high levels from previous year



Source: USDA, Agricultural Marketing Service, Bean Market News.



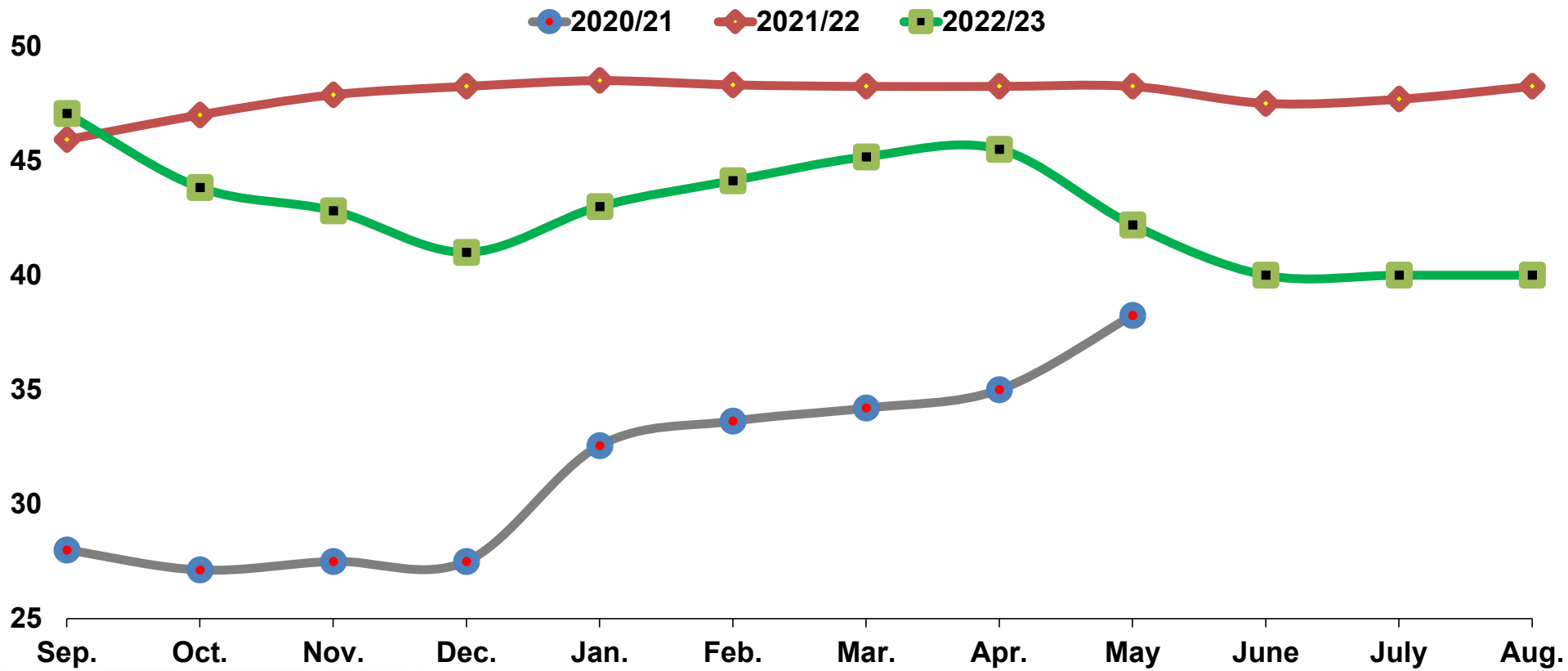
# Navy beans, MI: Monthly grower prices



Source: USDA, Agricultural Marketing Service, Bean Market News.



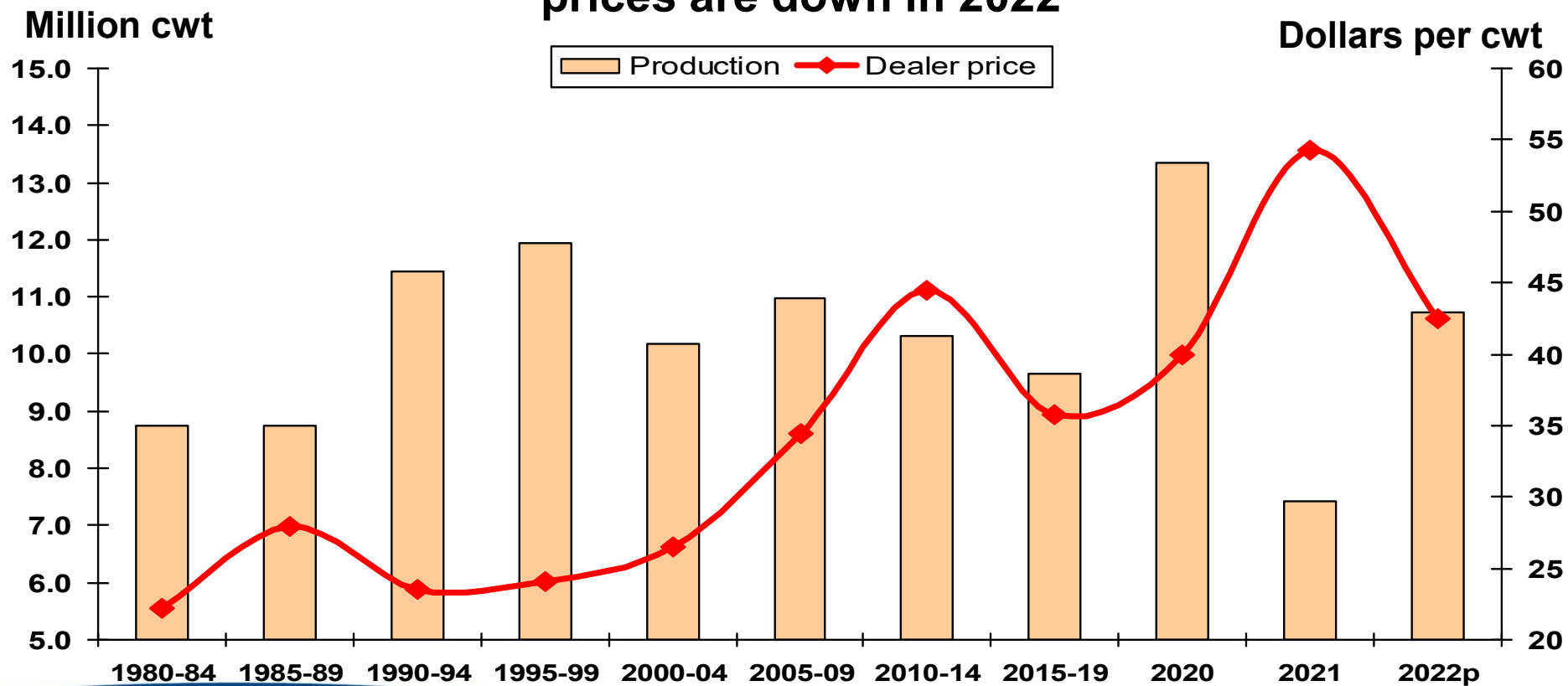
# Black beans, MI: Monthly grower prices



Source: "Bean Market News", AMS, USDA.



