The world is now home to the largest youth population in history. Nearly 80 percent of the world’s 2.3 billion young people between the ages of 15 and 34 reside in low- and middle-income countries (LMICs). In places that have yet to reach their full economic potential and where job opportunities are already scarce, the addition of millions more young people could exacerbate current challenges such as hunger, poverty, instability, and civil unrest.

But the rapid increase in the number of youth, sometimes called a youth bulge, is also an enormous opportunity. Global demand for agricultural and food products is on the rise as a result of population growth, urbanization, and diet transformation. If this demand can be met by local production, it can power positive economic growth and provide job opportunities to youth entering the labor pool.

With proactive measures to support a youth-inclusive agricultural development agenda, a booming youth population has the potential to transform entire regions, making them more prosperous, stable, and secure. However, if not managed properly, rising numbers of youth without economic prospects for the future could lead to disillusionment, social disruption, political instability, migration, and conflict that could require costly humanitarian assistance and possibly even military interventions.

As a global leader in agriculture and with a strong history of youth involvement in farming, the US government, in close collaboration with the private sector, civil society, universities, multilateral institutions, and regional bodies, is well positioned to work with the national governments of LMICs to transform agricultural and food (agrifood) production systems and enhance youth engagement. Collaboration between these actors would expand economic opportunities for young people, promote economic growth and social stability, and open new and expanded markets to American businesses.

The agricultural sector is the single largest employer of the labor force and young people in LMICs. For example, farming accounts for about 55 percent and 44 percent of total employment in Sub-Saharan Africa (SSA) and South Asia, respectively. A higher proportion of youth (age 15 to 24) are engaged in agriculture relative to young adults (age 25 to 34) and the entire working-age population.

This report outlines strategies and recommendations that can increase the productivity and profitability of agriculture, which offers the most powerful means to improve youth livelihoods, enhance food security, and increase youth readiness to contribute to development.
Changing global demographics

The rapid growth in youth populations in regions of Asia, Central America, and Africa is sometimes referred to as a youth bulge. More than 60 percent of the population in SSA is below age 25. Africa’s youth population as a whole is expected to double, with 1 billion people projected to be under the age of 18 years by 2050. In India about 1 million people turn 18 years old every month, while about 900,000 young Filipinos enter the labor force each year. As these surging youth populations come of age, how governments integrate them economically, politically, and socially will shape our shared future.

In nations that are not experiencing a youth bulge, like here in the United States, increasing youth engagement in agriculture is still necessary to ensure a safe, stable, and productive agrifood sector for the future.

Global youth population trends (age 15 to 24)

Africa’s youth population will continue to rise over the next century.

Source: UNPD 2017
Population growth in key countries

Ninety-nine percent of the projected population growth over the next century will occur in LMICs.

Source: UNPD 2015
Countries with highest prevalence of youth (age 24 and below) and food insecurity, as a percent of total population

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Food Insecurity (%)</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Central African Republic</td>
<td>58.6</td>
<td>Rising</td>
</tr>
<tr>
<td>2</td>
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<td>46.8</td>
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<td>4</td>
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<td>Rwanda</td>
<td>41.1</td>
<td>Falling</td>
</tr>
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<td>8</td>
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<td>9</td>
<td>Uganda</td>
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<tr>
<td>20</td>
<td>Timor-Leste</td>
<td>26.9</td>
<td>Falling</td>
</tr>
</tbody>
</table>


Note: While most current youth population data is from 2017, most current food insecurity data is from 2015. Data on prevalence of food insecurity unavailable for the Democratic Republic of the Congo.

Source: UNPD 2017, FAO 2015

Rising food insecurity
Falling food insecurity

Countries with highest prevalence of food insecurity (2015)*

1. Central African Republic 58.6
2. Haiti 46.8
3. Zambia 45.9
4. Zimbabwe 44.7
5. Liberia 42.8
6. Madagascar 42.3
7. Rwanda 41.1
8. Democratic People’s Republic of Korea 40.8
9. Uganda 39.0
10. Chad 32.5
11. United Republic of Tanzania 32.3
12. Sierra Leone 30.9
13. Tajikistan 30.1
14. Ethiopia 28.8
15. Namibia 28.8
16. Yemen 28.8
17. Guinea-Bissau 28.3
18. Congo 28.2
19. Iraq 27.8
20. Timor-Leste 26.9

Youth population as percent of total population (2017) (age 24 and below)

- 60 – 70%
- 50 – 60%
- 40 – 50%
- 30 – 40%
- 0 – 30%

Countries with the highest prevalence of food insecurity

[Map showing youth population as percent of total population]
The risks of inaction

The Arab Spring in 2011, which toppled governments in Tunisia, Egypt, and Libya and sparked political unrest across the Middle East, had its roots in grievances related to high food prices and the lack of job opportunities among young people. Widespread joblessness and dissatisfaction among youth has a destabilizing effect that takes many forms, whether it be piracy off the coast of Somalia, xenophobia in South Africa, recruitment into terrorist networks, or gang activities in major cities around the world. If the United States and the global community fail to develop prosperous employment opportunities to engage youth in LMICs, then critical US allies may find themselves weakened by rapid population growth, widespread instability, and new threats to national security.

