

The Influences of Agriculture and Trade on the Evolution of Food

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Present Day Agriculture



Common Plants and Crops

- ◆ Maize (corn)
- ◆ Tomatoes
- ◆ Potatoes
- ◆ Avocados
- ◆ Pineapples
- ◆ Rice
- ◆ Coffee

Field of Maize in Peru



© mongabay.com

http://www.mongabay.com/images/peru/cuzco/Urubamba_1020_1283.JPG

Farming Methods

- ◆ Used to use bat guano as fertilizer
- ◆ Switched to synthetic fertilizers
 - Due to collapse of bird population resulting from collapse of fishery
- ◆ Most of its produce is organic:
 - Coffee
 - Maize

Terrace Farming

- ◆ Unique and innovative idea originally developed by Incas
- ◆ Land on mountains is leveled off forming steps



Terrace farming in China

Natural Terracing

- ◆ Occurs to some extent naturally
- ◆ Results from small amounts of erosion or can also result from cattle wearing down a slope



<http://www.nesthomescyprus.com/images/nata3.jpg>

An example of natural
terracing

Advantages of Terrace Farming

- ◆ Conserves water
- ◆ Makes farming easier and less dangerous
- ◆ Stops rain from washing crops and soil away
- ◆ Very effective for growing rice
- ◆ Used all around the world

Fishery

- ◆ Used to be most productive fishery in the world
 - Peru current
 - Climate
 - Nutrients
- ◆ Over fishing caused its downfall



Fish market in Lima

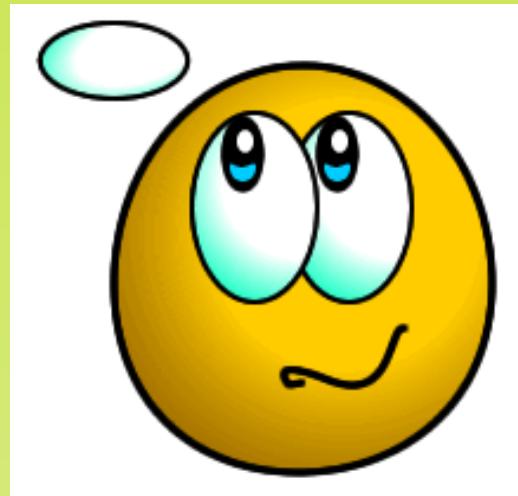


Machu Picchu

How in the world did they
survive?

Problems

- ◆ Altitude
- ◆ Geography and Climate
- ◆ Erosion



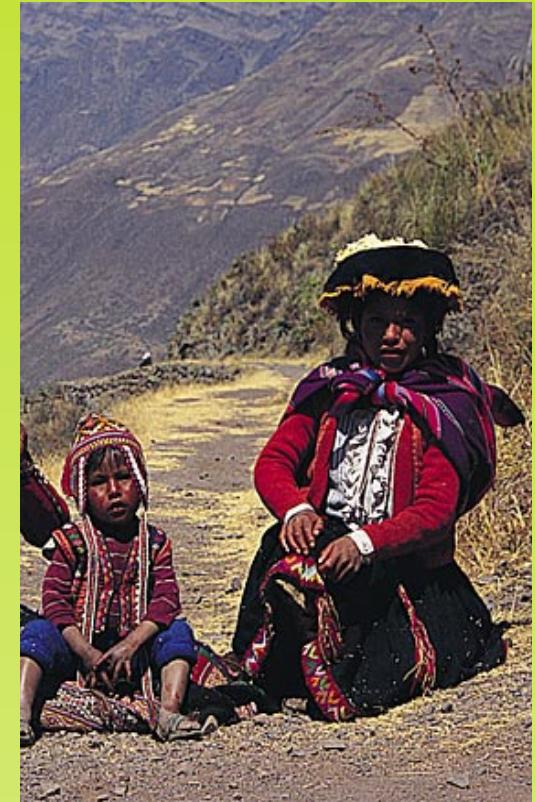
Solutions



Water
Channels



Terraces



Inca
Trial

Common Food

- ◆ Corn
- ◆ Potato
- ◆ *Cannabis sativa*



Trade and Spices



Trade Development

- ◆ Exploration for gold, trading routes & religious purposes
- ◆ Technological advancements
- ◆ Discovery of new lands
- ◆ Treaty of Tordesillas in 1494: Split the world between Portugal (east) and Spain (west) by Spanish Pope Alexander VI

Trade Development cont...

- ◆ Portugal population went up = necessity for food
- ◆ Close to Africa = ‘maritime trading’
- ◆ Spread to Middle East
- ◆ Prince Henry “the Navigator”
- ◆ 1475-1479 War kept Spanish from trade along African coast

Trade Development cont...

- ◆ Vasco de Gama = spices from India
- ◆ Pedro Cabral = brazil-wood & sugar
- ◆ West Africa = gold, ivory & pepper

Trade Development cont...

- ◆ Ferdinand + Isabella = Spain!!!
- ◆ Spanish wanted spice trade
- ◆ Wanted to prosper even more than Portugal
- ◆ Columbus proposed expedition to achieve both by finding route to Asia
- ◆ Ferdinand & Isabella liked Columbus

Trade Development cont...

- ◆ 1st group w/Columbus discovered ‘new world’ & wealth
- ◆ 1st group included ‘conquistadors’ (i.e. Francisco Pizarro & Inca Empire)
- ◆ 2nd group claimed leftovers
- ◆ 2nd group included merchants who traded w/Europe from new territories (i.e. Lima, Peru)

Trade Development cont...

