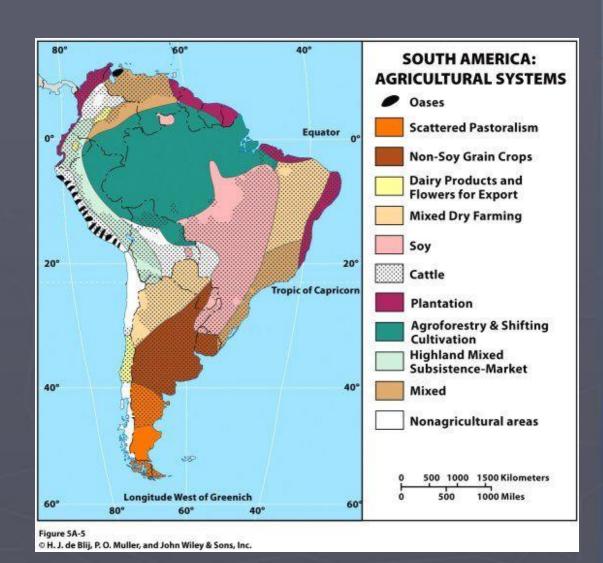
# Agriculture in South America

### 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

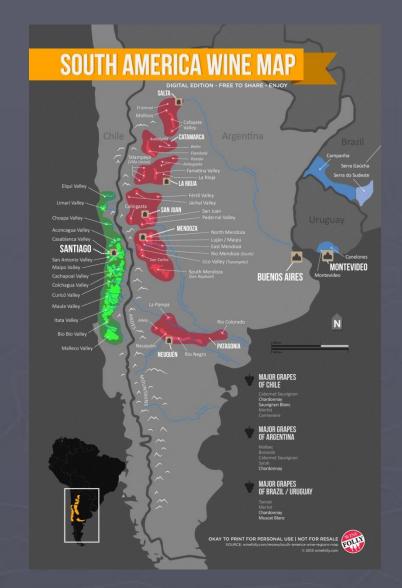
- Modern day South American "cowboys"
  - Classified as a folk culture
- Primarily in Patagonian region of Argentina
  - Move herds of sheep and cattle to pastures





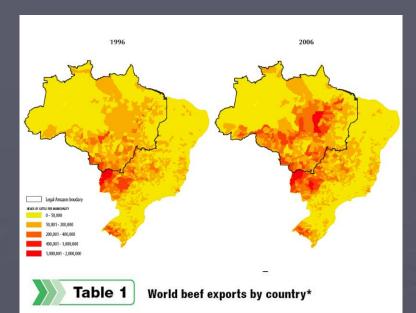
#### Mediterranean South America

- 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 LegalAmazon boundaries
- Needing large grain industry to feed cattle



Rank	Country	1,000 MT CWE	Change '99 to '12	% of world
1	India	1,525	+593%	17.5%
2	Australia	1,425	+14%	16.3%
3	Brazil	1,350	+193%	15.5%
4	United States	1,236	+13%	14.2%
5	New Zealand	544	+25%	6.2%
6	Canada	450	-15%	5.2%
7	EU-27	445	-56%	5.1%
8	Uruguay	315	+67%	3.6%
9	Argentina	280	-21%	3.2%
10	Mexico	250	+3,025%	2.9%
	World	8.728	+48%	

\*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-andburn 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

