

Field Exchange

Emergency Nutrition Network



Special 40th issue: focus on Ethiopia



View of the audience of a drama held during a Productive Safety Net Programme (PSNP) pay day session in Tigray-Hintalo Wajirat, Ethiopia

Credit: P. Fracassi / Ethiopia, 2010

Field Articles

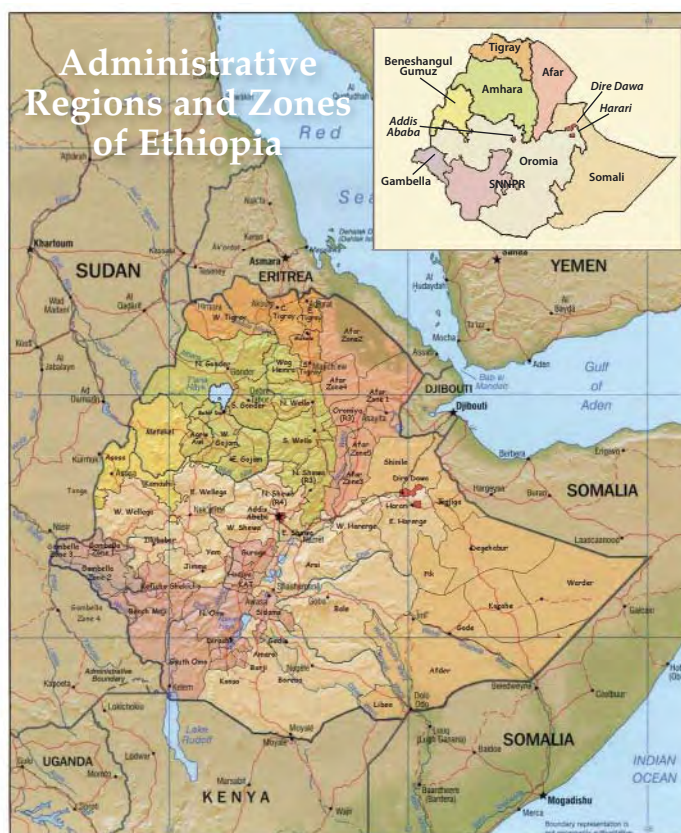
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Invite to submit material to Field Exchange

Many people underestimate the value of their individual field experiences and how sharing them can benefit others working in the field. At ENN, we are keen to broaden the scope of individuals and agencies that contribute material for publication and to continue to reflect current field activities and experiences in emergency nutrition.

Many of the articles you see in Field Exchange begin as a few lines in an email or an idea shared with us. Sometimes they exist as an internal report that hasn't been shared outside an agency. The editorial team at Field Exchange can support you in write-up and help shape your article for publication.

To get started, just drop us a line. Ideally, send us (in less than 500 words) your ideas for an article for Field Exchange, and any supporting material, e.g. an agency report. Tell us why you think your field article would be of particular interest to Field Exchange readers. If you know of others who you think

should contribute, pass this on – especially to government staff and local NGOs who are underrepresented in our coverage.

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A. Simons/FH Ethiopia, 2009

Over twenty five years on from the famine of the 1980s which resulted in many thousands of deaths and devastated livelihoods, Ethiopia today is a country that has placed nutrition and food security concerns at the heart of its development. The launch of the first Ethiopian National Nutrition Strategy and implementation of the National Nutrition Programme are testament to the national drive to significantly improve the population’s nutritional status and to manage the threats to people’s nutrition and food security posed by recurrent emergencies.

This special issue of Field Exchange focuses on Ethiopia, 25 years on from the devastating famine of the 1980s. It brings together articles written by many highly experienced Government and non-government actors about the country’s large-scale programmes aimed at preventing and treating acute malnutrition, reducing food insecurity, tackling childhood sickness and improving people’s livelihoods. The wealth of experience contained in these articles reflects the results of many years of lesson learning both within Ethiopia and internationally. Challenges remain with to-scale programming and these are outlined, as are the potential solutions. Smaller scale projects, research initiatives and key national nutrition and coordinating institutions are also profiled in this publication.

Overall, this issue of Field Exchange provides a unique and comprehensive picture of Ethiopia’s nutrition and food security programming. It is of value, not only as a resource for those of us in Ethiopia who are working in a complex nutrition and food security environment, but also to others in emergency prone and food insecure countries which are scaling up programmes to address undernutrition.

Ethiopia has come a very long way in 25 years. The work being undertaken by Government in partnership with many UN, NGO, church and community based organisations, academic institutions and coordinating bodies as documented here is undoubtedly saving countless lives and, whilst much still needs to be done to tackle food insecurity and undernutrition, these endeavours are providing a better tomorrow for millions of Ethiopians.

H. E Dr Kesetebirhan Admassu, State Minister of Health
Dr Ferew Lemma, Senior Nutrition Advisor

From the Editor.....



Simon Rolph, Ethiopia

Ethiopia is a diverse country where a significant proportion of the population live on or below the poverty line, where food insecurity is widespread and rates of acute malnutrition are often at or above the international threshold that defines an emergency situation. Levels of chronic malnutrition are also high. Food and nutrition crises arising from the effects of drought, floods, market fluctuations and, at times, political instability are frequently faced. The challenges today are enormous but over the past 25 years, the Government of Ethiopia (GoE), with the technical support and budgetary assistance of many donors, UN agencies, non-governmental organisations and institutions has developed an impressive array of national nutrition, food security, livelihoods and health related policies, programmes and systems. These are driving nutrition and food security improvements and should ensure that the massive loss of lives and livelihoods seen at the height of the famine in the mid-1980s, doesn’t arise again.

This 40th issue of Field Exchange (FEX) shines a spotlight on this immense progress in Ethiopia, 25

years on from the mid-1980s crisis. It contains six agency/programming profiles and twenty field articles written by national and international actors about nutrition and food security related programming. The profiles and articles provide insights into some of the key nutrition and food security/livelihoods related structures and programmes in Ethiopia, covering early warning, response, recovery and longer-term programming.

Government agencies and structures

The first profile is on the government’s Early Warning System (EWS). Written by Kassahun Bedada Beyi, it plots the EWS evolution from an ad-hoc system in the 1970s, to a highly centralised, somewhat cumbersome system with minimal community involvement in the 1980s to the current system which is highly decentralised and takes account of local early warning knowledge. Ethiopia’s EWS, as with many emergency prone country experiences, is not without its problems. It will no doubt continue to evolve as it manages complex data and strives to strengthen its communication channels and to ensure timely and appropriate responses in areas of the country exposed to acute food and nutrition insecurity.

Institutionally linked to the government's EWS is the well-established Emergency Nutrition Coordination Unit (ENCU). Isaack Manyama and colleagues describe the unit's growing mandate since its inception in 2000, at which time the quality and coordination of nutrition surveys in Ethiopia was severely constrained and links to the EWS were minimal. The ENCU has seen considerable expansion since 2005 and today, it is mandated to coordinate, quality assure and disseminate emergency nutrition assessments as well as to coordinate nutrition cluster activities, strengthen EWS capacity and related operational research in Ethiopia.

The ENCU is possibly one of a very few dedicated units of its type in sub-Saharan Africa and has a considerable wealth of experience and knowledge of coordinating many agencies concerned with nutrition assessment and response. Interestingly, since its inception, over 600 nutrition surveys have been carried out in Ethiopia, which, when the logistics and related costs are taken into account, raises questions about the relative merits of cross-sectional surveys in contrast to a nutrition surveillance system.

Another key national structure is the Ethiopian Health and Nutrition Research Institute (EHNRI) which has considerable experience of working at the 'coal face' of nutrition related problems in Ethiopia. With over 450 staff, the EHNRI has (among many responsibilities), the mandate to support the government with implementation of the National Nutrition Programme (NNP) providing analysis of the magnitude and determinants of malnutrition in Ethiopia, capacity mapping for implementing the NNP and undertaking operational research. Its most recent national survey work confirms the need to focus on the determinants of undernutrition in the under 2 year age group, the target group for the NNP, along with women of reproductive age.

The existence of the EHNRI gives Ethiopia a unique 'home grown' capacity to drive the NNP and, arguably, enables government to have a self-determined dialogue with the myriad of donors and agencies that operate in Ethiopia. This is not to suggest that Ethiopia has all the nutrition capacity it needs to implement its programmes. As the article written by Aweke Yilma from Hawassa University highlights, the need for teaching/faculty staff to be trained in nutrition so that they in turn can expand the existing nurse and midwifery undergraduate training curricula to include nutrition is highlighted as a significant need. The need for pre-service training on nutrition is likely to be an issue in many of Ethiopia's universities and training institutions and, where efforts are made to upgrade faculty staff knowledge and skills. As described in the article written by Kate Sadler and Elizabeth N Bontrager from Tufts University, this offers a clear way forward for building capacity in nutrition among Ethiopia's key graduates.

Local NGOs and church-based agencies

The article by the REST Mekelle Team from Ethiopia's largest home-grown NGO, the Relief Society of Tigray (REST) provides an insight into the evolution of a relatively small organisation, which started out in the 1970s working with drought affected Tigrayan's, to the organisation it is today - 700 staff strong, commanding a multi-million dollar budget and working in both emergency and long-term programming. This article describes REST's approach to the implementation of the large-scale Productive Safety Nets Programme (PSNP) and the impact of the PSNP on levels of wasting and stunting, on dietary diversity and on household food security - all of which reportedly showed improvement over a 3 year period. Whilst nutrition is not a specific technical competence of REST staff, it is interesting to note the concerted efforts made to try and capture nutrition impact in their work.

Two profiles reflect the work of two of the largest church based organisations in Ethiopia - the Ethiopian Orthodox Church Development and Inter-Church Aid Commission by Gebreselassie Atsbahha and the Ethiopian Evangelical Church Mekane Yesus, by Deed Jaldessa and Debela Kenea. Both highlight the considerable community reach and resources of the Church in mounting emergency responses and in longer term programming. What is interesting, is how these Church groups have formed dedicated departments for overseeing their humanitarian and development programming. They are increasingly closely aligned to government policies and priorities and are able to help fill gaps in responding to food security crises, largely through food aid distributions. A gap identified by both groups in these articles is their lack of nutrition capacity, which they are aiming to address in the future.

Ethiopia's history of large scale emergencies has meant that many international agencies have worked in Ethiopia for 20 to 30 years or more. These agencies have therefore been afforded the opportunity to implement numerous relief and/or development programmes and to refine approaches as lessons have been learnt. Many of the articles in this issue of Field Exchange therefore reflect lesson learning amongst agencies over a significant period of time.

Emergency assessments

There are three articles on emergency assessment. The first, by Zeine Muzeiny and Ewnetu Yohannes describes the work undertaken in Goal's Early Warning Department involving field based assessments in so called 'hot spot' woredas (districts) identified by the GoE's ENCU and how this information fits into decision making and response. Between August 2005 and June 2010, GOAL Ethiopia conducted 60 nutrition surveys and intervened in approximately 95% of woredas with an identified need. GOAL's nutrition survey staff carry out surveys with government staff at woreda and regional level in order to build their capacity in planning and conducting surveys, analysing data and report writing.

The second article dealing with assessment is by Patrizia Fracassi. This article provides a personal view of the strengths and weaknesses of the country's nutrition information system, as well as a vision for the future.

The third article by Alison Oman from UNHCR describes the agency's joint assessment mission (JAM) process with WFP for refugees and how this has evolved since the mid-1990s. This article draws heavily on the experiences of implementing JAM's in Ethiopian refugee camps and shows the wide range of information gathered in an assessment, e.g. food security and coping strategies, logistics, non-food items, market prices, health, nutrition and the environment. The process of consensus building is key as it not only encourages assessment from a multi-sectoral viewpoint, but also ensures that the recommendations reflect the capacities and expertise of the agencies involved.

Addressing moderate acute malnutrition

Supplementary feeding programmes (SFPs) are the subject of three articles. The first article by Jutta Neitzel from WFP describes the national targeted supplementary feeding (TSF) programme implemented by the GoE and WFP which is part of the government's Extended Outreach Strategy (EOS). Initially, the TSF covered 325 woredas when established in 2004, but due to soaring food prices as well as diminished donor support in early 2008, the programme had to be downscaled so that today, it only covers 168 priority woredas and approximately one million children. The TSF has a fairly unique design for the TSF in that food distributions only take place every three months and there are no anthropometric measurements of children between distributions. A TSF evaluation study conducted in 2008 found limited impact (on mid-upper arm



Christian Ad/Caroline Waterman

circumference (MUAC)), largely due to food sharing at home and high inclusion error. The programme also encountered a number of challenges including logistical problems in more inaccessible areas of the country, delayed communication of screening results and weak linkages with other programmes.

The second article by Selamawit Negash from UNICEF describes the national Enhanced Outreach Strategy (EOS) programme, which links health extension services and staff (HEW's) and services with the TSF. The GoE and implementing partners have achieved extraordinary coverage with the EOS. During the second round 2009 EOS activity, 11.5 million children aged 6-59 months were supplemented with Vitamin A and 7 million children between 24-59 months were de-wormed. In addition, 3.9 million children and 820,000 pregnant and lactating women (PLW) were screened for acute malnutrition. Out of these, 318,000 children and 150,000 PLW were found to be malnourished and referred to TSF and out-patient therapeutic feeding (OTP) respectively. A number of factors that have contributed to the high coverage of the EOS are described: the frequent specialised training of HEW's to strengthen their capacity for social mobilisation, the participation of a large number of public health institutions and participation of NGOs. Successful community mobilisation and demand for EOS services are partly attributed to the financial incentives (per diems) provided for the local HEWs and volunteers. Almost 70% of the total EOS budget is expended on per diems.

The third article on SFP's has been written by Sarah Style from Concern Worldwide. In 2008, an area classified as a 'hot spot' due to failure of the short belg rains, resulted in Concern Ethiopia initiating a TSF programme which has been continuously operational since then. However, rates of wasting in the woreda have remained relatively un-changed. The TSF programme, although well implemented as evidenced by high coverage rates, has poor recovery rates and high re-admission rates, (2009 recovery rate 27%, non-recovery rate 59%, re-admission rate 57%). Investigations suggest that an inadequate general ration, lack of access to the PSNP as well as climatic and topographical constraints, the health environment and poor caring practices, are key factors limiting effectiveness. Linkages with the general food distribution (GFD) is limited and the impossibility of registering the whole population for the PSNP and GFD means that sharing of the supplementary food amongst non-beneficiary children is commonplace. The author concludes that improvements in rates of wasting in this context might be beyond the scope and capacity of nutrition interventions such as SFP's. Such limitations with traditional approaches to the prevention and treatment of moderate acute malnutrition are the subject of considerable work internationally.



A. Simmons/FFH Ethiopia, 2010

Addressing severe acute malnutrition

There are three articles on the implementation of programmes to treat severe acute malnutrition (SAM), a research piece sharing work on the impact of emotional stimulation on SAM outcomes, and a further article on the challenges of securing affordable ready to use therapeutic foods (RUTF). Sylvie Chamois from UNICEF Ethiopia describes the impressive scale up of the GoE OTP to over 6,400 health posts (at the time of writing) in 691 woredas. The article describes how scale up was achieved and key challenges faced. The enabling factors identified for scale up included advocacy and coordination, donor support, development of regional action plans, technical assistance for training and follow up, provision of supply and logistics support and enhanced programme monitoring and quality assurance. Ensuring good programme monitoring and quality proved to be particularly challenging with the rapid multiplication of OTP sites.

The vast majority of OTP sites are achieving SPHERE standards and UNICEF considers that there have been a number of important contributory factors to the success of this programme. Particularly noteworthy are the GoE's commitment to develop policies and guidelines on decentralised treatment of SAM and to integrate services into the wider decentralised health programme, advocacy by agencies such as UNICEF, high educational levels, technical skills and commitment amongst programme staff working within the health sector and enhanced coordination between the key actors.

Another article written by Sisay Sinamo describes the World Vision Ethiopia (WVE) programme for treatment of SAM (called Community Therapeutic Care (CTC) at the time), between 2005 and 2007. Lessons learnt were then used to inform the design of a subsequent programme in 2009 with a more 'hands-off' approach. In the 2009 programme, WVE staff focused on capacity building of partners rather than direct implementation. This was described as a 'minimum support' approach. In addition, WVE supplied a protection ration for children discharged from the OTP, as it could not be assumed that these children would be enrolled on the TSF programme.

Emily Mates from Concern Worldwide describes the history of Concern's programme that evolved from an innovative emergency intervention, into a longer-term initiative aimed at supporting the Ministry of Health (MoH) to integrate treatment services for SAM within the routine health system – the National CMAM (N-CMAM) programme. The N-CMAM team assisted the MoH in selected areas of four regions (Oromia, Tigray, SNNP and Amhara). The approach used a process of incremental capacity building from the outset to ensure that the ownership of the programme was always firmly in the hands of the MoH. Concern provided a minimal support package of theoretical and practical training in OTP and in-patient SAM case management, as well as joint supportive supervision and follow-up,

community mobilisation mapping and facilitation of regular dissemination workshops to facilitate sharing of experiences.

A number of key factors promoted an enabling environment within which the N-CMAM programme could achieve its objectives, e.g. continuous and sufficient funding from July 2005, and a strong focus on training of the N-CMAM team in how to support partner staff rather than directly implement programmes. Numerous lessons have been learnt from the experience, e.g. the length of time that the process of integration requires and the importance of using both formal and informal channels of communication and networking to muster influence.

An article by Play Therapy Action describes early findings from a study to explore impact of introducing emotional stimulation and good parenting skills, in addition to emergency therapeutic food distribution, for SAM children. Investigated in 47 outreach therapeutic sites and one hospital in the SNNP Region, preliminary results found faster weight gain, less developmental damage of the acute malnutrition 'event', and positive 'knock on' effects of the interventions on care of other children, on the mother's mental well-being and her empowerment, and on family life.

An article by Yuki Isogai from the World Bank (WB) outlines how the cost of treating the severely and moderately malnourished in Ethiopia is 'too high' as a large share of the feeding products, i.e. RUTF and CSB, have to be imported from abroad. She poses the question-'why hasn't the private sector stepped in to fill the local supply gap?' The WB Ethiopian Nutrition Team conducted a thorough review of this question and identified three major issues, which are inter-linked with each other: lack of market information, low access to finance; and weak value chain. The author argues that the problems affecting the whole value chain need to be tackled simultaneously if a solution is to be found. To do this will require a strong public private partnership involving private companies, commercial banks, farms, NGOs, UN agencies and donors.

Reaching pastoralists and livelihood programmes

Two field articles specifically focus on pastoralists, who represent a significant minority in Ethiopia. Dr Abay Bekele writes about Oxfam UK's Somaliland-Ethiopia cross-border programme. At the heart of the programme is a concern to build strong, representative pastoral organisations, through which pastoralists can better understand and claim their rights and manage the development services they need. Principle aims include improved institutional capacity for drought preparedness linked to

enhanced community preparedness capacity, and improved integrated natural resource management to ensure increased access to and availability of pasture, fodder and water so that households can preserve their assets. A key lesson from the early phases of the project is that the focus of pastoralist interventions should be to strengthen the community and risk reduction strategies, rather than simply fill material gaps through resource provision.

Save the Children (UK) has been providing support to pastoral communities in Ethiopia for almost 20 years with current programmes in the Somali and Afar regions. The PILLAR project, which is described in the article by Holly Welcome Radice and colleagues, seeks to contribute to community level drought risk reduction focusing on the three pillars of pastoralism – people, livestock and natural resources. The article focuses on the project's impact on the lives of children. Children belonging to families involved in water point construction, small scale irrigation and income generating activity micro-projects reported that they had more time for leisure and more time with their parents. They also spent less time on chores and attended school more regularly.

There are five articles written about programmes aimed at supporting the livelihoods of farmers in Ethiopia, which include market based analyses for high value commodities. The first of these is by Andrew Simmons who writes about the Food for the Hungry (FFH) Market-led Livelihood Recovery and Enhancement Programme (MLREP). This programme aims to improve the food and livelihood security status of smallholders in SNNP region. The programme targets PSNP beneficiaries to help them build assets and graduate from the PSNP programme. The approach involves building upon and integrating livelihood components identified following the results of a value chain analysis (VCA) study. The analysis provides the answer to the question, 'which commodity should be pushed further in terms of ease of access to input and output markets? After the completion of the first year of the MLREP, initial benefits were seen at the household level in terms of income generation. However, there was no obvious evidence that this increased income was being put to use to improve the nutrition and health outcomes of the most vulnerable members of the family.