## U.S. pinto beans: Production rises while dealer crop year prices are down in 2022



Source: USDA, National Agricultural Statistics Service and USDA, Agricultural Marketing Service

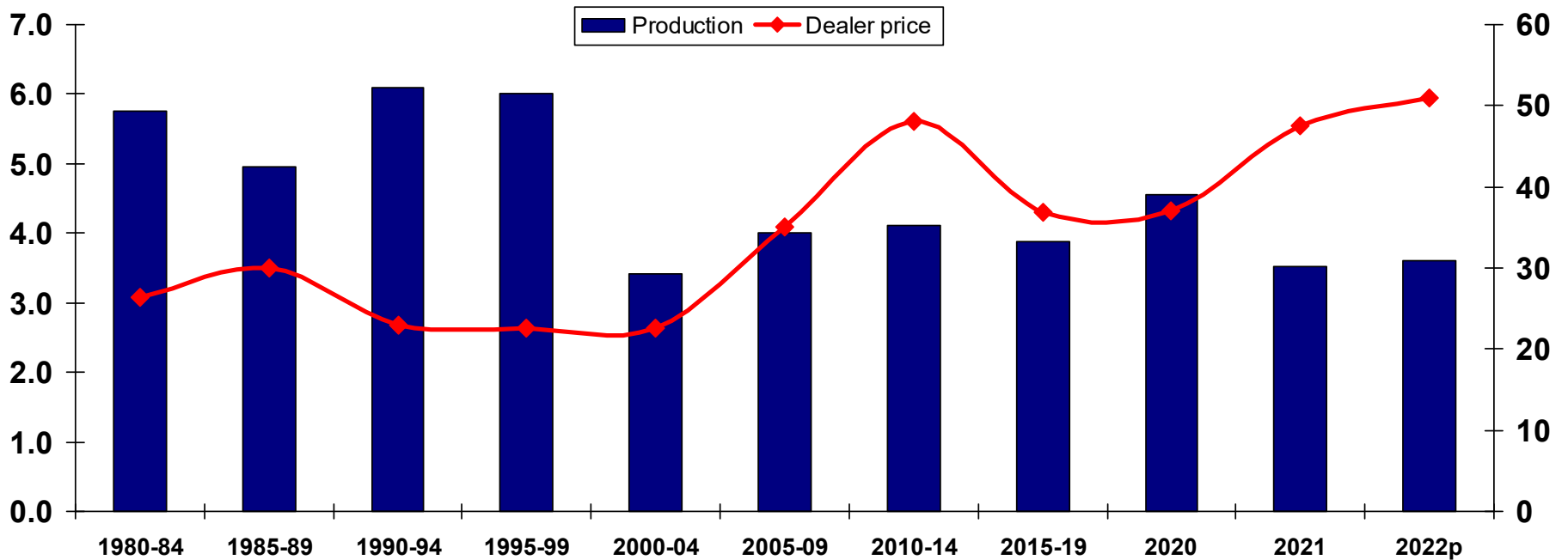




# U.S. navy beans: Production and dealer crop year price both rise slightly

Million cwt

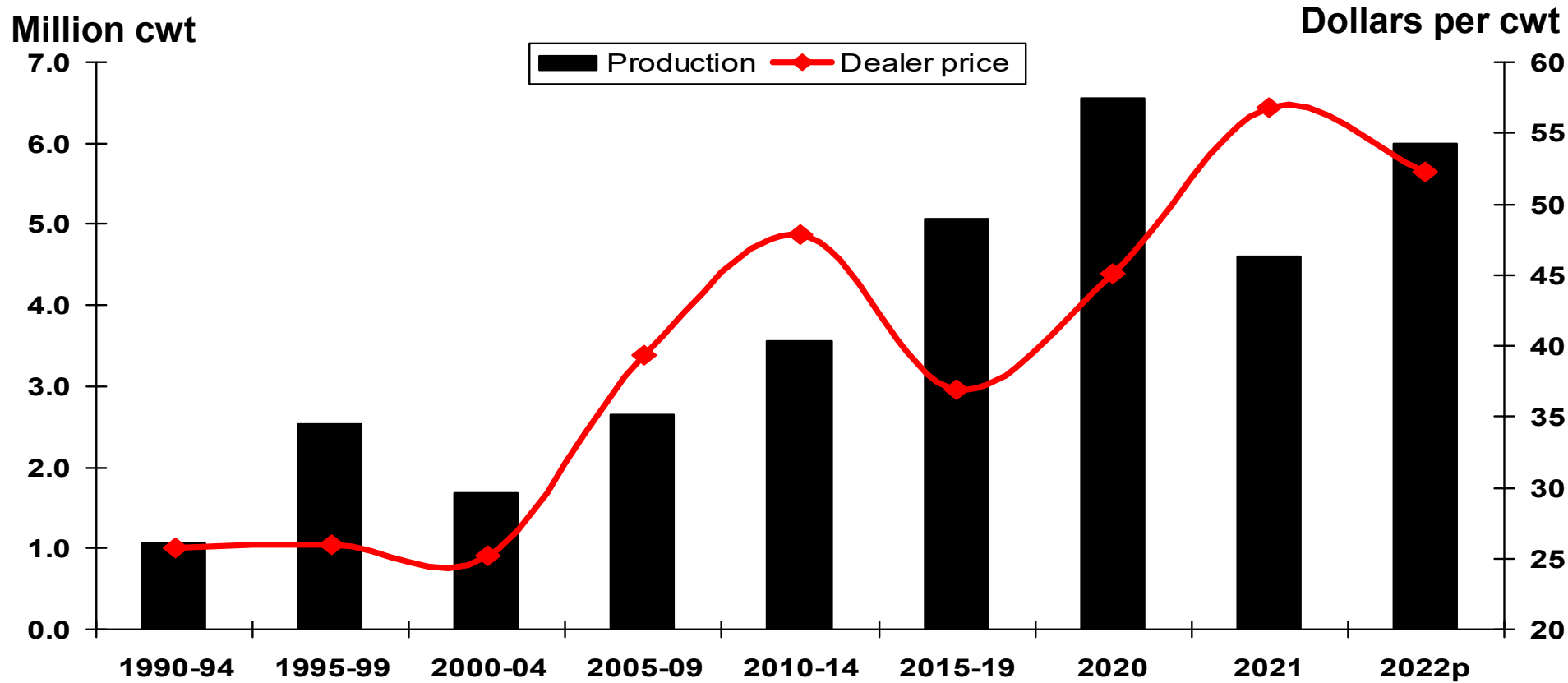
Dollars per cwt



Source: USDA, National Agricultural Statistics Service and USDA, Agricultural Marketing Service



# U.S. black beans: Production rises and dealer crop year price declines in 2022



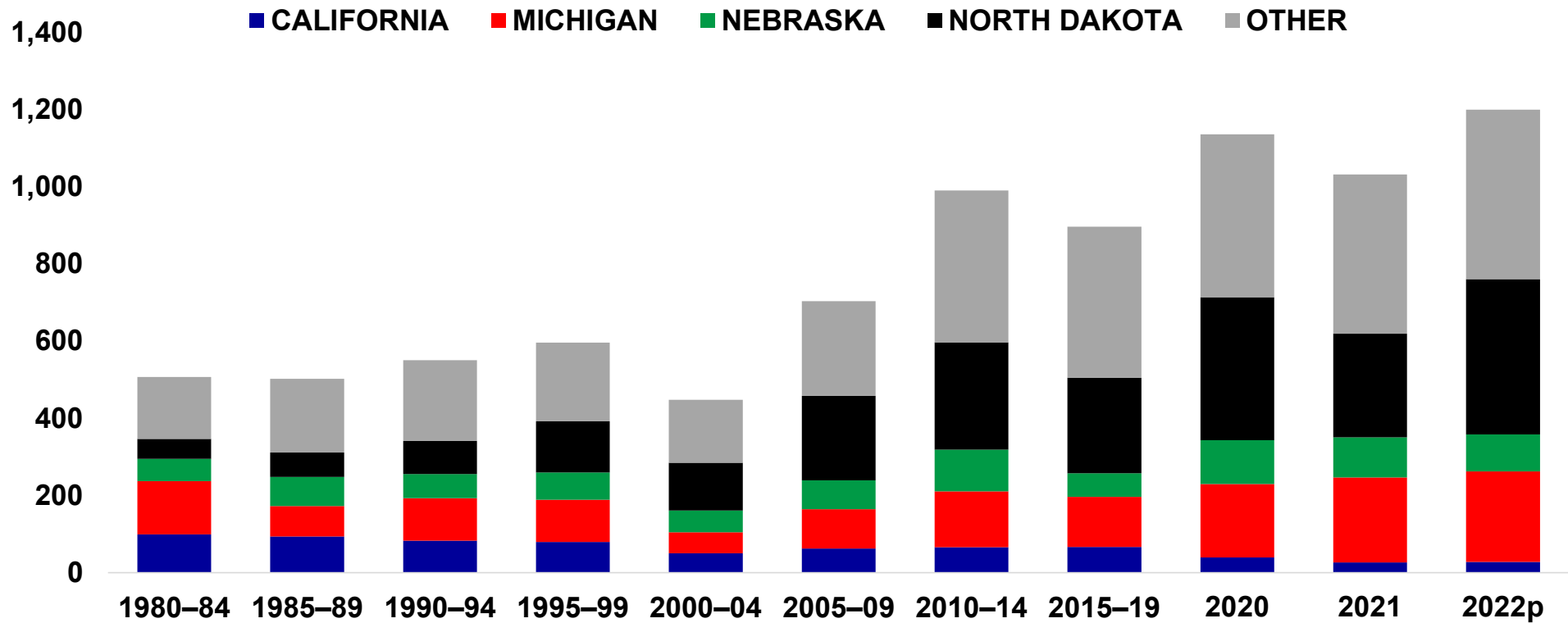
Source: USDA, National Agricultural Statistics Service and USDA, Agricultural Marketing Service



