

*China's Supply/Demand Balance and  
and Forecast Trade Potential in Meats*

**Selected Poster Presentation**

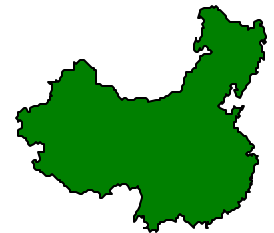
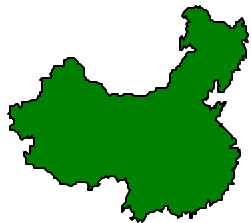
**American Agricultural Economics Association**

**Tampa, Florida**

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**Yanhong Chen, John Deere  
and**

**Parr Rosson & Flynn Adcock  
Texas A&M University**



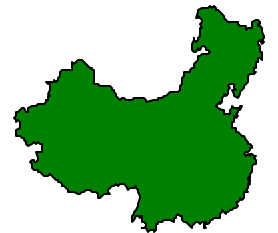
# Overview

**6 Background & Justification**

**6 Methodology**

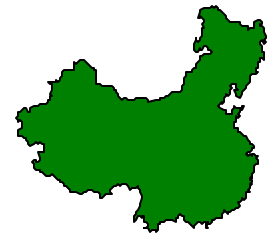
**6 Results**

**6 Conclusions & Implications**



# Background & Justification

- 6 Economic Growth & Market Reform in China**
- 6 Population Diversity & Changing Consumer Tastes & Preferences**
- 6 Changing Self-sufficiency Policy & Potential for Market Growth**

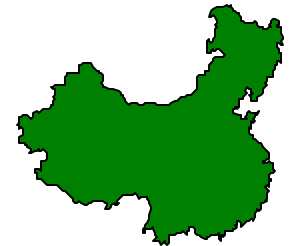


# **Background & Justification**

**6 Trends in Consumption and Production**

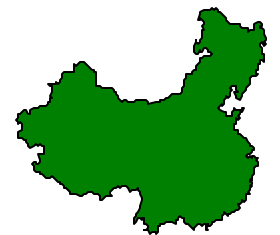
**6 Natural Resources**

**6 Transportation and Regional  
Disparities in Production**



# Methodology

- 6 Regression Analysis Was Used to Estimate Parameters**
- 6 Forecast Production, Consumption, & Net Trade**
- 6 Beef, Pork, Poultry & Fish**
- 6 Analysis Time Period: 1980-1998**
- 6 Forecast: 1999-2010**



## Methodology (cont.)

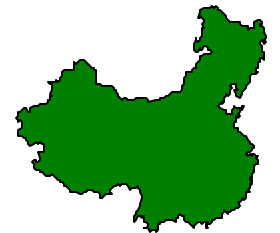
### 6 Model Specification:

6 Meat Production = Meat Production<sub>(t-1)</sub>  
Animal Production, Slaughter,

and Prices

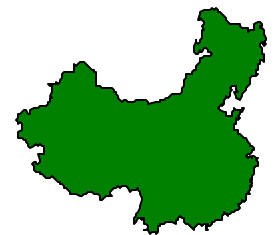
6 Meat Cons = Meat Cons<sub>(t-1)</sub> Prices

6 Net Trade Was Estimated as Residual



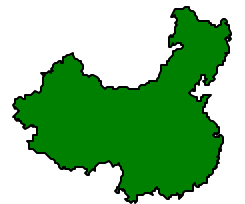
# Methodology (cont.)

- 6 Assumptions:**
  - 6 Family Planning Continues**
  - 6 Open Market Trend Continues**
  - 6 Continued Growth Path**
  
- 6 Price Proxies Estimated Using Moving Average**



# Results

- & R-squares Ranged from .91-.98**
- & Pork Consumption: Positive Price Coeff.**
- & Fish Consumption: Positive Price Coeff.**
- & Planned Economy & Rapid Consumption Growth**



