



# Perhaps we all should pay more for our food

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## Summary

Most Tropical Agriculture Association members have, like us, worked to increase food production. We have been party to one of the modern world's great successes – to have almost quadrupled food production since the end of World War II, enabling global *average* food availability per person to rise by 40 percent while the population has grown from 2.5 to over 7 billion.

However this amazing rise in food availability – which, strangely, attracts little comment – has not been translated as much as might have been expected into better human nutrition and health. It has also inflicted huge damage on the world's natural resources and, in many countries, undermined the fabric of rural society.

We suggest that many of the negative effects of the growth in food production stem from the view, widely held by governments, that low retail food prices are a 'good thing'. In the UK, for example, food is cheap, with the proportion of disposable income of the average person spent on food having fallen from about 55 percent in the early 1960s to 12 percent now. We think that it is time to propose fundamental shifts in food pricing, taxation and subsidy policies, centred on the principle that consumers should meet the full costs of producing their food, thereby assuring decent incomes for those involved in food production as well as covering the costs of collateral environmental damage. Low-income families, exposed to hunger and malnutrition, would receive income supplements to enable them to access adequate food under these new market conditions. To the extent that farm subsidies continue, these would be redirected at accelerating the necessary shift to more sustainable food production and consumption systems.

## The consequences of conventional food management policies

In spite of ample food availability, the health, lifespan and productivity of more than half the world's people are still being

damaged by bad nutrition. About 800 million people face chronic hunger (FAO *et al*, 2014) – and 258,000 died of famine in Somalia just three years ago (FAO, 2013); perhaps 2 billion suffer from malnutrition induced by nutrient and vitamin deficiencies (often due to a non-diversified diet); and at least 1.5 billion are overweight or obese. Hunger and obesity often coexist in the same countries, communities and even families.

Despite its obvious benefits, the rapid growth in food output has contributed to massive damage to soil, water, forest, biodiversity and marine resources, and may be exhausting phosphate supplies. Farming, conversion of forest to agriculture, and food wastage (accounting for about 30 percent of food output worldwide) generate 25-30 percent of the greenhouse gas emissions that drive the processes of global warming and climate change, posing great risks for future food production (Vermeulin *et al*, 2012). We are leaving it to future generations to clean up most of the damage we are causing.

Because of downward pressures on producer prices and generally low wages in the food sector, the current food management system also perpetuates poverty and hunger in farming communities (often only relieved through rural-urban migration) and amongst people involved in food production, handling, processing and distribution. Some 70 percent of the hungry in developing countries live in rural areas. It is paradoxical that those who work hard to produce our food are, themselves, likely to suffer from hunger, especially where farming is dependent on low-priced manual labour (UNCTAD, 2013).

At the other extreme, the obesity epidemic is driving a surge in non-communicable diseases (NCDs), including diabetes, cardio-vascular problems, some cancers and dementia, which will have huge future health costs, especially in those countries in which affordable food is taken for granted and seen as an inalienable right (IASO, 2014).

It is probably no exaggeration to claim that the combination of the negative impacts of so many aspects of food management poses a fundamental threat to the very existence of society as

we know it. If current policies are continued, they will increasingly contribute to social exclusion and profound misery, retard economic progress, destroy more natural resources, accelerate climate change, escalate migration, and spawn instability and conflicts.

With current policies, FAO forecasts a 60 percent increase in food demand by 2050, when there would be possibly 9.6 billion people (Alexandratos & Bruinsma, 2012). Population growth, of which part is due to people living longer thanks largely to better medicine, safer water and sanitation, accounts for about half the rise in demand. The rest comes mainly from growing consumption by people who, as their personal incomes rise, are expected to make a 'nutrition transition' towards more food with higher animal protein, sugar, salt and fat contents than are good for their health, emulating 'western' diets. The number of overweight and obese people in the UK, for instance, is forecast at 60 percent of adult men and 50 percent of women in 2050 (Foresight, 2007). With business-as-usual, over 300 million people would still be chronically hungry worldwide in 2050 because of their poverty (Alexandratos & Bruinsma, 2012).

Such forecasts are a wake-up call for decisive moves away from current food policies. Instead, we should ideally now be laying the foundations for a new food management system that ensures the early elimination of hunger and that enables all people to eat healthily while reducing the negative impact of food production and waste on the environment. This would not only generate massive and enduring health, economic and peace benefits but also reduce the rate of growth in future food demand below forecast levels. This, in turn, would cut the pressure of farming on natural resources and on the processes of climate change. The needed transition to truly sustainable food production systems would be more easily attainable.