# U.S. dry beans: State value of production rises in North Dakota and Michigan while California and Nebraska Shrink

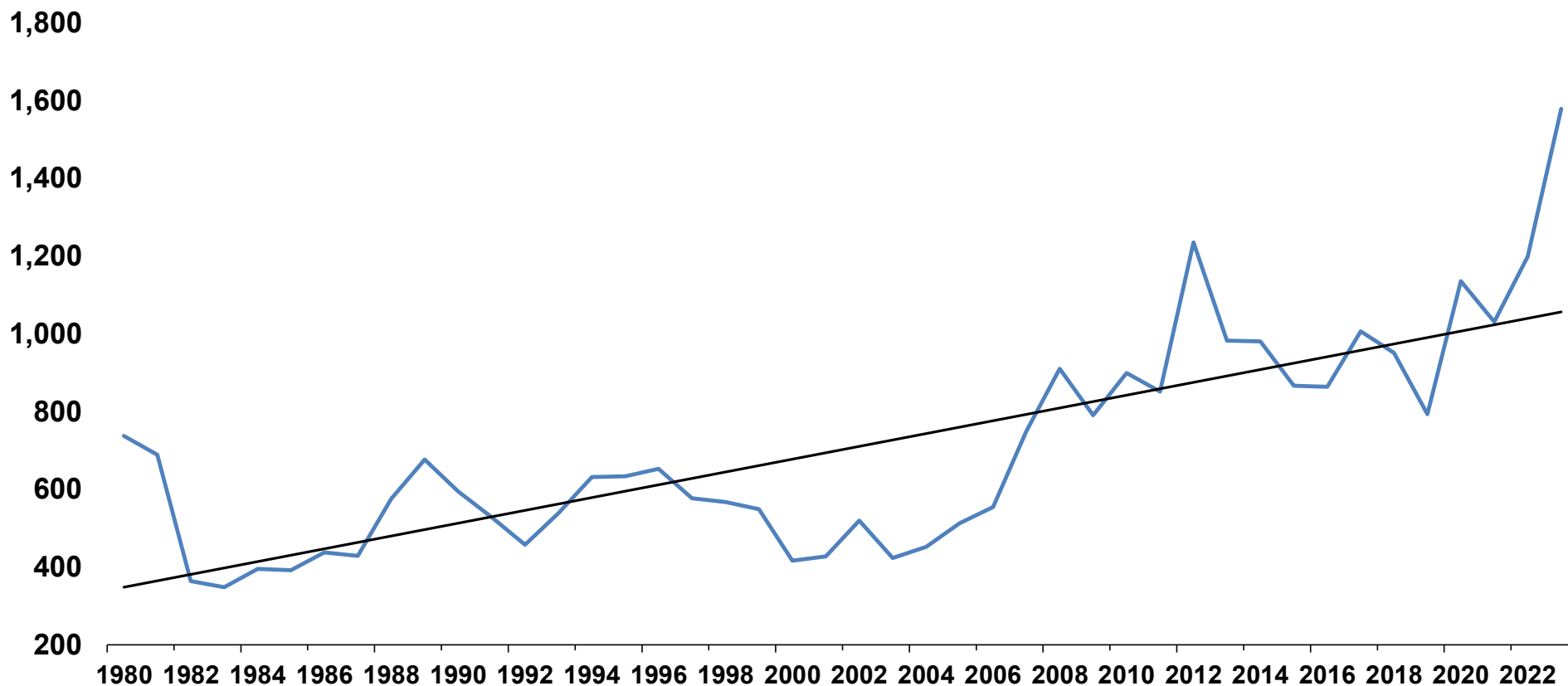


Million dollars

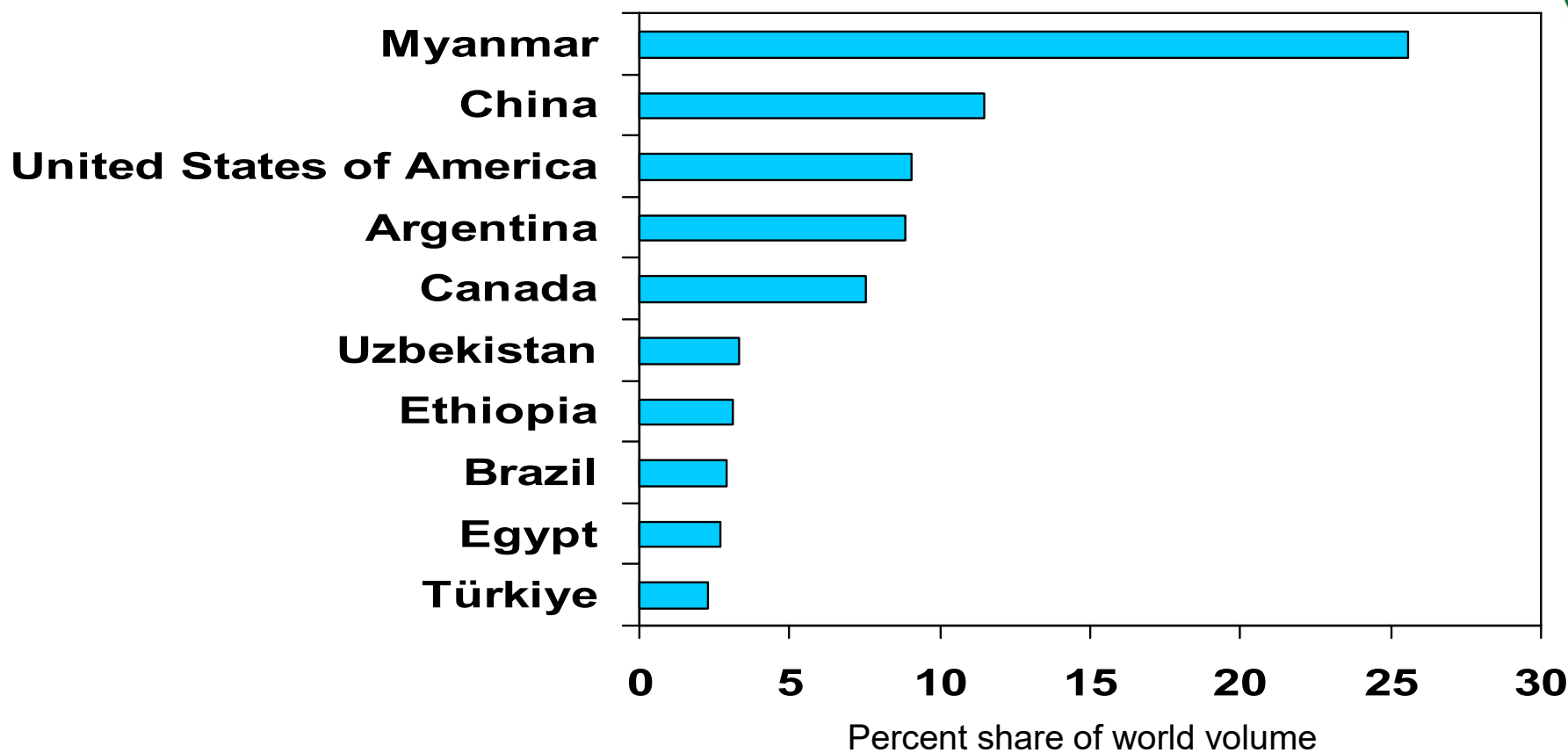
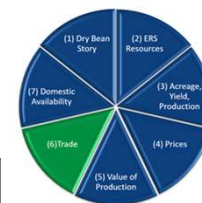


