Hasn't the time come for some brave new thinking on food management?*

by

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Summary of the Argument

It is absurd, indeed criminal, that, although we produce enough food for all, over half the world's people face nutrition-endangered lives, from hunger, micro-nutrient malnutrition or excess.

Moreover, much of what we now eat – and waste - is produced in non-sustainable ways that damage the earth's scarce natural resources, contribute to climate change and keep many rural people poor and hungry.

A major flaw in current food policies, especially those tied to farm subsidies, is their implicit aim of assuring "affordable" food for all consumers on the grounds that this will enable the poor to access adequate food. The fact that so many people are still hungry shows that these policies fail to do this in spite of their huge cost.

If continued as they are, current policies will fuel a massive growth in food demand, an explosion of non-communicable diseases, continued exposure of hundreds of millions to chronic hunger, and greater pressures on natural resources and climate change processes.

The growing credibility of targeted cash and food transfers as reliable, cheap, and fast-acting vehicles for enabling the poorest families to eat adequately opens the way for "smart" approaches to hunger reduction.

Let us adopt two simple global goals - first to enable all people to eat healthily, and secondly to produce all food sustainably – and apply them as common sense points of reference in all policy making processes affecting food management.

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To attain these goals, we must draw together agricultural, nutritional, environmental and social security policies. This could involve a deliberate raising of retail food prices to meet the real costs of production and to discourage waste and over-consumption; the application of Fair Trade type practices to ensure decent living standards for all involved in the food chain, and redirecting subsidies to promote a shift to truly sustainable production systems. This must be matched by cash or food transfers to very poor families to enable them to close the hunger gap, be more resilient to shocks and lead a more independent life, competing for opportunities on an even footing.

The 47 countries which now subsidise farming are well placed to set the lead in making such policy changes through reallocating already committed resources, including some to help developing countries to adjust to changing price conditions.

The proposed policy changes will yield enormous benefits in terms of reduced human suffering, better nutrition and health, higher productivity, longer life. The economic benefits will be vast, and the world will be a safer place for all of us.

Introduction

A public perception has been nurtured for decades that ending hunger is a forbiddingly difficult and unaffordable task. This is not the case.

It has long been assumed that hunger will disappear through a combination of increased food availability and economic growth but there is little evidence that this happens until countries share growth equitably – which few do! Instead, like most curable illnesses, the incidence of hunger and malnutrition can be cut very quickly through direct actions, smartly targeted on those people who are most affected by the problem. For most of them, the cure is to raise their capacity to buy, or, especially in rural communities, produce, adequate food for their families. This will help to end suffering and deep poverty and enable them to respond to other opportunities for self-improvement.

Hunger is literally a matter of life or death for hundreds of millions of people. We were brutally reminded of this just two years ago when 258,000 people – half of them children – died of starvation in Somalia because we failed to respond on time to early warning systems which told us what to do to prevent the disaster that happened.[i]

A crime has been committed against humanity in Somalia. *Famicide* is also committed every day by all governments that fail to act to prevent the predictable premature death of their people from chronic hunger, when all the means exist to do so.[ii] The world turns a very blind eye to this slow-burning diffuse famine. And nobody will end up in The Hague to be held accountable for it.[iii]

In our mad world, hunger is not even a certifiable cause of death, but obesity is classified as an epidemic!

This article explores some ideas both on eradicating hunger and on moving to more sustainable food systems, setting these in the broader context of the urgent need for food management policies that deliver outcomes shaped by the desire to achieve the greatest global public good rather than to respond mainly to special interests.

A crying need for better food policies

The need for much better food management policies is obvious from just two facts.

First, that, in spite of ample cheap food for all for decades, the nutrition, health, productivity and longevity – and happiness – of well over half the world's 7 billion people are being damaged by bad nutrition – almost 1 billion hungry, 2 billion suffering from various forms of malnutrition, and 1.5 billion overweight or obese.

Secondly, that much food is now produced, distributed, consumed and wasted in unsustainable ways that seriously damage the natural resources – soils, fresh water, fish stocks, forests, biodiversity – that future generations will need for their survival. As they now operate, food systems are also driving the climate change processes which will disrupt future farming. And they are leading to the impoverishment and breakdown of rural societies in both developed and developing countries.

