

►► FOOD SECURITY

Food security is a fascinating problem space. Most of us think of food insecurity as people who are starving because of crop failures, or a complete absence of food. Undoubtedly, we do have people who are in that category; differentially, those people are isolated from other systems. They are not part of markets, and are beyond the effective reach of most states, so they cannot be helped and served by normal systems.

Interestingly, differentially, the people who are the most hungry are subsistence farmers in sub-Saharan African, Asia and parts of Latin America, where they literally cannot generate enough protein, micronutrients, and other nutritional attributes to survive. The challenge we have is to address that core group of very hungry, episodically catastrophically hungry, but generally malnourished people. It is a bit disturbing that in the last three years, the trend has been slightly up in terms of the absolute number of people who are hungry, as short term trends may be hints that there is a longer term problem out there. We have had a long-term decline in the number of people who are food insecure or hungry. As far back as 1820, ninety five percent of us were food insecure, and we were living on incomes of less than two dollars a day. And eighty five percent of us were absolutely insecure, in that we were living on less than a dollar a day.

So we have gone from a billion people to more than seven billion people, and we have taken the incidence of episodic and absolute malnourishment, from eighty five to ninety percent of our population, down to nine or ten percent. That does not mean the job is done, but that we have done a lot. Now the question is how do we deal with the approximately nine hundred million people who are differentially hungry?

Reducing hunger

The traditional strategies for reducing hunger were simply to give them food or make food available on some concessionary basis. In a worst case, food was dropped out of the back of an airplane as it flew overhead, where there were no roads. In better cases, food was actually delivered to the hungry people on the ground by aid workers. We are discovering that those strategies are not always that effective. They may deal with the immediate short-term problem which we have to obviously get over, but they often actually are counterproductive. These kinds of food solutions often end up causing longer term food insecurity, because you are dropping food into a food insecure part of the country, and depressing the prices and the value of any food that is left. There is never zero food; it is just scarce, and scarcity normally brings in new supply, which is usually priced higher and incentivizes people to produce, and deliver more food. But continually truncating this relationship means constantly isolating the hungriest, so that they are perpetually at risk of the environment and other conditions.

So what is the solution? There is no single strategy. It is clear that giving food to people may be a necessary short to medium-term part of the puzzle, because we owe it to the world not to let people die from the absolute absence of available food in their lives.

But beyond that, the longer term solution is to try and assist these people to acquire the capacity to become more productive. This usually means somehow extending the public and private infrastructure and markets into those communities, so that people can buy and sell inputs, buy and sell their own labor, or they can sell surpluses and buy during

periods of shortages at the family level.

Very few countries are practically self-sufficient. We buy and sell food across our boundaries every day, because we want variety, or because we have to average out the shortages, and the peaks in our markets. States like Canada and some other large developed nations that have food surpluses, and are in areas which are resilient to climate change, are going to be increasingly important as other countries start buying and selling their foodstuffs.

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Another priority is to maintain our productive capacity. Our farmers are both competing against other countries and in Canada for land, labor, and capital. This means that agriculture needs to remain vibrant, productive, and profitable. It usually also means good business practices, good capital practices, and good infrastructure, but, fundamentally productivity growth. The rest of the economy as a whole is adding one to two percent to its productivity, on an annualized basis over extended periods, and farming needs to do the same or its relative incomes or production will fall. This puts

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MAKING WAVES



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pressure on countries like Canada to direct some of its research and development efforts to sustaining our productive capacity and our exportable surpluses of foodstuffs. Canada is pretty big in the wheat, canola and pulse markets, which are the bedrock for the diets of many food insecure communities and families around the world.

