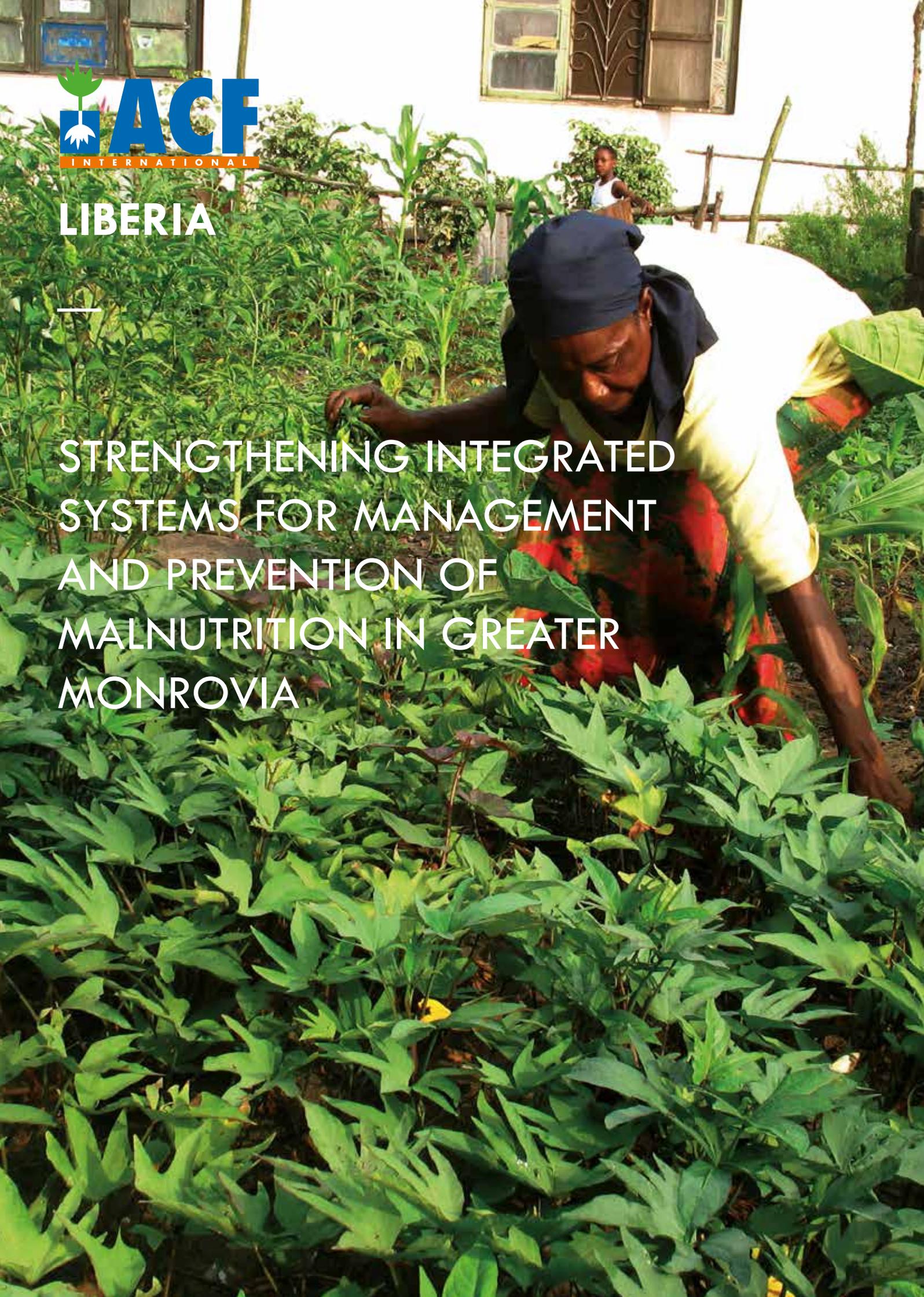




LIBERIA

STRENGTHENING INTEGRATED
SYSTEMS FOR MANAGEMENT
AND PREVENTION OF
MALNUTRITION IN GREATER
MONROVIA



Considering Liberia's high levels of child undernutrition (both acute and chronic) and food insecurity, Action Contre la Faim (ACF) implemented a pilot project integrating Food Security and Nutrition activities in Greater Monrovia in 2010. Building on lessons learnt, the pilot was then adapted and replicated in 2011 in three urban and peri-urban communities: *New Kru Town, Chicken Soup Factory and Pipeline.*