# U.S. dry beans: Value of production

Million dollars



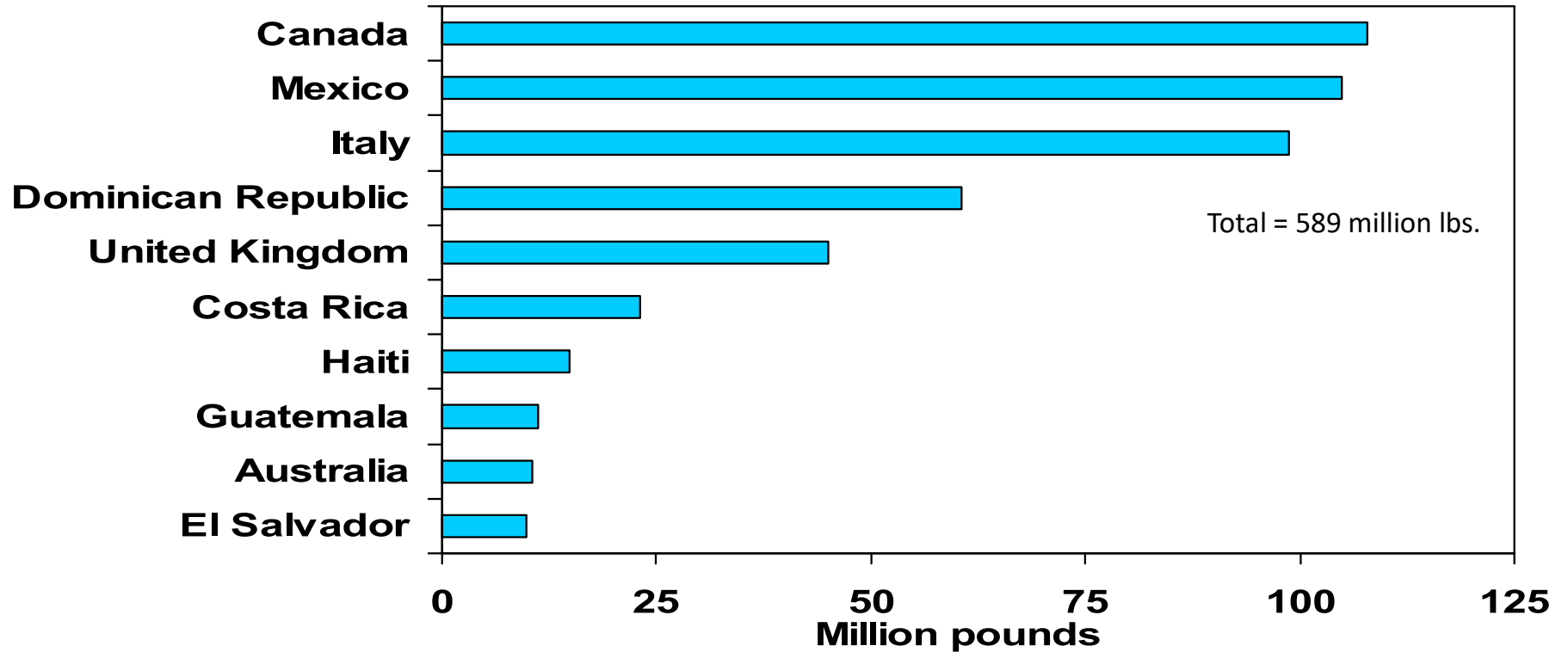
# Top world dry bean exporters, 2019–2021



Source: FAOStat, Food and Agriculture Organization of the United Nations.



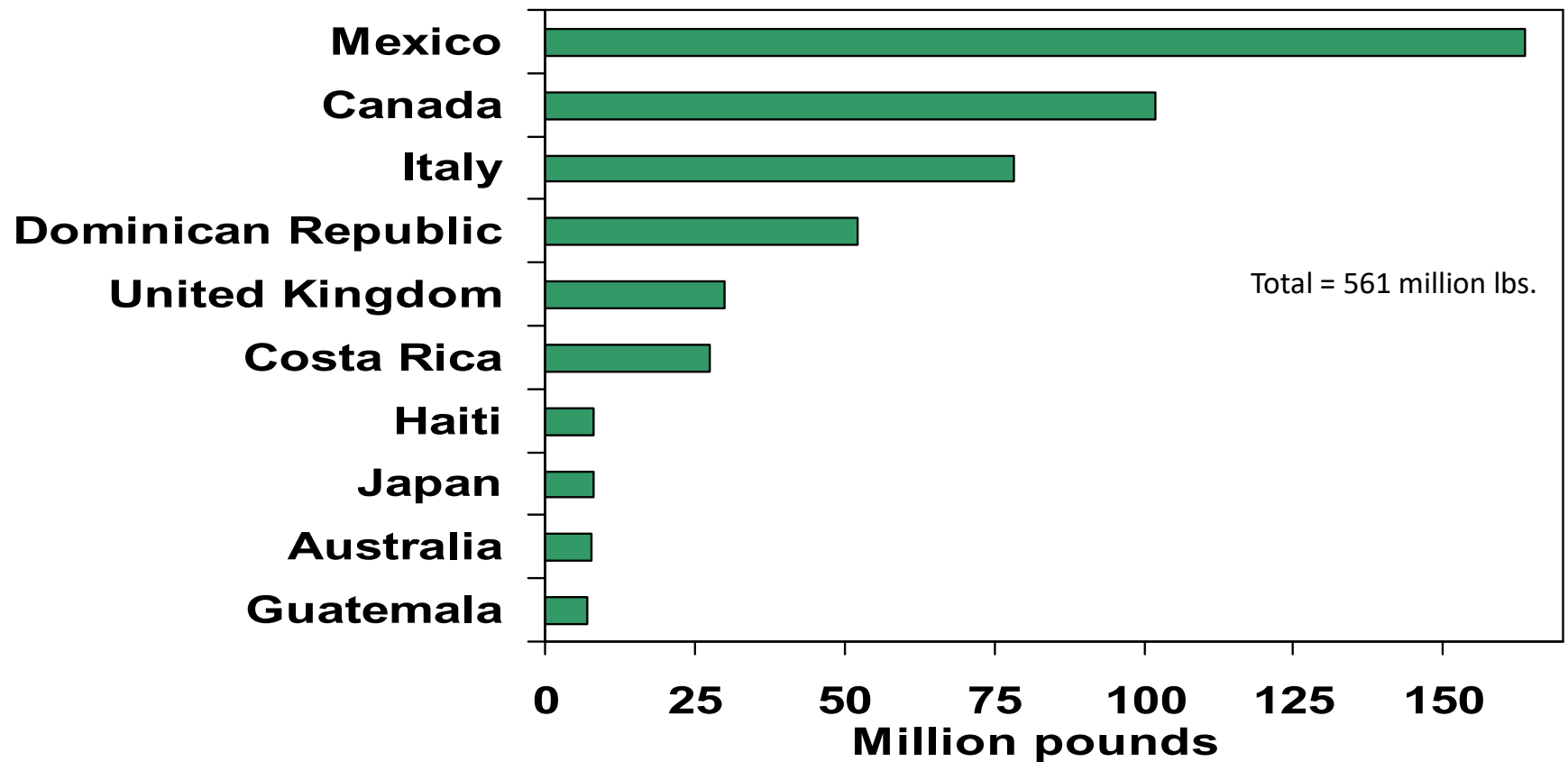
# U.S. dry bean crop year exports: Top markets, 2021/22 1/