These two problems – the failure to translate expanding food output into better nutrition and the spread of unsustainable intensive farming systems – result from a laissez-faire approach to food and agricultural policies at the global level, underlain by a convenient but naïve assumption that the market will largely take care of things. Until now the big regional and national market policy interventions – the farm subsidy programmes of most of the OECD countries and some emerging economies - have been designed to boost input-intensive farming, protect farmers' incomes and keep domestic food prices low, with little concern for global knock-on effects. In a globalised food market, however, these policies

have huge international repercussions on nutrition, incomes and the pressure on natural resources in other countries, as was vividly demonstrated when the US and the EU began to promote an expansion in corn-based ethanol production.[iv]

A flurry of trend-based forecasts has looked at world food demand – rather than *needs* – in 2050. Most, including FAO's latest forecast, have assumed that, when their incomes rise, people will inevitably adopt the unhealthy diets and food wasting behaviour of the "west".[v] If this dietary transition takes place in this way, it would have a bigger effect on food demand than population growth and the ending of hunger. Alarmingly, the same FAO study showed that with business as usual, there would still be 318 million hungry people by 2050, but not for lack of food!

This crystal gazing has sparked alarm about how to produce enough food to feed 9 billion people by then. The worry is that that there is less "spare" land to be farmed; the rate of crop yield growth is slowing, and farming will be increasingly exposed to the impacts of climate change. The UK chief scientist concluded that "every means to improve food production should now be employed, including the widespread use of new biotechnological techniques in farming."[vi] Sensing future scarcities, businesses have rushed to "grab" spare land in developing countries often trampling on the land rights of local people.

What the forecasts tell me is that we cannot afford to let current trends continue unaltered. They are a wake-up call for policy shifts that will prevent the prophesies from becoming true.

Two simple goals as a point of reference for policy adjustments

The idea of setting global goals has gained credibility through the Millennium Development Goals (MDG) process. But a great weakness is that the process has failed to create a supportive policy environment for reaching them.

Let me propose two very simple global goals for the food system that, if factored into all relevant policy making, would bring us a lot closer to overcoming both problems.

> Goal 1. All people should always be able to eat healthily.
>
> Goal 2. The world's food system should operate sustainably from social, economic and environmental perspectives.

I suggest that we try to have these goals become widely accepted as common sense points of reference for any policy making related to the many dimensions of food management at global, regional and national levels – whether to do with trade, subsidies, nutrition, environment and natural resources management, climate change, food safety, health, agricultural technology, poverty reduction, economic growth and so on.

They could become the focus for civil society lobbying of intergovernmental organisations and governments as well as for shaping public opinion. At first they could help to weed out

existing perverse policies and to challenge potentially non-supportive new policies. And then they could inspire proactive global and national policy making.

Four surprising figures

While writing "How to End Hunger… "[vii] I came across 4 figures that helped me think about the dimensions of the main nutritional problems.

First, I discovered that the average gap between the current food energy consumption of the chronically hungry and the hunger threshold is about 250-300 kcal per day - about 70 grams of rice or wheat. This is equivalent to less than 30 kg of grain per year and implies that less than 2 percent of world cereal production is enough to close the food energy gap for 1 billion people. The annual cost of closing the gap is roughly $30 billion, or well below 10% of the $548 billion spent on farm subsidies in 2012.

Secondly, I calculated that the ecological footprint of a "healthy" adult diet (2,700 kcal and 99 g protein per day) would be 40% of that of the recent average daily food use (3,370 kcal and 148g protein per day with a substantial proportion of animal protein) in industrialised countries.

Thirdly, I learnt that the volume of food wasted annually in developed countries is greater that the net yearly food consumption of Sub-Saharan Africa.[viii]

Finally, I found that cereal production rose by around 5% per year in Africa between 2000 and 2010, more than half being due to expanded area, but with yields also rising by a respectable 2%.

