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## Highlights in Malawi

- Lawrence Chakholoma joined the FAO Malawi nutrition team and is working together with Solange Heise in the delivery of the nutrition intervention.
- Graduation ceremonies were held in May in the first 200 villages who participated in the *Kupititsa Patsogolo Kadyetsedwe Koyenela Ka Ana* (Community based nutrition education program).
- *Kupititsa Patsogolo Kadyetsedwe Koyenela Ka Ana (KPKKKA)* will begin a second round with new children in the same 200 villages as well as start up in an additional 150 new villages.
- JLU will conduct a longitudinal study in selected villages participating in the second round of KPKKKA and a cross-sectional mid-term study in August-September.
- The FAO Nutrition Education Group and JLU will be presenting IMCF project and research findings from the baseline surveys of Malawi and Cambodia at the 20th International Congress on Nutrition, Granada, 15-20 September 2013.

## Highlights in Cambodia

- Finalization of nutrition education material is nearly complete.
- Training of trainers and of Community Nutrition Promoters will be carried out in July.
- The first community based nutrition education sessions are scheduled to begin in August.
- The Cambodian PhD candidate, Mav Khun finalized his first semester at Mahidol University and is now in the field in Cambodia beginning qualitative research.
- JLU will conduct a longitudinal study in selected villages participating in the first round of the community based nutrition education intervention.

## Comparison of IMCF baseline survey\* results in Cambodia and Malawi

Cross-sectional nutritional baseline surveys were conducted in Malawi (N=1039) and Cambodia (N=1029) in September 2011 and 2012, respectively. In Cambodia this corresponded to one of the peak months of hunger, while in Malawi the peak "hungry season" is experienced in January/February. A standardized questionnaire was administered to randomly selected households with children below two years of age. Anthropometric measurements were taken from both parents and the child (0-23 months).

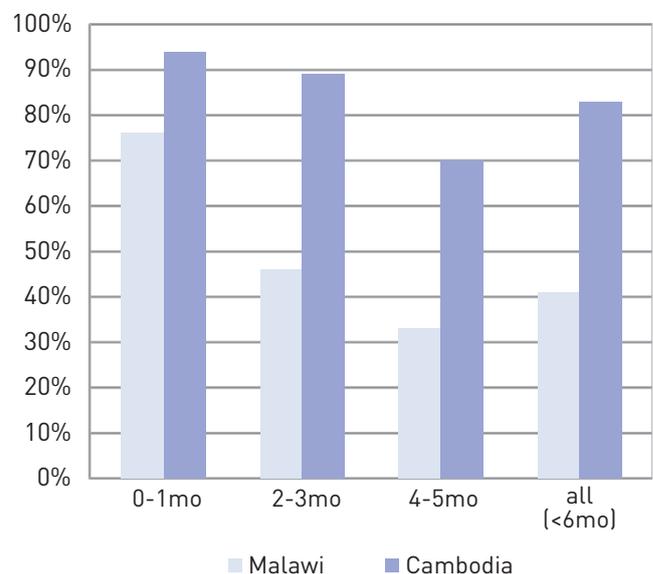
### Breastfeeding practices

The majority of children 0-23 months of age (94 and 85 percent respectively in Malawi and Cambodia) were continuing to be breastfeed. Exclusive breastfeeding (EBF) practices however were quite different between the two countries,

\*final results

with a sharp decline in EBF within older age groups in Malawi (Figure 1).

Figure 1: Comparison of Exclusive Breastfeeding practices





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### Infant feeding practices

Table 1 shows the percentage of children achieving selected World Health Organization (WHO) Infant and Young Child Feeding (IYCF) indicators. Minimum dietary diversity was achieved by 61% of the children in Malawi and 44% in Cambodia, while 72% and 70% respectively had a minimum meal frequency. Minimum acceptable diet was achieved by less than 50% in Malawi and 28% in Cambodia. As could be expected the percentage of children with minimum dietary diversity increases with age, however minimum meal frequency decreased with age in both project sites. In both project sites, there was a decrease of minimal meal frequency for children 18 to 23 months of age as compared to younger age groups. The reasons for this should be explored in focus group discussions with caregivers.

