

**Policy Changes, Trade
Tensions & Disputes: Focus on
Grains & Pulses**

*Policy Disputes Information
Consortium*

April 23-26, 2003

Montreal, Quebec

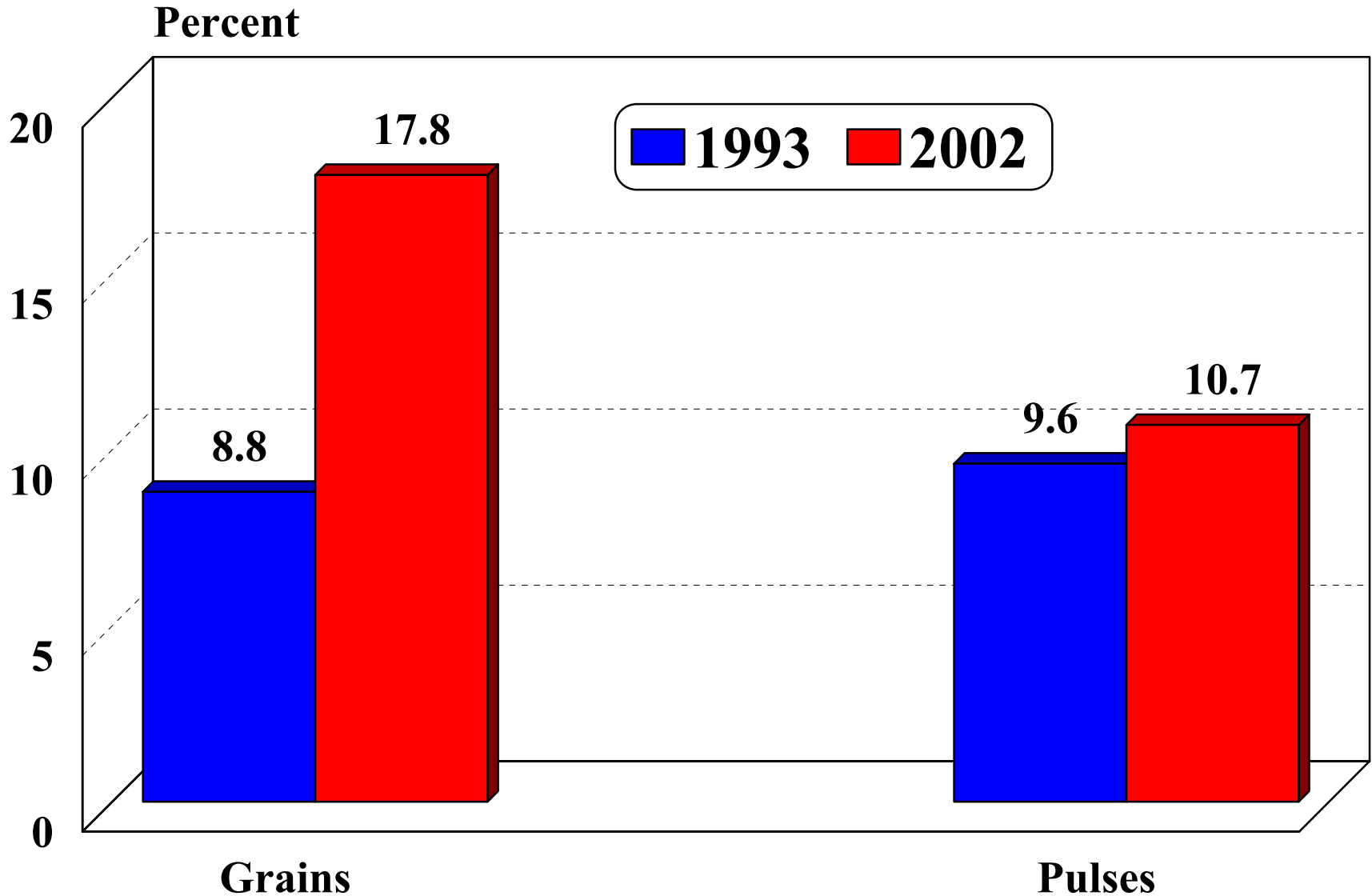
Parr Rosson & Flynn Adcock

Texas A&M University

Overview

- **Grain & Pulse Trade: Focus on World & North American Trends**
- **Farm Program Provisions Related to Pulses**
- **Potential for Trade Disputes**
 - **Corn**
 - **Pulses**
 - **Dry Beans**
- **Conclusions & Implications**

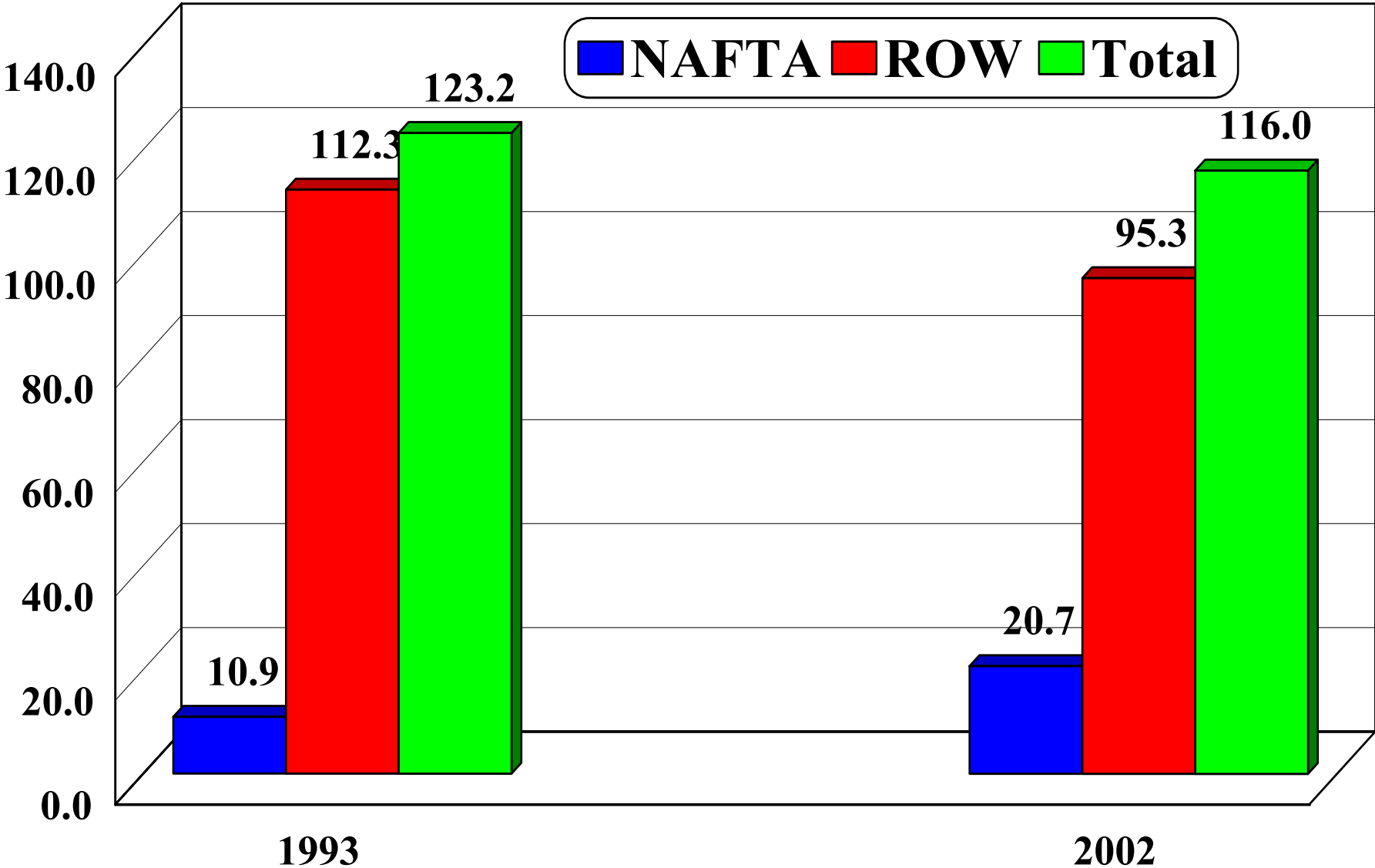
Intra-NAFTA Share of Total NAFTA Grain & Pulse Trade, 1993 & 2002



