Summary

Today’s world faces pressing challenges, including the threat of global instability, conflict, and migration as a result of inadequate food supplies or unstable food prices. Today’s global population of 7.4 billion people is expected to grow to 8 billion by 2024 and 10 billion by 2056, dramatically increasing demand for food. In addition, rising incomes in many low- and middle-income countries are increasing demand for higher quality, more nutritious, and diverse foods. Meanwhile, 700 million people are still living in extreme poverty, and nearly 800 million remain chronically hungry.

Meeting the challenge of feeding the world’s people will require sustained global efforts across sectors. But there has never been more expertise available to achieve food and nutrition security. Ending hunger and malnutrition is in our grasp. Now, more than ever, is the time to double down on our commitment to action and investment on global food security and agricultural development.
The proven power of agricultural development

Low- and middle-income countries have made unprecedented gains in hunger and poverty alleviation in the last few decades. Between 1990 and 2015 more than one billion people were lifted out of poverty, and the proportion of chronically undernourished people in low- and middle-income countries fell from 23 to 13 percent, even as the global population grew. Agricultural development has been at the heart of this progress.

- Agricultural development and nutrition programs are cost-effective. Investments in agricultural development have proven to be more than twice as effective at reducing poverty as investments in other sectors.
- Agricultural production has, on average, almost doubled in low- and middle-income countries since 1995.
- Agricultural development has led to greater food availability and higher incomes over the past two decades, creating substantial reductions in hunger and improved nutrition for people on and beyond the farm.

Falling rates of hunger since 1990

*Data for 2014–16 refer to provisional estimates.
Source: FAO, IFAD, and WFP, 2015.
Falling rates of poverty since 1990

- East Asia
- Latin America and the Caribbean
- Sub-Saharan Africa
- Europe
- South Asia
- World

Food security promotes shared global security interests

Food price–related unrest can have an immense impact on the stability of countries, and food price shocks can act as a catalyst for both nonviolent and armed conflict.7

► In 2010 and 2011 food prices and grievances related to food policy were among the major drivers of the Arab Spring.
► Analyses suggest that Angola, Benin, Burkina Faso, Chad, Ethiopia, Gambia, Madagascar, Mali, Mozambique, Rwanda, Tanzania, and Uganda are all ripe for revolt should prices spike again.

Food prices and food-related protests, 2007-2015

Extreme food price volatility correlates with the occurrence of food-related protests and riots.

Source: Hendrix, 2016. Food price data are from the FAO. Protests and riots data are from the World Bank Food Price Crisis Observatory (2015) and only cover 2007-14.
Food insecurity can also be a powerful driver for migration.

- Despite ongoing conflicts, much of today’s global migration crisis is driven by economic reasons, as millions of people flee hunger and poverty in their countries in search of a better life.
- The conflict in Syria was preceded by years of severe drought, which left numerous Syrian farmers without food or income—adding fuel to the fire of the crisis that was to come.⁸

Much of today’s global migration crisis is driven by economic reasons, as millions of people flee hunger and poverty in search of a better life.

- Facing steep funding shortfalls at the end of 2015, the UN World Food Programme asserted that Syrian refugees living in and around regional refugee camps would risk travel to Europe in response to a lack of services, including a lack of sufficient food.⁹
- In South Sudan, where nearly one-third of the population is in need of emergency food assistance as a result of civil war, 1.87 million people have become internally displaced, and 1.1 million have become refugees in neighboring countries since 2013.¹⁰

Food security spurs economic growth and expands markets

Global growth creates stronger markets locally, nationally, regionally, and globally. As economies grow, so does demand for products. Rising incomes and changing diets are leading to demand for increasingly diverse and nutritious foods, benefiting local and global producers. This growing demand is not limited to food products, but includes agricultural inputs, mechanization, and new technologies across the board.
Challenges must be overcome

While progress has been made, obstacles loom large. Global economic growth has slowed significantly, straining currencies and budgets. Gains in agricultural production have not reached everywhere they are needed. The refugee crisis and conflicts in the Middle East are creating instability around the world. Nearly 800 million people remain chronically hungry, and 700 million still live in extreme poverty.

