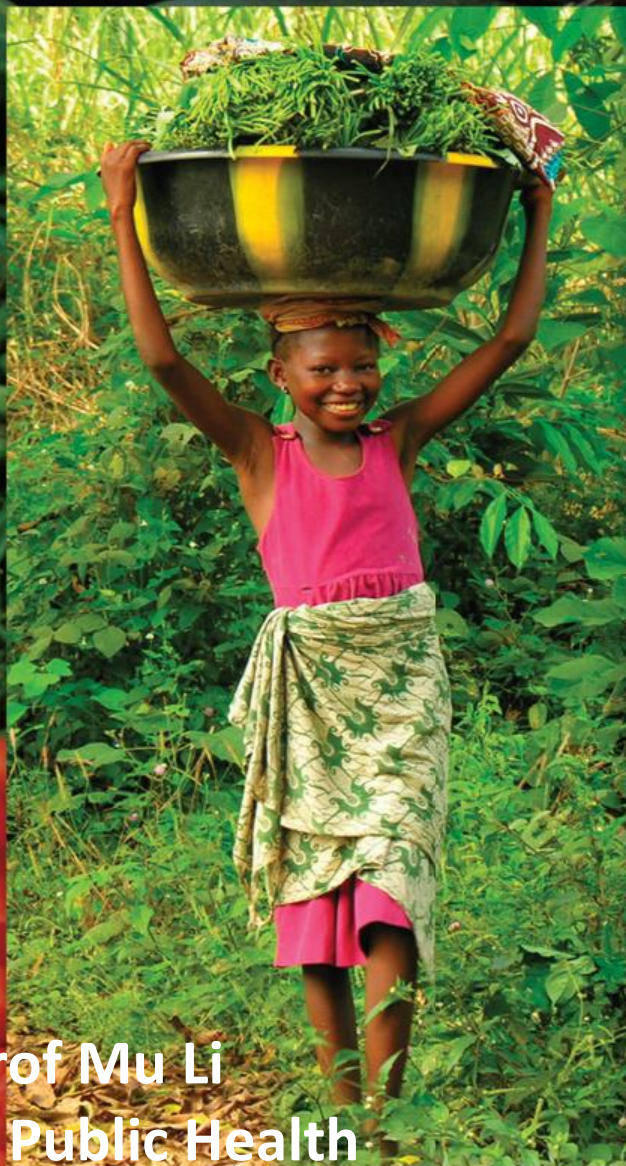


# Making the connection- Agricultural, Nutrition and Health



A/Prof Mu Li

School of Public Health

The University of Sydney

# Post-2015 Development Agenda

## Goal 5: ensure food security and good nutrition

- a) End hunger and protect the rights of everyone to have access to **sufficient, safe, affordable and nutritious food**
- b) Reduce stunting, wasting and anemia in <5
- c) Increase agricultural productivity
- d) Adopt sustainable agricultural, fishery practices
- e) Reduce postharvest loss and food waste



# Links Between Agriculture & Health

Complex and bidirectional

- agriculture provides a source of food and income at the household and national level
- helps to ensure food security and to reduce undernutrition
- can contribute to the development of non-communicable diseases

