

# The Agricultural Sustainability Imperative for Producers

Farmers, ranchers, foresters and fishers around the world face similar challenges as they seek to produce nutritious food for their families, communities and for more distant markets.

Business cycles go from boom to bust; heat stress and extreme weather contribute to unbearable working conditions; little chance for advancement and stagnant wage growth dampen youth interest in farming; and remote rural locations lead to isolation from modern services and amenities.

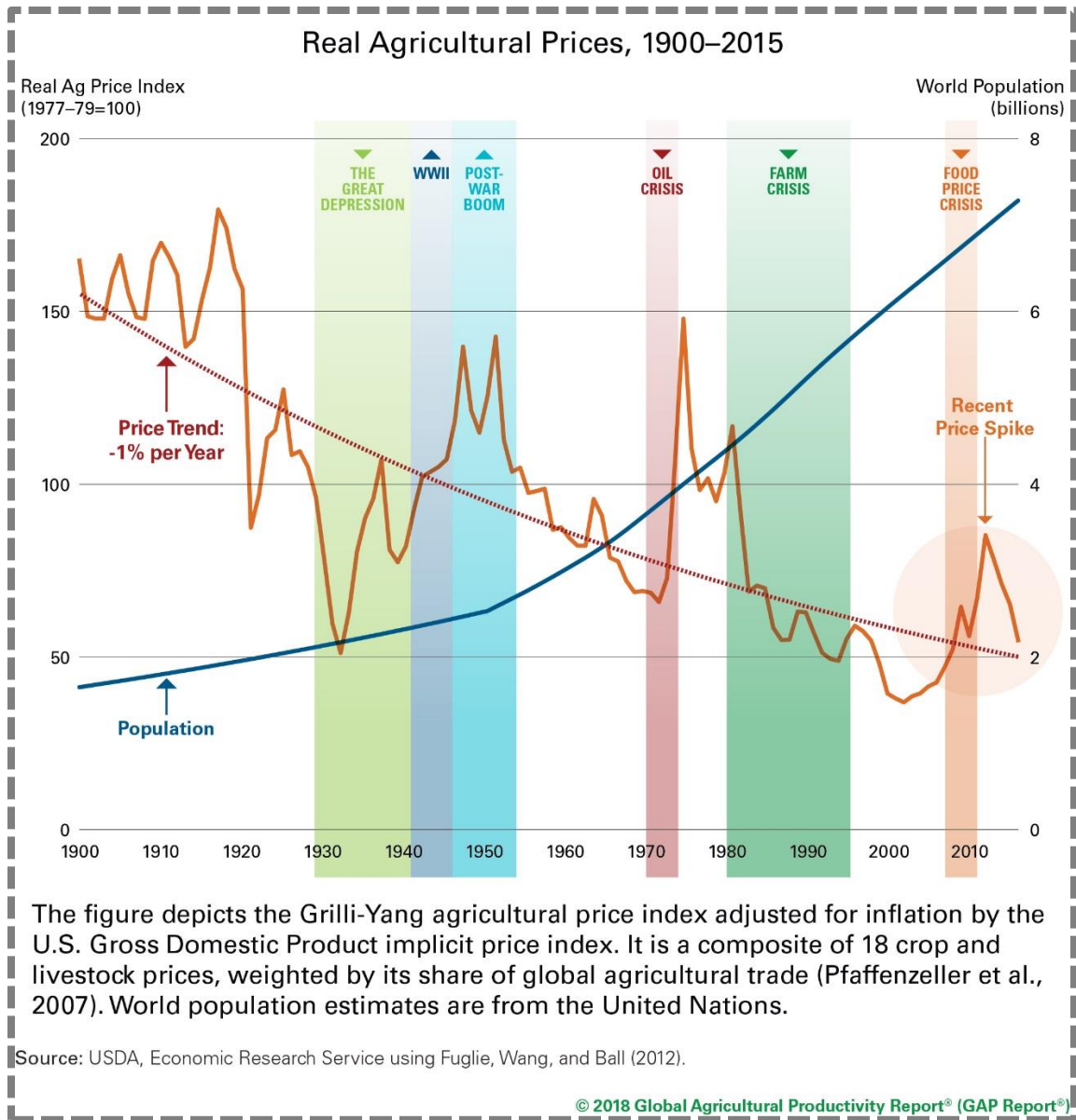
Producers need equitable work opportunities and the chance to build thriving businesses. With the adoption of more sustainable agricultural policies and a focus on improvements for decent work and access to education, training and innovation, producers can help fulfill the sustainability imperative and transform agri-food systems for healthy people and a healthy planet.