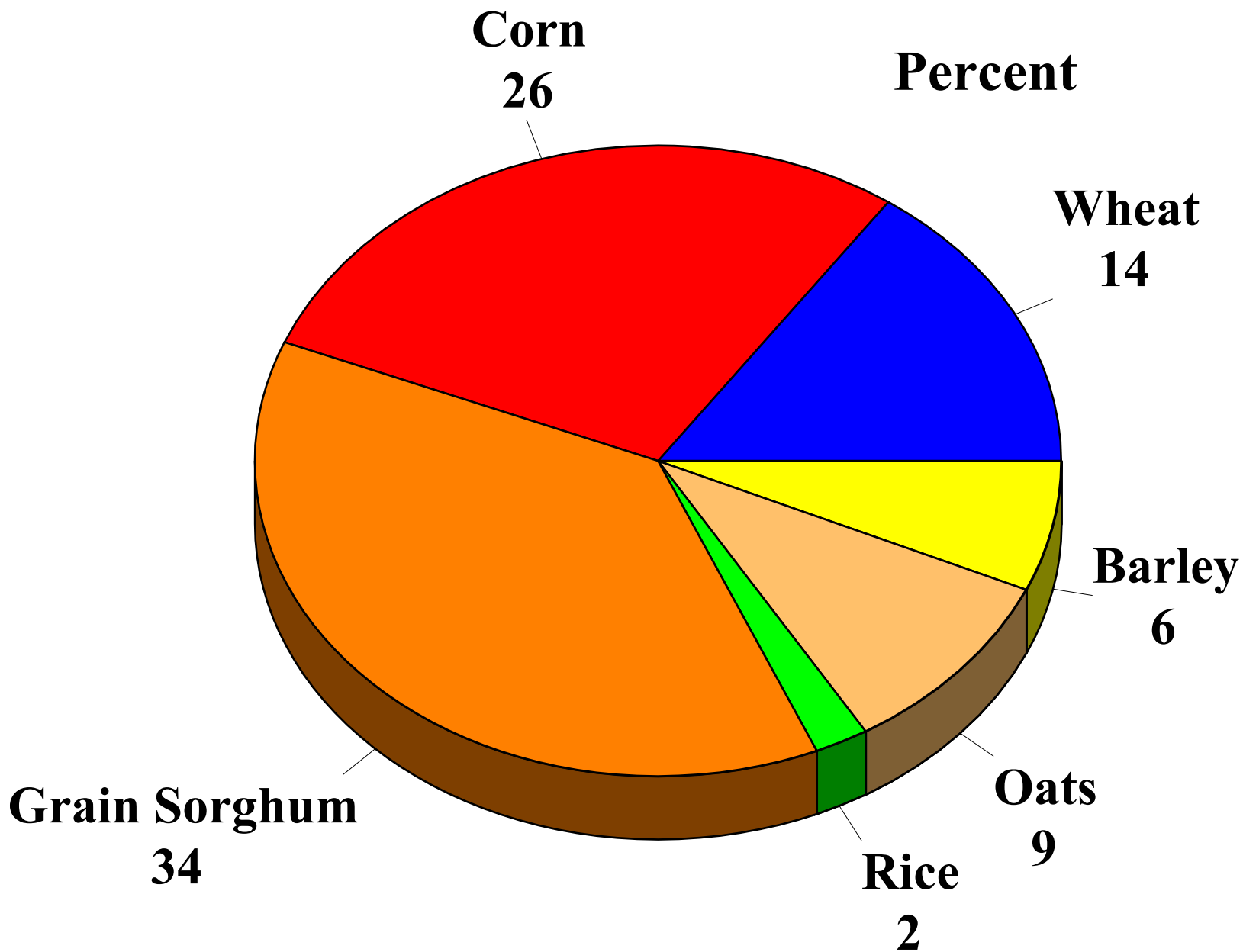
Intra-NAFTA & ROW Grain Trade

1,000 Metric Tons

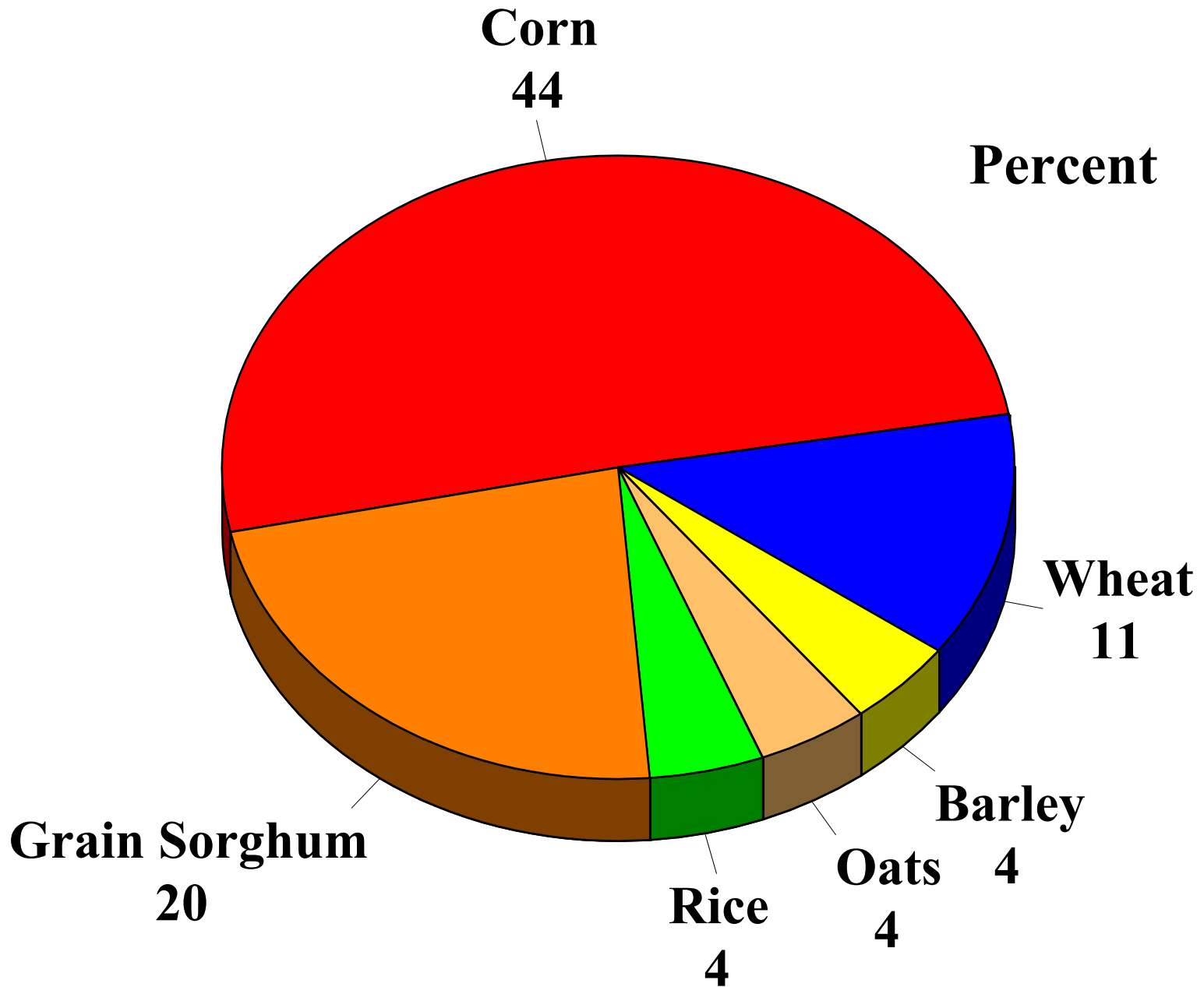
■ NAFTA ■ ROW ■ Total



Intra-NAFTA Grain Trade, 1993

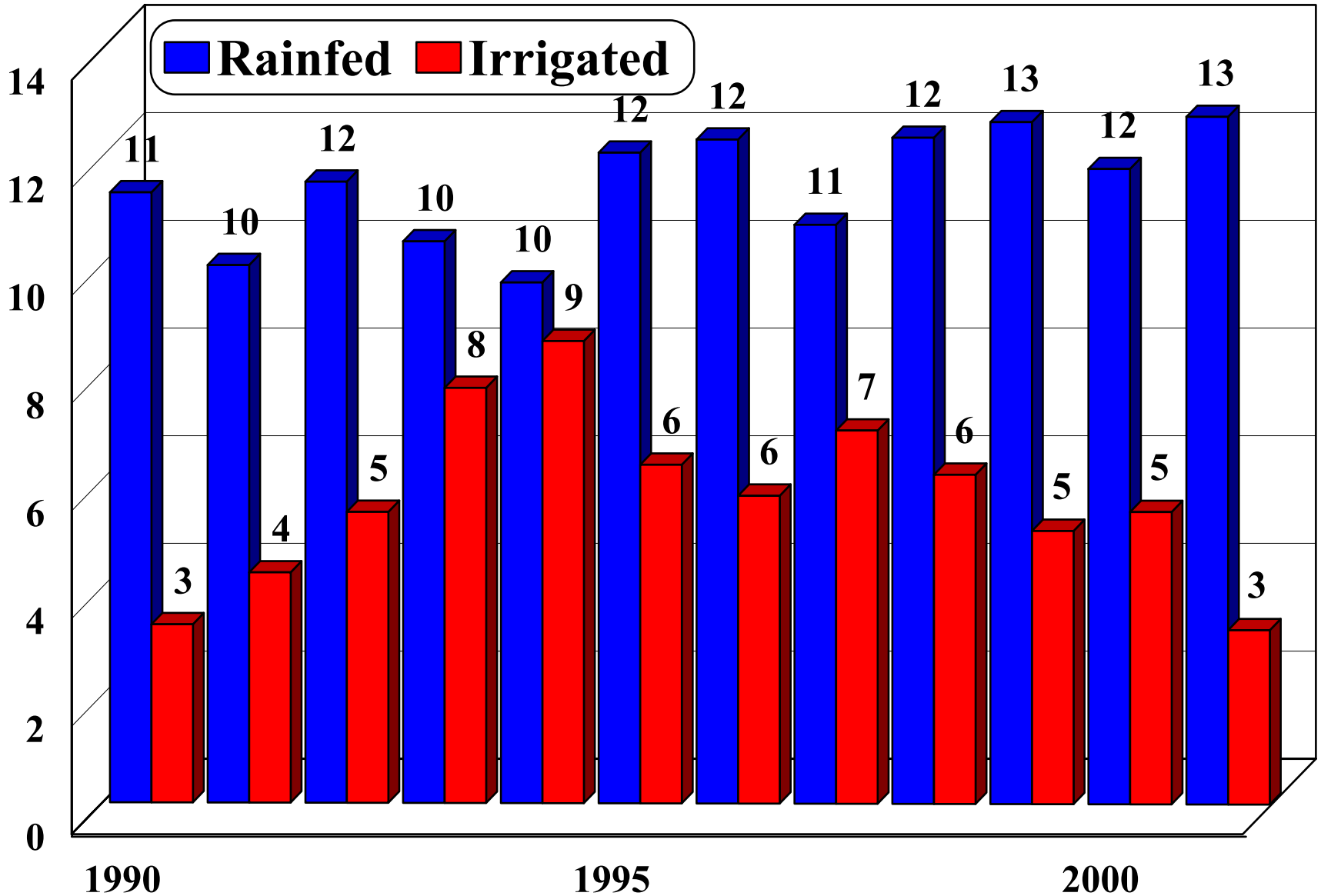


Intra-NAFTA Grain Trade, 2002

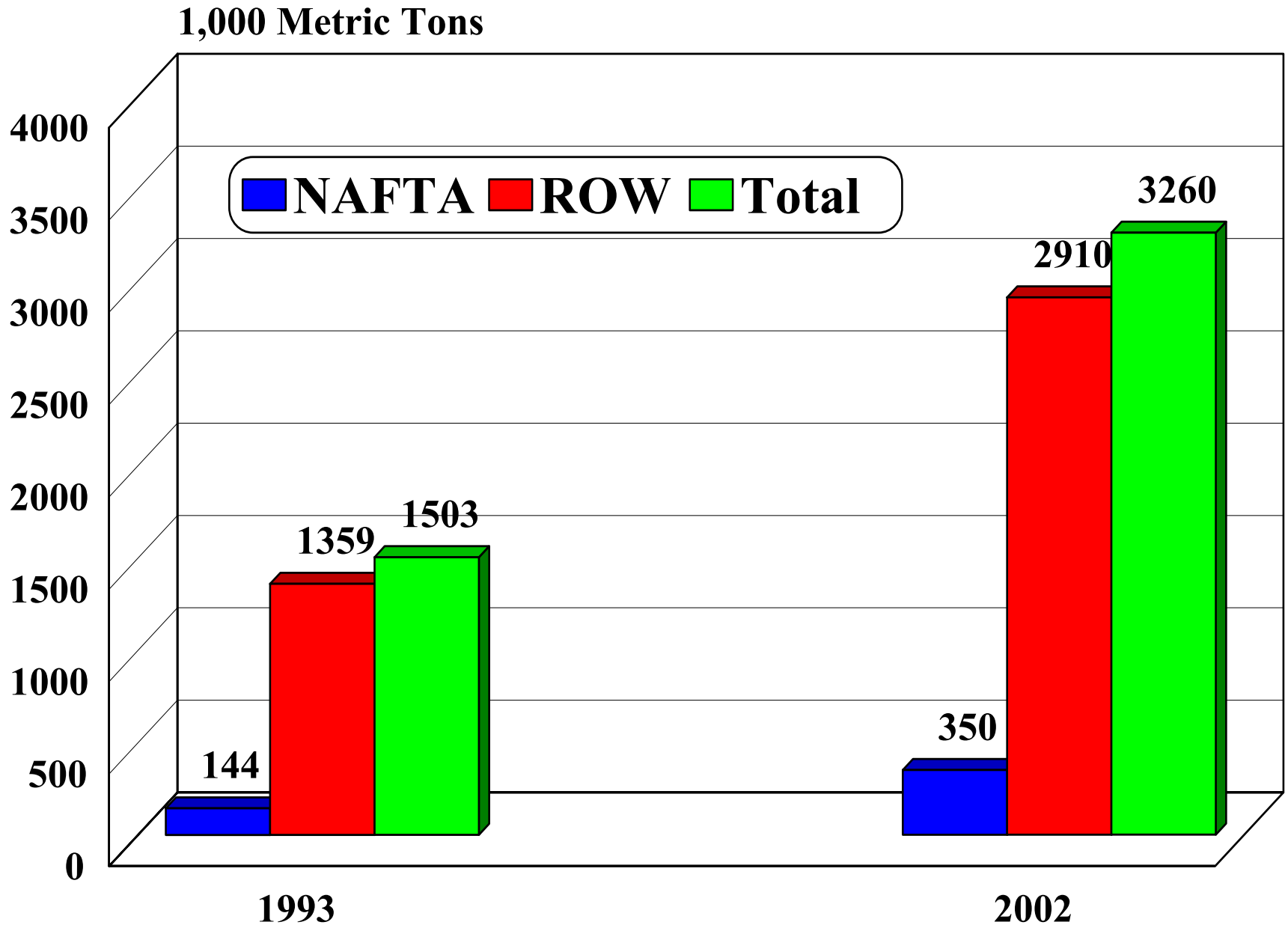


Mexican Corn Production

Million Metric Tons

