



## Cambodia

### Highlights of food security and nutrition education interventions

- In March 2015, nutrition education sessions in the target MALIS<sup>1</sup> project provinces, Otdar Meanchey and Preah Vihear, reached a total of 1,387 caregivers in 99 villages.
- Of the 3,700 participating households in the MALIS agricultural fairs, 99.3 percent have repaid the credit following post-harvest sale of produce.
- Round 3 training of 200 community nutrition promoters (CNPs) from 6 extension planning areas (EPAs) of the IFSN<sup>2</sup> project in Kasungu and Mzimba districts was completed in February 2015.
- Wrappers (*chitenje*) were distributed to CNPs, frontline and government staff as an information, education and communication tool in dietary diversification.

### Highlights of IMCF<sup>3</sup> research

- The impact survey was conducted during September and October 2014 and data collection was completed.
- The IMCF research office in Siem Reap was closed in November 2014 and the PhD and MSc students are analysing their data.
- Preliminary IMCF results were presented at the FAO/Justus Liebig University (JLU) joint dissemination meeting in Samrong Town on 6 March and Preah Vihear town 11 March and will be presented in Phnom Penh on 26 March 2015.
- The impact survey was conducted during August to September 2014 and data collection was completed.
- The IMCF research office in Kasungu was closed in October 2014 and the two PhD students are analysing their data.
- Preliminary IMCF results were presented at the FAO/JLU joint dissemination meetings in Mzimba and Lilongwe on 13 and 18 February 2015, respectively.

## Malawi

## Process Review of the IFSN project in Malawi

FAO Headquarters consultants and IFSN staff conducted a process review of the nutrition education intervention and its linkages with agriculture from 13 September to 11 October 2014. The purpose of the review was to develop lessons learned and identify best practices to inform future programme and policy development.

The process review focused on Round 1 (2012-2013) and Round 2 (2013-2014) IFSN project activities as Round 3 (2014-2015) had not yet started at that time. It was undertaken in purposively chosen EPAs in Kasungu and Mzimba districts and randomly selected villages in which nutrition education training was conducted.

A range of stakeholders participated in the process review at national, regional, district, EPA and community levels, which included: District and National government staff from Ministry of Health (MoH), Department of Nutrition, HIV and AIDS (DNHA), Ministry of Agriculture, Irrigation and Water Development (MoAIWD), and Ministry of Education, Science and Technology (MoEST); IFSN project staff; Feed the Children and MALEZA staff; Village Headmen; CNPs (Lead Farmers and Community Nutrition Volunteers); caregivers; grandmothers; spouses; Junior Farmer Field and Life School (JFFLS) students and their teacher facilitator.

<sup>1</sup> MALIS: Improving Food Security and Market Linkages for Smallholders in Preah Vihear and Otdar Meanchey.

<sup>2</sup> IFSN: Improving Food Security and Nutrition Policies and Programme Outreach.

<sup>3</sup> IMCF: Improving the dietary intakes and nutritional status of infants and young children through improved food security and complementary feeding.



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## Food Security , Improved Diets, Healthy Children

Primary data collection methods included: interviews, focus group discussions (FGDs) and observations, which were thematically analysed. In addition, a secondary data analysis of IFSN documentation was undertaken at FAO Headquarters in Rome.

Process review findings and results of the IMCF project were presented at a joint FAO/JLU Dissemination meeting in Lilongwe on 18 February 2015.



Caregivers participating in a focus group discussion for the process review

Contributed by: Elizabeth Westaway, Nutrition Consultant, FAO Rome

## The role of community support in the adoption of improved complementary feeding practices in rural Malawi

Nutrition education on improved infant and young child feeding (IYCF) practices often only targets mothers of young children. However, the Government of Flanders-funded IFSN project implemented nutrition education sessions targeting groups of 15 primary caregivers with children aged 6-18 months and five community members, such as grandmothers, spouses and Village Headmen. Prior to implementation of the nutrition education intervention, CNPs conducted community sensitisation and mobilisation to select participants to attend the 10 nutrition education sessions on complementary feeding. These sessions included nutrition and health education messages, and participatory cooking demonstrations.

The IMCF project wanted to determine the role of community members in supporting caregivers' adoption of improved complementary feeding practices.

Hence, FGDs in Chichewa and Chitumbuka were conducted two months after the last nutrition education session with separate groups of caregivers and grandmothers in four villages. Audiotapes of the FGDs were transcribed and translated into English and a content analysis was undertaken on the data.

