

Example by StudyDriver

Source: <https://studydriver.com/fourth-agricultural-revolution/>

Fourth Agricultural Revolution Example

In the first agricultural revolution humans went from hunter gathers to cultivators of the land, producing and domesticating plants and animals. During the second agricultural revolution which was prompted by the industrial revolution; crop yields went up, fertilizers and pesticides started being used, and farm sizes increased. The third revolution which is referred to as the “Green Revolution” introduced genetically modified organisms (GMOS), the genetic engineering of crops, and yet again an increase in crop yield. Many people argue and debate on whether or not we are currently in the fourth agricultural revolution. I feel that we are currently in the midst of this revolution. In the fourth agricultural revolution, which can be referred to as the “Digital Revolution” many different technologies have been introduced to the agricultural industry. Some examples of these technologies are farm management systems that track your production in real-time, on-farm machinery that will take care of your crops at the click of a button, and artificial intelligence (AI) that calculates your optimal harvest times and informs you of your current potential crop yield just to name a few. (Food Agility) These technologies have helped to produce more efficient farming and higher crop yield.

Technology in agriculture has positively affected the global food problem and the consumer food problem. These

technologies have confronted these problems by making agriculture more efficient. Because of this crop yields have increased which has in turn caused an increase in our global food supply. With this rise in our global food supply, our food security has increased as well. "Food security, as defined by the United Nations' Committee on World Food Security, means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life."(IFPRI) With our food security increased more people have access to sufficient food and nutrition, which is needed for any human to survive and flourish.

Although there are positives to technology in agriculture there are also downsides. One of these downsides is the rural development problem. These technologies have made agriculture so efficient that it has almost completely cut out the middleman. One machine can do the job of a whole team of workers. Some farmers find it more economical to buy a machine and have it do all the work more efficiently and in half the time than having to hire a whole team of workers who will take far more time. This has caused many farmhands to be put out of a job.

I feel that technology has greatly influenced agriculture both positively and negatively. Although it has made agriculture much more efficient it has also changed the agricultural workforce. Fewer workers are now needed to accomplish tasks, putting many of the blue colored workers out of a job.