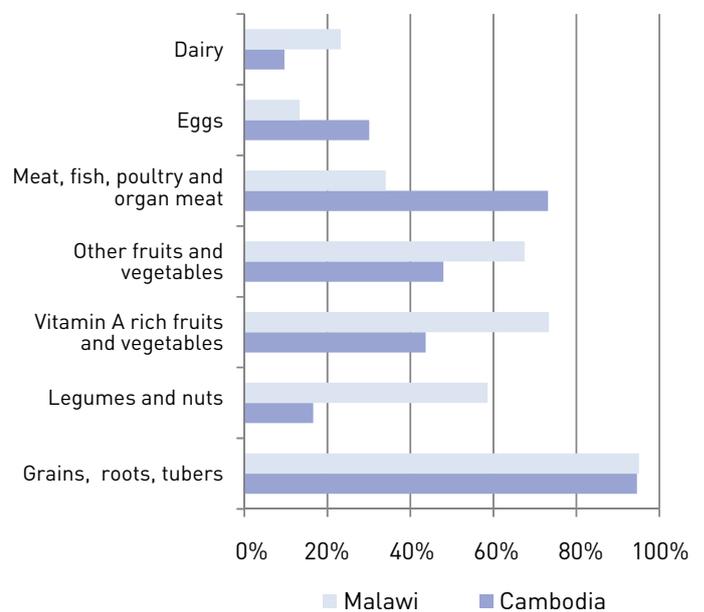
Table 1: Comparison of selected IYCF indicators

WHO IYCF Indicators	Malawi		Cambodia	
	N	%	N	%
Minimum dietary diversity	831	61	801	44
6 to 11 months	301	44	332	30
12 to 17 months	261	70	263	51
18 to 23 months	269	71	206	58
Minimum meal frequency	814	72	773	70
6 to 11 months	296	78	314	80
12 to 17 months	254	76	257	72
18 to 23 months	264	60	202	52
Minimum acceptable diet	814	48	798	28
6 to 11 months	296	38	329	25
12 to 17 months	254	56	263	38
18 to 23 months	264	52	206	21

### Diet patterns by food group

Comparison of the percentage of children (6-23 months) consuming the seven recommended WHO food groups during the previous 24 hours shows a high proportion of children consuming foods made from grains, roots or tubers (primarily rice in Cambodia and maize in Malawi) in both research sites (Figure 2). However, there are notable differences in non-staple food patterns, with more children in Malawi consuming foods from the legumes, nuts and seeds (primarily groundnut) and fruit and vegetable groups, while more children in Cambodia received foods from the meat/fish (primarily fish) and egg food groups.

Figure 2: Comparison of food groups consumed during the previous 24 hours (6-23 mo)



The comparison of prevalence of stunting, underweight and wasting (< -2 z-scores) of children 6-23 months, shows a much higher prevalence of stunting