Figures such as these suggest that, even if population growth continues as forecast (and this is not inevitable), there is lots of room for reducing the future rate of growth in food demand, while also arriving at a better nourished human population, cutting future human disease burdens and leaving greater "space" for the urgent transition to sustainable production systems with lower greenhouse gas emissions. A potential win-win scenario!

The negative effects of low food prices

Surprisingly, most policy makers accept that low food prices are "good". The price rise in 2008 to 2011 was generally portrayed as a "bad thing". It pushed up the number of hungry and led to food riots in over 20 countries that failed to soften the blow on the poor.

However, when retail food prices stay too low for too long, as for more than 20 years up to 2007–8, they have a number of negative effects. Part of this is because the food marketing system has evolved to create increasingly asymmetrical relationships between consumers, food industry and retailers and traders on the one side, and producers (especially farm labourers) on the other. Under these conditions, the results of low food prices have been:

- Downward pressure on the incomes of farmers, farm labourers and food industry workers, resulting in:
    - Their impoverishment and deteriorating living conditions
    - Accelerating rural-urban migration and growing slums
    - Disproportionately high incidence of food insecurity amongst rural people. About 70% of the hungry in developing countries are rural.
    - Low resilience of rural communities and their high exposure to shocks
- Low incentives for farmers to invest and to expand output
- Drop in public investment in rural infrastructure and services and de-capitalisation of production systems
- Under-employment of the rural work force
- Abandonment of good farm land
- Non-payment for the environmental damage and greenhouse gas emissions caused by food production, leaving our children to pick up the bill
- Strong incentives for consumers to waste and over-consume food, partially fuelling the rise in obesity and related non-communicable diseases
- Governments of richer and emerging countries subsidising farmers to fill the income gap between their earnings from food production and a decent living standard.

The main positive impact of low food prices is that consumers, especially lower-income urban families, can buy more food for the same money and be better fed. In rural communities, net food-buying families also benefit, but the rise in the number of such families is itself a result of the low food prices!

Paradoxically, it is generally perceived that low food prices will help to alleviate all manifestations of hunger, while in reality they tend to depress rural economies and contribute to the collapse of rural societies and to accelerating rural–urban migration.

Link food pricing and social protection policies

By making food "affordable", many current policies effectively subsidise all consumers including those who have adequate financial means to pay the full costs of their food. In industrialised countries, where food wastage is greatest, food expenditures typically account for as little as 10 to 15% of disposable personal income and so even a substantial rise in prices would not significantly impact on the household budgets of middle and high income families. In developing countries, as incomes rise, the proportion spent on food will also fall, opening a wider range of food choices.

Under current policies most governments are foregoing opportunities to use price adjustments and income redistribution measures to induce behavioural changes amongst both consumers and producers which could yield big social, nutritional, health and environmental benefits. In some cases they offer educational programmes that promote good nutrition and raise environmental awareness amongst consumers but these alone are not enough to radically change how people now eat or to steer the direction of income-induced nutritional transitions. This is particularly true because consumption patterns are much more strongly influenced by advertising and retailing practices than by consumer education.

There is now, as we shall show below, convincing evidence emerging from a growing number of developing countries that well-targeted social protection programmes improve the food consumption of very poor families. This opens the way for policies that deliberately push up food prices to counteract the negative impacts of low prices, outlined above.

And so, to reach the proposed goals, I suggest that governments engage in two linked sets of actions. First, that they adopt policies that raise consumer food prices with the aims of stimulating investment in expanding food output through sustainable farming systems, assuring fair incomes for food chain workers and getting consumers to offset the cost of public health and environmental damage caused by their eating habits through penalising food wastage, over-consumption, and eating of foods with high environmental footprints. This would harness consumer food purchasing power to induce badly needed investments in rural development and livelihood improvements in farming communities. Secondly, that they use income transfers, indexed to food prices – or, in some cases, food transfers - to boost the food accessing power of the poorest families to a point at which they can escape from the hunger trap.

Towards "fair" food prices

Rising retail food prices will only elicit a sustainable production response if they are transmitted through the food chain and deliberately linked to the uptake of sustainable farming methods that work on the basis of enhancing biological inputs, rather than agrochemicals. It is small-scale family farmers that have the experience on the ground to

work with their local ecologies and sustain productivity, often making good use of marginal land.