There is every reason to aim in these directions, but only a few countries, including Ireland, have developed the kind of food strategy that is needed. In 2010, the UK published 'Food 2030' with priorities of enabling and encouraging people to eat a healthy diet, ensuring a resilient, profitable and competitive food system, increasing food production sustainably and reducing the food system's greenhouse gas emissions (UK, 2010). They abandoned it in 2011!

## Ending hunger while cutting future growth in food demand

Contrary to public perceptions, eradicating hunger will generate only a small increase in future food demand. The main sources of rising demand are population growth and excessive food consumption and wastage.

The average depth of chronic hunger amounts to an energy deficit of about 300 kcal per day (or the equivalent of about 75 grams of wheat or rice) (FAO, 2000). To bring 1 billion people above the hunger threshold would require less than 30 million tons of cereals per year or well below 2 percent of global output, equivalent to about 15 percent of the food wasted in European countries (Trueba & MacMillan, 2013). Even if the amount were to be doubled or tripled, it would represent a small part of future demand, and cost a fraction of the US\$415 billion spent by OECD countries on farm subsidies in 2012 (OECD, 2013).



Figure 1. This advice to food buyers is even more relevant today than it was during the First World War when food was scarce in the UK.

Population growth is slowing down rapidly in most countries. However, it will still be the main driver of food demand in about 10 African high-fertility countries, such as Niger, Uganda and Zambia, and also in Yemen (UN, 2012). Here the focus should be on broadening the reach of primary health care, including reproductive health services, and enabling girls to stay longer in school as effective means of cutting birth rates. Hopefully, the growing recognition that high population growth inhibits improvements in living standards will encourage the concerned governments to address the population issue even where it is now politically taboo. Globally, however, the biggest potential for curtailing growth in future food demand while delivering huge health, economic, social, environmental and climate change benefits lies in altering how people who can afford to eat adequately behave as food consumption and waste choices widen. As incomes rise, individuals tend to engage in less strenuous work, with lower demands on food energy, but their natural tendency is to eat more food, widening the gap between physiological needs and demand: hence the obesity epidemic.

The justification for public action to narrow the demand/need gap is strong. At the domestic level, there is a case for curbing excess food consumption to cut the future burden of Non-Communicable Diseases (NCDs): in the UK, for instance, the costs of elevated Body Mass Index (BMI) in 2015 are estimated at £6.4 billion for the National Health Service plus £27 billion for the wider economy (IASO, 2014). Internationally, a reduction in food over-consumption and waste would reduce the need for more forest conversion to farming and help to achieve greenhouse gas emission reduction targets.

Historical data from industrialised countries indicate that at an average apparent consumption level of around 3,000 kcals per person per day, obesity is at a tolerable 7.5 percent (Alexandratos, 2006). FAO estimates that by 2050 the number

### Box 1: Brazil's Zero Hunger Programme

For President Lula, it was absurd that any Brazilian should be hungry in a major food exporting nation. In 2003, he set the goal that all Brazilians should have three meals a day by the end of his Presidency. Zero Hunger's biggest component is the *Bolsa Familia*, a monthly income supplement for over 12 million poor families, with 90 percent being transferred electronically to adult women family members. Other measures to improve food access included extending the school meals programme to all school-age children, offering tax breaks for workers' canteens and providing mother and child nutritional support. Zero Hunger also supported small-scale farming by expanding public procurement of food for state institutions (hospitals, prisons, schools) from them at guaranteed prices, and by accelerating land reform.

Zero Hunger has contributed to major improvements in nutrition with dramatic reductions in child mortality and stunting rates, falls in income inequality, enhanced workforce participation amongst income transfer beneficiaries, and increases in small-scale farmer earnings.

Programme costs are about 0.5 percent of Brazil's GDP.

**Source: (MacMillan, 2010).**

of people living in countries consuming an average of over 3,000 kcal per day would have risen from 1.9 billion (2005/07) to 4.7 billion of whom 3.4 billion would be in developing countries (Alexandratos & Bruinsma, 2012). By 2050, consumption in the developed countries would average 3,490 kcal per day, implying an average adult obesity incidence of at least 25 percent.

Rather than accept the FAO forecasts of future hunger and over-nutrition as inevitable, surely we should try to steer food consumption towards better health, social and environmental outcomes?

First, this means taking direct action to end hunger through broadening access to food. In the short-term, the main focus must be on establishing or expanding social protection programmes, targeted on the poorest families. These would provide them regularly with food inflation-adjusted cash grants or vouchers with which to cover their food deficits to the point where they could live healthily (Box 1).

