Participatory Nutrition Education is a Catalyst for Dietary Diversity

FAO-led food security interventions in Cambodia and Malawi show added value of linking agriculture and nutrition education

Compelling evidence has emerged showing that food security interventions and participatory nutrition education greatly improve children’s diet and can have an impact on their nutritional status.

A joint study conducted by the Governments of Malawi and Cambodia, the UN Food and Agriculture Organization (FAO) and Justus-Liebig University (JLU), Giessen, Germany focusing on “Improving the dietary intakes and nutritional status of infants and young children through improved food security and complementary feeding (IMCF),” reveals that where a nutrition education approach was applied, dietary diversification and consumption of animal foods, legumes and vegetables increased substantially.

The study looked at how behaviour change messages and nutritionally-improved recipes can lead to lasting improvements in complementary feeding practices. It also focused on how locally produced and affordable foods can enhance the quality of local diets, and in conjunction with nutrition education improve infant and young child feeding practices during one of the most critical life stages, i.e. the first 1 000 days of a child’s life.

High stunting as a serious challenge

High rates of stunting in children under five years pose a serious challenge to countries such as Cambodia and Malawi, where more than one third of children are chronically undernourished and constrained to fully develop their physical and cognitive potential. The peak incidence of growth faltering, micronutrient deficiencies and infectious diseases occurs mostly in children 6–23 months of age. Poor quality diets and inappropriate feeding practices contribute to inadequate nutrient intake among infants and young children. Research has shown that even when food resources are available in the home, caregivers are often not able to make optimal use of them because of inadequate knowledge and practices due to inappropriate advice or tradition.

Government of Malawi committed to mainstreaming nutrition into agriculture

The IMCF study results shows that children’s diets improved in the FAO intervention (agriculture and nutrition education) and not in the control area (agriculture only). Also at mid-term, children’s mean height-for-age in the intervention area improved significantly due to the combination of food security and nutrition education delivered through the FAO-supported integrated agriculture-nutrition programme. The study concluded that the combination of food security and nutrition education actions improved children’s dietary diversity and nutritional status at the community level.

At a national dissemination meeting attended by over 60 Government, UN and NGO participants in Lilongwe, Malawi on 18 February 2015, the Deputy Secretary, Department of Nutrition, HIV and AIDS, Mr Victor Sandikonda welcomed the research findings which he noted fit well with Malawi’s Scaling Up Nutrition 1 000 Special Days Campaign.

“The research findings have come at the right time when the Department is reviewing its policy and strategic plan and results would therefore help come up with interventions that have been tried and shown to be effective,” he said. “We are ready to listen and discuss openly to improve the impact of our nutrition programme in Malawi and bring them to scale.”

Ms Mzondwase Mgomezulu, Deputy Director, Department of Agricultural Extension, Ministry of Agriculture, Irrigation and Water Development underlined the Government’s commitment to integrating nutrition into agricultural strategies and activities. FAO and the Ministry of Agriculture, Irrigation and Water Development have worked together to successfully advocate for more emphasis on agriculture which can prevent malnutrition and reduce the need for medical treatment.
Government of Cambodia - Scaling up needed

In Cambodia, the IMCF results show evidence of behavioural change and improved health in the target areas. There was also increased capacity among the trainers and volunteers working at the village level, as well as an increase in knowledge and skills among mothers and caregivers, resulting in significant improvements in the quality of the diet, especially among the target age group of children aged 6–23 months.

The study notes that intensifying community mobilization to improve young child feeding for the prevention of malnutrition is pivotal, while ensuring proper timing of nutrition education sessions by recognizing mothers’ workload which can lead to low attendance. A comprehensive, continuous training system is needed at all levels of health and agricultural extension systems to ensure that nutrition is integrated appropriately. Provision of timely agricultural support in line with the seasonal agricultural crop calendar is also critical to improving family diets and children’s nutritional status.

The national dissemination meeting held in Phnom Penh on 26 March 2015, attended by 80 participants from Government, UN and NGOs, underlines that these changes need to occur in every village and commune in the vulnerable areas. Scaling up of nutrition education, integrated with efforts to produce more nutritious foods in the home garden or farm, better hygiene practices, food safety and clean water supplies are needed. Participants agreed that the approach must be one of comprehensive improvement and not a mosaic of diverse, small scale efforts.

Ms Chann Phaloeun, the Deputy Director General of the General Directorate of Agriculture emphasized the important role of the Council for Agriculture and Rural Development (CARD) in coordinating different ministries to prioritise nutrition, and improve the diet and health of children — the generation of tomorrow.

His Excellency, Dr Ty Sokhun, Secretary of State, Ministry of Agriculture, Forestry and Fisheries (MAFF) highlighted the Government’s commitment “to increasing diversification and modernisation of agriculture in order to address the issue of malnutrition. We want to make sure Cambodian people have increased food security and enough food for good nutrition and health.”

Technical Meeting: Linking agriculture and nutrition education for improved young child feeding, FAO Headquarters, Rome 6–8 July 2015

The Technical Meeting was the culmination of the five-year IMCF project and was jointly organised by the Nutrition Education and Consumer Awareness Group, Nutrition Division at FAO headquarters and research partners from JLU. Over 60 representatives from UN agencies, NGOs, research institutes and universities met to discuss: (1) links between agriculture and nutrition for improved family and young child feeding; (2) effective strategies that use nutrition education for behavioural change to promote nutritious, locally available and affordable foods; and (3) prevention of malnutrition as part of a comprehensive “continuum of care” approach.

Programme experiences were shared from a range of nutrition-sensitive agriculture programmes that aim to improve family and young child nutrition from countries in Africa and Asia. Working groups identified good practices for designing integrated agriculture and nutrition education interventions and discussed how to improve monitoring, evaluation and operational research. They also considered how to achieve and sustain behavioural changes on complementary feeding using nutrient-rich affordable foods and how to scale up interventions to reduce malnutrition.

Working groups distilled good practices and draft programme lessons from relevant research and field programmes. These have been further refined through a consultative process facilitated by FAO. Once endorsed, the programme lessons will be shared widely through FAO’s advocacy work, international fora and global networks (e.g. AG2Nut) to inform future programmes and policies.

The IMCF project

IMCF was funded by the Federal German Ministry of Food and Agriculture (BMEL) and implemented by FAO from 2010 to 2015. The research was carried out by the Institute of Nutritional Sciences, University of Giessen, Germany in collaboration with Lilongwe University of Agriculture and Natural Resources, Malawi and Mahidol University, Thailand. The research will be published in international peer reviewed journals in 2015–16; 10 scientific papers are currently under review.