Up to the Industrial revolution

The Columbian Exchange

The period after Columbus' discovery of America in 1492 was characterised by considerable cultural and biological exchange between the New and Old Worlds (called the Columbian Exchange). The exchange of plants, animals, diseases and technology transformed European and Native American ways of life. Maize, potatoes, pineapple, cocoa and tobacco were imported to Europe, while several wheat varieties, grapes, olives and sugarcane were exported to America. Also, a number of domesticated animals were brought to the New World, including horses, cattle, pigs, sheep, goats and chickens, while turkeys were imported to Europe.



Seed drill

The first cash crops

The following years of exploration and colonisation led to the production of cash crops such as sugar, cotton, tobacco and tea. The large plantations in the Caribbean and in North America were heavily dependent upon slave labour and for this reason, from the 15th to the 19th century, agriculture was a key element in the Atlantic slave trade from Africa.

The Renaissance

The European Renaissance brought about improvements in farming methods and increments in crop yields. Two big changes were the elimination of fallowing and the use of cross ploughing. Fallowing was the practice of leaving a field unused for one season or more; cross ploughing implied ploughing fields first in parallel rows, and then in perpendicular rows. This left more earth exposed for seeds and thus produced more food or fodder for animals. In turn, animals ate more and produced more manure, which was used to fertilise more land for crops.

Industrial agriculture

The birth of industrial agriculture more or less coincided with that of the Industrial Revolution: technological progress increased food production while reducing the need of labour force. Mechanical improvements began in the early 1700s with an Englishman, Jethro Tull, who invented a machine that planted seeds in neat rows called the seed drill. New tools and processes were developed to ensure that fewer people were needed to cultivate larger areas and produce ever increasing amounts of food. By the mid-1800s, farm machinery, such as the McCormick reaper, vastly increased the productivity of every farm worker and, by the late 1800s, steam power replaced the use of animals.



Tobacco crop

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1 Refer back to the text and find the corresponding English words.

1. Aratura incrociata .....
2. Coltura da reddito .....
3. Foraggio .....
4. Maggese .....
5. Mietitrice .....
6. Rendimento .....
7. Seminatrice .....
8. Siccità .....

2 Decide if the statements are true or false and correct the false ones.

	T	F
1. Cross ploughing was replaced by parallel ploughing in the Renaissance.	☐	☐
2. In the Renaissance, farmers started to leave a portion of land unseeded during a growing season.	☐	☐
3. A large variety of animals and plants were imported to Europe in the 16th century.	☐	☐
4. No European seeds were exported to America.	☐	☐
5. The history of the slave trade is linked to agricultural development in the New World.	☐	☐
6. New tools and machinery needed more labour force to increase production.	☐	☐

3 FIRST Use the words in brackets to form a word that fits in the gap.

The **1.** ..... (DOMESTIC) of sugarcane dates back to 10,000 years ago when it **2.** ..... (ORIGIN) in New Guinea. By AD100 almost all of Europe had been **3.** ..... (INTRODUCTION) to it, but it was difficult to cultivate in European climates and was therefore very rare. On his second voyage to the Americas, Columbus brought some **4.** ..... (CUT) of sugarcane, which were planted in Santo Domingo. The **5.** ..... (PRODUCE) flourished in the New World under the plantation system, firstly in Cuba, Puerto Rico and Jamaica, then in the southeastern colonies of North America. Produced on a large scale, sugar became one of the many vices developed from New World plants and one of the largest cash crops in history. Since it is used in coffee, tea, chocolate, and rum, we can say that people have become **6.** ..... (ADD) to sugar.



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