An article by Todd Flower from Mercy Corps describes the Revitalising Agricultural/pastoral Incomes and New markets (RAIN) programme - a multimillion dollar OFDA/USAID funded programme being implemented for three years (2009 to 2012) in zones in the Oromia Region with four bordering zones of the Somali Region. RAIN seeks to protect, promote, and diversify livelihoods as a means of increasing households' resilience to shocks. The RAIN programme focuses on market systems and provides support by creating linkages between various market participants. In the first year of the programme, several value chains were identified and evaluated including live animals, hides and skins, milk, fruits and vegetables, and peanuts. The RAIN programme works to improve access to agricultural input supplies to assist producers in meeting available market demand.

Another article by Shekar Armand from Oxfam describes the emergency and food security livelihoods (EFSL) project which is part of the Global Agricultural Scale up (GASU) initiative started by Oxfam four years ago. The GASU programme in Ethiopia has worked with farmers on many crops. It has now been decided to use a scalable model for three commodities, honey, coffee and sesame. These have also been identified by the GoE as high value export crops.

The EFSL component arose out of Oxfam's awareness that their target farmers are often exposed to



Aldei Yimam (male, 20 months) has been in and out of SFP and OTP on five occasions (Gelsha kebele)

Concern Ethiopia



Concern Ethiopia

Hayat Seid, female, 29 months, has been in and out of OTP and SFP five times

emergencies caused by drought, flood, market turbulence and climate change. The idea is therefore to embed a humanitarian response programme within the programme to prevent farmers from falling into 'the poverty trap'. The EFSL project aims 'to protect those farmers that are vulnerable to impact of drought and other shocks'. Key lessons learnt so far from the EFSL include the understanding that asset poor households are less able to apply resource management practices and that the onset of natural disasters presents new business opportunities for microfinance institutions (MFI) especially in rural areas.

An article by Antoinette Powell describes Christian Aids (CA's) response to a series of emergencies and subsequent work with implementing partners to rebuild lives and livelihoods and strengthen disaster preparedness. Christian Aid works through a range of implementing partners with some of the most marginalised communities in Ethiopia, including pastoralist communities in the country's south and farmers in SNNP region. Concern about the effects of climate change has recently prompted Christian Aid to fund one of its partners, Citizens Solidarity for the Campaign Against Famine in Ethiopia (CS-CAFÉ), to carry out a study on climate change.

The article written by Mulugeta Wtsadik from UNHCR describes a multi-story gardens (MSG) programme in refugee camps for Eritreans and Somalis. Mulugeta outlines how a pilot MSG programme was established in three camps to address problems of anaemia and to compensate for a WFP ration considered inadequate in terms of micronutrients like iron and zinc. The pilot project began in April 2008 and has had a significant impact on the diversity of foods available to beneficiary households – particularly in terms of fruits and vegetables. Water shortages have been the main problem with the programme, although various methods have been employed to conserve scarce water in the more arid camps.

Large-scale safety net programming

After many years of implementing food relief programmes through the old Employment Generation Scheme (EGS), implementing partners reached a view that there had to be a better way of meeting transient emergency needs. The EGS activities were poorly managed and ultimately unproductive so that recipients rarely graduated to any level of food security and remained dependent on annual food relief packages. The advent of the PSNP in 2005 was a reflection of this learning. The vision for the PSNP, which uses food and/or cash as a resource transfer, was to use resources more imaginatively to help build up productive assets and so enable beneficiaries to graduate out of structural poverty and chronic food insecurity. The multi-annual and multi-donor commitment to this programme reflects this vision.

An article on the PSNP by Matt Hobson and Sarah Coll-Black from the World Bank describes how the PSNP has developed over the last 5 years, its achievements and major challenges.

By 2009, the PSNP supported 7.6 million people in 290 chronically food insecure woredas in eight of the country's 10 regions. This demonstrates that large scale cash and/or food transfers are operationally and logistically possible in resource-poor, low-income rural settings. However, between 2007 and 2009, only around 280,000 individuals graduated from the PSNP, which although not insignificant (especially given the adverse events of 2008), falls well short of the national goal. Deficiencies in implementation, due to limited human and physical capacity, undermine the potential impact of the PSNP, while ensuring quality implementation in all programme areas remains a significant challenge for the future.

An article by Alix Carter from CARE Ethiopia describes the Joint Emergency Operation Plan (JEOP) which has existed in different iterations since 1984. JEOP targets food insecure households who are not covered though the PSNP. It thus provides a complementary intervention to prevent acute food shortages from depleting overall community progress gained through PSNP. The JEOP is activated in close collaboration with the GoE when chronic food insecurity is exacerbated by emergency shocks, requiring additional coverage of emergency food relief. The partnership was re-activated in 2000 under its current form with five member international NGOs. More recently, REST and SC-UK have joined. As a result of recurrent shocks, JEOP has been operational in seven of the last ten years, providing one third of all emergency food relief in Ethiopia to an average of 1.8 million beneficiaries at each round.

A major challenge for the JEOP is delays and changes in allocation of food aid figures to partner agencies' caused, in large measure, by communication and capacity gaps between or at different levels of Government. Another difficulty is the arrival of huge shipments of commodities to ports and warehouses, creating congestion and difficulty for partners to secure enough space for their commodity storage. In addition, secondary transport to distribution sites has proven difficult for some JEOP partners and different strategies have been used to overcome these problems. In the Extended JEOP, partner agencies are considering options for a pooled transport system that could circumvent these logistical issues in the future.

Concluding remarks

The articles in this special issue of Field Exchange show clearly how a range of actors are playing a vital role in testing and developing new and more effective programming approaches, disseminating findings and then advocating for adoption and scale up of evidence based programming to address acute malnutrition, food insecurity and support more sustainable livelihoods in Ethiopia. There is a strong commitment by GoE to invest in scaled up programming. The two best examples are the scale up of the OTP and the PSNP.

The GoE has also proven itself over many years to be 'fiercely independent' of international agencies. Its emergency and development philosophy with respect to external actors is very much along the lines of 'work with us, help us to develop the capacity to implement programming and then leave us alone to do it'. Most international agencies working in Ethiopia have embraced this and invest considerable resources in building national capacity. This can only bode well for Ethiopia and its capacity to prepare, respond and recover from emergencies in the future. There are, however, as highlighted in some the articles in this issue, risks associated with rapid scale up where the demands for implementing 'best-practice' and high quality programmes can outstrip capacity for delivery. This is a challenge facing many countries, not only Ethiopia, and will be the subject of international focus as the international Scaling up Nutrition (SUN) initiative gets underway.

The extent to which programmes are joined up, coherent and integrated to maximise nutritional objectives is a challenge. For example, SFPs will not be effective if general rations or basic food security is inadequate and integrating the TSF with OTP, or PSNP with TSF/OTP households, need to be fully grasped. There are also a number of specific challenges for GoE and its implementing partners. For example, scale up of local production of RUTF for the treatment of SAM and the need to bring prices down so that the current roll out of OTP and TFP can be sustained. Another challenge relates to the large case load of MAM in Ethiopia. It is widely acknowledged both within and outside of Ethiopia that the current TSF is not a panacea and that much work needs to be done to develop an evidenced MAM strategy, underpinned by a clear implementation plan to reach the large number of MAM population affected.

Despite these challenges, Ethiopia appears, with minimal publicity and fuss, to have manoeuvred itself away from being the country which, in many previous years grabbed the international humanitarian spotlight as a result of drought and famine. Sadly, other countries have taken its place. The good news is that famine early warning and response systems in Ethiopia have been considerably strengthened through many years of programme implementation and learning.

This issue of Field Exchange has tried to capture the array of national and international policies, programmes and systems that have been put in place to drive nutrition and food security developments in Ethiopia. Many of these developments have been adapted from international policies and evidence-based good practice in key areas of nutrition, as well as from lessons learnt from within Ethiopia on what does and doesn't work within the country's specific political, socio-economic and cultural context. There is much to learn from this experience and we hope that this special issue of Field Exchange plays some small part in disseminating the many lessons learned by the GoE and the myriad of national and international actors involved in humanitarian work in Ethiopia.

Jeremy Shoham, Editor
Carmel Dolan, Guest editor



A Simons/FH Ethiopia, 2009

Women work in tree and fodder nurseries as part of the cash for work scheme



A child receiving vitamin A supplements during EOS in Tigray region, Adwa District

Indriyas Getachew, UNICEF Ethiopia, 2009

Enhanced Outreach Strategy/ Targeted Supplementary Feeding for Child Survival in Ethiopia (EOS/TSF)

By Selamawit Negash, Nutrition Specialist, UNICEF Ethiopia



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Disclaimer: the findings, interpretations, and conclusions in this article are those of the author. They do not necessarily represent the views of UNICEF, its Executive Directors, or the countries that they represent and should not be attributed to them.

Ethiopia has one of the highest under five mortality rates of all developing countries, due largely to the combined effect of a high incidence of infectious diseases and inadequate infant and young child nutrition. Results from the 2005 Demographic & Health Survey (DHS) reported the chronic malnutrition rate among children under 5 years (stunting) to be 46% and acute malnutrition (wasting) 11%¹. About 27% of women are malnourished (Body Mass Index (BMI) < 18.5²). Vitamin A deficiency (VAD) is a severe public health problem affecting 30-95% of children 6-59 months of age in all 11 regions of the country³. In addition, food insecurity and poverty remains a threat, as Ethiopia has been exposed to repeated droughts, resulting in chronic food insecurity for the last four decades. Periodic episodes of acute food shortage still occur in many parts of the country and continue to jeopardise the nutritional status of the most vulnerable, especially children. The situation has been described as a constant state of chronic emergency and therefore effective health and nutrition interventions need to address the long-term and periodic emergency needs underlying this complex situation.

Rationale and programme design

The Enhanced Outreach Strategy/Targeted Supplementary Feeding (EOS/TSF) is the first national programme in Ethiopia to link community-based preventive health services with a ration of supplementary food for women and children who are identified as malnourished⁴. It is one of the leading approaches to address child survival and malnutrition and yet its establishment in 2004 was triggered as a response to the acute famine that affected many parts of the country in 2003. It was also introduced as a transition strategy towards the establishment of the Ministry of Health (MOH)'s Health Extension Programme (HEP), which aims to extend primary health care services to meet the population's long term health and nutrition needs at community level.

In 2001/2002, progress had been made to increase the Vitamin A supplementation (VAS) coverage using the opportunity of polio and measles National Immunisation Days. However, coverage was not more than 64% and it included only one dose. The

primary objective of EOS was to increase twice yearly VAS coverage that was extremely low. The opportunity was also taken to include deworming to promote normal growth and prevent malnutrition among children under the age of five. Before 2003, moderate acute malnutrition (MAM) was addressed only through blanket supplementary feeding distributed together with food aid in drought affected districts. The introduction of the EOS was seen as an opportunity to target MAM for TSF in a much wider coverage than seen before. However, due to capacity/resources issues, screening for acute malnutrition and TSF were started in 325 drought prone districts only⁵.

Partnership was developed between UNICEF, WFP and the Government of Ethiopia (GoE) under the United Nations Development Assistance Framework (UNDAF, 2007-2011). A memorandum of understanding, signed by Disaster Risk Management and Food Security Sector (DRMFSS), MOH, UNICEF and WFP, outlined the roles and responsibilities of each party. Whilst UNICEF and WFP provide financial resources and technical support, coordination, implementation and management of the EOS/TSF were and remain under the responsibility of the MOH and DRMFSS both at federal and regional levels. See Figure 1 for an illustration of how the EOS/TSF is organised.

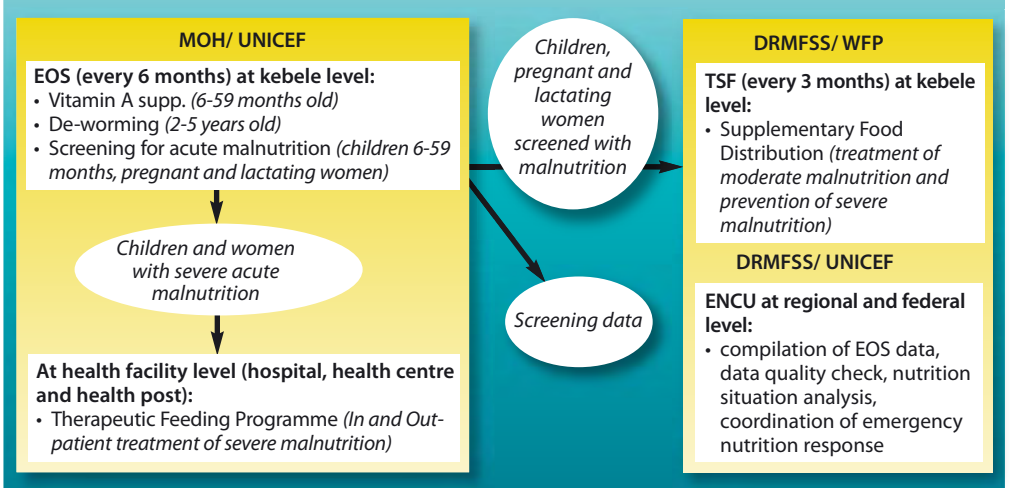
Initially, the EOS/TSF target was to cover more than 90% of the 6.8 million children aged 6-59 months old and 1.5 million pregnant and lactating women (PLW) living in 325 drought prone districts. However, there remained an additional 6.4 million children in 299 'non-EOS districts'. These were not covered by EOS/TSF interventions because the districts were not considered as the most vulnerable and 'drought prone'. In 2005, the MOH and partners decided to extend its cover to reach these additional 6.4 million children in the 299 'non-EOS' districts with a package of biannual vitamin A supplementation and deworming only. Nutritional screening and TSF were not included due to resource limitations.

Objectives

The overall objective of the EOS is to reduce mortality and morbidity in children under five by providing low cost, high impact child survival interventions at community level. The specific objectives are:

¹ Ethiopia Demographic and Health Survey, 2005
² ibid
³ National Vitamin A Deficiency Survey Report, Ethiopian Health and Nutrition Research Institute, 2006
⁴ Mission Report, Enhanced Outreach Strategy/Targeted Supplementary Feeding for Child Survival Interventions, Ethiopia, Andrew Hall and Tanya Khara, November-December 2006
⁵ In 2008, the number of TSF districts reduced from 325 to 167 due to resource constraints.

Figure 1: Illustration of how EOS/TSF is organised



Source: UNICEF Ethiopia. ENCU: Emergency Nutrition Coordination Unit; EOS/TSF: Enhanced Outreach Strategy Targeted Supplementary Feeding; MOH: Ministry of Health; DRMFSS: Disaster Risk Management and Food Security Sector

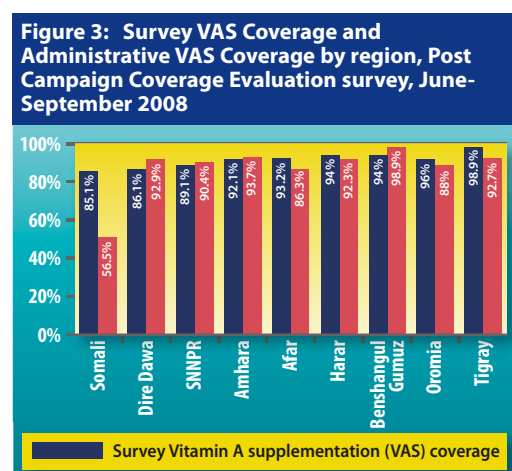
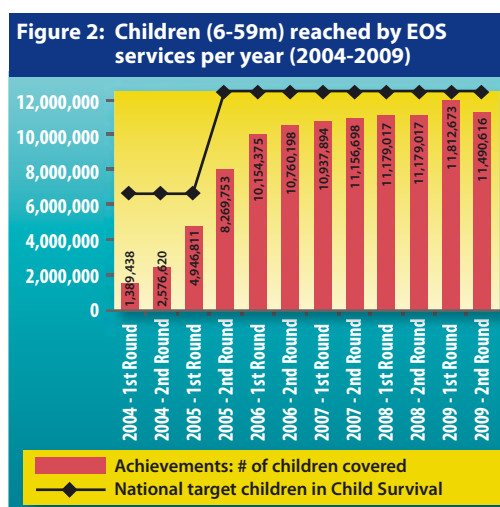
- In all districts of Ethiopia except Addis Ababa and every 6 months:
 - > 90% of children 6-59 months old are supplemented with high dose vitamin A.
 - > 90% of children 2-5 years old are dewormed.
- In all districts of Ethiopia except Addis Ababa and once a year:
 - > 90% of children 9-23 months old are vaccinated against measles if they have missed routine vaccination.
- In TSF selected districts:
 - > 90% of children 6-59 months old and PLW are screened for malnutrition and referred to TSF when acutely malnourished.

EOS is also used as an opportunity to integrate other interventions, such as measles catch up and follow-up campaigns, tetanus toxoid and polio supplemental immunisation activities, long-lasting insecticide treated nets (ITN) distribution and iodine supplementation. Some of the districts are also using the opportunity to conduct routine Expanded Programme of Immunisation (EPI) outreaches.

EOS activities are part of the Ethiopian government Health Sector Development Plan and one of the sub components in the National Nutrition Programme (NNP)⁶. UNICEF is supporting EOS as per its Country Programme Action Plan (2007-2011) under the output "eighty percent of children and mothers in drought-prone districts receiving high-impact, community health and nutrition services every six months through the EOS". It is also part of the UNDAF Humanitarian Response and Recovery and Food Security sub-component for "improved health and nutrition status of 90% of children and PLW in chronically food-insecure areas through outreach activities".

Modalities of EOS service delivery

Every six months and with UNICEF support, Regional Health Bureaus organise the EOS. Each district that is not a TSF district has one EOS team per sub-district, composed of one health worker and one HEW. These staff mobilise the community to come to the nearest health post on a specific day, the EOS day. On EOS day, the EOS team deworms and supplements with vitamin A all children under five years. In many



instances, the Regional Health Bureaus take the opportunity to deliver other essential services, such as measles vaccination, tetanus vaccination, mosquito net distribution, HIV/AIDS prevention, iodine capsules distribution, etc.

In TSF districts, the EOS team is expanded with an additional two health staff, generally one HEW and one support staff, to undertake the screening of children and PLW. Screeners measure the mid-upper arm circumference (MUAC) and check for bilateral oedema. Children and women eligible for TSF are registered in a book and given a TSF ration card. In addition to receiving the TSF ration, children identified with severe acute malnutrition⁷ are also referred to the nearest Therapeutic Feeding Programme (TFP).

Comprehensive social mobilisation is conducted to ensure all eligible children and mothers come to the health post. One team supervisor is assigned to support 3-6 teams. The team supervisors provide all-round support, including management and logistic support, technical support and identify problems and constraints and plan for better performance of next the day.

Two months before the implementation of EOS, training of trainers is given to district/zonal health managers (coordinators and supervisors) by regional and central facilitators. At the same time, district level micro-plans are

prepared. Training of trainers and micro-plans are completed once every year. Two standard formats are provided for easy calculation of the needs, both in terms of operational costs and supplies. One to two weeks before the implementation, service providers (supervisors, health workers, HEWs and support staff) are trained for two days by the district trainers. Training of service providers is given on every round, i.e. every six months. The training is based on the national guideline⁸.

Results

After the introduction of EOS, the service coverage has consistently increased, providing key proven child survival interventions (low cost, high impact interventions) to children and PLW every 6 months. Since the start of the programme, the number of children reached by EOS services has progressively increased (see Figure 2 and Table 1). The EOS programme

⁶ The NNP is a long-term programme that will be implemented in two phases for the next 10 years, each phase lasting five years. The current NNP phase I spanning from July 2008 to June 2013. The NNP targets the most vulnerable i.e. under 5 year children, particularly those under 2 years, PLW, and adolescents. The objective of the NNP is to halve malnutrition from 1990 levels (underweight in children under 5y) by 2015 that constitutes the non-income target of the MDG 1. It also explicitly aims to reduce child stunting, wasting, and low birth weight rates by half by 2010, to which the NNP will contribute as an integral part of the HEP.

⁷ Eligibility for TFP: children with MUAC < 11 cm and/or bilateral oedema.

