Technical Assistance Options

to Support Food Security, Nutrition, and HIV Activities Using PEPFAR Resources in the Democratic Republic of the Congo

Photo: Wendy Hammond

Paluku Bahwere, FANTA-2 consultant

Sybil Chidiac, CARE/Tanzania

Wendy Hammond, FANTA-2

Willy Rumanya, CARE/DRC

Jill Thompson, LIFT consultant

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ABBREVIATIONS AND ACRONYMS

English	French	
AAH	ACF	Action against Hunger/*Action contre la Faim*
AIDS	SIDA	Acquired immune deficiency syndrome/*syndrome de l'immunodéficience acquise*
ANC	CPN	Antenatal care/*consultation prénatale*
ART		Antiretroviral treatment
BMI	IMC	Body mass index/*indice de masse corporelle*
CDC		U.S. Centers for Disease Control and Prevention
CDC	CDC	Community development committee/*comité de développement de la communauté*
CMAM	PCCMA	Community-based management of acute malnutrition/*prise en charge communautaire de la malnutrition aïgue*
CRS		Catholic Relief Services
DHS	EDS	Demographic and Health Survey/*Enquête Démographique et de Santé*
DRC	RDC	Democratic Republic of the Congo/*République Démocratique du Congo*
ECHO		European Community Humanitarian Office
ENA	AEN	Essential nutrition actions/*Actions Essentielles en Nutrition*
FANTA-2		Food and Nutrition Technical Assistance II Project
GDRC	GRDC	Government of the Democratic Republic of Congo
GFATM		Global Fund for AIDS, Tuberculosis, and Malaria
GMP		Growth monitoring and promotion
HCT		HIV counseling and testing
HIV	VIH	Human immunodeficiency virus/*virus de l'immunodéficience humaine*
HBC		Home-based care
IGA	AGR	Income generating activity/*activité rurale génératrice de revenus*
IHP	PROSANI	Integrated Health Project/*Projet de Santé Integré*
IYCF	ANJE	Infant and young child feeding/*alimentation du nourrisson et du jeune enfant*
LIFT		Livelihoods and Food Security Technical Assistance Project
MAM	MAM	Moderate acute malnutrition/*malnutrition aiguë modérée*
MCHN		Maternal and child health and nutrition/*santé et nutrition maternelles et infantiles*
MINAS	MINAS	Ministère des Affaires Sociales de l ’Action Humanitaire et de la Solidarité Nationale
MOA	MINAGRI	Ministry of Agriculture/*Ministère de l’Agriculture, Pêche, et Elevage*
MOH	MINISANTE	Ministry of Health/*Ministère de la Santé Publique*
MSME		Micro, small, and medium enterprise

MUAC	PB	Mid-upper-arm circumference/*périmètre brachial*
NACS		Nutrition assessment, counseling, and support
NGO	ONG	Nongovernmental organization/*organization non-gouvernementale*
OTP	UNTA	Outpatient therapeutic nutrition unit/*unité nutritionnelle thérapeutique ambulatoire*
OVC	OEV	Orphan(s) and vulnerable child(ren)/*orphelin(s) et enfant(s) vulnerable(s)*
PHC		Primary health care
PITC		Provider-initiated testing and counseling
PLHIV	PVVIH	Persons(s) living with HIV/*personne(s) vivant avec le VIH*
PM2A		Preventing Malnutrition in Children under 2 Approach/*l'approche pour la prévention de la malnutrition chez les enfants de moins de 2 ans*
PMTCT	PTME	Prevention of mother-to-child transmission of HIV/*prevention de la de la transmission du VIH de la mère à l'enfant*
PNLS		National HIV/AIDS and STI Control Program/*Programme National de Lutte contre le VIH/SIDA et IST*
PNMLS		National Multisectoral AIDS Control Program/*Programme national multisectoriel de lutte contre le Sida*
PRONANUT		National Nutrition Program/*Programme National de Nutrition*
IHP	PROSANI	Integrated Health Project/*Projet de Santé Integré*
ProVIC		Integrated HIV/AIDS Program in the DRC/*Programme du VIH/SIDA Integré au Congo*
SAM	MAS	Severe acute malnutrition/*malnutrition aiguë sévère*
SBCC		Social and behavior change communication
STI	IST	Sexually transmitted infection
TB		Tuberculosis
UNAIDS	ONUSIDA	Joint United Nations Programme on HIV/AIDS/*Programme des nations unies sur le VIH/SIDA*
UNDP	PNUD	United Nations Development Programme/ *Programme des Nations Unies pour le développment*
UNICEF		United Nations Children's Fund/*Fonds des Nations Unies pour l'Enfance*
UNTA		Intensive outpatient nutrition unit/*unité nutritionnelle thérapeutique ambulatoire*
UNTI		Intensive therapeutic nutrition unit/*unité nutritionnelle thérapeutique intensive*
USG	GEU	United States Government/*Gouvernement des États-Unis*
WASH	EAS	Water, sanitation, and hygiene/*eau, assainissement, et santé*
WFP	PAM	World Food Programme/*Programme Alimentaire mondial des Nations Unies*
WHO	OMS	World Health Organization/*Organisation mondiale de la Santé*

1. Assessment Background

In 2011 USAID/DRC allocated $2 million in PEPFAR funds from COP 10 and COP 11 for food and nutrition activities related to PLHIV and OVC. USAID/DRC requested technical assistance from the Food and Nutrition Technical Assistance II Project (FANTA-2) and the Livelihoods and Food Security Technical Assistance Project (LIFT) to help strengthen programming of these funds. A joint FANTA-2/LIFT assessment team visited the DRC in July 2011 to meet with government, international and local organizations, and community members to review experience with nutrition, food security, and economic strengthening activities targeting HIV-affected populations or in areas of relatively high HIV prevalence. This report presents the team's findings and recommendations.

An estimated 80 percent of the population of the Democratic Republic of the Congo (DRC) lives below the poverty line. The country has declined from relative prosperity to become one of the world's least-developed nations. With comparative stability in 2011, donors are beginning to move from emergency to development programming, particularly in the health sector.

DRC's health indicators are among the worst in the world, reflecting years of civil war, continuing conflict in some regions, and serious deterioration of once high-quality health services since 1998. The *2007 Demographic and Health Survey* (DHS) estimated the country's life expectancy at 43 years (Ministry of Planning and ORS Macro 2008). An extremely high disease burden (malaria, diarrhea, and acute respiratory infections) contributes to high child mortality. According to the DHS, under-five mortality was 148 per 1,000 live births, and infant mortality was 92 live births per 1,000. The DRC has a high incidence rate of tuberculosis, and 30 percent of adult TB patients are co-infected with HIV. Poor access to primary health care affects up to 80 percent of the population, with urban areas generally better served than rural. Health care provider salaries are paid inconsistently if at all, and fees for services and some medicines make health care inaccessible for many Congolese.

Nutrition indicators are also poor. The 2007 DHS reported a national malnutrition prevalence of 41 percent, chronic malnutrition in 46 percent of children, and underweight or chronic energy deficiency in 18.5 percent of women. Rates of acute malnutrition declined from about 15 percent in 2001 to 9 percent in 2010 but remain above the WHO emergency threshold of 15 percent in East and West Kasaï and Katanga and Bandundu provinces (Ministry of Planning and ORC Macro 2008). The same survey reported that only 15 percent of children 6–23 months old were fed according to the minimum established infant and young child feeding (IYCF) standards. Only 36 percent of infants were exclusively breastfed for 6 months, and median duration of breastfeeding was only 1.4 months (Ibid). Most Congolese diets do not meet minimum standards of dietary diversity and meal frequency. FAO estimates that animal protein provides only 1 percent of dietary energy for most Congolese (Mathys and Remancus 2010). Rural households average 1.3 meals per day for adults and 1.6 for children during the lean season and 2.3 and 2.6 respectively during the harvest period (Ibid.).

Poor water, sanitation, and hygiene (WASH) indicators contribute to malnutrition and opportunistic infections among people living with HIV (PLHIV). Even with a diverse diet, infection from water- or food-

borne disease leads to loss of nutrients. Chronic infectious diseases can damage the intestinal lining, impairing nutrient absorption. In the 2007 DHS, only 48 percent of households reported having access to potable water (81 percent urban, 24 percent rural). In rural areas, 59 percent of households had at least a 30-minute walk to their water sources. Nationally, the vast majority of households (83 percent) did not have access to latrines, even in urban areas (79 percent) (Ministry of Planning and ORC Macro 2008).

Food insecurity in the DRC is exacerbated by ongoing unrest, especially in the east. Households generally depend on their own production, except in conflict-affected North and South Kivu, where much food has to be purchased. Production of major staple crops, especially cassava, has not kept pace with population growth. Most households practice subsistence agriculture, and some rely for income on informal employment, such as the sale of agricultural products, petty trade, and contract work. Women in the DRC have a central role in household nutrition and food security. Women's control over income is associated with better household nutritional status, but only 25 percent of women in DRC control their own income (Ministry of Planning and ORC Macro 2008). Women provide most labor on household farms but do not have secure land tenure. They generally take a lead role in feeding and watering livestock, milking, processing agricultural products, and small animal raising.

HIV both exacerbates and results from economic and food insecurity. The infection reduces work capacity and agricultural production. Decreased income and food production affect access to and biological utilization of food, which lowers immune status and increases vulnerability to opportunistic infections. Poverty leads to behaviors that increase the risk of HIV infection. Although HIV prevalence in the general population in the DRC, reported by UNAIDS at 1.3 percent in 2007 (USAID/DRC 2010), is lower than in many sub-Saharan African countries, infection rates have been measured at 33 percent in hospitalized tuberculosis (TB) patients and 19 percent among commercial sex workers.[1] Antenatal care (ANC) survey surveillance in 2008 showed a mean prevalence of 4.3 percent among pregnant women (USAID/DRC 2010), but only 5 percent of HIV-positive pregnant women were receiving antiretroviral therapy (ART) (WHO et al. 2009). The 2008 UNAIDS Update estimated that 25.6 percent of women victims of sexual violence in areas of armed conflict were HIV positive (Ibid.).

HIV can cause or worsen food insecurity for affected children because of loss of household labor and income, health care and funeral expenses, and care for ill household members. Adult illness and death can limit children's access to skills needed to earn livelihoods, especially in agriculture, which is the most common source of livelihood in many HIV-affected areas and often relies on indigenous knowledge. The 2009 OVC Rapid Assessment, Analysis, and Action Plan Situational Analysis estimated that the country had 8.2 million orphans and vulnerable children (OVC), representing one in four children (USAID/DRC 2010). If the proportion of OVC among all children remains stable, the country will have more than 10 million OVC by 2014 (Ministry of Social Affairs, Humanitarian Action, and National Solidatiry 2009). With no national system of social protection, weak basic social services, and poorly coordinated interventions for OVC, such a large population of vulnerable children will have worrying economic and social implications. Among the five strategic areas identified by the National Plan of Action for OVC Living in

[1] http://en.wikipedia.org/wiki/Demographics_of_the_Democratic_Republic_of_the_Congo.

the DRC 2010–2014 are mobilizing community and family responses for protection and support and ensuring access to basic social services, including nutrition care, for at least 15 percent of OVC by 2014.

Evidence has emerged on the clinical and nutritional benefits of nutrition interventions as part of comprehensive care and support of PLHIV. HIV can cause or aggravate malnutrition by reducing appetite and decreasing nutrient absorption at the same time that metabolic changes increase energy needs. Malnutrition may worsen the impact of HIV by weakening the immune system, increasing susceptibility to opportunistic infections, and reducing the effectiveness of treatment. Severe and moderate malnutrition on initiation of ART are associated with more than double the risk of early mortality. Research findings suggest that good nutritional status may prevent opportunistic infections and slow disease progression and death. Because the higher energy needs of PLHIV can stress vulnerable households, targeted food support can reduce economic stress and improve treatment uptake, adherence, and effectiveness.

Various development partners implement aspects of the 2010–2014 National HIV/AIDS Strategic Framework. In 2009 the United States and DRC Government developed a Partnership Framework to support implementation of the national HIV and AIDS response under the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The Global Fund for AIDS, Tuberculosis, and Malaria (GFATM) and USAID are the largest donors for HIV prevention and treatment. USAID/DRC supports HIV activities in high-prevalence areas of Kinshasa, Matadi, Lubumbashi, and Bukavu.

2. Current U.S. Government (USG) Nutrition, Food Security, and HIV Programming in the DRC

In light of the Global Health Initiative approach, PEPFAR/DRC emphasizes reduction in morbidity and mortality in women and girls through prevention of mother-to-child transmission of HIV (PMTCT), providing nutrition support to improve wellbeing of mothers and children in PMTCT programs and PLHIV before and during ART, and mitigating the impact of HIV on OVC. USAID/DRC is working with other donors to coordinate a response to the country's urgent nutrition needs.

A. Current Approaches to Nutrition and HIV Programming

The assessment team visited two USAID/DRC-supported projects and one CDC/DRC-supported project. The **Integrated HIV and AIDS Program/*Programme du VIH/SIDA Integré au* Congo (ProVIC)** is the largest USAID/DRC HIV project. ProVIC supports HIV counseling and testing (HCT), PMTCT, psychosocial and medical care for PLHIV and OVC, nutrition counseling and food support, vocational training, quality improvement, treatment of TB/HIV co-infection, home-based care (HBC), and gender-based violence mitigation. PATH, the consortium partner responsible for nutrition, is developing a nutrition package that includes therapeutic and supplementary feeding for malnourished OVC and PLHIV. ProVIC also works to strengthen the capacity of the Ministry of Social Affairs, Humanitarian Action, and National Solidarity (MINAS) to implement the national OVC action plan. ProVIC uses the Champion Community approach to help communities identify problems and local resources to solve them. Examples of

Champion Community activities are growing food to improve infant and young child feeding and renovating classrooms in return for waiving school fees.

