

From overflowing farm gates to empty food plates: the unfinished food journey

Ashwini Kakkar • President of Action Against Hunger – India

How to explain the Indian paradox that sees the country with the highest cereal production in the world experiencing one of the highest rates of undernutrition? Ashwini Kakkar traces the history of India through this prism before turning to the measures put in place by the government and by a non-governmental organisation with its roots in France.

The narrative on agriculture in India, especially over the last century, is filled with great contrasts. Today, despite a record production of food grains, the farmers are poor, and around 224 million people are undernourished, which accounts for about a third of the world’s hunger burden.¹

Indigenous agricultural practice started in north-western India as far back as 9000 BC. Over the millennia, invaders and colonisers from around the world introduced new agricultural crops, strains, techniques and taxes which kept changing the landscape. With the Independence of India seventy-five years ago, in 1947 came a new vision for the 350 million citizens of this new country. In the initial years, India was still hugely dependent on supplies of food from the United States.² In fact, with grain production at only 11.3 million tonnes in 1963, India was forced to import 20 million tonnes over the next two years to feed its population.

Today, India produces about 110 million tonnes of wheat and 120 million tonnes of rice annually. This massive shift is a result of India’s resolve to prioritise agricultural development alongside the National Five-Year Plans. The establishment of the National Dairy Development Board, the National Bank for Agriculture and Rural Development and various cooperatives were important milestones on the journey.

The “Green Revolution” led by agricultural scientist and Chairman Emeritus of Action Against Hunger – India (AAHI), Dr M.S. Swaminathan, with support from Dr Norman Borlaug promoted the introduction of high-yielding, disease-resistant seeds/strains and the use of fertilisers, better irrigation and more farm mechanisation from the mid-1960s. These policies led to high increases in food output and made the country self-sufficient in grains. Since 1970, food production in India has grown at a trend rate of about 3% per annum with an accelerating bias, while population growth has been about 1.86% per annum, with a decelerating bias. Compared to global standards, however, yields continue to be 30% to 50% lower than the best achievable due to sub-optimal use of mechanisation and technology, fragmented holdings and low private and public investment in agriculture. As for the “White Revolution” (Operation Flood) launched in 1970 by Dr Verghese Kurien, it created a national milk grid

¹ FAO, IFAD, UNICEF *et al.*, *The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable*, July 2022, <https://www.fao.org/3/cc0639en/cc0639en.pdf>

² Office of the Historian, “USAID and PL-480, 1961–1969”, <https://history.state.gov/milestones/1961-1968/pl-480>

that linked the country-wide producers to consumers in over 700 towns and cities. It transformed India from a milk-deficient nation to the world's largest milk producer (about 23% of global output).³

While contract farming was gaining hold and agri exports continued to rise, average land holdings unfortunately continued to shrink and are now down to about one hectare, especially in rain-fed areas where, with truant monsoons, chronic farmer indebtedness has started to increase, leading to farmer suicides. This sector, which used to employ almost two-thirds of India's working population and contributed around 52% of gross domestic product (GDP), currently employs around 40% of the total workforce and contributes about 20% of GDP. India is blessed with abundant sunshine and the world's second-largest agricultural land area at about 157 million hectares (approximately 48% of total geographical area), which is spread over twenty agro-climatic regions.⁴ Only about one-third of this area is irrigated: 40% with surface water and 60% by rapidly depleting groundwater. For the rest, the nation depends on the double monsoons which provides farmers with two harvests per year.

Even so, India produces for its 1.3 billion people about 726 million tonnes of food, of which three-quarters is of plant origin and one-quarter of animal origin.⁵ It is the largest producer of pulses, spices, milk, tea, cashews, mangos and jute and second-largest for wheat, rice, fruits, vegetables, sugarcane, cotton and oilseeds. On the other hand, there is inadequate cold-storage capacity, and the food processing industry is still under-developed, leading to substantial harvest and post-harvest losses.⁶ Proliferation of start-ups in the agri sector has nevertheless shone a new light on addressing the agri-sector challenges through high-nutrition biofortified crops, satellite and drone mapping, precision farming using drips and sensors, tissue culture and genetics and food processing. But while the government is purchasing one-third of selected crops at minimum support prices and provides tens of billions of dollars annually by way of food, fertiliser and power subsidies, India still has large numbers of people affected by malnutrition and hunger.

