

Where do we stand on financing the Zero Hunger Target?

Arvind Ashta

Introduction

We are living in a world with a lot of inequalities: while people in the wealthiest countries in the world have access to running water, electricity, and gas for heating, over 800 million people are suffering from hunger, who are underfed or badly fed, and one in three people are not sure to get adequate food every day (United Nations, 2022, July 25). These figures have not changed since 2016.

The sustainable development goals were elaborated in 2015, and the Millennium Development Goals before them were signed in 2000. We wanted to reduce hunger and malnutrition, and now we're targeting eliminating them by 2030. The second objective of the SDGs also includes doubling agricultural productivity and reducing food insecurity.

To contextualize the problem, almost 9% of the world population suffers from hunger (United Nations, 2022). Most of these people live in Asia and Africa. About 189 million Indians (14% of the Indian population) were under-nourished before COVID (FAO, IFAD, UNICEF, WFP, & WHO, 2020). Sixty-six million school-going children in developing countries are hungry while in class (WFP, 2012), reducing their ability to concentrate and learn. Not only are these children undernourished, but they are also malnourished. In sub-Saharan Africa, 23% of the population eats poorly. Poor nutrition is the cause of almost 45% of children dying at less than five years of age. That is 3.1 million children every year. Malnutrition not only causes stunting for 149 million children (158 million in 2016), it also causes the brain not growing (Wiseman, 2022), higher illness, lower learning, and underproductivity (WHO, 2015, November 19). About 40 million Indian children of less than five years of age (almost 35% of Indian children of that age group) suffer from stunting (FAO et al., 2020). The problem is not just that people don't have food more than once a day, it is also the uncertainty that, on a given day, they will have any food at all. This uncertainty is the problem of food insecurity.

This food insecurity is exacerbated because 75% of agricultural diversity has disappeared from the fields and has been replaced by cash crops for exports. On the supply side, women farmers are often underproductive because they do not have adequate education or financial resources. About 1.4 billion people don't have access to electricity and therefore do not have the complementary factors that could increase farm productivity. This means that poor people worldwide do not have physical, mental, financial, or technical resources to do

something to elevate themselves out of poverty. Moreover, we have known for some time now that climate change reduces food supply through the rising of the seas, droughts, tempests, and floods.

Yet despite the laudatory objectives of SDG 2 and some progress till 2019, we have witnessed the problem worsening during the last three years.

Recent news on food shortages

Why has the problem grown in this year and the preceding years? The three most essential elements are the continuing effects of COVID, conflicts, and climate changes owing to global warming (The Economist, 2022, March 9). These factors have intertwined to create a supply chain crisis and inflation, both of which have led to reduced supply, increasing inequalities, and inadequate purchasing power in the hands of poorer people.

A. Covid and food shortages

In many countries, COVID has resulted in loss of jobs and created problems of crop production and supply chain bottlenecks. The cumulative number of COVID cases has actually more than doubled this year, from 289 million at the end of 2021 to 605 million in September 5, 2022 (Johns Hopkins University, 2022, September 5) . Confirmed statistics indicate that about 1 million people died in 2022, up from 5.5 million deaths till December 31, 2021. Even though the fatality rate has slowed, the loss of productivity from illness remains high. There is some evidence that COVID led to an increase in poverty and inequalities in many countries and that education facilities worsened for poorer children (Yonzan, Cojocar, Lakner, Mahler, & Narayan, 2022, Jan 18). Covid has disrupted the supply chain of all goods, including food, thus leading to higher prices (The Economist, 2022, March 9). Indeed, the Food and Agricultural Organization (FAO) revealed that the food price index went up by 7.9% over its value a year ago. However, it has been coming down in the last few months (FAO, 2022, Sept 2). Over the previous three years, COVID-19 increased the number of hungry people by 150 million and food insecurity for about 250 million people.

B. Conflict and Food shortages

The Russian-Ukraine conflict has been regularly in the news. Until recently, when a Turkiye and UNO-backed agreement was reached between the two countries, there was fear of a global food shortage since these countries contribute 30% of global wheat exports and 20% of maize exports. The EU blamed Russia for instigating a global food crisis by blocking Ukraine from exporting. Third-world countries blamed the EU for imposing sanctions and preventing Russia from exporting (Pop, 2022, July 18).

Civil wars have also taken their toll. In Afghanistan, the impact of COVID, combined with other political elements and natural disasters, has led to about 19 million people facing food insecurity (Besheer, 2022,

August 15). This is half of the population. A similar situation exists in Myanmar, South Sudan, Syria and Yemen where civil insurrections have left people starving. In Ethiopia, violent encounters between factions have led to more than 400,000 people without food.