The **Integrated Health Project/*Projet de Santé Integré* (PROSANI)** works to strengthen and increase utilization of primary health care services, including maternal and child health, nutrition, and HIV and AIDS. Led by Management Sciences for Health (MSH), PROSANI collaborates with the National Multisectoral AIDS Control Program/*Programme National Multisectoriel de Lutte contre le SIDA* (PNMLS) to support PMTCT in 470 sites. Nutrition-related activities will include promotion of exclusive breastfeeding, growth monitoring, micronutrient supplementation, and improved water collection and hygiene, as well as collaboration with ProVIC on PMTCT. PROSANI will work in 28 of the 34 health zones in South Kivu Province. PROSANI and ProVIC have good collaboration and may both work in some PMTCT sites in the province.

In the east both ProVIC and PROSANI work in health zones and some of the PMTCT sites previously supported by the AXxes Project, which worked until late 2010 to strengthen primary health care. The ProVIC team in Bukavu is building on activities of AXxes, ACF, Family Health International (FHI), and UNICEF in the province. PROSANI began by assessing the capacity of the AXxes PMTCT sites and supplying missing equipment and supplies. It will next work with local partner NGOs to train clinic and community health providers in PMTCT using the national HIV curriculum. The project will integrate nutrition and economic strengthening activities progressively from Year 2.

The **Centers for Disease Control and Prevention (CDC)** support strategic information, surveillance, institutional capacity development, and laboratory services for blood and injection safety, PMTCT, HIV/AIDS care and treatment, and TB/HIV co-infection. CDC is working with the Ministry of Public Health (MOH) to scale up a Family-Centered Continuum of HIV Services model in selected PMTCT sites in Kinshasa. CDC provides technical assistance and capacity building to the national HIV reference laboratory for early infant diagnosis (EID), supports ANC sentinel site surveillance, and supports an HIV/AIDS Hotline that provides anonymous information by trained counselors. In addition, the Centers for Disease Control and Prevention (CDC) provides technical support for family-centered HIV services, strategic information and disease surveillance, and institutional capacity development in the DRC. USAID/DRC would like to leverage resources for a multi-sectoral and sustainable approach to improving nutrition for women and children through these and other programs.

The **University of North Carolina (UNC)** provides care and treatment for PLHIV, from psychosocial evaluation through medical treatment through community follow-up, in Kinshasa's main pediatric AIDS hospital, Kalembe Lembe. UNC funds ARVs, CDC/DRC pays salaries, the **International Center for AIDS Care and Treatment Programs (ICAP)** supports the laboratory, and other funding comes from the Global Fund. The CDC-funded ICAP program at this hospital also targets families of HIV-positive children. The program refers children with severe acute malnutrition (SAM) and complications to the hospital's Acute Malnutrition Unit, which no longer provides therapeutic milks or Plumpy'nut. The hospital is linked with over 20 PLHIV support groups. When patients stabilize on treatment, the hospital tries to find funds for vocational training or links patients to the local NGO AMO Congo to keep patients from relapsing into malnutrition. CDC/DRC has a sub-agreement with **Action against Hunger/*Action contre la Faim* (ACF)** to

provide nutrition training and support in 23 of the facilities supported by ICAP and about 50 other facilities funded by CDC.

B. Strengths and Weaknesses of Current Nutrition Approaches

With no standardized national package of nutrition support for PLHIV and OVC, implementing partners have defined interventions based on available resources and/or the experience of earlier projects. Important issues related to current nutrition and food security programming that were identified in discussions with partners and visits to health facilities are discussed below.

Vertical programming

One of the legacies of the conflict years is channeling of donor funding through NGOs rather than directly to the government, leaving a program orientation that is difficult to shed. Because many projects are short term, implementers tend to use a vertical approach for service delivery support, with their own teams on the ground. As a member of the Inter-agency Task Team (IATT), USAID supports using PMTCT as an entry point for preventive, curative, and support services for HIV-positive mothers and their infants and families. Many of the implementing partners visited (particularly UNC) followed this family-centered approach. However, many health care providers see nutrition as a stand-alone intervention implemented by international NGOs rather than an integral part of health services. They may not implement the service if the trained staff are not present and stop it once the project ends.

A related observation is that implementing partner coverage of services offered is limited even within supported health zones. Consequently the focus has shifted from the health zone to a facility-centred approach.

HIV testing coverage

Nutritional deterioration in PLHIV begins before it is confirmed by anthropometric measurements. This is because expansion of extra-cellular water volume usually masks muscle and fat loss. Counseling on how to prevent wasting therefore needs to start before PLHIV show signs of weight loss.

Late diagnosis of HIV is related to late diagnosis of malnutrition in PLHIV. The 2007 DHS reported that only 9 percent of men and women in the country knew their HIV status and only 2.2 percent of pregnant women had been tested for HIV (Ministry of Planning and ORC Macro 2008). As a result, most people are diagnosed with HIV at an advanced disease stage, when more than 25 percent are wasted. Almost all the PLHIV enrolled in program visited were already on ART, confirming low testing coverage and late diagnosis. With good HIV testing coverage, fewer than 30 percent of adult PLHIV need ART at the time of HJV diagnosis.

Without health center data from systematic nutrition assessment (other than weight for pregnant women) in the health facilities visited, it was difficult to estimate the proportion or severity of malnutrition in PLHIV at the time of enrolment in ART. The presence of wasting at the time of initiating ART is associated with up to a six-fold increase in mortality during the first 6 months of ART, even with

nutrition intervention. Many opportunistic infections (OIs) that are difficult to diagnose and treat in developing countries are also associated with wasting, partially explaining the high mortality observed in wasted PLHIV. Later presentation translated into very low CD4 count at the initiation of ART and severe malnutrition due to late identification of nutritional co-morbidity are among the stronger predictors of early mortality in PLHIV. Cumulative mortality at 12 months after starting ART was found high in at least two programs in the DRC—6.4 percent in Bukavu in a *Médecins sans frontières* (MSF) program and 10 percent in a cohort of children in Kinshasa.

The MOH has adopted the provider-initiated testing and counseling (PITC) approach for TB and would like to roll it out for HCT. This approach tests people routinely unless they decline (opt out). However, all health facilities visited said that HIV testing was opt-in (informing clients of the option and asking whether they would like to be tested). The MOH has not yet disseminated or oriented health workers on the policy, perhaps because of the resource implication of the increased caseload for testing and nutrition care and support.

Curative program approach

Related to late diagnosis of both HIV and malnutrition is a concentration on curative rather than preventive services. Low caseloads because of low HIV prevalence are resource intensive and limit coverage of services. Implementing partners working in nutrition tend to focus on identification and treatment of acute malnutrition, which worked through decades of interventions in an emergency context. Inadequate attention to improving access to health care, clean water, and food security has had little impact on chronic malnutrition.

Weak coordination of nutrition and HIV activities

Strong, effective donor coordination is a prerequisite for scaling up NACS. Donor work through NGOs and church structures for direct service delivery, a practical necessity for essential humanitarian interventions, has produced impressive results in the health sector, but it is equally important to help the government deliver social services in the long term. Almost every person interviewed during the assessment, from government and non-governmental organization staff to health care providers in health centers, raised the issue of lack of coordination of HIV services.

The *Programme National Multisectoriel National de Lutte contre le Sida* (PNMLS) has not yet been able to exercise its role and prerogative fully, and coordination among ministries and other bodies involved in HIV mitigation, care, treatment, and support is limited. One of the consequences is the promulgation of inconsistent policies even within the same ministry. Reproductive Health Department in the South Kivu Provincial Health Office had not been updated on the change in national IYCF policy for HIV-positive mothers, while provincial PNMLS staff cited it readily. Government capacity for exercising technical leadership for nutrition and HIV is also limited by lack of exposure to practice in other countries. Intra- and intersectoral coordination is a priority action in the PNDS 2011–2015, but there is no national policy that outlines how PRONANUT and the Ministry of Agriculture (MINAGRI) should work together.

The National Nutrition Cluster is part of the UN humanitarian reform to strengthen partnerships between NGOs, IOs, and UN agencies, but Nutrition Cluster meetings do not include all partners (especially non-humanitarian aid partners) working in HIV or nutrition. Moreover, the Nutrition Cluster and Food Security Cluster do not meet regularly. Provincial Food Security and Nutrition Clusters are not yet well organized.

The constitution of the DRC allocates a substantial proportion of revenue to the provinces. Provincial PRONANUT coordinators have a mandate to organize regular intersectoral coordination meetings and provide technical and logistical assistance for nutrition activities, but this capacity varies among regions. Although the provincial health system is responsible for technical supervision of health zones, the focus on health zones has neglected capacity building for the provincial health system.

Lack of approved national guidelines for nutrition care and support of PLHIV

An enabling policy environment and consistent national guidelines are critical for standardized and effective clinic-based nutrition and HIV services in the DRC. Without national guidelines, service provider capacity to contextualize integration of nutrition assessment, counseling, and support at operational level is limited. The "National Guidelines for Nutrition Treatment of People Living with HIV"/*Protocole National de Prise en Charge Nutritionnelle des Personnes Vivant avec le Virus de l'Immunodéficience Humaine* drafted by PRONANUT, UNICEF, and ACF in 2008 include care principles to help agencies and practitioners make management decisions about nutrition screening and develop their own protocols. However, the guidelines do not meet the definition of "protocol" as a detailed outline of steps (set of instructions) to follow to prevent or manage a condition and lack clear instructions on what to do for most situations requiring nutrition intervention faced by HIV service implementers. Donors have not agreed on some of the content, for example, the optimum diet of PLHIV by age and whether to include regional dietary recommendations. Some of the recommendations need updating, including the use of percentages for weight-for-height (NCHS standards) instead of z-scores (2009 WHO Child Growth Standards). The delay in finalizing and disseminating these guidelines is a barrier for uptake of technically sound and standardized nutrition and HIV services.

Inadequate attention to nutrition in and HIV-free infant survival PMTCT services

HIV-positive pregnant and lactating women without AIDS-related symptoms need to consume 10 percent more energy than non-infected adults of the same age and physical activity level if they do not have HIV-related symptoms and 20–30 percent more if they are symptomatic, in addition to the increased requirements for pregnant and lactation. In a well-meaning attempt to avoid HIV-related stigma (or because of lack of knowledge), health care providers in sites visited gave HIV-positive pregnant and lactating women the same nutrition messages as women without HIV. Group counseling was the only counseling provided, even for mothers diagnosed with HIV. Health centers visited weighed pregnant women regularly and did GMP for children under 5 (GMP coverage was reported to be weak) but did not appear to do any other regular nutrition assessment.

HIV-positive mothers need counseling on optimal infant feeding to avoid transmission of HIV. The MOH has adopted the 2010 WHO recommendation to counsel HIV-positive women to breastfeed exclusively for 6 months, then introduce appropriate complementary feeding and continue to breastfeed for 24 months if both mothers and infants are on ARVs. Most sites visited, however, were still recommending that HIV-positive mothers practice exclusive breastfeeding for 6 months and stop at 6 months and replace with formula if safe replacement feeding is possible (PRONANUT 2008b).

The risk of growth faltering and acute malnutrition increases if breastfeeding stops abruptly at 6 months. Health care providers did not have clear guidance on how to wean abruptly or (except for limited and intermittent supply of free formula for mothers who were advised or chose not to breastfed) what to feed infants afterwards. No support (even not nutrition assessment and counseling) was given to promote optimal growth after the cessation of breastfeeding.

The goal of PMTCT should not be just to reduce HIV transmission but also to maximize HIV-free survival by preventing mortality from other primary causes, e.g., pneumonia, diarrhea, malaria, and malnutrition. HIV-exposed infants are seen at 6 days, 6 weeks, 6 months, and 18 months, with no special monitoring or follow-up thereafter. The health centers visited were giving HIV-infected and -exposed infants the same post-natal attention (during growth monitoring and sick child visits) as HIV-negative infants, despite their higher risk of growth faltering, acute malnutrition, and life threatening episodes of illness. There was no clear guidance for Cotrimoxazole prophylaxis. Some nurses do home visits to follow up children who have not returned for HIV testing, but loss to follow-up of HIV-exposed children is high by the time of testing at 18 months.

Nutrition care and support of PLHIV and HIV-exposed infants and young children

The assessment team did not hear of any attempts to integrate nutrition into ART services. Health care providers met during the assessment had limited skills in nutrition counseling or nutrition management of malnutrition in PLHIV. OVC support by local PEPFAR/DRC partners is largely limited to psychosocial support, including economic strengthening.

Breastfeeding is almost universal in the DRC, even among HIV-positive mothers, but the prevalence of exclusive breastfeeding at 6 months is low. The quality of complementary food is inadequate to meet the requirements of infants 6–12 months old, putting children at risk of nutrient deficiencies. In the health centers visited, some health care providers and *relais communautaires* had been trained in infant and young child feeding (IYCF), but the staff gave caregivers the same nutrition messages for HIV-positive children as for children without HIV. Under-5 services are only offered once a month in some of the health centers visited, limiting possibilities for regular nutrition assessment.