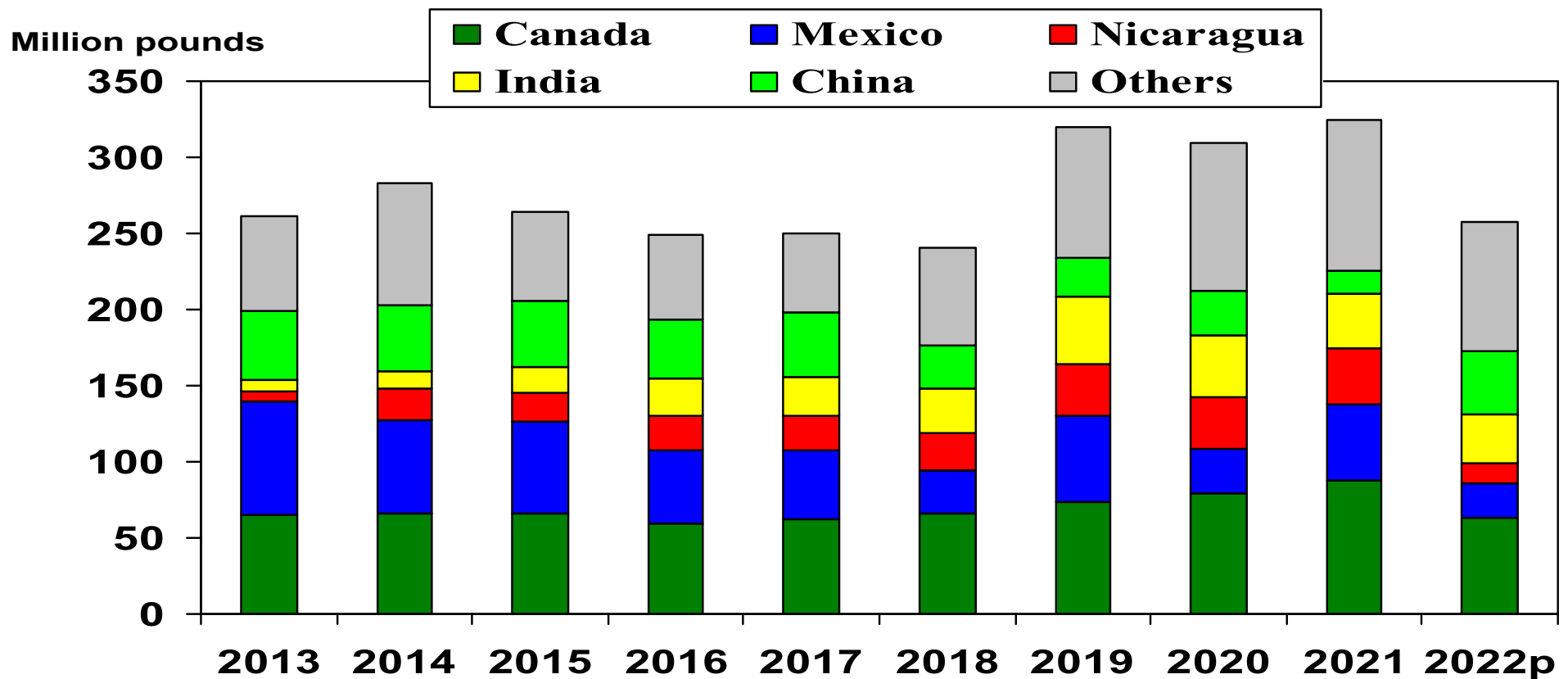
Source: U.S. Department of Commerce, Bureau of the Census.



# U.S. dry bean crop year exports: Top markets, 2022/23 1/

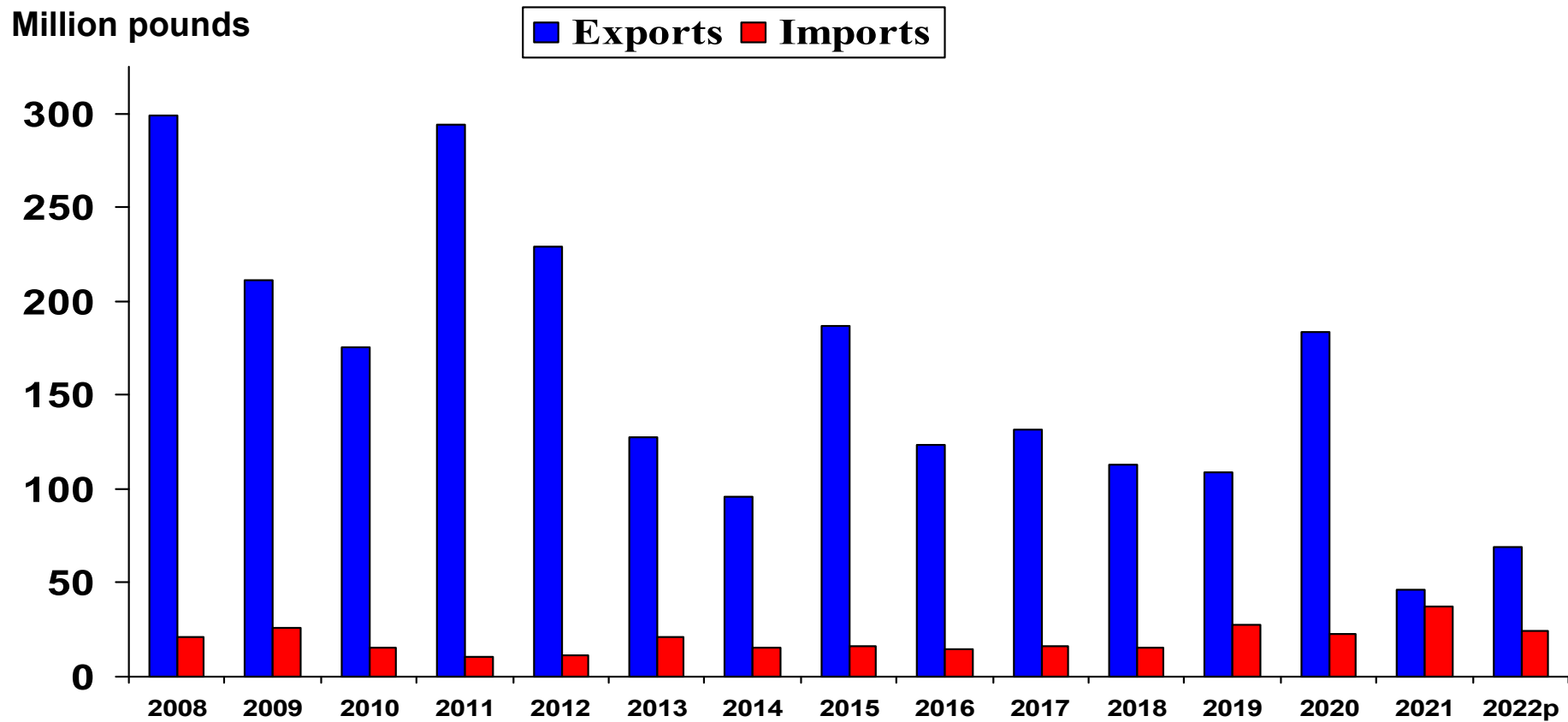


# U.S. dry beans: Crop year import volume/1





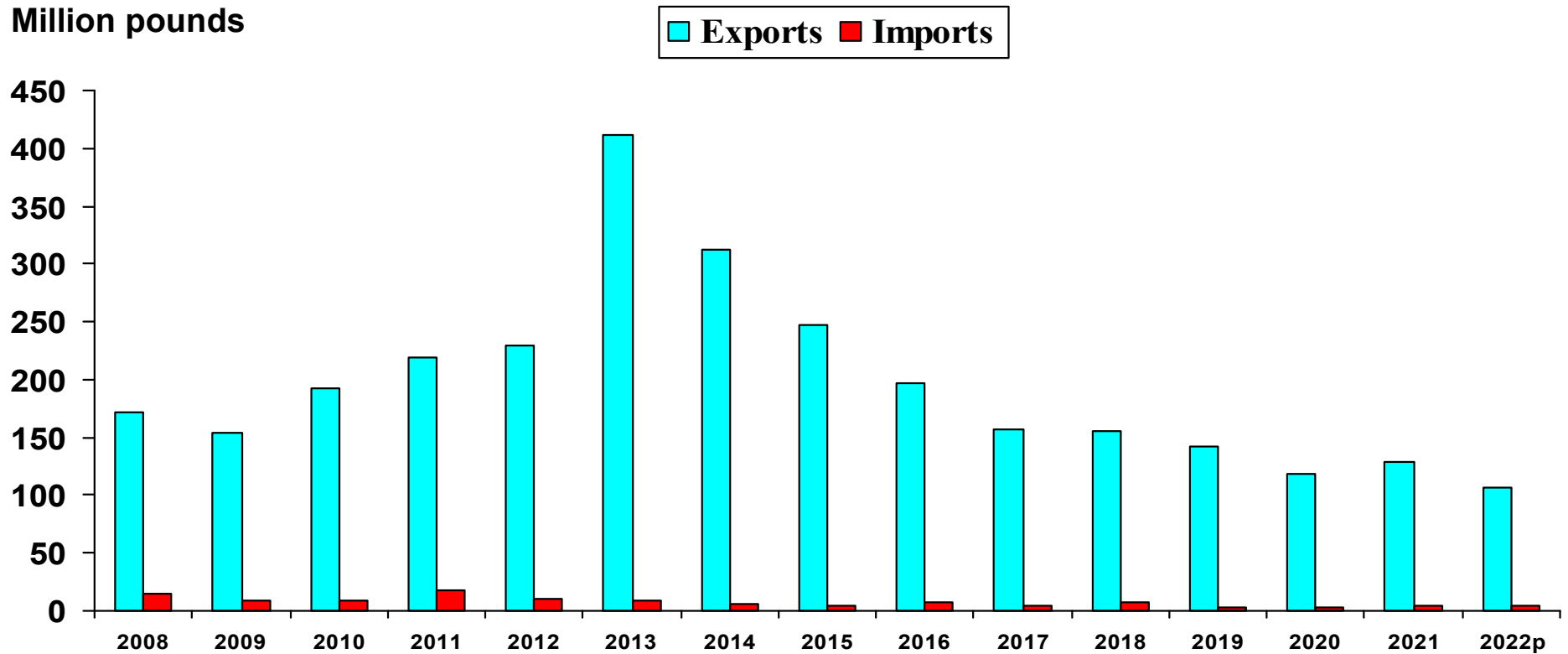
# U.S. pinto beans: Crop year trade volume



