Agriculture in South America
South American Agricultural Regions

- Mountains and forests make widespread agriculture difficult
  - Most successful commercial farms in Argentina, Brazil, and Uruguay
Transhumance

• The seasonal periodic movement up and down in elevation
  – Move to higher elevations during summer and movement down to valleys during winter
  – Style of nomadic herding

• Popular in Andes, Patagonia, and Brazilian Highlands
Case Study: The Gauchos

• Modern day South American “cowboys”
  – Classified as a folk culture
• Primarily in Patagonian region of Argentina
  – Move herds of sheep and cattle to pastures
Mediterranean South America

• Climate offers ideal conditions to grow grapes and other fruits and vegetables
  – Often fruits are grown here in December and flown to Europe and North America
  – Gaining reputation as a wine producer
• Rivalry between Argentinian and Chilean Wines
Cattle Ranching

- Large industry and continually growing
  - Especially in places like Brazil to feed growing populations
  - Encroaching into Legal Amazon boundaries
- Needing large grain industry to feed cattle

### Table 1

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>1,000 MT CWE</th>
<th>Change '99 to '12</th>
<th>% of world</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>India</td>
<td>1,525</td>
<td>+503%</td>
<td>17.5%</td>
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<tr>
<td>2</td>
<td>Australia</td>
<td>1,425</td>
<td>+14%</td>
<td>16.3%</td>
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<tr>
<td>3</td>
<td>Brazil</td>
<td>1,350</td>
<td>+193%</td>
<td>15.5%</td>
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<tr>
<td>4</td>
<td>United States</td>
<td>1,236</td>
<td>+13%</td>
<td>14.2%</td>
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<tr>
<td>5</td>
<td>New Zealand</td>
<td>544</td>
<td>+25%</td>
<td>6.2%</td>
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<tr>
<td>6</td>
<td>Canada</td>
<td>450</td>
<td>-15%</td>
<td>5.2%</td>
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<tr>
<td>7</td>
<td>EU-27</td>
<td>445</td>
<td>-56%</td>
<td>5.1%</td>
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<tr>
<td>8</td>
<td>Uruguay</td>
<td>315</td>
<td>+67%</td>
<td>3.6%</td>
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<td>9</td>
<td>Argentina</td>
<td>280</td>
<td>-21%</td>
<td>3.2%</td>
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<tr>
<td>10</td>
<td>Mexico</td>
<td>250</td>
<td>+3,025%</td>
<td>2.9%</td>
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<tr>
<td></td>
<td>World</td>
<td>8,728</td>
<td>+48%</td>
<td></td>
</tr>
</tbody>
</table>

*In 1,000 metric tons carcass weight equivalent in 2012, and change from 1999 to 2012. Source: FAS/USDA, compiled by Fabio Montossi, INIA, Uruguay.
Monsanto

• Promoting the use of GMOs to increase crop yields in South America
  – Combating food shortages
  – Genetically modified seeds grow bigger and faster

• Making it difficult for local farmers to compete
  – Monsanto produces higher yields and can sell more for less
  – Laws protecting Monsanto interests
Subsistence Agriculture

- Extensive subsistence agriculture in Amazon basin
  - Primarily slash-and-burn
- Widely practiced by indigenous peoples of Andes region
  - Leading to increasing gap between urban and rural
  - Declining due to globalization and growth of commercial agriculture
- Movements by UN’s FAO to promote sustainable subsistence farming
Shifting Cultivation

• Also called slash-and-burn or swidden
• Practiced in Tropical rainforests
  • Amazon
  • Congo
  • East Indies
• Used to clear land for grain cultivation
Process for Shifting Cultivation

- Cut down non-useful trees and shrubs
- Burn felled trees to release nutrients into soil
- Clear space and till soil for agriculture
Problems of Shifting Cultivation

• **Sustainability**
  – Land is only productive for 2-5 years
    • Then needs to sit fallow for 15-20

• **In-efficiency**
  – 20% of land used to feed 5% of population

• **Deforestation**

• **Loss of native flora and fauna**
Deforestation in the Amazon Basin