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Food Security, Improved Diets, Healthy Children

Improved Complementary Feeding Practices Newsletter

Newsletter n.5 December 2013

Highlights in Cambodia

- The nutrition education component of the MALIS¹ project started in July with training of trainers and volunteers.
- The IYCF sessions started in 16 villages in Preah Vihear and 19 villages in Otdar Meanchey in August. In each province, the first round included around 200 mothers and caregivers with their infants and young children aged 5-18 months.
- Graduations for the 400 participants will take place in January 2014.
- The MALIS project will form new caregiver groups from Farmer Field School participants to link agriculture and nutrition activities effectively, with the goal to improve food security and nutrition of the project beneficiaries.

Highlights in Malawi

- The FICA-FAO supported IFSN² Project is continuing the wider dissemination of culturally acceptable IYCF practices, together with the promotion of local, nutrient dense foods, good hygiene practices and health behaviors in Mzimba and Kasungu Districts.
- As of August 2013, a registered number of about 2154 caretakers and 713 community members, totaling to about 2867 households were reached.
- A total of new 175 villages (91 in Mzimba and 84 in Kasungu districts) have been reached, slightly above the 150 villages that were targeted in round 2.
- Graduations of caregivers for the new groups ("round 2, group 1") will be conducted in February and March 2013.

1. Improving Food Security and Market Linkages for Smallholders in Otdar Meanchey and Preah Vihear Provinces.

2. Improving Food Security and Nutrition Policies and Programme Outreach in Kasungu and Mzimba districts.

Preliminary Results of the Longitudinal Study Component in Malawi and Cambodia

Irmgard Jordan, Anika Reinbott and Judith Kuchenbecker.

A longitudinal study component was designed in both countries, Malawi and Cambodia, looking at the pathway to impact on dietary intake and nutritional status of the children targeted by the nutrition education of FAO. All caregivers with children aged 6-8 months who were participating in the nutrition education sessions on improved infant and young child feeding (IYCF), were eligible to be included in the study.

The data collection started with a baseline survey in both Malawi and Cambodia in July and August 2013, respectively.

The survey included structured interviews and anthropometric measurements of both the caregiver and child. In Malawi, 72 and 77 children were recruited in the intervention area and the control area, respectively. In Cambodia, 64 children were recruited in the intervention area and 32 in the control area.

The selected children were matched with children from the control area (no nutrition education) by age (days) and sex. During the baseline survey the median age e.g. in Malawi was 229 (197; 252) days. There were no significant differences in age (days) between the children from the intervention and control areas in both countries.



The caregivers and their children will be visited every three months for an interview and anthropometric measurements. Data will be collected for a period of one year until the children are 18-24 months old. The second round of data collection (1st follow up) took place in October (Malawi) and November (Cambodia). Three of the mothers dropped out and nine were not available for the interview in Malawi. In Cambodia, one child dropped out in the control area and two mothers were replaced by the grandmothers.

Child nutrition (1)

In Malawi, 30% of the children in the baseline survey achieved a score equal or above the threshold value of having consumed four out of seven food groups per day, which is the WHO indicator called “minimum dietary diversity” (MDD)³. Even though the achievements were higher in the intervention section (39%), the difference with the control section (21%) was not on a significant level at baseline. Three months later, results more than doubled in the intervention and in the control area. Now, 89% and 55% of the children attained the MDD in the intervention and control area, respectively. The results for the “minimum meal frequency” (MMF)⁴ differed less between baseline and 1st follow-up survey. At baseline the indicator was slightly more achieved in the control (91%) than in the intervention section (82%). At the 1st follow-up survey nearly all children (97%) in the intervention area received a minimum number of meals per day according to their age group, whereas the control region showed lower results (86%). In comparison, only the results between baseline and 1st follow-up within the intervention group differed significantly ($p < 0.01$). Also the number of children receiving a “minimum acceptable diet” (MAD)⁵, defined by WHO, increased over time.

At baseline, only 42% in the intervention and 22% in the control group received a minimum acceptable diet, while three months later, it augmented to 88% of the children in the intervention group and 55% in the control group.

