

Effect of New Agriculture Techniques on World Hunger

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ARTICLE ID: 027

Introduction

A spike in global food prices has increased hunger. A prolonged period of higher prices threatens to stall or reverse progress in achieving the Millennium Development Goals (MDGs) of the 862 million poor people around the world who are chronically hungry, 75 percent live in rural areas and depend on agriculture for their earnings. Increasing agricultural productivity in poor countries is critical to reducing hunger. It increases food supply, which lowers food prices. Poor people benefit the most because they spend a much greater share of their income on food. Increasing the productivity of smallholder farmers also raises their incomes, improving their ability to cope. Over the last twenty years, donors have been partners in a progressive decline in support for agriculture and rural development. A substantial increase in funding for agriculture is needed but aid by itself won't be enough. Reforming trade distorting policies in rich countries is also necessary. In addition, developing countries themselves have to provide supportive policies, along with additional investments, for donor resources to be effective.

Key Points of World Hunger

- Increasing agricultural productivity in developing countries is necessary to reduce hunger and poverty, especially in the face of rapidly rising food prices.
- Agricultural and rural development strongly determines whether a developing country is likely to achieve broad-based economic growth and the Millennium Development Goals.



- Declining rates of poverty and hunger in Asia, where agricultural growth helped raise incomes of poor people in rural communities, provides valuable lessons for sub-Saharan Africa.
- In recent decades, rich and poor countries alike have diverted resources away from promoting agricultural growth in developing countries, disadvantaging smallholder farmers.
- Disinvestments in agriculture have been compounded by protectionist trade and agriculture policies in rich countries. New investments would be more effective if these policies were reformed.

New Agriculture Introduction

The only way to eliminate world hunger and poverty is to make agriculture more environmentally sustainable. That's the conclusion of a new report released this week by the United Nations Food and Agriculture Organization. The FAO found that climate change will increase the number of people struggling with food insecurity by 2030 if agriculture does not adapt to the new climate conditions. In India were the words by former Union food and public distribution minister, the late Ram Vilas Paswan, when the Global Hunger Index (GHI), 2019 report was released. India ranked 102 among 117 countries.

The number of people living in poverty could increase by between 35 million and 122 million by 2030. The FAO said that's because population will grow fastest in developing countries that are the most vulnerable to more frequent droughts, floods and other extreme weather events caused by climate change. As EWG showed recently in its Feeding the World report, agricultural practices like biotechnology, chemical fertilizers and pesticides, which are employed by U.S. farmers, are not feeding those who suffer the most from undernourishment. The FAO agrees that these technologies will not end world hunger. To feed those who are hungry now and prevent hunger from spreading, farmers must adopt sustainable practices that help them adapt to climate change.

Conservation practices, such as crop diversification, drip or sprinkler irrigation, zero-soil tillage and growing more crops that rely less on nitrogen, are key to adapting to climate change and solving hunger. According to the report, adopting no-till alone could lift almost 9 percent of people out of hunger by 2050.



Assisting small farmers to adopt sustainable practices is crucial to reducing hunger. Combined with raising income levels, providing education for women and the poor, preventing wars and violent conflicts, and improving infrastructure like access to markets, sustainable conservation practices can help farmers adapt to climate change, and eradicate hunger and poverty worldwide.

Nine Fields Of Study To Solve World Hunger

When asked for the one thing they could change about the world, people (not least beauty pageant contestants) often answer: “To end world hunger.” Given 796 million people across the globe do not have enough to eat, it’s a very noble aspiration – and it does not have to be an empty one. In fact, when you consider the multi-factored nature of food insecurity and hunger, many possible solutions emerge. Here’s a closer look at nine fields of study with the potential to eradicate world hunger.

1. Agricultural science

While the planet currently produces enough food to feed all of its inhabitants, one out of every nine people goes hungry every day. Agriculture can play a crucial role in bridging the gap, by both providing nutrient-rich foods and supporting sustainable livelihoods.

2. Public policy

A great deal of global hunger comes down to something other than lack of food: inadequate policies that would enable countries and communities to more effectively fight hunger through economic security and self-sufficiency. These include everything from reforming and regulating commodities markets to supporting and training small farmers. Public policy students can help drive such policies, to make a difference in the world.

