



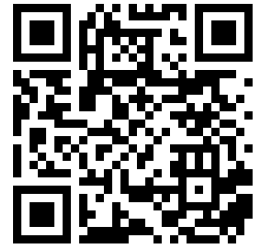
# Qualifying Problem



## Agricultural Industry

### Business & Economics

How might the agricultural industry adapt to the needs of feeding a growing world population in the future?



*Visit our topic center to learn more about our Agricultural Industry topic, view suggested readings and access additional resources.*

### Context

Agricultural industry is not only a vital component of global economies, but also a critical driver of environmental impact and social development. It encompasses a wide range of activities, from crop cultivation to livestock management. It provides food, textiles and biofuels to a growing population. While industrial agriculture has improved crop yields and increased accessibility and affordability, past and current farming practices have raised concerns related to sustainability. As the world's largest consumer of water and land, agriculture must seek sustainable farming practices to ensure its survival. The excessive use of these resources raises questions about the long-term viability of current agricultural practices. Addressing challenges will require innovative approaches, sustainable farming practices, and lastly, an analysis of how we produce and consume food.

### Background

Agriculture is a complex, multi-faceted industry which impacts societies worldwide via the economy, the environment, and most importantly human development. Agriculture is based on the science of cultivating plants, animals, and other life forms for food, fiber, and fuel.

For thousands of years, farming practices have evolved in the use of land, crops, and technology. Small farms, with farmers caring for the land and its inhabitants, are increasingly rare, as most of the world's food is produced on an industrial scale. Industrial agriculture brings high-yield crops, often requiring extreme land exploitation and increased chemical applications. These advances in agriculture have made nutritious food more affordable and accessible. While the agricultural industry in place today is sufficient to feed the current population of planet Earth, it is also affecting the overall health of the planet.

### Challenge

- What factors influence where and what can be grown, production levels, and profits?
- How will the agricultural industry adapt to feed the world's growing population?
- How can we make farms profitable while protecting the environment and natural resources?

### Central Themes

1. Agricultural industry drives the global economy
2. Sustainability and environmental concerns
3. Food system resilience
4. Smart farming

