

POPULATION AND THE FOOD SUPPLY

The connection between population and food supply

- Sharp rises in global food prices are in part due to short-term factors—drought, speculative investing, low reserves, and hoarding.
- Food prices will likely remain high for years to come because of the rapidly rising demand for food and environmental constraints on the ability to expand crop production.
- The combination of increasing fuel and food prices likely means that many poor countries won't be able to feed their citizens an adequate diet.
- The rapid growth in the population of developing countries and rising incomes are the main drivers of the demand for food and fuel.
- World population is expected to increase by 1.8 billion as of 2030 and by 2.5 billion as of 2050, reaching 9.2 billion. Nearly all these additions will be in the poorest regions of the world.
- By 2030 food demand is expected to increase by 50 percent because of continued population growth and higher incomes.

Changing dietary habits worsen the problem

- As developing countries climb out of poverty, diets become more calorie- and protein-rich, and consumption of animal products grows.

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- Consuming meat and dairy products is less efficient and more environmentally damaging than a plant-based diet.
- Production of a pound of meat requires several pounds of cereals for animal feed.
- Eating meat is the environmental equivalent of driving a gas-guzzling SUV.

Food and fuel: A collision course

- Sharply increasing energy prices affect every step in the food production system: cultivation, harvesting, transportation, refrigeration, packaging, and distribution.
- Rising oil prices and government subsidies have resulted in large supplies of corn being shifted from food to bio-fuel.
- A number of countries have curbed the amount of food being exported.
- Prices of hydrocarbon-based fertilizer and pesticides have skyrocketed, thus contributing to the rising cost of food and limiting the ability of poor farmers to expand crop production.

- There are environmental constraints on expanding food production:
 - Most productive land is already used for agriculture or covered by man-made structures.
 - The best river sites have been dammed.
 - The limits to the benefits of the green revolution have largely been reached.
 - Water shortages are acute in densely populated regions.
- Cultivating more land, investing in agricultural infrastructure and technology, and subsidizing farming inputs (such as fertilizer, pesticides, and water) should stimulate agricultural production, but even with higher prices, this approach is not sustainable because of the high environmental costs:
 - Deforestation
 - Exhaustion of fresh water resources
 - Soil erosion
 - Water, soil, and air pollution

Reducing unnecessary consumption could improve worldwide access to food

- It is essential to pursue efforts to decrease the growth in demand for food, focusing on overconsumption in rich countries.
- Meat and dairy products should be priced to compensate for their environmental effects. At the very least, subsidies for the production of animal-based foods and bio-fuels should be eliminated.

- Taxes on animal products make sense for the same reason as carbon taxes: They protect the environment and benefit society.

The poorest countries need practical solutions

- Despite the AIDS epidemic, sub-Saharan Africa is expected to add a billion people to its current population of 770 million in the next 40+ years.
- The AIDS epidemic has resulted in fewer resources being allocated to family planning. Because they lack access to contraception, many women—especially in the least-developed countries—bear more children than they want, and populations continue to increase.
- Prospects for increasing food supplies are grimmest for the poorest countries with few natural resources and rapid population growth.
- Hundreds of millions of people will face famine and environmental destruction if no changes are made.
- Massive food aid may be needed to prevent large-scale starvation.
- Reducing population growth—by investing in family planning programs and by improving education, especially for girls—is essential.

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