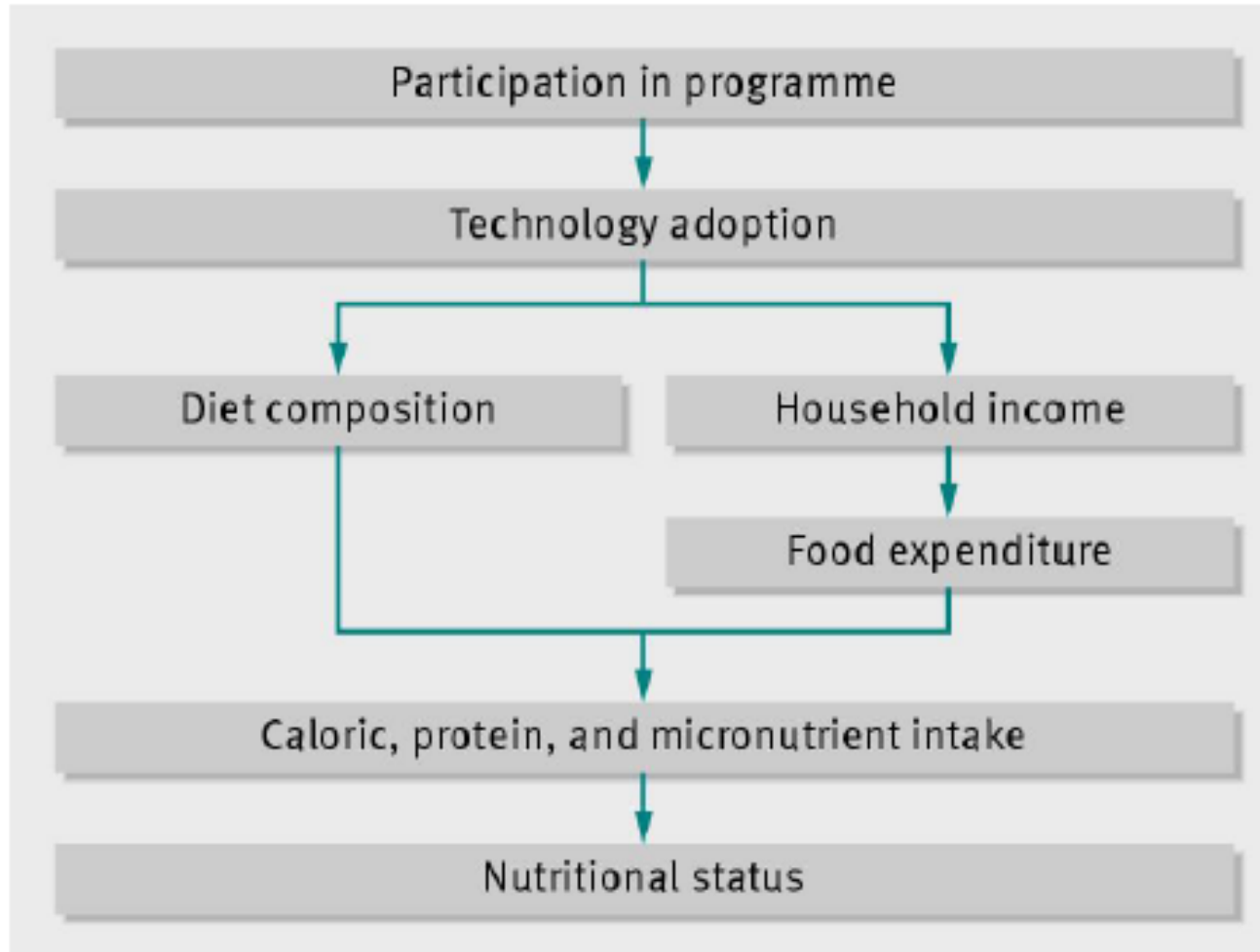


# How Can Agriculture Narrow the Nutrition Gap?

- Increasing small scale production of nutrient rich foods
- Increasing commercial production of nutrient rich foods
- Reduction of post harvest losses to maintain nutrient levels in commonly eaten foods
- Plant selection and breeding to increase nutrient levels



# Pathway of Agricultural Interventions Impact on Children's Nutritional Status



# Agricultural Interventions & Nutrition Outcomes

Limited evidence of the effectiveness of targeted agricultural interventions on maternal and child nutrition, because

- Problem has not been addressed through nutrition lens
- Failure to incorporate nutritional assessments in agricultural research

# Impact Of Agricultural Interventions On Nutrition Outcomes

- Recent systematic reviews of this evidence
  - Masset E, Haddad L, Cornelius A, Isaza-Castro J. *Effectiveness of agricultural interventions that aim to improve the nutritional status of children: systematic review*. *BMJ* 2012;344:d8222.
    - A systematic review of 23 studies designed to identify effects of agricultural interventions in improving child nutritional status
  - Gunaratna NS, de Groote H, Nestel P, Pixley KV, McCabe GP. *A meta-analysis of community-based studies on quality protein maize*. *Food Policy* 2010;35:202-10.
    - A systematic review of 9 trials designed to identify effect of biofortified maize on child growth in producer households