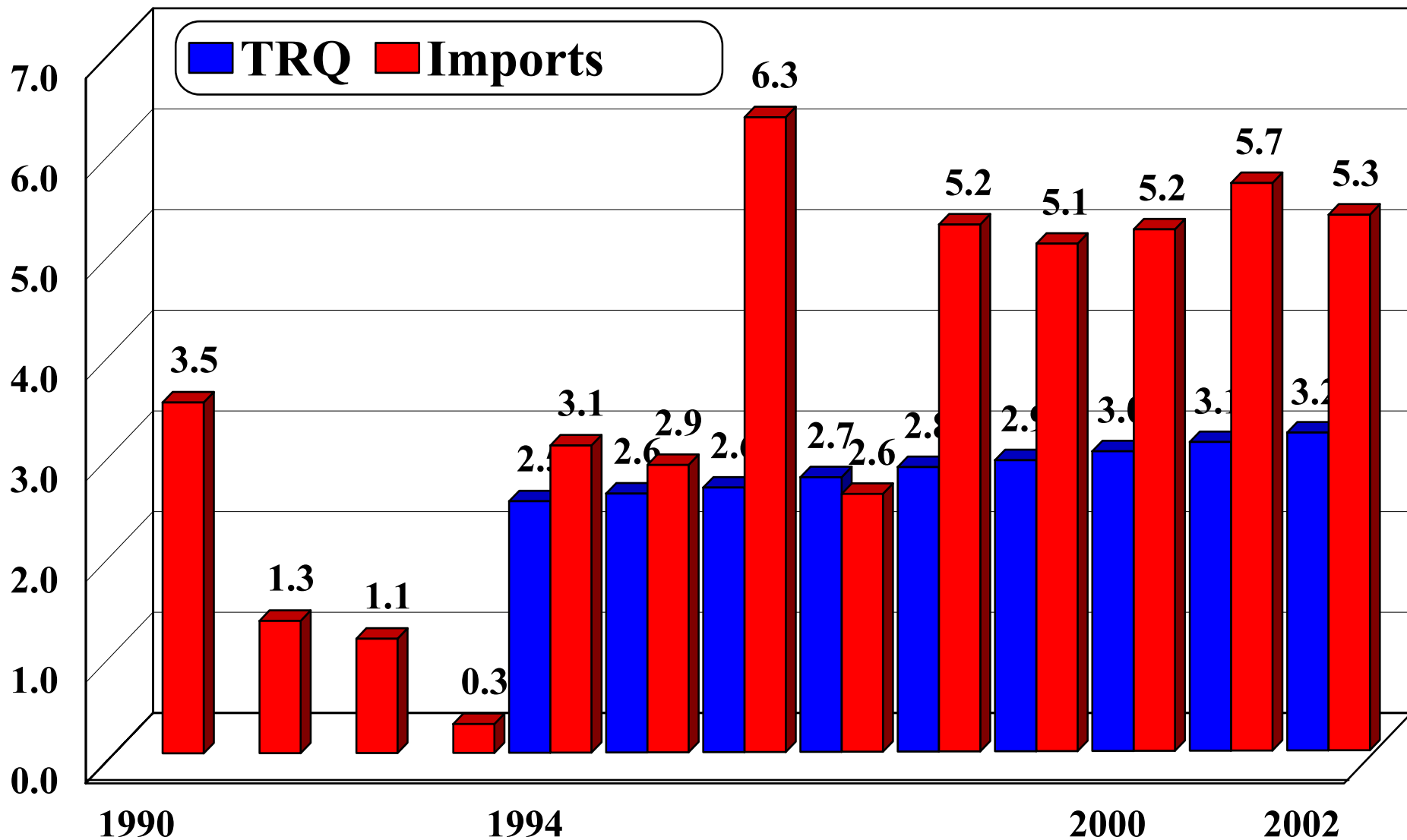


Intra-NAFTA & ROW Pulse Trade



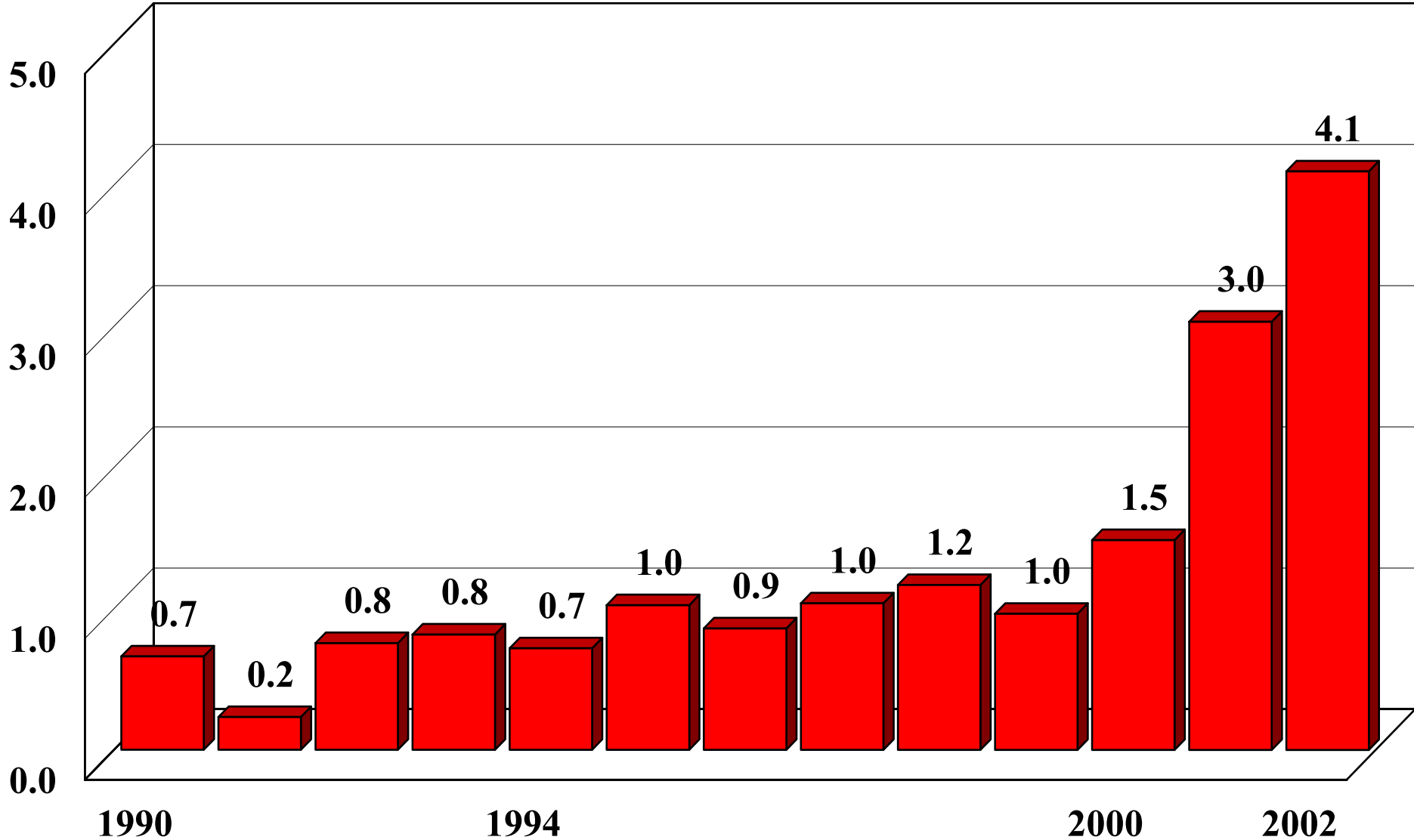
U.S. Corn Exports to Mexico

Million Metric Tons

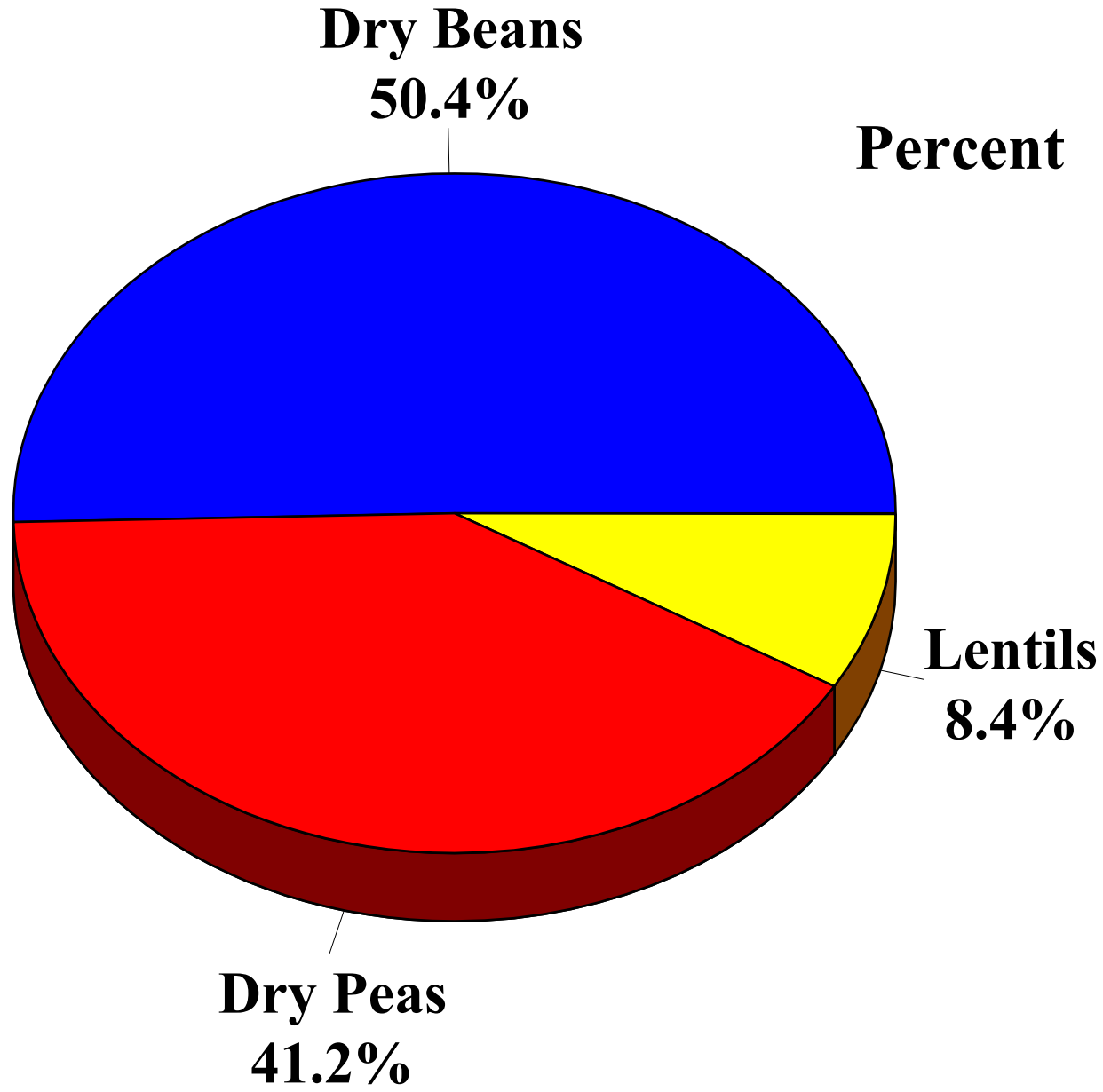


U.S. Corn Exports to Canada

Million Metric Tons



Intra-NAFTA Pulse Trade, 1993

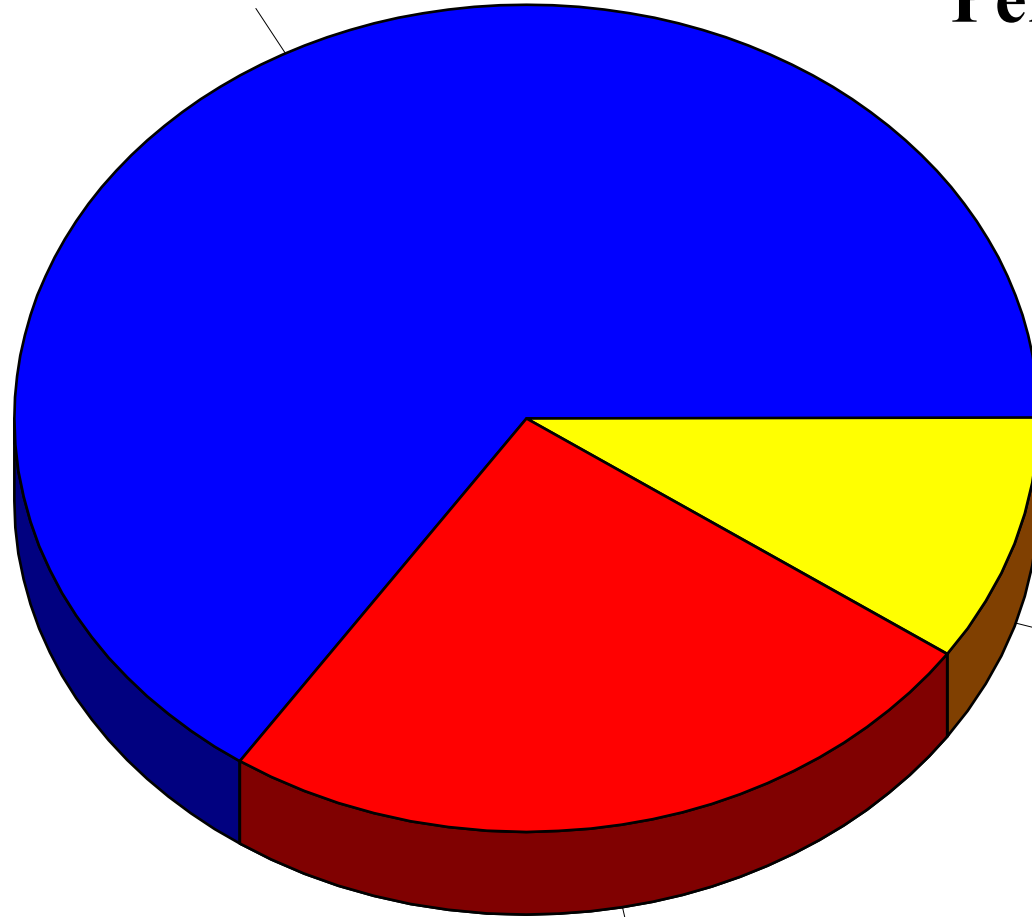


