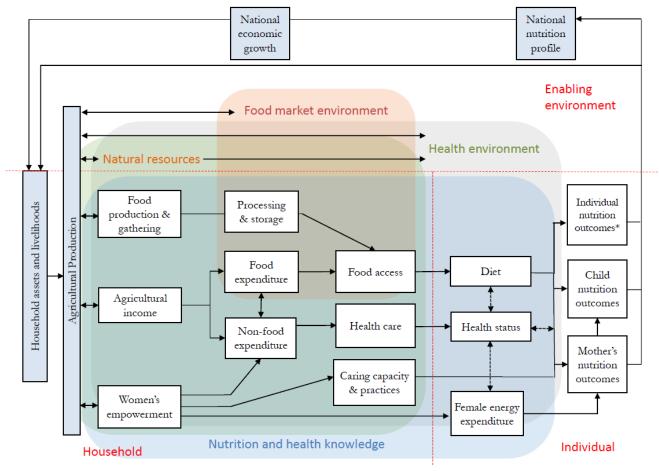
Agriculture-Nutrition-Health Pathways

This framework illustrates the pathways through which agriculture influences nutrition (Headey, Chiu, & Kadiyala, 2012; Harris and Kennedy, 2013) and expands upon the Herforth & Harris (2014) framework to include linkages with health.

Health status influences nutrition outcomes, by mediating a person's ability to utilize nutrients and lead a healthy life, while at the same time, health status is itself influenced by nutrition status, by mediating a person's vulnerability to various illnesses. Health status refers to a wide range of health outcomes, including occupational health risks, water-associated vector-borne diseases, chronic diseases, foodborne illnesses, HIV/AIDS, and livestock-related illnesses (Hawkes & Ruel, 2006). Health status can be directly affected by agricultural labor, such as malaria or exposure to environmental toxins, as well as by a laborer's energy expenditure.

Furthermore, women's empowerment is a crucial mediator of women's access to health care, both through her own self-valuation and through her ability to get permission from her husband to seek health goods and services that may be costly, distant, and/or carry some social stigma. Female energy expenditure in agricultural and domestic work affects her health status and vice versa.



*individual nutrition outcomes refer to the general population, including women, men, and adolescents (not just mothers and children) Source: Herforth and Harris 2013

References:

- Hawkes, C., & Ruel, M. (2006). Understanding the Links Between Agriculture and Health. *International Food Policy Research Institute 2020 Vision for Food, Agriculture, and the Environment*.
- Headey, D., Chiu, A., & Kadiyala, S. (2012). Agriculture's role in the Indian enigma: help or hindrance to the crisis of undernutrition? *Food Security*, *4*(1), 87–102. Retrieved from http://link.springer.com/10.1007/s12571-011-0161-0
- Herforth, A., & Harris, J. (2014). Understanding and Applying Primary Pathways and Principles. Brief #1.
 Improving Nutrition through Agriculture Technical Brief Series. Arlington, VA: USAID/Strengthening
 Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project.
- Harris, J., & Kennedy, G. (2013). "From agriculture to nutrition via gender." Presentation at the A4NH Gender-Nutrition Idea Exchange Workshop, December 2013. Nairobi, Kenya.
- Hawkes, C., & Ruel, M. (2006). Understanding the Links Between Agriculture and Health. *International* Food Policy Research Institute 2020 Vision for Food, Agriculture, and the Environment.
- Headey, D., Chiu, A., & Kadiyala, S. (2012). Agriculture's role in the Indian enigma: help or hindrance to the crisis of undernutrition? *Food Security*, *4*(1), 87–102. Retrieved from http://link.springer.com/10.1007/s12571-011-0161-0
- Herforth, A., & Harris, J. (2014). PATHWAYS | PRINCIPLES | PRACTICE Understanding and Applying Primary Pathways and Principles, (March).