# What Drove the Sugar Trade?

Document Study

Read the introduction on the first two pages of the packet, and complete the following in your notebooks:

- 1. Make a sketch, or create a flow chart of the movement of sugar from earliest cultivation to the formation of large plantations in the New World.
- 2. What makes growing, processing, and refining sugar labor intensive?
- 3. Define the three building blocks of all business operations (also known as the factors of production).

Now that you have an understanding of the complexity of making sugar, analyze the documents with the following two BIG questions in mind:

1. What drove the sugar trade? In other words, what are the factors that led to the development of the global sugar trade in the early modern era?

To answer this question, categorize the documents based on the different contributing factors. What led to the development of this vast trade network?

2. How did the global sugar trade change the Atlantic World?

To answer this question, go back through the documents and think about the effects of the sugar trade in Europe, Africa, and the Americas in the early modern period. Make a bulleted list of the ways the sugar trade changed the Atlantic World.



# What Drove the Sugar Trade?

#### Introduction

Today we almost take it for granted. A farmer in Nebraska sells wheat to a grain trader in Chicago who resells to a buyer in Bangladesh. The wheat is then shipped on a Japanese freighter built with German steel and fueled with Venezuelan oil. This is the global economy at work. But in the 1500s a nearly global sugar market was a new thing. In fact, for many people, just learning that they lived on a globe was a new thing.

Anthropologists tell us that sugar was first grown in New Guinea some 9000 years ago. From New Guinea traders carried cane stalks to India, and slowly over the centuries sugar worked its way to India and eventually to the Mediterranean. While cane sugar was known to the Greeks and Romans, the first recorded commercial shipment to England did not occur until 1317. In fact, if you had asked an English farmer in 1300 what he thought of sugar, he might not have known what you were talking about.

## Sugar Arrives in the New World

This was about to change. From plantations in Sicily, southern Spain and Portugal, sugar cane spread even further west, first to the Atlantic island of Madeira in 1432 and then the Canary Islands in 1480. Thirteen years later sugar crossed the Atlantic with Christopher Columbus.

In the 1500s the Portuguese led New World sugar producers, creating large plantations in Brazil. In the late 1600s and 1700s sugar growing

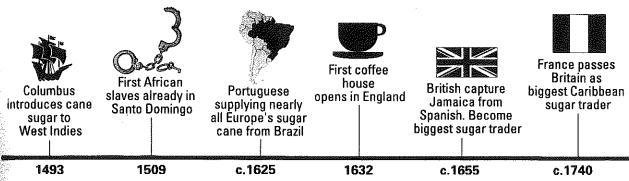
took firm hold in the Caribbean. Here the British and the French competed for domination. This DBQ focuses on the British sugar industry from its beginnings in Jamaica around 1655 until the British abolished slavery in its colonies in 1833.

## **Growing Cane and Making Sugar**

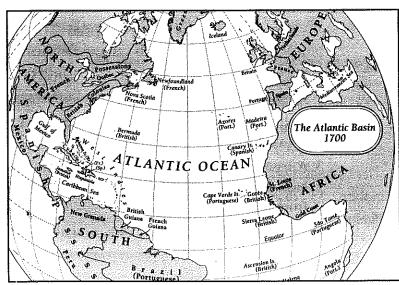
Cane sugar is actually a member of the grass family and like its sister plant, bamboo, grows in segmented sections. Cut off one of these jointed 12 inch sections and you have a "sett" which when planted will grow into a new sugar cane plant. It thrives in hot, humid, tropical climates. During its maturation period, sugar cane can grow an inch a day and attain a height of six to twenty feet. Planting, cultivating, and harvesting sugar cane was tough, exhausting work requiring many hands. Work in the boiling house wasn't any easier.

