



Leveraging Agriculture for Child and Adolescent Nutrition in India

Focus policies and programmes

- **Supplementary Nutrition Programme** under **ICDS**
- **Mid-Day Meal Scheme**
- **National Nutrition Policy 1993**
- **Draft National Plan of Action for Children 2016**
- **National Food Security Act 2013**

Current policy scenario

The Sustainable Development Goals (SDGs) focus mainly on the first 1000 days. The **National Nutrition Policy 1993** of the Government of India, under the aegis of Department of Women and Child Development emphasises Infant and Young Child Feeding Practices (IYCF) highlighting exclusive breastfeeding for the first six months after birth and complementary feeding along with breast milk for up to two years.

According to the **National Food Security Act 2013** (NFSA), pregnant women and lactating mothers until six months after child birth and children in the age group of six months to six years are entitled to an appropriate meal free of charge through the local



Anganwadi or ICDS centres as per the prescribed nutritional standards for the particular category. All children, up to class VIII or within the age group of six to fourteen years are entitled to one mid-day meal, free of charge, every day except on school holidays, in all schools run by local bodies,

↑ Children eating the Mid Day Meal in a village school in Odisha, India.

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Government and Government aided schools. This is covered by rice, *dhal*, vegetables and oil, and egg in some states.

The NFSA also provides for inclusion of millets and diversification of commodities distributed under the **Public Distribution System** (PDS); and support to local public distribution models.

LANSA research evidence

A state level analysis of agriculture and child nutrition linkages in India exploring the associations between agricultural prosperity and child undernutrition in rural India, after controlling for access to sanitation and safe drinking water, concluded that **agricultural prosperity** as indicated by agricultural growth, worker and land productivity and per capita food grain production has a positive influence on reducing child undernutrition.

The prevalence of undernutrition (underweight, stunting and wasting) was found to increase as the child's age increased from 0 to 24 months to 24 to 60 months in the ongoing **Farming System for Nutrition** (FSN) study in Wardha and Koraput districts. This maybe primarily due to insufficient energy and other nutrient intakes, this being a crucial transition period when the child is shifted from breastfeeding to family food. Among school going children and adolescents, boys were found to be more undernourished than girls in the study locations.

Another ongoing LANSAs study on pro-nutrition value chains identifies linking local farmers with the **Supplementary Nutrition Programme** (SNP) under ICDS. It was found that the provision of vegetable (rich source of micronutrients) in SNP is not consistent and depends a lot on price and availability in the markets.

Recommendations for policy

Ensuring access and safety of food to meet the nutritional requirements of proteins, calories and micronutrients in infancy and childhood from six months of age needs to be a priority. Although the SNP under ICDS and **Mid-Day**

Further reading

Swarna S Vepa, Vinodhini Umashankar, R V Bhavani and Rohit Parasar (2014): **Agriculture and Child Under-nutrition in India: A State level analysis** *MSE Working Paper 86/2014* July <http://www.lansasouthasia.org/content/agriculture-and-child-under-nutrition-india-state-level-analysis>

Swarna S Vepa, Brinda Viswanathan, Sandeeptha Dhas, Vinodhini Umashankar and Bhavani R V (2016) **Women's Agency and Child Underweight rates in India in the context of Agriculture: A district level analysis**. Chapter 6 in Sonalde Desai, Amit Thorat, Deepta Chopra and Lawrence Haddad (Edited) *Undernutrition in India and Public policy – Investing in the Future*, Routledge <http://bit.ly/1UNSYII>

Swarna S Vepa, Brinda Viswanathan, Rohit Parasar and Bhavani R V (2016): **Child Underweight, Land Productivity and Public Services: A District Level Analysis for India** LANSAs Working Paper Series Volume 2016 No.6 March http://ims.ids.ac.uk/sites/ims.ids.ac.uk/files/documents/Land%20productivity%20and%20Child%20Underweight%20in%20TEMPLATE%2020-04-2016%20final_I_0.pdf

<http://lansasouthasia.org/blog/supplementary-nutrition-programme-example-social-protection-india>

<http://lansasouthasia.org/blog/sprouting-school-nutrition-gardens-fsn-study-villages>

<https://www.youtube.com/watch?v=Mwx2xq-U9oU>

Meal (MDM) scheme provides food, it has to ensure that pre-school children below six years and school going children get adequate calories, protein and micronutrients.

