### Covid-19 crisis allows opportunity to address food security, safety and malnutrition

The Covid-19 crisis offers another opportunity to address the challenges of food security, safety and malnutrition. Recent debates on the need to 'shorten' and 'on-shore' value or supply chains currently focus on food and medical products, offering yet another opportunity to reconsider food supply sources.

The last few decades had seen significant trade liberalization with many governments opening their economies to food imports instead of earlier efforts to ensure food security by increasing food, especially cereal production and supplies, closely associated with the Green Revolution of the 1960s and 1970s.

Governments were advised, and sometimes required, e.g., through structural adjustment programmes, to instead produce cash crops and other products for export to earn the needed foreign exchange to import their food requirements, presumed to be at lower cost, from abroad.

Thus, the end of food self-sufficiency, due to trade liberalization, was seen as improving the international division of labour, economic efficiency and the welfare of all, both consumers and producers, through a particular interpretation of international trade theory.

Over a decade ago, food price increases, attributed to some consequences of the financialization of commodity markets. With the Great Recession following the 2008 global financial crisis, most members of the G20 group, representing the largest economies in the world, and others adopting protectionist trade measures which greatly slowed the rapid trade of the previous decades.

Indicators of food security were redefined with hunger measures increasingly reflecting poverty, cereal supply availability and crude as well as dated estimates of their presumed distribution. The last two decades have seen a counter-intuitively significant decline in the World Bank's poverty numbers in contrast with the much more modest reduction in measures of caloric undernourishment equated with hunger.

### Malnutrition's three facets

Malnutrition remains a formidable challenge in most societies, with less than a tenth of the countries in the world not experiencing at least one major malnutrition problem.

In relatively more *food secure* countries, where almost everyone has enough to eat, and few live in fear of a sudden loss of access to food, *micronutrient deficiencies* and *diet-related non-communicable diseases* (NCDs) often still loom large.

In many middle income countries, cereals, such as rice, wheat and maize, are, by and large, available and affordable to most. However, what populations eat can be quite problematic, contributing undernutrition in terms of micronutrients such as vitamins, mineral and trace elements, and other food-related health issues.

Various traditional foods and food customs have changed with new market, technological, demographic, environmental, and other behavioural influences.

Most societies have not been exempt from global trends, including greater food consumption away from home, and the growing popularity of 'convenience foods', deep-frying as well as sugared food and beverages.

# Diets must improve

Undernutrition, or nutrient deficiencies, remains high, even though hunger, or dietary energy undernourishment, has declined in many parts of the world. Nevertheless, stunting among children under five years of age and the share of underweight children rose.

Public health efforts should ensure adequate micronutrient absorption in daily food consumption as deficiencies causing serious problems are largely ignored. Meanwhile, millions are anaemic, with especially significant long-term consequences for many women of reproductive age.

Overweight and obesity increase the risks of many NCDs such as diabetes, cardio-vascular diseases and cancers. Alarmingly, NCDs are now leading causes of premature death and disability, with the most attention given to visually apparent overweight and obesity.

The prevalence of diabetes increased. NCDs reduce productivity and quality of life, besides unnecessarily raising health and other related spending, both private and public, with healthcare costs for obesity alone now comparable to those due to smoking.

While dietary energy consumption, mainly of carbohydrates, initially rises with income to avoid hunger, further food spending increases tend to increase dietary diversity. But without nutrition awareness, changing food behaviours are typically influenced by new cultural norms, e.g., convenience considerations, peer influence, advertising and fads.

Overweight and obesity are also subject to genetics, behaviour, food consumption, physical activity, illness and global food consumption trends, e.g., more 'food processing' and 'convenience foods'. Tackling these factors will improve health and use of scarce healthcare resources.

## Improving policies

Country-level nutrition programmes and policies have evolved, often influenced by food production, processing and marketing conglomerates. Some post-independence nutrition programmes initially focused on improving living conditions among rural populations. These efforts have included school feeding programmes, especially for poor children.

But such programmes have been undermined by poor intersectoral, multi-stakeholder coordination, inadequate financing, limited human resource capacities and capabilities as well as poor monitoring and evaluation.

Well-organized, government-financed universal school feeding programmes can not only improve children's nutrition, but also farmers' incomes and food safety. These have improved children's habits and outcomes, including better nutrition, health awareness, physical development, learning, academic performance and cooperation.

In countries ranging from Brazil to China, procurement for such programmes has improved food production, incomes for farmers and others, and parental participation in ensuring food safety and quality, instead of merely enriching transnational food giants.

#### Better food for all

Marketing of 'junk' and other unhealthy foods causing malnutrition needs to be restricted, especially to children, e.g., with stricter regulation of food and beverages sold in school canteens. Food safety also need to be improved, e.g., by reducing the overuse of antibiotics for animal, including fish breeding, and pesticides, most of which also harm humans.

The recent California court decision deeming a popular herbicide carcinogenic raises questions about 'no-till' agriculture promotion, ostensibly to increase carbon sequestration in farm top soil to mitigate greenhouse gas contributions by agriculture.

Governments should use the likely agrarian transitions to promote more sustainable food agricultural practices, especially to curb the dangerously irresponsible promotion of the use of toxic agro-chemicals, especially pesticides.

With greater appreciation of the hazards of growing 'anti-microbial resistance', increasing reliance on food animal breeding in aquaculture and animal husbandry will require strict production practice standards to avoid far-ranging catastrophic implications for human health.

'All-of-government' nutrition strategies are needed to effectively and comprehensively tackle national malnutrition challenges. Sustainable food systems are needed to promote healthy diets, while public nutrition education is badly needed for both children and adults.

While many middle-income developing countries have considerably improved food availability, affordability and stability, what remains is to improve nutrition, health and wellbeing, especially by tackling micronutrient deficiencies and diet related NCDs.