Here is the process for growing and producing cane sugar in 18th century Jamaica:

- 1. Clear a hillside and plant the cane "setts" in rows at about five-foot intervals.
- 2. Cultivate for several weeks until canes stand above weeds.
- 3. After about 15 months of growing, cut cane at base with machetes. (New crop will regenerate from root base)
- 4. Take canes to crushing mill where stalks are run under rollers and placed in presses for squeezing out all the juice.
- 5. Run cane juice through covered "gutter" to boiling-house for first boil.



- 6. Repeat boilings in large copper tubs. (The sugar cane stalk is 75% water, 15% sucrose, and 10% fiber. Repeated boilings are necessary to evaporate off the water.) Skim off scum that floats to surface.
- 7. Take skimmings from third and fourth boil to the still-house for making rum.
- 8. Pour supersaturated liquid sugar into pots with a finger-sized drain hole in bottom.
- 9. Place pots in drying room for two days. The cooled, crystallized raw sugar leaves behind the more liquid molasses (the British call it treacle). The molasses leaks out the pot hole and cannot be further crystallized. Sell molasses as a sweetener or add to the skimmings for making rum.
- 10. Ship sugar cakes to Europe for direct consumption or further refinement. Perhaps ship some of the molasses to Boston for rum making.



When harvesting the sugar cane, time was critical. Sugar cane stalks must be crushed and pressed within twenty-four hours of cutting or the sugar in the cane juice will "invert" and the crop will be spoiled. The slaves had to work quickly under hot, humid conditions. But time and heat were not the only enemies. The crushing mills could be dangerous. One diary account refers to a hatchet kept near the crushing rollers to quickly chop off a hand before the entire arm was pulled into the rollers.

#### Some Basic Economics

Economists point out that in every business operation there are three general building blocks that must be present. These building blocks are called the factors of production. These factors are land, labor, and capital. A word needs to be said about each.

Land, in economic terms, is more than dirt, although it is that, too. Land refers to all natural resources – topsoil and water, iron ore and trees, buffalo and codfish. Land provides the raw material for every product mankind has ever created or consumed, from asparagus to computer chips. To say the least, land is valuable.

Labor is easier. It is all human resources used to do work. It includes paid workers and slaves, managers and secretaries, plantation overseers and cooks.

Capital is tricky. There are two kinds of capital. First, capital includes all factories, office

buildings, boiling houses, tools and machinery used in producing something. Thus a pencil is "capital." So is that hatchet hanging on the wall of our crushing mill. A second kind of capital is money used to buy land, equipment, or labor. We often call this investment capital.

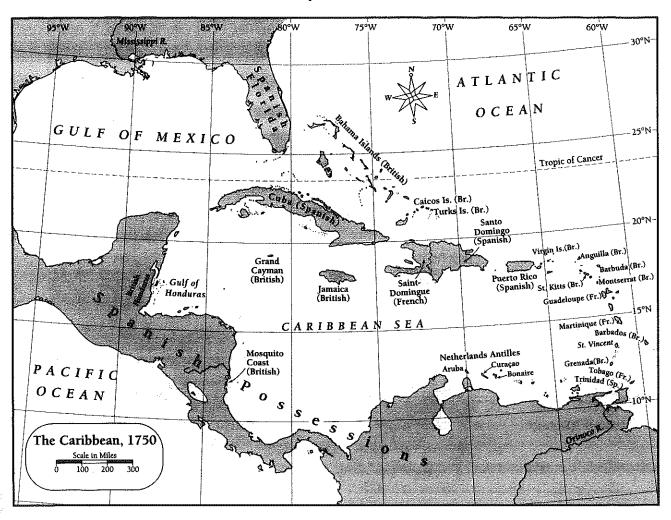
### The Question

The question in this DBQ asks you to identify the different factors that drove the sugar trade. Some of these factors will be closely linked to the factors of production discussed

above. However, there may be other contributing elements like consumer demand or even trade philosophy. Examine the documents and try to organize them into different contributing categories. Then describe these key factors that together made the sugar trade a huge economic event. In other words, answer the question: What drove the sugar trade?

Source: Map created from various sources.