Millets are a good source of micronutrients. The **NFSAs** provides for procurement of millets. Millet based meal for one day or a millet based snack can be provided under the SNP and MDM programmes, both of which are national food distribution programmes. Some states like Tamil

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Nadu and Telengana already provide millet based pre-mix under the SNP.

The **SNP under ICDS** and the **MDM**, both major food distribution value chains in the country can be the link between agriculture production and nutrition. Dry or semi-arid regions in India have traditionally grown millets that are rich in nutrients and are climate resilient. Policies can pro-actively promote agricultural prosperity in rain-fed farming areas by support to millet production, procurement and processing and link with institutional feeding programmes such as SNP under ICDS and MDM.

In Bangladesh there are pilot level initiatives linking the school meal programmes with ‘groups of mothers’ growing vegetables and providing them at schools. A similar initiative if adopted would allow the *Anganwadi* helper or MDM cook in schools to purchase vegetables from the mothers’ or women farmer’ groups and cook nutritious meals for the children.

Nutrition gardens of vegetables have been promoted in schools and ICDS Centres in the FSN study villages to ensure supply of fresh vegetables for the midday meal. Both linking local farmers to institutional feeding programmes like SNP under ICDS and MDM and promoting nutrition gardens of fruits and vegetables in schools and ICDS centres wherever land is available, will provide a direct link to nutrition from agriculture.

Anganwadi workers (AWW) monitor growth of children below six years on a monthly basis. **Digitising** this data using simple modern technology will help track the prevalence of undernutrition at disaggregated levels. AWWs should be supported to use the information for counselling. **Regular monitoring of the delivery and impact** of the existing programmes targeting children and adolescents and using simple but modern technology can be a game changer.

Evidence shows that **women’s educational achievement** has an important role in reducing the prevalence of undernutrition. Ensuring

educational opportunities and access to education to school age children and adolescent girls should hence be a priority.

Sanitation and **women’s access to toilets** has a significant impact independently on prevalence of child underweight even in rural areas. Seamless convergence with initiatives like **Swachh Bharat Mission** will have an impact through changes in the enabling environment on women’s role in agriculture-nutrition linkages and the consequences to their own and their children’s health.

↓ Child from a village in Odisha, India, holding his lunch provided by the ICDS Centre.
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Women farmers in Wardha District sharing the harvest of greens from the community nutrition garden.

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The importance of social and behavioural change cannot be over emphasised. **Nutrition awareness and behaviour change and communication** are of crucial importance. Behaviour change strategies must not merely be targeted to **consumption of nutritious diets**. They must also **promote hygienic practices** and achievement of zero open defecation practices complemented by regular programmes for periodic de-worming of children at *Anganwadi* centres and Schools at least once or twice a year.

While **adolescent girls** are covered under extant

policy, nutrition for **adolescent boys** needs attention. Awareness on harmful effects of intake of tobacco and alcohol is also essential. Overall, there is serious need for further research on nutrition for the adolescent age group to inform policy better.

As part of **nutrition awareness strategy** in villages under the FSN study, we are engaging with the **Panchayat Raj Institutions** and working on training local men and women as champions at the village level. Involvement of existing personnel and strengthening agriculture extension workers also needs support.

Credits

LANSA MSSRF team based on research conducted in India (2013–2016).

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LANSA is an international research partnership, exploring how agriculture and agri-food systems can be better designed to advance nutrition in South Asia. Led by MS Swaminathan Foundation, members include BRAC, Collective for Social Science Research, Institute of Development Studies, International Food Policy Research Institute and Leverhulme Centre for Integrative Research for Action on Health. LANSAs is funded by the UK Government. The views expressed in this document do not necessarily reflect the UK Government's official policies.

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