At baseline, the prevalence of children receiving an acceptable diet was similar in both countries with 39% of the children reaching the minimum dietary diversity threshold, 78% having a minimum meal frequency and 37% receiving a minimum acceptable diet in Cambodia (Figure 1). However, the change among the children in the intervention area was lower in Cambodia than in Malawi. This might be due to the fact that the caregivers in Malawi had received about two more nutrition education sessions between baseline and 1st follow up than in Cambodia. In both countries, the children’s diet improved in the control areas, too. In Malawi, this might be due to improved food availability, whereas in Cambodia several organizations are conducting nutrition education sessions targeting caregivers in the research control area.

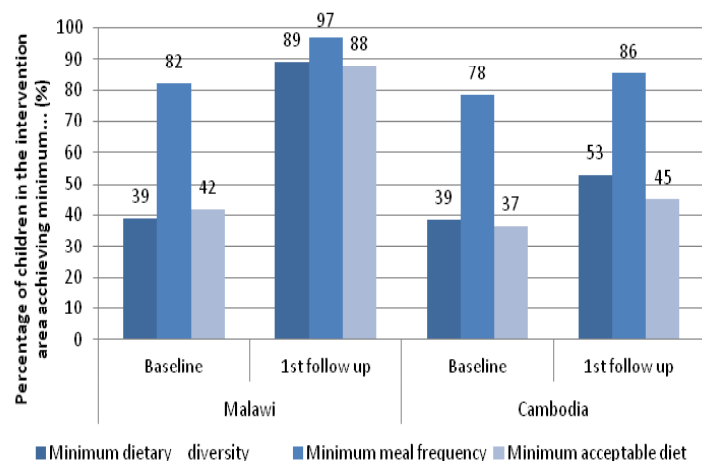


Figure 1. Changes in MDD, MMF, and MAD in the intervention areas after three months of nutrition education in Malawi and Cambodia (1)

3. MDD: Proportion of children 6–23 months of age who receive foods from 4 or more food groups (grains, roots and tubers; legumes and nuts; dairy products; flesh foods; eggs; vitamin A rich fruits and vegetables; other fruits and vegetables).

4. MMF: Proportion of breastfed and non breastfed children 6-23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non breastfed children) the minimum number of times or more.

5. MAD: Proportion of children 6-23 months of age who receive a minimum acceptable diet (apart from breast milk).

WHO. Indicators for assessing infant and young child feeding practices: Part 2 Measurement [Internet]. 2010 [cited 2011 May 26]. Available from: http://whqlibdoc.who.int/publications/2010/9789241599290_eng.pdf.



Child anthropometry

Table 1 shows the mean weight (kg) and length (cm) of all children from both surveys. There were no significant differences between intervention and control at baseline or 1st follow up.

Table 1: Mean weight and length of all children (Baseline and 1st Follow-up)

		n	Median age (days)		mean ± SD	min	max
Malawi	Baseline	149	229	weight (kg)	7.6 ± 1.0	4.6	10.5
				length (cm)	65.4 ± 3.0	56.1	73.5
	1st Follow-up	137	320	weight (kg)	8.3 ± 1.1	5.2	11.2
				length (cm)	69.4 ± 3.0	60.5	77.0
Cambodia	Baseline	96	233	weight (kg)	7.3 ± 0.9	4.4	9.4
				length (cm)	66.8 ± 2.9	54.7	71.7
	1st Follow-up	95	304	weight (kg)	7.7 ± 0.9	5.3	9.9
				length (cm)	69.8 ± 2.8	58.5	74.7

In the control area, no significant changes in terms of soap usage could be observed between baseline and 1st follow-up survey, which was expected as no nutrition nor hygiene education had been carried out in that area.

Preparing a special meal for their children in Cambodia

Preparing a special meal is the main component of the nutrition education in Cambodia. Caregivers are taught how to prepare a nutritious porridge with rice or sweet potato, vegetables and animal-source food such as fish or meat, instead of the traditionally prepared plain rice porridge. The respondents were asked whether they prepared enriched porridge during the previous day for their child. At baseline 14% of the respondents stated to have had prepared a special meal for their child during the previous day (n=96). Three months later, the proportions increased in intervention and control areas (see Figure 2). The increase observed in the control area is most likely explained by the fact that other organisations are working on nutrition education with those communities.