3. Nutrition

Infant malnutrition is one of the most widely known effects of world hunger. As such, it receives significant attention. “Big improvements have already been made. The solution lies in education on good feeding techniques and getting the right nutrients to the mother and child from the beginning of pregnancy. Overall, malnutrition makes people poorer – it is responsible for an 11 percent decline in GDP in affected countries,” says The Guardian.



4. Water management

As droughts become more and more common, both water scarcity and poor water quality continue to threaten people all over the world – especially in Africa. The Water Project explains, “Relieving hunger in Africa has to begin with access to clean water. It may seem simple, but we forget that without access to a reliable source of water, food is hard to grow and even more difficult to preserve and prepare.”

5. Reduce food waste

Currently, one-third of all food produced (over 1.3 billion tons) is wasted. Producing this wasted food also wastes other natural resources —requiring an amount of water equal to the annual flow of Russia’s Volga River and creating 3.3 billion tons of greenhouse gases. Ending food waste would be a radical shift, but it’s one that you can be a part of by simply reducing your own food waste.

6. Climate change and sustainability

The UN’s Food and Agricultural Organization (FAO) recently released a report identifying climate change – including extreme weather events, land degradation and desertification, water scarcity and rising sea levels – as a leading driver of global hunger. A joint forward to the report penned by a collective of experts insists. “If we are to achieve a world without hunger and malnutrition in all its forms by 2030, it is imperative that we accelerate and scale up actions to strengthen the resilience and adaptive capacity of food systems and people’s livelihoods in response to climate variability and extremes.”

7. Microfinance

Microfinance is the provision of financial services to the poor who might otherwise not have access to them. These include loans, savings, and insurance to start and grow businesses. In particular, The Hunger Project is focusing its microfinance efforts on one especially powerful initiative.

8. Agricultural mechanization and infrastructure

The FAO’s ninth Sustainable Development Goal is to “build resilient infrastructure, promote sustainable industrialization and foster innovation.” This is another example where lack of food is not the problem, but rather logistics related to the accessibility of food. In certain areas of Asia, meanwhile, post-harvest losses have been high in

vital crops due to generally weak infrastructure across handling, transportation, packaging, and poor storage. The introduction of good post-harvest management practices and improved technologies offers hope for reduced losses.

9. Biodiversity

“Biodiversity for food and agriculture is indispensable to food security and sustainable development. It supplies many vital ecosystem services, such as creating and maintaining healthy soils, pollinating plants, controlling pests, and providing habitat for wildlife, including for fish and other species that are vital to food production and agricultural livelihoods,” according to FAO.

Benefit of New Agriculture Techniques in World Hunger

- ✦ **Eradicate extreme poverty and hunger:** The majority of poor people reside in rural areas and rely on agriculture. Improvements in agriculture pave the way for economic growth in poorer nations. Meeting the first MDG will contribute to progress on all.
- ✦ **Achieve universal primary education:** By raising incomes, agricultural growth enables parents to send children to school rather than to work. Education prepares children, particularly girls, to take advantage of economic opportunities. It empowers poor men and women in all aspects of life.
- ✦ **Promote gender equality and empower women:** Women play a critical role in agriculture in much of the developing world, especially in sub-Saharan Africa. Formalizing their legal and economic rights will help boost agricultural productivity.
- ✦ **Reduce child mortality and improve maternal health:** More children die before the age of five in rural than urban areas. About half of these deaths are due to malnutrition. Increased and diversified agricultural production is one of the most reliable, sustainable interventions to improve nutrition and reduce child malnutrition and mortality
- ✦ **Combat HIV/AIDS, malaria, and other diseases:** When people with HIV lack sufficient food and proper nutrition, they develop AIDS more rapidly. The agricultural sector in developing countries can help by generating income to purchase food and increasing the availability of nutritious food.
- ✦ **Ensure environmental sustainability:** Many agricultural practices that increase productivity may also cause damage to the environment. Overuse and misuse of agricultural chemicals can pollute surface and ground water supplies and leave dangerous residues in



food. But agriculture's large environmental footprint can be reduced. Agriculture can also help protect the environment through carbon sequestration.

- ✚ **Develop a global partnership for development:** Domestic agricultural policies in rich countries hurt many poor countries. Rich countries subsidize their farmers to overproduce, which makes it difficult for the world's poorest farmers to compete and therefore to earn a living.²⁷ Agricultural protection in rich countries remains solidly in place despite agreements to bring agriculture within the purview of the World Trade Organization and negotiate fairer policies.