⁸ Guidelines, Enhanced Outreach Strategy for Child Survival Interventions, Ethiopia, Federal Ministry of Health, March 2006

Table 1: EOS results per year and per round (2004-2009)

	2004		2005		2006		2007		2008		2009	
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
Vitamin A supplementation (6-59 months old)												
No. of children targeted	1,521,204	2,879,374	5,431,811	9,427,048	11,071,190	11,567,721	11,744,360	11,926,235	11,917,323	12,583,034	12,028,833	11,397,948
No. of children supplemented	1,389,438	2,576,620	4,946,811	8,269,753	10,154,375	10,760,198	10,937,894	11,156,698	11,179,017	11,812,673	11,490,616	10,707,244
VAS coverage	92.6%	89.5%	91.1%	87.7%	91.7%	93%	93.1%	93.5%	93.8%	94.1%	95.5%	93.9%
Deworming (2-5 years old)												
No of children targeted	1,306,162	2,553,918	4,557,592	9,427,048	9,804,259	10,265,133	7,869,237	7,990,586	8,061,722	8,449,184	8,323,036	7,352,881
No of children dewormed	855,482	2,265,321	4,152,385	8,269,753	9,013,888	9,456,451	7,746,443	8,174,227	7,999,734	8,282,718	8,059,861	7,092,712
Deworming coverage (%)	65.6%	88.7%	91.1%	86.6%	91.9%	92.1%	98.4%	102%	99.2%	98%	96.8%	96.5%
Screening for acute malnutrition (6-59 months old)												
No of children targeted	1,522,760	2,907,581	5,104,418	5,574,715	5,795,379	6,555,634	6,352,271	6,352,271	3,687,509	4,844,574	3,952,015	4,309,853
No of children screened	1,304,429	2,636,501	4,641,860	4,939,404	5,249,589	6,145,624	6,049,750	6,082,610	3,467,356	4,525,101	3,869,890	3,941,853
Screening coverage (%)	85.7%	90.7%	90.9%	88.6%	90.6%	93.7%	95.2%	94.1%	94%	93.4%	97.9%	91.5%
No and % of children identified with acute malnutrition and referred to TSF	85,522 (6.6%)	211,445 (8%)	302,030 (6.5%)	247,870 (5%)	425,199 (8.1%)	528,766 (8.6%)	479,030 (8%)	351,232 (7.2%)	416,269 (12%)	438,862 (10.2%)	498,833 (12.8%)	318,353 (8.1%)
Screening for acute malnutrition (pregnant and lactating women (PLW))												
No of PLW targeted	333,106	680,865	1,118,022	1,211,409	1,266,126	1,416,739	1,380,005	1,406,681	814,014	1,053,370	895,645	961,173
No of PLW screened	158,928	343,602	584,363	643,751	834,773	1,416,739	1,072,234	1,125,284	707,730	830,953	788,392	829,813
Screening coverage (%)	47.7%	50.5%	52.3%	53.1%	65.9%	74%	77.7%	80%	86.9%	78.9%	88%	86.3%
No and % of PLW identified with acute malnutrition and referred to TSF	33,010 (20.8%)	79,033 (23%)	150,472 (25.7%)	117,508 (18.3%)	165,386 (19.8%)	216,461 (20.6%)	236,450 (22.1%)	228,715 (20.3%)	175,358 (24%)	178,445 (24.8%)	171,433 (21.7%)	150,046 (18.1%)

Source: Federal Ministry of Health, EOS data base, 2010

Table 2: EOS and measles, vitamin A and deworming coverage by region, 2006

Region	Measles		Vitamin A		Deworming	
	Survey coverage	Admin. coverage	Survey coverage	Admin. coverage	Survey coverage	Admin. coverage
Oromia	91%	97%	95.8%	96.6%	85%	95.6%
Amhara	97.6%	88.6%	98.3%	79.6%	93.8%	87%
SNNPR	90.2%	87%	91%	91%	77.3%	87%
Tigray	95.2%	82.8%	98.7%	83.9%	86.6%	86%
B.Gumuz	90.2%	101%	89.6%	71%	67.1%	71%
Somali	85%	91%	84.4%	89%	83%	88%



Health extension worker assessing the nutritional status of a child using MUAC measurement during EOS in Tigray region, Adwa District

reached its peak activity level in 2006/2007. Using the EOS approach the programme is now covering the entire country, except Addis Ababa city administration, reaching more than 11 million children every six months.

Based on routine administrative reports, the EOS coverage has exceeded the planned target for each round for vitamin A supplementation, deworming and nutritional screening. During the second round of the 2009 EOS, 11.5 million children aged 6-59 months were supplemented with vitamin A and 7 million children aged 24-59 months were dewormed. In addition, 3.9 million children and 820,000 PLW were screened for acute malnutrition. From these, 318,000 children and 150,000 PLW were found to be malnourished and referred to the TSF/TFP.

Monitoring and evaluation

Between March and May 2006, a measles follow up campaign was conducted in Oromia, Amhara, Tigray, Somali, SNNP and Benishangul Gumuz regions⁹. The campaign was integrated with the EOS interventions. Following the campaign, a coverage evaluation survey was conducted between June and Sept 2006 to validate the administrative coverage report¹⁰. The EPI cluster methodology was used to design and conduct the survey. A total of 8,116 households were assessed. The survey identified that integrated child survival interventions coverage was high and very close to administrative reports, with little variation between each study area (see Table 2).

Another coverage survey was conducted in 2008 to validate EOS coverage data collected through routine administrative systems. This involve gathering household level data on selected indicators such as VAS, deworming and nutritional screening¹¹. It was a cross sectional survey conducted in 42 districts in Oromia, Amhara, SNNPR, Tigray, Somali, Afar and Benishangul Gumuz regions. Six districts from each region were randomly selected and in each district, nine sub-districts were assessed using a 30 by 30 cluster methodology. A total of 900 households with children under five years were assessed.

The results showed that the overall coverage of the EOS campaign was very high and above 80%. It also confirmed that the post-campaign coverage estimates for VAS, deworming, and nutritional screening were not necessarily the same as those found in routine administrative EOS reports (Figure 3).

In addition to achieving high coverage, EOS has been found to be a cost effective strategy for child survival¹². The 'EOS costing study' conducted in 2006 has estimated that the cost per life saved is equivalent to only \$58 for Vitamin A, and \$228 for integrated interven-

tions including measles. In conclusion, the study found that EOS interventions are extremely cost-effective and a good investment for Ethiopia¹³.

Despite the favourable unit costs of delivering life saving interventions such as VAS and deworming, there is no direct evidence that the EOS/TSF is having a positive impact on mortality reduction and improving the nutritional status of children enrolled in the programme. A meta-analysis of the effectiveness of VAS to control young child morbidity and mortality in developing countries showed that improving the vitamin A status reduces mortality rates by some 23%¹⁴. However, in Ethiopia it is not possible to quantify the impact of EOS because there is no baseline data or case-control study for comparison. A formula developed by Pelletier et al¹⁵ was used to estimate the life saving impact of EOS. Based on this method, it is estimated that 171,000 under five children's death are prevented through the EOS/TSF every year.

Factors contributing to high coverage in the EOS programme

Factors contributing to high coverage in the EOS programme include:

- The specialised training conducted before every round of EOS for health service providers to strengthen capacity. This helps to overcome the high staff turnover in the health system.
- Social mobilisation has been the key effort to get people to attend the EOS centres, and it was central to achieving 90% coverage¹⁶. High community participation, created by public announcement and mobilisation during the screening time, promoted EOS service uptake, which has a knock-on effect in promoting general health service uptake at sub-district level.
- It creates community demand whereby mothers/caregivers appreciate deworming because of a visible immediate effect.

- The EOS programme benefits from the participation of a large number of public health institutions at all administrative levels and of non-governmental organisations (NGOs).
- Its cost effectiveness is proven and a number of donors have been supporting the programme since the start.
- Added EOS services like measles vaccination, ITN distribution and iodine supplementation have contributed to lowering the average cost per person served.
- Successful community mobilisation and demand for the service is attributable to the financial incentives (outreach allowances) provided for the local HEWs and volunteers. About 68% of the total costs of EOS are for outreach allowances¹⁷.

Challenges

During the course of its implementation, EOS has also encountered some significant challenges:

Poor nutritional screening data quality has been an issue. The Outcome Evaluation Study of the TSF programme in Ethiopia¹⁸ conducted by WFP in 2008 highlighted a very high inclusion error of the TSF beneficiaries screened during the EOS (46% mistakenly admitted into the TSF). Efforts made since to improve the quality of nutrition screening measurements include providing training before every round of EOS, simplification of the screening methodology to reduce risks of error (from a two-stage screening comprising of MUAC and weight-for-height to MUAC only), wide-spread dissemination of posters in local languages, and use of a new MUAC tape with a colour code to both help HEWs understand screening procedures and to increase the beneficiary's awareness of their entitlement. While noting the continuous improvement of screening data quality¹⁹, the Emergency Nutrition Coordination Unit²⁰ still encounters problems with the data retrieved from systematic checks.

⁹ Bale, Borena, Guji, East Showa and Arsi zones of Oromia region, North Wollo, South Wollo and Waghimra zones of Amhara region, all districts of Tigray region, all districts of B. Gumuz region, all districts of Somali region and Gurage, Wolayita, Dauro, Siltie, Hadiya, Kembata Tembaro zones and Konta, Alaba districts, and Awassa, SNNPR.

¹⁰ Coverage Survey Report on Integrated Child Survival Interventions in Oromia, Amhara, SNNPR, Tigray, Somali and Benishangul Gumuz National Regional States of Ethiopia, UNICEF Addis Ababa, December 2006

¹¹ Post campaign Evaluation Survey of round 1 2008 Enhanced Outreach Strategy in Ethiopia, Addis .Continental Institute of Public Health, October 2008

¹² Feidler, J. and Chuko, T. 2006. Enhanced Outreach Strategy Costing Study. Micronutrient Initiative, A2Z, World Bank, UNICEF

¹³ The Macroeconomic Commission on Health classifies all health interventions that have a cost per life saved that is the equivalent of less than per capita GDP as "highly cost-effective".

¹⁴ Beaton GH, Martorell R, Aronson KJ, Edmonston B, McCabe G, Ross AC, and Harvey B - Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and Mortality in Developing Countries; ACC/SCN State-of-the-Art Series, Nutrition Policy Discussion Paper No.13, 1993

¹⁵ Pelletier, DL, E.A. Fongillo, Jr., D.G. Schroeder, and J.P. Habicht. 1994. A methodology for estimating the contribution of malnutrition to child mortality in developing countries. *Journal of Nutrition* 124 (10 SUPPL.): 2106s-2122s

¹⁶ Mission Report, Enhanced Outreach Strategy/Targeted Supplementary Food for Child Survival Interventions, Ethiopia, Andrew Hall and Tanya Khara, November-December 2006

¹⁷ Feidler, J. and Chuko, T. 2006. Costing Study. Enhanced Outreach Strategy, Micronutrient Initiative, A2Z, World Bank, UNICEF

¹⁸ Outcome evaluation study of the Targeted Supplementary Food (TSF) programme in Ethiopia; World Food Programme; Ethiopia; June 2009; Jutta Skau, MSc; Tefera Belachew, MD MSc; Tsinael Girma, MD; Bradley A. Woodruff, MD MPH.

¹⁹ The ENCU checks show regular decreases in the proportion of districts with unreliable screening data. Those with unreliable data amounted to 48% in 2008 Round 1, 44% in 2008 Round 2, and 47% in 2009 Round 1, 27 % in 2009 Round 2.

²⁰ The Emergency Nutrition Coordination Unit (ENCU), which is the technical arm of Disaster Management and Food Security Sector (DMFSS), with the support of UNICEF, was established in 2000 to coordinate emergency nutrition assessments and interventions. ENCU is doing quality check for EOS nutritional screening data.

Due to poor quality, the EOS screening data cannot be used for trend analysis in the context of nutrition surveillance. While reporting is part of every six monthly EOS refresher training, late data compilation and reporting still occurs.

MOH leadership to manage the logistics need and programme information/data management has been limited. Supply and distribution of resources at national scale is a challenge for all programmes without a MOH National Logistics Master Plan that is still not fully functional.

Except for staff salary and overhead cost, there is no budget allocation from government for EOS programme. The programme is supported by international donors through in kind assistance (vitamin A capsules from the Canadian International Development Agency (CIDA) and the Micronutrient Initiative (MI)), and financial contributions for supplies and operational costs (CIDA, MI, Spanish Government, Australian Aid, UNOCHA, USAID, different national committees for UNICEF, etc.). Donor's funding commitment is usually for one or two rounds so that it is difficult to plan for the longer-term.

Future Direction: EOS transition into the HEP

The Health Extension Programme (HEP) is the long term and sustainable strategy for delivering the child survival and maternal packages under EOS. While the EOS will continue to be implemented, its pilot transition to the HEP was started in 39 selected districts from Amhara, Oromia, Tigray and SNNPR.

Two modalities are envisaged to provide EOS services in the HEP package:

- The first and main mode is the Community Health Days (CHDs) that will be organised by the HEWs on a quarterly basis to allow more frequent identification and early treatment of the malnourished cases. The vitamin A and deworming will continue to be delivered every six months. The CHDs are underway since the end of 2008.
- The second mode would be part of the routine activity at the health post and during home visits by the HEWs, in order to maximise the current 'missed' opportunity and enhance coverage (this has not yet started).

The main rationales for the transition are:

- Creating a mechanism for the sustainable delivery of child survival service packages as part of the HEP by maintaining the current EOS coverage of 90%.
- Giving responsibility to the local district and sub-district to plan, implement and monitor programmes.
- To help the HEWs to organise and execute the services as part of their regular work and ultimately to increase local ownership and service delivery capacity.

As of now, 170 districts have started implementing CHDs. In 2009, more than 1.3 million children 6-59 months have received VAS and about 800,000 children 24-59 months were dewormed through the CHD modality. In addition, 1.3 million children 6-59 months were screened for acute malnutrition. Post-CHD coverage surveys were conducted in October 2009 in three regions²¹. The preliminary report is showing coverage is ranging from 58% to 73% for VAS²².

Lessons

EOS in conjunction with TSF seems to be a highly relevant action for the local environment. This is partly due to the prevailing critical nutrition and health situation in large areas of the country, where on average 47% of children suffer from chronic malnutrition. For sustainability, the GOE has prepared a plan for EOS transition in HEP with phase by phase exit strategy for EOS. The plan is to be implemented within the MOH's Health Sector Development Plan IV (period 2010-2014). It is important to make sure that the transition is smooth and that the HEP will be able to maintain the current gain in EOS.

Availability of financial incentives associated with EOS has played an important role in the success of EOS. However, there are also concerns regarding the sustainability of its high coverage when the financial incentives are withdrawn. For example, it will be difficult to maintain the high level of engagement of Community Health Workers (that are volunteers) if financial incentives are removed. This will have a negative impact on programme coverage. The reliance on pure volunteerism to support community mobilisation remains a challenge to any community-based programme.

The process of screening children using MUAC instead of weight-for-height has helped to identify more severely malnourished children who are at risk of death. In addition, it makes the task much simpler for the HEWs and reduces risks of error attached to conducting two stage screening (i.e. using both MUAC and weight for height).

The EOS screening should ensure that only acutely malnourished children get access to supplementary feeding. However, the current safeguard mechanisms in EOS/TSF are not enough to adequately prevent distortion²³. In addition, there is no formal appeal process for individuals if they feel that they have been unfairly excluded²⁴. EOS/TSF partners are currently working on improving supervision and monitoring during EOS/CHD screening and conducting intensive community awareness and social mobilisation before, during and after the EOS/CHD screening to mitigate the problem in the short-term. Dialogue is ongoing with Ministry officials and donors to discuss the actions necessary to improve the overall management of MAM in the country. A re-design of nutritional screening and management of MAM is required, both to respond to the immediate need to overcome the high inclusion error²⁵ and to strengthen the

programme through establishing appropriate safeguard mechanisms. Re-design should also look to secure wider coverage and use of alternative products for management of MAM.

Ethiopia has achieved encouraging progress in recent years in detecting and managing acute malnutrition through EOS and the expansion of the national TFP. At the same time, there is a growing understanding that it is time to invest in a more comprehensive approach at household and community level to prevent and manage all causes of malnutrition. The Community Based Nutrition programme (CBN) is the first compressive nutrition programme to address some of the immediate, underlining and basic cause of malnutrition in Ethiopia. Started at the end of 2008, CBN is being implemented in 170 districts so far. CBN activities are centred on the Triple-A (assess, analyse, act) approach, which helps parents/caregivers and community members to assess the situation of children and women, analyse causes of the problems and take feasible actions at family and community level. Monthly growth monitoring and promotion is conducted for children under two years, which is the most vulnerable period and when the impact of early childhood malnutrition can be reversed. In all of the CBN districts, services under the EOS package are being delivered as quarterly CHDs. The CBN has established effective referral linkages to the management of acute malnutrition.

In many countries, social security has reduced poverty and inequality by half and more²⁶. There is evidence that social protection in a form of cash transfer has improved the nutritional status of children^{27,28,29}. While most of the EOS/TSF districts are chronically food insecure, the current management of MAM is not adequately linked with existing food assistance/ food security programmes. Food sharing has been noted in TSF outcome evaluation study conducted by WFP³⁰. It is one of the cultural mechanisms to cope with food insecurity. Therefore, targeting a malnourished child in poor family will not be enough to get the required programme effectiveness. Poor families/communities need to be targeted for social security programming. One possible way to improve programme effectiveness lies with the possibility of changing the targeting mechanism to include not just anthropometry, but also targeting families of vulnerable children for basic social protection.

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²¹ 1,391 children sampled in 1,103 households in Tigray, Oromia and SNNPR less than 2 weeks after the CHD

²² The proportion of VA supplementation was 73.3% in SNNP 51.9% in Tigray 62.9% in Oromia Regions. The proportion of children de-wormed was 65.8% in SNNP, 35.4% Tigray and 52.4% in Oromia regions. The proportion of screened children was higher 89.4% in Tigray, 73.5% in Oromia and 66.6% in SNNP Regions

²³ Aid, Accountabilities and Distortion, An exploratory study into possible distortion in donor-supported development programmes in Ethiopia, Productive Safety Nets Programme; Protection of Basic Services Grant; Humanitarian Relief Programme; Enhanced Outreach Strategy – Targeted Supplementary Feeding Programme, Report prepared by DFID on behalf of, and for the consideration of, the Development Assistance Group, Ethiopia, 23rd March 2010

²⁴ *ibid*

²⁵ Outcome evaluation study of the Targeted Supplementary Food (TSF) programme in Ethiopia; World Food Programme; Ethiopia; June 2009; Jutta Skau, MSc; Tefera Belachew, MD MSc; Tsiniel Girma, MD; Bradley A. Woodruff, MD MPH. The ENCU checks show regular decreases in the proportion of districts with unreliable screening data: it was 48 per cent in 2008 Round 1; 44 per cent in 2008 Round 2; 47 per cent in

2009 Round 1 and 27 per cent in 2009 Round 2.

²⁶ International Labour Office, 'Can Low income countries afford Basic Social Security?', Social Security Policy Briefing, no.3 ILO, Social Security Department, Geneva, 2008.

²⁷ Rutstein S. O, Effects of preceding birth intervals on neonatal, infants and under five years mortality and nutritional status in developing countries: evidence from the demographic and health surveys. International Journal of Gynecology and Obstetrics, Vol.89, Supplement 1, April 2005, pp S7-S24.

²⁸ Erhlich, Isaac and Jinyoung Kim, 'Has Social security Influenced Family Formation and fertility in OECD Countries? An Economic and Econometric analysis', NBER Working Paper no. 12869, National Bureau of Economic Research, Cambridge, MA, January 2007

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Child screening in Fedis woreda during Community Health Day

P. Fracassi, Ethiopia, 2008



Children with their caregivers on OTP day in Chalenqo Health Centre, Fedis woreda

P. Fracassi, Ethiopia, 2008

Can the Nutrition Information System be 'trusted' to build on available data sources?

By Patrizia Fracassi



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Patrizia would like to acknowledge team-members from the federal and regional Emergency Nutrition Coordination Units and from UNICEF Nutrition and Food Security Section for their continuous support, and especially government representatives at all levels for their willingness to share information and give their valuable insights.