Population growth and rapid urbanization

- The global population will reach 8 billion by 2024 and 10 billion by 2056. Ninety-nine percent of the projected growth in the next century will occur in low- and middle-income countries.\textsuperscript{11}
- Many more people will live in cities than ever before. The share of people living in urban areas worldwide will increase from about 50 percent today to two-thirds by 2050.\textsuperscript{12}

Average cereal yields required in low-yield countries to meet demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Metric tons of cereal yield per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1.0</td>
</tr>
<tr>
<td>2000</td>
<td>1.1</td>
</tr>
<tr>
<td>2010</td>
<td>1.2</td>
</tr>
<tr>
<td>2020</td>
<td>1.3</td>
</tr>
<tr>
<td>2030</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Trend required to reach two metric tons per hectare by 2030

Current trend

Note: Only countries with less than 2 metric tons per hectare in 2013.
Source: World Bank, World Development Indicators (2015), and calculations from “Ending Rural Hunger.”
Growing youth populations and unemployment

- In much of Africa and South Asia, a large and increasing share of growing populations are adolescents and young adults—known as a “youth bulge.” There are currently 200 million people in Africa between the ages of 15 and 24, and this number is expected to double within the next 30 years.¹³
- Despite rapid urbanization, the majority of youth in Sub-Saharan Africa still live in rural areas, and more than two-thirds of young people working in rural areas are employed in agriculture.¹⁴
- As youth populations have grown, economic opportunities have not kept up. Sixty percent of Africa’s unemployed today are young people.¹⁵
- A thriving food and agriculture sector, while by no means a silver bullet, is important to addressing the youth bulge. It not only ensures food and nutrition security, but offers a source of employment throughout agricultural supply chains.

Increasing risks from climate change and natural resource pressures

- Temperatures are rising, and weather patterns are expected to become more volatile and unpredictable from month to month and season to season.¹⁶
- Water scarcity is increasing. By 2050 one billion people will have insufficient water resources.¹⁷
- Soil degradation and poor soil health also pose a major threat to agricultural production and food security.¹⁸

Population growth in countries of Africa and Asia

Source: UN, 2015.
Countries where the average age of the population is 24 or less (2015)

Source: UN, 2015.
Leveraging the power of the private sector

Agriculture and food production are driven in large part by the private sector. Up and down the value chain—from growing food to trading, processing, and retail—the business of feeding the planet is stewarded by the private investment and ingenuity of firms ranging from small- and medium-sized rural farms and enterprises to global companies. Achieving increases in agricultural productivity, improvements in nutrition, and enhanced global food security is only possible through the considerable capital, technological and product development capabilities, knowledge, experience, and distribution capacities of private businesses.

Foreign direct investment

Foreign direct investment (FDI) has been increasing dramatically in many food-insecure regions, providing an important starting point for overall economic development. For example, India is currently the biggest recipient of FDI globally, with over $55 billion invested there in FY 2016. However, despite increased investment flows to some regions, there are challenges that impede the full engagement and transformative power of the private sector in smallholder agricultural development. These challenges include the risk—both real and perceived—associated with the agriculture sector, and the difficulty of scaling up successful solutions for the vast and diverse population of smallholder farmers and rural entrepreneurs.
Public-private partnerships

Public-private partnerships have developed significantly in the past decade, but must go further to realize the full impact of their potential in the food and agriculture sector. Important models for partnerships have emerged, ranging from single government–single company partnerships to vast partnership platforms between groups of companies and governments focused on specific geographies, commodities, subsectors, or business models. The chart below highlights notable large-scale efforts launched in the past decade.²⁰

Although private-sector investment in areas related to food and nutrition security has increased rapidly in recent years, the full breadth of the private sector’s power to develop and scale up solutions has not been fully realized. Businesses and entrepreneurs still face many obstacles and impediments, which must be the basis for future government collaboration with the private sector, academia, and civil society in order to achieve sustainable global food and nutrition security in the near term.