Most health care providers in PEPFAR- and CDC-supported facilities were trained in the previous version of the national guidelines for treatment of acute malnutrition and implement community-based management of acute malnutrition (CMAM) where supplies are available. The revised *Protocole National de Prise en Charge de la Malnutrition Aiguë* (PRONANUT 2008b) includes an HIV component for children, adolescents, and adults with moderate to acute malnutrition but has not been distributed to health centers. Health centers refer acutely malnourished PMTCT, HCT, ART, HBC, and palliative care

clients to intensive therapeutic nutrition units/*unités nutritionnelles thérapeutiques intensives* (UNTI) for rehabilitation of SAM or intensive outpatient nutrition units/*unités nutritionnelles thérapeutiques ambulatoires* (UNTA) for rehabilitation of MAM.

In some areas *relais communautaires* have been trained to do community case finding of children with SAM using mid-upper-arm circumference (MUAC) and follow up clients on ART to encourage treatment. Health center staff consistently mentioned, however, that lack of incentives affect the *relais*' motivation and retention.

Uncertain sources of specialized food products to treat acute malnutrition

One of the biggest challenges PEPFAR/DRC implementing partners face is finding sustainable sources of therapeutic and supplementary food for acutely malnourished PLHIV and OVC. SAM requires treatment with ready-to-use therapeutic food (RUTF). UNICEF has supplied therapeutic milks and Plumpy'nut to health centers implementing CMAM for rehabilitation of children under 5 with SAM, but stock outs mean that the CMAM services are not always available. Severely malnourished PLHIV also need therapeutic and supplementary feeding to recover from acute malnutrition.

RUTF is costly and sometimes difficult to procure. A production facility in Katanga is beginning the lengthy process of UNICEF certification of its product but will only be able to supply that province. UNICEF procures imported RUTF but plans to hand over procurement of CMAM supplies to PRONANUT.

Fortified blended foods (FBF) such as corn-soy blend (CSB) have long been used to treat moderate acute malnutrition (MAM), though with limited documented success. The World Food Programme (WFP) provided CSB for MAM and other household food rations for PLHIV and OVC under AXxes in the east but has suspended this support pending more transparency and accountability in the beneficiary lists of local NGOs. WFP earlier provided food support to pediatric AIDS patients at Kalembe Lembe Hospital and their families, but this support has also ended.

Once they recover, malnourished PLHIV and OVC may need continued food support to prevent relapse. PLHIV have higher nutrient requirements than uninfected people, and the requirements continue to increase as they move from the asymptomatic to symptomatic phase. ARVs increase appetite, and lack of food worsens the drugs' side effects. Better nutrition increases the effectiveness of ART. Partners are therefore looking for innovative solutions for sustainable food support for clients after treatment for acute malnutrition.

Weak targeting of food support

Most of the food support for PLHIV and ORT in sites visited by the assessment team had been targeted based on budgets and food availability rather than standardized anthropometric criteria or a household and food security vulnerability criteria. There was no distinction among nutrient needs for different phases of malnutrition (stabilization, rehabilitation, and maintenance).

Resistance to task shifting

South Kivu has only three pediatric HIV treatment sites, two in Bukavu and one in Uvira. At Kalembe-Lembe Pediatric Hospital in Kinshasa, some children in care were from up to 500 km away. Many malnourished PLHIV interrupt inpatient treatment of SAM to return home after stabilization. Although some provinces have many unemployed doctors and nurses, most rural areas and some disadvantaged urban settings lack access to health care. The capacity of the government to increase the health care workforce is very limited. One solution to a shortage of higher-level health care providers and health services in remote areas is to train community cadres in tasks otherwise done by clinic health care providers. Although PROSANI has been discussing with the MOH the possibility of training volunteers who staff community care centers in rapid HIV testing, the assessment team noted institutional and health care provider resistance to task shifting in general and particularly for HIV services.

M&E

Health center adherence to reporting was said to be excellent in terms of completeness, accuracy, and timeliness. Paper-based reporting is in place, and the team saw completed and updated registers in health centers. However, the only nutrition-related indicators seen were weight for pregnant women and nutritional status for referral of children with SAM.

Current U.S. Government (USG)/DRC programming approaches in food security/economic strengthening for PLHIV and OVC are summarized below.

C. Current Approach to Economic Strengthening in HIV Services

In interviews with USAID/DRC implementing partner organizations and key resource persons, a common vision emerged of the interrelationship between food security and economic strengthening as they relate to positive nutrition outcomes (figure 1). People often learn their sero-status after they have been bedridden—sometimes several times—with an HIV-related illness. Starting ART in an already fragile health, nutritional, economic, and psychological state is less than ideal. Current support for PLHIV includes time-limited food supplements to rehabilitate PLHIV so they can adhere to ARV treatment and resist opportunistic infections. However, once rehabilitation is successful and food supplements are withdrawn, clients often relapse into malnutrition because they lack resources to buy adequate food. In this "curative context," project planners look for ways to strengthen household livelihood strategies. The typical response is to support PLHIV, OVC, and their caregivers by engaging them in income generating activities (IGAs).

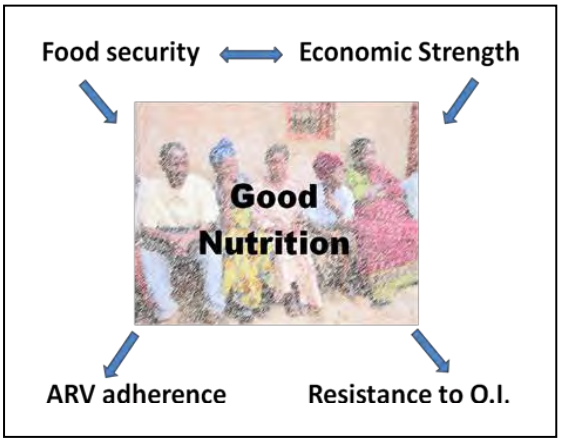


Figure 1. Relationship between food security, economic strengthening, and nutrition

1) Assessed Need

The greatest economic impact of HIV andAIDS is associated with caring for PLHIV, losing productive adults to AIDS, paying for funeral costs, and absorbing orphans (Armstrong 2000). Families and communities shoulder much of this burden, and the epidemic therefore takes the heaviest toll at the household and community level (Over 1998).

Multiple research findings support household economic strengthening and promoting sustainable livelihood strategies for food-insecure people. USAID (1995) noted that "the primary cause of food insecurity is the continued lack of economic opportunity to produce adequate amounts of food or to obtain sufficient income to purchase adequate amounts of food." It is also well documented that as incomes rise, poor households spend more on food, purchase a more diverse variety of foods, and shift to higher-quality foods with greater nutritional value (Behrman 1995; Diskin 1995; Kennedy 1989). The success of a household's livelihood strategies determine whether its members will be able to manage risks, cope with stresses and shocks, and build or replenish assets— all of which are necessary for food security.

Agricultural development is another key factor in attaining food security. It is widely accepted among development practitioners that improvement agriculture is essential for better-quality economic growth, which will benefit the majority of impoverished Congolese (Tollens 2008). According to the 2008 World Development Report, agricultural growth has a powerful impact on poverty across all country types. Estimates show that GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture (Ibid.).

Attaining food security in the DRC is particularly challenging because of the country's almost four decades of mismanagement and armed conflict. The rural sector has borne the brunt of the destruction, and poverty indicators have reached catastrophic dimensions (World Bank 2006). D Declining agricultural productivity and the impact of HIV are mutually reinforcing. HIV makes rural households more susceptible and less resilient to external shocks.

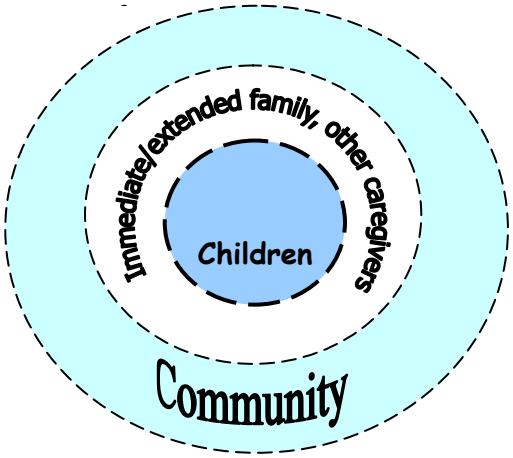
Box 1. HIV and AIDS-related crises

- ✓ Prolonged illnesses of spouse or extended family member
- ✓ Multiple deaths in close succession
- ✓ Death and burial
- ✓ Care of orphans, particularly the cost of their education.

Studies that also examined the impact of HIV and AIDS on the household emphasize that the economic burden of HIV and AIDS-related crises can push households inexorably into poverty, wiping out the economic resources of people who never thought they would be poor as well as those who were already worried about their next meal (box 1). Households play multiple roles in support of children and other community members affected by HIV and often serve as the backbone of a community safety net. Household members with extremely weak household economic capacity need increasing external support and cannot care adequately for their children or support their neighbors.

Therefore, the starting point for creating effective responses to the impacts of the pandemic is recognizing that *families* and *communities* are the principal, albeit informal, safety nets — especially for children and youth (figure 3).

Figure 3. Safety nets



Children and adolescents not only depend on the support of their families but also contribute to their households' economic capacity. In rural areas they work in family agricultural activities, in cities they often find part-time employment in the informal sector, and in the home they are often principal caregivers for younger siblings and older relatives. Children who attend school (as do most of those who work and serve as caregivers) are an important household investment in long-term economic opportunity—their education is an accumulated asset of potential benefit to the entire household. Some households affected by HIV turn to older children to take on the role of primary caregivers and/or breadwinners. Some households are headed by children. Finally, some children and adolescents join non-traditional households as they move out on their own or with other children and become responsible for their own safety and well-being.

Consequently, interventions will have significant, sustainable impact to the extent that they strengthen ongoing capacities of affected families and communities to protect and care for children. However, even as the well-being of children and youth depends on the capacity of the overall household to maintain or stabilize its collective assets, these resources are stretched as parents become caregivers for extended family members who are ill, become chronically ill themselves or take in orphaned children. Children are affected in other ways too. Not only do they lose one or both parents, the reduced resources of their households often mean that they can no longer attend school.

Without efforts to slow down or halt the downward slide of economically vulnerable households, 1) a larger number of households that become extremely vulnerable will overwhelm the capacity of community safety nets and 2) fewer households will be economically strong enough to contribute to community safety nets.

In a paper examining the dynamics of household economic portfolios, Chen et al (1996) explain household economic coping behavior in terms of a) reducing risk and b) managing loss.

a) **Risk reduction** strategies include the following:

- Choosing low-risk income-generating activities that earn modest, but steady, returns
- Diversifying household crop production and/or income earning activities
- Building up savings and in-kind assets (e.g., livestock, jewelry, household goods)
- Preserving extended family and community ties

b) **Loss management** techniques fall into three stages.

- *Stage one*—Strategies are reversible because they involve the liquidation of protective assets.

- *Stage two*—Consequences are difficult to reverse because they involve the sale of productive assets, undermining future household capacity to generate income and produce food.
- *Stage three*—Households become destitute with few, if any, remaining coping mechanisms.

Avoiding stages two and three depends on the resiliency of stage one strategies. Stage one, in turn, depends on the successful outcomes of risk reduction activities. Therefore, strengthening risk reduction activities of affected households and helping them avoid stages 2 and 3 will reduce their vulnerability to poverty—and, by extension the impacts of HIV and AIDS.

The following points summarize the importance of considering the economic aspects of supporting OVC, their caregivers, and their communities to mitigate the impacts of HIV:

- Strengthening the economic capacity of children, families, and communities are all important to improve the safety and well-being of OVC.

- Economic strengthening does not automatically result in improved child well-being (additional action such as community sensitization and mobilization may be needed to ensure this link), but economic strengthening is essential to sustainable improvements in children's safety and well-being.

- Certain microenterprise development services have been effective in strengthening household economic capacity.

2) Current Target Groups for Economic Strengthening Support

"Most vulnerable" groups referred to by development partners in the DRC include PLHIV, OVC, and their caregivers. "Most at-risk populations" (MARP) include sex workers, truck drivers, and others most vulnerable to HIV infection.

Many of the beneficiaries interviewed were PLHIV and belonged to support groups that partners help facilitate. These groups receive psychosocial counseling and training in Positive Living. Health facilities identify extremely vulnerable ART clients as clinically malnourished and in need of specialized food products and typically refer them to other organizations that offer food or economic support through promotion of IGAs.

Support groups play an important role in helping new members come to terms with their positive HIV status and change their outlook from one of despair to one of hope. One support group member explained that when she found out she was HIV positive, she "... got rid of everything [from her business] and had nothing at all." Her group helped her restore hope for the future through the training they received on Positive Living, and she is now back in business.

Typically, PLHIV who receive support from PEPFAR/DRC-supported projects have been through several, mainly health, crises that have seriously depleted household resources by the time economic support is provided. Because such people were in a seriously diminished state, the economic support tends not to have the desired long-term impact.

More important, however, is that explicit targeting of economic support based on HIV status appears to exacerbate stigma and create jealousy or resentment, particularly when most other people in the area perceive also themselves as poor. Targeting based on HIV status can also distort behavior such that people try to fit eligibility criteria in order to get assistance. The team heard of clients at health centers being disappointed with negative HIV test results because this meant they wouldn't get material support meant for PLHIV. Some PLHIV in the DRC have come to NGOs for blocking access to benefits they feel entitled to or worse, keeping the material support for themselves.