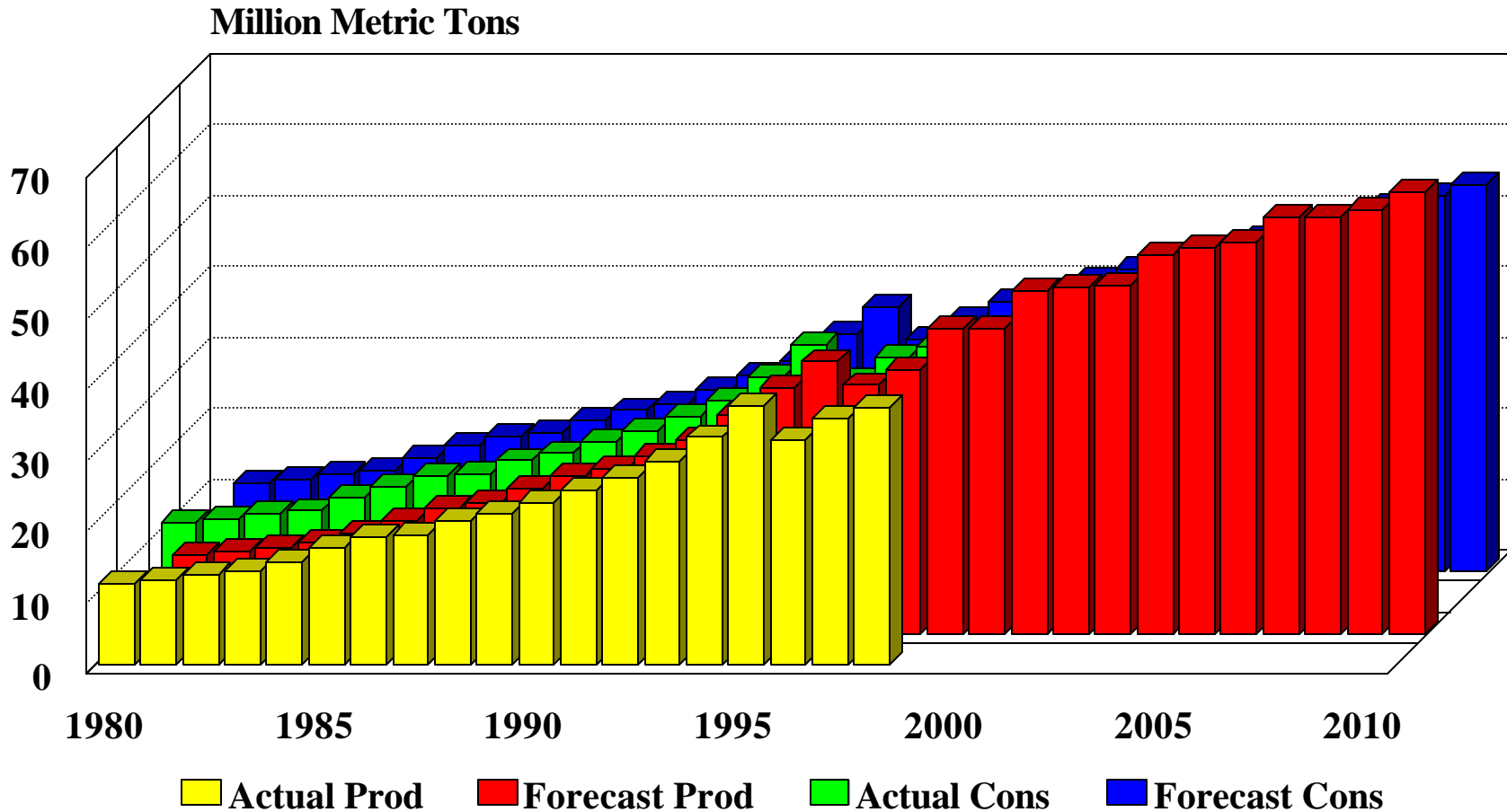


# Results for Pork

- & Pork Production Exceeds Use by 8.7 million metric tons/year**
- & China Remains a Net Exporter of Pork**
- & Per capita Pork use rises from 30 kg to 38 kg**



