



ESSAYS

# Food Security Post-2015: What Countries Need to Do So That Regional Collaboration Can Be Effective

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In my new book that attempts to explain why ending hunger has been so hard, I focus on four main themes: the complex role of markets, the importance of government policies, the historical process of structural transformation, and the need to identify the appropriate time horizon for analysis and interventions. These themes are not new, but integrating them into a coherent approach to ending hunger seems to be original. And it is the integration itself which is difficult, conceptually, politically and operationally. Rich countries have largely managed this integration, and ended widespread hunger, because they have abundant resources for the tasks. Only a few poor countries have managed to end hunger while they were relatively poor, and most of them are in Asia. The lessons from these success stories drive the analysis in the book and are the subject of this essay.

## The critical role of markets

The most common shortcoming of strategies to end hunger — and many have been proposed since the advent of the Green Revolution in the mid-1960s — is that they fail to understand the critical role of markets in decision-making about food production and consumption. Markets play three roles, only the first of which is widely appreciated. Markets are the arena in which food marketing takes place — transforming a commodity in the farmer's field in time, place and form so that it ends up as nutritious food on the consumer's table. These are the marketing functions of storage, transportation and processing.

These “engineering” functions of markets are essential no matter how the rest of the economy is organized — planned or capitalist. Soviet-style central planning may be dead, but most of the countries in East and Southeast Asia have active planning agencies that help private investors know what government policies and investment priorities are. [\[1\]](#)

In a capitalist, market economy, the second critical function of markets is “price discovery” — the costs of performing these essential engineering functions of marketing must be matched by price differentials at each stage of the process. These price differentials are signals. In the third function of markets, these price signals direct producers, traders and consumers to allocate scarce economic resources to their most efficient use. Without reasonably efficient use of resources, we are doomed to poverty and hunger.

In all of the successful escapes from hunger — from the OECD countries in the 19th century to the wealthier countries in East and Southeast Asia in the 20th century, markets have done the heavy lifting. Their role in generating signals of resource scarcity and inducing producers and consumers to make decisions that are consonant with those signals has never

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been carried out successfully by government planners. Markets, for all of their problems and failures, are at the core of solving the problem of hunger. To end hunger, markets have to work pretty well.

## The importance of government policies

At the same time, *none* of the successful escapes from hunger was driven entirely by market forces. Governments have had to intervene in many ways to provide food security to their citizens. Stabilizing the economic environment, providing public goods such as transportation and communications networks, agricultural research and development, and access to quality health and educational facilities have all been essential in most environments.

There is scope for more or less government involvement, depending on institutional capacity and the willingness of citizens to be taxed to pay for it, but “none” has never been the right answer. “Too much” has been a common mistake, because well-intentioned policy objectives sometimes do not have the fiscal or bureaucratic resources to defend them. It is a tricky balance that requires constant analysis, experimentation and learning.

Ending hunger requires that each society find the right mix of market forces and government interventions to drive a process of economic growth that reaches the poor and ensures that food supplies are readily, and reliably, available and accessible to even the poorest households. Finding this “right mix” has been a major challenge, both analytically and politically, and it seems to be getting more difficult as the global economy becomes more integrated and less stable.

## Structural transformation

One way to lift households out of poverty and provide sustainable food security is to help them grow more food themselves. To do this, rural households — which include most of the world's poor and hungry — need reliable access to modern inputs, to water, and to knowledge about effective farming techniques and markets. Modern inputs must come from markets. These markets need to be close enough to allow farmers to purchase high-yielding seeds and agricultural chemicals, and in return to get decent prices for their surplus output. Good schools (which build the educational tools for farmers to access knowledge), nearby health clinics, and local financial markets also raise rural living standards, but just raising secure crops and feeding their children is a first priority for these families.