The findings, interpretations and conclusions in this article are those of the author. They do not necessarily represent the views of UNICEF, its Executive Directors or the countries that they represent and should not be attributed to them.

Field Article

In Ethiopia, the role of the national Nutrition Information System (NIS) has been clearly stated in the Ethiopian National Nutrition Programme (NNP). There are three constituent parts to this role. These provide a 'comprehensive' and holistic structure to NIS design: to support timely warning and adequate interventions at woreda and higher levels, to develop, manage and evaluate the NNP at all levels, and to inform other sectors like agriculture, water/sanitation and economic development. This comprehensive vision for the NIS is to inform understanding of the nutritional situation with respect to chronic and newly occurring problems, as well as the causes of these problems, and how these change over time in order to help in decision-making at all levels. However, while the NIS can effectively accommodate and be 'open' to an unlimited amount of data, the ability to trigger an effective and appropriate response requires that the information is timely, reliable and consistent. These conditions ultimately determine the basic parameters upon which the initial choice of information for the NIS is made. Put simply, all data should be trusted and continuously available, data should be triangulated to generate 'context-specific' and evidence-based information and there should be a clear process, agreed by all actors, to feed information into decision-making.

Unique data situation in Ethiopia

Ethiopia is in quite a unique position because, over the last thirty years, large amounts of data have been collected by the Early Warning System (EWS), including health and nutrition information. However, the nutrition information collected by the EWS (see Box 1) provides only scattered data - mostly alert signals based upon 'observable' degeneration. Data is collected directly from health workers at 'critical times' and without systematic comparison with what would be 'normal' for a given time of year. Nutritional assessments are required during these critical times to confirm 'emergencies' but the seasonality of these critical times creates a widespread, simultaneous demand for assessments, which rarely can be adequately met.

In recent years, targeting of surveys has been improved through increased use of routine data sources, at least to indicate where an assessment is most urgently needed. Nutrition data are now available and accessible on a monthly and quarterly basis at the lowest levels due in large measure to three programmes: The Community Based Nutrition programme (CBN), the Therapeutic Feeding Programme (TFP) and Community Health Days (CHD) (See Box 1). These routine systems are the monitoring backbone of the NNP, which - at least theoretically - can be combined to inform timely warning and be shared with other sectors. Similarly, a number of diseases are also currently being tracked on a weekly basis through the Public Health Emergency Management (PHEM) system (see Box 1). Thus, there is a very real potential for the EWS to systematically tap into specific data from existing health information sources and vice-versa. This will be most effective if a consensus is reached on key indicators, in particular for timely warning. The key question, ultimately, is whether decision-makers from all sectors are willing to exchange and use available routine data to inform their decisions and response.

Nutrition data management

While there are 'trust' issues on data quality and credibility, the administrative decentralisation and existence of a widespread health network, creates the rare opportunity to build capacities, accountability and transparency at lower levels like the woreda and the kebele.

Initial data collectors are volunteers and frontline health practitioners. Many report that data collection is an additional burden to their already crowded agenda. After the initial collection, data flows up through various levels via supervisors and health officials. However, little feedback is given through the system so that people directly involved have a limited sense of what is actually done with the information provided. The sheer volume of reports stored testifies to the regularity of data collection undertaken and the immediate priority that should be given to improve the 'efficiency' of the process. Currently, asking for nutrition information from a woreda official leads to a paper-chase given the amount of report forms collated. Where officials have been provided with a computer, data appears to have been regularly updated. Given the increased requirements for information management, it seems inevitable that woreda Health Offices will move from a paper-based system to a computerised one, allowing them to perform data quality checks that otherwise are time consuming and prone to mistakes if done manually. The implication here is that woreda level officials are mostly young, often computer-literate, professionals with degrees. Provision of adequate tools/software to practically manage information can help build their capacity to implement the system. If information is not properly valued at woreda level, where most data are collated and 'checked', then the task of quality assurance at higher levels is nigh-on impossible.

Added value of NIS: triangulation of data

What is 'new' in the NIS paradigm is the requirement for 'triangulation' to provide evidence-based information for decision-making. This implies that collected data are not interpreted in isolation but are brought together from different sources. The strength of triangulation is the 'contextualisation' of the data, meaning numbers and/or standardised observations are grounded in 'local knowledge'. Frontline practitioners in health-posts have access to nutrition and health information through regular contact with patients. With nutrition, for example, they are in the best position to judge if the deteriorating weight of a child during monthly growth monitoring or his/her admission in the Outpatient Therapeutic Programme (OTP) is linked to lack of food in the family or to other causes like illness, inappropriate feeding practices, etc. It is this 'proximity' that allows for the triangulation to be most helpful at community level whereby

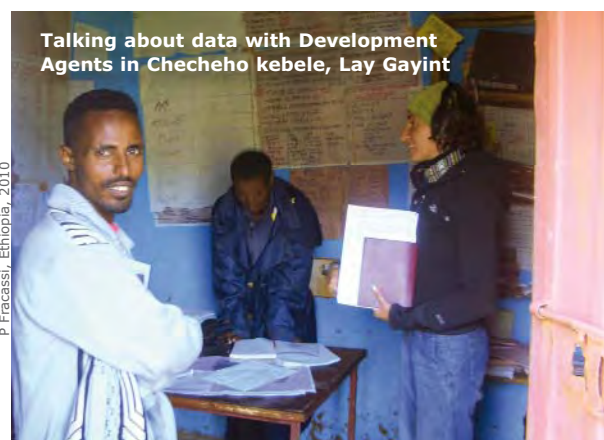
root causes of malnutrition can be identified. An example where this could be used is in chronically food insecure areas supported by the Productive Safety Net Programme (PSNP) where risk financing mechanisms exist to address new chronic or temporary food insecurity. By monitoring increases in underweight (as an early indicator) and OTP admissions (as a late indicator), frontline health practitioners, who are members of the Food Security Task Forces (FSTF), can play a crucial role in providing information for appeal processes. However, the credibility of their information will depend on their full understanding that risk financing mechanisms are only accessible when malnutrition is linked to food insecurity. Thus, triangulation of data at source is a kind of check by key people before information is fed into the decision-making processes or reported to higher levels.

Trust, accountability and transparency

In Ethiopia, in line with governmental decentralisation, woreda and kebele level administrations have been given increased power to analyse, assess and act on their own changing situation. They are therefore more responsible and accountable for both development and emergency response. Addressing the challenges of how information can feed into decision-making will ensure the credibility and sustainability of the NIS. At the moment, available data from routine sources are not adequately linked to information use. The main challenge for data utilisation at higher levels is that sources are not fully trusted while at lower levels there are limitations over capacities and mandate. While data quality assurance can be built into the system, especially by improving lower-level capacity, more emphasis needs to be given to the human aspect. 'Trust' cannot be built without attention to the role played by each stakeholder, starting with frontline practitioners. 'Accountability' cannot be acquired if there is no hand over of responsibility. 'Transparency' cannot be promoted without making response and feedback more visible.

The NIS in Ethiopia can be built upon coupling available data sources with adequate technical support provided throughout the health system. However, technical inputs are not enough to ensure its sustainability. A sense of 'value' is what motivates people and without it, the simple transmission of data to higher levels will not provide incentive to stakeholders for their input. 'Triangulation' is most effective at community level where individual data sets can be compared at source and understood within a given context. Frontline practitioners play a crucial role in building the credibility of the NIS but this can only come about with increased recognition of the role they play in informing decision-making. As the process of decentralisation continues within Ethiopia, important decisions to be taken at the lowest levels, risk financing mechanisms being an example, will require bringing together available data from different sources. This, in turn, will rely increasingly on key people accountable for informing this process at the frontline. Before trusting the Nutrition Information 'System', a vote of confidence should be given to empowering the information 'Source'. Credibility, after all, should always start with the people.

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Talking about data with Development Agents in Checheho kebele, Lay Gayint



Queuing during HD in Fedis Woreda

Box 1: A guide to key systems and programmes in Ethiopia implemented by the Government

The **Early Warning System (EWS)** is implemented nationally under the Disaster Risk Management Food Security Sector (DRMFSS). Information are collected at kebele level by Development Agents and passed to the Woreda Early Warning Food Security Task Force. The Task Force analyses and interprets data and submits reports to the regional level and to the Woreda Council. Collected information include: rainfall condition, crop condition, migratory pests, input supply, livestock condition; human health condition, water access and availability, education related information, fast on-set disasters (flash and seasonal river floods, landslides, conflict, forest fire outbreak and livestock diseases outbreak and human epidemics), grain, livestock and other commodities prices, coping mechanisms, emergency relief responses. Information is fed into decision-making processes for classification of emergency affected areas/woredas and relief allocation. In Productive-Safety-Net Program woredas, EW information is used to help programme the newly established Contingency Funds. In addition, the DRMFSS is responsible for the implementation of bi-annual seasonal (belg and mehr) multi-sectoral assessments. Information is used to identify acutely food insecure woredas and estimate the number of affected population in need of relief.

The **emergency nutrition surveys** are coordinated by the regional and federal Emergency Nutrition Coordination Units (ENCU) under the DRMFSS. Surveys are conducted by non-governmental organisations (NGOs) and/or government multi-sectoral teams using the SMART methodology. ENCU is responsible for the technical quality through an approval process of the initial proposal and final findings. Request for an emergency nutrition survey should come or be endorsed by the woreda/regional authority based on EW information and/or results from the bi-annual assessments. Information is used to confirm 'emergencies' and mobilize response for relief and selective feeding programmes.

The **Community Based Nutrition Programme (CBN)**, started in 2007, is now expanding in 150 woredas covering all kebeles. The programme is implemented by Volunteer Community Health Workers (vCHWs) under the supervision of the Health Extension Workers. It includes monthly Growth Monitoring and Promotion (GMP) of children under two years with referral of those who are severely underweight, not gaining weight for two months or with other health problems. Pregnant and Lactating Women (PLW) receive folic acid supplementation and are mobilised for antenatal care, safe delivery and other maternal services. Community Conversation (CC) is conducted monthly to assess child malnutrition, analyse causes and plan for action (Triple A Cycle Approach). Collected information includes: number of children under two years, number of weighed children, children with normal weight, underweight and severe

underweight, number of trained and reporting vCHWs, number of implemented CC sessions and participants. Indicators are disaggregated by gender.

The **Community Health Days (CHD)** are implemented every three-months and expected to cover all 150 CBN woredas. MUAC screening is conducted for all children 6-59 months and for PLW. Those identified as malnourished are referred to therapeutic feeding programmes or supplementary feeding, where available. Every six months, children are additionally provided with Vitamin A and deworming. Collected information includes: targeted population (children 6-59 months), coverage of child and PLW MUAC screening, coverage of Vitamin A and deworming supplementation. Children and PLW are grouped on the basis of MUAC as follows: MUAC >12 cm, MUAC between 11-11.9 cm and MUAC <11 cm, PLW with MUAC <21 cm. Data are collected by the Health Extension Workers and volunteers and sent to the Woreda Health Office for further transmission to the zonal, regional and federal level. Where supplementary feeding is available, screening results are shared with the DRMFSS to establish the number of beneficiaries.

The **Outpatient Therapeutic Feeding Programme (OTP)**, as part of the management of severe malnutrition, is now covering more than 6,000 sites (health centres and health posts). Collected information includes: number of in-charge beneficiaries, number of admitted beneficiaries (severely wasted, with oedema, transferred, etc.), number of discharged beneficiaries and performance indicators (cured, death, defaulter, etc.). Data are collected by the Health Extension Workers and health workers and sent to the Woreda Health Office (WorHO) for further transmission to the zonal, regional and federal level.

The **Public Health Emergency Management (PHEM)** system, coordinated by the Ethiopian Health and Nutrition Research Institute (EHNRI), is expected to be implemented on a nation-wide scale. Immediately reportable diseases include polio, anthrax, avian human influenza, cholera, guinea worm, measles, neonatal tetanus, pandemic influenza, rabies, severe acute respiratory syndrome, smallpox, viral hemorrhagic fever and yellow fever. Weekly reportable diseases are dysentery, malaria, relapsing fever, typhoid fever, typhus and severe acute malnutrition. The latter has been only recently added among the weekly reportable diseases. Health facilities have to inform the WorHO within thirty minutes after they see an immediately reportable disease. Further data transmission from woreda to zone/regions and from zone/region to EHNRI is expected to take place within an hour using any available communication mechanism. Health facilities (including health posts) report data from Monday to Sunday every Monday to WorHO. Data are expected to arrive at EHNRI every Thursday.

Oxfam's Somaliland-Ethiopia Cross Border Drought Preparedness Project

A community birkad in the Harshin-Somali region

By Abay Bekele



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The author would like to thank the staff of Oxfam GB Somaliland and Ethiopia and Horn of Africa, east and Central Africa, that designed and implemented RDD I and II projects, particularly Helen Bushell, Abdirahim Salah, Mustapha Mohammud, Million Ali, and Elias Kebede. Special thanks go to Jeremy Shoham for his invaluable support in putting documents and materials together and revisions of drafts.

The author is particularly grateful to the many pastoralist communities, partners with whom Oxfam has been working to end poverty and suffering in Ethiopia.

The ECHO RDD support for the second phase from July 2009 to June 2010 was seen as the time to consolidate the activities, learning and outcomes of the first phase.

Background to the project

The pastoralist populations in Ethiopia and Somaliland are exposed to multiple hazards. Continued and increasing frequency of drought combined with a weakened asset base and coping mechanisms has resulted in high levels of risk. Frequent droughts lead to inadequate access to and availability of both water and pasture. Rapid population growth and a declining natural resource base have exacerbated the negative impact of the recurrent droughts.

The major water source for pastoralists and their livestock is surface water collected in water catchments (birkads) during the rainy season. There is also an increasing trend of expanding underground cement water tanks. Some of the water facilities in pastoral communities are privately owned although a large number are communally owned, particularly water pans/catchments. Though communally managed water facilities offer good coverage to various social groups within pastoral communities, there are increasing concerns in terms of their maintenance. Overall, the existing water sources are inadequate to provide water for human and livestock needs, even during normal times. The situation worsens usually during periods of water stress. During this time, competition over water and pasture often results in conflict and forces pastoralists to travel for longer distances with weakened livestock to find water. The stress induced by long-distance migrations leads to an erosion of the social capital and social support networks amongst the pastoralists. Access to basic social services such as education and health facilities is also disrupted, rendering this group less resilient to the increased incidence of drought.

At the same time, the stress-induced migrations negatively affect the health and productivity of livestock, leading to a significant increase in livestock mortality during drought periods. As the health of the livestock deteriorates, pastoralists resort to selling animals, thus crowding the market and leading to a drop in prices. This reduces the income of the pastoral households at a time when prices of all other consumables tend to go up, hence weakening the purchasing power of the pastoralists. The end results are loss of assets, destitution and, finally, dropping out from pastoralism. 'Drop out' pastoralists tend to migrate to urban settlements to access humanitarian relief and other basic social services. These situations create a sub-group of the population around large towns and villages who lack the skills to take part in economic activities in their new settings.

Communities living in adjacent border areas are often inter-dependent (in terms of culture and ethnicity, language, sharing common resources, trade and marketing routes), and the causes of their poverty are inter-linked. This is particularly the case in pastoral areas where pasture and water need to be accessed by resource users on both sides of the border. Furthermore, communities sharing a common border are faced with similar environmental conditions, socio-economic constraints and risk profiles. Effective natural

Oxfam's Somaliland-Ethiopia Cross Border Drought Preparedness Project is implemented as a component of Oxfam GB's 15-year regional pastoral initiative that covers six countries in the Horn and East Africa¹. This initiative is divided into 3-year phases. In the Somali region of Ethiopia, implementation started in 2002 and is now in the second phase, whilst in Somaliland the first phase started in 2005. The first phase of Oxfam's Ethiopia-Somaliland Cross Border Drought Preparedness Project (see map) ran from January 2008 – June 2009. The second phase, which was funded under the European Commission Humanitarian Office (ECHO) Regional Drought Decision (RDD), was a 12-month project implemented in partnership with HAVOYOCO (Horn of Africa Voluntary Youth Committee) and ended in June 2010.

The regional pastoral initiative is based on the idea that the key issue in reducing poverty and marginalisation in pastoral communities is increasing the level and quality of pastoralists' participation and representation. At the heart of the programme is a concern to build strong, representative pastoral organisations, through which pastoralists can better understand and claim their rights and manage the development services they need. Strengthening drought management capacity (at technical, organisational and institutional levels) and working to reduce vulnerability to drought is a central aspect of the pastoral development programme.

Figure 1: Location of Ethiopia-Somaliland Cross Border Drought Preparedness Project



¹ Sudan, Ethiopia, Somalia, Kenya, Uganda, and Tanzania.

resource management, conflict management and development work therefore requires joint action. Of particular relevance to the Somaliland-Ethiopia Cross Border Drought Preparedness Project are issues of trade, charcoal production, livestock trekking routes and water points. For example, poverty reduction in border areas cannot be achieved without peace-building, and most conflicts have a cross-border dynamic. As well as mitigating risk (conflict, disease), cross-border work can also add value, by opening up social/economic opportunities (trade, natural resource management (NRM), education) – this is particularly the case given the trade routes and links between Somaliland and Ethiopia.

Project strategy

The principles of cross border programming as applied to the Ethiopia-Somaliland Cross Border Drought Preparedness Project have largely been developed from prior thinking and consultations over a period of years. The programme strategy is based on Oxfam GB's 'one programme' approach and Oxfam GB's and HAVOYOCO understanding that the cross border project should be:

- Proactive in nature and involve high quality work with communities
- Programmatic and strategic, i.e. focused on strengthening institutions/processes, not just activities
- Jointly planned and owned by communities, local partner organisations or by both governments
- Addressing issues that can only be tackled by common action and/or coordination on both sides of the border
- Used to achieve wider impact by influencing policy and practice on a regional basis
- Flexible and responsive to changes in an operating context
- Built on shared learning and understanding

Situation analysis

Assessments carried out in Ethiopia in January and March 2009 in Harshin Woreda and in Somaliland during the first week of May 2009 were instrumental in informing the proposal put to ECHO for the second phase of the cross border project. The findings revealed that vulnerable pastoral households were facing increasing livelihood erosion as droughts became more frequent and coping capacity extremely weakened. Communities identified the effect of drought on vulnerable households as a core problem, highlighting that lack of proper, integrated management of natural resources (water and rangeland) leads to scarcity of water and pasture, as well as natural resource and environmental degradation. The assessment also identified privatisation of communal grazing land, limiting mobility and availability of resources, poor access to basic social services, erosion of social capital and resource based conflict as interrelated problems associated with the effect of drought.

Within the current disaster management system (on the Somaliland side) there is a functioning, although often ad hoc, disaster management coordination structure and a food security and nutrition information system. However, the absence of government in a central strong position is a clear limitation in relation to effectiveness, efficiency and sustainability. Furthermore, little attention has been paid to strengthening of the organisational capacity of community-based institutions to

participate in the decision-making process in respect of matters affecting their welfare. In relation to this, women in pastoral societies are highly marginalised and face multiple burdens in terms of bearing responsibility for most productive and reproductive tasks, while lacking comparable authority over productive resources and decision making processes. These burdens tend to increase during times of drought stress and conflict. Preparedness planning and capacity is seen as an urgent need.

Phase II objectives and expected outcomes

The proposal for phase II submitted to ECHO states that pastoralist vulnerability to drought will be addressed by focusing upon the natural resource base and the management of natural resources, capacity for effective drought preparedness and response and supporting communities to preserve their asset base in times of drought stress. The principal objective of the project is to ensure that communities, local government and civil society organisations in Somaliland and the Somali region of Ethiopia are better prepared to manage the negative impacts of droughts.

Three expected results (outcomes) for Phase II are:

Result 1: Improved institutional capacity for drought preparedness linked to enhanced community preparedness capacity.

Greater emphasis was placed on this result during the second phase, recognising the limited achievements during phase I. The focus is to improve community access to early warning information from national/regional authorities, awareness of the drought cycle, and drought risk management at community level. This is supported by the development and improvement of contingency plans with clearly demarcated roles and responsibilities.

Result 2: Improved integrated natural resource management (NRM) to ensure increased access to and availability of pasture, fodder and water.

Here the project focuses upon mapping of the natural resource base as a tool for planning in both a humanitarian and development context. Mapping exercises are built upon by ensuring the effective management of water points (including hygiene practices) and pasture management. Based on studies undertaken during phase I, the issue of land enclosure was to be taken up at a policy and advocacy level.