Humanitarian context

Background:

Following a quarter century of political instability and brutal conflict, post-war Liberia is trying to rebuild and cope with the many unaddressed needs of the population.

It is estimated that more than 2.2 million people (64% of the population) are poor and vulnerable to threats posed by inadequate basic services such as education and health. The problem is largely centralized in Monrovia, the capital, which concentrates one third of the population of the country and where a high population density intensifies pressure on resources and installations such as water and sanitation facilities.

In terms of economy, nearly two-thirds of Liberia's domestic food requirements are largely dominated by imports, including for rice, the staple commodity. High dependence on food imports makes Liberia particularly vulnerable to global food price fluctuations.

Assessment:

A Comprehensive Food Security & Nutrition Survey (CFSNS) was carried out by WFP, UNICEF and the Ministry of Agriculture of Liberia between May and August 2010 and the results showed that food insecurity

and malnutrition were still widespread in the country. It was estimated that 41.8% of children under five years old were stunted (see the table below), 41% of households were food insecure and 1 in 5 deaths in children under-five was attributable to malnutrition.

The survey also indicated that access to health care was limited and care of both mothers and children was largely inadequate.¹

Child undernutrition in Liberia²:

| | Wasting | Stunting | Underweight |
|------|---------|----------|-------------|
| 2006 | 6,9 % | 39,2 % | 26,8 % |
| 2010 | 2,8 % | 41,8 % | 14,9 % |

In response to this critical situation, ACF designed a program that addressed malnutrition through each of its underlying causes - food security, health, maternal and child care. It focused on the full life cycle of malnutrition, from prevention and early detection through to referral and treatment of both moderate and severe acute malnutrition.

¹ The State of Food and Nutrition Insecurity in Liberia, Comprehensive Food Security and Nutrition Survey, 2010, Republic of Liberia, Monrovia

² 2010 survey uses the WHO Reference Standard population while the 2006 uses the NCHS Standard. Therefore, these figures are not totally comparable.



Programme Overview and rationale

In April 2011, ACF launched an eleven month long integrated food security and nutrition programme based on lessons learnt from the 2010/2011 pilot phase. The aim was to create a link between food security and nutrition and particularly the links between eating a diverse range of food and improving a child's health.

The objective of this programme was: **The reduction of morbidity and mortality from malnutrition in children under five years old in Greater Monrovia.**

The project focused on three main levels of intervention:

- **Community and Family Level:** Gardening and ENA³ promotion activities were combined with the prevention, early detection and referral of malnutrition ensuring the promotion of health, nutrition and hygiene.
- **Health Facility Level:** ACF supported the local NGO ANDP (Aid for the Needy Development Project) to provide nutrition training and mentoring in an attempt to develop the capacity of the health facilities for delivery of nutrition based initiatives. The treatment of acute malnutrition was carried out through the existing health system in Out-Patient Therapeutic Programmes (OTPs) and/or In-Patient Therapeutic Programmes (IPTPs).
- **County and National Level:** County Health Team and Ministry of Health and Social Welfare (MOHSW) were strengthened to supervise, monitor and support the management of acute malnutrition at both OTPs and IPTPs and to adopt appropriate nutrition policies.

Whereas prevention activities at the household level were intended to reduce the underlying and immediate causes of malnutrition (inadequate dietary intake, inadequate care for children and women, unhealthy environment), activities in Health facilities and at county and national levels such as advocacy, technical assistance and nutrition training aimed to directly tackle the outcome of malnutrition.