C. Climate change and food shortages

Natural disasters, reduced rainfall, and other weather events disrupt agriculture. In Madagascar, a multi-year drought has led to famine, affecting 1.7m people (Pilling, 2022, August 3). The UN considers it the world's first climate change-induced famine.

The recent floods in Pakistan have washed away millions of tonnes of crop production. In one province, 90% of the crops have been destroyed (Pakistan Today, 2022, August 29). The floods are due to extreme heat causing glaciers to melt, combined with earlier than expected monsoon rains of twice the average quantity of rainfall (Daily Times, 2022, August 29).

Alternative possible solutions

To combat hunger, notably from long term factors, we have been building capacity, notably information technologies, for communication to signal weather conditions and shortages, we have been trying to finance agriculture and we have been trying to increase access to markets. Actors such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO) United Nations Development Program (UNDP), World Food Program (WFP), the International Fund for Agricultural Development (IFAD) and many national and local organizations, are finding ways to increase production, improve distribution, and reduce consumption. Countries like India have achieved larger-scale commercial production with the use of improved breeds, feed, housing and vaccinations (FAO et al., 2020).

WHO works to strengthen national food control systems to facilitate global prevention, detection and response to public health threats associated with unsafe food. Its food control assessment tools look at legal, financial and human resources; domestic and import controls, monitoring and surveillance of food chains; the interaction of competent authorities with domestic and international stakeholders; and innovation, including access to knowledge and use of knowledge to analyzing risks (WHO, 2021). It provides independent scientific assessments on microbiological and chemical hazards for international standards. It has collaborated with FAO to assess the performance on national food control systems (WHO, 2022, May 19).

Food security requires proper policies and data for monitoring. The 'Data for Policy' initiative, facilitated by the Government of Telangana and UNDP in partnership with The Rockefeller Foundation, is an example of an initiative to strengthen climate resilience of food systems by using data for policy making. In this initiative, a remote sensing-based digital public good platform and algorithms are used to identify farms that are resilient to climate change and those that are highly vulnerable. The public good platform uses open-source

technologies to facilitate analysis conducted by data scientists and citizen scientists. Policy-making can then be based on good practices to help strengthen climate resilience. Without such systems, climate change could reduce food production in India by 15-18% (Noda, Ranjan, & Khanna, 2021). As another example of UNDP's role, the UNDP is training fishermen and farmers to build awareness of climate-smart agriculture that would help them start practices that make their businesses resilient to climate change (UNDP, 2022, August 18). These practices will improve food security.

There are other ideas requiring financial aid. IFAD finances agriculture and development initiatives. Since 1978, it has financed more than US\$23.2 billion of projects in developing countries through grants and subsidized loans. It responded to COVID by setting up a special fund that reached 20 million people in 59 worst affected countries. In response to the food crisis created by the Russia-Ukraine conflict, it has recently created a new initiative to finance Afghanistan, Ethiopia, Haiti, Mozambique, Somalia and Yemen (IFAD, 2022, July 28). IFAD has a number of projects in India which are directly concerned with food security. For example, it provides financing of \$51 million in a project costing 130 million for improving the livelihoods and providing food and nutrition security for over 62,000 households in Odisha. Most of the remaining financing is provided by the Government of India (IFAD, n.d.).

One possibility is to provide one free meal to school children worldwide (The Economist, 2022, September 1). In low-income families, this increases the incentive to attend school. Moreover, children who eat adequately can concentrate better. Third, it is possible to ensure that the school meal has all the essential micronutrients that a child needs during the day for the body and mind to develop. The number of children receiving school meals grew by 9 percent globally and 36 percent in low-income countries from 2013 to 2020. Yet 73 million vulnerable children are still going without free school meals. The WFP has worked with more than 100 countries to develop sustainable national school feeding programs. In 2020, 17 million schoolchildren received free meals from WFP (WFP, 2021). Governments are also taking an interest. As an early policy innovator, India has declared meals at school a legal obligation of those providing education. Today, India has the highest number of school meal programs (90 million children), followed by Brazil and China (both 40 million), the United States (30 million) and Egypt (11 million). The meal supply process in India is handled by NGOs but also by corporates directly as part of the social responsibility. Akshaypatra claims that it is the world's largest NGO meal-supplier, feeding over 2 million children across almost 20,000 schools. Its annual report indicates that donations and government subsidies are its principle revenues. The webpage on donation indicates that it costs about Rs 1,500 (between USD 15 and 20) to feed a child for the year. The Indian multinational Vedanta has a Nand Ghar program which aims at women upliftment and child nutrition.

