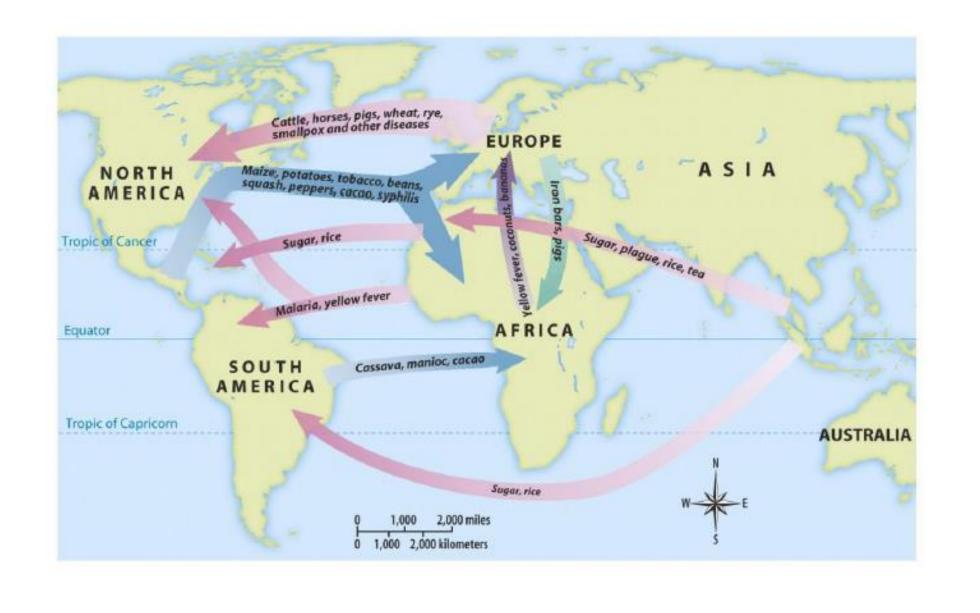
# Topic 4.2: The Columbian Exchange

## Characteristics



### Plant and Animals Crossings of the Atlantic

Chart 1: Valuable plants that were confined before 1492 to one side of the Atlantic, crossed to the other side, and flourished there.

Cultivated	Nourishment	Cultivated	Nourishment
plants of	value: millions	plants of	value: millions
American	of calories per	Afroeurasian	of calories per
origin	hectare that	origin	hectare that
established in	the crop may	established in	the crop may
	produce		produce

Afroeurasia by about 1650 CE		the Americas by about 1650	
Maize (corn)	7.3	Wheat	4.2
Potatoes	7.5	Barley	5.1
Sweet Potatoes	7.1	Rice	7.3
Cassava	9.9	Oats	5.5
Vanilla		Sugarcane	
Peanuts		Olives	
Tobacco		Coffee	
Beans		Peaches	
Squash		Okra	
Tomatoes		Cabbage	
Chili Peppers		Spinach	
Cocoa		Turnips	
Pineapples		Mustard	

(Source: Alfred W. Crosby, Ecological Imperialism: The Biological Expansion of Europe, 900-1900)

Table 2: Valuable animals that were confined before 1492 to one side of the Atlantic, crossed to the other side, and flourished there.

Domestic animals from the Americas	Domestic animals of Afro-eurasian origin
established in Afro-eurasia	established in the Americas
Turkeys	Cattle
Small dogs	Pigs
	Sheep
	Horses
	Goats
	chickens
	Honeybees
	Large dogs

## Additional Effects

**Population estimates around the world, from 1400-1700** (these estimates, from 1979, show the number of people in millions on some of the major continents)