Extremism

- Young people who lack compelling economic opportunities to lift themselves out of poverty are more likely to participate in extremism, piracy, crime, and social unrest.
- An estimated 40 percent of people who join rebel movements are motivated by a lack of economic opportunity.

World leaders are at a critical juncture. If not managed properly, the demographic challenge of rising youth populations will push fragile and food-insecure nations over the brink.
Migration

- Young people are more likely to migrate. They constitute a significant share of international movement. Around 70 percent of migrant flows are people younger than 30.
- Between 2000 and 2010 the net influx of international migrants to Europe, North America, and Oceania reached about 3.1 million per year. This is almost twice as many as the previous decade.
- Unless measures are put in place to expand economic opportunities and food security in LMICs, many young people will continue to face increased pressure to migrate by any means necessary—including taking life-threatening risks—to reach Europe and North America in search of better prospects.

Stunted economic growth due to malnutrition

- The Global Nutrition Report estimates that SSA and South Asia each lose about 11 percent of gross national product every year due to the cumulative impact of physical and cognitive stunting.
- Studies estimate that 43 percent of children under the age of five in LMICs are at risk of never achieving their full cognitive potential.
- About one in every three children in SSA and South Asia is stunted. Studies have found that stunted children spend less time in school, learn less when they are in the classroom, and earn 20 to 40 percent less as adults.

A transformed agricultural sector can increase economic opportunities for young people and help minimize recruitment into terrorist and criminal organizations that threaten US and global national security, reduce the severity of the global migration crisis, and promote food and nutrition security and social stability in politically precarious regions.
A historic opportunity for youth in LMICs

Importance of agriculture to development

Investments in agriculture are one of the most cost-effective methods of development. They have proven to effectively reduce poverty more than twice as much as investment in other economic sectors. Many high-income countries can look no further than their own histories to illustrate this point. The United States, Japan, South Korea, and European nations have had to find ways to increase agricultural productivity and encourage youth involvement. Even now, with aging farmer populations in both high- and low-income countries, governments strive to find ways to engage young people in agriculture and related activities.

The United States has already created infrastructure to try to address the problem of the rapidly aging farmer population. It is uniquely positioned to share robust models of successful youth engagement in agriculture like the 4-H, FFA, and Beginning Farmer and Rancher programs. These models have already spread around the world and continue to create thriving agricultural communities.

Many young people in LMICs are already engaged in agriculture. For instance, the majority of youth in SSA still live in rural areas despite rapid urbanization, and more than two-thirds of young people working in rural areas are employed in agriculture. Because of its strong multiplier effects on the rest of the economy, a flourishing agricultural sector will spur job growth in the off-farm sector as well.

Simply put, young people need agriculture, and agriculture needs young people in order to succeed. With the right policies and investments, along with the engagement of young people in nurturing their own potential, the largest generation of young people in human history can become the problem-solving producers, creators, entrepreneurs, change agents, and leaders of the coming decades.

Percentage of farmers over the age of 55

Sources: Heide-Ottosen 2014; USDA NASS 2012
A historic opportunity for the United States

Building the capacity of local production systems will not only create jobs for young people in LMICs, but will also expand the demand for agricultural inputs such as improved seeds, farm machinery, and fertilizer. This demand will open new business opportunities for the private sector, from local US entrepreneurs to American multinational companies. Young people in LMICs represent a significant future market for US goods and services.

- By 2050 about 2.2 billion people, or 23 percent of the global population, are expected to be in SSA, and another 2.4 billion will be in South Asia.
- Rapid economic growth is gradually expanding the middle class and increasing the purchasing power of consumers in these regions.
  - For instance, about 78 million households are expected to join India’s middle class between 2016 and 2021.
  - The middle class in Latin America and the Caribbean and in SSA are also projected to reach 335 million and 212 million people, respectively, by 2030.
- Evidence suggests that the rising middle class is already impacting US exports.
  - Since 2000 the value of US exports to SSA has increased steadily, reaching nearly US$24 billion in 2013 and supporting hundreds of thousands of US jobs.
  - Similarly, robust growth has been recorded in South America and Southeast Asia, where US agricultural exports grew by 11 percent between 2013 and 2014, reaching a record US$11.5 billion.

