

AP European History
Month 3 Synopsis Paper 2

Prior to the agricultural revolution of the 1600s and 1700s, European agriculture largely operated at the same level of effectiveness as it had since the Middle Ages. The same system of crop rotation, the open field system, was still being used, which meant that every third year a field would lie fallow. This inefficient system, combined with heavy taxes by the central government, aristocracy, and church, had resulted in constant food shortages and additional famines from the Middle Ages to the 1600s. Population, which had grown steadily until 1300, and continued to grow from 1400 to 1600, stayed roughly the same throughout the 1600s due to recurrences of the bubonic plague, famine and malnutrition, and devastating wars such as the Thirty Years' War. Most peasants and rural laborers were so busy attempting to scrape a living from the earth by working both on their own fields and laboring for others that they had little or no time to engage in any other economic activities.

However, in the United Provinces of the Netherlands in the 1600s, an agricultural revolution of great scope occurred, and soon spread to other European nations. The United Provinces, one of the most densely populated areas in Europe, had a pressing need to improve food production. They began to use new American crops, such as potatoes, which yielded two to three times more food per acre than grain. They developed better patterns of crop rotations in which basic grain crops would be alternated with nitrogen-restoring crops such as peas and beans, potatoes, turnips, and clovers. This eliminated the traditional year of fallow, and the new nitrogen-storing crops were ideal food for livestock, thus allowing farmers to develop small herds. In order to expand cultivatable

land, the Dutch drained many of their marshes and swamps. Landowners enclosed traditional common fields so that the new farming techniques could be implemented more effectively.

From the United Provinces, the agricultural revolution spread to England. Dutch engineers such as Cornelius Vermuyden drained English swamps, creating new and fertile lands. Viscount Charles Townsend manured his fields heavily and used Dutch-style crop rotations, thus producing larger crops and earning higher incomes than other nobles, who in turn copied his techniques to increase their revenues. Also, Jethro Tull spread the use of horses to plow fields and invented the seed drill, which allowed crops to be grown between the rows and lessened the need for weeding. Selective breeding was also introduced, and thus the size of English livestock increased with each generation. Enclosure also became especially prominent in England, where enterprising aristocrats enclosed the fields of the peasantry in order to promulgate the new farming techniques more effectively. In England this resulted in a significant increase in the class of landless proletarian laborers. It also resulted in the stratification of the agricultural economy, marked by a few large landowners, declining numbers of prosperous tenant farmers and independent peasant farmers, and huge numbers of poor landless cottagers.

The agricultural revolution was accompanied by a population explosion of huge scale throughout Europe, not just in England and the United Provinces. However, it would be a mistake to link the population explosion exclusively to the agricultural revolution. In reality, the disappearance and decline of many diseases was a much more important cause. Following the Black Death of the 1300s, plagues continued to strike Europe, carried to major ports by ships from the Middle East. However, after the terrible

Marseilles plague of 1721, the plague never struck Europe again. Strict quarantine measures contributed to this, but the underlying cause was that the black rat, which had spread the bubonic plague, was out-bred and out-evolved by the Asiatic brown rat. Improvements in the water supply and inoculation against smallpox also contributed to the reduction of disease, and improved road and canal networks allowed food to be transported quickly to regions where famine struck. While the agricultural revolution did contribute to population growth by lessening the rate of famine, this contribution was far outweighed by the implementation of anti-disease measures and the elimination of the plague.

The scope and scale of cottage industry also expanded dramatically during the 1700s. Cottage industry, also known as the putting-out system, was a system in which merchant capitalists provided raw materials to cottage workers, who processed them and then returned them to the merchant capitalist. The growth of cottage industry was a direct result of the agricultural revolution and the population explosion. The population explosion had resulted in an increase in population across Europe, from Ireland to Russia. At the same time, however, the agricultural revolution and the enclosure that accompanied it made less people necessary for productive agriculture, which resulted in many agricultural workers becoming landless, and left others with more time to engage in non-agricultural economic pursuits. In turn, expanding world trade produced a class of urban merchant capitalists who had capital to invest, and members of this class used the cottage workers to process their raw materials into finished products. Cottage industry was a family enterprise, and was extremely labor-intensive, but it nonetheless marked the beginnings of industrialization in Europe, and is often described as

“protoindustrialization.” Industrialization would build on the successes of cottage industry in textile production, bringing the process into factories where laborers could be made to work harder and faster by their managers.