Intra-NAFTA Pulse Trade, 2002

Dry Beans

65.6%

Percent



Lentils

9.6%

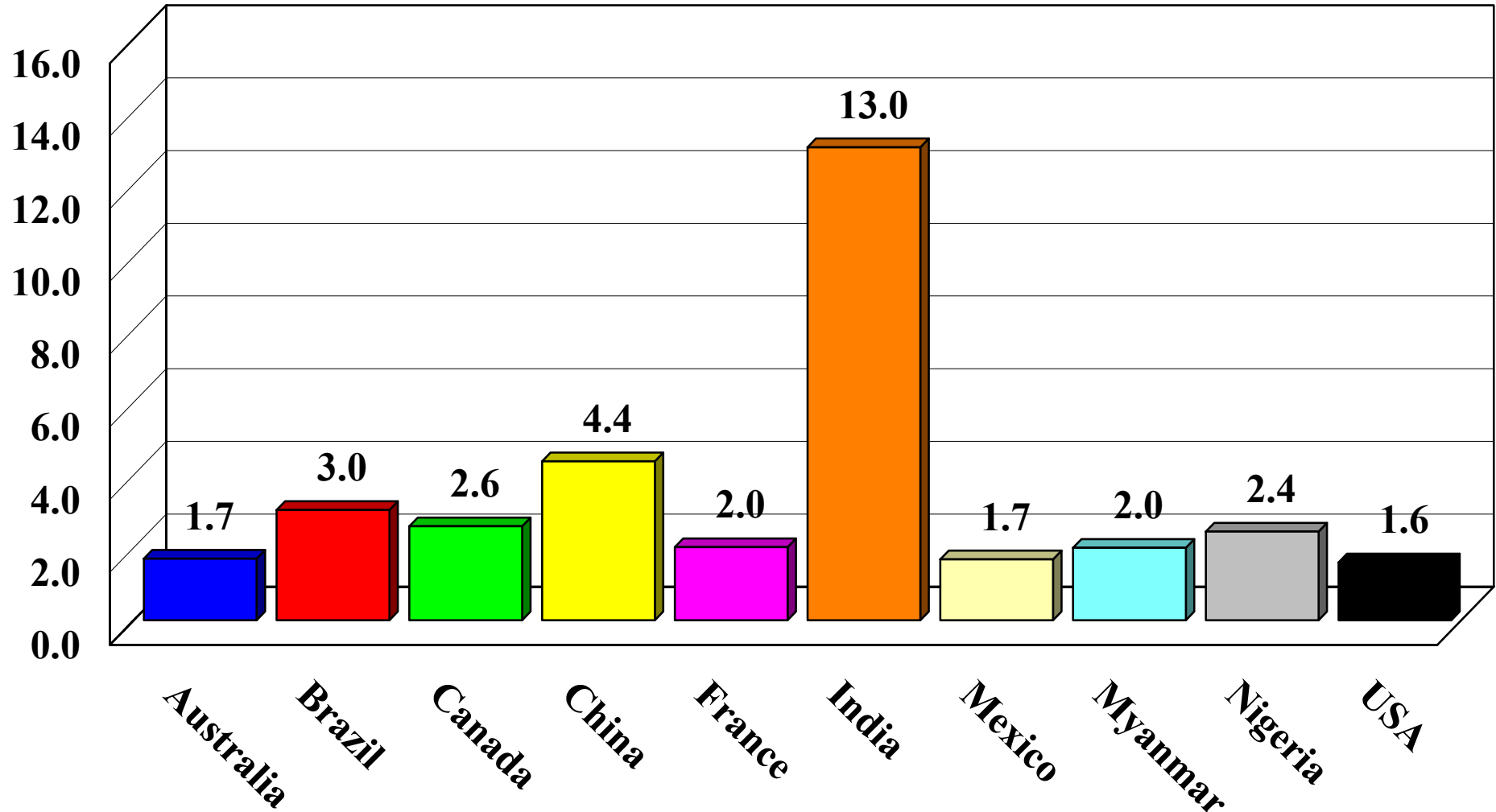
Dry Peas

24.8%

World Pulse Production, 2002

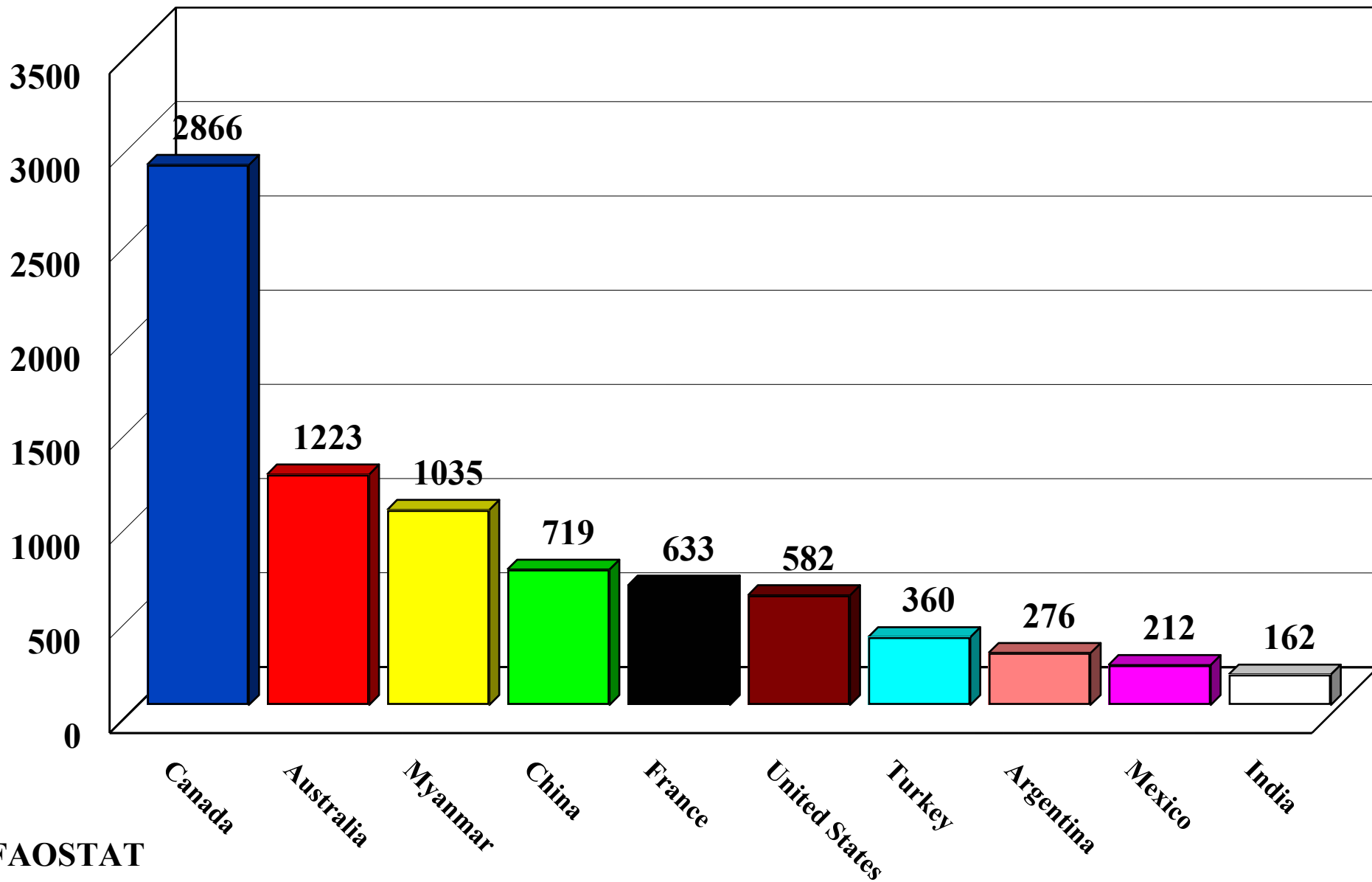
Top 10 Countries

Million Metric Tons

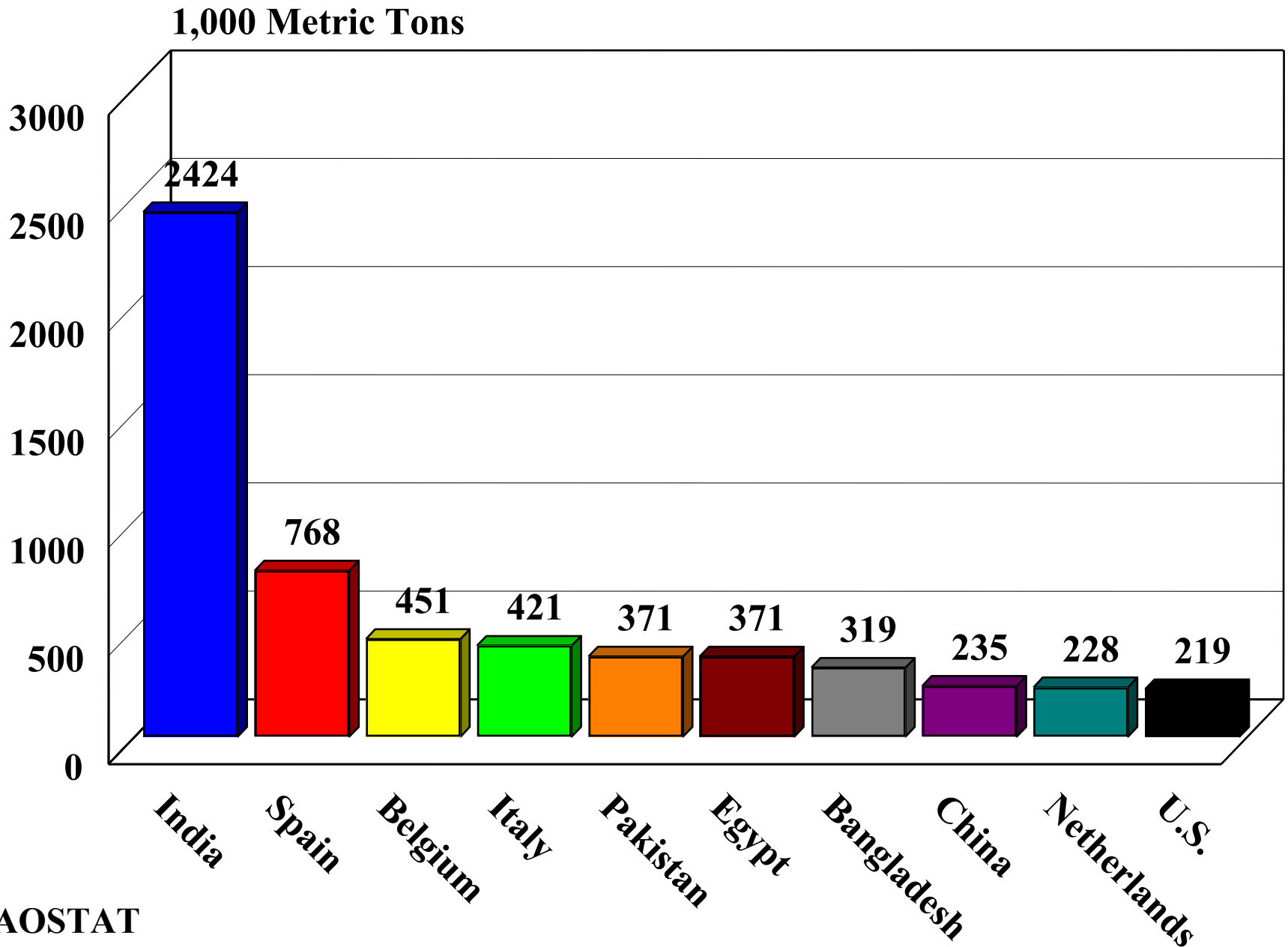


World Pulse Exports, 2001

1,000 Metric Tons



World Pulse Imports, 2001