Source: U.S. Department of Commerce, Bureau of the Census.



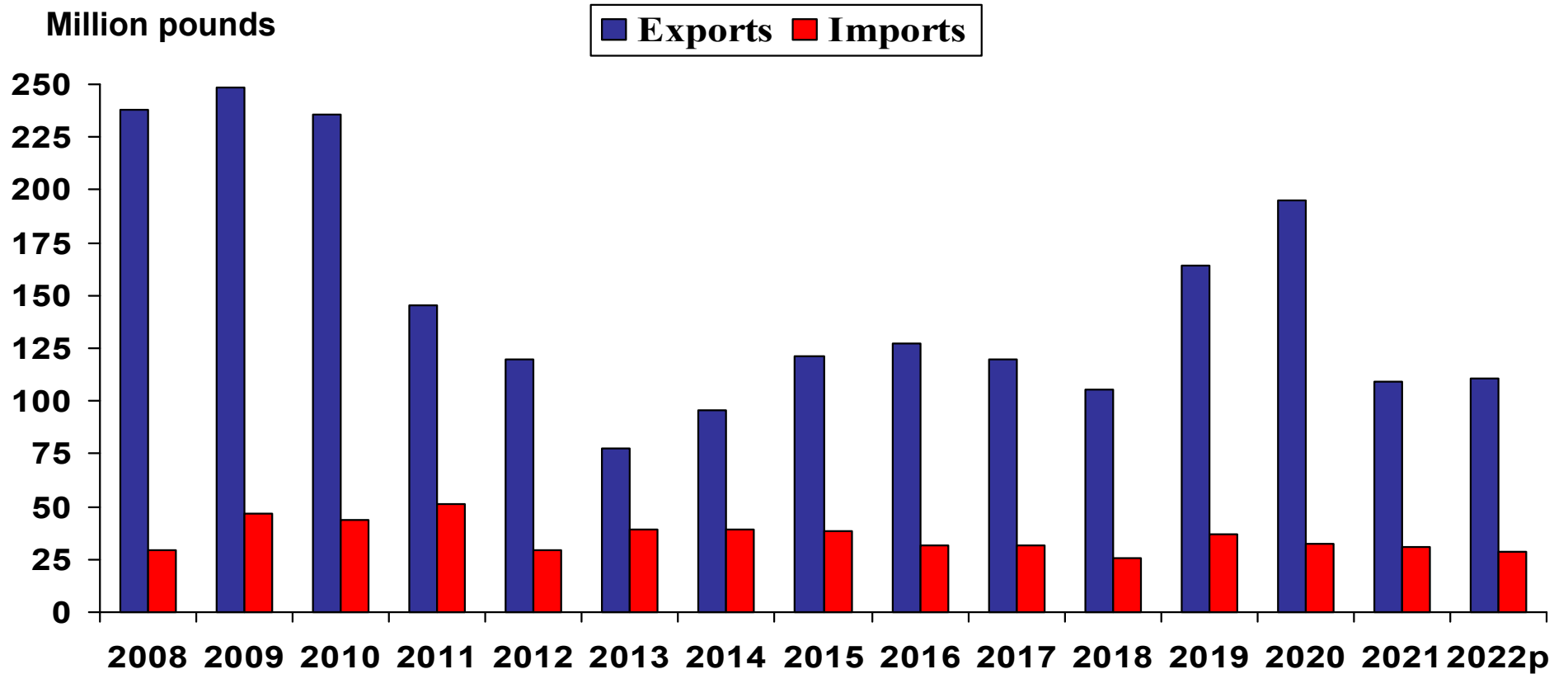
# U.S. navy beans: Crop year trade volume



Source: U.S. Department of Commerce, Bureau of the Census.



# U.S. black beans: Crop year trade volume



Source: U.S. Department of Commerce, Bureau of the Census.