## The Agricultural Business Cycle: Managing Through the Booms and Busts

The ups and downs of the global economy, along with local and regional boom and bust cycles affect the agriculture sector and continue to impact farmers and other agri-food system participants, regardless of scale.

Since 1900, real agricultural commodity prices have fallen, while world population growth has more than quadrupled to 7 billion in 2015 (Figure 1). The average price reduction trend has been one percent per year over that time. Yet, shorter-term boom and bust cycles are evident within the long-term trend.

In the last decades of the nineteenth century and first two decades of the twentieth century, technological changes, population growth and migration set the stage for increased trade and global integration, sparking the **“first wave of globalization.”** Global demand and prices for agriculture goods were relatively high until 1929. With the onset of the **Great Depression**, prices dropped, and trade slowed as economies contracted.



Prices rebounded during the **boom era of World War II** and continued through the post-war era for another two decades. The world per capita economy grew at nearly 2.9 percent annually. Agricultural trade and prices also grew, spurred on by the creation of multilateral development institutions and trade structures, including the World Bank, the International Finance Corporation and the General Agreement on Tariffs and Trade (GATT).

By the 1980s a debt-crisis had emerged due to inflation and high-interest rates and many farmers who had purchased land, equipment and other capital investments were locked into loans that became difficult to repay. International trade in agricultural goods slowed as the Soviet Union invaded Afghanistan and an embargo of agricultural exports from the United States placed additional strain on farmers. **The 1980's Farm Crisis** saw many producers enter into bankruptcy and lose their homes and farms.

**Over the period of 1990 to 2007**, economic growth and agricultural prices rebounded, averaging 2.9 percent global economic per capita growth annually. New technologies for farmers, access to lower interest loans and better transportation for goods and services led to a second wave of globalization and growing prices with high food demand from countries like China.

A severe **food price crisis began in 2007**, due to a growing global middle class, increased use of biofuels, a series of weather-related poor harvests, high costs of energy and diminishing grain stocks.

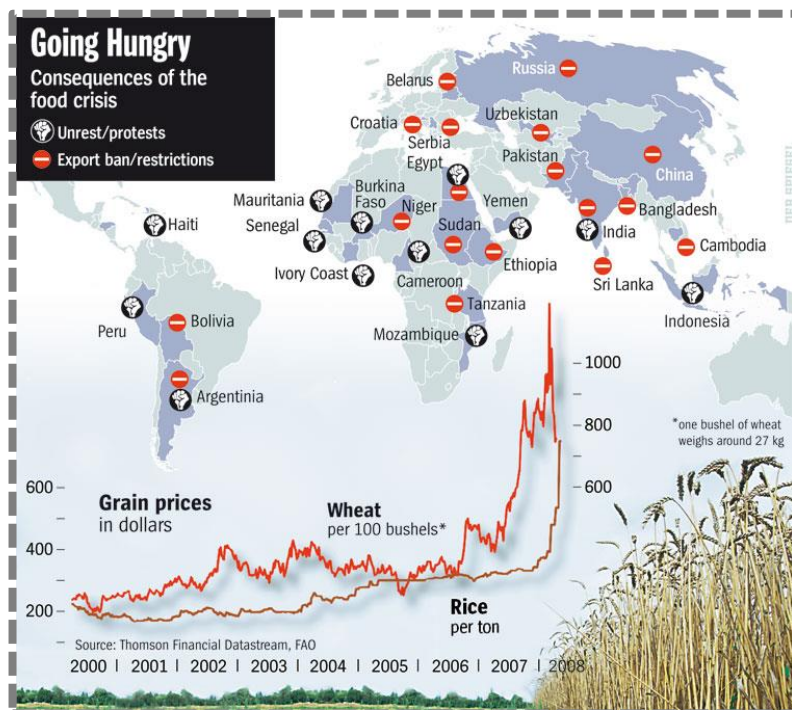
Prices of basic staple food crops, particularly rice, spiked upwards and trade in rice halted, further worsening the crisis and leading to even higher prices.

