

The future of the american agricultural sector

[Education](#), [Sustainability](#)



The Future of the American Agricultural Sector — What are the principal challenges faced by it? The United States is the world's largest industrial power. It relies heavily on its high-tech and services industries, but is at the same time the world largest producer of agricultural products. With the impending environmental effects of global warming, making the scenario of a global food crisis more likely than ever, it becomes obvious that the agricultural sector will play a key role in the foreseeable future of the United States. The nation's ability to provide its ever-growing population with adequate nutrition can be defined as a prerequisite for an efficient and independent American economy. Hence, the essay will address the future of American agriculture by firstly casting a glance at the current facts, followed by an examination of the series of challenges this very sector is facing before coming to a short conclusion. What is the relative significance of the U. S. agricultural sector? With an estimated gross domestic product (GDP) of US\$ 14. 62 trillion in 2010 and a real GDP growth rate of 2. 7 percent, the USA ranks as the largest economy in the world, according to the Central Intelligence Agency (2009). While the industrial sector accounted for 22. 2 percent of the nation's GDP and services contributed the largest portion of 76. 7 percent, the agricultural sector only generated 1. 2 percent of the U. S. GDP in 2010. Currently, the agricultural sector accounts for approximately 2. 4 percent of total employment (Central Intelligence Agency, 2009). The American agricultural sector might seem relatively small when compared with the other sectors of the economy, yet it can be classified as highly diverse and well developed. The geographic differences across the country, such as climate or soil, allow for the cultivation of a wide variety of crops.

The main crops are wheat, corn, fruits, vegetables and cotton; livestock products are beef, pork, poultry, turkey and dairy products. Although most of these commodities are used for domestic consumption, the USA exports about 19 percent of its annual agricultural output to foreign countries including China, Mexico and Japan. Furthermore, the productivity of U. S. agriculture is legendary; the value of its agricultural commodities exceeds US\$ 191 billion at the farm level (U. S. Department of Agriculture, 2010).

What does the future of American agriculture look like? Joel Kotkin, an internationally recognized author on global, economic and social trends, predicts that American agriculture will be a growth industry in the upcoming four decades. Kotkin's theory is based on the assumption that the growing U. S. population, the availability of arable land combined with the entrepreneurial spirit and younger population are advantages that will give the USA a competitive edge over other developed nations. The argument is supported by research data that suggests a positive change in people's attitude towards rural life. Thus, nowadays 35 percent of Americans would like to live in the country, which is also reflected by an immigration trend that agricultural states, such as Texas or North Carolina, are registering (Ramkumar, 2010). Nevertheless, the challenges ahead of the agricultural sector are significant ones: Issues related to the global food shortage, a rising concern for climate change, the decline in supplies of fossil energy, and the entailed quest for more sustainability as well as the deployment of biotechnological practices can all ultimately be classified as issues of national and global food security, and shall therefore be explored in the following. The United States will play a key role in the prevention of a global

food crisis. As developing countries such as China continue expanding, they are boosting the global demand for agricultural products. The fact that China, with an increase in shipments by 34 percent to \$17.5 billion, became the largest market for U. S. farm goods in 2010 corroborates this hypothesis (Bloomberg, 2011). In order to meet the demand of a growing world population, American farmers have a great responsibility in improving productivity as well as agricultural output, and in offering these staple foods for fair prices on the international markets. The sector is, however, dealing with a shrinking resource base of farm land, which results in fiercer competition for land and water for renewable energy production, according to the president of American Farmland Trust (American Farmland Trust, 2011). The adaptation to a new climate variability and the containment of the effects of global warming that are projected to cause annual damages to American crops ranging from \$15 billion to \$30 billion in the next thirty to fifty years, represent another substantial challenge (University of California Berkeley, 2001). In addition, the industrial agriculture system consumes fossil fuel, water and topsoil at unsustainable rates, thereby contributing to numerous forms of environmental degradation including air and water pollution, soil depletion as well as the diminishment of biodiversity. The implementation of agricultural sustainability aims at the reduction of carbon-dioxide emissions in order to allow for a significant contribution to halting climate change. Main sustainable practices are the substitution of pesticides and fertilizers by crop rotation systems and soil enrichment methods or the deployment of natural predators (Union of Concerned Scientists, 2007). Another trend in line with this development is the increasing popularity of

organic and locally grown foods, which also reflects a growing consumer rebellion against an industrial food system. Being highly dependent upon exports, the future of a large part of the U. S. agriculture is determined by the development of international markets, since trade as well as reasonable trade growth is elementary to the existence of the sector (National Association of State Departments of Agriculture, 2008). The United States still possesses an advantage in the production of capital-intensive, land-extensive, and low-labor input crops that can be mechanically harvested, for instance corn and soybeans. However, the issue of genetically engineered crops has become a central barrier on international markets for American agricultural commodities. While U. S. farmers have been rapidly adopting genetically engineered crops in order to lower production costs while increasing output, many important trading partners remain wary of agricultural biotechnology, including numerous European countries that have adopted widely divergent approaches to regulating biotechnology (Becker/Tadlock, 2006). Conclusion In conclusion, agriculture, having been a pillar of the U. S. economy for centuries, continues to be a crucial economic sector. The factors and issues that influence the future of the American agricultural sector are interdependent, sometimes even conflicting, forming a complex network: The adoption of sustainable practices will mitigate the impact of global warming, thus contributing to an alleviation of the impending food crisis; biotechnology helps improve the agricultural profitability but currently constraints international trade, and yet it remains to be seen whether the deployment of genetically modified crops can be consistent with a sustainable agriculture. Nevertheless, a vibrant agricultural

sector may be capable of meeting these great challenges and simultaneously providing solutions to some of the most pressing food and environmental issues of our time. (1099 words) Bibliography American Farmland Trust (2011): Challenges and opportunities abound for U. S. agriculture. Western Farm Press, 08. 04. 2011 (online version) downloaded at <http://westernfarmpress.com/management/challenges-and-opportunities-abound-us-agriculture> on 23. 04. 2011. Becker, Geoffrey & Cowan, Tadlock (2006): Agricultural Biotechnology: Background and Recent Issues. Washington D. C.: Congressional Research Service downloaded at www.ait.org.tw/infousa/enus/economy/industry/docs/73949.pdf on 23. 04. 2011. Bloomberg (2011): Food Crisis: Farmers can't produce enough grain. The Daily Crux, 22. 02. 2011, (online version) downloaded at <http://www.thedailycrux.com/content/6989/Agriculture> on 23. 04. 2011. Central Intelligence Agency (2009): The World Factbook, downloaded at <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> on 22. 04. 2011. National Association of State Departments of Agriculture (2008): International Trade of Agriculture Products, downloaded at <http://www.nasda.org/cms/7196/7362.aspx> on 21. 04. 2011. Ramkumar, Seshadri (2010): Bright future for US agriculture in the next 4 decades. Commodity Online, 08. 12. 2010 (online version) downloaded at <http://www.commodityonline.com/news/Bright-future-for-US-agriculture-in-the-next-4-decades-34266-3-1.html> on 22. 04. 2011. Union of Concerned Scientists (2007): Sustainable Agriculture, downloaded at http://www.ucsusa.org/food_and_agriculture/science_and_impacts/science/sustainable-agriculture-faq.html on 23. 04. 2011. University of California Berkeley <https://assignbuster.com/the-future-of-the-american-agricultural-sector/>

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