Result 3: Households better able to preserve their assets throughout the drought cycle.

The emphasis here is on working to ensure that levels of vulnerability to drought do not increase amongst pastoral populations by helping to ensure household assets are preserved during times of stress. This involves reviewing and addressing issues of coverage of veterinary services offered by Community Animal Health Workers (CAHWs), reviewing livestock marketing for effective livestock off-take during times of drought stress and building the capacity amongst livestock marketing cooperatives, Woreda DPPO (Disaster Prevention and Preparedness Office), pharmacists and private vets in drought related livestock diseases and drought response.

Phase II activities

Target population

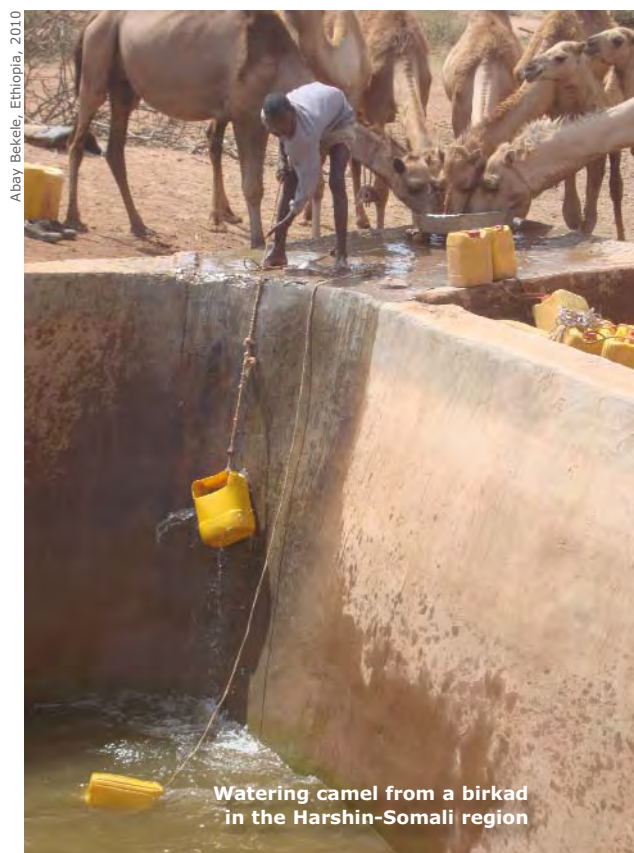
The project was implemented in the cross-

border areas of Harshin, Somali region of Ethiopia and in Odwayine, Durqsi, Ballidhiig (Togdheer Region) and Farawayne, Allaybadaye and Belligubedle (districts of Galbeed province of Somaliland). The border communities are mainly from Isaac clan sharing the same ethnic denomination.

A total of 76,000 people in 9,500 households were expected to benefit directly from the intervention as shown in Table 1. The beneficiaries are pastoral men, women, children, youth and the elderly. Among the general population in Somali region of Ethiopia, 90% are pastoralists while those in Somaliland constitute 60-65% of the population.

The activities implemented in phase II in order to achieve the three results are summarised in Box 1. Approximately 76,000 people (9,500 households) directly benefited from the integrated NRM of water and pasture resources as well as capacity building activities targeted by the project. Woreda, district and regional authorities, community-based organisations played a key and predominant role in the planning, implementation and monitoring of the project. By improving the management of water and pasture resources and reinforcing local capacities, all the Harshin population (80,215 people of whom over 45% are women) indirectly benefit from the project. Many of these benefit from the technical support provided by the implementing team.

Woreda and regional government institutions and community-based organisations also benefit from capacity building and technical support provided by the project. In Somaliland, the implementing local partner, HAVOYOCO, the community pastoral organizations (POs), the districts/regions authorities and the national level government departments including, the national disaster authority and the Ministry of Pastoral Development and Environment of Somaliland, benefit from institutional capacity support. On the Ethiopia side, the respective woreda and regional government institutions of Livestock, Crop and Rural Development, Water, Energy and Mines, DPP



Watering camel from a birkad in the Harshin-Somali region



Mobility, a key pastoral livelihood strategy (Kebribeyah Somali region)

Table 1: Profile of intervention targets in Phase II

	Total population in target area*	Total number of households in target districts**	Total direct beneficiaries	Total direct beneficiary households
Somaliland				
Galbeed (project will be working in 3 of the 10 districts)	100,800	12,600	14,729	1,841
Togdheer (project working in 3 of the 6 districts)	111,600	13,950	21,271	2,659
Total Somaliland	212,400	26,550	36,000	4,500
Ethiopia				
Harshin Woreda	80,215	10,027	40,000	5,000
Total Somaliland and Ethiopia	292,615	36,577	76,000	9,500

*Target area given as districts the project is working in, rather than the region.

** Each household has on average 8 people.

Box 1: Phase II activities by anticipated result

Result 1: Improved institutional capacity for disaster risk reduction linked to enhanced community preparedness capacity.

- Awareness raising on disaster risk reduction (DRR)/drought cycle management topics for pastoral organisations, traditional leaders, women groups, traditional meteorologists and government (district commissioners, village head-men and governors (regional and district level)) in Somaliland.
- Ten community mapping sessions on drought preparedness including mobility patterns, water and pasture resources for contingency planning in Harshin.
- Five trainings on DRR and five follow up meetings with CAHWs to strengthen a community based early warning information system using data collected by CAHWs and linked to the district DPPB office.
- District disaster contingency planning workshop, facilitated by DPPB with community participation, to establish a drought contingency plan in Harshin District. Also, support to NERAD (National Environment Research and Disaster Management) to develop a national and district contingency planning methodology for Somaliland as well as a national plan together with six district drought contingency plans.
- Conduct an early warning system (EWS) user survey and use this as a basis to develop an EWS for Somaliland.
- Study tour for NERAD, HAVOYOCO and Oxfam GB Somaliland to Ethiopia/Kenya to see how these two countries' disaster risk management agencies (including EWS systems) and mechanisms are set up and function.

Result 2: Improved integrated NRM to ensure increased access to and availability of pasture, fodder and water.

- Cross border integrated natural resource management mapping of the project area focusing on water, pasture resources and possible migration routes in partnership with the Food and Agriculture Organisation (FAO).
- Joint dialogue workshops on findings of natural resource management (NRM) mapping and land enclosures study from previous phase of RDD in partnership with FAO and line bureaus and ministries (proposed formulation of a cross border NRM technical working group)

- Construction of five community birkads and natural resources management training and follow up coaching for five birkad community management committees.
- Construction of four rainwater harvesting tanks in four schools and operations and maintenance training and follow up coaching for four teachers.
- Technical vocational skills course for 10 masons and carpenters on the construction and maintenance of water structures and roof water harvesting system.
- Gully erosion control and re-seeding of 6 sq. km of pastureland including provision of tools to community members.
- Technical and policy level support to the Ministry of Pastoral Development and Environment of Somaliland to advance the formulation of the national Land Tenure Policy. This includes convening a stakeholder's review meeting (to include participants from Ethiopia by way of joint learning) and incorporating the findings of the land enclosures study from the previous phase of the RDD.

Result 3: Households better able to preserve their assets throughout the drought cycle.

- A cross border study to investigate the possible role of Community Animal Health Workers (CAHWs) in drought preparedness and response including tackling drought related diseases and the overall performance of CAHWs in respect to their given mandate.
- Dissemination of study findings to national bodies via national workshops in Somaliland and Somali Region (government, FAO and agencies engaged with CAHWs working) to help strengthen CAHWs training through the updating of national and agency training guidelines.
- Used study findings to develop training guidelines on the management of drought related diseases and trained CAHWs on the same. A total of 22 CAHWs were trained in Somaliland.
- Support the Livestock, Crop and Rural Development Bureau in Somali Region of Ethiopia to roll out the national guideline for the Design and Establishment of CAHWs via holding a regional orientation session (targeting FAO, Agricultural Bureau DPPB, NGO's, etc.) and two district orientation sessions (targeting CAHWs, district veterinary technicians, live stock marketing cooperatives, private vets and private pharmacies).

and Health are key beneficiaries from the different trainings and institutional development support.

Amongst target beneficiaries are the POs at community level and (in Somaliland) district level community development and preparedness committees.

Management and coordination

In order to administer and deliver the project, a Project Management Team was formed and led by the Somali Region, Pastoral Programme Manager. The Ethiopia project lead reflected a change in approach from phase I which was led by Somaliland. The switch to Ethiopia reflects the larger project on the Ethiopia side of the border and the greater project management capacity correspondingly budgeted within the Ethiopia team.

Monitoring, Evaluation and Learning

In Phase I of the project, a Monitoring, Evaluation and Learning (MEL) guide was developed and a project baseline established. In phase II, the MEL guide and baseline was adapted to incorporate a Logical Framework.

Project implementing teams conducted monthly field monitoring by providing monthly progress reports. These monitoring exercises have been conducted to check the progress made against plans and hold discussions with stakeholders (communities, local authorities and NGOs). The implementing team held monthly coordination meetings to make decisions based on an analysis of the monitoring data, and the outcome of the meetings were shared with Oxfam Nairobi Office and FAO (flash report). During such reviews, Oxfam GB discussed with beneficiaries the relevance of the proposed activities for the next semester and took their comments into account.

A final internal evaluation was conducted by a team of Oxfam GB senior staff from Ethiopia and Somaliland, and representatives of NGO and government bureaus. The baseline survey was repeated and the results compared with the baseline carried out at the start of the project.

Lessons learnt during the first two project phases

Access to and types of rangelands

A key finding of the natural resource study in phase II of the project was that communal lands are being increasingly privatised, i.e. they become land enclosures. The process seems to be influenced by endogenous [erosion of customary institutions, intra-clan competition, erosion of communalism and population growth] and exogenous [weak grass root government institutions, expansion of settlement and social services, commercialization of rangeland products and climate change] factors. This leads to erosion of livelihoods as livestock numbers decrease, so that more people become involved in selling charcoal as a means of survival. Charcoal is used domestically or sold to the Middle East.

During phase II, Oxfam GB has tried to build community capacity, e.g. through developing water capacity (cement lined wells) and rehabilitating rangelands via the community.

A number of negative impacts and challenges of the programme have emerged. As water points were developed, communities started acquiring their own private birkads. The number of birkads on the Ethiopian side increased significantly but the amount of graz-

Table 2: Profile of beneficiaries by result/sector

Result /Sector	Number of beneficiaries in Somaliland	Number of beneficiaries in Ethiopia	Total number of beneficiaries	Number of households
Result 1: Disaster preparedness, local disaster management components	36,000	40,000	76,000	9,500
Result 2: Disaster preparedness, small-scale infrastructure and services	4,800 (part of the 36,000 above)	25,000 (part of the 40,000 above)	29,800	3,725
Result 3: Food assistance, short term food security and livelihood support.	9,600 (part of above)	0	9,600	1,200

ing land remained the same, leading to rangeland degradation during the dry season in particular. The number of birkads in the area of the project has now reached more than 5000. Livestock come to access the water and graze the fields around the water points leading to rangeland degradation. Wealthy households started selling water and natural resource sharing mechanisms changed as livelihoods declined. Overall there has been a process of commercialisation so that water and grass are increasingly purchased. Water is now commonly sold during drought and dry season periods.

The total number of water points rehabilitated during the two phases has been approximately 500 (approx 10%). There are two ways to manage birkads – privately and communally. Most of the constructed or rehabilitated birkads have been constructed for the community but private birkads tend to be better managed than communal ones. Another lesson from phase II has been that it is important to support the capacity to manage the water points (financially and institutionally) so that these resources are sustainable.

An important finding from this experience for Oxfam GB, who are now attempting to secure funding from ECHO to continue the project from July 2010 to December 2011, has been that drought related problems cannot be solved simply by filling gaps, e.g. constructing birkads. It is far better to build the institutional capacity of communities so that they can manage their own resources more effectively.

Another set of key learning points arose in relation to types of grazing land (60% enclosed/private, 40% communal). Enclosed lands are generally well managed but most of the community are excluded from these lands. Usually, the grass and trees are excellent on enclosed lands. Communal lands tend to be degraded and eroded and poorly managed. In the next phase of the project, Oxfam GB intends to support the exchange of management experience between enclosed and communal lands. This will be piloted in three woredas - four communities per woreda. The project will use households in enclosures to train those communities who use communal lands, in land management. To reverse the situation, pastoral field school will be piloted to train herders and community leaders. Trainees will act as resource persons in their local communities to raise the awareness level of the community on rangeland management.

Another set of issues arising out of the first two phases relates to cross-border land areas. The GoE does not recognise international movements over the border. Oxfam GB is therefore looking at issues around mobility and the

need to establish information systems for critical knowledge around pastoralist livelihood systems. For example, with regard to livestock diseases, how mobility is influenced by disease and how to share information between communities. The congregation of herds at dry season grazing areas favours disease transmission. However, this also gives opportunity to access and treat a large population of animals at any one time, and stands the best chance of breaking the chain of transmission.

Cross border livestock trade

The structure of the market between communities in the cross border areas of Ethiopia and Somaliland conveys livestock to Somaliland and brings in consumer goods to Ethiopia. Oxfam GB will facilitate exchange of information between the two communities.

Cross border mobility

Sharing information on grass and water availability and improved management of strategic water points and grazing lands between the two cross-border communities is essential. This will have to be done informally due to the GoE's position on cross-border movements. The Oxfam GB offices in Jijiga and Somaliland plan to exchange information and also disseminate and share information between the two communities. The aim in the next project phase will be gradually to institutionalise capacity to exchange information outlined above. It is also hoped to take relevant government staff from Ethiopia and Somaliland to West Africa to expose them to cross border policy formulation and implementation in the region (Mali, Burkina Faso or Niger) and how information sharing can work, i.e. the approach is advocacy from above while having an impact at grass-roots level.

Preparedness and livestock disease

Another key issue for the next phase of the project is addressing preparedness. A major problem for pastoralists is livestock disease, especially drought induced diseases. Five key livestock diseases for each animal species have been identified as part of this project making it possible to strategise disease control measures. The most important actors with respect to livestock diseases are CAHWs. Through the project, eighty nine have so far been trained on the Ethiopian side, with others trained on the Somali side. These CAHWs move with the communities to provide animal health service as they are pastoralists themselves. The project has been building their capacity in disease surveillance and diagnosis with a view to establishing community early warning and response capacity to drought. This will help facilitate vaccination or treatment interventions.

A relevant and appropriate contingency plan has been produced both on the Ethiopian and

Somaliland side on the basis of assessment, analysis, consultation, and seasonal scenarios. The contingency plan includes linkages with the regional (Ethiopia) and national (Somaliland) early warning system (EWS). It is anticipated that these linkages will be strengthened during the forthcoming ECHO programme (RDD3). Community based early warning indicators focus on the following key areas: rainfall, birkad levels, pasture conditions, livestock body condition, livestock disease, and migration in/out of the woreda. This information is gathered by CAHWs. Focusing on these indicators would help pilot the process and establish the analytical linkages between community based monitoring and the regional/national EWs. In Ethiopia, CAHWs information is passed to animal health technicians (AHTs) in government. In Harshin there are 13 centres with AHTs. AHTs travel to the district capital each month for payment and can use this opportunity to inform the district of developments. The project aims to develop district contingency plans, which will be activated by early warning information collected by CAHWs.

On the Somaliland side, institutional capacity of the government and the technical capacity of its staff are weaker. Oxfam GB has tried to build capacity of DPPO equivalent staff although there are not many suitable government staff to train. Thus, the programme is stronger on the Harshin side. Marketing activities have not as yet started in this project. Oxfam GB recognises that it is important to establish preparedness first but that timely livestock marketing will be critical further down the line.

Community vulnerability

The remaining pillar of the Oxfam GB cross-border project relates to reducing community vulnerability during drought and dry seasons. Generally, the drought and dry season favours the better off but if conditions are very severe, all are affected. The most vulnerable are the poor as they lack livestock and natural resources. They need alternative income generating sources. Women are the most vulnerable amongst the poor. Women and children remain behind when husbands migrate. If food and money sent by the husband diminishes, then they have to send livestock to their husbands to sell.

The challenge for the Oxfam GB project is how to reduce vulnerability of women and children who remain behind during the dry season. The programme is currently attempting to identify business opportunities for women.

Conclusion

In conclusion, a lesson from phases I and II of the project is that the focus of pastoralist interventions should be to strengthen the community and risk reduction strategies rather than simply fill material gaps through resource provision. Oxfam GB also realise that information on the interaction of communities with neighbouring groups is a pre-requisite for understanding pastoralist societies and planning development initiatives. Furthermore, there is a need to find out about the major resources in a community, where these are found, who manages them and perhaps most important of all, who benefits from them.

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Farmers at work

Oxfam, Ethiopia, 2008

Emergency Food Security and Livelihoods Project in Amhara and Oromia regions

By Shekar Anand, Oxfam



Shekar is Programme Director for Oxfam GB in Ethiopia. Past experience includes working with OXFAM, CARE, CIDA, and Government in Aceh, India, Zimbabwe and Afghanistan. He has a post graduate in Rural Development and Management of NGOs and twenty-two years of experience in his field.

The author acknowledges the work of Oxfam GB and the Ethiopia Rift Valley Women and Children Development Association, Ethiopia.

Oxfam UK has been working in Ethiopia for close to 30 years. Oxfam's flagship coffee programme linked with the international coffee house, Starbucks, has enabled the organisation's unique positioning within agriculture and livelihoods programming in Ethiopia. Oxfam UK is also leading Oxfam International efforts to establish a single management structure for the various national Oxfam agencies currently working in Ethiopia.

Oxfam UK currently has three types of programme in Ethiopia:

- i) Humanitarian response, e.g. drought or flood response, interventions to address acute outbreaks of watery diarrhoea.
- ii) Pastoral programmes, e.g. the cross border programme in Somali region.¹
- iii) Livelihood programming, which includes agricultural development.

Agricultural development in Ethiopia

The agricultural development programme in Ethiopia is part of the Global Agricultural Scale Up (GASU) initiative started by Oxfam four years ago. This pilot initiative was initially established in three countries, Ethiopia, Honduras and India covering three continents. Tanzania was subsequently included. If successful the programme is to be scaled up.

The Commercialisation of Agriculture for Smallholders in Ethiopia (CASHE) programme (called the Ethiopian Agricultural Scale Up Programme until 2009) targets small farmers with at least half a hectare of land and aims to support these farmers in gaining access to, and inclusion in, markets. The programme is operating in three regions in Ethiopia, namely Oromia, Amhara and Benshangul Gumuz Regional States. Beneficiaries are targeted on the basis of land ownership and market constraints. Farmers are supported in a number of ways, e.g. creating an enabling environment, value chain development of select commodities and market service provision.

The Agricultural Scale Up programme in Ethiopia has worked with farmers on many crops. It has now been decided to use a scalable model for three commodities, honey, coffee and sesame. These have also been identified by the government as high value crops for export. The project ensures that farmers are not dependent upon these crops for their livelihoods but also grow other crops.

Oxfam's work has focussed on three domains:

- farmer needs - formation of farmer groups, improving governance, development of skills, women's economic leadership, increasing production and linking this to market access and risk reduction
- the market - value chain development, assessing market needs and where formal markets exist, food processors, working with the private sector, and
- lessons learned - for example, building Oxfam capacity, developing and advocating at policy forums at local, national and regional levels and coordinating with stakeholders.

The Agricultural Scale Up programme strategy is about pulling rather than pushing people out of poverty. The approach builds on the assets and capacities of farmers who are not food insecure. The theory is that by focusing on this stratum of society, it will be possible to make a contribution to the overall economy of the country and resulting GDP. It will create greater wealth and development for the country than a strategy which focuses upon the poor and most food insecure. The approach focuses on productive areas and productive capacity.

However, Oxfam are aware that their target farmers are often exposed to emergencies like drought, flood, market turbulence and climate change. Consequently, Oxfam have endeavoured to embed a humanitarian response programme within the Agricultural Scale Up programme for pockets of target farmers, to prevent them from falling into the poverty trap. Small holder farmers who become food insecure do not have access to the national Productive Safety Net Programme (PSNP). Furthermore, there is very little donor money for supporting agriculture. Oxfam have therefore come up with an approach called the 'emergency food security and livelihoods (EFSL) project' to protect those farmers who are vulnerable to impact of drought and other shocks.