The results showed that community members who participated in the community mobilisation or nutrition education sessions were very supportive and motivated the caregivers to attend the nutrition education sessions. In addition, grandmothers encouraged caregivers to prepare enriched porridge and spouses purchased ingredients for the enriched porridge. A grandmother commented:

*"The spouse tasted the porridge and liked it. [He said to the wife] Don't stop! Continue [to prepare mixed porridge] our child must grow well".*

By contrast, in villages where community members were not well informed about the nutrition education sessions, they tended to discourage caregivers from preparing enriched porridge with fish and vegetables. One mother recounted what a grandmother told her:

*"They are cheating you, how did we grow? Were we eating porridge with fish or vegetables? You are wasting your time."*



Caregivers and grandmothers participating in a discussion group on infant and young child feeding

The lesson learned from this study is that intensive community mobilisation should be conducted prior to implementation of nutrition education sessions to ensure that caregivers are encouraged to attend the seminars and are motivated to prepare the enriched porridge recipes at home.

Contributed by: Gabriella Chiutsi Phiri, Malawi PhD student





## Community-based graduation ceremonies for caregivers and community members

The IFSN nutrition education intervention involves two CNPs facilitating 10 nutrition education sessions. The first nine nutrition education sessions aim to increase caregiver knowledge and skills on complementary feeding. The 10<sup>th</sup> nutrition education session involves a graduation ceremony that is organised jointly by the CNPs and caregivers with support from their community leaders, frontline staff from agriculture and health, as well as their supervisors. The graduation ceremony aims to achieve the following objectives:

- Serves as an open day for other community members, local leaders and community stakeholders to appreciate the importance of enriched porridge and dietary diversity through demonstrations of porridge prepared from nutritious crops by caregivers.
- Motivates caregivers and grandmothers to practice what they have learned and to encourage them to disseminate the knowledge to other parents within the community.
- Sensitises Village Headman and other community members on the benefits of the nutrition education intervention for improved child health and nutritional status, by enabling interaction with the beneficiaries.
- Acts as a platform to disseminate messages on agriculture and food security, gender and HIV.

During the graduation ceremony, nutrition and food security messages are disseminated through role plays, poems, drama and songs performed by caregivers,

grandmothers, CNPs, members of Farmer Field Schools (FFS) and JFFLS students.



*Caregivers performing nutrition songs during a Graduation*

In Round 1 (the first 200 villages), graduation ceremonies were initiated by IFSN project staff with support from the government. However, in Round 2 (the next 175 villages), they were organised by government extension staff with FAO logistical support i.e. fuel and food for the District Nutritionist to backstop activities. In the final Round 3 (the last 100 villages), graduation ceremonies will be community-based and coordinated by CNPs, Village Headmen, and frontline staff with support from Agricultural Extension Development Coordinator (AEDCs) and Area Environmental Health Officer (AEHOs) at EPA and Health Centre level, respectively.

Contributed by: Lawrence Chakholoma, IFSN Project Nutritionist



*Caregivers presenting enriched porridges at a Graduation Ceremony*





## Integrating Nutrition into Junior Farmer Field and Life Schools

One of the nutrition sensitive agriculture approaches employed by the IFSN project is the JFFLS, which targets primary school students aged 12-18 years of both genders, vulnerable children including in- and out-of-school children, and children directly or indirectly affected by HIV and AIDS.

The JFFLS is a participatory group extension approach that enables students to learn new knowledge and practices on crops and livestock. Students are taught improved agricultural production practices, such as planting one-to-one, manure making, soil and water conservation, planting high yielding hybrid maize, correctly applying fertiliser, planting of legumes/fruits, and environmental protection. The knowledge gained by students enables them to make locally relevant decisions about crop and livestock practices.

The JFFLS students also learn about nutrition security and the importance of dietary diversity for good nutrition. In addition, they learn about the Malawi six food groups, the need for eating different foods every day, how to use the seasonal food availability calendar and good foods for feeding young children. Students are also given the opportunity to practise food processing and utilising different foods, and develop skills on preparation of nutritious meals incorporating the six food groups.

To-date, 120 JFFLS have been implemented by the IFSN project in collaboration with the Government of Malawi. Each JFFLS comprises 30 students and one teacher facilitator.

Suitable primary schools are identified by the District Education Manager that have the necessary infrastructure for theoretical classes and agricultural land for practical exercises. Then, a teacher facilitator is selected and trained in the JFFLS approach prior to implementation.

In summary, the JFFLS approach is an important entry point for integrating nutrition into agriculture and ensures that the farmers of tomorrow adopt new knowledge and practices on diversified crop production for income generation and own consumption to improve the health and nutritional status of family members.