# Colonial Map of the Caribbean



## Document 2

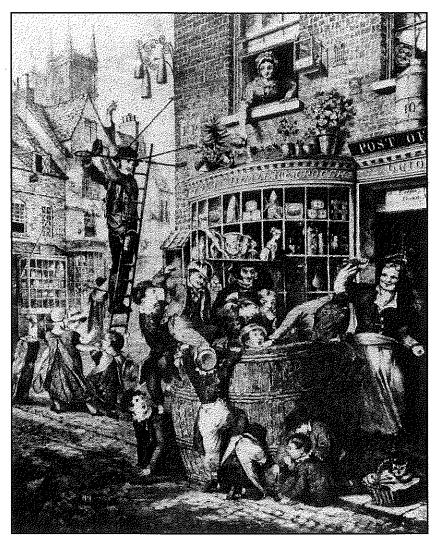
Source: Encyclopedia Britannica. Selected Micropedia and Macropedia entries, 1980.

Ideal Climate For Cane Sugar Production				
Latitude Range	37° N to 30° S			
Temperature Range	68° to 90° F			
Soil Type	volcanic or alluvial* with sand/silt/clay mix			
Rainfall	80 to 90 inches per year			

<sup>\*</sup> Alluvial soil is created by flowing water, often during flooding.

Climate For Two Caribbean Islands				
	Jamaica	Barbados		
Latitude	18° N	13° N		
Temperature Range	68° to 86° F	72° to 86° F		
Soil Type	clay-silt-sand mix	clay and sand mix		
Rainfall Average	77 inches: more in north, less in south	60 inches a year but with considerable variety		

Source: E.T. Parris, illustrator, The Sugar Hogshead, London, 1846.



A hogshead was a large barrel weighing between 700 and 1200 pounds. In the 1760s the typical West Indian trade ship carried about 65 hogsheads in its hold. Why it was called a hogshead historians aren't sure.

**Source:** Benjamin Moseley, M.D., A Treatise on Sugar With Miscellaneous Medical Observations, 1800.

The increased consumption of sugar, and increasing demand for it, exceed all comparison with any other article, used as an auxiliary, in food: for, such is the influence of sugar, that once touching the nerves of taste no person was ever known to have the power of relinquishing the desire for it.

**Source:** Sydney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History*, New York: Elizabeth Sifton Books, Viking Press, 1985.

Sugar as sweetener came to the fore in connection with three other exotic imports—tea, coffee, and chocolate—of which one, tea, became and has since remained the most important nonalcoholic beverage in the United Kingdom. All are tropical products, all were new to England in the third quarter of the seventeenth century, all contain stimulants and can be properly classified as drugs (together with tobacco and rum, though clearly different both in effects and addictiveness). All began as competitors for British preference, so that the presence of each probably affected to some extent the fate of the others.

**Source:** Adapted from Ralph A. Austin and Woodruff D. Smith, "Private Tooth Decay as Public Economic Virtue," *Social Science History*, Duke University Press, 1990.

	British Population	British Sugar Imports (1,000s cwt.)	Annual Per Capita Consumption (In Pounds)
1700	6,122,000	280.7	4.6
1710	6,352,000	300.5	4.7
1720	6,253,000	473.1	7.6
1730	6,183,000	686.2	11.1
1740	6,153,000	720.1	11.7
1750	6,336,000	761.5	12.0
1760	8,000,000	1,102.1	13.8
1770	8,500,000	1,379.2	16.2

Note: • cwt. = one hundred weight or 100 pounds in the US. In the British Imperial System it was actually equivalent to 112 pounds. The authors of this article have given it the US value in making their calculations.

- per capita = per person
- Sugar consumption approached nearly 10 percent of overall food expenditures for some families in England in the 1700s.
- After 1660, England's sugar imports always exceeded its combined imports of all other colonial products.

Source: William Belgrove, A Treatise Upon Husbandry or Planting, 1755.