Packed honey ready for market

How the EFSL project started

The failure of short rains in most parts of Ethiopia in 2008 resulted in drought conditions that affected the agricultural scale-up programme in Amhara and Oromia regions. Farmers in at least nine woredas required immediate EFSL support for a three to five month period. Oxfam elected to support the farmers to develop agricultural infrastructure that would help restore normal food production levels by the end of the harvest season, i.e. December 2008.

The Oxfam EFSL project appeal proposed, first, to provide immediate support to affected communities so that they could withstand the shock till the next harvest season and secondly, to stabilise food production in the long run through development of agricultural infrastructures and community-managed systems. There were three primary objectives:

¹ See field article in this issue, p27-30.

- i) Respond to increasing vulnerability to food insecurity faced by smallholder farmers in nine target woredas of Amhara and Oromia regions through social transfer and a public works project.
- ii) Strengthen linkages between social protection and humanitarian response activities and improve sustainability and probability of graduation of beneficiaries. This was to be achieved through developing a strategy for collaboration with PSNP around social protection leading to graduation in target woredas.
- iii) Inform long-term agriculture programming on appropriate activities to address the humanitarian context faced by smallholder farmers as part of an integrated approach.

Box 1 outlines the activities planned in the different regions.

Management and implementing partners

The overall management of the project was supervised by agricultural scale-up programme managers who were in charge of Amhara and Oromia regions respectively. Partners were responsible for project implementation on the ground. The project was implemented over a 16 month period (September 2008 – December 2009). However actual implementation of project activities was completed in the first 12 month period and the remaining four months were used for evaluation, documentation of lessons learnt and wrap-up.

The project was implemented by the Organisation for Rehabilitation and Development (ORDA) in Amhara region, and by Rift Valley Children and Women Development Association (RCWDA) and Rural Organization for the Betterment of Agropastoralists (ROBA) in Oromia region. Relevant government departments at regional, zonal and woreda levels were consulted during the course of implementation.

Target beneficiaries

In Amhara region, a total of 2,300 households (11,500 people) in six woredas were directly involved in and benefited from this project, constituting at least 13% of the affected population in these woredas. All of the beneficiaries were also the beneficiaries of the Agricultural Scale Up Programme (1,080 households targeted on malt barley value chain and around 1,220 households on honey value chain interventions). It was estimated that about 88,000 people in these woredas indirectly benefited from the project interventions.

In Oromia region, a total of 3,050 households (15,250 people) in three woredas (Arsi Negelle, Kore and Kofele), in 15 kebeles of Langan Shala locality, were directly involved in and benefited from this project. It is estimated that about 75,000 people in these woredas indirectly benefited from the project interventions. All of the beneficiaries in Oromia region were also beneficiaries of the Agricultural Scale Up Programme.

Impact of the programme

Changes in household income

According to implementing partners and beneficiaries, the increase in income as a result of the EFSL project has improved households' access to food and assisted households to pay back the loans they received from saving and credit groups/institutions. The extra income has also

Box 1: Project activity plan

Amhara region

- EFSL assessment and planning with communities
- Construction of 5 grain banks in five malt barley growing Woredas
- Construction of 4 honey collection centres in each honey Woreda
- Construction of access roads- 33 Km
- Provision of around 150kg bee forage seed and planting on 50 hectares
- Capacity and skill building of communities on maintenance and use of community structures and CBRM approach and mechanisms
- Establishing community-managed revolving funds for 50,000 birr in two locations in each woreda

Oromia region

- EFSL assessment and planning with communities
- Cleaning and maintaining 22 irrigation schemes
- Maintenance of rural roads (100 km)
- Soil and Water conservation structures (25)
- Provision of vegetable seeds to 780 households
- Provision of farm tools & equipment to 780 households

- Establishing/strengthening market information centres
- Capacity and skill building of communities on maintenance and use of community structures and on the Community Based Resource Management (CBRM) approach and mechanisms
- Establishing community-managed revolving funds for 50,000 birr in two locations in each woreda

Amhara and Oromia regions

- Social Security assessments conducted in targeted woredas
- Consultative review of PSNP and other food security programmes
- Consultation and strategy development through learning from the response
- Baseline survey/ assessments
- Monitoring of project implementation
- Documenting lessons learnt and dissemination
- Conducting mid term and final evaluation
- Application of learning in development programmes and policy advocacy

enabled households to bridge the hunger gap and deal with food price inflation, improved access to agricultural inputs, particularly those that increase the productivity of high value commodities and enabled households to buy productive assets such as livestock. Furthermore, almost all households targeted by the project now send their children to school.

Data show a clear increasing trend in income from Oct/Nov 2008 to May and June, 2009, after which income fluctuated up and down. Most of the beneficiaries interviewed indicated that there has been a considerable increase in income.

Diversification of sources of livelihoods

Implementing partners and beneficiaries cited the following as examples of livelihood diversification due to the project:

- Increased on-farm and off-farm activities, such as beehive production due to the revolving loan scheme and income generating activities.
- Increased number of small holder farmers engaged in employment opportunities created through cash for work.
- Increased production of malt barely crop.

Increased availability of food

According to implementing partners and beneficiaries this has been achieved through a number of means:

- The transfer of cash resource to vulnerable households through public work has

increased capacity of households to purchase food items from local markets.

- The provision of farm tools and equipment enabled farmers to undertake farm activities more effectively coupled with the various soil and water conservation measures, e.g. the construction of check dams, cut off drains, and hill side terraces in areas that are highly susceptible to erosion and land degradation. These measures have led to an increase in production and productivity.
- The training and technical support given to farmers in improved agronomic practices like seed beds preparation, technique of sowing seeds on the beds, mulching system, shading system and improved ways of watering seedling in different stages, have all contributed to increased production of crops.

Access to potable water supply

Access to potable water has improved through a number of means (more water points (faucets) and construction of pot/calabash stands) leading to improved water consumption both during the wet and dry seasons. It was also reported that the use of safe water supply has significantly contributed to improvements in health status of people, as well as improved children's school enrolment – particularly girls, as the time children spend on fetching water has decreased. The majority of water collection trips used to take 90 minutes but have now reduced to 30 minutes. Furthermore, women were spending less time queuing.



Access to local markets

The construction and maintenance of feeder roads improved access of particularly marginalised communities in the intervention areas to market and also to other social services, such as health.

Asset creation and ownership

Most households have created productive and non productive assets following the project intervention. There has also been a marked increase in holdings of livestock and other productive assets and a reduction in distress sales of assets.

Prices of cereals in local markets

The situation in Kofele woreda is typical of other woredas where the prices of cereal and livestock have declined or remained more or less stable (except for the price of bulls which have shown exceptional fluctuations in the months of December 2008 and March 2009 as shown in Figure 1).

The results of market assessment conducted by the World Food Programme (WFP) during the project year are presented in Table 1. These indicate that in Oromia region, the prices of

staple food such as maize, wheat and sorghum in quintals have generally declined over the year of the intervention. The same pattern was observed in Amhara region for maize and sorghum, although the price of wheat increased above the normal seasonal patterns. According to WFP, at national level, local prices of major staple foods continued to decrease as a result of the continued market stabilisation programme implemented by government and continued food aid interventions.

Improved awareness about the benefits of organised actions

Knowledge and awareness amongst members of self help groups (SHG) on development related issues has increased. Members explain the importance of organizing into groups by a local saying 'Jirbiin walitti yaatee arba hiiti', which means that 'when threads come together, they could tie an elephant'. The group savings initiated in each SHG has started to play a role in reducing the vulnerability of group members during production shocks. Currently all the SHGs have at least a monthly saving scheme and regular forums for discussion.

Participation of farmers in the construction of the grain banks indicates that there is an increased knowledge among farmers about the benefits of being organised and working together in grain marketing, as they are now in a better position to influence the market.

Saving patterns

Review of the available data indicates that there is still a low level of household saving. For instance, the saving and investment of heads of households in Bugna woreda for the month of March 2009 show that 100 heads of households saved/invested a total of 1,657 birr, i.e. 16.57 birr per household. In Arsi Negelle woreda in February 2009, only 160 birr saved/ invested by 189 households, i.e. 0.846 birr per household.

Changes in gender relations

Interventions in high value crop promotion, public works and cash transfers, potable water supply and the support to off-farm income generating activities have all enabled women to address both their practical and strategic needs. Women have been equipped with important life skills in areas such as small scale business development, entrepreneurship, petty trading and the production of vegetables and fruits.

There are clear indications of changes regarding women's participation in community level processes, including political participation and leadership. Interventions have also started to change gender based division of labour, with men and boys now assisting women and girls in household activities such as fetching water. There has also been a significant shift in decision-making. More than half of women now decide whether or not to participate in community affairs. A considerable number of women are now members of either committees or leaders of community organisations, including their saving and credit cooperatives, and are free to make decisions either to join such community organisations or not. Some of the women pointed out that because they are now economically in a better position, they can express themselves more freely and forcibly.

Key challenges

Due to increasing food prices, the cash provided through cash for work programmes is becoming inadequate to enable recipients to purchase foods similar to those provided in a food for work programme, thereby discouraging participation in the programme. Managing food price instability is a long standing policy challenge. With mixed experiences of agricultural price policy reforms, this has re-emerged as a contemporary policy issue.

The project targeted only a portion of the total population in the woredas worst hit by the food crisis. There has been an increasing demand, particularly for financial support from those areas in the woreda that were not targeted by the project. This has led to a situation where numbers enrolled in public work activities have in some cases almost doubled compared to planned number of beneficiaries. This dilutes financial resources transferred per head.

Stakeholders, government and the community have limited experience, as well as capacity, to effectively manage public work activities and cash transfers to vulnerable groups. This has, in some cases, resulted in the late or untimely delivery of project inputs to beneficiaries. Furthermore, price inflation of important project inputs has forced project expenditures over and above the planned budget.

Case study: Mohamed Kediro



Mohamed Kediro is 28 years old and lives in Kore Woreda, Shifa kebele Biftu village/Got/Ganda. He has a family of nine (three adults and six children below the age of 18 years).

Mohamed described how after the intervention, household income has increased as he is being provided with improved seed (malt barley) while the chronic problem of potable water has also been addressed. Furthermore, availability of household food has increased. Mohamed has participated in training on crop management. The project has provided him with financial support and improved seed varieties. But he reported there has been no change in his livestock management, as this is not well addressed by the project.

As a result of his participation in the project, he has now accrued important productive assets – he has bought one sheep, constructed a new house and has bought a bed.

Increased availability of food

According to implementing partners and beneficiaries this has been achieved through a number of means:

- The transfer of cash resource to vulnerable households through public work has increased capacity of households to purchase food items from local markets.
- The provision of farm tools and equipment enabled farmers to undertake farm activities more effectively coupled with the various soil and water conservation measures, e.g. the construction of check dams, cut off drains, and

hill side terraces in areas that are highly susceptible to erosion and land degradation. These measures have led to an increase in production and productivity.

- The training and technical support given to farmers in improved agronomic practices like seed beds preparation, technique of sowing seeds on the beds, mulching system, shading system and improved ways of watering seedling in different stages, have all contributed to increased production of crops.

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The construction and maintenance of feeder roads improved access of particularly marginalised communities in the intervention areas to market and also to other social services, such as health.

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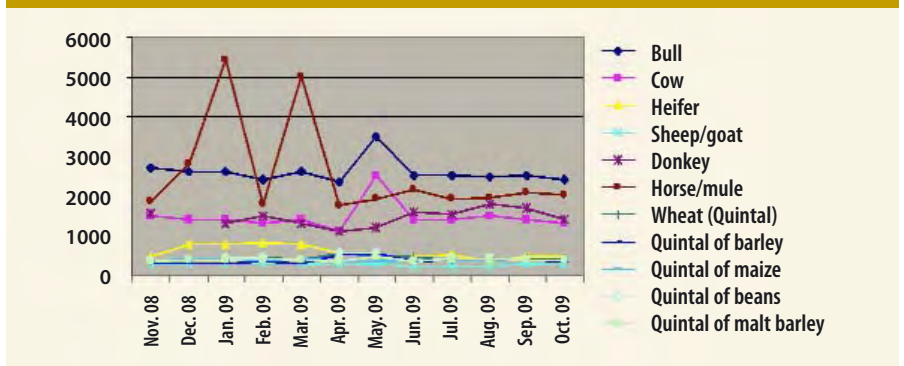
Table 1: Prices of cereals in selected regions in April, 2010

Markets	Major Commodity	Current Price	Price change (%)			Average Change		
			1Y	6M	1M	1Y	6M	1M
4. Regional average (BIRR/100KG)								
Oromia	Maize	406	-11.0	-13.6	-4.1	▼	▼	▼
	Wheat	550	0.6	-17.5	-8.3	▶	▼	▼
	Sorghum	403	-22.7	-25.5	-1.6	▼	▼	▼
Tigray	Maize	432	-18.9	-29.4	7.3	▼	▼	▶
	Wheat	592	0.9	-22.0	-9.9	▶	▼	▼
	Sorghum	486	-11.4	-26.9	-11.5	▼	▼	▼
Somali	Maize	390	-23.5	-1.9	-4.9	▼	▼	▼
	Wheat	375	-39.5	-22.7	-21.1	▼	▼	▼
	Sorghum	300	-31.8	-50.8	-15.2	▼	▼	▼
SNNPR	Maize	362	-21.1	10.2	-5.2	▼	▲	▼
	Wheat	578	-7.5	-2.0	5.6	▼	▼	▶
	Sorghum	385	-6.1	-11.5	0.0	▼	▼	▶
Amahara	Maize	413	-6.4	-11.4	-3.2	▼	▼	▼
	Wheat	578	18.0	10.3	8.9	▲	▶	▼
	Sorghum	450	-13.1	0.0	-16.5	▼	▶	▼

Note: ▲ Price increase above normal fluctuation
▶ Normal price fluctuation
▼ Price decrease below normal price fluctuation
Y: year; M: month



Figure 1: Average price of livestock and crops in local markets in Kofele woreda



Source: ROBA, Monthly Market Assessment Data

Lessons learned

Households who are poorer in terms of ownership of physical assets are less able to apply resource management practices (such as land management, improved farming practices, etc) and hence they obtain lower yield and lower income.

Facilitating rural credit facilities and providing credit support to poor rural communities contributes towards enhancing their involvement in different income generating activities that increase income level.

Farmers' access to credit should be improved through the formation of saving and credit groups/cooperatives. More saving and credit cooperatives should be established and their institutional capacity built up through training, provision of materials, seed, money or working capital.

The onset of natural disasters presents new opportunities for microfinance institutions (MFI) especially in rural areas. MFIs can act as a logical mechanism for disaster relief, reconstruction, rehabilitation, and development. Disaster-oriented microfinance services may be in the form of new and temporary services developed as a post-disaster response, or as part of the menu of services already being provided by the institution. Microfinance programmes that target female clients are likely to have the greatest impact on household well being.

Relief and development are not separate entities. They are interdependent and should be considered as such when planning and implementing projects.

Some vulnerable households are labour constrained and hence may not be able to provide the labour required to participate in public works. Hence there is likelihood that children under the age of 18 become involved in public work programmes. Additional information is required to determine whether children have participated in cash for work programmes or not. Other data such as school participation of children and the work loads of women and girls should also be collected and analyzed to monitor and mitigate unintended outcomes.

Implementing this type of project within a short time-frame is a challenge, as there is limited time for community sensitisation, organisation, mobilisation, monitoring and training. More time should be allocated to ensure effective implementation, follow-up and support, as well as to assess progress and monitor impacts.

Conclusions

The project has made significant contributions in protecting consumption during times of food crisis and also saving beneficiaries' by providing cash, credit/loan and other agricultural inputs like high value seeds and farm tools. This has enabled beneficiaries not only to protect their assets but to go beyond that to create/build additional productive and non-productive assets in a short period of time. All of the important results and outcomes achieved so far have positively impacted on the capacity of the community to prevent, manage and mitigate vulnerability and shocks. Project interventions have contributed to the gradual stabilisation of market prices of major agricultural commodities, which in turn improved the access of households to food and enabled them to buy goods at reasonable prices. However, the problems of chronic vulnerability and high level malnutrition still persist in the project intervention areas. More efforts are required to understand and respond to this chronic vulnerability.

The project also contributed to the countries' awareness of social protection, the ways in which it could be implemented, and the opportunities for poverty reduction that it offers. This made the project a welcome support for policy dialogue, demonstrating the possibilities of implementing social protection programmes in the country.

The added value of the project is that it helped maximise opportunities for high-value crop production as an alternative source of income by building the capacity of farmers and farmer-led local institutions. The promotion of market-oriented agricultural products, such as high-value crops, is of paramount importance in the process of quickly changing the lives of farmers who struggle to get out of extreme poverty and vulnerability.

Activities undertaken have directly contributed to improvement in the access of households to local markets. However, the adoption of improved agricultural technologies in general and the use of improved essential agricultural inputs- including organic fertilizer, in particular, is minimal among farmers in the project intervention areas.

In order to improve farmers' access to inputs and to markets, future programmes in the area should build the institutional capacity of local government, community-based organizations such as service cooperatives and saving and credit associations. Efforts should be exerted to introduce a number of new and improved technologies to the farming system in the woredas.

In order for the Agricultural Scale Up programme and EFSLP to become the country approach, Oxfam recognise the need to come up with evidence of impact for Government and donors. Oxfam are no longer alone in advocating this approach. The World Bank has recently invested 300 million dollars into an agricultural growth programme (AGP) that targets food secure districts. Oxfam staff have been employed as consultants to work on an AGP operations manual.

Disseminating lessons to government has been slow although Oxfam have convened the first forum on agriculture, which has been followed by two GoE led national forums. The Oxfam approach converges well with GoE's PASDEP¹ (Poverty Reduction Policy) which advocates for agricultural development led industrialisation.

This programme has managed to integrate humanitarian activities into a development project by transferring resources in a different way. Oxfam are hopeful that the approach will continue to be emulated by other agencies including Government.

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¹ Plan for Accelerated and Sustained Development to End Poverty



Profile and overview of the church's role in emergency response

When Dhabe's pastoralist Borana community lost many of their cattle during a drought, EEC-MYs cash-for-work scheme offered them a lifeline, enabling them to buy food and put in place measures to reduce the impact of future disasters.

Christian Aid / Caroline Waterman

By Deed Jaldessa and Debela Kenea



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THE ETHIOPIAN EVANGELICAL CHURCH MEKANE YESUS DEVELOPMENT AND SOCIAL SERVICES COMMISSION

The Ethiopian Evangelical Church Mekane Yesus (EECMY) was established as a national church in Ethiopia in January 1959. As part of the mission of the church, EECMY set out to work in the areas of health, education and community development under its Development Department. This gave birth to a full incorporation of the 'Holistic Ministry' concept of the church, developed and communicated to the Lutheran Communion (Lutheran World Federation (LWF)) in 1972. The Holistic Ministry concept is based on the broad understanding of human needs (physical, social and spiritual). The EECMY Development and Social Services Commission (EECMY-DASSC) is a legally registered¹ faith-based development agency that took over the responsibility of the former Development Department of the Church in 2000, as required by the national policy of the Ethiopian Government. The Commission has robustly continued to work on humanitarian emergency response to disaster affected populations, building on strong experiences from the early 1970s and mid 1980s when the country faced widespread famine.

The EECMY-DASSC works in partnership with sister churches, development and humanitarian agencies in Ethiopia, Europe and North America. It is a leading member of church networks, such as the LWF, Action by Churches Together (ACT) Alliance and other evangelical fellowships in the country and abroad. The overall budget of the EECMY-DASSC in 2009 was Ethiopian Birr 200 million (approximately USD\$ 12 million). These funds are raised from different sister churches, development and humanitarian agencies operating throughout the country and worldwide.

Five year strategy

The following programmes constitute the major strategic focus areas of the EECMY-DASSC in its current five-year plan. These programme priorities are closely aligned with the Government's poverty reduction programme and the Millennium Development Goals (MDGs):

1. Socio-economic development (food security, water supply, gender equality, environmental protection, income generation)
2. Health and HIV/AIDS prevention and control
3. Capacity building
4. Child and Youth Care and Development
5. Education (formal, informal/literacy, vocational and special needs education)
6. Emergency Relief Response, Disaster Risk Reduction and Rehabilitation.