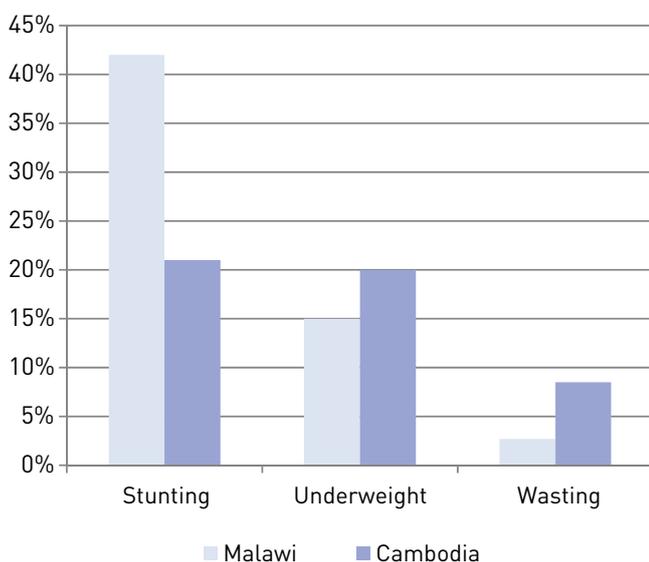
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ing in Malawi as compared to Cambodia (42% and 21% respectively), while wasting is much higher in Cambodia than in Malawi (8.5% and 2.7% respectively) (Figure 3). A possible contributing factor for the low stunting prevalence among children 0-23 months in Cambodia could be the successful national level breastfeeding campaign with dramatic documented increase in EBF. Further research is ongoing to better understand the determinants of observed stunting levels. Possible explanations for higher wasting include very poor access to improved sanitation facilities (19% compared to 30%) in Cambodia and Malawi respectively and survey concordance with the peak hungry season in Cambodia (September-November). The current structure of data analysis does not permit comparison of prevalence in the past two weeks of illness, but differences in prevalence of illness during the survey periods could be another possible explanation for high levels of wasting in Cambodia. In both countries a longitudinal study will be conducted by the research partners to determine the risk factors for stunting. A mid-term survey will take place in August 2013 in Malawi. The cross-sectional impact surveys are planned for August 2014.

**Figure 3: Comparison of prevalence (%) of stunting, underweight and wasting (0-23 mo)**



**Update on Malawi Food Security Project Nutrition Activities**

In Malawi the nutrition education component is part of the larger “Improving food security and nutrition policies and programme outreach” project operating in Kasungu and Mzimba districts of Malawi. The first community sessions of “*Kupititsa Patsogolo Kadyetsedwe Koyenela Ka Ana*” (KPKKKA), (Promoting improved infant and young child feeding) started in December 2012 and were completed in April/May 2013. Four hundred Community Nutrition Facilitators (CNFs) participated in KPKKKA and reached about 2,500 families with children 6-18 months of age. The KPKKKA sessions include lessons on continued breastfeeding, good hygiene practices, food safety, adequate, age-appropriate complementary feeding of children aged 6-23 months (frequency and quantity), thickness of a nutritious porridge, Malawi Six Food groups, seasonal food availability, family foods, vegetables, nutritious snacks (fruits), legumes, animal-source foods, how to feed a sick child and when a child has to be taken to the hospital. The nutrition education package comprises community counseling cards for the two CNFs, three key message booklets for the mothers to follow the session, a recipe book and additional materials for



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activities during the sessions. The KPKKKA sessions included the child and primary caretaker, with grandmothers and men also invited to attend all sessions.

Ongoing monitoring by FAO staff suggests that there is good participation from the caregivers and support from the village leadership. Positive feedback from the caregivers has been recorded. Mothers reported that their children are crying less and are not often sick. Some of the challenges observed were lack of ingredients for cooking demonstrations and caregivers' ability to remember the recipes. To support the CNFs and emphasize some important aspects of KPKKKA, a refresher training was conducted. The CNFs said that the refresher training helped them to improve their facilitation. There will be a second cycle with new caregiver-child pairs starting in the same villages by mid July. In addition to the already planned villages, KPKKKA is reaching out to 150 new villages of the FAO/FICA project area in 2013.