An unintended negative consequence of handouts is the creation of what mental health professionals call "surplus powerlessness." This is defined as a set of feelings and beliefs that make people perceive themselves as even more powerless than they are and leads them to act in ways that confirm them in their powerlessness (Lerner 1986). It is an internalized belief that change cannot occur, resulting in apathy and unwillingness to struggle for more control and influence (Lord et al. 1993). After decades of conflict and humanitarian aid, this attitude appears to be widespread in the DRC and can seriously undermine efforts to develop sustainable livelihoods among PLHIV, OVC, and their households. One health center nurse spoke of an emerging mentality among PLHIV that "they have nothing and can do nothing." Another informant felt that NGOs aggravate this mentality if they approach beneficiaries with pity, creating a passive population that gives up easily and genuinely believes it must wait to be rescued.

Explicitly targeting categories of people for material support distorts behavior, exacerbates stigma, and creates resentment. It can cause disputes in the community about who should or should not be helped, particularly when everyone in the community is poor. Moreover, development partners tend to provide economic support when PLHIV and their households are already at their most vulnerable. In this situation, solutions leading to economic independence are expensive and time consuming and have limited chance of success. Therefore, it is equally important to prevent the erosion of economic resources by helping households strengthen their livelihoods and build their asset base before HIV and AIDS-related crises have an impact as it is to rescue people from crises.

3) Current Economic Strengthening Approaches

Time did not allow an in-depth evaluation of the economic strengthening activities reviewed during the field visits, but most organizations interviewed could not adhere to industry standards or PEPFAR guidance regarding sound economic strengthening practice. In addition, the outreach of each activity was limited and not sustained after project funding ended.

The most common form of economic strengthening support was grants, usually in the form of seed capital to PLHIV for business start up. The grants were generally preceded by business management and/or production skills training. The vehicle for grant delivery tended to be a support group for PLHIV, and there seemed to be a tendency to support group-run businesses rather than individually run businesses. In some cases, the preference for group-run IGAs appeared to respond more to organizational needs than to market-driven or business-related reasoning.

Generally, the economic strengthening approaches observed consisted of:

1. Identifying vulnerable PLHIV, MARPs, OVC, and their caregivers according to HIV status and health/nutrition criteria developed by the organization or by household vulnerability criteria
2. Assessing income needs and matching them to a business that would, in theory, fulfill these needs. Some partners also took past experience into account. Some conducted feasibility studies to determine the profitability of various types of business. Others preferred to promote group-run businesses.
3. Providing training—business management and production skills, if necessary—for the type of business identified. AMO Congo took this a step further and initiated a "trade school" approach for OVC. `
4. Providing grants or in-kind start up "kits." Femme Plus accompanied grantees to purchase the inputs needed to start the businesses.
5. Encouraging support group members to contribute small amounts (100 to 200 CDF) to a "social fund" that could be used for emergencies and/or to finance future IGAs

D. Strengths of Current Economic Strengthening Approaches

In general partners felt that beneficiaries, especially OVC and younger PLHIV, preferred business and production skills training and grants. AMO Congo OVC beneficiaries are now managing an Internet café thanks to training and grant support.

Providing grants enabled partners to reach people who are traditionally unable to access standard microenterprise services. In most cases, partners tried to tailor grant assistance after training to individual clients. Grants, particularly accompanied by production skills training, enabled some clients to start bigger businesses more quickly than they would have without the grants.

Some partners encouraged contributions to "support group-managed social funds" so that members would have access to a sustainable source of capital for their individual IGAs after benefitting from grants. In Kinshasa the Society of Women against AIDS in Africa (SWAA) promoted savings clubs using a variation of CARE International's village savings and loans association (VSLA) methodology. In Bukavu under the AXxes Project, Femme Plus instituted a type of revolving fund in which grantees paid back their grants so the funds could be recycled and made available to more people.

E. Weaknesses of Current Economic Strengthening Activities

Nearly all the partners interviewed by the team felt economic strengthening strategies could be improved, noting the following areas of concern:

- Questionable sustainability of the grant-based approach
- Jealousy sparked among community members by the current approach
- Limited capacity of grants and training to attain scale of outreach necessary
- Low rate of success among IGAs (reportedly as low as 10–45 percent in IGAs started after training and grants)

The team noted the following additional areas of weakness:

- Partners seemed to assume that beneficiaries of economic support would be more successful if they focused on one small business. This is an indication that partner staff do not understand the role of survivalist and micro-business, the informal sector, and risk management strategies of economically vulnerable populations. Vulnerable households are very sensitive to risk and intuitively understand that depending on one source of income is ill advised, even if it has the potential to earn more income than several small activities. Typically, many programs overlook or discount what vulnerable households do to earn money because profits seem too small. Project designers, through the best of intentions, tend to encourage bigger businesses. When the "new" business requires significant management and production skills or capital, vulnerable households are forced to take on more risk than they can absorb. In addition, people funded by grant money tend to take on more complicated businesses than they can handle. Training can help, but there is no better teacher than experience, particularly in the business world. If someone fails at this bigger, riskier business, the loss will be severe and it will be very difficult to recoup and start over.
- As mentioned earlier, grants also tend to distort client behavior and lead to a "handout" mentality, making it difficult to identify genuinely deserving recipients. Beneficiaries also tend to take an "easy come, easy go" attitude toward grants.
- Although the team had no opportunities to verify this, people in similar projects who receive grants may succeed at the expense of other self-employed people, especially when the market can absorb only a few of that type of business. This floods the market and "robs Peter to pay Paul."
- Grants are even less effective for starting new enterprises than they are for expanding existing businesses.
- Production skill training provides beneficiaries with one option for self-employment. If that option fails, beneficiaries are no better off than before and could be worse off, depending on the opportunity costs (e.g., providing care or seeking other forms of income) associated with the training. Similarly, beneficiaries gain nothing when they realize well into the training that they lack talent for that skill. This is especially true for OVC who do not yet have life experience to guide them in choosing a skill to acquire. Training also raises expectations that grants will follow, particularly for production skills that typically require significant capital for start up.
- The revolving fund approach used by Femme Plus under the AXxes Project did not have the expected result. Members of one support group that received grants reported that some beneficiaries refused to repay the money because they felt it had been a gift—"How can we pay back a gift?" At the end of the project, Femme Plus told the group they would get back the money they repaid if they would use it to finance a group-run business. The support group decided on a community field for agricultural production and raising small livestock. However, when the money was given to the group, members took shares to finance their individual needs.

- Project staff who became disillusioned with the results of the grant-based approach moved to inject some type of microcredit component (such as a revolving loan fund). Box 2 is an excerpt from a study in Kenya and Uganda that mirrors what is happening among AIDS support organizations (ASOs) in the DRC.

Box 2. Economic strengthening lessons learned by AIDS support organizations (ASO) in Kenya and Uganda

In each case the ASO began by providing social and health services to PLHIV, widows whose husbands had died of AIDS, or caregivers of AIDS orphans. In general the programs exhibited a common evolution towards credit as follows:

- Initial access to free goods and services (including grants);
- Inability to sustain services because of donor need to spread resources more widely
- Increasing pressure from target clientele to address the economic effects of HIV/AIDS;
- Decision to "help people to help themselves" through encouraging/supporting their income generating capacity using training, grants and/or credit; and
- (For those who started out serving PLHIV) eventual expansion of service from infected to affected caregivers.

Common trends:

- **Poor repayment rates**. The repayment rate among the organizations interviewed ranged between 65 and 86 percent. Staff observed that when late payers suffered no consequences from non-repayment, those previously paying on time began falling behind in their payments.
- **Eroding loan capital and/or devolving loan fund.** Most program staff referred to their loan capital as a revolving fund. However, in every case the loan fund decreased by as much as 50 percent in 2 years—primarily as a result of the repayment problems alluded to above. Eventually, they would need to replenish the capital, but plans to do so were sketchy at best.
- **Very limited outreach capacity.** Organizations have other services to provide to their clients. Staff typically divide their time among the various services (including credit). The numbers of clients they can reach is small.

Building [economic strengthening services] into a program with a social or health agenda has typically been a development challenge. Nevertheless, because of the strong demand for such services, organizations feel compelled to respond. Over time, most organizations decide that if they are going to offer such services to their target clients, they need to create a separate mechanism to do so. They have also learned that such a mechanism needs to adhere to sound practices. In the end, some of these social development organizations conclude that they are not well suited to deliver economic strengthening services and either abandon the effort or seek out a specialized institution which can serve clients more effectively."

Source: Donahue (Thompson), Jill, Kamau Kabuccho, and Sylvia Osinde. 2001. "HIV/AIDS—Responding to a Silent Economic Crisis among Microfinance Clients." Nairobi: Micro-Save-Africa.

3. Recommendations for Use of COP 10, COP 11, and COP 12 Funds

This section lists separately recommendations for strengthening PEPFAR/DRC nutrition and food security programming and recommendations for improving economic strengthening programming. The recommendations for each area are further divided into 1) options to support existing or planned food security, nutrition, and HIV activities and 2) recommendations for new programs that can be implemented rapidly using PEPFAR/DRC resources.

A. Recommendations for Nutrition and Food Security Components of HIV Services

Below are recommendations from the FANTA-2 team on ***options to strengthen existing or planned nutrition, food security, and HIV activities***. USAID/PEPFAR partners should have sufficient technical and budget resources to implement most of the proposed actions with local partners.

1. Support PRONANUT in revising and finalizing the national guidelines for nutrition care of PLHIV.

USAID/DRC has allocated funds to build PRONANUT capacity to develop nutrition strategies and policies. Objective technical assistance is needed to organize and facilitate a workshop of the stakeholders involved in drafting the guidelines to address outstanding issues. It will be important to harmonize the national guidelines for nutrition care of PLHIV with the national guidelines for treatment of acute malnutrition. With support from USAID, FANTA-2 has worked with ministries of health in Côte d'Ivoire, Ethiopia, Namibia, Tanzania, and Zambia to develop national nutrition and HIV guidelines and to harmonize them with national guidelines for management of acute malnutrition in children. The UNC team at Kalembe Lembe Hospital has relevant expertise and experience to work with PRONANUT in updating the guidelines. PRONANUT should lead regional adaptation of the guidelines. The following elements are needed to finalize the guidelines:

- Well-defined target audience (e.g., clinic-based health service managers and providers)
- Clear objectives of nutrition care and support for different groups of PLHIV and OVC.
- Steps (standard operating procedures) to achieve each objective and actions for different actors at each step
- Harmonization with national guidelines for treatment of acute malnutrition
- Entry and exit criteria for treatment with specialized food products
- Clear guidance for provincial health offices on how to translate nutrient requirements (e.g., examples of foods from each food group) into acceptable and affordable dietary recommendations for each region. Attempting to include menus and recipes tailored to each region would be a massive undertaking, as there is cultural diversity in each region and Congolese who move from one region to another generally adapt well to new food habits.

- Indicators for monitoring and reporting on nutrition and food security interventions in HIV services as well as who is responsible for collecting and reporting data on each indicator, to whom, and how often.

- If possible, standardized national monitoring and reporting forms for nutrition assessment and treatment, procurement and distribution of specialized food products, and household food rations.

2. Strengthen PRONANUT capacity to plan, supervise, and monitor nutrition interventions for PLHIV.

PRONANUT is charged with national and provincial coordination of nutrition activities. Several international partners collaborate with PRONANUT for staff training and praise the quality of PRONANUT's nutrition surveys. However, PRONANUT's capacity is limited for coordination of nutrition activities for PLHIV and OVC, convene national technical meetings on technical issues, and interact with international technical experts on issues such as therapeutic feeding. The following actions are recommended to strengthen PRONANUT's national leadership role in nutrition and HIV:

- Fund participation of key PRONANUT staff in regional and global scientific and policy meetings on nutrition, food security, and HIV.

- Support a study visit by PRONANUT national and provincial staff to government-run NACS programs in Rwanda or Malawi.

- Second staff to PRONANUT to strengthen coordination and technical leadership in nutrition and HIV. These technical focal points will help incorporate nutrition and HIV into MOH policy and strategy documents coordinate nutrition care services for PLHIV and OVC across partners and geographic regions.

3. Support training of health care providers in supported health zones in the revised national CMAM guidelines.

Available evidence suggests that the principle of treating SAM in children under 5 is globally the same for children with and without HIV. However, children with HIV have higher risk of dying during treatment and after recovering from acute malnutrition. HIV-infected children with SAM can be treated on an outpatient basis if they have good appetite and no additional medical complications, and mortality is lower in CMAM than in facility-based programs, probably because of early initiation of therapeutic feeding.

Annex 3 of the revised version of the national guidelines for treatment of acute malnutrition includes an HIV component for children, adolescents, and adults with moderate to acute malnutrition. PRONANUT has not disseminated these guidelines to health facilities targeted by PEPFAR/DRC partners. In most of those facilities, health care providers have been trained in the previous CMAM guidelines and already refer HIV- infected infants and children with SAM to facilities that implement CMAM. However, limited

geographical coverage of CMAM services and stock outs of specialized food products limit referral possibilities.

FANTA-2 has developed a draft set of matrixes for assessing CMAM capacities at different levels and can share this tool with implementing partners working in health centers that treat acute malnutrition.

