

9 Questions for 9 Billion People Project

In preparation for Tuesday afternoon, please review the following and be ready to share your thoughts in a discussion with peers and Purdue faculty.

The birth of the world's seven-billionth person presents an important milestone in the development of humanity. The world population is on its way to nine billion and is likely to remain steady near that size. It also presents an opportunity to reflect and consider some of the many challenges and opportunities associated with producing food, feed, fiber and energy necessary to support this growing population. By most accounts it is clear that the world's population will continue to grow for many years. This growth will require that we continue to develop our ability to increase production. To do so, it is important to make an assessment of some of the most pressing concerns facing the agricultural production system.

The purpose of this project is to identify nine of the most critical challenges facing the agriculture and food industry and assess the current situation and state of knowledge in each of these areas. Our focus is to provide a resource that can be used to help guide future research efforts addressed at these challenges, frame discussions related to feeding, clothing and fueling the world in a sustainable fashion, and stimulate thinking toward addressing the challenges. Our hope is that this work lays a foundation of knowledge that is accessible to ordinary citizens of the world. Our belief is that an accurate characterization of the situation plays a key role in helping direct resources and innovations toward meeting the issues that will ultimately make concerns over sustainably feeding, clothing and fueling the world's population a thing of the past.

The 9 Questions

1. Will world economic growth and increased incomes enable the growing world population to afford to purchase additional foodstuffs and improve their nutritional intake?
2. What will be the demographic, health and nutritional requirement characteristics of the future world population?
3. Will adequate resources be available to fulfill the expected growing demand for agricultural raw materials for food, feed, fuel and fiber?

4. Will government policies impede or enhance agricultural productivity and production in the emerging as well as the developed economies?
5. How much will technology and innovation increase future productivity and the production capacity of world agriculture?
6. How can the increased food needs be produced in a sustainable manner that is environmentally and socially responsible as well as economically viable?
7. How adequate and accommodating will the transportation and logistics industries (both locally and globally) and international policies be to the movement of agricultural and food products from production to consumption regions?
8. How will climate change including global warming and increased variability in growing conditions (rainfall and temperature) impact the ability of the agricultural sector to satisfy future food, feed, fuel and fiber demands and the location of agricultural production?
9. What will be the information/knowledge required and the skills/competencies needed by the human resources to respond to the growing food, feed, fuel and fiber demands?