



## Gender, Agriculture, and Nutrition in South Asia: Conceptualising the Links

Even with higher economic growth and an overall reduction in poverty, there exists child undernutrition, maternal undernutrition and diverse forms of micro nutrient deficiencies – a phenomenon labelled as the South Asian Paradox. Eradicating undernutrition requires a dedicated effort to alleviating child undernutrition, as South Asia accounts for forty percent of the world's undernourished children (see Table I). Agricultural growth, by enabling farming households to grow more/better food for self-consumption, and opening opportunities for employment, can contribute importantly to this process.

*Existing evidence delineates **seven pathways** between agriculture and nutrition. While the first four pertain to the nutritional impacts of farm production, using farm incomes for food and for non-food consumption, and food prices; the remaining three relate to gender-agriculture-nutrition linkages. Evidence on the latter is weak despite the growing feminisation of agriculture and persistence of malnutrition in South Asia. LANSA research seeks to fill this knowledge gap.*



↑ Women engaged in labour-intensive agricultural work at almost every stage of cultivation. The photo from Koraput district in Odisha, India, shows Kharaguda village women transplanting rice.

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In South Asia, agriculture and allied sectors play a crucial role in provision of food, livelihoods, and income for a majority of the poor/rural population. Nevertheless, the combination of agricultural production and socio-cultural norms lead to harmful linkages with nutrition, and affect maternal health and child care practices<sup>1</sup>. This brief sets out the conceptual starting points for LANSAs research on the gender-agriculture pathways to improve nutritional outcomes.

**Table 1 Undernutrition in South Asia**  
Nutrition Status of Children < 5 years (Figures in percentage)

Country	Stunting	Wasting	Underweight
Bangladesh	41	16	36
India	38	21	36
Pakistan	44	15	32
Afghanistan	41	9.5	25

Source: DHS-2011, Bangladesh; NFHS 2015–16, India; NNS-2011, Pakistan; NNS–2013, Afghanistan



Women and girls engaged in weeding the vegetable garden in Kabul province, Afghanistan.  
BRAC, AFGHANISTAN, LANSAs

**Pathway 1 Agriculture as a source of food:** Research agrees that farm assets, interventions, crop diversification, homestead food production, and livestock ownership have a positive impact on dietary diversification and calorie intake, while land fragmentation and landlessness contribute negatively. The gendered nature of asset distribution, differential access to assets and agricultural self-employment are not a focus of the research.

**Pathway 2 & 3 Agriculture as a source of income:** No clear link is evident between the contribution of agricultural incomes to poor households and their nutritional choices. Research has found that non-food expenditure often leads to better absorption of food<sup>2</sup>, and expending on non-rice foods reduces stunting in children<sup>3</sup>. Patterns of gendered decision-making over food and non-food expenditures, however, vary widely and evidence is lacking.

“ This brief sets out the conceptual starting points for LANSAs research on the gender-agriculture pathways to improve nutritional outcomes. ”

<sup>1</sup> Kadiyala, S, Harris, J, Headey, D, Yosef, S, and S. Gillespie. 2014. *Agriculture and nutrition in India: mapping evidence to pathways*. Ann. N.Y. Acad. Sci. Vol. 1331: 43-56.

<sup>2</sup> Afzal, U. 2012. *The Determinants of Child Health and Nutritional Status in Punjab: An Economic Analysis*, CREB Working Paper 02–12

<sup>3</sup> Campbell AA., De, Pee S., Sun, K. 2010. *Household rice expenditure and maternal and child nutritional status in Bangladesh*. J. Nutr. 140(1). 189S-194S



◀ A rarity for women working in agriculture. In Banuaguda village, Koraput District, Odisha, Inida, a mother and her daughters having lunch together.

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**Pathway 4 Agricultural policy and food prices affecting food consumption:**

There is a strong correlation between food prices and its impact on consumption: higher the price – lower the consumption. However, studies examining the impact of trade liberalisation conclude that despite increase in prices of commodities relevant for nutrition<sup>4</sup>, the impact of price-rise did not yield adverse results on child nutrition, or on the calorie intake among the self-employed in agriculture.

**Pathway 5 Women in agriculture and intrahousehold decision-making and resource allocation:**

While there is no direct evidence on women’s decision-making and resource allocation in agricultural households, several studies note that households with better nutritional status are those where women exercise autonomy, hold assets or have decision-making power.

**Pathway 6 Maternal employment in agriculture, child care and feeding:**

Research suggests that economic recession and income volatility force female labour

participation in agriculture having a detrimental effect on child care and health<sup>5</sup>.

The children of mothers working on farms are more prone to diseases and are less likely to be treated during peak agricultural seasons. Research concludes that poor child care practices are neither more prevalent nor more important in agricultural households when compared to non-agricultural households in similar situations.

**Pathway 7 Women in agriculture and maternal nutrition and health status:**

Research has focused on the relationship between women’s employment in agriculture, women’s energy expenditure and their nutritional and health outcomes. Seasonality was found to affect maternal activity and in turn influence the birth weight. Environmental toxins present in agriculture were found to affect nutrition. These aspects are in critical need of further study.

“ While the scope for agricultural policies to influence nutrition exists, the frontier in agriculture-nutrition research needs to be broadened to take on gender dynamics within and across societies. ”

<sup>4</sup> Atkin, D. 2013. Trades, tastes and nutrition in India. *Am. Econ. Rev.* 103: 1629-1663

<sup>5</sup> Bhalotra, S. 2010. Fatal Fluctuations? *Cyclicalities in infant mortality in India.* *J.Dev.Econ.*93: 7-19



◆ Huge need for women involved in agricultural work to be empowered. The photo from Domar, Nilphamari in Bangladesh shows a woman using a power tiller in the cultivation process.

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## Conclusions and recommendations

Evidence suggests that farm sizes, irrigation and livestock assets influence food production and consumption; leading to better diets and incomes. Information on gender-related pathways is incomplete, especially the lack of time use data, making the case for further

research. While the scope for agricultural policies to influence nutrition exists, the frontier in agriculture-nutrition research needs to be broadened to take on gender dynamics within and across societies. LANSA research has sought to contribute in bridging this knowledge gap. Advances in this field require both political will and dynamic interdisciplinary academic collaborations.

## Further reading

Balagamwala, M. & H, Gazdar. 2013. *Agriculture and Nutrition in Pakistan: Pathways and Disconnects*. IDS Bulletin. Vol.4. Number 3. 66–74.

Yosef, S., Jones, A, Chakraborty, C, & S. Gillespie. 2015. *Agriculture and Nutrition in Bangladesh: Mapping Evidence to Pathways*. Food and Nutrition Bulletin. 1–18.

## Credits

**Nitya Rao**  
Gender crosscut  
– LANSA

**Bhargavi Motukuri**  
Consultant

**R V Bhavani**  
Programme Manager  
– LANSA

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Leveraging Agriculture for  
Nutrition in South Asia

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**Web** [www.lansasouthasia.org](http://www.lansasouthasia.org) **Email** [lansa.southasia@gmail.com](mailto:lansa.southasia@gmail.com) **Twitter** @LANSAresearch