The assessment team recommends that PEPFAR/DRC partners help improve health care provider capacity to manage acute malnutrition for PLHIV and OVC by:

- Working with PRONANUT and provincial health offices to disseminate the revised CMAM guidelines to supported health zones.
- Working with UNICEF to organize training of health care providers (including UNTI and UNTA staff) and community members in the revised guidelines.
- Supporting the integration of outpatient treatment of SAM in ART sites where referral to UNTAs is not possible.
- Use the CMAM guidelines to lobby for PRONANUT support to manage severely wasted PLHIV using resources available for CMAM. Pediatric and adult ART sites could be used as points of outpatient care for SAM.

4. Request PRONANUT authorization to use the draft national nutrition and HIV guidelines for immediate NACS work planning.

While waiting for the validation of the national nutrition and HIV guidelines, PEPFAR/DRC partners could use the draft to develop interim technical guidance for nutrition and HIV interventions to meet objectives within the project timeframe and pre-test the draft guidelines. Given the current focus of implementing partners, interim guidance should prioritize PMTCT, pre-ART and ART clients, and OVC.

Nutrition assessment, counseling, and support (NACS) is the standard PEPFAR approach for providing nutrition care to PLHIV and OVC. NACS is a service delivery and system strengthening approach to help improve HIV outcomes. The primary target groups for NACS are OVC under 2, HIV-positive pregnant and lactating women in PMTCT programs, OVC over 2 with evidence of malnutrition or faltering growth, and adult PLHIV in care and treatment. The NACS approach includes nutrition assessment (anthropometric, biochemical, clinical, dietary, and sometimes water and sanitation and food security), nutrition counseling, and nutrition support (which may include provision of specialized food products to malnourished clients, provision of micronutrient supplements, provision of safe water devices, and referral for food security and economic strengthening support). Entry points for NACS include ANC/PMTCT, HIV counseling and testing, clinical referral, and community nutrition surveillance and referral. FANTA-2 has developed guidance for the design, implementation, and monitoring of NACS services, including resource needs, training materials, and job aids.

Health center staff should provide individual nutrition assessment and counseling for all PMTCT and ART

clients on every clinic visit, regardless of the availability of therapeutic or supplementary foods for people diagnosed with acute malnutrition. Counseling on antenatal care, optimal infant and young child feeding, increasing dietary diversity and nutrient availability using available household foods, and safe water and sanitation practices can help all PLHIV avoid severe malnutrition and improve the effectiveness of treatment for PLHIV on ART.

Below are suggestions for incorporating elements of NACS into current PEPFAR/DRC partner programs using existing resources.

- Work with local partners to assess the capacity of health facilities in supported health zones to implement the NACS approach using the quality checklist in Annex 1.
- Work with UNICEF and PRONANUT to provide missing anthropometric equipment, growth cards, and health cards.
- Work with PRONANUT to arrange refresher training of hospital and health center staff who were trained in IYCF and PMTCT on the new national IYCF guidelines for HIV-positive mothers to ensure that mother do not receive mixed messages on feeding HIV-exposed and –infected infants.
- Support PMTCT training for all untrained nursing staff in targeted health facilities.
- Discuss with PRONANUT developing an interim training manual based on the draft nutrition and HIV guidelines. FANTA-2 has produced NACS training manuals for clinic-based providers in English and French that could be adapted to the DRC and harmonized with the draft national nutrition and HIV guidelines and national guidelines for treatment of acute malnutrition.
- Work with PRONANUT and PNLS to train health care providers in supported health zones and follow the training within 1 month with supportive supervision and mentoring. Train or retrain as many health center staff in each health facility as budgets allow. If training funds are limited, prioritize training all staff in fewer facilities rather than one or two from each facility.
- Work with local partners to train health extension workers to counsel on exclusive breastfeeding and appropriate complementary feeding, measure MUAC to monitor nutritional status in children 6–24 months old (especially children 12–24 months old), and refer children with SAM to health centers for further referral to UNTIs.
- Advocate for access of malnourished adult PLHIV to clinic sites that treat acute malnutrition.
- Target *relais* who work in the same health zones for inclusion in VSLA groups to increase incentives.
- Once staff are trained and if funding is available, add provision of therapeutic and supplementary feeding in health centers and hospitals supported by PEPFAR/DRC partners.

- Pilot the integration of PMTCT, maternal, neonatal, and child health, and pediatric HIV services in a selected number of facilities in supported health zones. Annex 2 lists components of this integrated care model for women of childbearing age and children under 5 taken from PEPFAR PMTCT guidance (PEFPAR 2011). Pediatric and adult ART sites could be used as outpatient points of care for SAM clients.

- Link with Population Services International (PSI) to support campaigns promoting safe water and hygiene behaviors through use of mass media in targeted health zones.

If PRONANUT prefers to train health care providers in the validated and approved national guidelines, FANTA-2 can provide technical assistance to develop the training materials.

5. Develop and pilot a model for providing nutrition care for PLHIV and OVC at community level.

Nutrition care and support for PLHIV and OVC can be integrated into local partner programs through home-based care and other community support. PROSANI could develop a community nutrition model and pilot the model in one or two supported health zones. The model can be adapted by combining features of integrated management of neonatal and childhood illnesses (C-IMNCI) and extended community-based management of acute malnutrition (E-CMAM).

- Work with local partners that implement psychosocial and economic strengthening activities for PLHIV and OVC to integrate nutrition into these activities, for example, by requiring beneficiaries to present for monthly nutrition assessment and counseling at health centers.

- Use the ENA counseling cards and/or adapt other community counseling materials to discuss the need for a balanced diet, increased energy needs of HIV-infected children and adolescents, nutrient requirements of pregnant and lactating adolescents, and WASH topics with OVC groups involved in economic strengthening activities. FANTA-2 can provide technical assistance to adapt/translate existing community nutrition materials from other countries.

6. Target OVC under 5 years old for nutrition care and support.

Very few programs address the needs of OVC under 5 years old, even though they make up about 15 percent of orphans. OVC under give years old are the most vulnerable age group, as they are completely dependent on support from caregivers or communities. In HIV-affected households, young children who depend on their households for action on their behalf can become a family liability. Young orphans are often brought to relatives from other districts and left without further contact and no records of immunizations or even birth. Without special efforts, young orphans can remain isolated and invisible to neighbours, family, and institutions.

The Speak for the Child Project in Kenya (2000–2011) addressed the needs of OVC under 5 years old by recruiting and training household mentors who provided support to their caregivers. The project worked with community-based organizations to establish health clinic and pharmacy agreements (vouchers) to cover costs of immunization and medicines for common childhood illnesses.

Community mentors were trained to help households solve health and nutrition problems during weekly household visits. Caregiver support groups received help with planting and latrine building and rotating savings schemes (Lusk et al. 2003). Speak for the Child also solicited public donations through its website to help target communities meet the basic needs of OVC. The suggested approaches below are drawn from Speak for the Child's experience.

- Through Champion Communities, work with HBC partners to conduct participatory learning and action (PLA) exercises to define nutrition and food security problems of HIV-affected children under 5 and ways to address them. Groups of men, women, OVC caregivers, and OVC themselves can define vulnerable households and the problems of very young children in those households, map community resources, and describe typical caregiving patterns and responsibilities. The goal of this exercise is to generate criteria for defining vulnerable children and develop a Community Action Plan to address their needs. Additional focus group discussions can explore beliefs about reasons for health and illness (fate, hygiene, diets) and ideal diets (food type and frequency) of children under 2 and under 5.

- Develop a targeting survey based on the community-generated vulnerability criteria. HIV should not be the only or even primary criterion for vulnerability.

- Identify needed actions based on the vulnerability criteria.

- Identify community mentors and pay them monthly stipends to make regular home visits to five caregivers of vulnerable children under 5. Support the mentors by accompanying them on visits every 2 weeks during their first months of work. Facilitate the community mentors' access to training in C/IMCI by health center staff. Hold monthly support group meetings for the community mentors to share home visit experiences and solve specific problems of children visited, receive additional health and nutrition training, and collect their monthly stipends.

7. Integrate nutrition and HIV messages into existing counseling materials.

Counseling flipcharts on the Essential Nutrition Actions (ENA) supplied by UNICEF were available in all health facilities visited and used for group counseling. The assessment team did not see counseling or social and behavior change communication (SBCC) materials that integrated nutrition and HIV messages.

- Advocate with UNICEF to update the ENA flipchart (for future print runs) with messages for NACS target groups (increased energy needs of PLHIV and pregnant and lactating women; ways to increase energy intake and ensure optimal micronutrients; IYCF for HIV-positive women).

- Adapt FANTA-2 NACS counseling and client education materials (some of these are available in French).

- Train health care providers and *relais communautaires* on how to use the materials.

- Make the counseling materials available to Champion Communities, PLHIV support groups, and other agricultural or VSLA groups and support them in designing meetings around topics

targeted to community needs. Bear in mind that fathers have a critical role in nutrition behaviors and that men may be more receptive to information from other men and doctors, particularly regarding nutrition for women and children.

8. Increase uptake of HIV testing by promoting the PITC approach.

The significant increase in HIV testing coverage and uptake associated with PITC makes it worth adopting in at least some health zones. Partners will need to prepare for an increased caseload for HIV testing, ART, and nutrition care and support. When the approach is first implemented, the proportion of PLHIV needing ART at the time of diagnosis of HIV will rise, and it may remain high until coverage is substantially increased.

- Work with PRONANUT and provincial health offices to disseminate the PITC policy to supported health zones.
- Support training of health center and hospital staff in the new approach.

9. Strengthen links between CDC/DRC partners (ICAP) and USAID/PEPFAR partners to improve clinical practices using available laboratory capacity.

Early initiation of Cotrimoxazole prophylaxis and ART prevent growth retardation and improve survival in HIV-infected infants. Virologic testing can diagnose HIV infection before 18 months. Many HIV infected adults in WHO clinical stage 1 and 2 have low CD4 count (<350 cells/ml) and susceptibility of developing sudden severe bacterial or opportunistic infection that cause deterioration in nutritional status. Over 50 percent of people with TB are co-infected with HIV.

PEPFAR/DRC partners continue to rely on antibody tests at 18 months for confirmation of HIV infection in children despite the existence of laboratory capacity in the DRC for early infant diagnosis (EID). Not all ART and PMTCT sites have access to CD4 tests, delaying the initiation of ART for many HIV-infected infants, children, and pregnant and lactating women. Although still marginal (around 10 percent after an average of 24 months on ART but in 7.9 percent of ART naïve patients in one study), resistance to antiretroviral treatment may become important in coming years given concerns of poor adherence in many PLHIV (it was not possible to quantify the magnitude of the problem during the assessment). ICAP/DRC and CDC/DRC have the capacity to support other PEPFAR/DRC partners to improve access to CD4 count and virologic test for early diagnosis of HIV in infants and virologic treatment failure.

The assessment team recommends that USAID/PEPFAR support partners to:

- Organize a joint meeting at national level chaired by USAID/RDC and CDC/RDC to define procedures and mechanisms of collaboration.
- Offer HIV diagnosis for all infants before 18 months.
- Perform CD4 count for all PMTCT clients.

- Offer CD4 count measurement to all PLHIV on diagnosis of HIV, before initiation of ART, and during ART.
- Include virologic surveillance in monitoring of ART clients for early detection of resistance, especially when response to ART treatment is poor. An algorithm can be developed for restricting the required volume of tests by prioritizing certain categories of clients, such us non-responders or PLHIV experiencing stage 3- or 4-defining illness.

10. Strengthen government coordination of nutrition and HIV activities.

Under the PEPFAR/DRC Partnership Framework, the USG is committed to mobilizing resources to promote coordination of HIV activities among key stakeholders. PEPFAR/RDC partners have the following opportunities within their HIV programming to strengthen leadership and coordination capacity in PNMLS, the National HIV/AIDS and STI Control Program/*Programme National de Lutte contre le VIH/SIDA et IST* (PNLS), and PRONANUT:

- Advocate for and support a Nutrition, Food Security, and HIV Technical Working Group (TWG) or sub-committee under the Nutrition Cluster to hold regular meetings of government and other organizations implementing HIV and nutrition activities. Support the role of this group in developing, reviewing, and disseminating policies, guidelines, and materials related to nutrition, food security, and HIV.

- Work with UNICEF to support an updated Profiles exercise. Profiles is a process for nutrition policy analysis and advocacy developed with USAID funding that uses spreadsheet models to estimate the functional consequences of malnutrition in terms that policy makers understand and care about and help stakeholders advocate for increased attention and resources for nutrition. The last Profiles was done in 2003, and UNICEF has expressed interest in an update.

- Applying the Profiles results, work with PRONANUT to draft an advocacy strategy for NACS and prepare advocacy materials for media and policy makers. The advocacy strategy should include information on the need to address severe acute malnutrition in infants and young children and integrate specialized food products in the Essential Medicines List so that donors can buy and import them.

- Support the government and local partners in developing a food security and nutrition plan, beginning with a stakeholder workshop at national level or in South Kivu, where both PROSANI and ProVIC are operational.

- Work with provincial health offices to promote collaboration with USAID/DRC to roll out a minimum package of nutrition actions for PLHIV and OVC in provincial health plans.