# A Sugar Plantation of five hundred Acres of Land requires

A Dwelling-House

Two Windmills

A Boiling-House

A Distilling-House

A Curing-House large enough to contain at least 2500 Pots

A Stable to hold thirty Horses, with a Loft over it for dry Grain

A Rum-House

An House for Servants

A Sick-House

A proper Room to confine disorderly Negroes

A Store-House for Salt Provisions

A Smith-Shop

A Cooper's-Shop

A Trash-House

And a Store for English Goods.

It requires three hundred Slaves
An hundred and fifty head of Cattle
Twenty-five Horses
Fifty head of Sheep

- Note: The average cost for an adult male slave in the West Indies in the early 1700s was about £25 (25 pounds) sterling.
  - Uncleared land in Jamaica in 1755 sold for well less than £1 per acre.
  - A head of cattle in Jamaica in 1775 was valued at £15.
  - At 14 pence per day, a day laborer in England in the early 1700s earned about £18 per year.

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## Historians Discuss Financing Sugar Plantations

Source: Peter Macinnis, Bittersweet: The Story of Sugar, Crows Nest, Australia: Allen and Unwin, 2002.

This is the first curse of sugar: it is capital intensive.

Source: Sidney W. Mintz, Sweetness and Power, New York: Viking Press, 1985.

When it was first produced in the West Indies, sugar easily won the attention and interest of Englishmen... (P)lantations were almost always run as individually owned enterprises, and most planters came from families of at least some means back home.

**Note:** As Mintz suggests, wealthy English families owned most sugar plantations themselves. Outside investors were generally not involved. This was quite different from the slaving business which involved large Liverpool investment houses and small investors where many people pooled their money and were part owners. Below are brief sketches of several of the largest sugar plantation owners in the Caribbean.

Source: Adapted from Eric Williams, Capitalism and Slavery, University of North Carolina Press, 1944.

Charles Long Absentee owner. Owned 14,000 acres in Jamaica.

Largest landholding on the island. Family built famous mansions across England in Kent, London, Suffolk.

**Robert Hibbert** Absentee owner of huge Jamaican plantation. Also a

merchant supplying cloth to West African slave

markets. Family owned 1,618 slaves in 1833. Received

£31,120 in compensation from British government when his slaves were freed.

William Beckford Absentee owner. Wealth inherited. Grandfather

Thomas had died one of wealthiest land owners in Europe. In mid 1700s was the most powerful West

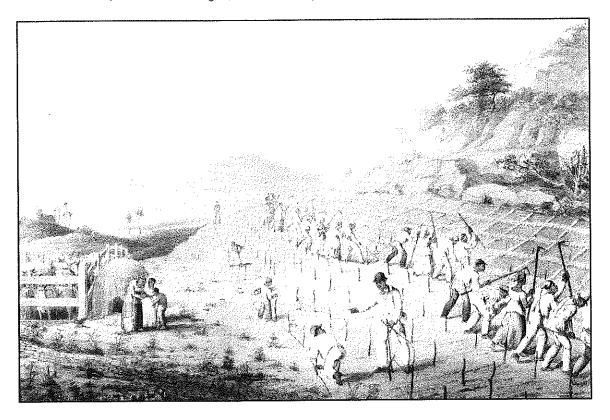
Indian planter in England.

**John Gladstone** Absentee owner. Owned Jamaican sugar plantations

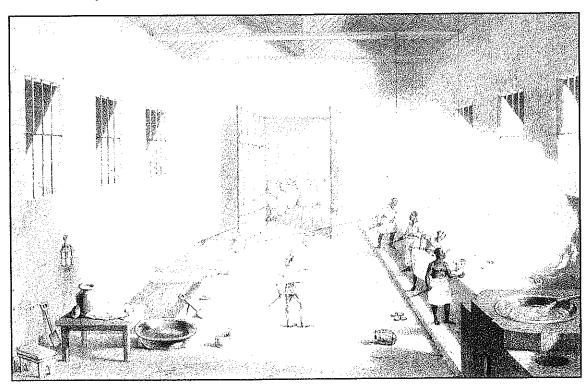
and own fleet of ships. Received £85,600 in compen-

sation for his 2,183 slaves in 1830s.