<table>
<thead>
<tr>
<th>Program</th>
<th>Overview</th>
<th>Notable progress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Agriculture and Food Security Program</strong></td>
<td><strong>GAFSP offers loans, credit guarantees, and equity to support private-sector-led action that advances agricultural development.</strong></td>
<td><strong>$225 million for 36 projects approved thus far. On average, projects leverage three times the funds provided by GAFSP.²¹</strong></td>
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<tr>
<td>(GAFSP)</td>
<td></td>
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<td><em>Initiated by the G8 and G20 in 2008-09; hosted by World Bank</em></td>
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<td><strong>Grow Africa</strong></td>
<td><strong>Grow Africa provides a collaborative partnership platform for companies, civil society, and selected governments to increase responsible investment in agriculture.</strong></td>
<td><strong>Since 2001 over $10 billion has been committed by more than 230 companies. African agribusinesses committed 70 percent of the funds, reaching 10 million smallholder farmers with their services and contracts.</strong></td>
</tr>
<tr>
<td><em>Initiated by the World Economic Forum and the African Union (AU) in 2011. (Grow Asia, a similar platform, was launched by the World Economic Forum in 2015.)</em></td>
<td><strong>The New Alliance catalyzes new investment while securing government commitments to enable the private sector through reform of key policies. While started separately, Grow Africa and the New Alliance have grown interdependent given their shared objectives and partnership with the AU.</strong></td>
<td><strong>African governments have advanced or completed 92 percent of policy commitments scheduled for completion by June 2015.²²</strong></td>
</tr>
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<td><strong>New Alliance for Food Security and Nutrition</strong></td>
<td></td>
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<tr>
<td><em>Initiated by the G7 in 2012 in alignment with the AU’s country-led development process</em></td>
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<tr>
<td><strong>Ag Results</strong></td>
<td><strong>This $118 million multidonor funding platform uses “pull mechanisms” to incentivize the private sector to invest in solutions. Unlike traditional aid, pull mechanisms reward achievement of predefined results regardless of the strategies and technologies used to achieve these results.²₃</strong></td>
<td><strong>Six pilots are under way, ranging from scaling up vitamin-A fortified maize in Zambia to scaling up distribution of an aflatoxin control product. Early results are promising.</strong></td>
</tr>
<tr>
<td><em>Initiated by the G20 in 2012</em></td>
<td></td>
<td><strong>Specific projects are evaluated for success, and companies are rewarded for results.</strong></td>
</tr>
</tbody>
</table>


²¹GAFSP offers loans, credit guarantees, and equity to support private-sector-led action that advances agricultural development.


²³For more information on Ag Results, see the Chicago Council on Global Affairs report, “Ag Results: Scaling Up Solutions to Achieve Agricultural Development Outcomes,” 2012.
Sustaining government leadership for food and nutrition security

Government leadership, whether by national governments challenged by hunger and malnutrition, traditional bilateral or multilateral donors, or emerging economies, is essential to achieving shared goals. Indeed, continued action by all of these actors will be crucial for sustained progress in strengthening global food security. Without it, as past experience has shown, setbacks can be expected.

A reinvigoration in public support for agricultural development

The 2007-08 food price crisis was a wake-up call that spurred global action and investment in agriculture and food security.

- In 2009 the L’Aquila Food Security Initiative was launched at the G8 Summit, constituting a significant increase in support for agricultural development and food security across a broad swath of funders. By 2015 more than 93 percent of these commitments had been disbursed, helping to strengthen agriculture and nutrition efforts around the world.24

![Circle chart showing pledges to the L’Aquila Food Security Initiative in US dollars.](chart.png)

By 2015 more than 93 percent of the L’Aquila Food Security Initiative commitments had been disbursed, helping to strengthen agriculture and nutrition efforts around the world.

- The Nutrition for Growth Initiative was launched in 2013, led by a partnership between the United Kingdom, Brazil, and Japan, with support from philanthropic foundations and civil society. At that event, $4 billion was pledged towards new commitments to fight malnutrition.25

- Today, the G7 and G20 are reviewing what is still needed to advance food and nutrition security and broader rural development to build on this important legacy, especially as the 2017 G7 Summit returns to Italy, where the historic L’Aquila Food Security Initiative emerged.
Official development assistance to agriculture, 2006-2015

*RDAC countries include Australia, Austria, Belgium, Canada, Czech Republic, Denmark, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, The Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and United States.

Source: Development Assistance Committee (DAC) of the OECD.

Emerging economies engage on global food security

In addition to traditional donors, rising world economic powerhouses are playing an increasingly prominent role in global agricultural development and food security—and in new ways.

China

China is engaging in a multitude of ways to advance development with an emphasis on agriculture and a regional focus on Africa and Latin America, including:

► Financing or developing major infrastructure projects related to power and road infrastructure.
► Incenting investment by the Chinese private sector in Africa through mechanisms like the China-Africa Development Fund, which now has $10 billion in capital.26
Transferring technical skills through mechanisms like “Agricultural Demo Centers,” of which there are 23 across the continent, and long and short-course training in China, by which more than 10,000 Africans are trained each year in agriculture.  

Pledging to conduct $500 billion in trade with Latin America and the Caribbean and $250 billion in FDI through 2019.