The EECMY-DASSC works through branch offices in 21 synods, which are local church units geographically located throughout the country. In total, the EECMY has 5.3 million church members representing around 7 per cent of the total population of Ethiopia.

Emergency relief and rehabilitation

Emergency relief is a vital part of EECMY-DASSC's work to respond to urgent humanitarian and further rehabilitation needs. The emergency relief response is aimed at providing resources either directly or in coordination with other national and international sister churches and NGOs to support emer-

gency affected people who cannot survive without assistance. Beside the emergency responses to urgent needs, EECMY-DASSC also implements short and long term rehabilitation programmes focusing on capacity building of those affected and their local communities, The Commission works with Government line departments to secure necessary permissions and also to ensure that services are not being duplicated but well coordinated with other relief agencies. Most importantly, the Commission consult and participate with the communities to ensure transparency and so that the aid provided helps meet their needs.

Targeting and implementation

The overall national targeting for emergency assistance is carried out by the Government's Disaster Risk Management and Food Security Sector (DRMFSS) through twice-yearly food security assessments. Household beneficiaries are targeted, screened and registered by the community based participatory task force in woredas (districts) in need. The major part of the humanitarian response is usually covered by the Government. The Church's response is required in situations where the relevant

¹ In accordance to the Government's law for non-governmental organisation (NGO's) registration for legal license, EECMY-DASSC was registered and certified by the Ministry of Justice as a development wing of the EECMY in 2000.

Region/District	Type of emergency	Population targeted	Type of response	Type of response
Oromia region- Gasera & Madwalbu districts	Flood and drought	17,901	General and supplementary food distribution	Wabe Batu synod
SNPP Region- Aleta Wando district	Drought	20,000	General and supplementary food distribution	South Central Ethiopia Synod
SNPP Region- Yirgachaffee	Drought	20,380	General and supplementary food distribution	South Synod
SNPP Region- Burji special district	Drought	18,000	General and supplementary food distribution	Amaro synod
Amhara region- Bati district	Drought	32,143	General and supplementary food distribution	North Central Ethiopia Synod
Gambella region- Jikawo District	Drought	15,894	General and supplementary food distribution	Western Gambella Bethel Synod
Gambella region Akobo District	Tribal conflict	7,020	Non food items	Western Gambella Bethel Synod
Gambella region- Itang District	Flood	10,500	Disaster Risk Management	East Gambella Bethel Synod

Emma Proud, Ethiopia, 2010

government department, such as the DRMFSS, is unable to reach an area or needs the support of the Church to mount a response. In 2009, the EECMY-DASSC responded to emergencies in 10 woredas, reaching a total of 141,838 people with food aid and non food items (NFI) such as blankets, plastic sheets, soap, containers, mosquito nets, seeds and farm tools.

At the time of writing (October 2010), humanitarian assistance was being supported by the EECMY-DASSC and implemented by the Commission's synod offices in six different regions of the country experiencing emergencies (see Table 1). The Commission's synod offices are the agents responsible locally for planning, implementation and supervision of humanitarian aid in their respective operational areas. They also ensure community and other stakeholder's participation in decision making and providing coordinated assistance.

The EECMY-DASSC has a responsibility to ensure compliance with the rules, regulations and codes of conduct in the implementation of programmes. It provides staff training to ensure that they are responsible and qualified for the task. Further training and capacity building supports are also given to local farmer's association leaders, to coordination members of the district task force for aid work and to other local line departments' staff to ensure that they can fulfil their responsibility

Challenges and opportunities for the future

Delays in assessment of an emergency often delay the actions needed to meet critical needs. EECMY- DASSC will need to strengthen its skilled human power and financial capacity for rapid assessment, as well as its capacity to mount even more effective responses in the food and nutrition sector.

In many affected woredas, the community's normal means of accessing food is compromised by both slow and rapid onset of disasters. Looking back over the past years, the Churches' contribution to food security-related emergency response has been considerable. To strengthen EECMY-DASSCs response in the future, it is important for the EECMY-DASSC to consider increasing its capacity in a range of response and programming areas based on a clear analysis of risks and needs. These will include:

- General food distribution (free) based on the level of the food insecurity analysis
- NFIs provision
- Emergency nutrition interventions
- Seeds, farm tools and restocking of animals (goats, sheep and milk cows, oxen)
- Income diversity through self-employment
- Building community capacity in disaster risk reduction and management
- Provide assistance for environmental rehabilitation and further rural/ agricultural development

Another area in which EECMY-DASSC would like to grow capacity is emergency nutrition and health support in marginal areas and in areas where displacement occurs due to various disasters.

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Cash for work beneficiaries digging soil bunds in Gashamo, Somali Region, to regenerate the rangeland

The RAIN programme

By Miriam Christensen and Todd Flower



Miriam Christensen was the Documentation and Information Officer with the RAIN programme. She specialises in communications and knowledge management. Miriam now works with the International Labour Organisation and is based in Tanzania.



Todd Flower is the Chief of Party of the RAIN programme and has extensive experience in implementing and managing international agricultural development projects. He specialises in agricultural market development.

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Rises in global food prices have led to an increase in vulnerability for areas of the world that are net food importers, which includes many countries in Africa. In Ethiopia, pastoralists and agro-pastoralist households depend on a delicate balance of trade to be able to purchase their household food requirements based on the value of their animal herds. If the prices of animals do not also rise with the prices of staple foods, then these households can struggle to meet their needs.

The United States Agency for International Development (USAID) through the Office of Foreign Disaster Assistance (OFDA) has been providing support to communities in Ethiopia for many years through short-term emergency assistance programmes, such as emergency vaccination or nutrition campaigns. These programmes have traditionally lasted from 6 to 12 months. The global food price crisis brought about a change in these programmes, with development of a longer term vision of assisting people and communities to remove themselves from the cycle of emergency assistance.

It is in this context that Mercy Corps is implementing the Revitalising Agricultural/pastoral Incomes and New markets (RAIN) programme, a multimillion dollar OFDA/

USAID funded programme. The RAIN programme is being implemented for three years from 2009 to 2012. It is clustered around an inter-linked geographic area connecting one zone in the Oromia region with four bordering zones of the Somali region. RAIN seeks to protect, promote, and diversify livelihoods in this strategic cluster as a means of increasing households' resilience to shocks. The RAIN programme works in the transitional environment from emergency to development programmes by combining traditional emergency interventions with longer-term development activities. This seeks to address both the immediate needs of communities and also to promote sustainable local economic development and integration. Some of these activities include cash for work, emergency animal vaccination campaigns, value chain analyses, linking producers to markets, and the establishment of a microfinance institution to increase access to credit. The RAIN programme is targeting over 700,000 people with these activities.

RAIN objectives

The programme has two objectives:

- To protect the agricultural and pastoral productive asset base of food insecure households to prepare them for participation in more profitable markets

Emma Proud, Ethiopia, 2009



Vaccination campaign in Gashamo, Somali Region

- To increase and diversify the asset base of food insecure households via immediate economic opportunities and the development of high impact agriculture and non-agricultural markets, that spurs private sector investment and local economic growth.

Implementation: natural resource management

During the first year and under the mandate of the first objective, projects such as cash for work, seasonal and emergency vaccination campaigns and training of community animal health workers were implemented. Over 1.5 million animals received vaccinations that assisted 160,000 households and so far, more than 9,000 people have been employed under the cash for work component of the programme. While such activities have been going on in the region for many years as individual projects, it is the first time that such a range has been brought together under the umbrella of one programme.

All cash for work activities have focused on natural resource management to provide immediate assistance for poor households and to ensure that resources are developed for the benefit of the community. Natural resource management projects include activities like pond rehabilitation or other earth works that reduce the threat of flash flooding or drought. All natural resource management activities are identified by the participating community through a community action plan. The RAIN team works together with communities on asset and risk mapping and needs assessment. Cash for work is utilised to assist poor households to rebuild their assets and pay off debts. Poor households are much more likely to be risk averse and unable to take chances on new market opportunities. The cash for work helps these households to become more secure so that they can participate in profitable markets.

Implementation: a market led approach

The second objective, to strengthen economic recovery and market systems, is what makes RAIN dramatically different from traditional OFDA funded projects. Working on market system development focuses on the long-term approach, rather than immediate, emergency interventions. Traditional emergency approaches tend to have non-governmental organisations (NGOs) providing services directly. A market based approach, however, puts the 'exit strategy' first and aims to strengthen the local market to provide access to goods and services, so that NGOs do not have to in the future.

The RAIN programme focuses on market systems and provides support by creating linkages between various market participants. In the first year of the programme, several value chains were identified and evaluated including live animals, hides and skins, milk, fruits and vegetables, and peanuts. These value chains were selected for evaluation because they had the highest potential to

provide benefit for the poor in the programme area. At least one of these commodities is an important income source in all of the communities where the programme is working.

The value chain analyses included interviews with government, private sector and community members. A common theme to all of these evaluations was that farmers do not have access to the inputs they require to invest in the production of large quantities of high quality products. The RAIN programme is targeting access to agricultural input supplies to assist producers to be able to meet available market demand. Most of the markets in this area are considered informal, with lots of small scale transactions in many local markets. There are very few large, formal businesses working in the area. This has left the RAIN programme to focus on the production side of the value chain for most of these commodities. Demand is considered strong for all of these commodities. This means that any increase in production through intensification and improving access to the means of production, agricultural inputs and knowledge, will lead to a cycle of continuous upgrading for producers.

Producers not only need access to agricultural inputs but they also need information about how to use these inputs effectively and information about market demand. The RAIN programme is working with the private sector because these are the market players who should offer matching incentives to the producers. If the producer does well, then the input supplier will sell more inputs to that producer. The RAIN programme is identifying these 'win-win' situations to improve the functionality of the market.

The RAIN programme views the producers as customers with demands and works to link private suppliers to the customers. A traditional emergency approach might include the distribution of needed inputs by an NGO. However,

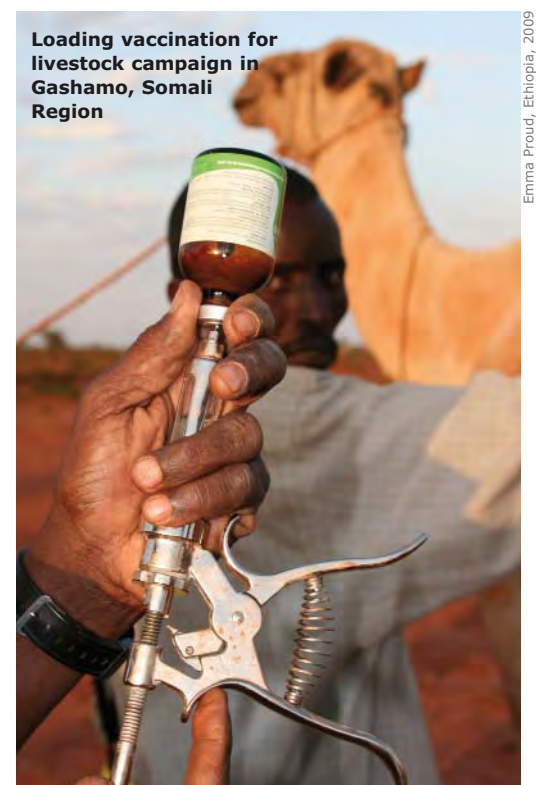
this tends to lead to low investment in the long term because the producers are unaware of where they can purchase these inputs in the future. It is also often the case that the emergency approach leads to 'dependency syndrome' where producers wait for the next distribution to occur. The RAIN programme is taking a facilitation approach to ensure sustainability by working with the private sector to invest in the region.

RAIN in action: the peanut chain

Another example of RAIN programme activities in market development is in peanuts. The RAIN programme is working on supply through the agricultural input market but also on the demand, by connecting farmers to a lead firm. Lead firms are identified by size (i.e. number of members of a producer's cooperative) and their influence (i.e. whether they set the standard for the market). RAIN set a strategic goal to increase the competitiveness of the regional peanut sector by reducing losses, increasing production efficiency, upgrading warehousing and storage, strengthening management capability, and facilitating linkages to higher value markets.

The RAIN programme is working with the Afran Kallo Union (AKU) and Hilina Enriched Foods Processing Centre plc to increase income for peanut producers in the programme area. AKU is a union of peanut suppliers with 68 member cooperatives that represent approximately 48,000 individual members. Hilina Enriched Foods is a manufacturer of a ready-to-use therapeutic food (RUTF)¹ used to treat severely malnourished children. The relationship between these producers and the company was a very typical situation. Hilina could not source enough peanuts on the local market that met their stringent standards and the AKU was unaware of the standards and available prices. Low prices on the local market led to low investment by producers in production, harvest, and storage. Considering these needs gaps and opportunities, the two partners were identified as ideal candidates for support from the RAIN programme.

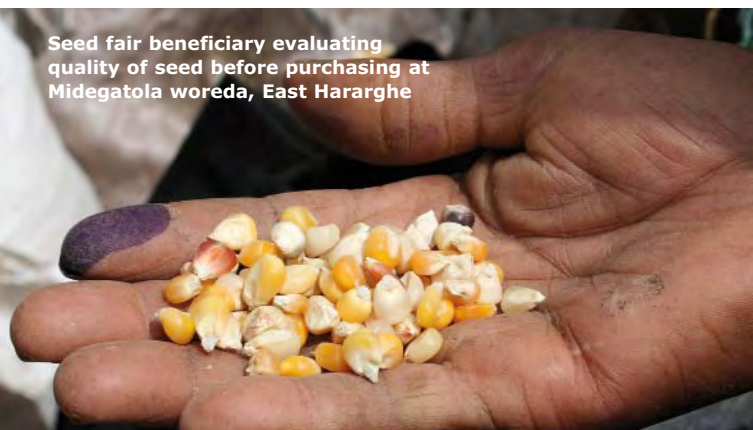
¹ PlumPy'nut



Loading vaccination for livestock campaign in Gashamo, Somali Region

Emma Proud, Ethiopia, 2009

Seed fair beneficiary evaluating quality of seed before purchasing at Midegatola woreda, East Hararghe



Emma Proud, Ethiopia, 2010

The RAIN programme facilitated the signing of a production contract between Hilina and AKU in June 2010. Hilina and AKU signed a supply agreement at a 10 to 15 percent market premium starting July 2010. The RAIN programme also coordinated a production and post-harvest loss prevention training carried out by Hilina technicians and fully paid for by AKU and Hilina. By again aligning market incentives, the RAIN programme has been able to create conditions where participants are willing to invest in constant upgrading to meet this new market demand. The RAIN programme is providing additional support to this market by providing a research grant for improved peanut production at a local university and by identifying input suppliers for the cooperative members for access to improved seeds. Finally, RAIN will supply a management consultant to ensure AKU's management team is proactively able to seek solutions to members' production and post-harvest needs in meeting with market demand. This consultant will help the AKU Board, managers and members establish management structures, responsibilities and targets conducive to more proactive and responsive leadership.

In short, the RAIN programme seeks to create space and opportunities for market-driven systems using facilitation techniques to impact the targeted value chains. As the peanut chain example illustrates, the programme does this by identifying incentive structures and working to align them to create investment. The programme also works to reduce risks for all participants in the market to stimulate new market transactions.

One of the goals for the remainder of the RAIN programme is to continue to focus on market development and build on the successes to increase the impact of the project in the region. This will leave behind better functioning markets that in turn contribute to sustainable livelihoods.

RAIN and microfinance

Providing access to markets and inputs does not always

allow producers to invest in these opportunities. To complement these activities, the RAIN programme is developing the first microfinance institution in the Somali region to provide access to credit. The RAIN programme started with the intent of providing loan guarantees for producer and income generating groups but it was quickly realised that there were no microfinance institutions working in the region. The RAIN programme began working with the government of the Somali region to establish a new institution, which was one of the first goals of the new president of the region. The RAIN programme has been providing technical support by working with the national bank and regional government to create all of the documentation required, including a business plan and memorandum of association. The RAIN programme also provided a technical expert to work directly with the government on making their budget request for the loan capital from the federal budget. The government has since held a general assembly meeting which voted in favour of all of the documentation required, election of the new board of directors, and approval of the shares to be distributed to the government and private investors. It is expected that the new institution will be operational by the end of 2010.

Lessons learned

The RAIN programme has reached the halfway point of implementation and many lessons have been learned. It is often difficult to transition staff into a new approach. When people have worked for many years on emergency programmes, they are often convinced that

approach is the best method for providing benefits to needy people. The RAIN programme not only had to demonstrate success in the project area to convince people of the approach, but those successes were just as necessary for convincing staff of a new method of operation.

Agricultural markets in Ethiopia are fragmented into several regions. The Somali region of Ethiopia tends to do business with Somaliland instead of selling commodities internally to the rest of the country. This is due to cultural relationships on both sides of the border and better access and proximity to those markets. The RAIN programme is working with producers to provide better quality commodities in these markets but is unable to work with the end market of commodities, like livestock and milk, due to funding constraints for working across borders.

Like many countries in Africa, the agricultural input market is highly regulated and in some cases, such as fertiliser, controlled by the government. The market place for these products becomes a self fulfilling prophecy for the government. The government believes that the private sector cannot provide these products at a low enough price to the producers so it steps into the market to provide the service directly. The private sector is then unable to compete with the government so it remains unable to provide services and products to the producers. The RAIN programme is working to identify existing private sector suppliers that offer products that are not in direct competition with the government suppliers. The programme will demonstrate that the private sector can compete and provide benefits to producers with these products. The private sector will then be in a better position to demonstrate to the government that it has the capacity to provide services more efficiently.

The RAIN programme is taking a holistic view of the needs of the target region and providing emergency assistance where needed, connecting people to profitable markets, and assisting people to access capital needs for investment.

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Seed fair beneficiaries queuing to purchase seed at Midegatola woreda, East Hararghe.

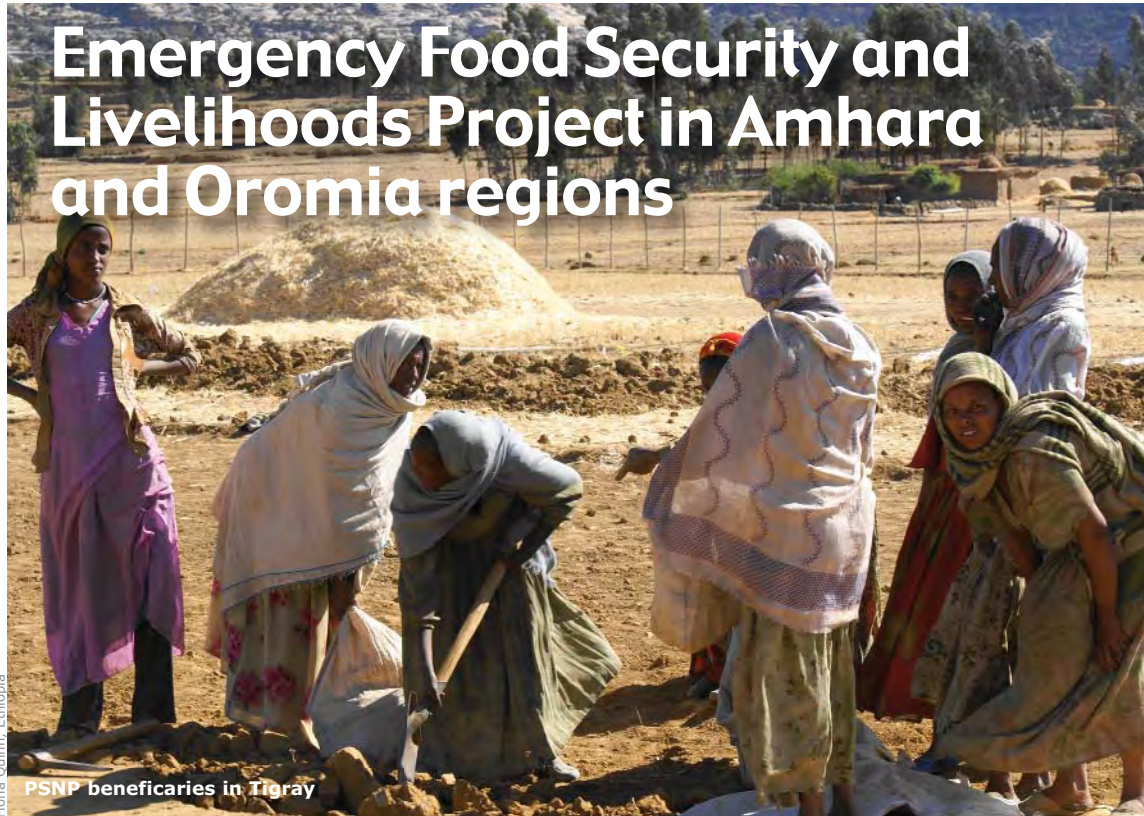
Emma Proud, Ethiopia, 2010

Emergency Food Security and Livelihoods Project in Amhara and Oromia regions

By Sarah Coll-Black and Matt Hobson

Sarah Coll-Black is a Social Protection Specialist working with the World Bank in Ethiopia and Kenya. She has been involved with Ethiopia's Productive Safety Net Programme (PSNP) since 2007, initially as a member of the PSNP Donor Coordination Team and then with the World Bank PSNP Task Team. She holds an MPhil from the Institute of Development Studies, University of Sussex.