³ Essential Nutrition Actions; refer to box next page.

Implementation

Initial survey

Intervention details were determined after the completion of the baseline survey, which included a total of five sections:

1. General information
2. Gardening activity
3. Income Generating Activity
4. Child nutrition
5. Women's nutrition

The survey aimed to assess household vulnerability, current gardening activities, and establish basic profiles of beneficiaries. The baseline survey allowed for obtaining necessary data on land availability, labor availability, and nutritional vulnerability and selecting beneficiaries for participation in the project. It helped to determine existing agricultural practices, access to inputs, and preferred crops which enabled the modification or improvement of the planned project activities. It also allowed creating a general profile of the beneficiaries selected to participate in the project as well as establishing a point of contact with the community. Finally, the baseline survey was a way to collect data for the work of an external evaluator at the end of the project and the results were used as a reference for the measurement of project impact.

Beneficiary selection and targeting

ACF selected communities in Greater Monrovia with high levels of malnutrition. Community selection began with two weeks of registration of children admitted to the nutritional programs Outpatient Therapeutic Program (OUT) and Supplementary Feeding Program (SFP) at the twelve health facilities.

As the project worked on several levels, beneficiaries consisted of children, caretakers, and families as well as Community Health Volunteers, health workers and Ministry of Health professional staff.

A total of three communities and 12 health facilities were selected for the implementation of the project and this selection was done on the basis of:

- The number of current malnourished children from the community receiving treatment at the health facilities.



- Health facilities implementing nutritional program(s)

From the 12 health facilities, the first six with available land space were chosen for demonstration pilot activities and the other six were targeted for sensitization gardening and ENA activities.

A total of 304 households were initially screened at the health facilities. Verification through interviews and final registration then took place within the communities. The selection was done on the basis of:

- Households permanently staying in the community.
- Willingness to engage in short term food crop gardening with a minimum of 1 year access to agricultural land.
- With at least 2 active family members (manpower).
- Priority given to households with a child or children currently or previously affected by acute malnutrition.

Key activities of the programme:

- **Capacity building on urban gardening techniques:** Training sessions on garden site selection, small nursery establishment, crop propagation and maintenance were held

with the targeted beneficiaries. The training mainly focused on the demonstration of techniques (demonstration plots), including soil testing, field layout, seeds testing, nursery establishment /nursing of small seeds and preparation of homemade pesticide.

- **Nutritiously valuable crops distribution:** ACF distributed three crop types: sweet corn, orange flesh sweet potato and cowpea. These three crops were prioritized due to their high quality and nutritional value (containing carbohydrate, Vitamin A, and protein, respectively). In addition, beneficiaries were offered to select two further types of seed of their own choice to encourage their participation and to make sure that their tastes and preferences were also respected.
- **Essential Nutrition Actions (ENA) promotion:** Home and gardens visits were conducted to promote ENA and follow up on the urban gardens. Household visits aimed to reinforce key messages on food diversity and nutrition through practical demonstration and active gardens and to promote a correct use of seeds, tools and application of agricultural practices.

- **Management of acute malnutrition within 12 health facilities:** Ministry of Health and Social Welfare care and medical workers from ten clinics and two referral hospitals were trained to screen, detect and treat cases of acute malnutrition. This technical support, training, monitoring and follow up of the management of acute malnutrition were conducted by ACF and ANDP to reinforce the capacity of the health facilities (both inpatient and outpatient components).
- **Home visits for absentees and defaulters:** Health facility clinical staff carried out home visits for absentees and defaulters from the program, as well as children who lost weight or had stagnant weight. This permitted to understand the reasons for default, to allow children to continue their treatment and to refer children with medical complications to the appropriate Specialized Nutrition Unit (SNU).