Almost overnight hundreds of millions of low-income people across Asia and Africa were unable to afford food, setting off political unrest and driving conflict and migration.



Many U.S. farmers lost everything in the 1980's Farm Crisis. Photo credit: David Peterson

In response to the demand for food, producers ramped up production between 2008 and 2013, and with sufficient supplies and lower demand in China, a **new bust cycle of lower commodity prices** started again in 2014 that continues until today. These lower prices pose challenges for producers and requires them to adopt a productivity-centered business model to cut costs, as well as seek new markets and focus on improving the quality of their products to gain a price advantage.



## Sustainability in an Uncertain Season

Farmers everywhere are impacted differently by the agricultural business cycle. How they respond to downturns—particularly when it comes to building resilience against future shocks—depends on their level of education, training, access to finance, information and technology and supportive public policies that enable them to compete and take advantage of market opportunity.

Governments must help by providing essential public goods such as infrastructure, agricultural research and extension services and access to credit and risk management services. Fair and efficient trade helps farmers supply new markets and more consumers.

During volatile business cycles of agriculture, farmers must explore every opportunity to cut costs, improve production and business practices and wisely manage their natural resource bases for long-term sustainability.

Key strategies include effective business planning, data management for decision support and productivity to lower costs and be competitive. Farmers also seek to improve the quality of their products to gain a price premium from the consumer market.



## Social Protection Programs for Productive Resilient Farmers

### CASE STUDY



For subsistence and small-scale producers, income instability is one of the greatest obstacles to increasing the productivity and profitability of their agricultural enterprises.

In **Zambia**, farmers cultivating less than 5 hectares of land rely on wage labor, such as working on larger farms or in processing facilities, for their main source of income.

Agricultural wage labor is seasonal,

which means that men and women are investing less time and energy in their own farms during critical planting and harvest periods.

As a result, many rural Zambians are stuck in a cycle of “coping” — doing what they need to do to get by. This makes it difficult for them to increase the productivity of their own operations, accumulate savings for future investments or acquire knowledge and skills to work in a value-added agricultural business or non-agricultural trade.

**Social protection programs**, such as **cash grants**, provide the poorest rural residents with income stability and food security, while also reducing their reliance on agricultural wage labor and freeing them up to invest time and resources in their own farms, to develop off-farm enterprises or to pursue training for nonagricultural employment.

In 2010, the **Zambian Ministry of Community Development for Mother and Child Health (MCDMCH) piloted a Child Grant Program (CGP)** in three provinces, where the program gave households with children under the age of five a total cash grant of \$12 per month.<sup>1</sup> Payments were made monthly and without condition. Participants spent the additional money on food (76 percent), health/hygiene (7 percent), clothing (6 percent) and transportation/communications (6 percent).

**Perhaps most encouraging was the increased investment in productivity-enhancing and laborsaving inputs, and the increases in agricultural output.**<sup>2</sup>

The share of CGP household expenditure spent on seeds, fertilizer and hired labor increased by 18 percent — with a 22 percent increase in spending by the smallest households. The value of the overall

harvest increased by 50 percent, on average, with most of the additional production being sold. CGP households increased both their ownership of livestock (21 percent) as well as the diversity of their livestock.

Finally, the **income stability of the cash grants** enabled participants, particularly women, to reduce their wage labor hours and develop their own enterprises. The percentage of households that operated off-farm businesses increased by 17 percent.<sup>3</sup> The CPG grants also had a significant multiplier effect: each kwacha transferred to a recipient generated 1.79 kwacha in the local economy.

## No Workers, No Food: Labor Challenges in Agriculture



(A Honduran maize farmer digs irrigation channels.  
Photo credit: Neil Palmer/CIAT.)

