

# A Note on Practice of Cultivating Plants and Livestock

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## Short Communication

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## ABSTRACT

The technique of growing plants and livestock is known as agriculture. Agriculture was a significant factor in the rise of stationary human civilization, as it enabled humans to live in cities by creating food surpluses from domesticated species. Agriculture has a long history dating back thousands of years. Farmers began planting wild grains roughly 11,500 years ago, after harvesting them for at least 105,000 years. Domestication of pigs, sheep, and cattle began over 10,000 years ago. Plants were grown independently in at least 11 different parts of the world. In the twentieth century, industrial agriculture based on large-scale monoculture evolved to dominate agricultural output, despite the fact that about 2 billion people still relied on subsistence agriculture.

## DESCRIPTION

Foods, fibres, fuels, and raw materials are the four major categories of agricultural products (such as rubber). Cereal grains (grains), vegetables, fruits, oils, meat, milk, eggs, and fungus are all food classes. Agriculture employs more than one-third of the world's workforce, second only to the service sector, despite the fact that, in recent decades, the global trend of a declining number of agricultural workers has continued, particularly in developing countries where smallholding agriculture has been displaced by industrial agriculture and automation, which has resulted in significant crop yield increase<sup>[1]</sup>.

Crop yields have increased significantly as a result of modern agriculture, plant breeding, agrochemicals such as fertilizers and pesticides, and technical advancements, but at the expense of ecological and environmental harm. Selective breeding and contemporary animal husbandry procedures have enhanced meat output in a similar way, but they have prompted concerns about animal welfare and environmental damage. Contributions to global warming, aquifer depletion, deforestation, antibiotic resistance, and growth hormones in industrial meat production are all environmental concerns. Agriculture is both a source and a victim of environmental degradation, including biodiversity loss, desertification, soil degradation, and global warming, all of which can lead to agricultural

production reductions. Although some genetically modified organisms are outlawed in some countries, they are extensively used [2].

Intensive agriculture increased productivity starting in the twentieth century. It replaced labor with chemical fertilizers and pesticides, but it resulted in increasing water contamination and frequently involved farm subsidies. Organic, regenerative, and sustainable agriculture groups have sprung up in response to the negative environmental effects of conventional agriculture in recent years. The European Union, which first certified organic food in 1991 and began reforming its Common Agricultural Policy (CAP) in 2005 to phase out commodity-linked farm subsidies, often known as decoupling, has been a major factor behind this movement. Alternative methods such as integrated pest management, selective breeding, and controlled-environment agriculture have emerged as a result of the rise of organic farming. Genetically modified foods are one of the most recent mainstream technological developments [3].

Food security is under threat in many regions of the world due to non-food biofuel crops, development of old farm lands, rising transportation costs, climate change, increased consumer demand in China and India, and population expansion. Given Vietnam's positive experience, the International Fund for Agricultural Development believes that increasing smallholder agriculture could be part of the solution to worries about food prices and overall food security. Soil degradation and diseases like stem rust are important global concerns; over 40% of the world's agricultural land is seriously degraded.

China had the world's largest agricultural output in 2015, followed by the European Union, India, and the United States. Agriculture's total factor productivity is measured by economists, and according to this metric, agriculture in the United States is around 1.7 times more productive than it was in 1948.

According to the three-sector theory, the number of persons working in the agricultural sector and other primary activities (such as fishing) in the least developed countries can be as high as 80%, while it can be as low as 2% in the most developed ones. Many countries have transitioned to developed economies since the Industrial Revolution, and the proportion of people employed in agriculture has progressively decreased. In Europe, for example, between 55 and 75 percent of the population worked in agriculture during the 16<sup>th</sup> century; by the 19<sup>th</sup> century, this had dropped to between 35 and 65 percent [4]. Currently, the percentage is less than 10% in the same countries.

Agriculture employed over a billion people, or more than a third of the available working population, at the turn of the twenty-first century. It employs nearly 70% of all children globally, and in many countries, it employs the highest amount of women of any industry. In 2007, the service sector replaced agriculture as the world's largest employer. Agriculture, especially farming, is still a dangerous sector, with farmers all over the world at risk of work-related accidents, lung disease, noise-induced hearing loss, skin disorders, and malignancies linked to chemical use and excessive sun exposure. Injuries involving agricultural machinery are widespread on industrialized farms, and tractor rollovers are a prominent cause of fatal agricultural injuries in developed countries. Pesticides and other agricultural chemicals can be harmful to workers' health, and professionals who are exposed to pesticides are more likely to become ill or have children with birth defects [5].

## **CONCLUSION**

Cropping systems are different from farm to farm, based on available resources and limits, the farm's geography and climate, government policies, economic, social, and political factors, and the farmer's philosophy and culture.

Shifting agriculture (also known as slash and burn) is a strategy in which forests are burned, releasing nutrients that are subsequently used to support the growth of annual and then agricultural plants over a number of years. The farmer then moves to a new plot, leaving the old one fallow to reestablish forest, and returns after a few years (10–20). If population density rises, the fallow period is shortened, requiring the addition of nutrients (fertilizer or manure) as well as some manual insect management. There seems to be no fallow period in annual cultivation, which is the next level of quality. This necessitates additional more nutrient and herbicide inputs.

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