

Secure, sustainable food supply

Ending hunger won't be achieved through scientific progress or policymaking alone. Coordinated action will require fundamental changes on the part of producers, consumers and governments

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n most respects, agriculture can be considered one of the great success stories of humankind. After centuries of subsistence living, occasional outbreaks of mass starvation and general anxiety about the availability of food, the 20th century saw agriculture evolve into previously undreamed of capacities for production of food and fibre.

The developed world now enjoys an era of plentiful foodstuffs – so much so that this abundance is now coupled with intermittent

concerns about the economic consequences of overproduction and, more recently, the medical costs related to unhealthy diets and/ or obesity. Yet, despite such productivity gains, food security for many is still elusive.

The 2000 United Nations Millennium Declaration sought to reduce global hunger by 50 per cent by 2015. However, the 2015 report, *The State of Food Insecurity in the World*, published by the Food and Agriculture Organization of the UN, identifies about 793 million people that remain undernourished globally.

Although this number is down 167 million over the last decade – and represents progress to be sure – it is far from meeting

the goal of halving the proportion of the chronically undernourished. This calls for new approaches – a larger vision of sustainable agriculture and healthy food systems that will more fully engage diverse stakeholders and the general public.

All too often, initiatives aimed at developing a secure and sustainable food supply revolve around new variations of engineering: enhancing supply chains, reducing food waste, increasing productivity, managing natural resources, improving food safety and human health, and so on. Or they centre on socioeconomic issues, involving impacts of globalisation, urbanisation, demographic

■ Farming rice on terraces in Guangxi, China. Increasingly, consumers are far removed from the sources of their food and unable to understand the needs of the producers

trends, capitalisation of natural resources, access to land or the value of labour and livelihoods of those involved with farming. These issues are habitually managed in silos, which only exacerbates the problem. Most experts and activists operate in their specific arena and find it difficult to work in an interdisciplinary manner.

Competing narratives

If we are to find some practical ideas to achieve food security and sustainability we must develop a better understanding of the multiple competing narratives that lead to competing strategies – and the loss of a coherent public voice with the power to demand sustainability.

Such discord allows those interests that are more narrowly defined and better organised to rule the day – much as we are seeing in recent political upheavals around the globe. More importantly, we must utilise such an understanding to effect far-reaching systemic change throughout our farm and food systems.

This is neither new nor unique to farm policy. In fact, the concept of sustainability itself has long suffered similar discord, as noted by University of California Professor Richard Norgaard in 1988:

"The politics of sustainable development is taking a different course. Environmentalists want environmental systems sustained. Consumers want consumption sustained. Workers want jobs sustained. Capitalists and socialists have their 'isms' while aristocrats, autocrats, bureaucrats and technocrats have their 'cracies'. All are threatened. Thus... sustainability calls to and is being called by many, from tribal peoples to the most erudite academics, from Levi-clad ecoactivists to pinstripe-suited bankers. With the term meaning something different to everyone, the quest for sustainable development is off to a cacophonous start."

Similar cacophony has long existed in food and farm systems work, where simplistic discourses often emphasise extremes of policy positions: reform versus degradation, family farms versus factory farms, organic versus biotechnology, and so on. Price pressures, questionable farm policies, new technology and ever-changing market forces can, and often do, push farmers into unsustainable situations throughout the developed and developing worlds.

While it is relatively easy to identify these forces, it has proved extremely difficult to develop the policy instruments that would motivate individuals, let alone governments, to support either sustainable agriculture or food security. The causes, triggers, paths and effects are not always obvious, and are often fragile.

For example, the traditional supposition that capital is accumulated through control

of the tangible means of production (land, labour, water, etc.) is increasingly incorrect. Ownership and control of the intangible assets (information, brands, patents, etc.) is where the true power now resides.

Impediments to change

John Kotter, a thought leader in systems change, asserts that a high level of complacency and a low sense of urgency constitute the two most significant impediments to change. In the political world, this manifests as many government programmes being viewed as untouchable.

The benefits of the programme are concentrated in one strongly motivated, politically active segment of society, while injuries, though greater in total, are spread

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throughout the public. Similarly, as the resources to produce, process and distribute food become concentrated into fewer hands, consumers become further removed from their source of food and less able to understand the needs of those that actually produce it. This can leave both consumers and farmers vulnerable to a global economy that pursues only the highest return on investment.

Research done by Kotter on over 100 of the largest firms attempting to implement major change initiatives – with results ranging from great success to total failure – identified eight components fundamental to building stable and enduring change within systems:

- establish a sense of urgency;
- form a powerful guiding coalition;
- create a vision;
- communicate the vision;
- empower others to act on the vision;
- plan for and create short-term wins;
- consolidate improvements and produce more change;
- institutionalise new approaches.

We recognise that in our current globalised, market-oriented food systems, there are many actors other than the state

Although the actions are quite straightforward, they do represent a shift from traditional activism, with its focus on political change. This offers huge opportunities as we recognise that in our current globalised, market-oriented food systems, there are many actors other than the state.

In other words, not all solutions are to be found in changes aimed at governance. For example, through their purchases, consumers send strong messages to producers, retailers and others in the food system about what they want and are willing to pay for. As this information filters through supply chains, it affects the choices of agribusiness as well as the various sectors involved in food distribution.

End hunger, achieve food security and improved nutrition and promote sustainable agriculture In 2015, more than half of the adult population in sub-Saharan Africa faced moderate or severe Globally, nearly 800 million food insecurity; the level was severe still suffer from hunger for one-quarter of adults in the region Percentage of children under age five with stunted growth, 2000 and 2014 Oceania Sub-Saharan Africa Southern Asia South-Eastern Asia Northern Africa Western Asia Caucasus & Central Asia Latin America & Caribbean Eastern Asia Developed regions Developing regions World 50 2000 In 2014, an estimated 158.6 million, one in four children under age five, were affected by stunting. Chronic undernutrition puts children at greater risk of dying from common infections, increases the frequency and severity of infections and contributes to delayed recovery. Source: The Sustainable Development Goals Report 2016, United Nations

Besides the obvious needs for cooperation, initiative and credibility there must also be a way to harness the energy and drive of many people throughout the system to make a large change initiative be effective.

The good news is that there has already been much progress in this regard as more regions work to develop comprehensive food systems that link consumers more closely with their farmers, and link both groups to opportunities along the entire supply chain.

Done well, the entire region, and a wide array of sectors, can enjoy improved economic growth.

Such collaborative enterprises capture the imagination and build momentum for the longer-term tasks of reforming key institutions, rethinking economic strategies, and challenging widely held social values.

This is a vital component of sustainable agriculture and healthy food systems – a vision that all people can engage with in their daily lives. •