Hay Exports and Dynamics of a World Hay Market

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Introduction and objectives

- **Objective:** Examine what’s been happening with respect to US hay exports and look at the drivers behind the shifts we see.

- **Brief review of recent dynamics in US hay exports.**
  - How much is going overseas?
  - Where is it going.

- **What’s driving the changes in demand?**

- **Will it continue?**
Volume of US Hay Exports, 1998-2013

Source: United States International Trade Commission, DataWeb
Share of US Hay Production Exported By Hay Category, 1998-2012

Source: United States International Trade Commission, DataWeb
Share of US Hay Exports by Value from Western Ports by Region, 1996-2013 YTD

Source: United States International Trade Commission, DataWeb
Value of US Hay Exports from Western Ports by Region, 1996-2013 YTD

#### Hay Export Values (in $million)

- **ASIA**
- **ARAB PENINSULA**
- **OTHER DESTINATIONS**

*Source: United States International Trade Commission, DataWeb*
Share of US Hay Exports to Asia From West Ports by Country

Source: United States International Trade Commission, DataWeb
The Take Away

• Since 2008:
  – Volume of US hay exports have increased at a faster rate than previous decade.
  – Share of US hay production to exports has increased from around 1.5%-2.00% annually to over 3.5% in 2012.
  – Increase in total share of US hay exports to Arabian Peninsula has increased (UAE) BUT…Asia is still the dominant destination region.
    • Value of US hay to Asia over $1 billion in 2012 and 2013.
    • Value of US hay to Arab Peninsula tops out under $225 million in 2013.
  – Within Asia, Japan remains the main buyer but exports to China and Korea increasing.
Projections Past 2013

• What’s happening in the major buying areas?
• Outlook for future?
The Big Story: Population is soon going to stop growing.
In % terms population is growing more slowly.
Population Projections For Hay Destinations

- Arabian Peninsula
- China
- Japan, Korea

Source: UN World Population Prospects
Per Capita Dairy Consumption

Source: UN FAOSTAT
Per Capita Meat Consumption

Source: UN FAOSTAT
Projection of the Urban Share of China’s Population

Source: FAOSTAT
Population Density
Income Gap Between Urban and Rural Residents

China Urban and Rural per Capita Income, 2011

Urbanization Boosts Demand for Animal Products

Source: FAOSTAT
## Changing Composition of Asian Diets

### kg/person/year

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<tbody>
<tr>
<td>Rice</td>
<td>82.3</td>
<td>88.7</td>
<td>89.2</td>
<td>86.0</td>
<td>84.1</td>
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<tr>
<td>Wheat</td>
<td>54.3</td>
<td>62.5</td>
<td>65.8</td>
<td>69.8</td>
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<tr>
<td>Milk</td>
<td>26.1</td>
<td>30.2</td>
<td>32.1</td>
<td>37.5</td>
<td>41.6</td>
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<td>Meat</td>
<td>11.4</td>
<td>14.0</td>
<td>17.1</td>
<td>22.4</td>
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<td>Vegetable oil</td>
<td>4.6</td>
<td>5.8</td>
<td>6.9</td>
<td>7.8</td>
<td>9.0</td>
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<tr>
<td>Vegetables</td>
<td>57.1</td>
<td>70.2</td>
<td>76.4</td>
<td>96.3</td>
<td>124.4</td>
<td>139.6</td>
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<tr>
<td>Fruits</td>
<td>27.8</td>
<td>30.1</td>
<td>32.2</td>
<td>40.8</td>
<td>46.0</td>
<td>54.1</td>
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<td>Calories/day</td>
<td>2286</td>
<td>2463</td>
<td>2550</td>
<td>2637</td>
<td>2680</td>
<td>2624</td>
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<td>% from cereals</td>
<td>65.5%</td>
<td>64.7%</td>
<td>63.3%</td>
<td>59.7%</td>
<td>56.3%</td>
<td>54.9%</td>
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<tr>
<td>% from animal</td>
<td>7.9%</td>
<td>8.9%</td>
<td>10.0%</td>
<td>12.1%</td>
<td>13.7%</td>
<td>15.0%</td>
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</tbody>
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Source: FAOSTAT
China Milk Consumption

Tons (millions)

- Fluid products
- Processed products

Source: USDA, PSD database
China Dry Non-fat Milk Powder Supply

Source: USDA, PSD database
All Asia Annual Per Capita Dairy and Meat Consumption

Source: UN FAOSTAT
Asia Dairy Imports

Source: USDA, PSD database
USDA Dairy Trade Projections
(Billion pounds)
Policy: Governments can open or block trade

- Trade agreements have continued to spread rapidly over the past 5 years, just not with the U.S.
- Agreements like TransPacificPartnership (TPP) can have small positive impacts by lowering some barriers and harmonizing some rules
- But, if members can each make exceptions (say for dairy or rice or sugar) any agreement will be worth much less
- The U.S. is a major farm exporters so U.S. agriculture gains from the broadest possible agreements

- A framework or set of incentives and the trust to solve inevitable trade frictions is perhaps most valuable
Bottom Line

• Current growth in exports to Arabian Peninsula is the result of a policy shift. Filling the gap in a relatively small market.

• Social dynamics and population growth make China (and Asia in total) the area of potential large growth.

• Future of trade negotiations with remainder of Asia region could open doors in Asia further (TTP).

• US hay will be a player in Asia!

• IT DOESN’T MATTER HOW……Hay will be exported either as forage products for cows in Asia or as milk produced from cows in US.