### **Update on Cambodia Food Security Project Nutrition Activities**

In Cambodia the nutrition education component is part of the FAO project "Improving food security and market linkages for smallholders" (MALIS) operating in Otdhar Meanchey and Preah Vihear Provinces of Cambodia. The nutrition education intervention in Cambodia is designed as a series of seven facilitated sessions and follows the educational materials on complementary feed-

ing prepared by the National Nutrition Program (NNP). As in Malawi, children between the age of 6-18 months and their families will be recruited to participate in the intervention. The nutrition education package consists of the NNP video, a set of community counseling cards, a facilitators book and recipes to practice during cooking demonstrations. The NNP sessions include lessons on food hygiene and handwashing, continued breastfeeding, food diversity, food for lactating women, adequate complementary feeding per age group for children aged 6-23 months (frequency and quantity), thickness of a nutritious porridge, preparing complementary foods using family foods, nutritious snacks (fruits), active feeding and how to feed a sick child. The sessions will be facilitated by two community nutrition promoters (CNP) who are supported by the Provincial Departments of Health and Women's Affairs and local NGOs. The training of Master trainers is scheduled to take place in July, 2013, followed by community nutrition education sessions that will start in August, 2013. A total of 45 groups will be involved in the first round of IYCF. The mothers groups will meet once every two weeks for 2 hours. Every session has some key messages and questions aimed to promote group discussion. Cooking demonstrations and demonstrations of hand washing will be conducted in 5 sessions.



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MEETINGS WITH PARTNERS



Meeting of JLU and Lilongwe University of Agriculture and Natural Resources. Persons from left to right, Beatrice Mtimuni, Judith Kuchenbecker, Catherine Mthinda, Alexander Kalimpira, Gabriella Chiutsi Phiri, Irmgard Jordan, Orpah Kabambe. Date and venue: 26th February 2013, (Luanor) in Bunda, Malawi.



Photo taken in Phnom Penh, Cambodia, during a presentation of the MALIS project and JLU Cambodia baseline results. Persons from left to right, lean Russel, Programme Manager MALIS project; Anika Reinbott, PhD student Cambodia, Justus-Liebig University; Gina Kennedy, IMCF project, FAO Rome; Koungrly Ly, Nutrition Officer MALIS project; Ou Kevanna, IMCF Cambodia co-investigator.



Visit to IMCF research site in Kasungu, Malawi. Persons from left to right, Stacia Nordin, Nutrition Officer, FAO Malawi; Solange Heise, Nutrition Consultant, FICA project; Bertha Munthali, Nutrition Officer, FICA project; Dr. Irmgard Jordan, JLU Giessen; Judith Kuchenbecker, Ph. D. Student Malawi, JLU Giessen; Gabriella Chiutsi, Ph.D. Student Malawi, Lilongwe University of Agriculture and Natural Resources.

WELCOME TO ESTHER EVANG AND LOYCE JUDITH MNYAWA



**Esther Evang** is a master student from the Justus Liebig University Giessen in Germany. In 2010 she finished her Bachelor in Nutritional Science and Home Economics. Afterwards she became an intern at the Max Rubner-Institut in Karlsruhe in the department of Nutritional Behaviour where she analysed data for the German National Food Consumption Survey II and worked as an enumerator. Afterwards she made an internship at the NGO Misericordia in the Africa department for rural development. In 2011 she started her master in Nutritional Science in Giessen and spent her third semester in Umeå/Sweden where she studied Public Health. Since March 2013 she supports the IMCF Malawi team and collects data for her master thesis. She is going to conduct focus group discussions with mothers and grandmothers to find out about perception and attitudes about exclusive breastfeeding.



**Loyce Judith Mnyawa** is the new Malawian assistant in the IMCF Malawi team. She obtained her Diploma in Food Nutrition and Livelihood Security at the National Resources College Malawi in 2011. In 2010 she was working for the Thyolo District Hospital as a Technical Assistance Nutrition Officer where she was involved in nutrition rehabilitation and in assessing the nutritional status of children under five years of age. As a field facilitator she worked in 2011 for Children of the Nations where she was responsible for the community mobilization and dissemination of nutritional messages. Afterwards, she began her internship as a Nutritional Assistant for the FICA project in Kasungu. There she was involved in several data collections (individual interviews, 24h-recall), coordination with extension staff from Ministry of Health and Ministry of Agriculture and training of the community nutrition facilitators.



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