To put up a fair fight against hunger, there should be a targeted approach that ensures access to food for all. Nobel laureate Amartya Sen categorically states that hunger and starvation are due to lack of adequate access to food which is not uniform in a country, in a community or even in a family. In India, the ration card-based Public Distribution System is one such ongoing scheme that makes raw food items accessible and affordable to everyone. Its distribution network, the largest in the world, has helped improve access to food but is yet to be successful in eliminating hunger and malnutrition. Ranked 101 out of the 116 countries assessed under the 2021 Global Hunger Index, India is home to a third of the world's total stunted children and almost half of the world's wasted (undernourished) children under the age of 5.⁷ According to the latest findings of India's National Family Health Survey,

³ Ministry of Finance, *Economic Survey 2021-22 (Agriculture and Food Management)*, 2022, <https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap07.pdf>

⁴ Mohan Guruswamy, "India's Agriculture: The failure of the success...", *Deccan Chronicle*, 21 October 2021, <https://www.deccanchronicle.com/opinion/columnists/211021/mohan-guruswamy-indias-agriculture-the-failure-of-the-success.html>

⁵ Ramesh Chand, *Transforming Agriculture for Challenges of the 21st Century* (102nd annual conference of Indian Economic Association, 27-29 December 2019) in *Indian Economic Journal*, vol. 15, no. 4, 2019, https://www.niti.gov.in/sites/default/files/2020-01/Presidential_Address.pdf

⁶ Dhanya Vijayan, Avdesh Shula and Rishabh Kumar, "Food Processing industry in India: Challenges and Potential", *RBI Bulletin*, March 2020, pp. 27–41.

⁷ Klaus von Grebmer, Jill Bernstein, Miriam Wiemers *et al.*, *2021 Global Hunger Index: Hunger and food systems in conflict settings*, Concern Worldwide and Welthungerhilfe, 14 October 2021, <https://admin.concern.net/sites/default/files/documents/2021-10/2021%20GHI%20Synopsis%20FR.pdf>; Development Initiatives, *2018 Global Nutrition Report: Shining a light to spur action on nutrition*, November 2018.

HUMANITARIAN ALTERNATIVES

total wasting (acute malnutrition) in Indian children under the age of 5 is 19.3% and stunting (chronic malnutrition) is as high as 35.5%.⁸

India has a long-standing tradition of philanthropy. More widespread giving has also been a part of India's socio-economic fabric with contributions in cash and kind from religious groups, corporates, high-net-worth individuals and small donors. New ways of prioritising funding for innovative pilot projects in areas such as hunger, education, water, healthcare and livelihoods need to be implemented in order to achieve strategic transformation, be it by the government or non-governmental organisations (NGO).

As of March 2022, there are 16,813 NGOs registered with the Foreign Contributions Regulation Act in India.⁹ The last amendments to this act, at the end of 2020, imposed many stringent conditions on their operations and compliance, at times hampering their activities. While day-to-day field operations of NGOs can be challenging, and there are a plethora of rules and regulations, one of the best developments in the last five years has been the legislation and implementation of the Corporate Social Responsibility (CSR) Act in India. This act mandates that every corporation making a profit of over approximately US\$630,000 per annum (amongst other conditions) must spend 2% of its last three years' average net profit on a CSR initiative of their choosing from the government-notified list. This initiative can be implemented in the location of their choice. For the majority, the destination of projects is decided based on the needs of the community, the severity of the problem and the NGO's presence in the area. The final selection of the NGO is usually dependent on the strength of the solutions proposed by the organisation and its standards of transparency, integrity and governance. Under this scheme, 17,000 companies are likely to spend about US\$3 billion per annum on CSR activities. This is path-breaking legislation and is likely to be replicated in other countries in the coming years as it has helped the NGO community tremendously and has been very beneficial to the general good.

One example of an organisation effectively addressing the challenge of malnutrition in India while judiciously optimising limited resources is Action Against Hunger – India (AAHI). Its journey began in 2010 as a mission under Action Against Hunger – France in the State of Rajasthan. Death of children in the village of Suvans revealed a high level of malnutrition in Baran district. Situational analysis was carried out followed by awareness-raising and capacity-building projects. The Standardized Monitoring and Assessment of Relief and Transitions (SMART) Survey in 2014 revealed rates of 5.4% for severe acute malnutrition (SAM) and 22.1% for moderate acute malnutrition (MAM) leading to direct intervention in 100 villages in the areas of nutrition, mental health and care practices, water, sanitation and hygiene. Intense advocacy led to an increase in the number of malnutrition treatment centres, from two to five. Part of the work was to test and validate a novel, local ready-to-use therapeutic food in technical collaboration with Washington University and support from the Children's Investment Fund Foundation. The positive results and advocacy led to the Rajasthan government considering AAHI's recommendations and announcing a Community-based Management of Acute Malnutrition (CMAM) programme (*Poshan* phase 1) in thirteen districts. AAHI was also appointed to its technical advisory committee. Through the committee, its recommendations – coordinating with faith healers to refer children, mobilising workers in the community and setting up handwashing stations in centres and sub-centres – were implemented in the subsequent 2019 government-enhanced programme,

