

Feasibility of an integrated agriculture and nutrition behaviour change intervention to improve maternal and child nutrition in rural Bangladesh

Introduction

Despite remarkable progress in agricultural development in Bangladesh, food and nutrition insecurity among the poor prevails. Currently in Bangladesh there are several parallel interventions in agriculture and nutrition that lack integration. Moreover nutrition elements in agricultural interventions are largely non-existent. To generate positive impacts on nutritional outcomes, agricultural interventions require more focus on nutrition, and need to be linked to nutrition-specific interventions.

Study Objectives

Our research will assess the feasibility and acceptability of an intervention that integrates agriculture, and nutrition behavior change with financial incentives, to improve maternal and child nutrition among families from disadvantaged rural families in Bangladesh. In our multi-component, community-based, intervention combining agricultural and nutrition related activities, a mobile phone platform will be used to link farming families from rural Kurigram – one of the poorest districts in Bangladesh.

We will provide the public sector agriculture extension workers a low cost smartphone with an embedded application that includes communication tools, such as videos, voice messages, and animated diagrams. They will be trained to use this mobile phone application to support their communications with farmers about appropriate farming practices and selected aspects of nutrition. The trained community development workers from our local NGO partner will visit families to provide training about the usefulness of home gardens and specific skills such as selecting appropriate seeds, when to plant, how to fertilize and how to irrigate the plot. These communications will also be facilitated with a mobile application. All these activities will be enhanced by the financial incentives transferred to the families through mobile banking to increase households' ability to spend on livelihood products such as seeds and fertilizers.

We hope to demonstrate a feasible strategy for integrating mobile technology, cash incentives, and nutrition and agriculture counselling with the goal to generate positive impacts on nutritional outcomes among the poor families. The information we generate will be useful for public sector and developmental organizations that aim to design a large-scale program integrating nutrition-specific and nutrition-sensitive interventions to leverage agriculture for nutrition in low-resource settings, including South Asia.

Partners

University of Sydney (Lead), International Centre for Diarrhoeal Disease Research, Bangladesh, Agriculture Extension Division, Government of Bangladesh and Solidarity, Bangladesh.