Agricultural labor can be dangerous and difficult, and wages are often stagnant. By 2030, some four billion people will live in regions with increasingly hot climates; agricultural workers will account for 66 percent of hours lost due to heat stress.

Around the world, 44 percent of agricultural workers are younger than 14 years old and 66 percent of agricultural workers live in extreme poverty.<sup>4</sup> Many do not have secure access to land and to the assets they need to improve their farm operations. These challenges are resulting in a **youth exodus from the agriculture sector** that requires urgent attention.

Rural areas are home now to 600 million youth, who are the face and the future of food security in their countries.

Understanding their needs and providing them with opportunities from an early age to participate in successful rural agricultural businesses is part of a wider strategy to reverse the youth exodus from agriculture.

A range of new approaches are being established to inspire and support youth to remain engaged in agriculture and to help feed their communities and the world.



A future farmer in rural Honduras whose family participates in ASOFAIL, [Association of Lenca Farming and Artisan Families from Intibuca]. ASOFAIL farmers supply produce to Walmart and use modern farming methods promoted by CIAT (The International Center for Tropical Agriculture).

Photo Credit: Adriana Varón y Stéfanie Neno, CIAT.

The United Nations Food and Agriculture Organization (FAO) has developed [a methodology for youth training](#), the **Junior Farmer Field and Life School (JFFLS)**. In use since 2004, the approach enhances skills and knowledge in agriculture, markets and business and is aimed at young people throughout Africa, Asia and the Middle East. Topics are addressed through small group discussions, observation, role-playing and experimentation.

The approach can be adapted to a wide range of settings and participants, including those [youth displaced](#) due to political instability and conflict.



Graduates from the FAO Junior Farmer Field and Life School program in Mozambique display certificates and results of their field work upon successful completion of the course.

Photo credit: ©FAO/Filipe Branquinho

A new form of JFFLS training includes “training of youth trainers”, a peer-to-peer vocational training in which trained youth are involved in mobilizing and sensitizing their peers in opportunities in agriculture and food industries.

On average, each youth trainer graduate has re-trained 20 other rural youth in his/her district, bringing a positive spillover effect.<sup>5</sup> Key [training themes](#) include conserving water, promoting good health, improving aquaculture, adapting to climate change, and addressing land and property rights.

A global movement of young professionals has emerged who are advocating for more youth participation and leadership to shape sustainable food systems. These young professionals launched [YPARD \(Young Professionals for Agricultural Development\)](#) in 2006 to be a global network of resources and mentoring, led by young professionals in agriculture for youth.

Today, YPARD has more than 15,000 members in over 60 national working groups that are advancing new ideas and opportunities for one another and for the next generation of agriculture leaders.

As an international financial institution working to alleviate rural poverty, **the International Fund for Agricultural Development (IFAD)** has provided \$18.5 billion in grants and low-interest loans to projects since 1978 that have reached about 464 million people. To address challenges of youth development throughout many of its country programs, IFAD is promoting a new approach to agriculture and rural development: [youth-sensitive development](#), incorporating aspirations and concerns of youth and targeting specific programs and policy toward agribusiness improvements so youth can succeed.



In **Cameroon**, 50 percent of the economically active population is involved in agriculture. Youth in rural Cameroon are particularly vulnerable to poverty and are unable to access improved seeds, fertilizers, mechanization or irrigation. Agriculture's importance will rise as Cameroon's oil revenue declines.

IFAD's **Youth Agropastoral Entrepreneurship Promotion Program (PEA-Youth)** is [focused on improving the productivity and sustainability of agriculture and helping young people develop viable agropastoral businesses](#). Using a model of "business incubators", youth gain access to services such as mentoring, along with skills training for business creation and management, training in technical skills, access to finance and financial education.

The program also helps the government of Cameroon improve the institutional and legal frameworks of public policy so that youth can access land. By completion in 2021, the program should reach nearly 40 percent of the youth population living in rural areas and benefit 50,400 households.