# Forecast of China Pork Production and Consumption

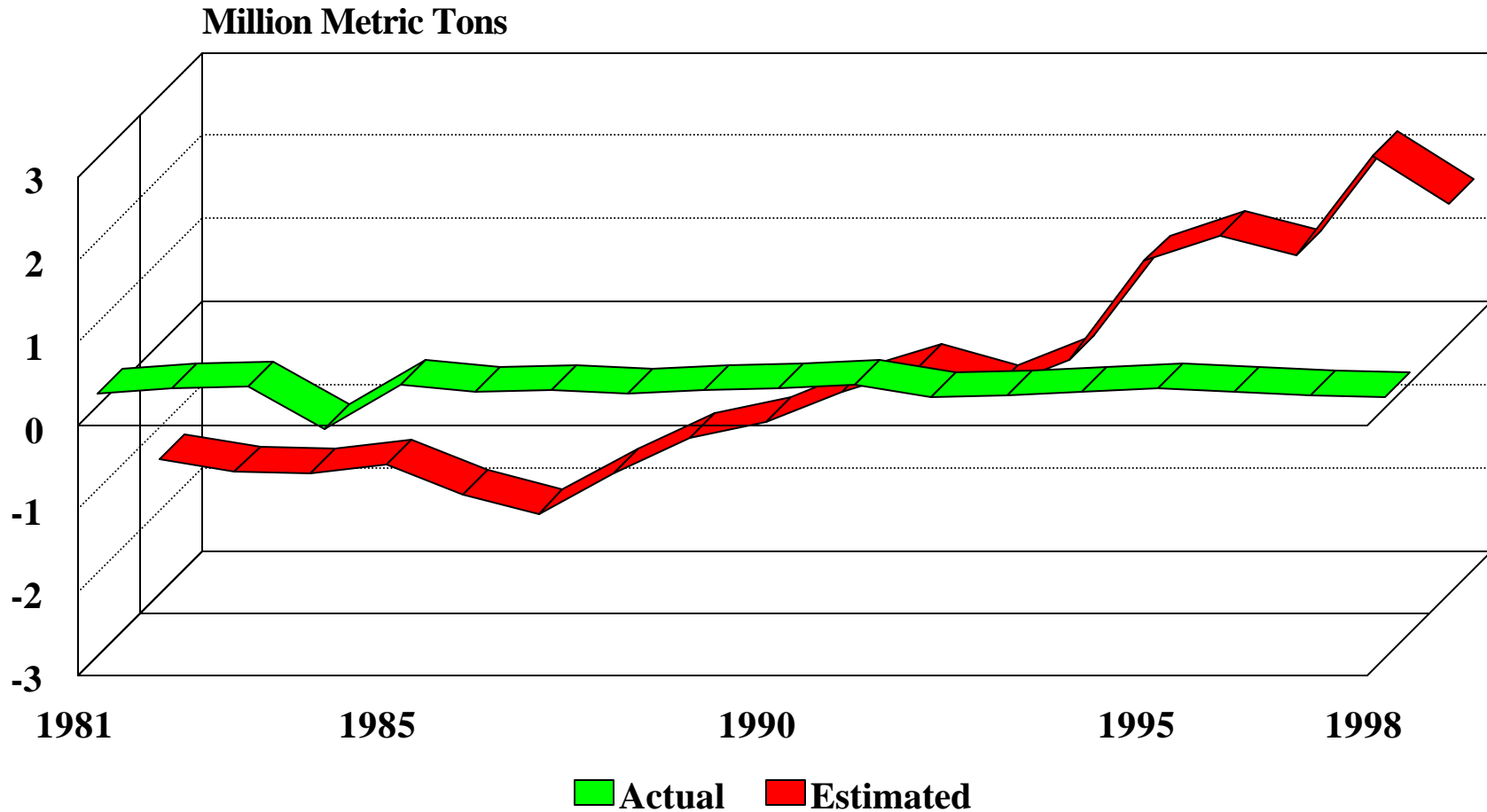


Source: *Economic Analysis and Forecasts of Meat Supply/Demand Balance in China*  
for Professional Paper, Dept of AGECE, Texas A&M University

, by Yanhong Chen

# Chinese Net Pork Trade

## Actual vs. Estimated, 1981 - 1998

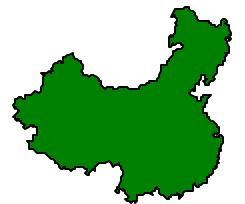


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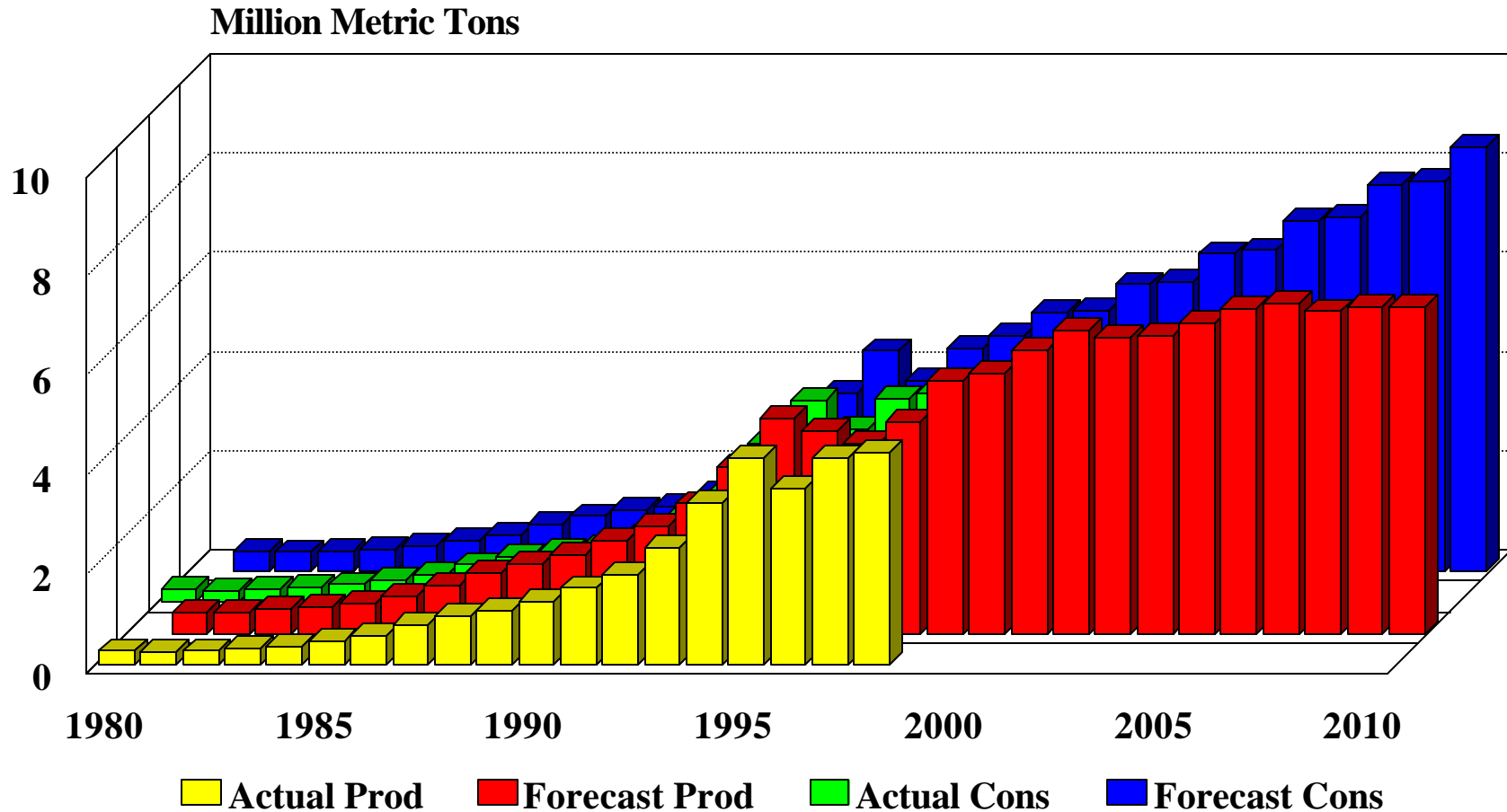
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## Results for Beef