Presence and usage of soap in the households in Malawi

In both countries, improved hygiene practices are an important topic in the nutrition education sessions. The respondents were asked if they had soap at present and if so, whether they used the soap the previous day. In Malawi, a total of 94% at baseline and 88% at 1st follow-up stated to have soap at present. At baseline, the usage was rather sparsely during food preparation and feeding, with < 6% using soap, either before feeding the child, before food preparation or before eating. At 1st follow-up noticeable changes could be observed in the intervention area as compared to the baseline. Soap usage before feeding the child increased to 32%, as well as before food preparation to 33% (both p < 0.001). Further, more caregivers washed the food before consuming it.

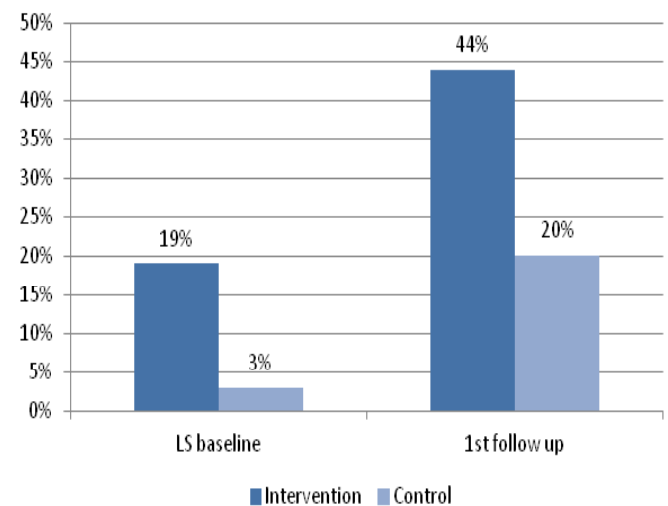
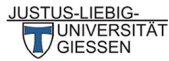


Figure 2. Respondents preparing a special meal for their child 24h prior to data collection in Cambodia



Outlook

The preliminary results show the first changes in the behavior of caregivers following nutrition education sessions. However, this did not stop a further decline of the nutritional status in Malawi. This might be also due to food shortages more prevalent in November (1st follow up) than in July (LS baseline). In Cambodia, no significant positive effect can be seen yet. The next data collection round will be conducted in January 2014 in Malawi and in February 2014 in Cambodia. The nutrition education sessions will be finished by then in both countries.

Involving grandmothers is key for improved infant and young child feeding and child care practices in Malawi

Lawrence Chakholoma

In Malawi, levels of child malnutrition have remained high in the past years. Almost half of the under-five child population is stunted, whilst 22 percent are severely stunted presenting a serious development challenge for the country. One of the contributing factors has been the following of poor infant and young child feeding practices amongst caregivers. This situation has not spared Kasungu and Mzimba districts where traditionally children under the age of six months are receiving water with herbs (dawale) and a watery, nutritionally inadequate maize porridge. The grandmothers in rural communities have been promoting such practices and passing them on to young mothers, hence transferring this culture from generation to generation. To address this issue, the FICA-FAO supported IFSN project deliberately encouraged the participation of elderly women in the community IYCF sessions.

One of the community members Esnat Zimba (62 years old) from Elia Saka village, Unyolo section in Khosolo -Mzimba said:

“I will encourage mothers to be practicing good feeding and hygiene practices. “

“I can see that many grand children whose mothers are participating in the sessions are growing well”.

She also recalls that children who were fed on dawale were frequently getting sick and always had lower weights. Esnat wishes that she could give birth again and feed her child with improved nutritious porridges and see her grow well.

The grandmothers have been very influential in promoting cultural infant and young child feeding practices in the past. After participating in the IYCF sessions, the grandmothers are going door by door to encourage the mothers to adopt the improved practices. Because of their involvement, there has been a notable behavior change amongst young mothers.