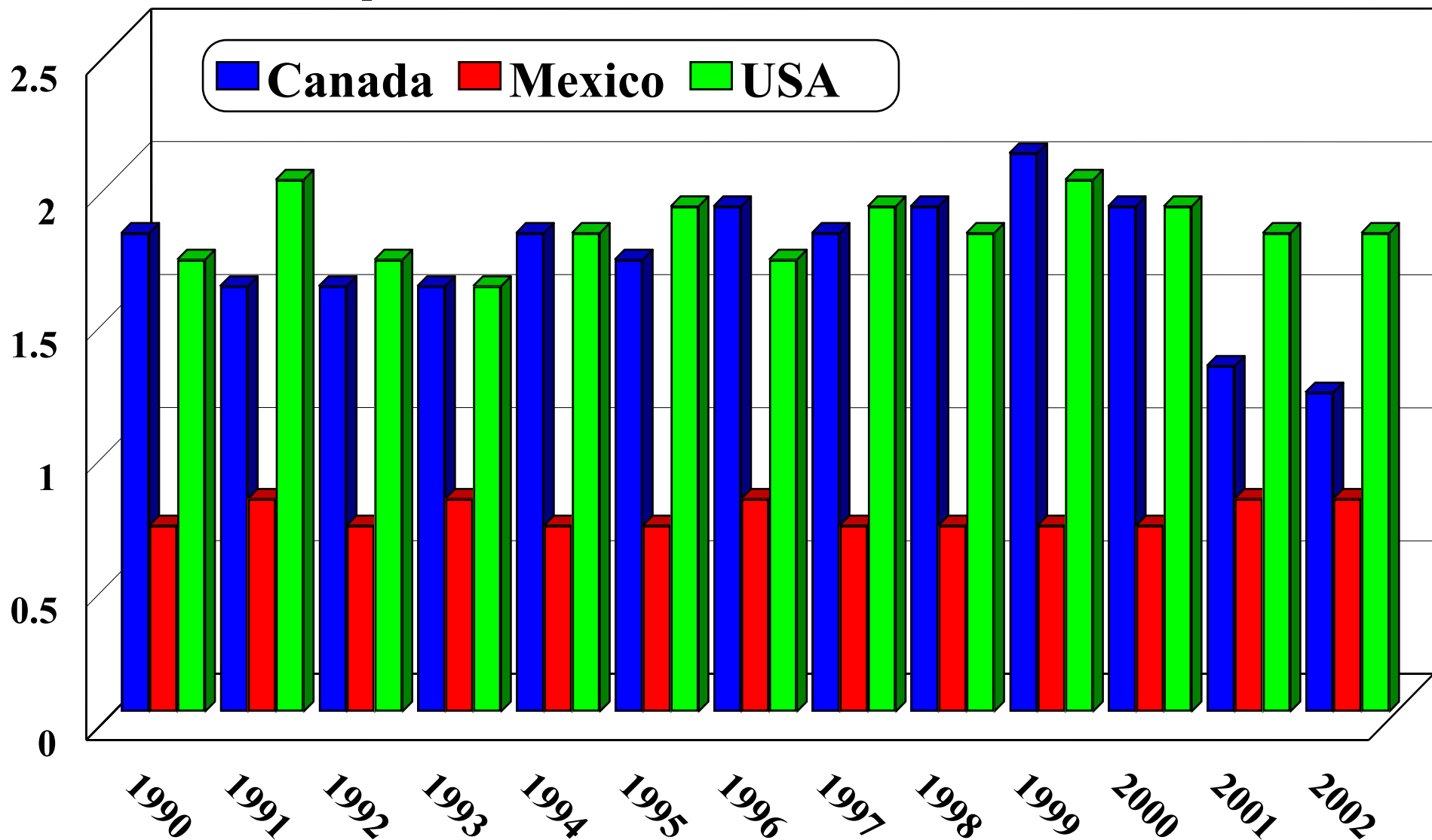


World Pulse Trade & Output

- **Canada Dominates World Pulse Exports, Volumes Nearly Triple Australia, Myanmar**
- **India Dominates Imports, EU, Middle East, United States**
- **China, France, United States Are Second Tier Exporters**
- **India Dominates Production, Triple China, Four Times Brazil**