Essential Nutrition Actions (ENA)

The Basic Support for Institutionalizing Child Survival (BASICS II) project, the flagship child health project of the U.S. Agency for International Development (USAID), made nutrition a central piece of its child health package. ENA is a set of interventions to fight malnutrition. These essential actions protect, promote and support the achievement of six priority nutrition behaviors:

- Exclusive breastfeeding for six months;
- Adequate complementary feeding starting at about six months with continued breastfeeding for two years;
- Appropriate nutritional care of sick and severely malnourished children;
- Adequate intake of vitamin A for women and children;
- Adequate intake of iron for women and children;
- Adequate intake of iodine by all members of the household.

Programme outcomes and impacts

By the end of the project, over 90% of households were adopting new methods and best practices in agriculture which permitted to increase their production and their consumption of vegetables. A handful of households with larger plots were selling surplus for additional income. The findings showed as well that newly introduced varieties and vegetables were successfully grown and consumed by households. The orange flesh sweet potato variety was one of the crops successfully introduced, i.e. 51% of surveyed households indicated that they produced and consumed this new variety for the first time. Cowpea (protein-rich crop) was also introduced, with 62.2% of surveyed households producing for consumption. 88.3% of children in households interviewed were fed at least four varieties of food per day compared to 70% prior to the intervention. Increase in dietary diversity was also observed, although to a lesser extent, for the participating pregnant and lactating women.⁴

Feeding frequency (more than three times a day) for children aged 6-24 months the feeding increased for 28% of the households surveyed between baseline and end line.

ACF advocacy work mobilized Ministry of Health and Social Welfare to be positively involved in the development of nutrition initiatives and developing plans to reduce levels of child malnutrition across Liberia.

From a beneficiary perspective, the project was successful in introducing new inputs and techniques to improve the productivity and diversity of existing garden plots. It also provided key information relating to nutrition, food security and improving the health of a child.

The sustainability of garden activities was not fully ensured due to limited and relatively expensive seeds.

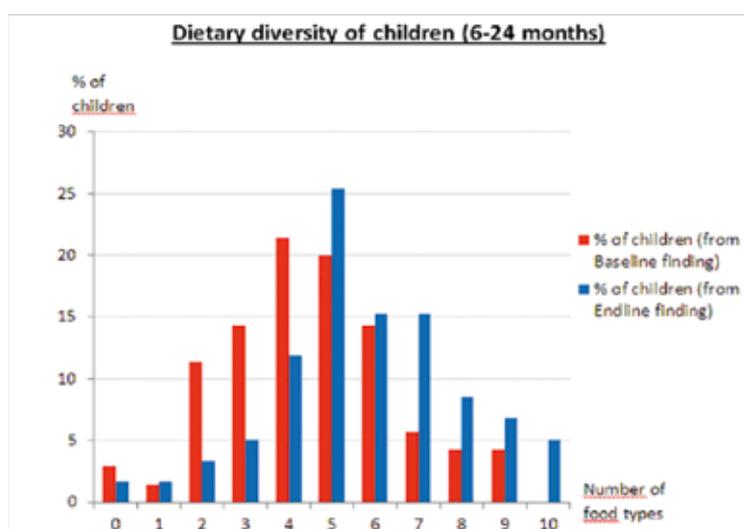
Success Story

Nancy Karr, 22 years old, mother of two children under 2 years old, resident of New Kru Town had never gardened. Prior to her selection to participate in the project, her main livelihood activity was the collection and sale of empty cups. Nancy could only afford one small meal a day for herself and her two kids. One of the kids was affected by acute malnutrition and admitted to the nutrition therapeutic program at Redemption hospital.

She was later selected for participation in the project, supported with home gardening inputs, and sensitized on Essential Nutrition Actions and home gardening techniques through trainings and home visitations. Nancy was also supplied with assorted IGA kits and trainings on small business management.

Today Nancy Karr has one of the most successful urban gardens in New Kru Town. The garden provides her with most of her daily meal vegetables.

She also earns cash from the sale of some vegetables (okra, and potato green). She has established a cash box from the small business inputs she received and currently has a savings of 8,000 LD (111 USD) from which she is intending to register one of the children in school.