There are significant rewards to be captured along the food chain - from farmers reducing input costs to consumers building healthier diets on wholesome food. The Fair Trade movement shows that price transmission from consumer to producer is possible, and that higher and more predictable prices can trigger increased output of quality products grown more sustainably by small-scale farmers. If we can make all food trade, local and international, "fair" (and I see no reason why not[ix]), mid-century food demand would readily be met, mainly by small-scale farmers responding to price incentives. Rural hunger and malnutrition should have disappeared.

In the Middle East, South Asia and China options for expanding food production are tightening because of land and water constraints. However, where future food needs will increase fastest (in much of Africa), there is still ample room for raising cropped areas and yields. There is a large gap between current and potential yields, even when using sustainable practices. A rise in farm-gate prices would release the latent production capacity of small-scale farmers when they feel confident that the additional income will exceed the cost of engaging amply available extra labour. If higher food prices are ultimately reflected in a "living wage" for farm workers – paid for by consumers - this alone would make a huge dent in rural poverty and hunger.

Confidence that a move towards more sustainable farming systems is already under way is evidenced by the rapid uptake by small-scale farmers, especially in developing countries, of agro-ecological practices including minimum tillage ("conservation agriculture")[x], SRI (System of Rice Intensification)[xi], agro-forestry, and organic farming systems. Most importantly, these innovations raise labour productivity but they also rebuild soil fertility, make better use of scarce land and water resources, lead to greater yield stability and cut fossil fuel use: in some cases they store more carbon in the soil. Farmers like them because investment needs are small and net incomes rise.[xii] In many instances, more holistic farming systems, using agro-ecological practices, are capable of generating multiple services (cleaner water, natural pest control, among others) while not sacrificing yields. As oil prices rise, their comparative advantages over conventional farming systems will grow.

The uptake of such systems could be accelerated by adjustments in the policies of the 47 countries that now subsidise farming. However, though the recent global food price rises opened opportunities for painlessly cutting farm support subsidies, the OECD states that exactly the opposite is happening, especially through rising farm input subsidies in Asian emerging economies.[xiii]

The EU's Common Agricultural Policy (CAP) has moved away gradually from direct production subsidies, high import tariffs and export subsidies in response to WTO pressure. However its shift towards "decoupled" financial support for farm incomes still appears to have a food price depressing impact in Europe and beyond. The current negotiations around CAP 2014-20 and related national policy-making seem to be leading

to compromises which are unlikely either to get EU consumers to come much closer to meeting the full costs of their food or to reducing trade distortion effects at the global level. The new CAP is also criticised for "greenwashing" agriculture, squandering a good opportunity to drive the shift to truly sustainable food production.[xiv]

Interestingly, the USA has combined social protection (through food stamps) and farm subsidies in the same policy instrument (the Farm Bill). However, as pointed out by The Economist, recent action has been designed to minimise that linkages between the two components! The farm subsidy component, now paid mainly in the form of crop insurance, tends to encourage over-production of cereal crops and to concentrate support on the largest farmers – with 10% of farmers receiving 75% of the available funds.[xv] The new Bill includes innovative programmes for sustainable agriculture by supporting local food, organic agriculture, rural development, speciality crops, and start-up farmers, but, like the new CAP, it continues to support unfair competition from US producers on the global market.

Wouldn't it be better if countries that now subsidise farming look to policies that favour a rise in domestic consumer and farm gate prices, opening the way for a redirection of subsidies away from farm income support? This would free up fiscal resources for targeted income supplements for poor consumers to enable them to eat healthily even as prices rise. At the same time, input subsidies would be replaced by more publicly funded research and development on sustainable production systems, and by greater rewards for producers to convert to low-input but high-output farming practices. The cost of subsidies could be increasingly offset by rising taxation on high footprint foods, carbon emissions, water pollution and construction on farm lands. Some savings in developed countries could be applied to underpin similar policy adjustments in developing countries, as the higher food prices begin to have a knock-on effect on global markets.