NAFTA Pulse Yields

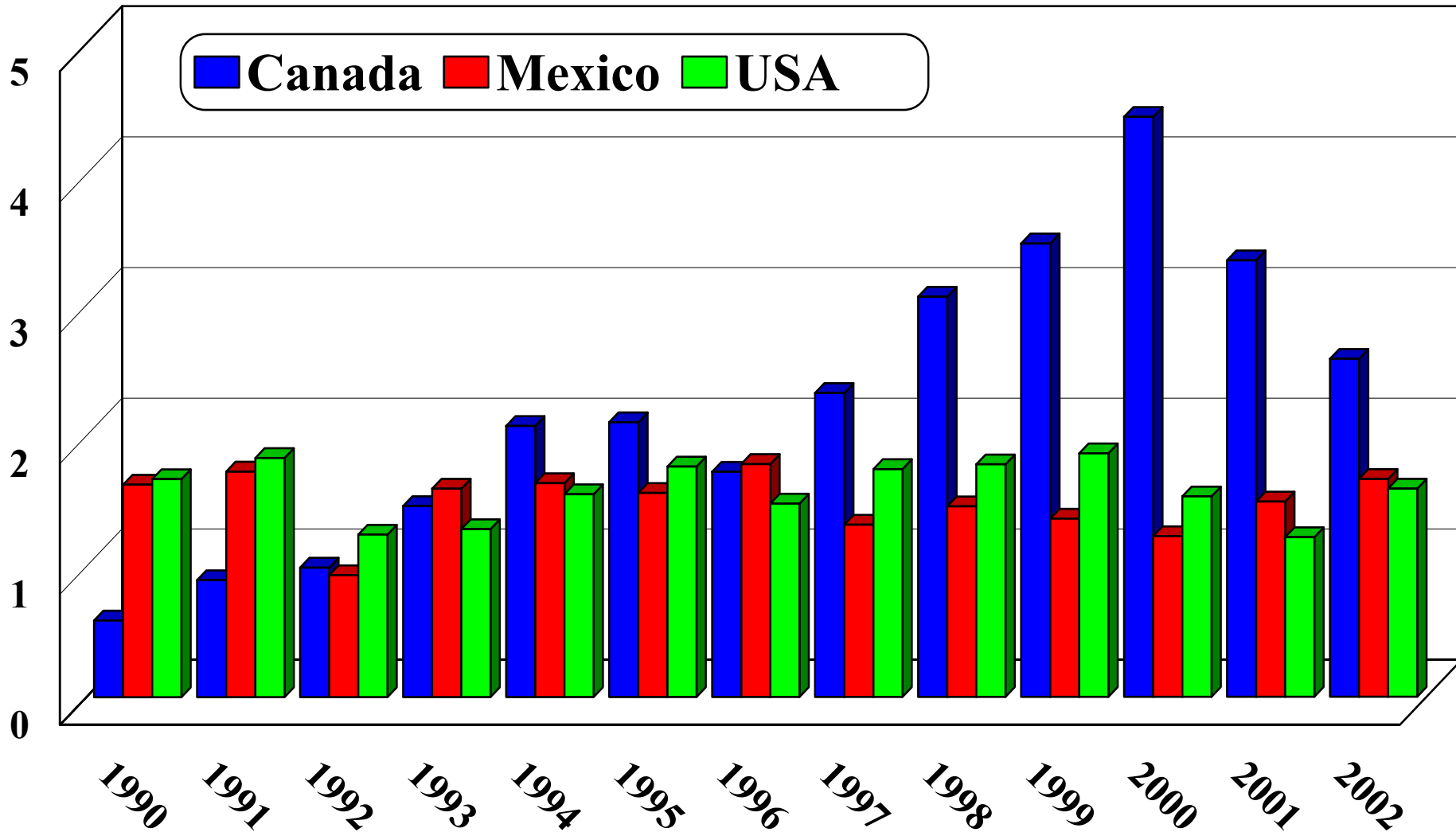
Metric Tons per Hectare



Source: FAO, FAOSTAT Database

NAFTA Pulse Production

Million Metric Tons



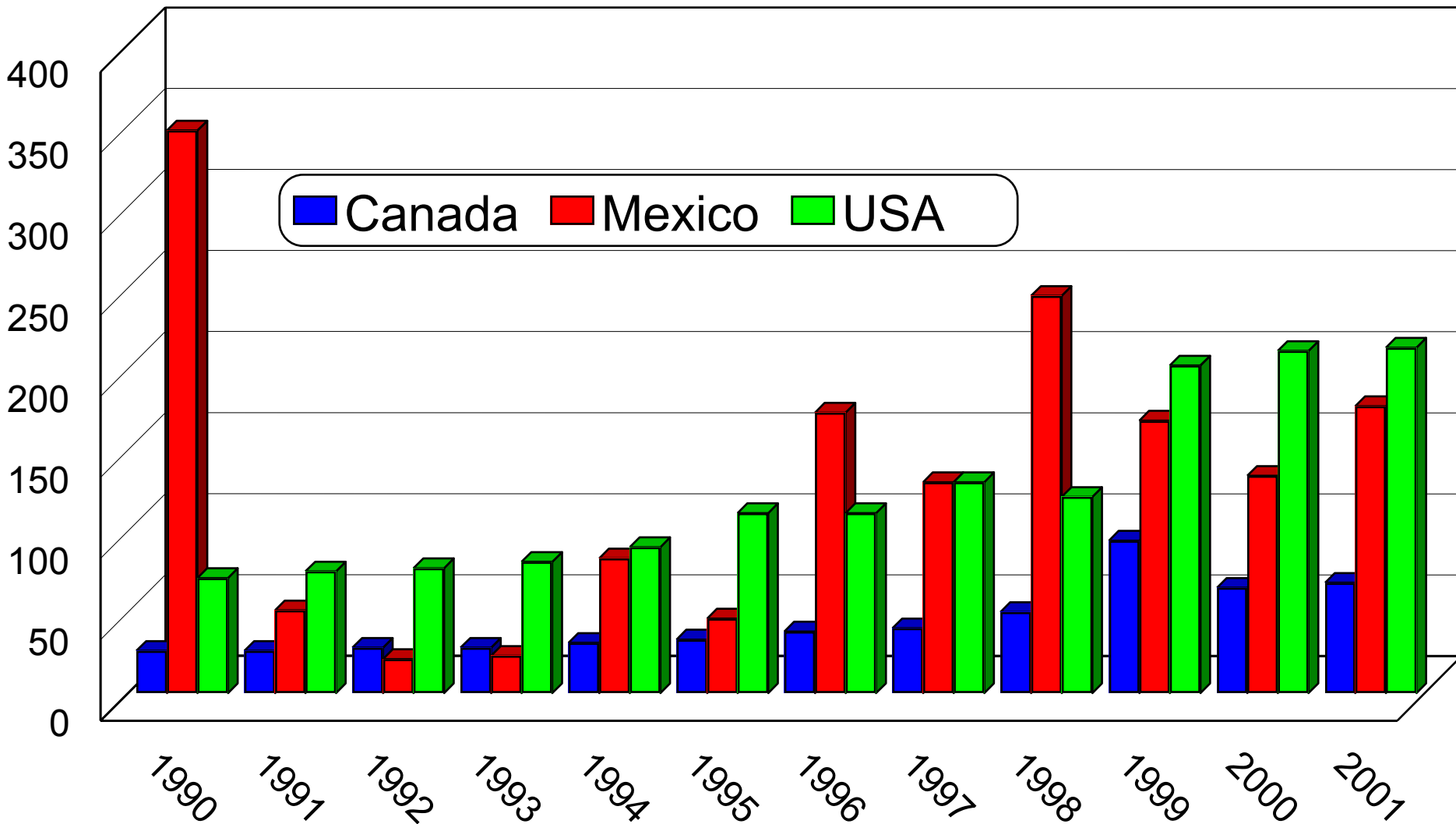
Source: FAO, FAOSTAT Database

NAFTA Yields & Output

- **Pulse Yields in Canada & U.S.
Double Yields in Mexico**
- **Influences of *Ejidatarios* on
Technology Adoption, Productivity**
- **Inelastic Supply Response
Hypothesis for Mexico**
- **Role of Mexico's Farm Policy**
 - **\$43/acre payment for < 5 hectares**