Secondly, it could imply adopting a notional national average food consumption goal for all countries of around 3,000 kcal per person/day. Achieving this in over-consuming countries would involve inducing changes in consumer behaviour to achieve health benefits (lower intake of fats, sugar, salt and red meat, combined with more fruits and vegetables) and to reduce environmental damage (cutting food waste and restraining grain-fed meat consumption).

Once a reliable social protection programme is in place to enable poor families to meet their food needs even when prices rise, the way is open for governments to adopt policies that lead to higher food prices. The choice of instruments will vary between countries, and should be sensitive to local cultural and social conditions. As governments explore policy options, we urge them to look to adjustments in food pricing, subsidies, taxes and social security programmes as ways of inducing not only lower food demand but also other desirable improvements in food management, including an increased awareness, among all sectors of the population, of the implication of poor

choice of food stuffs on future health prospects.

Adjustments will have to be carefully orchestrated between institutions that hitherto have seldom worked together in order to assure coherent signals for consumers and producers. Thus, as retail food prices rise, simultaneous measures must ensure that this increase is reflected in higher farm-gate prices, thereby leaving space to reduce farm subsidies where these exist. Part of any savings in farm subsidies and the added income from punitive taxation on 'high environmental footprint foods' can be redirected towards social protection, especially in the countries from which they are imported, to ensure that the hungry can access adequate food. Another part could subsidise the shift to sustainable farming. At the international level, measures would be required to ensure balanced competition between countries especially through favouring fair trade principles.

Countries often defend low food prices on the grounds that they make food affordable to the poor. However, recent research by the International Food Policy Research Institute (IFPRI) on the food prices of 2007-08, shows that, at least in the long-run, higher food prices actually reduce poverty and, by implication, hunger (Headey, 2014). This is because, when passed up the value chain, they pour extra resources into rural economies, triggering investment and creating employment and ultimately cutting the need for social protection.

## Conclusions

Adjustments in prices, taxes, subsidies and social security should be used amongst other instruments more deliberately to influence food consumption and production behaviour and thereby improve human nutrition and health while also contributing to greater rural prosperity and more sustainable food production.

Given the multiple objectives and instruments for better food management, inputs into policy reform must emerge from consultations between institutions concerned with agriculture,

health, nutrition, the food industry, the environment, climate change, rural development, social protection and public finance. Civil society can contribute to policy design and building public commitment to the new approaches.

At national level, new food management policies might involve an orchestrated combination of:

- Introduction of standards of conduct in the food trade to align all food purchase and sales practices with concepts of ethical food management, fair trade, and socially and environmentally sustainable production, processing and distribution, based on the principle that consumers should meet the 'full and fair' costs of bringing their food to the table.
- Progressively higher taxation of foods with high environmental footprints and health risks.
- Higher taxation on farm inputs used excessively in non-sustainable farming systems (nitrogenous fertilisers, pesticides, fuels).
- As farm-gate prices for food increase, a proportional redirection of any subsidies from general farm income support towards inducing the accelerated uptake of truly sustainable land management and production systems and expanding the local availability and consumption of fruits and vegetables: part of the resources to be used for more publicly funded research and development on sustainable farming and on promoting better nutrition and healthier lifestyles.
- Exposure of children and adults to the need for, and benefits of, a healthy diet, and engagement of food industries and supermarkets in promoting healthy eating. Such awareness creation is essential because regulations and policies can be adjusted but, if the attitude of people is not changed, then other, positive, changes are unlikely to occur.
- Introduction of social protection grants for the poorest families and adjustment of existing allowances and pensions, indexed to food prices in real time, combined with expanding support for food consumption of people facing acute short-term food shortages (eg food banks, school meals, 'meals on wheels' etc).
- Expanding inter-country technical cooperation in food system management, social protection programme design, and research and knowledge sharing in sustainable food production and marketing systems.

At the international level, there is a need to promote the adoption of fair trade principles throughout the food trade and to hold countries accountable for reducing greenhouse gas emissions from the food system. To the extent to which they fail to meet agreed demand reduction targets, they could be required to

pay penalties into the Clean Development Mechanism, set up under the Kyoto protocol (UNFCCC-CDM). The funds could be used to support hunger eradication and sustainable food systems in food-deficit countries.

Though politicians may fear to tread in these directions, the extraordinary success of the Jubilee 2000 debt relief campaign and the growing power of internet-based campaigning for social justice, suggest that the necessary popular support can be built for changes in food management policy that generate benefits not just for all people now but also for future generations.

Hence our optimism!

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