- & Net Beef Trade Rises from +209,000 mt to -2.3 mmt/Year by 2010**
- & China becomes a Net Importer in 2003 & Remains so thru 2010**
- & Per Capita Consumption of Beef Rises from 3.6 kg to 6.2 kg**



# Forecast of China Beef Production and Consumption

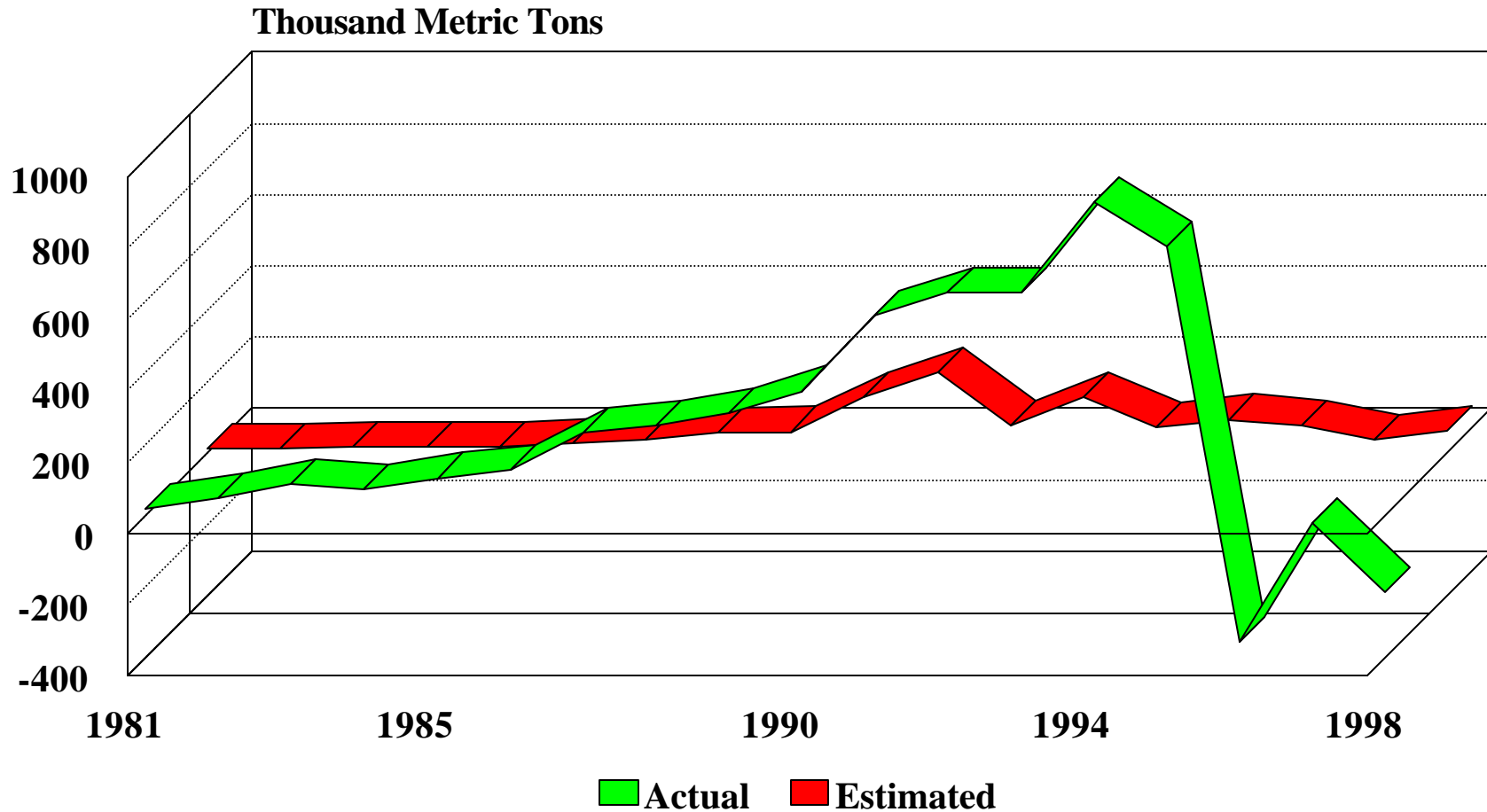


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# Chinese Net Beef Trade