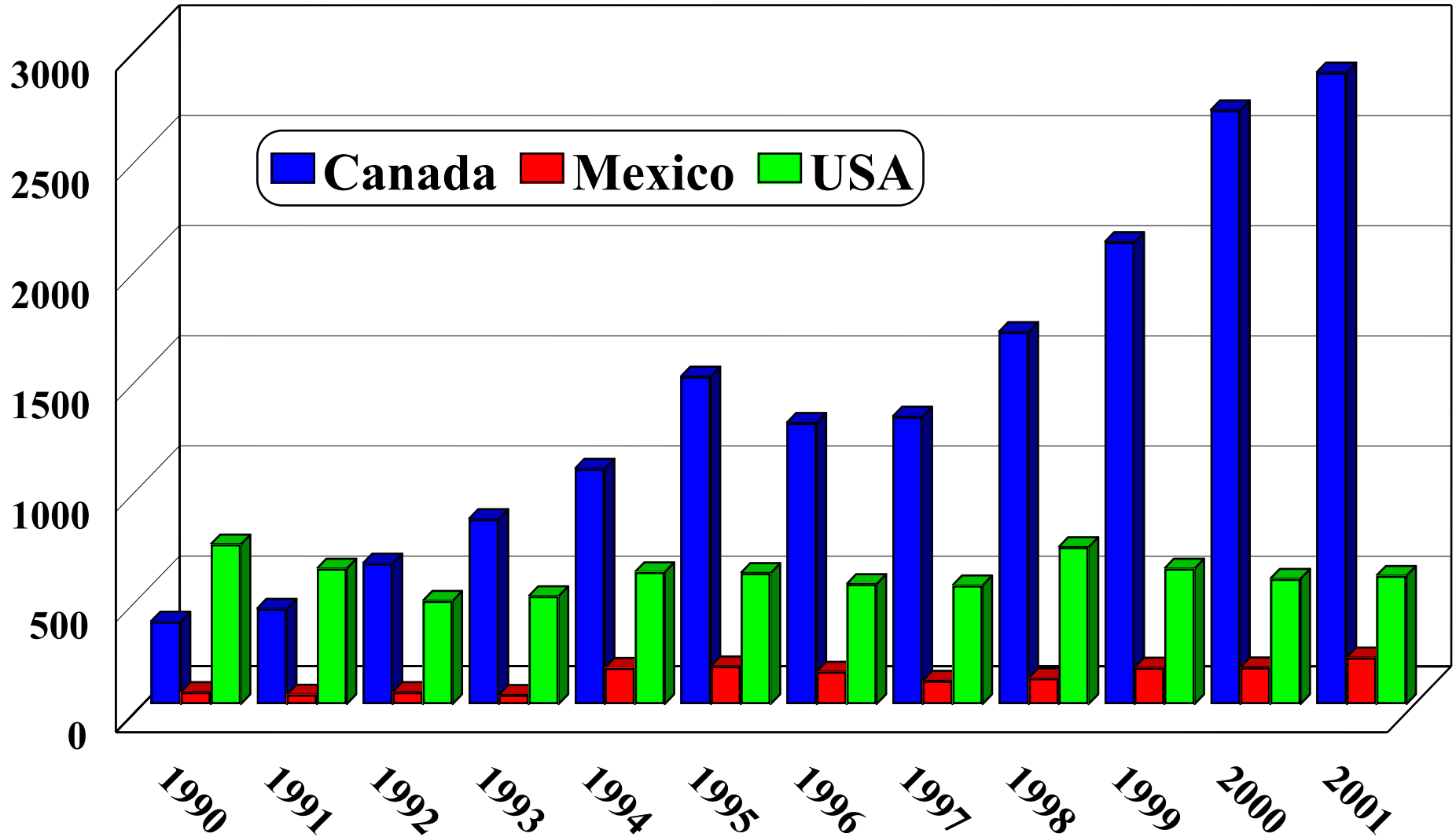
NAFTA Pulse Imports

1000 Metric Tons



NAFTA Pulse Exports

1000 Metric Tons

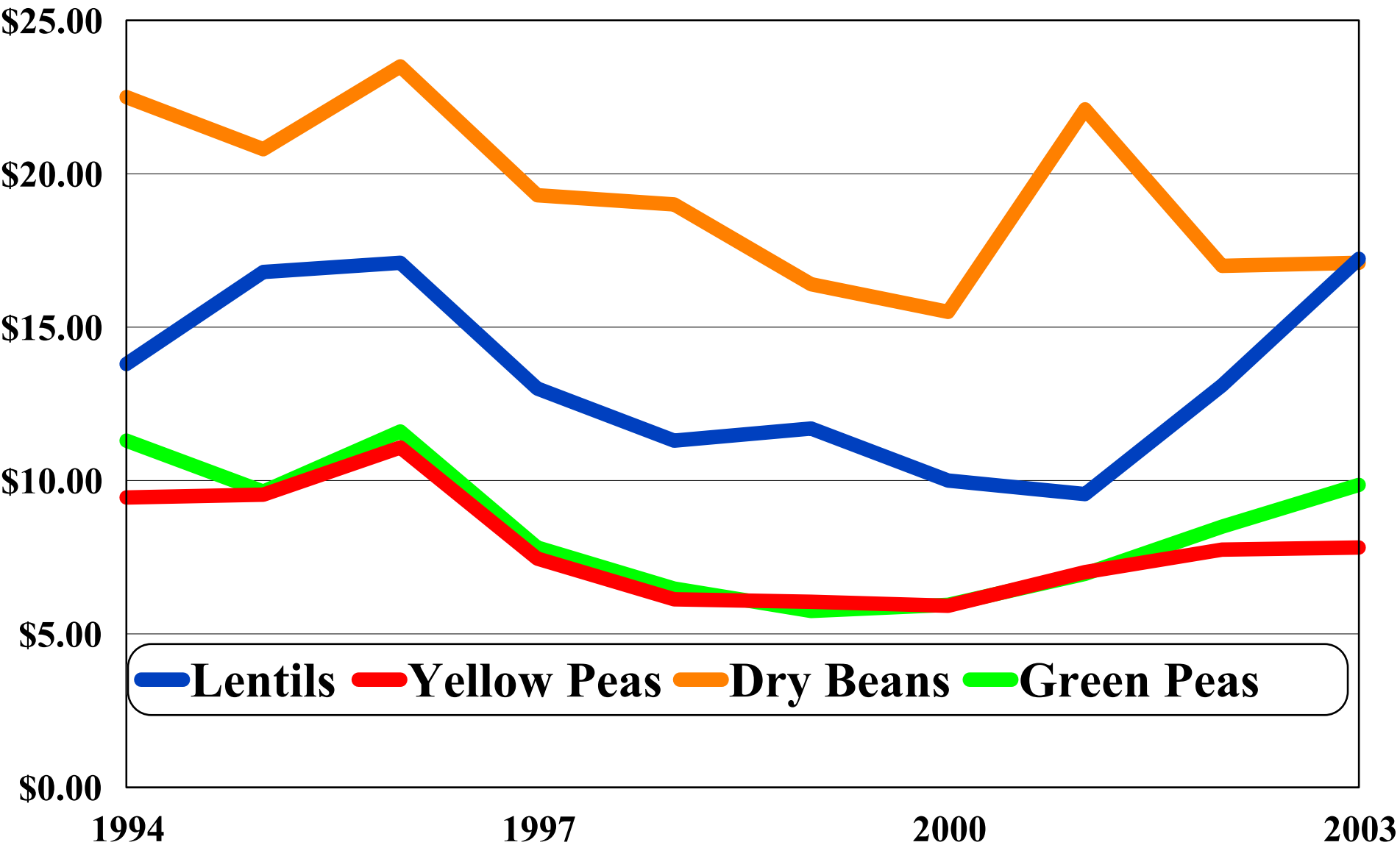


Source: FAO, FAOSTAT Database

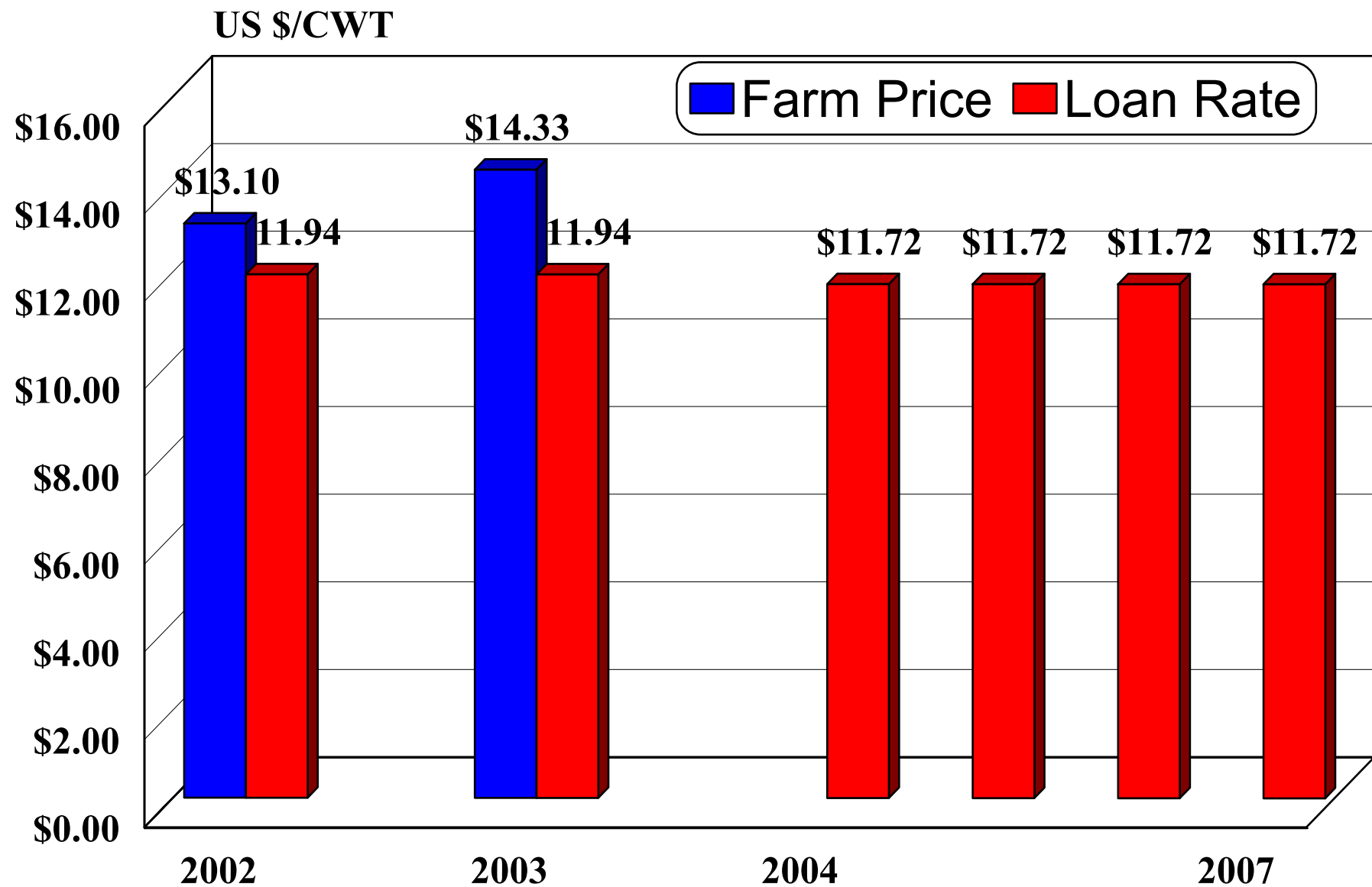
NAFTA Pulse Trade

- **Canada Dominates Trade: 80% of Exports**
- **U.S. & Mexico Growing as Importers**
- **U.S. Prices on Downward Trend Over Most of 1990s**
- **Drought in Canada & Stronger Export Demand Stimulated Recent Price Increases**