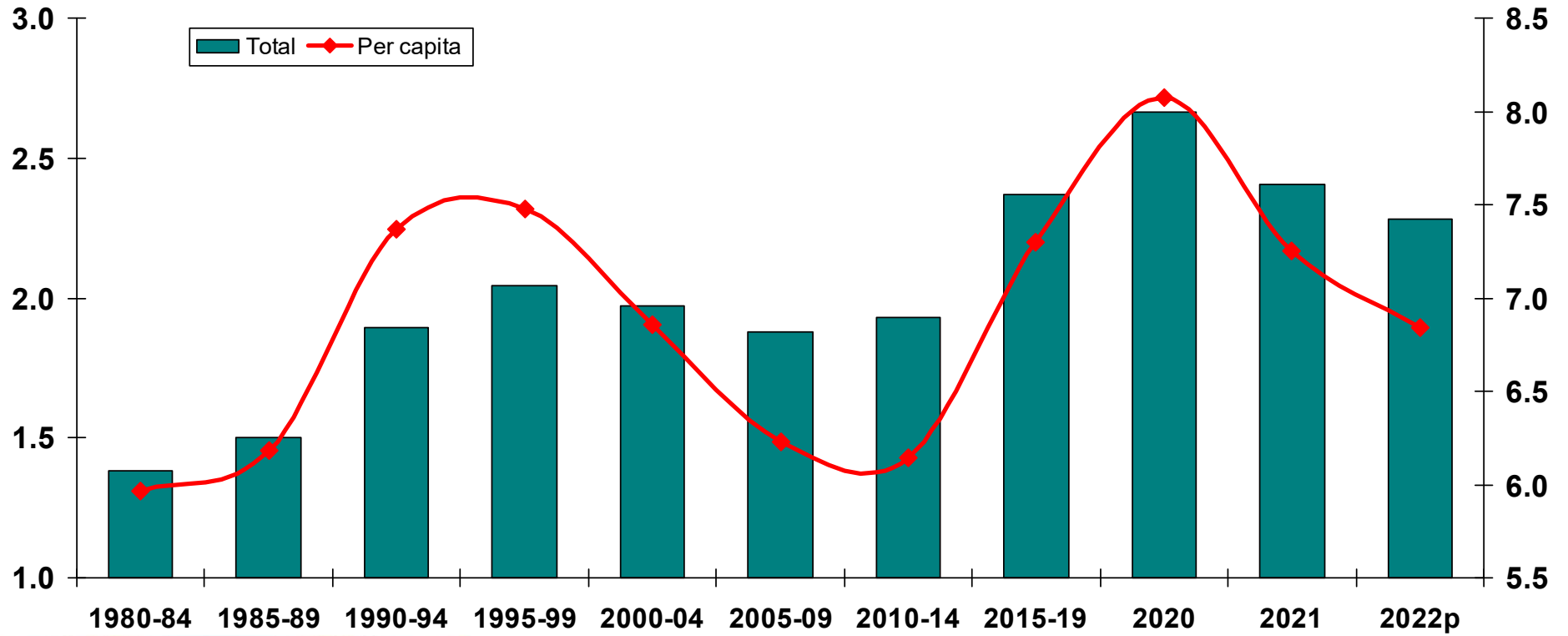




# U.S. dry beans: Domestic availability

Billion pounds

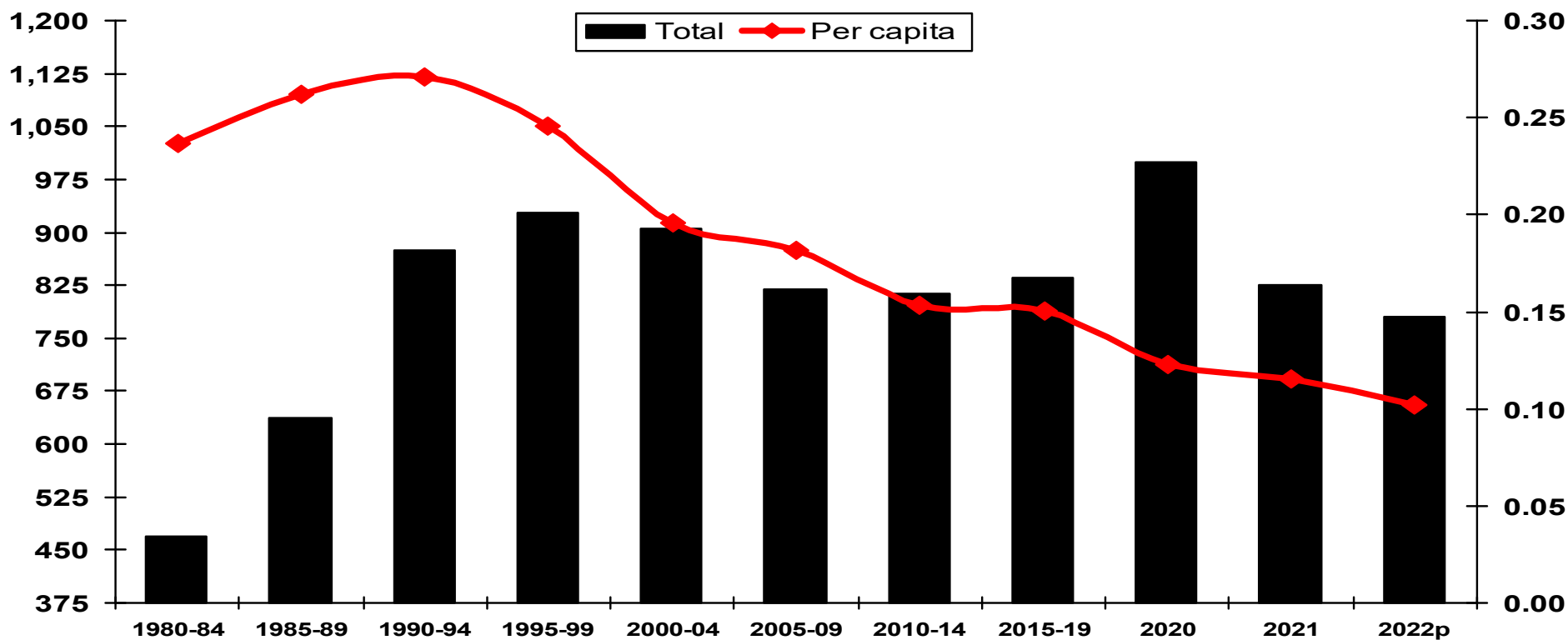
Pounds per person



# U.S. black beans: Domestic availability

Million pounds

Pounds per person

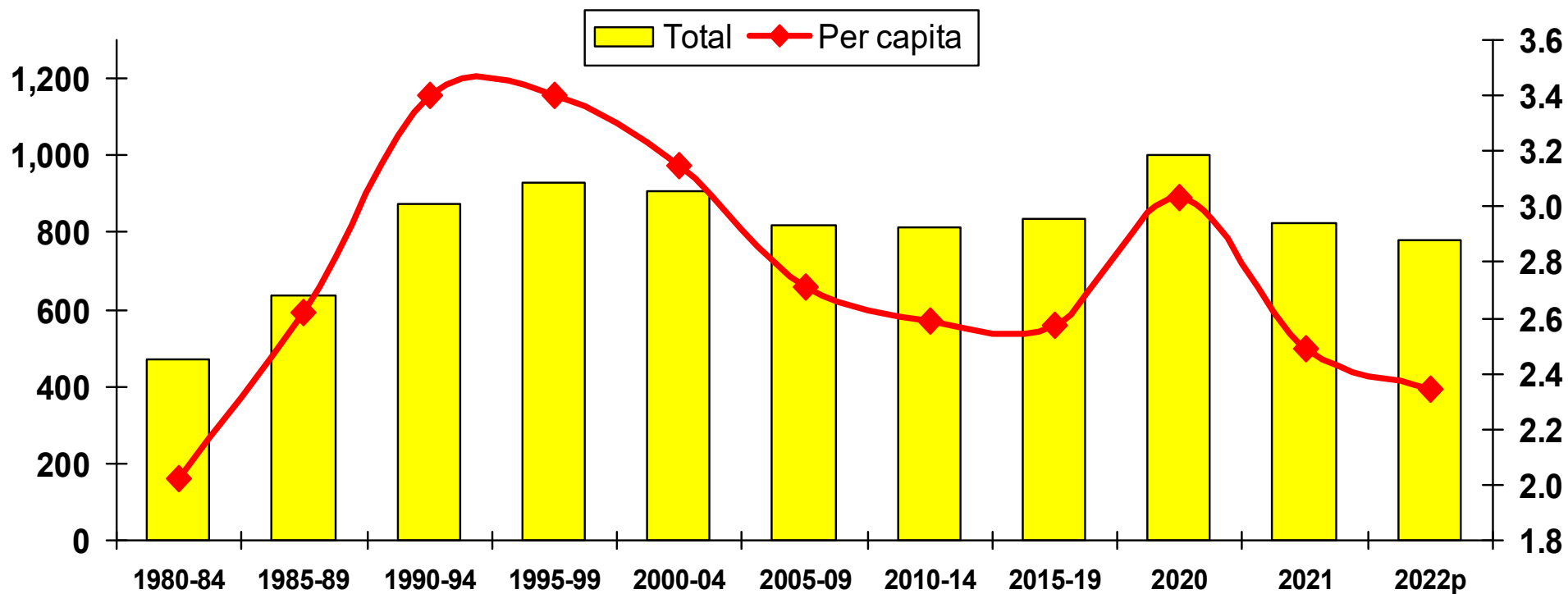


Source: USDA, Economic Research Service.