11. Strengthen M&E of nutrition and HIV interventions by selecting and including NACS indicators in reporting registers.

Reporting increases accountability: "What gets measured gets done." When service providers are required to report on performance, results become important. The FANTA-2 "Guide to Monitoring and Evaluation of Nutrition Assessment, Education, and Counseling of People Living with HIV" (2008) is available in French and could be disseminated to key nutrition and HIV stakeholders in the DRC. The following actions are recommended for current PEPFAR/DRC partners:

- If the PEPFAR/DRC reporting framework allows, collect data on the following NACS indicators and work with PRONANUT and PNLS to include them in reporting registers:
  - # and % of PLHIV in care and treatment identified as undernourished
  - **#** and % of HIV-positive women with MUAC less than 22 cm at first post-natal visit
  - **#** and % of HIV-exposed infants with weight-for-height less than –2 z-score at 12 months old
  - **#** and % of undernourished PLHIV receiving therapeutic or supplementary food
  - **#** and % of PLHIV in care and treatment who were nutritionally assessed with anthropometric measurement
  - **#** and % of clients in care and treatment who were nutritionally assessed who also received nutrition counseling
  - # and % of HIV care and treatment clients vulnerable to food insecurity who were referred to food security services
  - # and % of clients receiving food security services who were referred to HIV clinical services

- Advocate for inclusion of these indicators in the child and adult health cards that C-Change is designing with the MOH.

- Advocate for inclusion of these indicators in the national HIV HMIS. This could be a subject for the Nutrition, Food Security, and HIV TWG.

- Support PRONANUT in training health care providers to collect data and report on the new indicators.

- Support PRONANUT nutrition surveillance every 2 years in supported health zones to measure chronic malnutrition. Malteser Foundation has experience with this kind of surveillance.

12. Encourage task shifting to decentralize and improve access to services.

A shortage of accessible health facilities and qualified health care providers handicaps scale-up of effective NACS interventions. Transport costs and distance limit ART uptake and retention and follow-up clinic visits. PROSANI has discussed with the MOH the idea of training health aides in community care centers to do rapid testing in order to extend coverage. Task shifting for the following interventions has been used successfully to overcome shortage of qualified staff:

a. **HIV counseling and testing by extension worker**s. Using health extension workers with minimal training (6 weeks to 6 months) and non-medical personnel allowed rapid scale-up of HIV counseling in several countries including Malawi.

b. **ART prescription by nurses.** There is published evidence that nurses can effectively and safely prescribe ART if appropriately trained. Malawi, South Africa, and Zambia have increased ART coverage substantially by shifting the task of ART prescription from doctors to nurses.

c. **Outpatient management of SAM.** Several countries are decentralizing management of acute malnutrition by enabling community health workers or health extension workers to treat SAM without medical complications at health posts or in the community. With support from UNICEF, Ethiopia has successfully implemented this model since 2008, and Niger is starting to apply it.

d. **Community Integrated Management of Neonatal and Child Illness (C-IMNCI).** This approach adopted by the RDC is based on task shifting. Community health workers are trained to manage cases of uncomplicated diarrhea, malaria, pneumonia, and acute malnutrition.

PEPFAR/DRC partners could consider the following options for promoting task shifting in their targeted health zones.

- Advocate for regulatory changes to allow task shifting for HIV testing, ART, and nutrition care for malnourished PLHIV.

- Support (with a national or external consultant) the development of training modules for the cadres who will be allowed to perform the tasks and for their supervisors and mentors.

13. Strengthen links with Title II, WFP, and other food security programs for referral of food-insecure PMTCT and ART clients and OVC.

Poverty and food insecurity are even more challenging for PLHIV than uninfected people, affecting their ability to adhere to care and treatment regimens. The PEPFAR/DRC Strategic Framework Goals and Commitments include providing psychological support to delay initiation of ART enrolment (preventive). This includes supplementary food assistance and economic strengthening activities for PLHIV. USAID Title II programs contribute to improving food availability, access, and utilization and reducing vulnerability to food insecurity. FAO uses Farmer Field and Life Schools in South Kivu to help community groups restart agricultural production.

- Link with Title II where target areas overlap to refer food-insecure PLHIV and OVC to livelihood improvements and link livelihood improvements with counseling to increase consumption of improved crop varieties, especially by pregnant and lactating women and children under 2. Title II development partners may also be able to provide technical assistance for training Champion Communities in food production, processing, and storage.

- Link with FAO to support *jardins protégés* in health centers targeted by PEFPAR/DRC partners and *semences vivrières* for PLHIV clients with or caregivers of malnourished HIV-affected children

- Provide families of HIV-positive children who graduate from UNTA feeding with kits to start gardening or small livestock breeding.

- Work with WFP to plan better targeting in anticipation of WFP resumption of food supplements for PLHIV and HIV-affected households. Link food supplements to nutrition assessment with finite exit criteria.

- Work with the MINAGRIC to incorporate nutrition education into the activities of *comités de développement communautaire* (CDC). The CDC are the entry point for agricultural interventions in many areas.

- Standardize eligibility criteria for food support at individual and household levels. Food supplements should target malnourished people until anthropometric criteria show recovery, regardless of household food security status.

14. Consider alternative mechanisms for food support for food-insecure PLHIV and OVC.

Infants, children, and adults with HIV have higher energy requirements than uninfected people. Food supplements targeted to HIV-positive infants and young children and family food rations for households with HIV-positive members identified as food insecure can link food supplementation with nutrition education and livelihood programs. A finite income transfer can be provided to PLHIV and OVC diagnosed as malnourished to compensate for loss of income and reduce sharing of individual specialized food product rations among family members. Cash or vouchers may offer more flexibility and choice for households than food support, depending on market access, gender, season, risk of inflation, and degree of food insecurity. Save the Children UK has run a voucher program in Kenya that allows beneficiaries to exchange the vouchers for milk, meat, and beans, as well as food aid commodities.

- Provide in-kind transfers for women who have more control over household food than cash and people in remote or unstable areas.

- Provide vouchers to households of PLHIV diagnosed as malnourished so they can buy specific nutritious foods in markets. The sellers can send the bills to health centers to pay out of PEPFAR/DRC partner budgets.

Below are recommendations from the FANTA-2 team on ***new programs that could be implemented using PEPFAR/DRC resources***. Some of these programming options would require formal contractual arrangements with other organizations.

1. Integrate quality improvement (QI) component into NACS programming.

A key objective in the PEPFAR/DRC Partnership Framework for 2009–2013 is to strengthen health systems for sustainability. To help attain this objective, PEPFAR/DRC partners may consider partnering

with or engaging the Health Care Improvement Project (HCI) to include quality improvement approaches to improve NACS service delivery.

HCI applies the following principles of quality improvement to improve health care delivery: 1) focusing on the client, 2) making changes to improve health care delivery systems, 3) using change to improve processes and systems, and 4) setting up teams of health care providers to test and implement the changes. The collaborative QI methodology helps teams from different clinics, hospitals, and other levels work together to improve particular aspects of a health care system. For example, teams can initiate small doable actions that show quick results with minimal new resources. URC has adapted the collaborative QI model to resource-constrained settings. The QI approach can examine client flow within a facility or health system and link to livelihood, food security, and economic strengthening activities. QI can also be used to improve community systems (e.g., VSLAs, activities of *relais communautaires*).

An example of HCI's work was a 2008 assessment in Côte d'Ivoire of the quality of ART and PMTCT services in 41 clinics and hospitals. The assessment identified clinical activities that were not conducted during clinical visits and could be low-effort opportunities for quality care. HCI then developed an intervention package and tools for improving services. Most of the teams actively tested changes to improve service integration and retention in care of ART patients and children of HIV-positive mothers. Attention to filling out key items on patient medical records also improved, as did the proportion of children born to HIV-positive women who were tested for HIV. Best practices and successful changes were introduced in additional facilities, and a network of regional coaches was trained to support the new sites (USAID Health Care Improvement Project 2010).

The following suggested changes in clinical services for PLHIV are based on the findings of the FANTA-2 and LIFT assessment team:

- Integration of HIV testing, PMTCT, and ART into routine RH services (ANC), GMP, and CMAM
- Organization of all PMTCT services as family-centered programming to address the needs of family members of HIV-positive women and infants
- Integration of CMAM and nutrition care and support for PLHIV into a national Integrated Management of Acute Malnutrition (IMAM) program
- The task shifting options described on p. 26

Training will not lead to better performance and results when trained staff return to their poorly paid positions. Adequate salaries paid on time every month are essential to effective capacity building. QI efforts can examine staff retention and other human resource issues. PEPFAR/DRC may want to consider salary support for health care providers in target areas who have been trained in NACS.

2. Pilot a nutrition and food security program for OVC.

While families and communities are the main safety nets for OVC, support for HIV-affected adults, households, and communities in some cases needs to be supplemented by specific programming for HIV-infected and -affected children. Orphans and children of sick parents suffer disproportionally from malnutrition and stunting. Food insecurity can be an especially serious problem for households caring for OVC, who depend almost exclusively on the the food and income of other household members. Even in families with access to food, younger children are likely to be fed irregularly and infrequently and have frequent episodes of diarrhea and respiratory infections.

Increased income is not necessary spent on food or medicine for children. AIDS orphans may not receive needed health care because they are assumed to be infected with HIV and therefore untreatable. Lack of access to clean water and sanitation services can fall disproportionately on OVC, who have to fetch water for the household or whose households can no longer pay for water. PMTCT, HIV counseling and testing, HBC, and ART services, and IGAs can strengthen caregiver capacity to support OVC, but extremely vulnerable children also need direct attention to to ensure they have adequate access to preventive and curative health services, including nutrition support.

PEPFAR/DRC implementing partners may consider piloting a nutrition and food security program for OVC in target areas that incorporates the following components:

- Conducting formative research with OVC, caregivers, and clinic and community service providers to understand needs of OVC, including the perceived quality of food, changes in health status, and knowledge and attitudes related to HIV
- Training community service providers in growth monitoring and promotion to identify OVC who are not thriving and monitor the nutritional status of HIV-positive infants and children
- Training OVC caregivers in nutrition education with cooking demonstrations
- Developing nutrition indicators for OVC
- Supporting optimal complementary feeding of children over 6 months old of mothers in PMTCT programs through targeted counseling in PMTCT clinics
- Expanding HBC, health, and education programs with a food component for OVC and their caregivers during the suspension of food distribution to OVC by WFP
- Including the special health and nutrition problems of OVC and nutrition monitoring and basic health care practices to monitor and care for OVC, including counseling caregivers on appropriate use of food in the home, in training of health care providers, HBC providers, and other community volunteers

- Facilitating access of OVC to medical care
- Working with health centers to target preventative health care services for children under 3 years old who are cared for by elderly caregivers
- Improving OVC access to free health services by disseminating information to communities, OVC caregivers, and health workers on how to access health care services and gain exemption from fees for such services, if possible
- Improving referral systems between health care services and HBC providers
- Improving access of OVC and their caregivers to clean water and sanitation
- Creating funding for social support of OVC from a portion of revenues from IGAs
- Realigning IGAs, food for work, and agricultural extension to prioritize families caring for OVC
- Supporting partners to provide umbrella grants for food and nutrition services, health services, economic strengthening, psychosocial support, and education for OVC
- Providing time-limited food and nutrition support for OVC conditional on the identification of more sustainable solutions
- Providing conditional cash transfers to OVC parents and caregivers contingent on regular ANC, PMTCT, and well-child clinic attendance

3. Develop an SBCC package on nutrition and HIV.

PEPFAR/DRC partners could partner with the C-Change Project to develop NACS SBCC materials for health centers and communities. The C-Change SBCC framework uses advocacy, social mobilization, and behavior change to help people accept the importance of change and help households and communities buy into new practices to make them feasible. Separate counseling materials for PLHIV would ensure targeted messages but may risk stigmatization.

- Through the Nutrition, Food Security, and HIV TWG, identify target audiences for nutrition and HIV SBCC, compare existing counseling materials, and identify areas for updating and harmonization.
- Formative research is the foundation of an effective SBCC strategy. Conduct formative research to understand beneficiary perspectives and motivation and rationale for nutrition-related behaviors, determine the most effective and feasible behaviors to promote, identify opportunities to address malnutrition through agriculture, identify the best vehicles for SBCC,

and understand barriers, constraints, and facilitators of adoption of improved nutrition practices among PLHIV and OVC. Formative research methods to develop SBCC interventions include trials of improved practices (TIPs), focus groups, in-depth interviews, local determinants of malnutrition studies, doer/non-doer analysis, and barrier analysis. C-Change and the University of Kinshasa School of Public Health could work together to design and conduct this research.

- With Champion Communities, facilitate community-led assessment of local food sources and care practices to determine the most effective use of available food. Select appropriate foods. Base rations on food intake and requirements.

- Based on formative research results, design, pre-test, and print counseling cards on the Critical Nutrition Actions for PLHIV (annex 3) to complement the ENA counseling cards. This activity could be done jointly between PRONANUT and PEPFAR/DRC partners with the FHI360/C-Change Project or an SBCC consultant.

- Consider SBCC messages and materials that promote uptake of HCT, NACS, and PMTCT services; associate the production of nutritious crops with their processing and preparation; promote dietary diversity; promote optimal use of locally available foods where nutritious foods are available but not used; and promote production and consumption of iron-rich and iodine-rich foods.

- Consider alternatives to counseling cards for promoting optimal nutrition behaviors. C-Change supported the incorporation of SBCC methodology and community radio work in the AXxes and LMS projects in 10 health zones and has experience developing comic strips for family planning and maternal and child health education. Edu-tainment on NACS may be the most successful way to increase awareness and referral. Radio programs have been produced successfully in the DRC. NACS messages could be incorporated in the branded mass media communication platform *Rien que la Verité* developed by the U.S. State Department to link and strengthen HIV prevention interventions.