China’s growing role in global agricultural development, though not without critique, has generated new options for governments and private companies alike looking to access capital and skills to develop more sophisticated agriculture and food markets.

The China-Africa Development Fund, which aims to encourage and support Chinese enterprises to invest in Africa, now has $10 billion in capital.

India

India, though still addressing high levels of food and nutrition insecurity domestically, has begun to engage in Africa via its robust private sector. The Indian Ministry of Finance and the Reserve Bank of India approved $46.5 billion in investments in agriculture as well as other sectors in Zambia, Botswana, Tanzania, and South Africa alone from 1996 to 2015.
Brazil

Brazil has also intensified its engagement in global agricultural development, food security, and nutrition, with unique objectives and tools available to assist other countries. Given its success at reducing hunger and malnutrition, Brazil’s efforts focus on exporting successful program design and policy from its own experience to interested countries in Africa, Asia, and Latin America more broadly. These include:

- ProSavana, which focuses on the adaptation of Brazilian research to Mozambique, where the agro-ecology is similar. The effort is expected to reach 14 million hectares, with additional investment from Japan.30
- More Food Africa, which provides multicountry support to transfer or scale up the lessons of Brazil’s home-grown school feeding program. The program links local producers with schools to supply food for school meals and provides them with Brazilian agricultural machinery.31

Government policy and financial commitments in food-insecure regions

In most low-income countries, agricultural policies have improved significantly over the last two decades, providing greater opportunities for farmers and paving the way for major increases in agricultural production. The best opportunities for significant advances in food security are where national government policies move towards opening markets, removing distortions, and providing greater opportunities for farmers.

Bangladesh’s progress offers a strong case for the importance of policy reform as a driver of agricultural growth. From the 1980s onward, the government has implemented a variety of reforms to the agricultural sector—liberalizing the fertilizer and seed trade, irrigation management, and wholesale markets as well as deregulating import and export markets. The elimination of trade restrictions and price controls allowed farmers to begin investing their own resources in agricultural inputs. These new investments, particularly in irrigation, increased land productivity and improved efficiency in resource management. The reforms taken on by the Bangladeshi government in the seed, fertilizer, and irrigation markets have spurred measurable increases in agricultural production and stabilized food prices, improving market functionality and resilience to price shocks—particularly during the 2007-08 food price crisis.32 There is still progress to be made in Bangladesh related to rebalancing public agricultural expenditures towards research and away from subsidies and creating an enabling environment for nonfarm growth. Overall, though, agriculture has contributed significantly to poverty reduction throughout the country as a result of the sector’s development.33

Given the important role that policy plays in the development of efficient agricultural systems, a number of mechanisms have been developed to encourage the proliferation of effective national policies for agriculture. On a regional level, however, the unique and stand-alone effort to date is the Comprehensive Africa Agriculture Development Programme (CAADP), which launched in 2003 as an initiative of the AU and the New Partnership for Africa’s Development. CAADP provides support to countries to develop policy frameworks for agricultural transformation, income growth, food security, and nutrition. It helps national
governments establish programs and policies aimed at achieving 6 percent annual growth in agricultural GDP and allocating at least 10 percent of public expenditures to the agricultural sector. On average, public agricultural expenditures rose by more than 7 percent per year across Africa between 2003 and 2015, nearly doubling public agricultural expenditures in just over a decade. However, given the low starting points of investment in agriculture in many countries across Sub-Saharan Africa in comparison to counterparts in Asia, much progress is still needed.

Multilateral financing institutions also help play an important role in country-led work. For example, the African Development Bank (AfDB) finances a range of programs related to agricultural production, food security, and nutrition, which have taken on increasing priority within the institution in recent years. Promisingly, it appears this may also increase further. In 2016 the AfDB pledged $24 billion over the next 10 years to agricultural transformation in Africa.
**Strengthening the global commitment to ending hunger and malnutrition**

The crises and challenges facing the world and threatening food and nutrition security continue to call for action. Urgent, robust response in four key areas can make large strides in meeting these challenges:

1. Make global food and nutrition security a pillar of security strategy for national governments and multilateral bodies.

2. Prioritize investments in national research systems and global institutions in order to unlock and exchange innovation and harness new technologies for the agriculture, food, and nutrition sectors.

3. Productively partner with committed companies to amplify the power of the private sector to transform food and nutrition security, prioritizing responsible investment in agriculture and close attention to small business development in the supply chain.

4. Build the capacity of low-income countries to implement responsible and effective agriculture and nutrition policies.
Endnotes


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