# U.S. pinto beans: Domestic availability

Million pounds

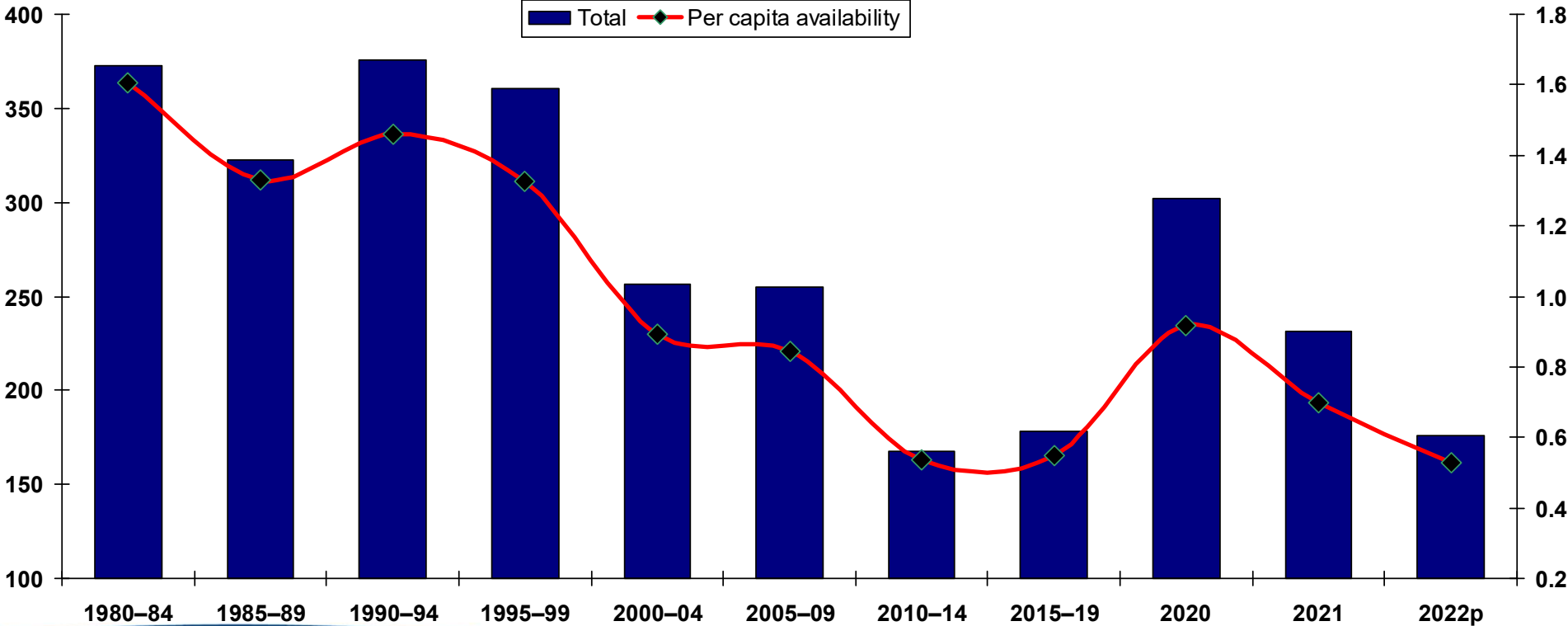
Pounds per person



# U.S. navy beans: Domestic availability

Million pounds

Pounds per person



Source: USDA, Economic Research Service.



# Recap, Resources, and Reach Out

**A Dry Bean Story**  
\* Bailey Farms \*

USDA Economic Research Service

**Bailey Farm Bet — Experience vs. Youth**

**A Dry Bean Story**  
\* Bailey Farms \*

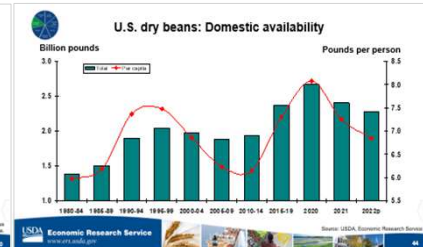
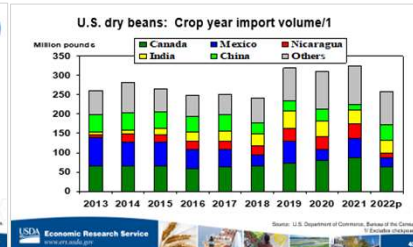
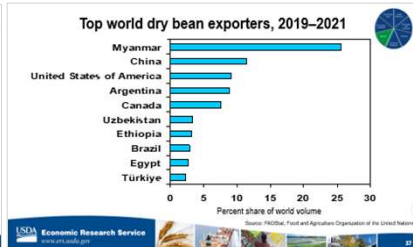
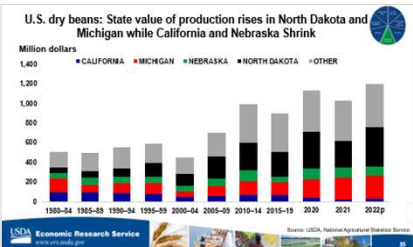
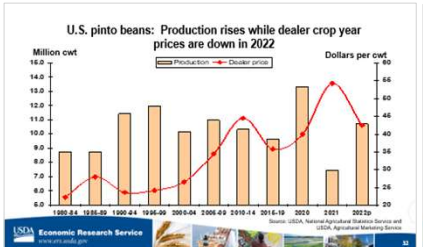
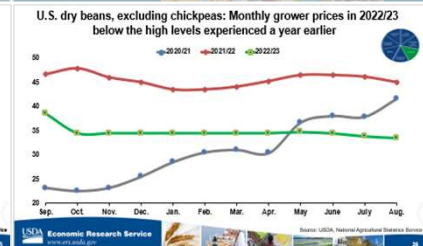
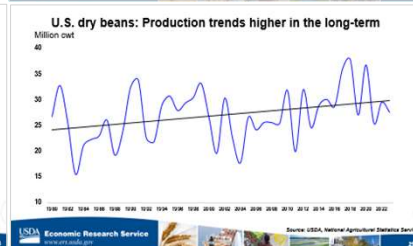
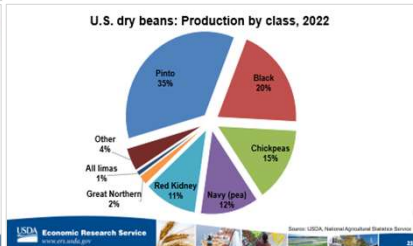
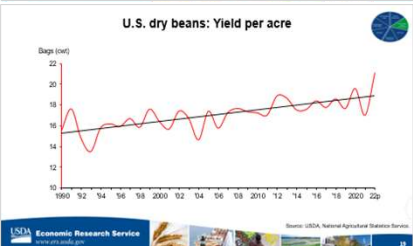
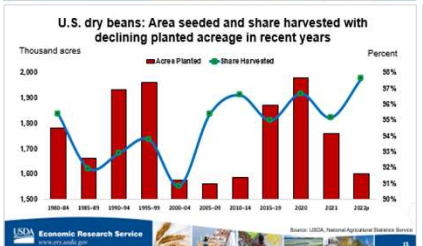
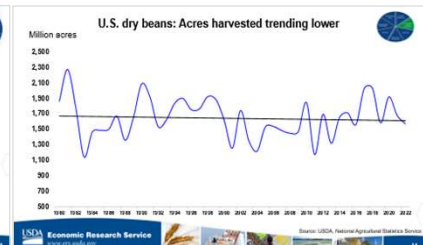
USDA Economic Research Service

**A Dry Bean Story**  
\* Bailey Farms \*

USDA Economic Research Service

**ERS Specialty Crop Resources for Pulse Crops**

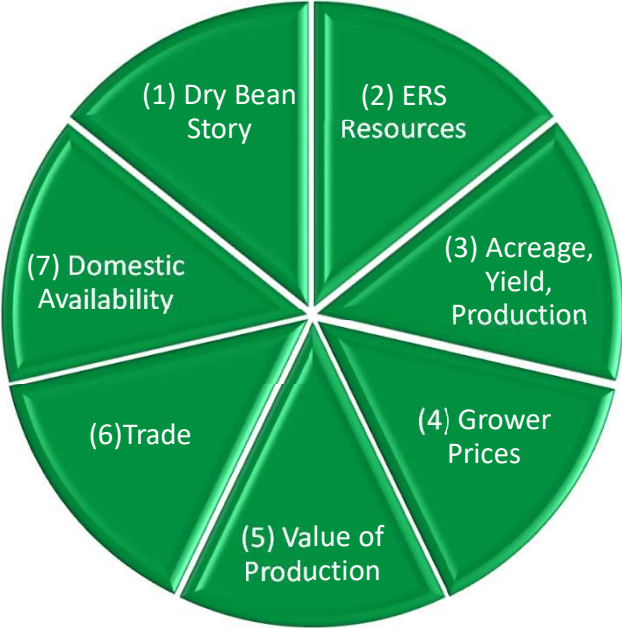
USDA Economic Research Service





# Recap, Resources, and Reach Out

Wilma V. Davis – Vegetables and Pulses Outlook Coordinator – [Wilma.Davis@usda.gov](mailto:Wilma.Davis@usda.gov)



Vegetables and Pulses Resources

www.ers.usda.gov/  
data-products/  
vegetables-and-pulses-data/



[www.ers.usda.gov/  
data-products/  
charts-of-note](http://www.ers.usda.gov/data-products/charts-of-note)

Wilma V. Davis

[Wilma.Davis@usda.gov](mailto:Wilma.Davis@usda.gov)