Source: W. Clark, Ten Views of Antigua, 1823. Courtesy British Library.



Source: R. Bridgens, a 19th century boiling-house, circa 1820. Courtesy British Library.



Source: David Richardson, "The Slave Trade, Sugar, and British Economic Growth, 1748-1776," Journal of Interdisciplinary History, 1987.

# Average purchase price of adult male slave on West African coast

1748 £14

1768 £16

# Average selling price of adult male slave in the British Caribbean

1748 £32

1768 £41

Note: £ = British Pound

Source: Eric Williams, Capitalism and Slavery, University of North Carolina Press, 1944.

Though a large part of the Liverpool (England) slave traffic was monopolized by about ten large firms, many of the small vessels in the trade were fitted out by attorneys, drapers (cloth merchants), grocers, barbers and tailors. The shares in the ventures were subdivided, one having one-eighth, another one-fifteenth, a third one thirty-second part of a share and so on. "Almost every man in Liverpool is a merchant, and he who cannot send a bale will send a band-box ... almost every order of people is interested in a Guinea cargo, it is to this influenza that (there are) so many small ships."

Note: • Bales and band-boxes were two ways of packaging cloth, one large, one small.

- · Guinea was a general reference to the slave coast of West Africa.
- It was said by Liverpool investors that if one slave ship in three "came in," a man was no loser; if two of three "came in," a man was a good gainer. According to Eric Williams, "only one [slave] ship in five miscarried."

## Document iû

**Source:** Franklin W. Knight, *The Caribbean; The Genesis of a Fragmented Nationalism,* New York: Oxford University Press, 1990.

# Slave Population and Sugar Production in Selected Colonies

Colony	Year	Slave Population	Tons of Sugar Produced
Barbados	1712	42,000	6,343
(British)	1757	63,600	7,068
	1792	64,300	9,025
Jamaica	1703	45,000	4,782
(British)	1730	74,500	15,972
	1754	130,000	23,396
	1789	250,000	59,400
Saint-Domingue	1764	206,000	60,000
(French)	1776	240,000	76,000
	1789	452,000	70,313
	1791	480,000	78,696
Cuba	1774	44,300	10,000
(Spanish)	1792	85,900	18,571
	1817	199,100	43,415

Source: John Campbell, Candid and Impartial Considerations on the Nature of the Sugar Trade; the Comparative Importance of the British and French Islands in the West Indies, 1763.

These so necessary Negro slaves are purchased in Africa by the English merchants with a great variety of

woolen goods a cheap sort of firearms from Birmingham, Sheffield, and other places

powder
bullets
iron bars
copper bars
brass pans
British malt spirits
tallow,
tobacco-pipes
Manchester goods

glass beads some particular kinds of linens, ironmonger and cutlery ware certain toys some East India goods

but in the main, with very little that is not of our own growth or manufacture.

Source: Philip Roden et. al., Life and Liberty, Glenview, Illinois: Scott Foresman, 1987.

Beginning about 1660, the Parliament in England passed a whole series of laws dealing with colonial shipping, trade, manufacturing and money. The point of these laws was to set up a trading system based on what was good for the mother country. This kind of trading system was called mercantilism or a mercantile system.

Document 12

The mercantile system worked this way: Laws let English merchants and manufacturers buy raw materials from the colonies at low prices. The colonists sent iron ore, fur, wood, (or cane sugar) to England. The English made the material into finished goods, such as pots, pans, clothing, fine furniture (or white refined sugar). English merchants then sold these goods at high prices in England, the colonies, and other countries. As a result, England had a favorable balance of trade. That is, more money (in gold and silver) came into England than went out. The result was national wealth that led to national power.