## Actual vs. Estimated, 1981 - 1998

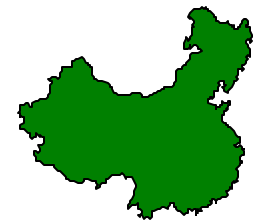


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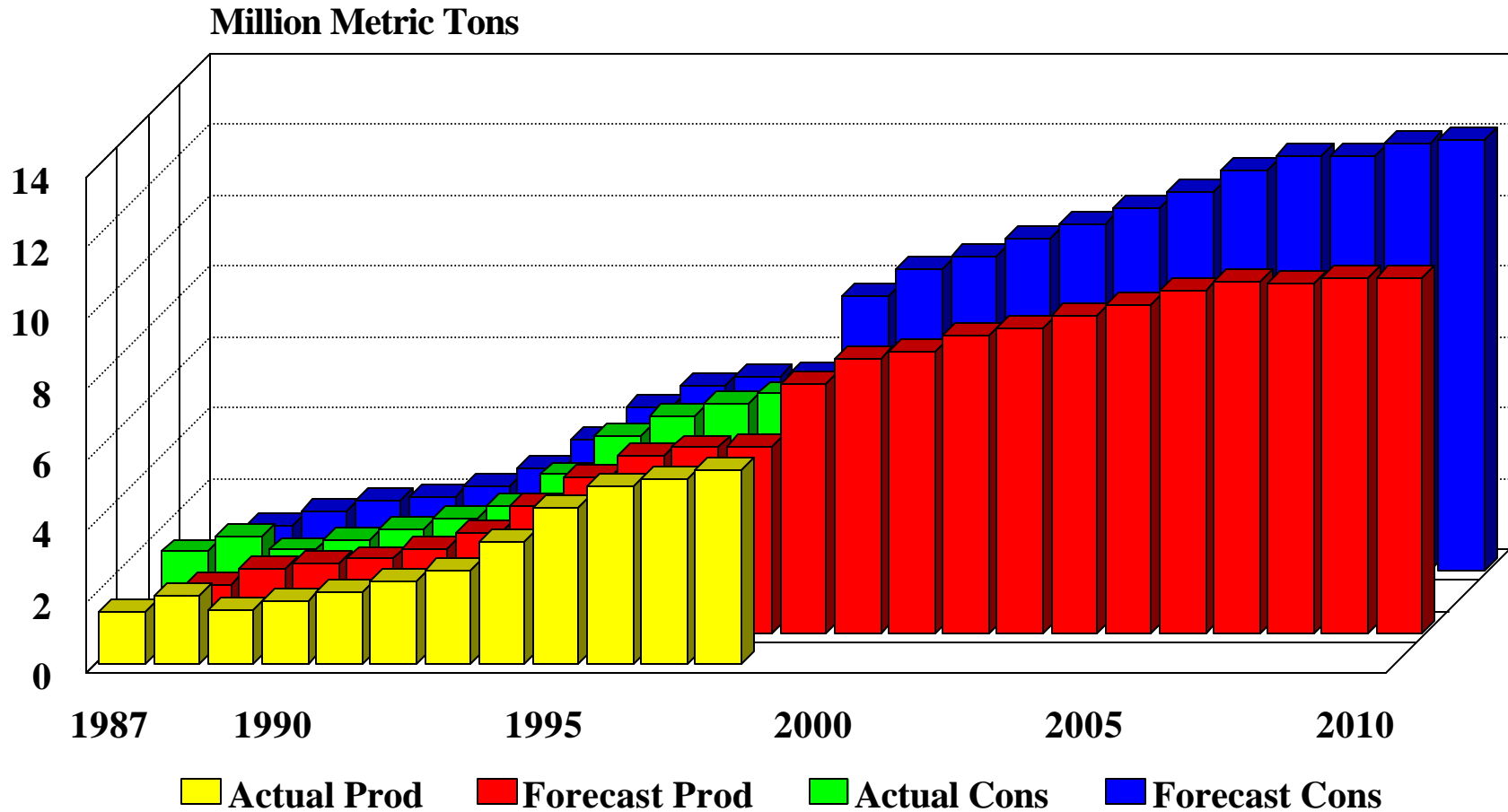
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## Results for Poultry

- & Net Poultry Trade Rises from -736,000 mt to -2.1 mmt/Year by 2010**
- & China Remains a Net Importer Forecast Period**
- & Per Capita Consumption of Poultry Rises from 6.1 kg to 8.5 kg**



