Policy options to leverage agriculture to improve nutrition security

*Priyanshu Tripathi, Adya Tiwari

Department of Foods and Nutrition, College of Home Science, MPUAT, Udaipur, Rajasthan, India

*Corresponding email: tripathipriyu89@gmail.com

Almost one in two Indian children is stunted and 40 percent are underweight. One-third of all Indian women are underweight. Rates of micronutrient deficiencies are extremely high, with almost 80 percent of children and 56 percent of women being anemic (see Figure 1). Countries such as China, Thailand, and Brazil have taken bold actions to successfully accelerate reductions in undernutrition and are on track to reach the first Millennium Development Goal on target, by the year 2015. But India will do so only in 2043 with its present pace of actions. In the meantime, undernutrition continues to exert a physical, cognitive, and economic toll, costing India as much as 3 percent of its GDP per year. The Copenhagen Consensus 2008 lists combating micronutrient undernutrition as the best development investment, with the rate of return in terms of improved health, reduced deaths, and increased income opportunities more than 15 times than the investment. The multiple causes of undernutrition, at the individual, household, and societal levels, are now well recognized (see Figure 2). Globally and in India, reasonable scientific consensus exists on what direct health and nutrition interventions will work. The central and state governments allocate substantial resources to an array of health and nutrition programs or schemes, such as the Integrated Child Development Scheme, Mid-Day Meals, Reproductive and Child Health Program, and National Rural Health Mission, to deliver these...
direct interventions. The challenge for India now lies in making these interventions truly effective at scale. While effectively scaling-up direct nutrition and health interventions is essential, it is not enough: direct nutrition interventions, if scaled-up and implemented effectively, will address only one-third of India’s undernutrition burden. Undernutrition reductions in countries such as Brazil, China, Senegal, and Thailand have shown the need to complement these interventions with approaches that address undernutrition’s deep-rooted causes. This comprehensive approach to solving the undernutrition crisis is gaining momentum in India. The Prime Minister’s National Council on India’s Nutrition Challenges, formed in 2008, is multisectoral, with representation from more than one dozen ministries. The Council’s key recommendations include creation of new institutional arrangements that encourage different sectors to work together. Several states, including Karnataka, Madhya Pradesh, Gujarat, and Orissa, are experimenting with moving nutrition into “Mission Mode” at the state level to accelerate reductions in undernutrition.

Some Policy Options to Leverage Agriculture to Improve Nutrition Security

Accelerating reductions in undernutrition should become India’s basic organizing principle for its faster, sustainable, and more inclusive growth strategy. The following section proposes some specific policy approaches as a starting point to make the agriculture sector more “propoor” and “pro-nutrition,” based on the principles espoused in the Twelfth Five-Year Plan Approach Paper and by the Prime Minister’s National Council on India’s Nutrition Challenges in October 2010. 1. Leveraging Existing Platforms The thrust of the Twelfth Five-Year Plan is to move forward with key schemes and missions initiated in the two previous Plans, such as Rashtriya Krishi Vikas Yojana, National Horticulture Mission, and National Food Security Mission. Such large-scale platforms should focus on improving Indian citizens’ nutrition security, especially in districts with a substantial overlap between poverty and undernutrition. Rashtriya Krishi Vikas Yojana (RKVY), a bottom-up and demand-driven platform, gives states the incentive to develop comprehensive plans for the agricultural sector, taking into consideration the available technologies, agroclimatic conditions, and natural-resource issues. It encourages effective integration of livestock, poultry, and fish farming with the crop sector. RKVY’s flexibility and decentralized planning and implementation make integrating nutrition-security concerns into its agenda a possibility. National Horticulture Mission (NHM) paid dividends by increasing production of horticultural commodities. Now is the time to harness NHM’s potential by realigning its goals and strategy from a nutrition perspective. The opportunities to dovetail its implementation, leveraging other platforms such as RKVY, National Rural Livelihoods Mission, and state-level nutrition missions, are worth serious exploration. A minimum of 15 percent of all RKVY and NHM funds should be channeled to plans that integrate nutrition security concerns into their planning, implementation, and monitoring. For example, RKVY, NHM, and other platforms could use pro-nutrition funds for programs that manage water, prevent agriculture-associated waterborne diseases (such as malaria), develop an ecologically sound small-ruminant sector, and create nutrition-sensitive value chains.

Improving Economic and Physical Access to High Quality, Nutrient Rich Diets

Food still constitutes, on average, more than half of the expenditures of Indian households. The overall consumption pattern in the last two decades is one of stable rice and wheat consumption for the poor, a rise in fat consumption, sharp declines in coarse cereal consumption, continued decline in pulses consumption, and rising consumption of high-value foods (micronutrient rich fruits, vegetables, livestock, and fish). Given these contrasting trends, determining whether the average Indian diet has improved or deteriorated during the last 25 years requires further empirical investigation.

A. Improve access to nutrient-rich foods The agriculture sector is responding to changing demand patterns. In aggregate, the high-value food
segment accounts for about 47 percent of the total value of agricultural output. Because India has a large share of small and marginal holdings, the country should explore providing incentives to small farmers to grow vegetables and fruits for household consumption—a strategy that is successful in Thailand. Pulse production in the last two decades, with the exception of 2010, has remained stubbornly low. The urgent need for a technological breakthrough to increase the yield potential of pulses is widely acknowledged. India now needs to match this with the needed investment in research and development and effective extension services to ensure the poor and vulnerable have access to pulses. A majority of the livestock and small ruminant population is concentrated in marginal smallholdings, and women play a significant role in animal husbandry through direct involvement in major operations like feeding, breeding, management, and healthcare. Therefore, progress in this sector will result in a more balanced development of the rural economy, particularly in poverty reduction and improved access to nutrient-rich diets.

**Leveraging Agriculture to Empower Women and Strengthen their Capacity to Care for themselves and Young Children**

The National Rural Livelihoods Mission (NRLM) under the Ministry of Rural Development offers a significant potential for convergence with the agriculture sector to empower women to care for themselves and their children. NRLM’s federations of Self-Help Groups (SHGs) could radically alter the balance of power not only in the markets they participate in as both producers and consumers, but also in their communities and households.

**CONCLUSION**

India’s central development strategy should be to systematize structural and sector-specific measures the government can implement immediately to promote nutrition security while not losing sight of the long-term changes needed to create a modern inclusive, and just India. Agriculture is fundamental to India’s inclusive and sustainable structural economic transformation. It must therefore play a more significant role in promoting nutrition security. To incentivize states, 15 percent of the budget of the existing programs (for instance, RKVY, NRLM, NHM, and others) should go to district-level action plans (particularly in those districts where undernutrition is high) that can demonstrate progress in relevant nutrition security indicators. Translating these investments into nutrition outcomes will also require India and its states to pursue effective social behavior change communication and mobilization strategies to change demand, behaviors, and consumption patterns, especially for adolescent girls, vulnerable mothers, and young children.

**REFERENCES**

