## Participatory, Agroecological and Gender-Sensitive Approaches to Improved Nutrition: A Case Study in Malawi Submission to the FAO Expert Meeting 'Nutrition-Sensitive Food and Agriculture Systems' in preparation for ICN+21 R. Bezner Kerr, L. Shumba, L. Dakishoni, E. Lupafya, P.R. Berti, L. Classen, S.S. Snapp, and M. Katundu

## **Summary of Critical Issues:**

This paper examines a long-term participatory agriculture and nutrition program in northern Malawi that successfully improved child growth, crop diversity, food security through innovative educational strategies and sustainable agriculture. The farmer-led approaches used mobilized communities to apply agroecological methods and improved child feeding practices, as well as address unequal gender relations. Significant improvements in child growth (average of 0.6 improvement in weight-for-age Z score over time and compared to non-project households) and household food security resulted from participatory experimentation with crop diversification, legume intercropping and nutrition education. Farmer practices have improved markedly, including improved residue management and incorporation of nutrient-rich legumes into maize-based cropping, up from 15% in 2000 to over 70% of farmers in 2011.Key findings from the paper include:

- Use of agroecological methods, including legume diversification and use of organic materials that were locally available, led to improved food security over time and reduced expenditures of fertilizer;
- Farmer-to-farmer teachings and experimentation were the primary teaching approach and were effective at sharing knowledge;
- Unequal social relations including gender inequalities were assessed over time using an iterative approach, and new educational strategies were developed to address these inequalities;
- Agricultural education was integrated with nutrition through interactive, dialoguebased methods, such as recipe days, discussion groups and apprenticeships;
- Efforts to link agriculture to child health outcomes took time at least 3 years before this goal was realized, and required interdisciplinary approaches.

## **Policy Recommendations:**

- Agricultural strategies that utilize locally available organic resources and promote crop diversity have ecosystem service benefits such as soil conservation, biodiversity, and resilience;
- Agronomy that promotes a range of legume plant types combined with improved residue management is key to producing more nutritious food for vulnerable smallholder households, while enhancing natural resources such as soil fertility and water quality
- Farmer-led and managed initiatives by food insecure farming households should be utilized, that foster capacity-building, innovation and knowledge dissemination in vulnerable communities;
- Programs should have interdisciplinary iterative research activities (including social, nutritional and agricultural sciences) that examine social inequalities at multiple levels (household, community, program) to address identified inequalities and ensure that the programs are having positive impacts for vulnerable groups.