Global Food Systems: An outlook to 2050

A food system is a holistic concept that describes all the elements, activities and institutions that are required to feed people, and their related consequences.

The global food system is central to ending world hunger, yet there is no common vision on the direction it should evolve. This report explores 4 preferred scenarios to a global food system in 2050, that is capable of feeding the world’s population.

Scenario 1: The production based vision
There is increased agricultural production by expanding industrial agricultural systems in low income countries.

- Increased agricultural productivity in low-income countries
- Economic diversification
- Breaking poverty traps
- Increased economic inequality
- Loss of agricultural livelihoods
- Worsening obesity epidemic
- Perpetuating cycle of environmental degradation & climate change

Scenario 2: The consumption based vision
There is reduced consumption by changing consumer behaviour in high and middle income countries, reduced food waste and consumption of resource intensive foods (such as animal products).

- Greater slack in the agriculture market
- Improved health conditions
- Consumer savings
- Fails to address economic inequality
- Loss of livelihoods for those producing livestock and resource intensive foods

Scenario 3: The regenerative based vision
A transformed global food system, to one that is not just sustainable but also regenerative, with the creation of a circular economy & adoption of agroecology.

- Addresses economic drivers of hunger
- Improved health and environmental outcomes
- Risk of increased food prices with some regions still struggling
- Resistance from existing power structure

Scenario 4: The innovation based vision
There is a new agriculture revolution through the use of biotechnology, where farming is superseded by microbial synthesis.

- Abundant food eliminates poverty as a driver of hunger
- Halts environmental degradation and climate change
- Loss of agricultural livelihoods for over a quarter of the world’s population
- Unprecedented rural-to-urban migrations
- Risk of deepening economic inequality and obesity epidemic