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IMCF at the 20th International Congress of Nutrition

The 20th International Congress of Nutrition (ICN) organized by the International Union of Nutritional Sciences (IUNS) was celebrated last September in Granada, Spain. The event provided the opportunity for professionals and experts from the various fields of the nutrition community to share and discuss experiences in a wide range of essential contemporary topics such as the scaling up of the prevention and treatment of child malnutrition.

FAO and its partner from Justus-Liebig University Giessen (JLU) featured the IMCF project and advocated for food-based, scalable strategies to prevent chronic undernutrition in countries such as Malawi and Cambodia.

The following symposia were jointly delivered as part of the congress activities:

- “Linking food security and Nutrition Education to Improve Infant and Young Child Feeding”, which centered on the lessons learned from FAO’s approach of linking food security with intensive nutrition education, its potential to be scaled up and its possible effect on child undernutrition in Malawi and Cambodia. Ellen Muehlhoff, Theresa Jeremias, Gina Kennedy and Michael Krawinkel (JLU) delivered presentations and Barbara Bulingame chaired the session.
- “Complementary feeding and Infant Health”, which focused on the various aspects of infant and young child feeding and the importance of the first two years of life, as well the role of nutrition education on promoting agriculture and food-based strategies for enriching young children’s diets. Presentations were held by Michael Krawinkel, Anna Lartey, Ellen Muehlhoff and Irmgard Jordan. The session was chaired by Michael Krawinkel and Anna Lartey, the new director of the Nutrition Division in FAO.

Upcoming Events

The International Green Week is a global exhibition for the food, agricultural and horticultural industries that will take place in Berlin 2014. The IMCF project will be jointly presented with the German Federal Ministry of Food, Agriculture and Consumer Protection (BMELV)

The second consultation of the Technical Advisory Committee (TAC) has been scheduled for February 2014, and will center on: (i) the review the preliminary results of the longitudinal surveys carried out in Malawi and Cambodia and (ii) a discussion of the methodology for the impact assessment.

Changes in staff at FAO HQ

- Gina Kennedy (senior nutrition consultant) left the project in August 2013. The new nutrition consultant will join the nutrition education group in January 2014.
- Theresa Jeremias (Associate nutrition officer) moved to FAO Cambodia in mid November 2013 and will give technical support in nutrition for one year.
- Melissa Vargas (nutrition intern) joined the nutrition education group in August 2013 and is supporting the IMCF work until end of February 2014.



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Welcome to

Lawrence Chakholoma joined the IFSN team in Kasungu as a project nutritionist in July 2013. He studied Environmental Science and Technology at the University of Malawi and obtained his BSc degree in 2003. Before his enrolment on the IFSN project, Lawrence worked as a Food and Nutrition Officer for the Ministry of Agriculture and Food Security in the district of Dowa, as a Nutrition Coordinator for Concern Universal, and as a Program Coordinator for Goal Malawi, where he gained experience in planning, implementing and resource management of community nutrition programmes and projects (Community-based management of acute malnutrition, HIV and nutrition and school nutrition gardens, among others). His prior work also includes monitoring and evaluating responsibilities for CIDA funded Child Survival Project (CCM) and the EU/GoM Rural Infrastructure Development Programme.



Sokha Thoang is the new national nutrition assistant of the MALIS project in Cambodia. She is originally from Kampong Cham province. She pursued a degree in nursing science at the International University in Phnom Penh. During her studies, she gained practical experience in the hospital context and had an initial contact with the IMCF project as an enumerator during the baseline survey in August 2012. As nutrition is one of her interests and part of her education, she supported the KAP project with FAO in Siem Reap at the beginning of this year. As a volunteer, she got involved in HIV/AIDS patients counselling before she joined the MALIS project in August 2013.

Anna Schelling joined the IMCF team as a master student from the Justus Liebig University in October 2013. She will conduct focus group discussions with mothers to explore the main constraints in preparing complementary food, and will be part of the researchers' group until the end of March 2014. Before her involvement with the IMCF project, she finished her Bachelor in Nutritional Science and Home Economics in 2011 and she started her Master in Nutritional Science in the same year. In the time between, she worked several months in New Zealand, and further travelled to Thailand where she had been before on a round trip including Cambodia.





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