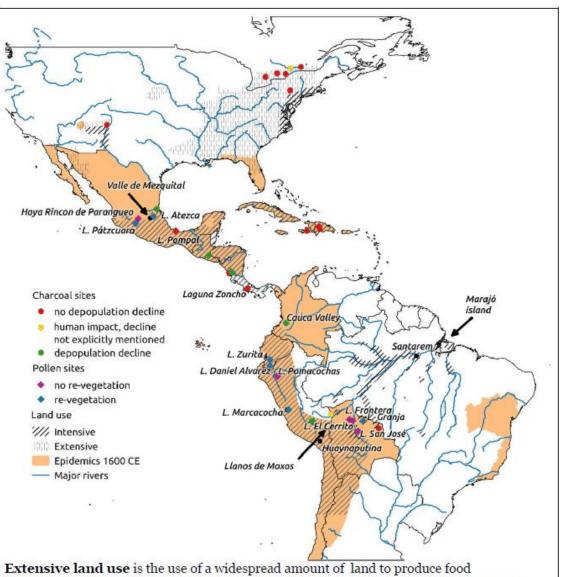
	1400	1500	1600	1700
Americas	39 million	42 million	13 million	12 million
Africa	68 million	87 million	113	107
			million	million
Europe	52 million	67 million	89 million	95 million
China	70 million	84 million	110	150
			million	million
India	74 million	95 million	145	175
			million	million

**Origins of New World Populations** (This table shows the proportion of people in each country with ancestry from the Old World. A share of 1.00 means everyone in that population has ancestry from somewhere in the Old World. Source: "The Columbian Exchange: A History of Disease, Food, and Ideas", *Journal of Economic Perspectives*)

	Share of	Share of	Share of
	population of	Population of	Population of
	Old World	African Origin	European Origin
	Origin (includes		
	Asia/Africa)		
Haiti	1.00	.98	.02
Jamaica	1.00	.89	.08
Cuba	.98	.34	.63
US	.9	.1	.68
Puerto Rico	.82	.16	.66
Mexico	.38	.07	.3
Brazil	.91	.16	.19

COMPANY	COMMODITIES	AFFILIATIONS	CENTER
Council of the Indies	gold, silver, slaves	RCC, Spain	Santo Domingo

British Co./ British East India Co.	gold, silver, spices, tea	England, Drake, Hawkins, ERI	London
Portuguese Coop.	indigo, sugar, slaves	Portugal	Sao Paulo, Lisbon
Royal African Company	slaves, gold	England, JRII	London
Charleston Mercantile Group	slaves, hides, tobacco	England	Charleston, SC
Virginia Co. of London	gold, tobacco	London Merchants	Jamestown, VA
Royal Fisheries Co.	fish/cod and herring	England	St. Johns, Newfoundland; Halifax, Nova Scotia
New France Co.	fur	France	Montreal, Canada
Northwest Co.	fur	Scotland	Montreal/Ft. William
Dutch West Indies Co.	guns, fur, spices	Holland	New Amsterdam (NY)
Hudson's Bay Co.	fur	England	Thunder Bay, Ontario
Massachusett's Bay Co.	fur, fish	England	Plymouth, MA
American Fur Co.	fur	J.J. Astor	New York, St. Louis



Extensive land use is the use of a widespread amount of land to produce food Intensive land use is the use of less land to produce the same amount of food, but using intensive farming practices such as machinery or animals (for plows), fertilizer/pesticides, and/or large labor forces



The American Physitian;

## A TREATISE

OF THE
ROOTS, SHRUBS,
PLANTS, FRUIT,
TREES, HERBS, &c.

ENGLISH PLANTATIONS

AMERICA.

Describing the Place, Time, Names, Kindes, Temperature, Vertues and Uses of them, either for Diet, Physick, &c.

Whereunto is added

#### A DISCOURSE

OF THE

And the use of its Fruit; with all the ways of making of CHOCOLATE.

The like never extant before. By w. Hughes.