Expansion of US soft power: addressing China’s rising influence

US power and influence in global affairs is not only shaped by its military might, but by “soft power,” inspiring and transforming lives through development assistance programs—including research and development (R&D)—cultural exchanges, and US private investments. Investing in young people in LMICs can generate affinity for American values, institutions, and companies and can translate into political influence and economic opportunity in the long term. Such efforts will help accelerate economic growth, improve living standards for many people, enhance the US reputation abroad, and facilitate the achievement of US foreign policy objectives.

For the last decade, however, China has been outspending the United States in agricultural R&D. By 2009 the US share of total global public spending on agricultural R&D had fallen from 21 to 13 percent since 1960, while China’s grew from 13 to 19 percent of total spending. In order to continue to be an agricultural leader, the United States must remain the most innovative country in the world. China’s influence in Africa in particular is rising. China is currently Africa’s biggest trading partner. In 2016 China increased its number of projects on the continent by 106 percent, becoming the third largest investor. African jobs created through Chinese foreign direct investment hit an all-time high in 2016 as well. They were double those in 2015 and over triple the number of jobs created by the United States. This is despite the fact that the United States funded 91 projects versus China’s 66 projects.

Source: Ernst and Young 2017
Renewed and refocused US investment in agriculture can catalyze youth engagement and entrepreneurship

For the past 60 years, there has been a bipartisan US commitment to ending global hunger and malnutrition. This commitment exists not just because there is a moral imperative, but also because it is in US economic, political, and national security interests.

A two-pronged approach is needed to address the challenge of engaging youth: supporting agricultural development to spur growth throughout the agrifood system and providing better opportunities for youth, while preparing them to participate in this transformation. This youth-inclusive agricultural transformation agenda is what will move LMICs and the world toward a more secure future.

RECOMMENDATION 1

Commit to a long-term, global food and nutrition strategy.

► The National Security Council (NSC) should include food and nutrition security programs as part of a comprehensive strategy to counter rising extremism, instability, and civil unrest in areas of strategic significance.

► The administration, particularly the NSC in coordination with the United States Agency for International Development (USAID), should update the Youth in Development Policy agenda to take account of the rising youth population, the opportunities and challenges it presents, and the impact it will have on strategically significant regions.

► US diplomatic and development representatives should lead the creation of youth-inclusive food and nutrition security programs (or a strategy) in coordination with bilateral and multilateral partners to secure common commitments on trade, development, and education.

RECOMMENDATION 2

Congress should revitalize and recommit to robust support for public-sector agricultural research and development with an emphasis on needs for the next agricultural transformation.

► Congress should increase investment in agricultural R&D by 1 percent annually to close the gap with peer nations currently surpassing US R&D spending and to retain a lead role in advancing global food security through responsive, adaptive research for the next century.

► The Foundation for Food and Agriculture, Agricultural Research Service, and National Institute for Food and Agriculture should include an emphasis on the use of digital technology and data analysis in acceptance of future grants.

► Congress should encourage the United States Department of Agriculture (USDA), in coordination with local universities and the private sector, to create a pilot program to provide for the inclusion of a private-sector mentorship program.

► The United States should maintain existing levels of investment in the Consultative Group on International Agricultural Research (CGIAR) while encouraging stronger ties with US and international research institutions to accelerate advancements in food security.
RECOMMENDATION 3

**Invest in the human capital development necessary to advance rural youth and to drive agricultural transformation.**

- US food security programs and national governments must prioritize nutrition spending and policy to ensure a strong, healthy workforce.
- Using the best models of agricultural and entrepreneurial education, Congress should encourage the administration to use all levers of government to expand education through programs and exchanges to reflect labor market realities and address the skills mismatch.
- The next generation of talent should be supported by promoting emerging hubs of youth entrepreneurship as a pathway to create more innovative businesses and sustainable employment for young people.
- US development programs should include youth-specific metrics in the monitoring and evaluation of programs. Data should also be disaggregated by gender and age to better understand the needs of specific segments of youth.
- In partnership with the private sector and priority countries, Feed the Future should consider investment in new models of vocational and technical training and certificate programs that support agricultural transformation and rural development.

RECOMMENDATION 4

**The US government should align programs that foster an enabling environment for businesses in strategic countries. This environment should be specifically geared toward businesses that generate high-quality jobs for youth and new youth-led ventures.**

- In partnership with priority countries, the private sector and multilateral partners should commit to prioritizing investment and innovation in digital infrastructure for rural areas alongside other investments like rural roads and power.
- An interagency policy working group should be established and formalized to coordinate a holistic approach to development finance tools available to private-sector investors, from small businesses to multinational corporations. The administration should create an organization that provides a “single window” in the US government to assist small, medium, and large US agribusinesses in finding investment opportunities in global agricultural development.
- With voice and vote, Congress should support the building of rural youth capacity through multinational development banks like the World Bank, African Development Bank, and Asian Development Bank.
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