# Forecast of China Poultry Production and Consumption



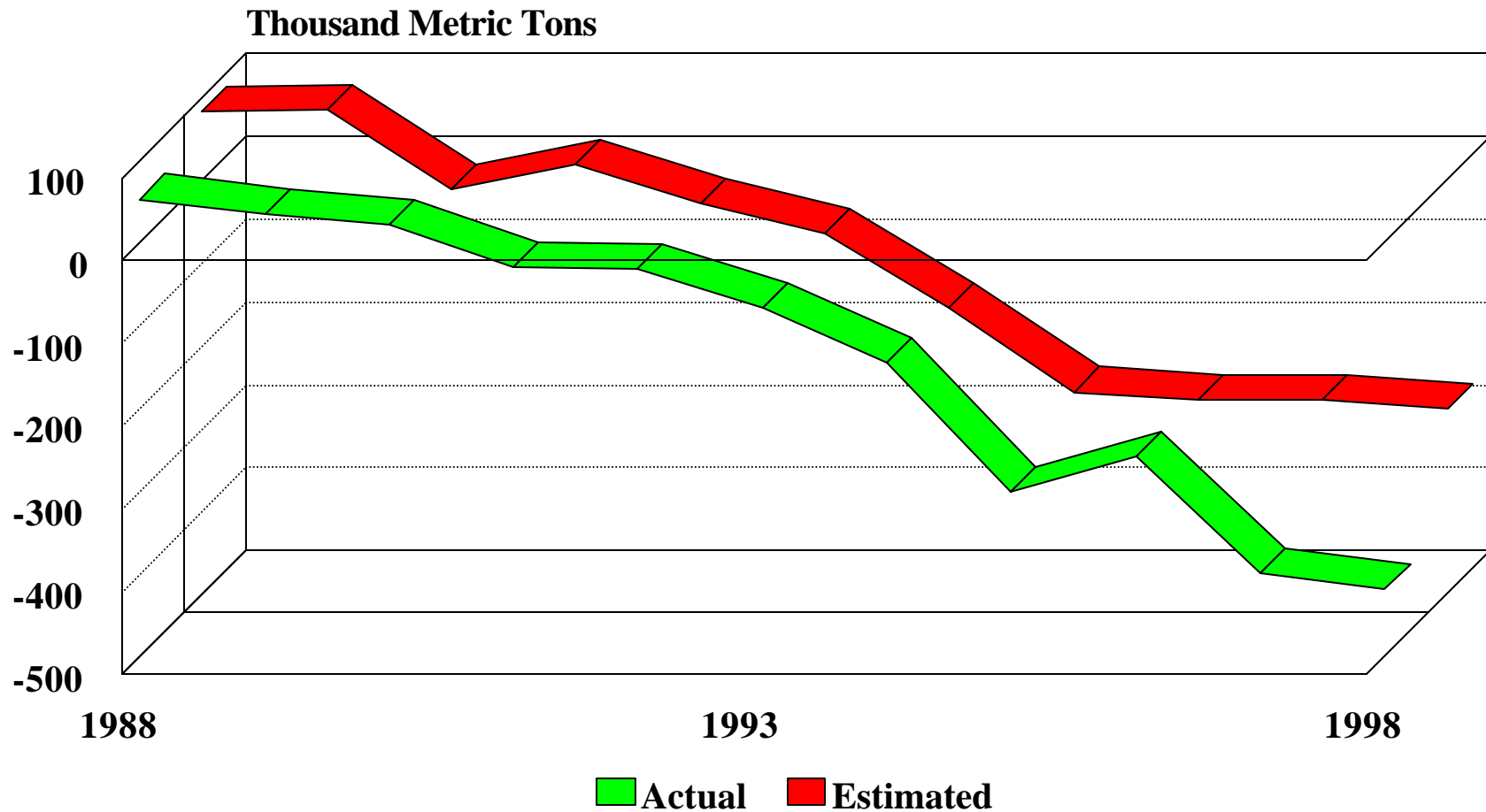
Source: *Economic Analysis and Forecasts of Meat Supply/Demand Balance in China*  
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# Chinese Net Poultry Trade

## Actual vs. Estimated, 1988 - 1998

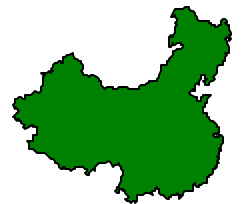


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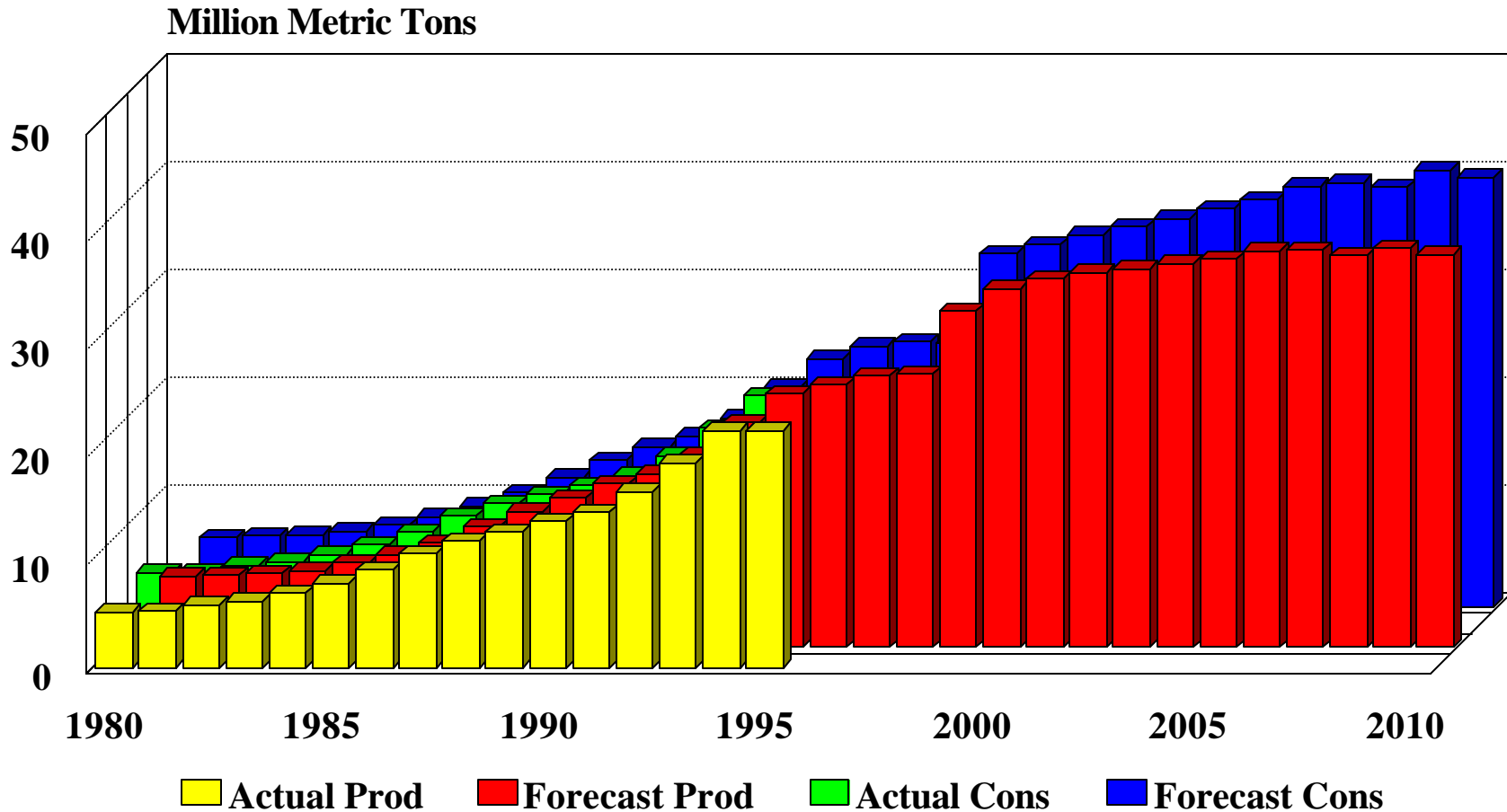
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## Results for Fish