The case for social protection

Moving to seriously higher food prices will take time because of consumer and farmer apprehensions and perceived political risks. This means that, in the short term, redistributive measures are vital to enable the 840 million chronically hungry people to access their food needs. Without additional resources, the hungry are caught in a vicious circle from which escape by their own means alone is virtually impossible. Hunger exposes them to weakness, ill health and shortened lives, and prevents them from working and so from earning the money they need to buy adequate food. Those nations that have succeeded in breaking the hunger cycle have all engaged in some form of income or food transfer, targeted on very poor families.

Of these experiences, I have first-hand knowledge of Brazil's Zero Hunger Programme, launched by Lula on his first day as President in January 2003. It combines nutritional, agricultural and social protection policies. It includes universal school lunches, a deliberate move to harness incremental food demand to stimulate small-scale farming, and accelerated land reform. Much the biggest component (*Bolsa Familia*) provides monthly

cash transfers to over 12 million poor families, channelled when possible through adult women family members. The results are impressive: a rapid fall in hunger; higher labour force participation; incomes for the poor rising 5 times as fast as those of the rich; big drops in under-5 child mortality and stunting; better public health and school attendance, and a greater status for women in the home and community. By raising minimum wages simultaneously, government reinforced the impact of the cash transfer programme.[xvi]

Convincing feedback on the success of such programmes, including their impact on reducing "distress" shedding of assets in times of shock, is coming from a growing number of African and Latin American countries.[xvii] But a main blockage to their still wider adoption is a common perception that they create dependencies and induce laziness. While this may be so in some developed country welfare programmes, modest transfers to people living under conditions of extreme deprivation enable them to access adequate food. This frees them from social exclusion and assures them the energy they need to stand on their own feet, study to good effect, be less prone to illness and compete for jobs. Responsible use is made of such funds and in rural areas what is not used on food consumption is invested in farm assets.[xviii]

An added reason for enabling good nutrition is that it is a viable investment. Nobel Laureate Robert William Fogel claims that "the combined effect of the increase in dietary energy available for work, and of the increased human efficiency in transforming energy into work output appears to account for about 50 percent of the British economic growth since 1790".[xix] At that time, average daily food consumption in Britain was about 2200 kcals per person which is about the mean Dietary Energy Supply (DES) now in sub-Saharan Africa. There seems to be no reason why the results of increasing human energy availability and stature – and hence energy efficiency – would be any different in Africa today, so the opportunity now exists for countries to boost their economies partly through better nutrition without waiting 200 years.

Risks

The biggest risk is that the proposed changes will not be allowed to happen because of the huge strength of vested interests in food management, exemplified by the concentration of much of ownership of farm input and output processing businesses, the international food trade, and the retailing of food in just a few corporations.

Partly because of this, there is a real danger of food price rises moving faster than the creation of well-run nationwide social protection programmes, leaving the poor in a worse condition than before the process of adjustment.

A third risk is that higher farm gate prices could stimulate a rise in food output at the same time as the rate of growth in demand is slowing, thereby creating surpluses and a possible subsequent collapse in prices.

Closing thought

We all have a long way to go to understand what it means to be responsible citizens in our globalised society. Amidst growing inequalities, what are our obligations towards each other, and how do we translate these into practical actions to close the gaps? And to what extent, as this generation's stewards of the world's resources, are we giving enough consideration to the needs and interests of future people in our decision-making?

Unless we pull ourselves together very quickly, future historians will brand us as a selfish bunch that has squandered its huge advances in knowledge, communications and wealth by failing to apply them for the benefit of all humanity.

As a start, let's each see how, in our own lives, we can apply common sense towards ending hunger by 2025!

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I would be very happy to receive comments and suggestions from readers, addressed to me at andrew.macmillan@alice.it

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[iii] See proposal set out in http://www.hungerexplained.org/Hungerexplained/Hunger_crime.html

[iv] See Babcock, B.A and Fabiosa, J.F., The Impact of Ethanol and Ethanol Subsidies on Corn Prices, CARD Policy Brief 11 PB-5, Iowa State University, April 2011 (http://www.card.iastate.edu/policy_briefs/display.aspx?id=1155)

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