

Pathways to Agricultural Productivity and Nutrition

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For more on the linkages between agriculture, gender and nutrition, see the [2016 Global Agricultural Productivity Report® \(GAP Report®\)](#), pages 56-58.



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Reducing malnutrition and obesity are essential for economic productivity and growth, particularly in agriculture. Malnutrition leads to stunted physical growth, cognitive impairments and increases the risk for chronic disease, all of which make farmers less productive and make it more difficult for people in rural communities to develop off-farm enterprises.¹

To meet targets for reductions in stunting (low height-for-age), wasting (low weight-for-height) and women's anemia, and to increase exclusive breastfeeding in low- and middle-income countries, **the World Bank estimates that governments will need to increase their nutrition-related expenditures by a factor of 2.3 over 10 years and donor funding will need to increase by a factor of 3.6 in the same period, for a total investment of \$70 billion.**²

While both men and women have roles to play in reducing malnutrition in the household, women are more likely to spend money on “reproductive” goods, such as nutritious foods, school fees or health care. Increasing a woman's income through productivity gains and access to agricultural markets can improve the nutritional status, health and earning potential of herself and her family. Still, recent **studies have shown that the linkages between agriculture, women's empowerment and nutrition are not always straightforward.**³

Increasing agricultural productivity requires two things that most poor women lack: financial resources to purchase productive inputs and time to learn new skills or develop new markets for their products. Without resources to buy

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\$1
Investment in nutrition
generates up to
\$48
In better health and productivity.⁶

¹ John Hoddinott, Harold Alderman, Jere Behrman Lawrence Haddad, and Susan Horton, “The Economic Rationale for Investing in Stunting Reduction,” GCC Working Paper Series, (September 15, 2013).

² M. Sheka, J. Kakietek, M. D'Alimonte, D. Walters, H. Rogers, J. Dayton Eberwein, S. Soe-Lin, and R. Hecht, Investing in Nutrition: The Foundation for Development,” The World Bank, (2016).

³ Hitomi Komatsu, Hazel Jean Malapit, and Sophie Theis, “How Does Women's Time in Reproductive Work and Agriculture Affect Maternal and Child Nutrition?,” IFPRI Discussion Paper 01486, (December 2015) and Hazel Jean Malaput and Agnes Quisumbing, “What Dimensions of Women's Empowerment in Agriculture Matter for Nutrition in Ghana?” Food Policy, Vol. 52, pp. 54-63, (April 2015).

productive inputs such as hybrid seeds, herbicides or irrigation technologies, a woman will spend more time planting, weeding and harvesting to increase her output. She may also spend time marketing and selling her products, further reducing the number of hours she has for reproductive tasks, such as childcare, eldercare, cooking and housekeeping, which in most contexts she will still be expected to perform.

A study of agriculture-nutrition linkages in Zambia found that for the poorest households the best agricultural pathway to improving nutrition is for women to increase the production of nutrient-dense foods.⁴ If women have access to assets or credit and can purchase time-saving agricultural inputs, the best pathway to improving nutrition is increasing the production of cash crops or high-value crops, such as fruits and vegetables, using the increased income to purchase nutritious foods. **While circumstances vary greatly from one community to another, research in Africa and Asia confirms that identifying women's time and resource constraints is essential to improving both agricultural productivity and maternal and child nutrition.**



Photo credit: Kelly Winquist, John Deere

⁴ Rhoda Mofya-Mukuka and Christian Kuhlitz, "Child Malnutrition, Agricultural Diversification and Commercialization among Smallholders in Eastern Zambia," Indaba Agricultural Policy Research Institute Working Paper 90, (January 2015).

⁶ Hoddinott et al., (2013).