4. Strengthen the capacity of the MOH to manage commodity procurement for treatment of acute malnutrition

Effective nutrition assessment and counseling and treatment of acute malnutrition require dependable supplies of specialized food products. PEPFAR/DRC should consider building PRONANUT and PNLS capacity in supply chain management to strengthen national commodity procurement, logistics, and delivery. The Supply Chain Management System and FANTA-2 can provide guidance on procurement of specialized food products to treat clinically malnourished PLHIV and OVC.

5. Support pre-service curriculum development in nutrition and HIV in nursing and medical training.

To ensure long-term human capacity in nutrition care and support of PLHIV, training in nutrition and HIV needs to be incorporated in pre-service nursing and medical training. FANTA-2

- Provide technical and financial assistance to the MOH to do a comprehensive assessment of current nursing and medical school curricula and identify entry points for nutrition and HIV content.
- Support a stakeholder meeting including nursing and medical faculty to adapt pre-service training materials on nutrition and HIV developed for nursing and medical schools in other African countries. Faculty can review the existing materials, recommend adaptations, and develop an action plan for the incorporation of nutrition and HIV in current curricula.

6. Pilot a modified PM2A intervention in supported health zones.

The Preventing Malnutrition in Children under 2 Years Approach (PM2A) is a food-assisted approach to prevent child malnutrition in food-insecure program areas by targeting a package of health and nutrition interventions during a critical 1,000-day window of opportunity—to all pregnant and lactating women and children under 2 years old regardless of nutritional status. Core services provided by PM2A include conditional food rations, preventive and curative health and nutrition services for children and women, and SBCC. PM2A is the primary approach to maternal and child health and nutrition adopted by Food for Peace in development food aid programs. The effectiveness of PM2A is well established. This approach could replace family rations for PMTCT clients.

- Pilot the full PM2A approach in Kinshasa health zones.
- Modify the PM2A approach to target acutely malnourished pregnant and lactating women and OVC under 2 years old in South Kivu health zones.
- Consider nutrition support for all children with early growth faltering or infants of mothers who have been advised to stop breastfeeding at 6 months.
- Further target the approach to cover only the lean season.

7. Collaborate with agriculture programs to help ensure sustained long-term intake of a diverse and adequate diet for PLHIV and OVC.

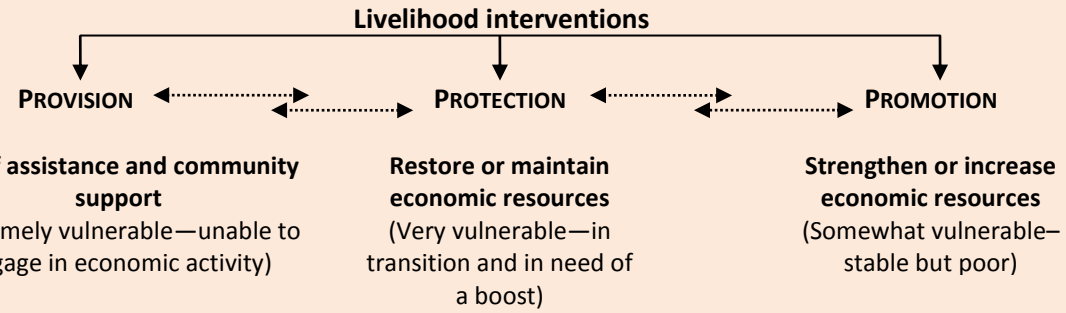
The Food-Based Approach promotes the importance of food and agriculture in supporting livelihoods, a link to rural income generation through agriculture, and community and local government involvement in nutrition. Starting from existing diets, this approach describes dietary intake of key target groups, identifies micronutrient gaps or over-intake for each group, and works with agriculture planners to fill nutrient gaps and reduce excess intakes. Cross-sector collaboration between the MOH and MINAGRI would be essential to carry this forward in the DRC. Other key players include local producers and local communities. User-friendly software can inform priorities by simulating the nutritional impact of available agricultural approaches. The Food-Based Approach is one of the solutions to malnutrition and the most sustainable in the long run, but is not enough without other NACS components.

- Support collaboration between PNLS and MINAGRI to implement a Food-Based Approach activity for the DRC.

B. Recommendations for Economic Strengthening Components of HIV Services

The LIFT Project distinguishes among three broad types of ES programming, provision, protection, and promotion, each appropriate for different vulnerability levels (box 3), and uses this typology to identify economic strengthening programming and gaps. The framework illustrates how livelihood phases, coping mechanisms, and potential livelihood interventions are related. At each stage of vulnerability, households use a set of coping mechanisms or strategies to achieve specific objectives, such as recovering assets of expanding income sources.

Box 3. Household livelihood security framework



Source: Thompson, J. 2005. Adapted from CARE International's Livelihood Security

1. **Provision** involves the direct offer of food, cash, assets, and other essential requirements to destitute households to meet their basic needs, stabilize consumption, and recover critical assets.
2. **Protection** interventions maintain and/or build household capacity to reduce risk and cope with shocks and stresses by smoothing household consumption or income, managing household cash flows, and building protective assets.
3. **Promotion** activities smooth or increase household income and build productive assets by improving the ability of household members to identify and seize employment and self-employment opportunities.

Shifting Gears in ES Programming

PEPFAR/DRC Partners should replace their current reliance on grants, training, and subsidized credit with a dual approach to accommodate the differing vulnerability levels shown in the conceptual framework above. LIFT recommendations are listed below.

- Broaden the scope of ES activities to include a **generalized** approach for economically vulnerable households (PLHIV, OVC, caregivers, MARPs, and people who don't know their HIV status) that focuses on protection and promotion activities. Use economic vulnerability and not HIV status as the eligibility criteria.

- Limit **targeted** assistance to extremely vulnerable PLHIV, OVC, and caregivers and focus on provision activities. Use both HIV status and economic vulnerability as eligibility criteria, emphasizing the need to develop mechanisms to identify people in genuine need of provisioning.

- Invest in strengthening PEPFAR/DRC Partner staff capacity in ES. Ideally, one Partner should have ES and micro, small, and medium enterprise (MSME) development as its core business and be technically proficient in the area. However, to facilitate collaboration with the ES Partner, other Partner staff—in particular staff involved with care and support activities—should have a working knowledge of current ES and MSME thinking and sound practice. To this end, PEPFAR/DRC could ask LIFT to identify documents on current thinking, sound practice, and trends that could be translated into French to be accessible to staff in the DRC.

Recommended methodology for the **generalized** approach: **Community-managed savings and lending**

Better-known community-managed savings and lending methodologies include CARE International's village (or voluntary) savings and lending association (VSLA) program and the Catholic Relief Services (CRS) Saving and Internal Lending Community (SILC) approach. Within this methodology, there is room to include business training and linkages to value chain opportunities. The methodology is low cost[2] and designed to attain significant outreach in terms of both scale and depth.[3] The methodology is also youth friendly. Many VSLA and SILC programs document the participation of young people in saving and lending groups; some are in youth-only groups, others are part of mixed adult and youth groups.

LIFT recommends that USAID/DRC:

- Implement the generalized approach immediately, replacing the current (and past) strategy of giving blanket grants and training to PLHIV, OVC, and OVC caregivers for IGAs and avoiding group-run IGAs in particular.

- Specifically for OVC, consider adding work readiness activities to prepare young people for jobs in addition to community-managed savings and lending.

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[2] As of December 2010, the cost per member assisted ranged from $22.90 to $34.50, according to the Bill & Melinda Gates Foundation-supported SAVIX (CARE International. 2011. "Microfinance in Africa: State-of-the-Sector Report: Closing the Gap").

[3] Scale of outreach refers to overall numbers of people reached. For example, in Uganda CARE reaches over 456,000 people with its VSLA program. Depth refers to services that reach as deeply as feasible into the survival economy.

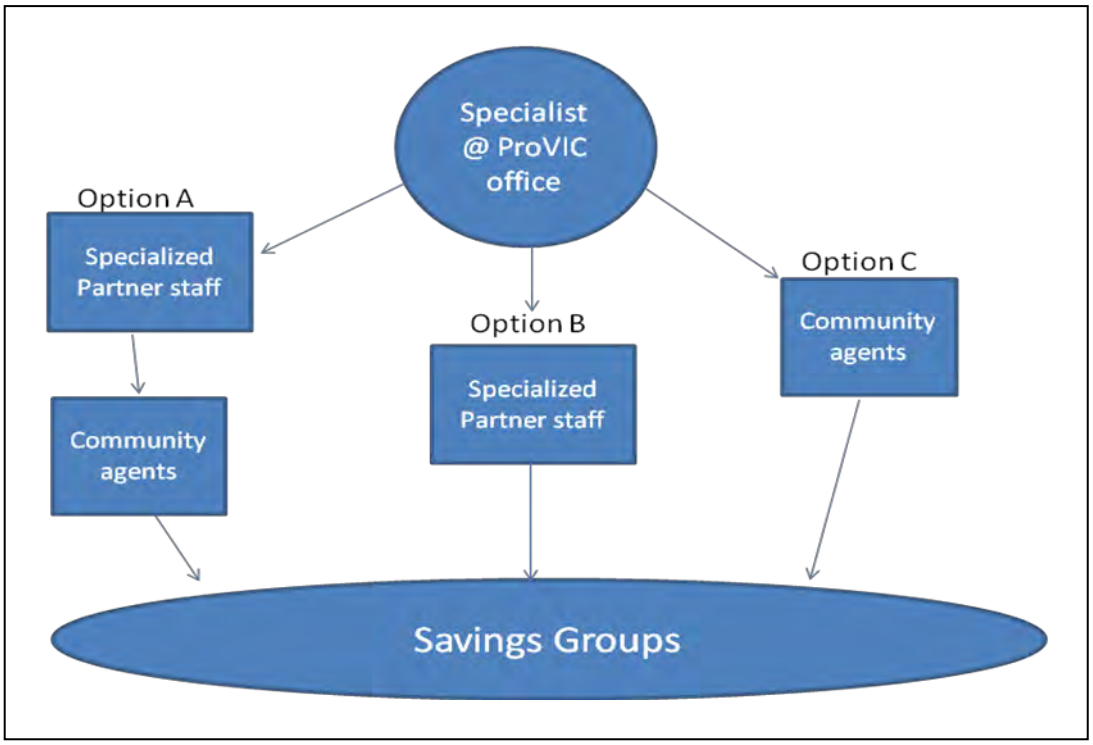
- Consider using a technical assistance mechanism such as LIFT FIELD Support LWA to as a long-term vehicle for funding the generalized approach as a wrap-around activity.

- Identify a resource person to provide short-term technical assistance to develop the generalized strategy while waiting to put a longer-term funding mechanism in place. Part of the strategy development could include:

  - ✓ Developing a draft performance contract for partners under which an additional person would be hired to specialize in implementing VLSA only
  - ✓ Determining how to identify, train, and deploy field agents and considering creating performance contracts for them, also
  - ✓ Identifying ways Champion Community *comités de pilotage* and PLHIV support groups could "market" VSLA in their areas (bearing in mind that membership in VSLA is open for everyone, but especially PLHIV, OVC, caregivers, and MARPs)
  - ✓ Identifying ways to strengthen ties between PLHIV support groups and the *comités de pilotage*

Once a long-term funding mechanism is identified for ES wraparound activities, hire a specialist organization whose core business is economic strengthening to work out of the ProVIC office to pilot the generalized approach in two or three target areas. Figure 2 shows three options for rolling out the generalized approach.

Figure 2. Options for rolling out the generalized approach



Option A entails placing a person on the local partner's staff to train and monitor community agents. The specialist organization could train this person. The community agent would be ultimately responsible for mobilizing, training, and monitoring savings groups. This option would enable ProVIC to scale up the approach quickly and ensure sustainability because the methodology is designed to build the community agent's capacity to carry on saving group activities even after project funding ends.

Option B relies only on local partner staff to carry out activities. This may be less costly in the short run, but scaling up would take longer and may not be sustained when project funding ends.

Option C bypasses local partners and relies only on community agents. This would be the least costly option but would place the entire burden on the specialist organization and scale up more slowly.

Recommended methodology for the **targeted** approach

- Use LIFT Field Support LWA funds to fund technical assistance. The scope of work should include attention to:
  - ✓ Type of provisioning (e.g., cash transfers, food supplements, asset transfers)
  - ✓ Criteria for inclusion in provision activities. This is a highly sensitive area, and great care must be taken to avoid a) stigmatization, b) creating a passive "handout" mentality among beneficiaries, c) sparking dishonest behavior designed to thwart the system to gain access to free material support, d) seeding jealousy of vulnerable groups (PLHIV) in order to get free material support, and e) attracting opportunists.
  - ✓ Exploring additional youth-friendly approaches like those implemented in the recent ROADS Project, which targeted a select number of young people for support.
  - ✓ Conduct participative research to identify how young people traditionally enter the informal sector to understand how to best assist OVC in developing successful livelihood pathways.

Cross cutting recommendations

- Discuss forging links with FAO, the USAID/DRC Economic Growth Unit, and perhaps ACF/DRC and CRS/DRC programs where there is geographic overlap. In particular, link especially vulnerable beneficiaries to these organizations' start-up kits to help restart agricultural activities and gain access to new market opportunities via value chain initiatives. This type of linking could be part of both the generalized (protection and promotion) and targeted (provision) approaches, depending on the nature of the linking organizations' programs.

