





# Commentary Achieving equitable diets for all: The long and winding road

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Our journey to improve food systems for healthy, equitable, and sustainable diets by 2050 will be long and winding. There might be bumps along the way, but there also exist maps and signposts to guide us. A fellow-ship of political commitment and realism, science and data, incentives, and collectivism will help us successfully reach our targeted destination and achieve our global goals.

### Food: The lifeline, the highway

Food. It is the lifeline-the highway, so to speak-that has historically spurred nations' economic growth and allowed our world population to grow to almost eight billion. It links society as a patchwork of feeder roads through our cultures, traditions, and histories. Food is fundamental to sustainable development because it touches on many political and sometimes contentious issues, such as equity, climate change, globalization, and technology.<sup>1</sup> Food is moved and manipulated through many hands, transactions, and decisions, culminating in an extensive global food system that shapes our diets for the better or worse. In all their intricacies, food systems have become incredibly efficient in some parts of the world and unbelievably ineffective in others. The result, following centuries of human manipulation, is a global food system that generates much food but at significant environmental cost. This would, perhaps, be understandable if Earth's nearly eight billion citizens were well fed and well nourished, but they are not. Not only is our global food system environmentally unsustainable and generating massive amounts of waste and plastic that end up in our oceans and atmosphere, but it also is not providing a healthy diet for everyone. For many individuals and families, getting access to nutritious foods is entirely out of reach. As we look ahead to 2050 and a global population approaching ten billion, we must navigate this long and winding road with a final destination in mind-one that does not destroy the planet or ourselves.

### Fragile, inadequate food systems

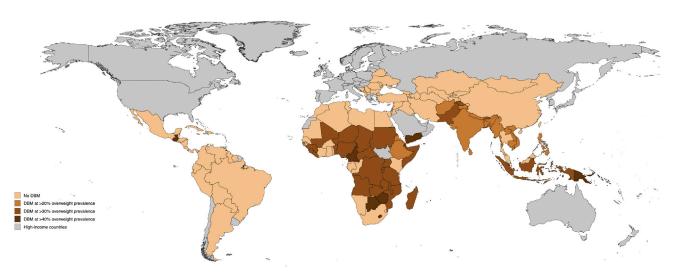
Food systems are fragile and inadequate and often reflect society's inequitiesboth between and within countries. The reality of the situation is that food systems are not doing what they need to do-that is, to provide healthy diets that nourish everyone and, at the same time, ensure that our planet and its natural resources are sustained for future generations. Worldwide, 9% of people still cannot get enough food on their daily table,<sup>2</sup> and where food is available, it might not be the healthiest, safest, or environmentally sustainable. Often, the most easily accessible foods are those that are calorie rich and nutrient poor with long shelf lives. This is often due to and influenced by rapid technological advances, globalization, trade, and the market growth of transnational food and beverage companies with their pervasive advertising, branding, and formulation of foods based on flavor and convenience.<sup>3</sup> Policies that protect consumers from unhealthy foods have been insufficient and largely ineffective.<sup>4</sup> These foods are increasingly dominating the diets we consume, and these sub-optimal diets now account for 11 million adult deaths annually, most of which are of the non-communicable disease (NCD) kind-where cardiovascular disease tops the list.<sup>5</sup> Undernutrition, often due to insufficient food, is not far behind as a second leading cause of death in many countries.<sup>6</sup> Even in the Global South, diet-related NCDs are increasing such that highly processed and packaged foods are creeping into deeply rural food markets and fast-food restaurants are infiltrating expanding urban centers in sub-Saharan Africa and South and Southeast Asia.

In some, often impoverished and deeply rural parts of the world, inadequate supply chains and market infrastructure limit what foods are available in local markets for purchase and what is affordable. For example, although there has been an increase in the availability of nutrient-rich animal-source foods since 1970, these, along with fruits and vegetables, require cold-chain storage and transport and, in the absence of such technologies, spoil on long, dusty roads.<sup>7</sup> It is also often costly to produce, transport, and thus purchase these food types. In a world where people spend up to 60%-80% of their entire income on food to feed their families, healthy diets are often out of reach.<sup>2</sup> It is estimated that three billion people, of whom 57% are sub-Saharan Africans and South Asians, cannot afford what constitutes a nationally recommended healthy diet.<sup>2</sup> When the poorest of the poor struggle to access vital sources of protein, micronutrients, and other healthpromoting properties, a diet that is both universally healthy and environmentally sustainable seems a long way down the road.