## No Justice, No Farmers



Agriculture around the world relies on a labor force that faces risky and difficult working conditions. Thanks to a growing number of socially responsible producers and led by consumer campaigns to raise awareness, agricultural working conditions are improving in some notable cases. Advocacy organizations such as the [Coalition of Immokalee Workers](#) and Oxfam shine a spotlight on how supply chains can become more just and more sustainable. Oxfam's new [Behind the Barcodes](#) campaign takes a focus on supermarkets and retailers and how they

can address growing inequality in their value chains by improving transparency in food sourcing, guaranteeing safe working conditions and equal opportunities for women and fairly sharing food industry revenues with farm laborers.

## Agriculture is Hiring!

In many developed countries, labor for agriculture is evaporating; young people are now seeking higher wages and off-farm jobs.

After the United Kingdom voted to leave the European Union, uncertainty around work status has begun to [shrink the number of workers available to harvest crops](#). Solutions for hiring seasonal agricultural labor must be prioritized in a post-Brexit economy or many farms will struggle to stay in operation.

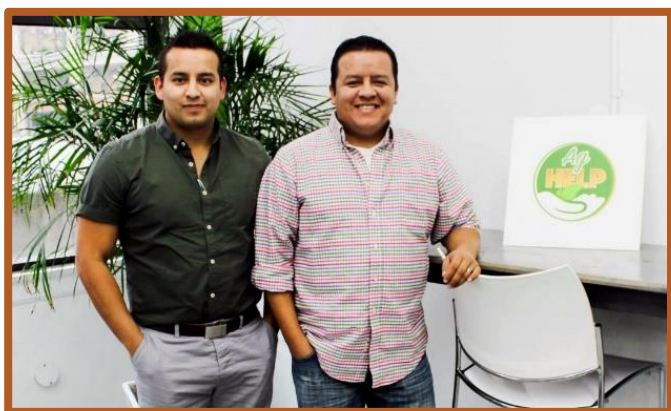
As the U.S. economy continues to grow, a challenging trend has emerged: while the booming economy is good news for many, in the rural agricultural sector there are fewer manual laborers available for agriculture.

Coupled with a shrinking number of migrant workers from Mexico who have long served as a reliable source of both year-round and seasonal labor, the agricultural labor shortage is likely to persist and grow worse in coming years.



Farmers in the U.S. are advocating for better and more streamlined work visa programs, as the current system is cumbersome and is not flexible or responsive to demand. The lack of workers leaves crops unharvested and contributes to food losses, while animals need care round-the-clock. Farm workers increasingly face heat stress, especially working in horticulture and specialty crop operations where manual labor is used rather than machinery.

Food processing plants also experience labor stress, as they tend to be located in small towns and need a reliable workforce. Wages and opportunities for upward mobility must be improved to retain workers and reduce turnover.



In the meantime, innovative solutions are being developed to match labor that is available with farmers who need help. Using information technology, Sadoc and Feliciano Paredes created a platform called [AgHelp](#) that connects local agricultural employers with potential employees. The AgHelp app will be available in English, Spanish and Creole and will be free for farm workers to use.



AgHelp will launch in October 2018 and will include information and social support services (legal, educational and health services) in addition to jobs in agriculture. The app will initially match farm work with workers across Michigan, Florida, Texas, North Carolina and Virginia and will eventually cover more states.

## Endnotes

<sup>1</sup> Silvio Daidone, Benjamin Davis, Joshua Dewbre, Mario González-Flores, Sudhashu Handa, David Seidenfeld, and Gelson Tembo, "Zambia's Child Grant Programme: 24-Month Impact Report on Productive Activities and Labour Allocation," FAO, (2014), 5, 6, 7.

<sup>2</sup> Daidone, S. et al, "Zambia's Child Grant Programme," 2014.

<sup>3</sup> Daidone, S. et al, "Zambia's Child Grant Programme," 2014.

<sup>4</sup> *Atlas of Sustainable Development Goals from World Development Indicators 2018*, World Bank Group, 2018.

<sup>5</sup> *Developing the Knowledge, Skills and Talent of Youth to Further Food Security and Nutrition*. 2014. Joint paper published by Committee on World Food Security, UN FAO, IFAD and WFP. Rome, Italy.