- & Net Fish Trade Rises from -1.5 mmt to -3.4 mmt/Year by 2010**
- & China Remains a Net Importer Forecast Period, but Imports Decline in 2000-03**
- & Per Capita Consumption of Fish Rises from 20 kg to 28 kg**



# Forecast of China Fish Production and Consumption

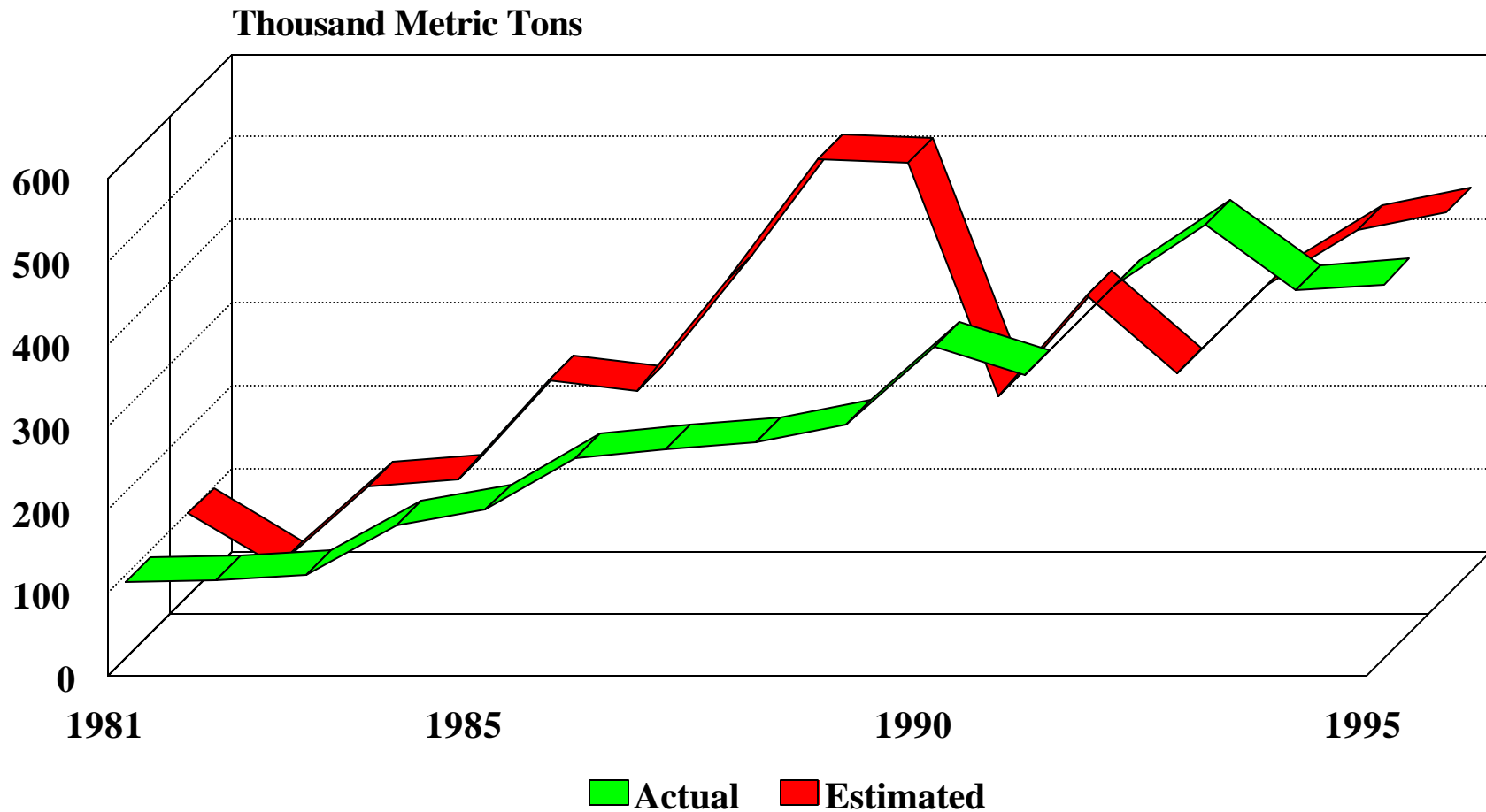


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# Chinese Net Fish Trade

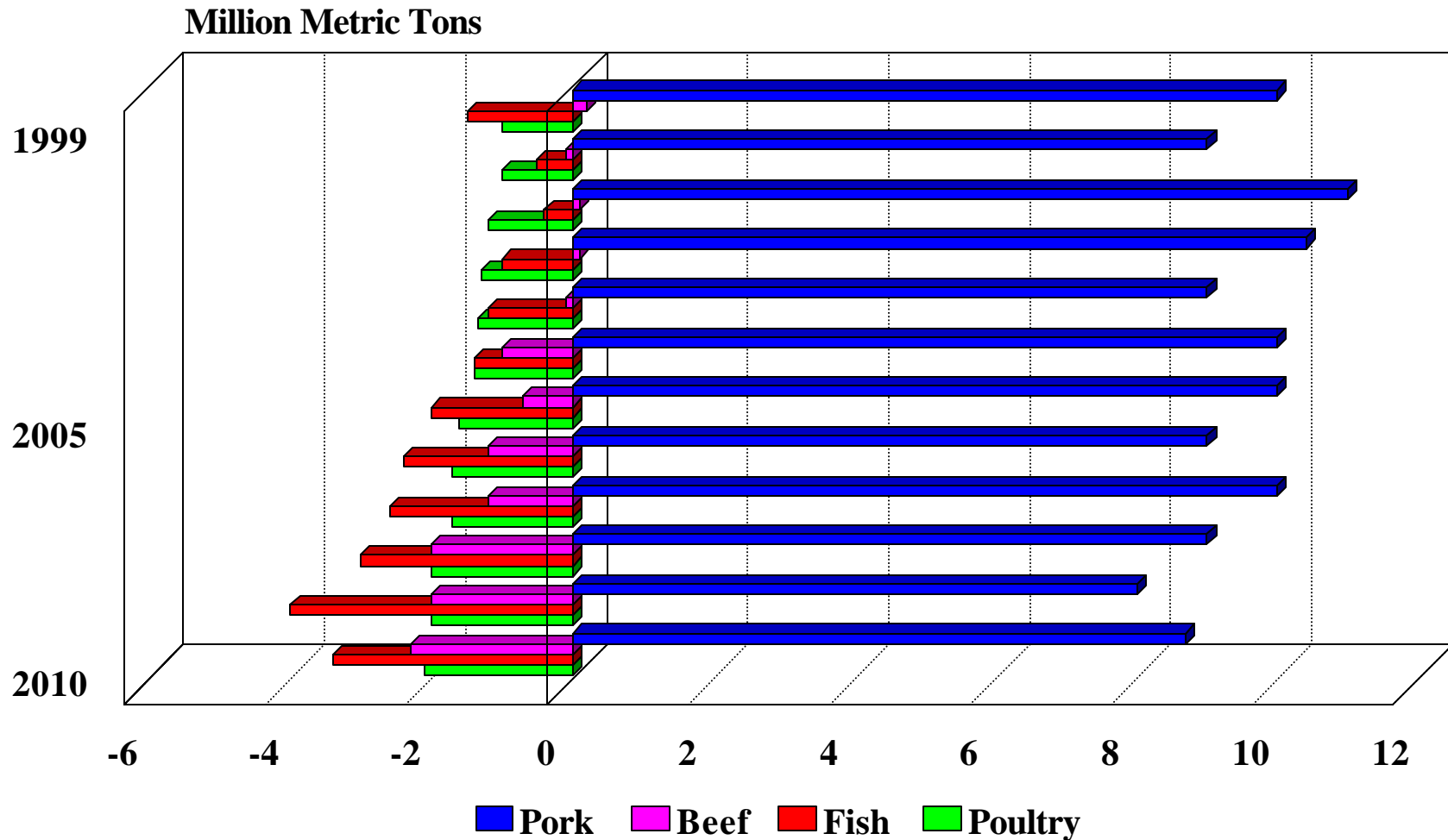
## Actual vs. Estimated, 1981 - 1995



Source: *Economic Analysis and Forecasts of Meat Supply/Demand Balance in China*  
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# China Net Trade Forecasts for Meat 1999 - 2010

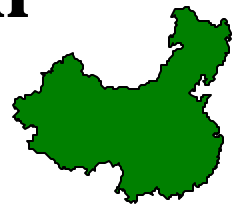


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# Conclusions & Implications

- & Forecasts Indicate Potential for Beef, Poultry, & Fish**
- & China Remains Net Exporter of Pork Bringing Total Meat S/D in Balance**
- & Forecasts Represent Upper Bound Due to Policy to Manage Production through Price Manipulation**



# Conclusions & Implications

**& Disparities Between Rural/Urban and Inland/Coastal Production and Consumption Need to Be Modeled**

**& Improved Data for Prices, Incomes, and Regions Would Improve Forecasts**

**& Forecasts Also Improved by Consistent Government Policies**