*JFFLS students performing a song about food security messages at a Graduation Ceremony*

Contributed by: Benjamin Mtika, IFSN Mzimba District Coordinator

## MALIS Input Credit Fairs and Purchase of Kitchen Equipment

During 2014, the EU-funded MALIS project conducted nine input trade fairs in Otdar Meanchey and Preah Vihear provinces to provide timely, quality inputs to farmers and ensure families have access to basic kitchen equipment for food preparation, feeding and hygiene.

The fairs were held prior to the cultivation and harvest season for smallholder farmers who were registered members of a participating community-based organisation (CBO) or agricultural cooperative (AC) based in the target districts.

The unique aspect of the fairs was that beneficiaries were given access to credit, in the form of vouchers, and then allowed to purchase items they deemed most appropriate for their needs. Beneficiaries issued with vouchers, of whom approximately 70 percent were female, could select from a range of inputs, such as: fertiliser, seeds, kitchen equipment, water pumps and tubing, poultry medication, and post-harvest equipment.

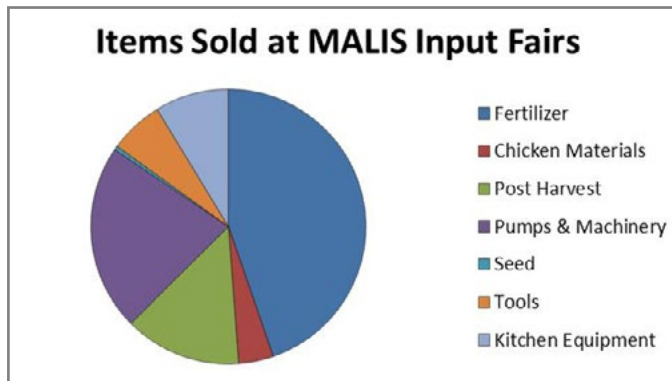


Beneficiaries were asked to repay 60 percent of the borrowed amount to their member CBO or AC, for use in future member-determined projects.

The 3,766 participating households received an average of USD 142 per household in input credit, which amounted to a total of USD 535,080 traded during the fairs. Participating households purchased more than USD 45,000 of kitchen equipment, such as: soap, stoves, food covers, cutlery, and water filters to enable the safe preparation of nutritious family food.



Caregivers learning about maternal diet in a nutrition education session



Contributed by: Tyler Whitley, Intern, MALIS Cambodia

## Caregiver’s knowledge, attitudes and practices of IYCF before and after attending nutrition education sessions

A study of two rural villages in Otdar Meanchey and Preah Vihear provinces was conducted during November 2014 to March 2015 to determine whether caregivers who attended the MALIS nutrition education sessions changed their knowledge, attitudes and practices (KAP) of infant and young child feeding. In each of the villages, a group of 15 caregivers with children aged 5-18 months (at recruitment) participated in the nutrition education sessions. From these groups, 13 and 14 caregivers, respectively, undertook a standardised pre- and post-KAP test interview on feeding and hygiene practices.

The preliminary KAP test results showed that caregivers in both villages had increased knowledge of enriched porridge (*bobor khap krop kroeng*) consistency and feeding frequency, complementary feeding and hygiene.



A young child being fed bobor at a cooking demonstration

Contributed by: Amy Wakem , Intern, MALIS Cambodia





## Focus on Knowledge, Attitude and Practices of Community Nutrition Promoters

Capacity building and institutional strengthening in relation to food security and nutrition is an important component of the MALIS project. To ensure that access to better diets through diversification of household food production and income will translate into better nutrition, emphasis is placed on further strengthening the capacities of service providers and households in nutrition, and food processing and preservation, as well as maternal and child feeding.

Forty-four staff from the Provincial Health Department (PHD), Provincial Department of Women's Affairs (PDOWA), Health Centres, NGOs and 153 CNPs participated in the Training of Trainers in order to become trainers or supervisors of the nutrition education sessions for caregivers of children within the complementary feeding age group.

In Phase 1 of the MALIS project, the nutrition education sessions were conducted by CNPs, whereas in Phase 2, NGO staff from Malteser International (Otdar Meanchey) and Farmer Livelihood Development (Preah Vihear) took over and CNPs had a supportive role.

In total, eight CNPs from Phase 1 were randomly selected to participate in an evaluation of the effectiveness of the Training of Trainers and assessed for their KAP change.

They were asked questions about programmatic issues on the CNPs' role before and after training. They were subsequently assessed on training practices by a master trainer in a group exercise.