- Significantly ramp up awareness campaigns to encourage early HIV testing. This is critical for getting ahead of the worst affects of the economic impact of HIV and AIDS.

- Capitalize on the Champion Community framework and seek to involve comités de pilotage members wherever possible. For example, members might also be members of savings groups and key players in mobilizing the community to form savings groups. They should play an

important role in developing criteria and modes of delivery for provisioning via the targeted approach.

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ANNEX 1. NACS SITE QUALITY CHECKLIST

Review the following statements and tick the "Yes" or "No" column for each facility. Do this assessment every quarter.

Equipment and materials		**Yes**	**No**
1.	The site has at least one functioning scale for adults that measures weight in kg.		
2.	The site has at least one functioning scale for adults that measures weight in kg to the nearest 100 g.		
3.	The site has at least one functioning scale for children that measures weight in kg to the nearest 100 g.		
4.	The site has at least one height/length board that measures in cm to the nearest cm.		
5.	The site has a set of four mid-upper arm circumference (MUAC) tapes that measure to the nearest cm for different groups.		
6.	The site has copies of algorithms/guidelines for managing malnutrition in adults and children.		
7.	The site has at least one set of NACS job aids.		
8.	The site has NACS M&E forms.		
9.	The site has a chart with body mass index (BMI) cut-offs for adults.		
10.	The site has a chart with weight for height (WFH) z-score cut-offs using the 2006 WHO child growth standards.		
11.	The site has utensils (e.g., bowls, serving spoons, pan, cooker) to demonstrate the use and preparation of specialized food products.		
Nutrition assessment and classification		**Yes**	**No**
12.	At least two health care workers on staff are trained in NACS.		
13.	Every adult and adolescent coming to the site for the first time is weighed to the nearest 100 g and measured to the nearest cm, with BMI calculated.		
14.	MUAC is measured for pregnant or lactating women (up to 6 months post-partum) or clients whose weight or height cannot be measured.		
15.	Every child < 15 coming to the site for the first time is weighed to the nearest 100 g and measured to the nearest cm and has weight for height (WFH) calculated and/or MUAC measured to the nearest cm.		

16.	Age, sex, HIV status, anthropometric measurements and nutritional status are recorded on the Nutrition Assessment and Management Forms for all clients.		
17.	Every client is assessed on each clinical visit for critical symptoms (e.g., severe dehydration, severe anemia, diarrhea, vomiting, oral sores or thrush, anorexia, tuberculosis, or other opportunistic infections) that may affect nutritional status.		
Nutrition Care Plans		**Yes**	**No**
18.	Every client receives a Nutrition Care Plan based on nutritional status and health condition.		
19. 1	Every client (or caregiver of children) is counseled on the need to:		
	a. Be weighed regularly.		
	b. Eat a varied and balanced diet.		
	c. Wash hands with soap and rinse them under flowing water.		
	d. Drink plenty of treated (boiled or filtered) water.		
	e. Maintain a healthy lifestyle to prevent stress and depression.		
	f. Get physical activity.		
	g. Manage diet-related symptoms.		
	h. Manage drug-food interactions.		
20.	Every acutely malnourished client who qualifies for specialized food products is given an explanation of the entry and exit criteria, the purpose of the specialized food products and how to prepare, eat, and store them.		
21.	Entry and exit criteria for specialized food products are posted where health care workers and clients can see them clearly.		
22.	Every client who qualifies for specialized food products is weighed on each visit, and the weight is recorded on the client record form.		
23.	Every severely malnourished client is given an appetite test before being prescribed Plumpy'nut.		
24.	Health care workers inform clients that specialized food products are not suitable as food for infants < 6 months old.		
25.	Mothers who chose to breastfeed are counseled to breastfeed their HIV-infected and HIV-exposed infants exclusively for the first 6 months of life, introduce appropriate complementary foods thereafter, continue breast-feeding for the first 12 months of life, and stop breastfeeding only when they		

	can feed their infants a nutritionally adequate and safe diet without breast milk. Mothers are encouraged to breastfeed exclusively for the first 6 months of life unless they can provide a replacement diet which is acceptable, feasible, affordable, sustainable and safe.		
26.	The site has enough specialized food products to last for 3 months.		
27.	The site has access to adequate and appropriate space to store specialized food products and related commodities.		
Stock management and record keeping		**Yes**	**No**
28.	Health care workers fill out nutrition assessment and management forms for each client and compile a daily register of NACS clients from these forms.		
29.	Health care workers fill out a daily specialized food product dispensing register from the prescription forms filled out during the day.		
30.	The site in-charge or NACS focal person compiles and submits a monthly summary report of specialized food product disbursement and request form for additional supply as needed.		
31.	"First to expire, first out" procedures and stock management are used for food and other commodities.		
32.	Specialized food products are ordered in advance to avoid stock outs.		

ANNEX 2. COMPONENTS OF AN INTEGRATED CARE PACKAGE FOR WOMEN OF CHILDBEARING AGE AND CHILDREN UP TO 5 YEARS OLD

WOMEN OF CHILDBEARING AGE

- HIV prevention efforts
- Voluntary family planning (FP) for HIV positive and negative women
- Provider-initiated HIV testing and counseling (PITC)

PLUS FOR PREGNANT WOMEN

- PITC and, if negative, ongoing HIV prevention/repeat testing at subsequent ANC visits, during labor and delivery, and while breastfeeding
- Partner outreach and testing with Positive Health, Dignity, and Prevention interventions for discordant couples
- Routine ANC services including tetanus toxoid vaccination and 1st visit screening and same day treatment for anemia and syphilis
- TB screening, diagnosis, and treatment with urgent HIV testing if TB positive
- Interventions to promote safe water, preventive hygiene practices, sanitation, and hand washing with soap
- Malaria IPT and access to malaria control programs and ITNs
- Nutrition assessment, counseling, and support, including micronutrient (MN) supplementation and deworming
- Infant feeding counseling including benefits of exclusive breastfeeding (EBF)
- Voluntary FP
- Delivery plan and safe delivery
- Community outreach for promotion of facility delivery, follow up, and ongoing care
- Post-partum follow up within 24–72 hours to manage bleeding and infection
- For women suffering a pregnancy loss, testing for HIV, malaria, and syphilis

PLUS FOR HIV-POSITIVE PREGNANT WOMEN

- CD4 testing to assess highly active antiretroviral therapy (HAART) eligibility
- ARV prophylaxis or HAART
- Infant feeding counseling and support including exclusive breastfeeding (EBF) if mother does not meet WHO conditions for safe replacement feeding, in line with national infant feeding guidelines
- Outreach and testing for partner and other children with referral to care and treatment for positives
- Psychological and social screening, counseling, and support
- Pain and other distressing symptom screening and management
- Opportunistic infection prevention, diagnosis, and management including Cotrimoxazole prophylaxis if indicated
- Ongoing follow up and case management with monitoring of disease progression, medications, side effects and response to treatment if on HAART

NEWBORNS, INFANTS, AND CHILDREN UP TO 5 YEARS OLD

- Essential newborn care and resuscitation if needed
- Prophylactic eye care
- Post-natal follow-up and care within 24–72 hours of birth
- Complete and timely immunization
- Malaria prevention and treatment including access to malaria control and treated bednets
- Case management of diarrhea, pneumonia, and sepsis
- Nutrition assessment, counseling, and support
- Interventions to promote safe water, preventive hygiene practices, and sanitation
- Community outreach for follow-up and ongoing care
- TB screening, diagnosis, and treatment with urgent HIV testing if TB positive
- PITC for every infant or child with signs, symptoms, or history suggestive of HIV

PLUS FOR HIV-EXPOSED INFANTS

- Pre- and perinatal maternal and infant ARV prophylaxis with continued prophylaxis to mother or infant as per national guidelines
- Early Infant Diagnosis with rapid return of results to caregiver and follow-up plan
- Intensive nutrition assessment, counseling, and support and growth monitoring
- Recommendation for exclusive breastfeeding in line with national guidelines
- Cotrimoxazole prophylaxis until final infection outcome determined
- Ongoing follow-up and individual case management

PLUS FOR HIV-INFECTED CHILDREN

- ART initiation immediately for infants < 2 years old and ART as eligible for children> 2 years old per WHO and national guidelines
- Clinical and lab monitoring of disease progression, medications, side effects, and treatment response if on ART
- Age-appropriate social and psychological counseling and support
- TB prevention, diagnosis, and treatment
- Symptom management
- Opportunistic infection prevention, diagnosis, and treatment

FOR HIV-NEGATIVE OR -AFFECTED CHILDREN

- Ongoing prevention and feeding counseling
- Repeat test after BF cessation and confirmatory test at 18 months

PLUS FOR ORPHANS AND VULNERABLE CHILDREN

- Age-appropriate disclosure, grief and bereavement support
- Intensive social assessment and support for food security, education, shelter, etc.

Source: PEPFAR. 2011. "PEPFAR Guidance on Integrating Prevention of Mother-to-Child Transmission of HIV, Maternal, Neonatal, and Child Health and Pediatric HIV Services. Washington, DC: PEPFAR.

ANNEX 3. CRITICAL NUTRITION ACTIONS FOR PEOPLE LIVING WITH HIV AND AIDS

CNA	Message	Explanation
1. Get weighed regularly and have weight recorded.	▪ If you have HIV-related symptoms, get weighed every month. ▪ If not, get weighed at least every 3 months.	▪ Unintentional weight loss or gain may mean poor health and lead to hospitalization. Periodic weighing tracks weight change to allow early action.
	▪ Keep a record of your weight in a book or on a weight chart.	
	▪ Seek medical care if you unintentionally lose more than 6 kg of weight in 2–3 months.	▪ Unintentional loss of more than 6 kg in 2–3 months can mean that HIV is progressing fast to AIDS.
2. Eat a variety of foods and increase your intake of nutritious foods.	▪ Eat three times a day with at least two snacks between meals. ▪ Eat a variety of foods from each food group. ▪ Eat energy-rich foods.	▪ A varied diet ensures that your body gets all the nutrients required. ▪ Fruits and vegetables help strengthen immunity.
	▪ Increase your energy intake by eating more food more often, especially if you are sick.	▪ PLHIV need more energy than uninfected people of the same age, gender and physical activity. ▪ The extra energy needed is based on the stage of HIV.
	▪ Practice exclusive breastfeeding for 6 months. ▪ Introduce complementary foods when the infant is 6 months old. ▪ Continue breastfeeding for 2 years or longer.	▪ Proper infant feeding improves immunity and child growth and development.
	▪ Improve the digestibility of foods by germination or fermentation (this requires demonstration).	▪ HIV infection affects digestion and absorption.

CNA	Message	Explanation
3. Drink plenty of boiled or treated water.	▪ Treat drinking water by boiling it, adding a hypochlorite (chlorine) solution, or using a water filter or solar disinfection. ▪ Store drinking water safely in a covered container with a narrow neck. ▪ Have enough boiled or treated drinking water in the home at all times for drinking, making juice and taking medicine.	▪ Treating water prevents infections such as diarrhea. ▪ The body needs water to remove toxins caused by HIV and ART.
4. Avoid habits that can lead to poor nutrition and poor health.	▪ Practice safer sex, using condoms.	▪ Safer sex avoids infection and transmission of sexually transmitted infections.
	▪ Avoid alcohol, especially if you are taking medicines.	▪ Alcohol interferes with digestion, absorption, storage and utilization of food.
	▪ Avoid smoking cigarettes and taking drugs without prescription.	▪ Smoking interferes with appetite and increases your risk of cancer and respiratory infections, particularly TB.
	▪ Avoid drinking sweetened, colored drinks and eating sugary and fatty foods.	▪ These foods have little nutritional value and can even harm your health.
	▪ Get plenty of rest.	▪ Too little sleep makes you fatigued and affects your appetite and strength.
5. Maintain good hygiene and sanitation.	▪ Wash your hands with flowing water and soap after using the toilet and before handling, preparing and eating food and giving medicine.	▪ Food- and water-borne infections cause weakness, vomiting, diarrhea and appetite loss. Diarrhea removes essential nutrients from your body.
6. Get exercise whenever	▪ Exercise regularly, at least	▪ Regular exercise builds and

CNA	Message	Explanation
physically possible.	by doing household chores, walking or running.	strengthens muscle, improves appetite, manages stress and improves health and alertness.
7. Prevent infections and seek early treatment of infections and advice on managing symptoms through diet.	▪ Seek immediate clinical help for management of illness.	▪ Illness affects food intake, digestion, absorption and utilization. Treating illness late worsens nutritional status.
	▪ Always seek advice from a health care worker on whether to take traditional remedies or nutrition supplements you are taking.	▪ Some supplements claim to treat HIV, but there is no cure for HIV. ▪ Some traditional herbs affect how other drugs work and can produce side effects.
	▪ Along with medical care, manage symptoms of illness through diet at home when possible.	▪ Dietary management can make symptoms less severe and help you continue eating.
8. Manage food and drug interactions and side effects through diet.	▪ Take all medicines as advised by your health care worker.	▪ If you do miss doses or stop taking them, your body can become resistant. The drugs will be less effective, and you may need stronger drugs.
	▪ Ask your health care worker to give you a drug-food schedule with times to take medicines in relation to meals. Ask someone to help you keep the schedule.	▪ Some drugs have to be taken with food and some without. If you don't follow these directions, the medicine will not work properly.
	▪ Ask your health care worker about possible side effects of drugs you are taking. ▪ Ask how you can manage drug side effects at home.	▪ You can manage many drug side effects by changing your diet.