

Fighting malnutrition: Use trade liberalization or increase local food production?

In 1996 the World Food Summit adopted a goal of “halving the number of undernourished people in the developing world to approximately 400 million by 2015.” Seven years into the international program, figures indicate that only 31 of 97 targeted countries have seen a decrease in the malnutrition rate.

One of the prescriptions offered for decreasing the level of malnutrition in developing countries is to liberalize international trade so these countries can increase their exports of those products for which they have a comparative advantage and use the export earnings to import food for local consumption. Others have suggested that, from a food security point of view, increasing local production will do more to reduce malnutrition than depending upon imports. With only 31 of 97 countries in line to reach the goal, can we begin to answer the question of the relative merits of food imports vs. domestic production when it comes to reducing malnutrition?

In a graduate seminar I taught this semester one of our international students tackled this question and I found his methodology and preliminary conclusions very interesting. Before sharing his data with you, I would caution you that the conclusions are tentative and need to be confirmed by more detailed research.

Hiroiyuki Takeshima found that nine countries with a large increase in daily calorie consumption between the 1961-1965 period and the 1998-2000 period, all increased their domestic production of their basic staple crop at a rate faster than the rate of increase in population.

For instance, China’s population grew by 80 percent while the production of rice, which provided 31 percent of dietary calories, increased by 160 percent. The production of wheat, which provided another 21 percent of daily caloric intake, increased by a whopping 480 percent and the production of pigmeat (10 of dietary calories) increased by an astronomical 990 percent. Over the 40 year period of his study, Takeshima found that the average daily caloric intake in China increased by 1,213 calories of which 75 came from imports. The rest came from increased domestic production.

Brazil saw its population increase by 110 percent while sugar production (19 percent of daily caloric intake) increased by 370 percent. Wheat production (12) increased by 320 percent. At the same time that it increased its average daily intake by 653 calories, Brazil decreased its net imports of foodstuffs by 381 calories a day. That is to

say local production increased its share of the average daily diet by 1,034 calories. The numbers vary from country to country, but the pattern is evident. For these nine countries that increased their daily average caloric consumption, thereby decreasing malnutrition levels, increases in local production were more important than imports.

There were other countries like Iran, Iraq, Algeria, Peru, Nigeria, South Korea and the Philippines where food imports contributed significantly to improved nutritional levels. In three of those countries (Peru, Algeria, and South Korea), on a per capita basis, local production actually decreased.

Of those countries with a decreasing level of daily caloric intake, the Democratic Republic of the Congo saw a population increase of 190 percent while the production of cassava (56 percent of average daily caloric intake) only increased by 80 percent. For the Democratic Republic of the Congo, the failure of local production to keep up with the growth in population meant that the country saw the average daily caloric consumption decrease by 638 calories despite increasing imports by a per capita average of 252 calories. Similar stories can be told looking at the numbers for many other sub-Saharan African countries like Kenya, Madagascar, Zambia, and Burundi. In each case, increased imports were not enough to stave off drops in local production, resulting in a decrease in the average daily caloric intake.

No doubt, the use of international trade to purchase staples paid for with money from exporting other farm products, for which the country has a comparative economic advantage, is an appropriate route to decrease malnutrition in some countries. But that may not be a universally successful approach to making more food available to the malnourished. The trade approach implicitly assumes that the earnings from exporting non-staples agricultural products will be spent in ways that will increase the calorie intake of the country’s citizenry. Increased supplies in a country’s town markets of locally-produced staples often can provide a direct means for a country’s populace to secure additional food.

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