Even though we are halfway through the United Nations (UN) Decade of Action on Nutrition, which aims to eliminate malnutrition burdens are still the most significant contributors to overall morbidity globally.<sup>8</sup> Although there has been a slight improvement in reducing global malnutrition compared with global child mortality, the UN Food and Agriculture Organization estimates that 691 million people still suffer from hunger and that 21% of children Please cite this article in press as: Fanzo, Achieving equitable diets for all: The long and winding road, One Earth (2021), https://doi.org/10.1016/ j.oneear.2021.03.007

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#### Figure 1. Rising double burden of malnutrition in low- and middle-income countries

This map shows countries that have a double burden of malnutrition, defined as a high prevalence of both undernutrition and overweight in at least one population group. A high prevalence of undernutrition is defined as a prevalence of wasting > 15% or of stunting > 30% in children 0-4 years old or a prevalence of thinness in women > 20%. A high prevalence of overweight is defined as a prevalence of overweight in adults or children > 20%, 30%, or 40% of the population with a body mass index of greater than 25, as shown in light, medium, or dark orange, respectively. Indicators of a double burden of malnutrition highlight a food system where an inequitable distribution of resources leads to undernutrition in some populations and overweight or obesity in other populations. Countries could be experiencing an increasingly higher prevalence of overweight and obesity while continuing to have a persistently high prevalence of undernutrition indicators. Source: Food Systems Dashboard.<sup>14</sup>

under the age of 5 years suffer from chronic undernutrition.<sup>2</sup> Unsurprisingly, those who suffer from higher malnutrition burdens tend to be of lower socioeconomic status, and food insecurity and poverty are strongly associated with households struggling with both undernutrition in children and overweight women.<sup>9</sup> Low- and middle-income countries are particularly hard hit by this double health challenge (Figure 1).<sup>10</sup> Since 1970, almost every country has suffered from rising rates of obesity and NCDs, but inequalities in undernutrition have increased primarily in low- and middle-income countries.<sup>11</sup> The coronavirus disease 2019 (COVID-19) pandemic has laid bare the consequences of such inequities. Those who are overweight have a higher risk of being hospitalized or dying from COVID-19,<sup>12</sup> and it is projected that undernutrition among women and children will increase significantly as a result of the economic downturn.<sup>13</sup> Avoiding future, potentially deadlier zoonotic spillover events-in which the encroachment of food systems into natural habitats is directly implicated-will be a key challenge over the next decade or two.

### **Destination unknown**

The urgency of the need to address global food challenges cannot be understated.

Although Sustainable Development Goal (SDG) 2-end hunger, achieve food security and improved nutrition, and promote sustainable agriculture-leans on food systems to achieve its endoame, food is relevant for every SDG. Unfortunately, projections show that we will not achieve SDG 2 by 2030,8 and analyses suggest that meeting the SDGs by 2030 will "demand a pace of progress that no country has achieved in the recent past."15 When we examine the pace of globalization and demand projections for diets, the story does not have a happy ending. The demand for and consumption of unhealthy, highly processed, packaged foods and environmentally intensive foods are estimated to increase into 2050 and 2070. COVID-19, along with continued climate change, could also offer further setbacks in reaching the SDGs by 2030.

So then if we look beyond 2030 to 2050, which is not all that far away, or even 2070, what will our world look like? Right now, as we sit in the middle of a pandemic with no precise return to "normal"—if there ever was such a thing—in sight, it is hard to tell. We have a history of formulating grand global goals and putting markers in the sand, but at the end of the day, they are made in sand rather than concrete, and we quickly move onto the next set of goals with very little hindsight or accountability of what went wrong and where we need to adjust. The 2000 Millennium Development Goals, in which the world agreed to cut hunger in half, are one such example. Perhaps it is society's modus operandi—a survival mechanism to move us closer to world order—but this approach is no longer sufficient, particularly as climate change barrels down on us and the profound increases in inequities are blindingly visible among the poorest of the poor, the most marginalized, and those living in the Global South.