As successful as that strategy is in reducing hunger, not all small farmers can achieve food security on their own small plots. For many of these, escaping poverty will require leaving agriculture — even moving to a city. This is the process of “structural transformation.” It occurs as labor productivity in agriculture increases but the sector becomes a smaller share of the economy and the workforce. And the structural transformation provides a powerful pathway out of poverty because it offers job opportunities off the farm. Indeed, if history is any guide, no escape from hunger and poverty has been sustainable without a successful structural transformation and urbanization.

## Three time horizons for appropriate analysis and action

This historical perspective means “time” is important — we have to identify the time horizon over which policies and investments are designed and implemented. By their very nature, some of the most important investments needed to guarantee enough food for all in the future have very long gestation periods and pay-off horizons. Rural infrastructure, including irrigation facilities, schools and health centers, basic agricultural research and development, even the basic institutions of effective governance, all take decades to design, build and deliver benefits. *Doing things right takes time.* Only policies that recognize this basic reality have a chance of working.

Consequently, the analysis, design, implementation and evaluation of policies to improve food security and end hunger require three time horizons to be effective:

1. The short run (less than a decade), when the task is to manage food price volatility and provide a reasonably stable environment for investing in food systems and improved livelihoods for the poor. Investments made in highly unstable environments tend to be speculative and have low rates of return for the economy as a whole — investors cannot see the “signal” because of all the “noise.”
2. The medium run (two to three decades from now), when the task is to manage demand for food. Growth in demand for food staples is driven by population growth, higher incomes, and policy-mandates to produce bio-fuels. Slowing growth in food demand does not require activist population controls or slower growth of incomes. It does require policies to restrict, rather than encourage, the use of basic foodstuffs to produce bio-fuels. Actions to encourage diets which are less meat-intensive are also important, both to improve the health of consumers directly and to reduce pressures on resource availability driven by demand for high-quality livestock feed.

3. The long run, when the task is to manage the sustainable increase in food supplies, subject to greater risks from climate change and a depleted resource base in many regions. New technologies are an important part of sustaining these increases, but part needs to come from significantly improved efficiency in utilizing resources and technologies currently in use.

## Managing the integration to provide food security

Appropriate (and different) policies are needed for each time horizon. The unifying theme for the disparate policies needed is solving the “food problem.” No country has been able to sustain rapid economic growth until its citizens and investors were confident that food was reliably available in the main urban markets. This confidence is the political foundation of food security.

Rural poverty has always been a later concern, after governments have secured their urban political base. Rising rural productivity and economic growth then provide the ingredients to broad-based food security that ends hunger, not just in urban areas. The two are intimately linked, and these links mean that government policies to reduce poverty and hunger — to improve food security — are complicated,

and require an economy-wide perspective on how rural and urban markets are connected. Labor market connections are most important for understanding real wages, labor productivity and living standards, but efficient input and output markets are also important. Eventually, financial systems are needed that link opportunities for urban investments and capital resources with rural savings. Access to modern financial institutions and their assets also permits the expansion of agricultural operations, which is essential to sustaining rapid growth in labor productivity.

That is why ending hunger is so hard. It takes (1) sustained economic growth (over decades, not years) that (2) systematically includes the poor (especially in rural areas), along with (3) public actions to stabilize the food economy in which poor households live (because spikes in food prices can kill).

Still, ending hunger is not impossible. History shows that billions have escaped its scourge. Those historical lessons inform the way out of hunger for the remaining billion still trapped without enough food to eat.

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This essay is from the text of my keynote address to the Responsible Business Forum on Food and Agriculture conference on “ASEAN beyond 2015: Collaboration for equitable growth,” held in Hanoi, Vietnam, June 23–24, 2015. It is based on my recent book, *Food Security and Scarcity: Why Ending Hunger Is So Hard*, University of Pennsylvania Press and the Center for Global Development, 2015. I would like to thank Peter Agree, the press’s editor-in-chief, and Ms. Hoang Ngan Pham, my collaborator in Vietnam, for helpful comments.

[\[1\]](#) I learned about economic development while working as an advisor in the early 1970s at BAPPENAS, the Indonesian National Planning Agency. My academic training was in economic history.