Some private firms are also contributing to improving nourishment for children. For example, Danone developed a low-price yogurt containing many micronutrients and partnered with Grameen Bank in Bangladesh to distribute it (Yunus, 2007).

For short-term problems, we need specific solutions. For example, for the Russia-Ukraine conflict, we need to reduce the risk of the food grains being transferred from the Black Sea and bypass economic sanctions to be able to use available stocks. In this view, Turkey and the United Nations brokered a deal allowing Russia and Ukraine to export food grains despite international legal constraints (Schipani, 2022, August 30). However, the recent Ukrainian attacks on Crimea have led to Russia stopping the agreement. Moreover, Russia feels that Ukraine has gained more from the arrangement than Russia. Therefore, till the war ends, we can expect that the solutions may remain intermittent.

Concluding thoughts

We can see that there has been progress in the march to Zero Hunger, but this progress has been halted, perhaps reversed, in the last few years. A major limitation is that the SDGs are not legally binding. Nevertheless, efforts continue to resolve short-term problems and work on long-term capacity building in the wake of a growing world population. All this requires financing, digital transformation, focusing on productivity and opportunities for women, and of course, developing resilience to climate change.

One possibility to reduce hunger being discussed frequently is universal basic income. With the advances in technology, and enhancement in productivity, there would be considerable unemployment and rise in inequalities. The idea would be to share some of the high profits with people who are manifestly neither able nor required in the production process. This universal basic income would then serve to meet the basic food needs and minimum health needs of poor people. Although most experiments are in developed countries, there are fairly advanced schemes running in Brazil and Iran. The thought goes against the Gandhian view that everyone must participate in the production process to feel part of society. Work-sharing would then be a better way out to allow everyone to work and feed themselves.

I want to mention two additional ideas to go further, both first presented in Artha last year. One is that we should have a federal world. This would reduce wars between countries, harmonize fundamental rights and commercial laws, and increase transfers, including food. Without fiscal transfers, federalism would not work (Ashta, 2021a; Ashta & Walia, 2022). These equalization transfers could be directed at feeding the hungry.

The second idea is that there could be shares in countries: “macroequity” (Ashta, 2020, 2021b). The value of these shares going up or down would encourage political actors to behave responsibly. If any country acts in an unsustainable manner, the image of that country will go down. This decline in the image would be reflected in the stock price of that country. Thus, financial markets would promote responsible action to feed the hungry.

These ideas may sound eccentric, but when you are in a desperate situation, you're willing to try anything. Ask the hungry if they are desperate.

Acknowledgments: This paper evolved from a presentation at the Assemblée Nationale in Paris organized by Open Diplomacy Institute: “Rencontres de Développement Durable”, Septembre 16, 2022. My thanks to Camille Talpin, Thomas Friang, Marie-Laurence Pouxviel, and an anonymous reviewer from Artha for their comments at various stages of this development.

References

- Ashta, A. (2020). Reflections on the financing of Covid-19? Introducing MACRO-Equity and opening Pandora’s Box. *Artha*, 6(2), 15-21. doi:http://financelab.iimcal.ac.in/e_magazine_pages/reflections-on-the-financing-of-covid-19-introducing-macro-equity-and-opening-pandoras-box/
- Ashta, A. (2021a). It is time to seriously consider the advantages of a world federal government. Retrieved from <https://blogs.lse.ac.uk/europpblog/2021/03/18/it-is-time-to-seriously-consider-the-advantages-of-a-world-federal-government/>
- Ashta, A. (2021b). Towards a New Form of Undemocratic Capitalism: Introducing Macro-Equity to Finance Development Post COVID-19 Crisis. *Journal of Risk and Financial Management*, 14(3), 116. doi:<https://www.mdpi.com/1911-8074/14/3/116>
- Ashta, A., & Walia, D. (2022). Financing the recovery from the havoc created by Covid: reinforcing the need for a world federal government. *Market & Organizations*, 2022 (1)(43), 213-235.
- Besheer, M. (2022, August 15). Millions of Afghans Facing Catastrophic Hunger. *VoA News*. Retrieved from <https://www.voanews.com/a/millions-of-afghans-facing-catastrophic-hunger-/6702592.html>
- Daily Times. (2022, August 29). Climate Change: Pakistan's Unseen Enemy. *Daily Times (Pakistan)*. Retrieved from https://nouveau.europresse.com/Link/ESCDIJONT_1/news%c2%b720220829%c2%b7FDTP%c2%b7012
- FAO. (2022, Sept 2). *FAO Food Price Index drops for the fifth consecutive month in August*. Retrieved from <https://www.fao.org/worldfoodsituation/foodpricesindex/en/>
- FAO, IFAD, UNICEF, WFP, & WHO. (2020). *The State of Food Security and Nutrition in the World 2020: Transforming food systems for affordable healthy diets*. Retrieved from Rome:

- IFAD. (2022, July 28). UN agency IFAD reaches record level of support for world's rural poor: 2021 annual report [Press release]. Retrieved from <https://www.ifad.org/en/web/latest/-/un-agency-ifad-reaches-record-level-of-support-for-world-s-rural-poor-2021-annual-report>
- IFAD. (n.d.). Odisha Particularly Vulnerable Tribal Groups Empowerment and Livelihoods Improvement Programme. Retrieved from <https://www.ifad.org/en/web/operations/-/project/1100001743>
- Johns Hopkins University. (2022, September 5). CSSE COVID-19 Data. Retrieved from https://ourworldindata.org/explorers/coronavirus-data-explorer?facet=none&pickerSort=desc&pickerMetric=population&Metric=Confirmed+cases&Interval=Cumulative&Relative+to+Population=false&Color+by+test+positivity=false&country=~OWID_WRL. from Our World in Data https://ourworldindata.org/explorers/coronavirus-data-explorer?facet=none&pickerSort=desc&pickerMetric=population&Metric=Confirmed+cases&Interval=Cumulative&Relative+to+Population=false&Color+by+test+positivity=false&country=~OWID_WRL
- Noda, S., Ranjan, J., & Khanna, D. (2021). Using Data for a Resilient Future. Retrieved from <https://www.undp.org/india/blog/using-data-resilient-future>
- Pakistan Today. (2022, August 29, 29/08/2022). Death, devastation, and now starvation - what is the cost of this catastrophe? *Pakistan Today*. Retrieved from https://nouveau.europresse.com/Link/ESCDIJONT_1/news%c2%b720220829%c2%b7APTO%c2%b7058
- Pilling, D. (2022, August 3, 03/08/2022). Why famine in Madagascar is an alarm bell for the planet. *Financial Times*, p. 13. Retrieved from https://nouveau.europresse.com/Link/ESCDIJONT_1/news%c2%b720220803%c2%b7GF%c2%b7180653752
- Pop, V. (2022, July 18, July 18). EU to close sanctions loopholes amid looming Gazprom deadline. *Financial Times*, <https://www.ft.com/content/64eaccdc-871b-427d-878ba870-fabcc872bfa876e872>.
- Schipani, A. (2022, August 30). Ukrainian wheat reaches Djibouti after humanitarian corridor deal. *Financial Times*.
- The Economist. (2022, March 9). Progress to eradicate global hunger is stalling. *The Economist*(March 9).
- The Economist. (2022, September 1). Should every schoolchild eat free? *The Economist*.
- UNDP. (2022, August 18). 600 young Farmers & Fishers for 21 million JMD gender-sensitive, climate resilience project. In. <https://www.undp.org/jamaica/news/600-young-farmers-fishers-21-million-jmd-gender-sensitive-climate-resilience-project>: United Nations Development Program.

- United Nations. (2022). *Goal 2: Zero Hunger*. Retrieved from <https://www.un.org/sustainabledevelopment/hunger/>:
- United Nations. (2022, July 25). *The Sustainable Development Goals Report 2022*. Retrieved from Washington, D.C.:
- WFP. (2012). *Two minutes to learn about: School Meals*. Retrieved from <https://documents.wfp.org/stellent/groups/public/documents/communications/wfp220221.pdf>:
- WFP. (2021). *State of School Feeding Worldwide 2020*. Retrieved from <https://www.wfp.org/publications/state-school-feeding-worldwide-2020>:
- WHO. (2015, November 19). *Stunting in a nutshell*. Retrieved from <https://www.who.int/news/item/19-11-2015-stunting-in-a-nutshell>:
- WHO. (2021). *Food control system assessment tool: introductory booklet*. Retrieved from Geneva:
- WHO. (2022, May 19). *Food safety*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/food-safety>:
- Wiseman, S. (2022). Poverty impacts infant brains. *Nature Neuroscience*, 25(3), 267-267.
doi:10.1038/s41593-022-01037-1
- Yonzan, N., Cojocaru, A., Lakner, C., Mahler, D. G., & Narayan, A. (2022, Jan 18). The impact of COVID-19 on poverty and inequality: Evidence from phone surveys. Retrieved from <https://blogs.worldbank.org/opendata/impact-covid-19-poverty-and-inequality-evidence-phone-surveys>
- Yunus, M. (2007). *Creating a World Without Poverty: Social Business and the Future of Capitalism*.