The CNPs reported having better knowledge of improved IYCF practices, hygiene and sanitation after the training. Some CNPs with young children started to prepare *bobor* and to wash their hands with soap regularly. However, most of them had difficulties with the recipes, in particular with accurately measuring ingredients to make up age-appropriate quantities of complementary foods (e.g.  $\frac{1}{2}$ ,  $\frac{3}{4}$  and one full bowl of *bobor* for children aged 6-8, 9-11 and 12-23 months, respectively), and with the age-appropriate feeding frequency. In addition, they reported to still lack confidence in facilitating the nutrition education sessions in a participatory manner. This highlights the need for frequent refresher training of community volunteers involved with nutrition education. Given that many CNPs have limited education and may not be fully literate, it is important to tailor training programs to their needs and provide regular supervision.

Ultimately, CNPs are an invaluable asset to their communities as they can offer hands-on practical advice on improved IYCF and effectively support and mobilise their communities.

Contributed by: Theresa Jeremias, Nutrition Officer, FAO, Rome



A CNP conducting a nutrition education session on age-appropriate feeding frequency



## Dissemination activities

**L**ilongwe/ Malawi, 18 February 2015: Joint FAO/JLU Dissemination Meeting of the IFSN project nutrition education intervention process review and IMCF project preliminary results.

**P**hnom Penh/ Cambodia 3-4 March 2015: National Conference on Nutrition “Investing in Nutrition for Sustainable Development in Cambodia”. Ilean Russell presented a poster, entitled: “The role of locally available foods in improving food and nutrition security in rural Cambodia,” and Anika Reinbott made an oral presentation, entitled: “Quality of Diet: Improving dietary intake and nutritional status of infants and young children in Cambodia”.

**S**tuttgart/ Germany, 3-6 March 2015: 2<sup>nd</sup> International Congress Hidden Hunger “Hidden Hunger, Childhood Development and Long-term Prospects for Society and Economy”. Judith Kuchenbecker and Irmgard Jordan made oral presentations, entitled: “Maternal nutrition in rural Malawi” and “Maternal nutrition in rural Cambodia,” respectively.

**P**hnom Penh/ Cambodia, 26 March 2015: Joint FAO/JLU Dissemination Meeting of the MALIS project nutrition education intervention process review and IMCF project preliminary results.

**Y**okohama/ Japan, 14-18 May 2015: 12<sup>th</sup> Asian Congress of Nutrition “Nutrition and Food for Longevity: For the Well-Being of All”. Anika Reinbott will present a poster, entitled: “A child feeding index is superior to WHO IYCF indicators in explaining length-for-age Z-scores of young children in rural Cambodia”.

## IMCF Publications

- Kuchenbecker J, Jordan I, Reinbott A, Herrmann J, Jeremias T, Kennedy G, Muehlhoff E, Mtimuni B and Krawinkel MB (2015) Exclusive breastfeeding and its effect on growth of Malawian infants: results from a cross-sectional study. *Paediatrics and International Child Health* 35(1): 14–23. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4280265/pdf/pch-35-01-014.pdf>
- Reinbott A, Kuchenbecker J, Herrmann J, Jordan I, Muehlhoff E, Kevanna O and Krawinkel M (2014) A child feeding index is superior to WHO IYCF indicators in explaining length-for-age Z-scores of young children in rural Cambodia. *Paediatrics and International Child Health* (forthcoming). Available at: <http://www.maneyonline.com/doi/pdfplus/10.1179/2046905514Y.0000000155>



## Welcome to



**Amy Wakem** joined FAO Cambodia in November 2014 as a Junior Nutrition Consultant and is conducting a study on the effectiveness of the MALIS nutrition education intervention. She holds a Bachelor of Applied Science in Nutrition and Food Science, a Masters in Dietetics, and a Graduate Diploma in Public Health from the University of Queensland, Australia. Amy is using the nutrition education study for her MSc in Public Health dissertation, entitled: “Case Studies of the Nutrition Education Component of the FAO MALIS Project, Cambodia”. Prior to joining FAO, she worked as a nutrition consultant for childcare centres in Brisbane, Australia.

**Esther Evang** joined FAO Headquarters in January 2015 as an intern and is providing support on complementary feeding-related project activities. She holds a MSc in Public Health from Umeå University/Sweden, a MSc in Nutritional Science and a BSc in Nutritional Science and Home Economics from JLU Giessen, Germany. In 2013, Esther spent seven months in Malawi supporting the IMCF Malawi team in preparing for and conducting the longitudinal study and mid-term survey. She also undertook FGDs with caregivers and grandmothers on exclusive breastfeeding for her MSc dissertation entitled: “Perceptions and Attitudes Regarding Exclusive Breastfeeding in Rural Malawi”.



Newsletter prepared by: Esther Evang

Layout: Melissa Vargas





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