

India Narrative



Country Context

India has seen unprecedented economic growth rates in recent decades and yet it remains home to one third of the world's undernourished children. Levels of child stunting (chronic undernutrition) are unacceptably high at 39 percent nationally¹ and up to 57 percent in rural areas of some Indian states. Stunting in the first two years of life leads to irreversible damage, causes increased susceptibility to disease and can lead to death.

There have been many studies researching the pathways through which agriculture may improve nutritional outcomes. Although agriculture has the potential to be a strong driver of undernutrition reduction, its potential to do so is currently not being realised. The focus of agriculture in India has largely been on increasing productivity and production of cereals, especially wheat and rice, starting with the 'Green Revolution' in the late 1960s. It is only in recent years that some strategies are emerging to address nutrition through agricultural routes, for example the Nutri-Farm scheme announced by the government in 2013.²

There are agriculture policies, programmes and schemes at the national level with budgetary allocations, but agriculture is a state subject in the country. This gives states the scope to be proactive and take initiatives in response to state-level requirements.

What is LANSAs?

Leveraging Agriculture for Nutrition in South Asia (LANSA) is a programme of research which aims to generate evidence that, with practical application, can improve nutrition outcomes in India, Bangladesh, Pakistan and Afghanistan. The research under LANSA will explore the fundamental, underlying and immediate determinants of nutrition.

LANSA Research in India

The majority of the research in India is led by the MS Swaminathan Research Foundation (MSSRF), the lead organisation for the LANSA programme. The integrated package of work includes studies on understanding the barriers and facilitators to nutrition-sensitive agricultural development in the country, analysing a few agri-food value chains and exploring how agricultural interventions can be designed to improve nutritional outcomes. Within these three areas, the following studies have been/are being conducted in India:



¹ Rapid Survey on Children (RSOC) 2013-14, Ministry of Women and Child Development, Government of India

² <http://nfsm.gov.in/Guidelines/NutriFarms.pdf>

Enabling environment, women's agency and child undernutrition

The quality and quantity of time available for childcare are critical factors in child undernutrition. Research under LANSA examined the agency effect of women's work participation and educational levels in an agricultural setting to understand how these factors may explain the variation in underweight rates of children. Overall, the results indicate that higher level of women's education and better sanitary conditions are more important than female workforce participation.

Another study examining dietary diversity and its impact on women's own nutritional status found that both dietary diversity and better environmental conditions are important. The emerging policy implications from the studies signify the need for social provisioning of healthcare, sanitation and education, which along with women's agency have the potential to impact on improving women and child nutrition outcomes in rural India.



Another strand of work examined the variations in nutrition status across states, comparing states with poor nutrition outcomes with a benchmark good performer state, Tamil Nadu. The results show that a surprisingly modest amount of the difference in stunting variation across states is due to the effects of factors such as income, education and sanitation, as is so often assumed, but rather that the bulk of the variation arises from unobservable factors such as political makeup, governance and institutional quality.

These findings highlight areas for focus, such as the successful versions of the Integrated Child Development Scheme (ICDS) and the public distribution system (PDS) in Tamil Nadu, which provide opportunities for cross state learning. This study goes some way in explaining why the effects of individual or household level factors as discussed in the first two studies remains somewhat ambiguous.

Agri-food policy, strategy and value chains

A study of consumption patterns under the targeted public distribution scheme (TPDS) found that households used the money saved on rice to spend more on pulses, edible oil, vegetables and sugar and other non-food items. It was also found that making TPDS more inclusive and more generous is not enough unless it is supported by administrative reforms to improve grain delivery and control diversion to open markets.

LANSA also seeks to analyse the nutrition focus of food value chains beyond the farm? Following up from a country review of interventions in the categories of naturally nutrient dense foods, fortified foods and food distribution chains, three case studies are underway. The case studies focus on examining the availability, access and affordability of: naturally nutrient dense complementary food for infants, nutritionally enhanced fortified biscuit and the Supplementary Nutrition Programme under the ICDS, by poor and vulnerable sections of the population. The objective is to highlight the policy support required for substantive and sustained consumption of nutrient-dense foods by poor households, with particular focus on women, adolescent girls and children and the role the private sector can play.



Pro-nutrition agriculture interventions

Finally, to explore how agricultural interventions can be designed to improve nutrition, a pilot feasibility study demonstrated the potential for community-led educational videos to promote better nutrition. Another ongoing study seeks to demonstrate the feasibility of a Farming System for Nutrition (FSN) approach to address undernutrition. The FSN study underway in two different agro-ecological locations integrates nutritious crop production, livestock, poultry, fisheries and forestry activities to address the needs of farming families based on the asset endowments, market conditions and community preferences of the target population, taking into account their common and differentiated nutritional needs at individual and household levels. It takes account of life-cycle needs by gender within households, but also socio-cultural and economic differences across caste groups. The goal of FSN is to demonstrate the feasibility of a pro-nutrition agriculture intervention to improve the nutrition status of the community. The effectiveness, acceptance and sustainability of such a model of interventions will be evaluated for the benefit of replication, up-scaling and wider dissemination to address the disconnect between agriculture and nutrition in this region.

How will this research make a difference?

The evidence emerging from the ongoing research has potential to influence diverse policy and intervention areas from agriculture and nutrition to the enabling environment. LANSA in India will actively engage with stakeholders through a variety of channels (consultations, one-on-one meetings, blogs, newsletter, research and policy briefs, social media channels) to bring a nutrition focus in Central and State Government programmes to establish the agriculture-nutrition linkage and improve nutrition outcomes.

For more information

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