- ◆ “Ultimately...imported African slave labor”
- ◆ “...overseas exploration and... maritime empires” = wealthy Spain!!!
- ◆ Spice trade shifts to Lisbon (Portugal) and Cadiz (Spain)
- ◆ Corn & potatoes from ‘Americas’ (i.e. Peru) “improved European diets”

Peruvian Spices & Cuisine

- ◆ Peruvian cuisine = mixture of homegrown crops + items brought by conquistadors
- ◆ “Local products” = Potatoes, corn, avocado, etc.
- ◆ Imported products = Olive oil, lemon & garlic (conquistadors)
- ◆ African slaves of conquistadors made impact on cuisine as well

Peruvian Spices & Cuisine cont...

- ◆ Lima restaurants = 4 main groups:
 - 1) Fish
 - 2) Creole cuisine (“...inexpensive, but nutritious...”; slave influence)
 - 3) National (i.e. chifas)
 - 4) International (“featureless... expensive”)
- ◆ Mid-19th century; Chinese arrive in Peru

Peruvian Spices & Cuisine cont...

- ◆ 100 years ago = “Large scale Japanese immigration to Peru...”
- ◆ Influence on cuisine (i.e. cebiche = national symbol of Peru)
- ◆ Creole cuisine influenced by slaves (i.e. meat, potatoes, cereal & corn flour = “...inexpensive, but nutritious...”)

Interesting Facts

- ◆ “siu” = guinea pig meat (a specialty)
- ◆ Shows Jesus eating “siu” at last supper
in the “San Francisco abbey”
- ◆ Peru = motherland of the potato
- ◆ May 30 = national day of the potato
- ◆ 4000 varieties of potatoes in Peru
- ◆ Inca Kola = popular soft drink



Port of Manila

Beginning of globalization



Motivation

- ◆ Spices, crops
- ◆ But MAIN reason is:

Half the price for gold in
China



The end

◆ 1565-1815

Restriction on number of ships

Treacherous journey

Sunken ships



The End of the Trade Route

The Evolution of Food

Inca Empire – Present Day



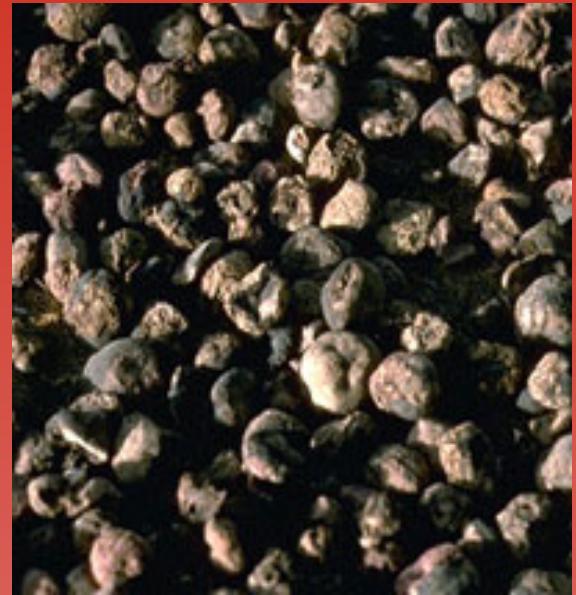
Inca Food

- Varied climate
 - Need for advanced agricultural technologies
 - Terraced farming
 - Evolution of native crops
 - Grains (Quinoa) acclimated to rugged terrain and cold temperatures



Potatoes

- ◆ Peru is the potato capital of the world with over 4000 varieties
 - Inca method of making *chuño* – potatoes could be eaten year round
 - Initially the Spanish conquistadors believed potatoes to be the food of lower classes



Grains



◆ Quinoa

- Thought to be sacred by the Incas
 - ◆ Called “Chisaya mama” or “The mother of all grains”
- Was scorned by the Spaniards for its use in indigenous non-Christian ceremonies
- Nutritious Qualities
 - ◆ Contains balanced amounts of amino acids
 - ◆ High protein content

Maize

- ◆ Over 30 varieties
- ◆ Popcorn
 - Easy to make
 - Prevented corn from spoiling
- ◆ Chicha
 - Fermented corn drink
 - Used for ritual and medicinal purposes
- ◆ Other Preparations:
 - Toasted, Boiled in water, Made into bread on special occasions



Other Common Crops

- ◆ Tomatoes
- ◆ Legumes
- ◆ Peppers
 - Aji
- ◆ Squash
- ◆ Avocados
- ◆ Bananas
- ◆ Pineapples
 - Twice the size of those encountered by Spaniards before
- ◆ Papayas
- ◆ Plums



Meat

- ◆ Everywhere:
 - Poultry and Sheep
- ◆ Coastal regions:
 - Seafood
 - ◆ Ceviche
- ◆ Mountainous regions:
 - Alpaca
 - Deer
 - Llama
 - Guinea Pig
- ◆ Jungles:
 - Freshwater fish (Paiche – largest freshwater fish)
 - Turtles



After the Spanish Conquest

Brought from Europe:

Wheat, cows, rabbits, lettuce, eggplants, onions, spinach, asparagus, cilantro, parsley and figs, oranges, limes, peaches, sugar cane, apples and cherries



Oriental Influences

- ◆ 100,000 Chinese immigrants came to Peru between 1849 and 1874
 - Chifa - fusion of cuisines by Chinese Peruvians



www.perullacta.com

Other Culinary Influences

- ◆ One of the most diverse in the world
- ◆ Combination of Inca heritage and Spanish, Basque, African, Chinese, Japanese and Italian immigration
- ◆ Peruvian cuisine is in constant evolution



Agriculture Sources

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Evolution of Food Sources

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