⁸ International Institute for Population Sciences, *National Family Health Survey-5 2019-21: India Fact Sheet*, November 2021, http://rchiips.org/nfhs/NFHS-5_FCTS/India.pdf

⁹ Ministry of Corporate Affairs, "CSR Expenditure: Summary", *National CSR Portal*, 2022, <https://www.csr.gov.in/content/csr/global/master/home/home.html>

HUMANITARIAN ALTERNATIVES

Poshan phase 2, in twenty districts. By adding antenatal care, the government programme was implemented as a joint CMAM-IMAM (Integrated management of acute malnutrition) programme. In 2022, AAHI provided strategic, operational and evidence-based recommendations to the local government's Naya Savera (New Dawn) programme. Along with recommendations from other working NGOs, the government rolled out an integrated project aiming to tackle anaemia, reduce low birth weight and ensure provision of energy-dense nutritional supplements.

The collaborative nature of AAHI's proposed programmes with donors, partners, communities and government ensures that every stakeholder is involved at every stage of programme design and implementation. The onboarding of village leaders and advocacy has helped make nutrition a priority in local meetings, prompted the refurbishment of centres and ensured the provision of new and functional anthropometric equipment across the State for accurate assessment of the status of malnutrition in children. Local communities have also evolved and social norms and behaviours – overcoming reluctance to feed colostrum, visiting malnutrition treatment centres instead of going to faith healers – have changed.

Now active in the four States of Rajasthan, Gujarat, Maharashtra and Madhya Pradesh, AAHI has about 250 employees and operates within a budget of approximately €2.5 million per annum (average total cost of €800 per employee per month) reaching out to approximately 700,000 people every year for whom access, affordability and availability are a challenge. It also works with a local operational board which has strengthened the strategic, technical and financial capabilities of the Indian headquarters. There has also been substantial support from other Action Against Hunger headquarters along with various other global and local partners to build and leverage technological solutions to combat malnutrition. An example is the use of artificial intelligence-based applications to replace physical anthropometric measurements of children in India in collaboration with *Welthungerhilfe* and Action Against Hunger – Spain. Compared to the initial years where the programmatic approach to reducing malnutrition specifically targeted the curative reduction of SAM and MAM, the current programmes have evolved to comprehensively target the root causes of malnutrition through a preventive and curative multisectoral approach.

Malnutrition in children is a manifestation of multiple social, economic, cultural, physiological, and demographic adversities coming together. Wasting and other forms of acute malnutrition are the result of maternal malnutrition, low birthweight, poor feeding and care practices and infection.¹⁰ These are exacerbated by food insecurity, unhealthy household environment, lack of health care services, limited access to safe drinking water, insufficient employment opportunities and poverty.

In line with this, AAHI's current programmes target sectors inclusive of nutrition, health, WASH, food security and livelihoods in an integrated manner. The implementation of these programmes is in convergence with the government. In addition, the community and local actors are equally involved in the programme – right from the design phase through to the end of implementation for sustainable behaviour change. With this approach, the community does not just benefit from intervention but also has a rightful say over and ownership of the transformation.

This example of how one national arm of a global organisation approached a complex local problem by building on the collective wisdom of global and local communities, partners and stakeholders

¹⁰ Zulfiqar A. Bhutta, James A Berkley, Robert H. J. Bandsma *et al.*, "Severe childhood malnutrition", *Nature Reviews Disease Primers*, vol. 3, no. 17067, September 2017.

proves that the time when we used to think and act in silos is well-nigh over. We all need to collaboratively design the most optimal and transformational models for the world, where we grow enough to feed and secure the entire population of the Earth, with efficient use of resources. For all this, we can make best use of innovations and technology and try to bring about changes one step at a time that are reviewed, revisited, adapted and replicated in a sustainable manner. In this endeavour, we need to ensure that we do not lose sight of the need to reduce inequalities and improve livelihoods.

Biography

Ashwini Kakkar • Indian entrepreneur and philanthropist Ashwini Kakkar has been involved in the fight against hunger for many years. He has been president of Action Against Hunger – India since the creation of the NGO's headquarters in 2012. He is a Distinguished Fellow of the Institute of Directors and has served as President of the Bombay Chamber of Commerce and Industry. In 2006, President Jacques Chirac of France decorated Ashwini Kakkar with the Knight of the National Order of Merit. In October 2021, he was unanimously elected as Global Chairman of Action Against Hunger.

*Reproduction prohibited without the agreement of the review Humanitarian Alternatives. To quote this article:
Ashwini Kakkar "From overflowing farm gates to empty food plates: the unfinished food journey", Humanitarian Alternatives, no. 21, November 2022, pp. 34–43,*

<https://www.alternatives-humanitaires.org/en/2022/11/18/from-overflowing-farm-gates-to-empty-food-plates-the-unfinished-food-journey/>