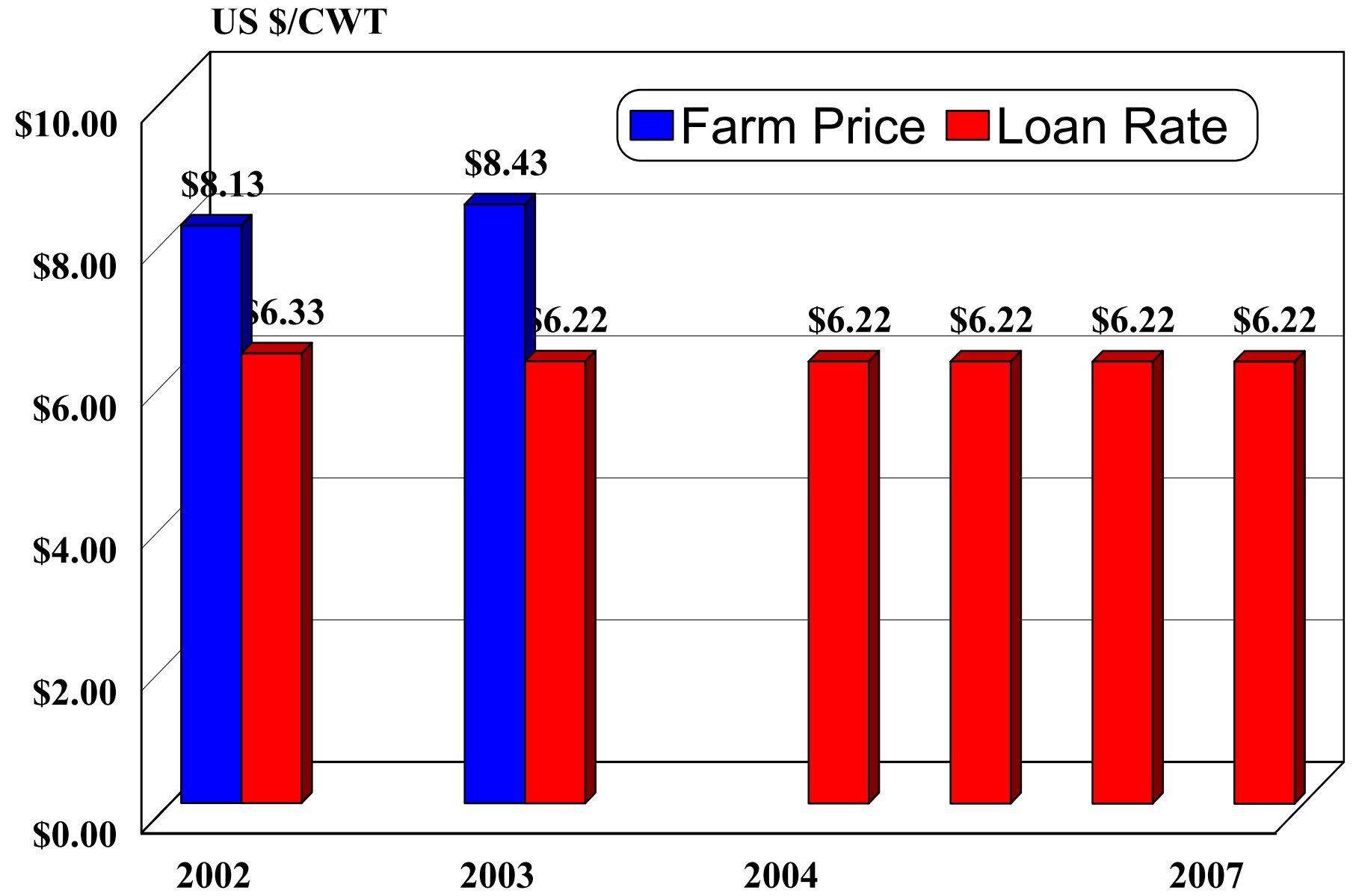
U.S. Farm Price for Pulses, 1994-03



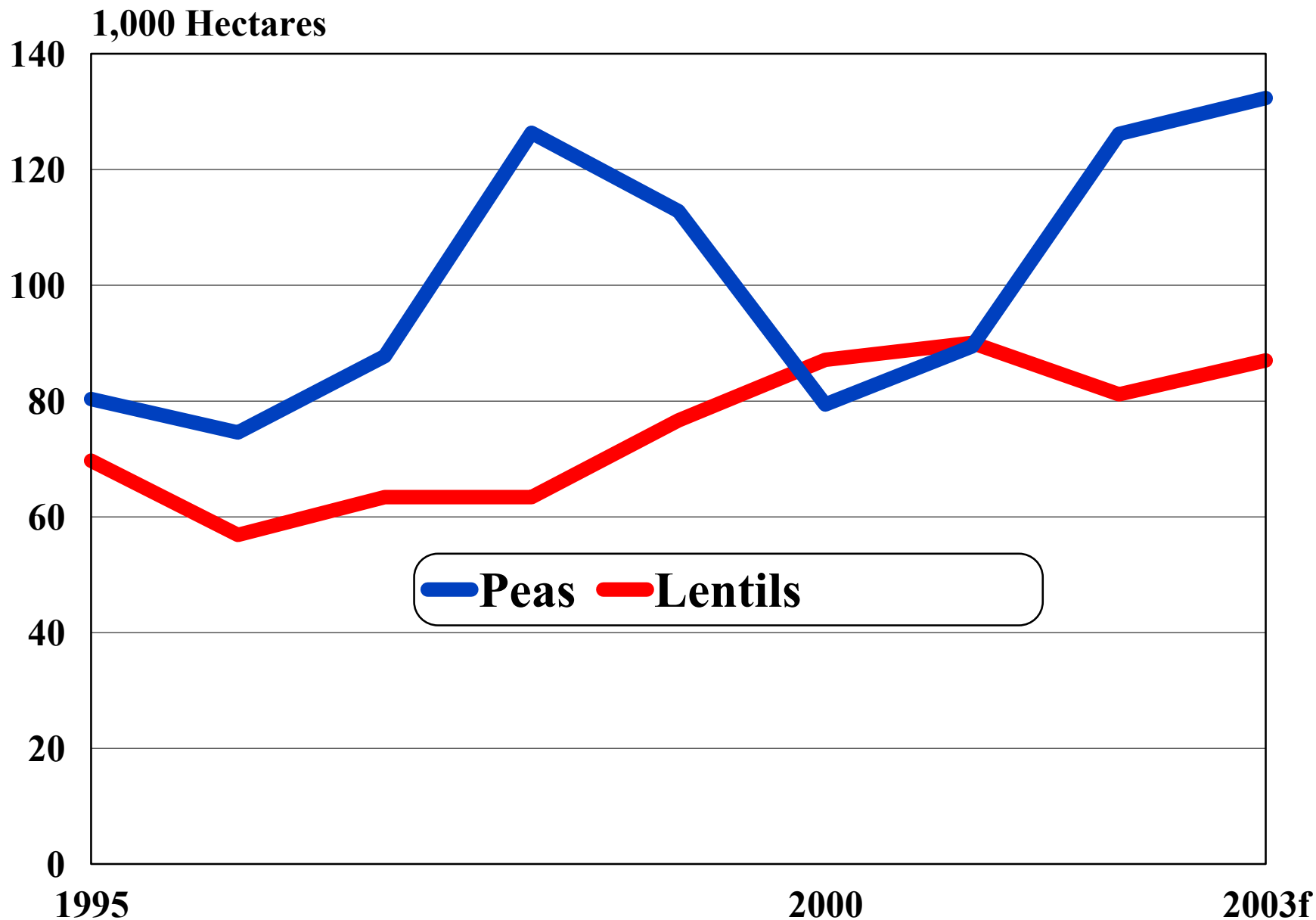
U.S. Lentil Prices and Loan Rates, 2002-03 and 2004-07



U.S. Dry Pea Prices and Loan Rates, 2002-03 and 2004-07

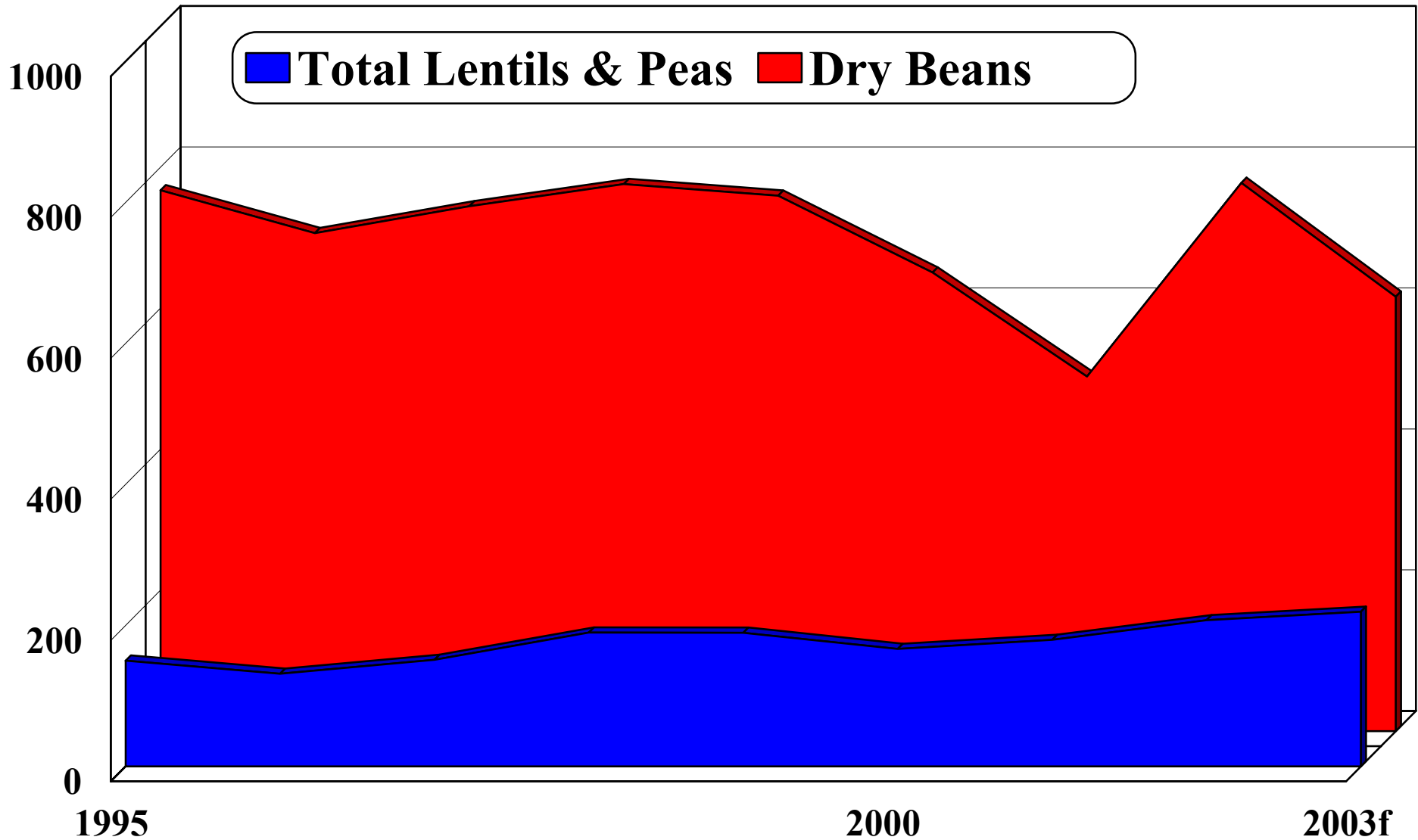


U.S. Pea & Lentil Planted Area, 1995-2003f



U.S. Lentil/Pea and Dry Bean Area

1,000 Hectares



ERS, USDA, 4/17/03 & FAOSTAT: Dry Beans are Planted Area, others are Harvested Area.

Farm Programs & Pulse Area

- **U.S. Farm Prices Above Loan Rates for Lentils & Peas in 2002 & 2003**
- **Dry Peas & Lentils Area Up 22% Since 2001/03, Follows Price Increase of 80%**
- **Dry Bean Area Up 55% Since 2001/02 and 22% 2001/03, After Price Increase of 40%**
- **Green Pea Prices Up 66% Same Period**
- ***Expansion in Area Began Prior to 2002***

Potential for Trade Disputes

- **Corn in Mexico: NAFTA Ten Year Anniversary**
 - U.S. Corn Exports Up 5 Fold since early 1990s
 - Social Unrest, But Duties Still 90.8%
 - Mexican Corn Output Down 6% Since 1993
 - Rainfed Corn Up 22%
 - Irrigated Corn Down 37%
- **Prices in Mexico Down 38% since 1993**
- **30% of Rainfed Corn is Grown on Ejidos**
 - Rainfed Corn Represents 70-80% of Total
- **20% Tax on Soft Drinks Made w/HFCS**

Corn Trade Issues

- **Highly Sensitive Issue for Mexico**
 - **Calls to Renegotiate NAFTA**
 - **Spawned ‘Agricultural Armor’ Program**
 - **Permanent Import Limits Being Considered**
 - **Impacts of Imports of Hybrids & GMOs on Traditional Corn Varieties**
- **Corn in Canada: U.S. Exports Up 4 Fold since mid-1990s, AD Duty Case, StarLink Concerns**
- **Concerns Focus on Price Impacts & GMOs**

Pulse Crops in Farm Program

- **U.S. Loan Rates Below Market**
- **Most of Area Expansion Driven by Higher Market Prices**
- **Drought in Canada & Increased Exports Stimulated Output**
- **Dry Beans & Peas Traded Most**
- **Situation Could Change Rapidly**

Pulse Trade Issues

- **Crop Substitution or Rotation Appear Most Likely if Pulse Area Expands**
- **Limiting Factors:**
 - **High Market Prices for Pulses & Program Crops**
 - **Loan Rates for U.S. No. 1 Quality**
 - **Specialized Handling & Market Information**
 - **Cultural Practices**
- **Positive Factors:**
 - **Loan Rates Set Lower Limit**
 - **Pulses Fix Nitrogen, so Used in Rotation**
 - **Cattle Prices**
- **No Immediate Expansion, Long Term More Difficult to Predict**

Dry Beans

- **Mexico Has Doubled Dry Bean Imports**
 - **NAFTA Primary Source: 60-70%**
- **Prices Down 10-25%**
- **Expanding World Output Placed Downward Pressure on Prices**
- **Mexico Supports Dry Beans with Area Payments: \$38/acre or \$43/acre**

Dry Bean Trade Issues

- **Dry Beans Used in Rotation to Fix Nitrogen, Improve Soil Structure**
- **If Wheat, Corn Area Expand Due to U.S. Farm Programs, Will that Stimulate Dry Bean Area?**
- **Phytosanitary Issues & Under Invoicing by Exporters Noted As Problems by Mexico**

Conclusions & Implications

- **Extent of Trade Disputes/Disruptions**
 - **Crop Substitution**
 - **Cattle Production Cycles, Herd Rebuilding & More Normal Weather**
 - **Uses of Pulses in Rotation & as Animal Feeds**
- **Farm Program Changes in Mexico & Canada May Mitigate Whatever Impacts Occur**
- **Can't Ignore World Supply/Demand Balance**

Conclusions & Implications

- **Environmental Issues Important**
 - **GMO Concerns**
 - **Maintaining Traditional Mexican Corn Varieties**
- **Protectionist Sentiment is Growing in NAFTA**
- **Farm Programs But One Factor**
 - **Weather, SPS, Exchange Rates**
- **Very Surprised If Trade Disputes Don't Increase in Frequency**