⁴ Baseline and Endline finding comparison. These results seem to reveal a positive tendency but it is important to underline that the two surveys have not been realized at the same season therefore the methodology is limited by the seasonality factors.



Key lessons learnt and recommendations

Key lessons learnt

Internal coordination between Food Security and Nutrition Units:

- Coordination at planning and implementation stage between FSL and Nut Units facilitated effective integration of FSL and Nut interventions in the field.
- FSL team was trained on ENA messages and contributed to strengthen ENA messages dissemination

Effective participation of Health facilities:

- Using the health facility as the entry point of the community and as the main point for beneficiary registration helped influenced care givers to bring their sick children to the clinic, expecting to be targeted by the project. At the beginning the project was seen as an incentive for care givers to bring children to the health facility.
- Health facility staff promoted production and consumption of nutritious food through demonstration plots installed at health centers and provided ENA messages.

Effective ways of promoting gardening and nutrition practices:

- T-shirts with messages – using local expressions – proved to be very effective in promoting production/consumption of nutritious food and nutrition practices.
- Cultural performances were very effective for disseminating gardening and nutrition messages, especially to women.
- Mothers that already adopted gardening and/or nutrition practices were effective promoters of these practices among “new” pregnant and lactating women.
- The use of community members to co-facilitate (mainly in the local dialect) during training sessions increased the understanding of participants.
- Improvement in nutrition knowledge and practice was higher when people were engaged in garden activities.
- Methods of message delivery could have been more participatory and more innovative methods such as community

theatre and film should have been considered.

Provision of inputs:

- The distribution of tools and seeds was progressively done as per calendar of field activities; this allowed an effective use of the incentives (tools and seeds).
- In New Kru Town community, gardening activities were done using bags and tires due to limited access to land.

Recommendations

- It is better to organize the “Farmer Field Days” in each targeted community (not centralized in one community).
- Promote seed saving activities in order to enhanced sustainability of the gardening activities
- Associate nutrition education with practical home gardening activities to enable beneficiaries to see and better understand the links to nutrition.
- Engage local facilitator: people respond well when they see a facilitator from their own community demonstrating new techniques.
- Continue to add hygiene messages, including food preparation hygiene, to classical ENA messages. This is particularly relevant for babies whose mothers have not breastfed them and replaced with food that is not prepared in clean and safe conditions.
- Water and sanitation activities should be included in the integrated approach as inadequate sanitary environment impacts on the prevalence of disease and is an important factor leading to undernutrition. Where access to irrigation water is limited, include a component to enhance access to water for irrigation.
- Promote nutrition sensitive Income Generating Activities (IGAs) such as production and marketing of nutritious food complements. In the area of the project, production of food complements based on beans and peanut paste, providing essential nutrients to children,

could be promoted and supported. Other IGAs may include fertilizer businesses, seed cleaning and tool maintenance.

- Apply good practices on monitoring and evaluation in order to better capture effects on food security and nutrition of innovative integrated interventions and contribute to evidence building. For instance, make sure comparisons between baseline and endline data do not suffer from seasonality bias; track changes in knowledge, attitudes and practices related to promotion and training activities.

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This document is part of a series of case studies of ACF Food Security and Livelihoods interventions aimed at reducing and/or preventing undernutrition. These case studies are developed by the ACF Working Group “Aligning Food security with Nutrition” in order to share experiences and lessons learned on the subject.

All the existing case studies can be downloaded in English and in French here:

<http://www.actioncontrelafaim.org/fr/content/aligning-casestudies>

The objective of the Working Group «Aligning Food security with Nutrition» is to promote and strengthen nutrition sensitive food security interventions within ACF and partner organizations. The Working Group supports these operations by collecting and disseminating lessons learned, conducting research, developing tools and guides, and capacity building.

For more information on the “Aligning” approach, refer to the ACF manual: *Maximizing the nutritional impact of food security and livelihoods interventions. A handbook for field workers.* <http://www.actioncontrelafaim.org/fr/content/maximising>