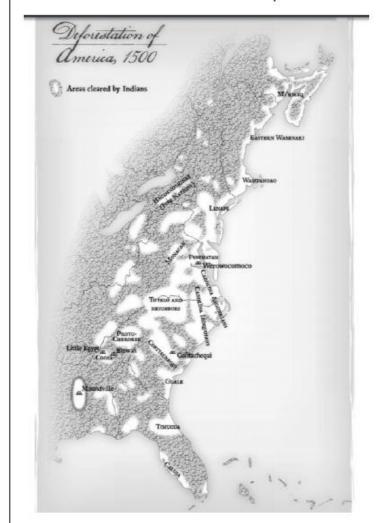
London, Printed by J. Ot for william Crook, at the Green Dragon without Timple-Bar, 1672.



On Caualier, Et ane Dame bemant du Chocolat
Ce jeune Caualier, et cette belle Dame Muis l'on voit dans leurs yeux une si unus flanse
Se regalent de Chocolat;
Qu'en eroit qu'il leur faudroit on mets plus délicai



On the left is deforestation around the time of European arrival, when many different native societies dominated the east coast. By 1650 (map on the right) these areas once created by natives had grown back because many societies had been wiped out due to European diseases or forced to leave



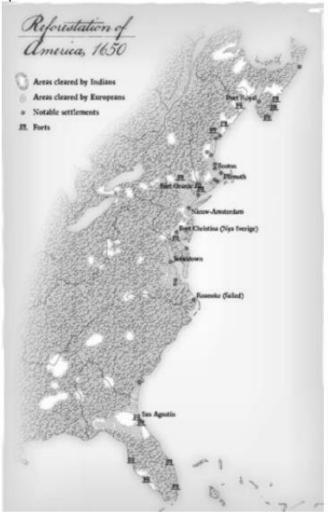


Table 1
The World's Most Popular Foods in 2000

Average Daily Consumption (calories)		Annual Production (millions of tonnes)		Land Harvested (millions of hectares)	
Rice	567	Sugar cane	1,252.5	Wheat	215.5
Wheat	527	Rice	598.8	Rice	154.1
Sugar	196	Maize	592.5	Maize	137.0
Maize	147	Wheat	585.9	Soybeans	74.4
Potatoes	60	Potatoes	328.7	Barley	54.5
Cassava	42	Sugar beet	247.1	Sorghum	41.0
Sorghum	32	Cassava	176.5	Millet	37.1
Sweet Potatoes	29	Soybeans	161.3	Rapeseed	25.8
Millet	29	Sweet potatoes	138.7	Sunflower seed	21.1
Soybeans	17	Barley	133.1	Potatoes	20.1
Bananas	14	Oil palm fruit	120.4	Sugar cane	19.5
Coconuts	12	Tomatoes	108.9	Cassava	17.0
Apples	9	Watermelons	76.5	Oats	12.7
Tomatoes	8	Bananas	64.9	Coffee, green	10.8
Oranges	8	Grapes	64.8	Coconuts	10.6
Rye	7	Oranges	63.8	Chick peas	10.1
Yams	7	Apples	59.1	Oil palm fruit	10.0
Onions	7	Sorghum	55.8	Rye	9.8
Plantains	7	Coconuts	52.9	Sweet potatoes	9.7
Barley	7	Onions, dry	49.8	Olives	8.3
Other Notable New	World Foo	ods:			
Cacao Beans	3	Eggplants	27.2	Cacao beans	7.6
Pineapples	2	Sunflower seed	26.5	Natural rubber	7.6
		Chillies/peppers, green	20.9	Tobacco	4.2
		Pineapples	15.1	Tomatoes	4.0

#### Number of European Emigrants 1500-1783

Country of Origin	Number	Period
<u>Spain</u>	437,000	1500-1650
<u>Portugal</u>	100,000	1500-1700
<u>Great Britain</u>	400,000	1607-1700
<u>Great Britain</u> (Totals)	322,000	1700-1780
Scotland, Ireland	190,000-250,000	
<u>France</u>	51,000	1608-1760
Germany (Southwestern, Totals)	100,000	1683-1783
Switzerland, Alsace Lorraine		
Totals	1,410,000	1500-1783