The future is in sight, but our goals are not presently within reach. To prevent the 2030 Agenda for Sustainable Development from becoming yet another faded, washed-out mark in the sand or to at the very least set firm foundations for targets toward 2050, action is needed. The UN Secretary-General has called for a Food Systems Summit at the end of this year to spur attention to and action toward food systems, as well as the foodrelated SDGs so they can be achieved by 2030. The summit is a critical moment to get back on track and ensure that food systems are steered in the right direction toward our destination. The road is likely to be long, winding, and difficult to navigate, but we have a road, a map, and Please cite this article in press as: Fanzo, Achieving equitable diets for all: The long and winding road, One Earth (2021), https://doi.org/10.1016/ j.oneear.2021.03.007

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signposts to guide us in how we traverse toward 2030 and beyond.

### A better roadmap

The road is us-the global citizenry. People are in the driver's seat in how we want food systems to function and for whom. We already produce enough food for everyone, and the technology needed for producing food in a more sustainable way already exists. We must make it easier for people to get access to and afford healthy foods and ensure that food is produced in a more sustainable way that stays within planetary boundaries-conserving biodiversity and watersheds, halting deforestation, and minimizing greenhouse gas emissions. Much can be done by the multitude of actors making decisions on how the food system operates and delivers the foods that constitute our diets. Consumers, too, can be powerful actors in shaping the food system's directionality but only when they have supportive systemic policies that protect them, such as the banning of junk-food advertising, the provision of easy-to-read labels, the development of better food-safety surveillance, and the promotion of investments that incentivize more sustainable food production practices.

The map is the vast amount of evidence, data, and knowledge accumulated over the last 50 years. Although there will always be data gaps, we have enough information to make solid decisions on what direction we want to head toward and how long it will take us. As on any good map, we also understand the topography, the features, the size, and the scale of the challenge at hand. There is also a bolus of food-system data and even a Food Systems Dashboard that brings all the data to aid in decision making.<sup>14</sup>

The signposts are the real-time learnings of the COVID-19 pandemic. First, when something is genuinely threatening to humanity, governments can and will act swiftly. How governments act might not always be optimal, but act they do. Governments must realize that unhealthy diets and unsustainable food systems are global threats. What is critical is to ensure that the science community generates, shares, and provides the data and evidence for better policy decision making in real time.

Do not underestimate human ingenuity. The speed at which scientists developed a vaccine for COVID-19 shows that with scientific cooperation, years of accumulating scientific research, and funding, global goods can have a profound impact. We know a tremendous amount about how food systems function and where we need to take action. Food systems can be a source of innovation and opportunity, and the UN Food Systems Summit is an opportunity to highlight this. Innovations such as regenerative agriculture, reformulated foods, lab-grown meats, ready-to-use foods for acute malnutrition treatment, seed vaults, homegrown school meals, digital technologies for consumer information, and front-of-thepack labels, to name just a handful, are being tried and tested all over the world.

Multilateral cooperation is essential. As exemplified by the COVID-19 pandemic, modern-day challenges including climate change and unsustainable food systems are interconnected issues. Our efforts to tackle these issues will be significantly impaired without cooperation. Because food is one of the most traded commodities globally, one country's efforts to "fix" their food system to ensure that it provides healthier, sustainable, safe, and affordable foods requires fixing the global food trade system. The UN Food Systems Summit will be crucial to garnering cooperation, ensuring inclusivity, signaling power asymmetries of food-system actors. and holding everyone to account.

Collectivism and social change are critical. Over the last few years, the resurgence of social movements, in a similar fashion to the late 1960s, has highlighted social injustices and inequities that can profoundly affect government policies. This past year, smack dab in the middle of a pandemic, we have seen Black Lives Matter take on profound importance in highlighting systemic injustices that have been swept under the rug for too long. Prior to the pandemic, the world saw millions of people take to the streets and participate in events demanding action on climate change. These injustices transcend to food systems, and the time is ripe for a global food-justice movement.

It is all about the incentives. Not understanding what is in it for each food-system actor to make the change is naive. Because "it is the right thing to do" is not enough. Examining the incentives and trade-offs in making certain decisions will be critical to making inroads in ensuring that food systems are sustainable and fair and produce healthy diets.

Navigating the long and winding road to equitable diets over the next 10 years will be difficult. But with sufficient coordinated action, there remains time to roll our sleeves up and get to work. There will be ten billion of us roaming this planet by 2050. We will all require sustainable, equitable, safe, and healthy diets. The UN Food Systems Summit should define where we are, where we want to go, and who we want to be by 2050 with a robust mechanism to hold every one of us to account.

### **DECLARATION OF INTERESTS**

J.F. is the editor-in-chief of the *Global Food Security Journal* and associate editor of the *American Journal of Clinical Nutrition*.

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