Matt Hobson is the Donor Coordinator for the PSNP. Previously, he worked for Save the Children as Head of Hunger Reduction in Ethiopia, as well as in Somalia, Sri Lanka, Afghanistan and London. Prior to this, Matt worked as a human rights lawyer in private practice.



Fiona Quinn, Ethiopia

PSNP beneficiaries in Tigray

This article is based on a longer publication entitled 'Designing and Implementing a Rural Safety Net in a Low Income Setting: Lessons Learned from Ethiopia's Productive Safety Net Program 2005-2009' by Will Wiseman, Julie Van Domelen and Sarah Coll-Black.

For generations, many rural Ethiopians have experienced significant periods when they were unable to meet their basic food needs. For over 20 years, the main response to this situation was food aid to ensure basic survival. Ethiopia has received more emergency support per capita than any other Sub-Saharan African nation, with appeals rising to 14.5 million people in some years. On average, 700,000 metric tons (MT) of food aid per year have been delivered in Ethiopia since 1990.

Serious deficiencies with the emergency food aid system were increasingly clear by the late 1990s. Despite high levels of food aid, with each emergency rural households further depleted their assets and found themselves increasingly vulnerable to even the most marginal livelihood shock. Analyses of these issues revealed that the timeliness of food aid deliveries was a serious deficiency in the system. There was also growing concern of the potentially negative effects of such large volumes of food aid on local food markets.

By late 2003, a technical group of the New Coalition for Food Security¹ had developed a proposal to reform the emergency appeal system in favour of an integrated approach to reducing vulnerability and food insecurity. This approach brought together under a single umbrella a range of initiatives implemented by the Government, donors and non-governmental organisations (NGOs).

For the Government, the objectives of the New Coalition for Food Security (which was led by the Prime Minister, Ato Meles Zenawi) would be largely met through implementation of the Food Security Programme (FSP). This consisted of three strategic pillars:

- (a) Resettling households from unsustainable and environmentally degraded lands
- (b) Developing a safety net for chronically food insecure households
- (c) Supplying agricultural and financial services to food insecure households to promote their graduation out of food insecurity.

Of these three pillars, donors embraced the safety net, the subsequent design of which was supported by a safety net donor group that engaged intensely with Government. The Productive Safety Net Programme (PSNP) was designed from late 2003 to the end of 2004 and was launched at scale in February 2005. It was not meant immediately to replace the emergency appeal system; instead the emergency appeal system would be gradually reduced over the course of two years.

PSNP Operations (2005–2009)

The objective of the PSNP (2005-2009) was to ensure food consumption and prevention of asset depletion for rural food insecure households in a way that stimulates markets, improves access to services and natural resources and rehabilitates and enhances the natural environment.

The PSNP provides cash and/or food transfers to households through two mechanisms:

- i) Chronically food insecure households with able-bodied adults receive a transfer for their participation in public work
- ii) Chronically food insecure households who cannot provide labour to public works and have no other means of support are provided an unconditional transfer. Direct support beneficiaries include, but are not limited to, orphans, pregnant and nursing mothers, people living with disabilities, the elderly,

chronically ill individuals and female-headed households that are labour poor.

PSNP stakeholders

The Ministry of Agriculture and Rural Development (MOARD) is responsible for the management of the PSNP, with the Disaster Risk Management and Food Security Sector (DRMFSS) responsible for overall programme coordination.

The Food Security Co-ordination Directorate is one of two Directorates that report to the DRMFSS and is the main implementing Directorate for the PSNP. The Early Warning and Response Directorate (EWRD), which is the second Directorate under DRMFSS, provides accurate and timely early warning information for the PSNP Risk Financing Mechanism (RF) and ensures linkages between PSNP RF and other humanitarian response activities. The Natural Resource Management Directorate (NRMD) within MOARD is responsible for coordination and oversight of the public works.

The Ministry of Finance and Economic Development (MOFED) oversees financial management of the programme and disburses cash resources to implementing federal ministries and to the regions based on the annual plan submitted by MOARD.

These federal implementation arrangements are replicated by regions and woredas (the Government's smallest administrative unit). In addition to programme implementation, regional and woreda bodies are responsible for ensuring sound multi-sectoral coordination of

¹ The coalition was established in 2003 to foster partnerships to take action to lessen the impact of droughts, improve livelihoods and ensure that communities have adequate food supplies. Funding support is from UNDP, OFDA and the World Bank.

the public works. Public works planning and selection of PSNP beneficiaries occur within communities and kebeles.

Within this framework, non-governmental organisations (NGOs) and the World Food Programme (WFP) play important roles in implementation because of their experience delivering food aid and the institutional requirements of some donor agencies to channel resources through NGOs. In addition, NGOs and WFP provide technical assistance to the programme, and WFP supports the Government in procuring food stocks from abroad.

Donor agencies have pooled their financing – both cash and in-kind contributions – and formulated a unified stream of technical advice in support of a single programme led by Government. This has been led by the creation of a Donor Co-ordination Unit, expressly for the purpose of harmonising donor positions, providing technical support to the programme and managing all donor-to-donor and donor-to-Government processes. The rights, obligations and coordination arrangements of the government-donor partnership for the PSNP are articulated in a Memorandum of Understanding (MoU).

Programme scale and coverage

In 2009, the PSNP supported 7.6 million people in 290 chronically food insecure woredas in eight of the country's 10 regions. This is equivalent to roughly 10% of the national population, covering over 40% of the country's woredas. The geographic coverage of the PSNP is shown in Map 1.

The 2009 annual budget was 2,136,734,460 birr in cash and 457,966.21 MT of cereals. This is equivalent to approximately \$360 million – or about 1.2% of Ethiopia's GDP. In addition, the Government estimates that roughly \$54 million in government staff time is devoted to the programme annually. There are at least 1,780 regular staff and Technical Assistants working on the PSNP full-time, with support from 14,295 Development Agents (DAs). The PSNP is integrated into the national budget system in Ethiopia.

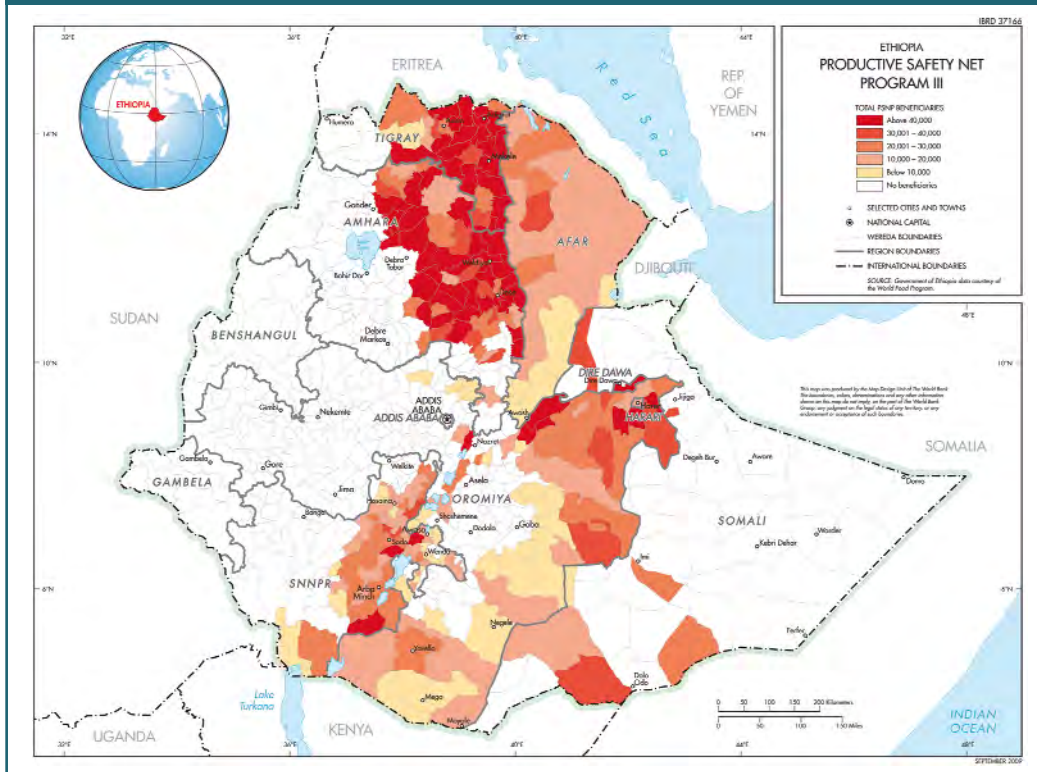
Selection of beneficiaries

Chronically food insecure households residing in PSNP kebeles are eligible to participate in the programme. The PSNP Programme Implementation Manual (PIM) defines a chronically food insecure household as:

- i) Households that have faced continuous food shortages (usually three months of food gap or more) in the last three years and received food assistance prior to the commencement of the PSNP.
- ii) Households that have suddenly become more vulnerable as a result of a severe loss of assets and are unable to support themselves (last 1-2 years).
- iii) Any household without family support and other means of social protection and support.

Based on these criteria, households are selected to participate in the PSNP through a community-based selection process. Once selected to participate in the PSNP, households are assigned to Public Works or Direct Support depending on the number of able-bodied members.

Table 1: Examples of the types of Public Works outcomes and activities communities may select



According to the PIM, households graduate from the PSNP when they are food sufficient, which is defined as “when a household is able to feed itself for 12 months a year, in the absence of programme support, as well as being able to withstand modest shocks.” A household's food security status is assessed using a set of pre-determined regional “asset-based benchmarks” that are tailored to local conditions. Data are collected by DAs and verified by kebele and woreda officials and vetted in community meetings.

Regardless of whether they are PSNP participants, any households that are unhappy with the outcome of the targeting and graduation processes are entitled to bring their grievances before the PSNP Kebele Appeal Committee (KAC).

Type, amount and timing of transfers

Transfers are provided to households on a monthly basis for six consecutive months. In 2009, the daily cash wage rate was 10 EBR and the food transfer was 3 kg of cereal. Each Public Works household member is entitled to receive a transfer based on five days of work at the prevailing cash or food wage rate. Households are provided transfers of cash, food, or a temporary mix of both resources. The mix of cash and

food resources tends to be used in a way that addresses the seasonal rise in food prices leading up to the hungry season.

Public works are carried out from January to June, during the agricultural slack season, which is relatively dry. Transfers are delivered on a monthly basis.

Operating procedures for public works

Public works are identified and planned through a participatory process at community level. The Government's Community-Based Participatory Watershed Development Planning (CBPWD) approach is the basis for developing a pipeline of sub-projects, many of which have a soil and water conservation focus. The woreda public works plan is integrated into woreda development plans to ensure linkages with other sectoral investments.

Tailoring the PSNP to specific groups

The PSNP includes a pastoral programme that addresses the different risks and vulnerabilities of pastoral livelihoods in the regions of Afar and Somali and pastoral areas of Oromia, and Southern Nations, Nationalities and Peoples Region (SNNPR). The programme uses public works and transfer payment mechanisms tailored to the needs of pastoralists. It is also

Box 1: Key indicators of the PSNP 2005-2009

- 90% of PSNP participants achieve 12 months food access from all sources, including PSNP, from December 2008 onwards.
- 65% of households report no distress sales of assets to meet food needs by December 2009.
- 25% increase in volume of locally produced grain in local markets by December 2009.
- 75% of households in PSNP woredas report improved use of health and education services attributable to PSNP by December 2009.
- 75% of households in PSNP woredas report improved availability of clean water and livestock fodder by December 2009.
- 90% of PSNP participants and non-participants report improvement in local vegetation coverage of hillsides by December 2009.

Table 1: Examples of the types of Public Works outcomes and activities communities may select

Outcomes	Community Level sub-projects
Improved land productivity, soil fertility restoration and increased land availability	Area closures, soil and water conservation
Improved market infrastructure	Community roads
Improved access to drinking and irrigation water	Community water projects such as stream diversion, spring development, shallow wells
Increased availability of fodder	Area closure incorporating conservation measures
High school enrolment and improvement health standards	Rehabilitating, extending and constructing primary schools

Table 2: Household consumption, assets and land access in PSNP woredas, by PSNP beneficiary status, 2008

Economic Characteristics	Household		
	Direct Support	Public Works	Non-PSNP
Total consumption (birr) per month, average	627	1012	1111
Land (hectares), average	1.0	1.1	1.4
Assets (birr), average	2349	4568	6480

designed to fit more organically with the institutional structures in these areas.

PSNP responds to the heavy workload of productive and reproductive labour carried by women in rural Ethiopia by allowing women to work fewer hours than men for the same pay and permitting them to switch to Direct Support when pregnant or breastfeeding.

PSNP risk financing mechanisms

The PSNP includes a contingency budget equivalent to 20% of the base programme cost and a risk financing facility designed to respond to transitory needs in chronically food insecure woredas. When households are unable to meet their immediate food needs because of shocks, these households are described as being transitory food insecure.

Of the contingency budget, 15% is held at regional level and 5% at woreda level. The woreda contingency fund is used to address unexpected needs of chronically food insecure households, such as a successful appeal to the KAC, and transitory food insecurity among PSNP and non-PSNP households. The regional contingency fund is used to address transitory food insecurity among PSNP and non-PSNP households in PSNP woredas.

The Government is currently operationalising the Risk Financing Mechanism to address transitory needs in PSNP woredas. This mechanism is designed to scale up the PSNP to cover transitory food insecure kebeles as needed, as well as to extend the duration of benefits for existing PSNP households, if needed.

Monitoring and evaluation

The PSNP key performance indicators are provided in Box 1. Given the flagship nature of the PSNP, much attention was, and continues to be, devoted to generating robust evaluations. A set of impact evaluations aims to measure changes for direct and indirect beneficiaries.

Design issues and trade-offs

In 2004, the Government proposed a caseload of 5 million chronically food insecure individuals. Donor agencies saw this figure as a minimum, with the actual number of chronically food insecure people probably closer to 7.9

million. The PSNP focused on those regions and woredas that had received food aid for the preceding three years or longer. Woreda administrators then selected the chronically food insecure kebeles, assigning the woreda's 'PSNP quota' from among these areas.

Within targeted woredas, chronic food insecurity was widespread but budget constraints required targeting households most in need. Within the food insecure woredas, household eligibility criteria were reinforced by a community-based selection process endorsed through community meetings. In addition, the wage rate for public works sub-projects was set low so that better-off households would be less tempted to seek employment through the PSNP.

The annual retargeting was designed to correct for inclusion and exclusion errors and thus responded to changes in the relative positions of households. A contingency budget of 20% was added to the programme to cover additional households that might become chronically food insecure during the course of the program and to respond to transitory needs among PSNP and non-PSNP households. In 2006, this was augmented by the Risk Financing Facility. The emergency response system would cover any transitory food insecurity beyond the available contingency and risk financing resources.

The emergency response system would also continue to cover food insecurity in non-PSNP woredas.

Targeting the PSNP

In 2005, the number of households selected to participate in the PSNP by communities and kebeles was almost always larger than the quotas assigned by the region and woreda. Recognising the scale of exclusion in programme areas, the Government and donors agreed that the October 2005 community-based targeting process would identify the actual number of chronically food insecure individuals. The Government and donors were therefore confident that the programme could handle a larger caseload, which was eventually (2009) set at 8.29 million people. The increase in beneficiary numbers eased the pressure on the targeting system significantly.

Evidence from 2008 shows that the PSNP is well targeted to the poorest households in PSNP woredas, which have significantly lower incomes, fewer assets and farm less land than non-beneficiaries (Table 2). A 2008 survey of local service delivery in Ethiopia reported that over 85% of respondents described the PSNP selection process as being fair.

Responding to transitory needs

In 2005 and 2006, the contingency budget was mainly used to cover additional chronically

food insecure households and only evolved into a transitory response instrument in 2007. In 2007, the Government proposed that the regional contingency budgets cover transitory food insecure households in areas where the numbers identified by the emergency needs assessment were within this resource envelope. An emergency appeal would then be launched only for areas outside the PSNP.

Since the start of the PSNP, the relationship between the emergency response system and the PSNP has been far from clear. Extensive dialogue between the FSCB, DPPA and donors finally led to an agreement in mid-2008 that available regional contingency budgets would be used to respond to emergency needs arising from the failure of the small rains (belg) and food price inflation. The number of people benefiting from contingency resources from 2005 to 2008 is shown in Table 3. These figures suggest that the population covered by the regional contingency budget has grown in comparison with the regular PSNP programme.

Types of transfers

Implementation experience

Starting in 2004, food prices in Ethiopia began to rise, spiking in mid-2005 and again in mid-2006. In both years, the Government and donors responded by accommodating the requests of woredas, which had planned to provide cash, to switch to food transfers. Given this experience with mid-year food price increases, many regions requested the Federal Government shift woredas from cash to food transfers in 2007. The programme accommodated this by allocating the first two transfers in cash rather than in food, which freed up food to be used later in the year in other woredas, and through a local purchase of food resources to augment donor pledges. Unlike previous years, few mid-year requests to change the cash-food split were accepted. The geographic distribution of cash and food transfers by woreda in early 2007 is shown in Map 2.

In 2008, the cash wage rate was increased for the first time from 6 to 8 birr. The trend in 2009 was towards greater requests for food transfers because of continuing increases in food prices. Given the resource mix available to the programme, coupled with budgetary constraints, the Government chose to allocate cash transfers for three months and then food transfers for three months to the vast majority of woredas. The cash wage rate was also further increased from 8 to 10 birr.

Since 2005, the overall trend has been increasing use of cash transfers in the PSNP (Figure 1) and a growing preference amongst beneficiaries for food only transfers (Figure 2). This move towards cash was, however, less than that initially predicted in the programme design and has largely stalled in recent years, due to global food and fuel price rises and parity issues between cash and food. In 2009, roughly 6.65 million people received food combined with cash transfers.

PSNP public works

While the PSNP design identified a menu of eligible investments, there was a tendency to focus on natural resource management projects.

One of the leading causes of previous failure of food for work programmes was the lack of appropriate community consultation to ensure the relevance and ownership of the assets

Table 3: Use of regional contingency 2005-2008

	2005		2006		2007		2008	
	No. of beneficiaries	% of regular programme	No. of beneficiaries	% of regular programme	No. of beneficiaries	% of regular programme	No. of beneficiaries	% of regular programme
Amhara					65,522	3%	321,160	13%
Oromia	104,015	10%	219,187	16%	331,117	24%	294,859	21%
SNNP		0%	132,441	10%	292,620	23%	371,457	29%
Tigray	204,820	22%	373,467	26%	388,427	27%	487,941	34%
Dire Dawa	11,580	24%	10,523	20%	10,522	20%	10,525	20%
Harari	0	0%	0	0%	0	0%	752	5%
TOTAL	320,415	7%	735,618	11%	1,088,208	16%	1,486,694	22%

created. In order to address this, the design of the PSNP gave the responsibility for the selection of public works sub-projects to communities. To promote this high level of community participation in the public works planning process, in coordination with Government DAs, the Community Food Security Task Forces (CFSTF) were mandated to mobilise communities to identify the public works that would be undertaken on an annual basis. In order to formalise this approach, DAs were provided training on the Community-Based Participatory Watershed Management Guidelines that were developed by Government in coordination with WFP.

Implementation experience

Since 2005, the PSNP has built a large number of public works sub-projects and evidence suggests that the performance of the public works component has improved over time. The 2008 Public Works Review found that quality had improved overall, with some continued technical deficiencies in roads and need for better operations and maintenance arrangements in water supply and small-scale irrigation projects. Sustainability of public works investments has been a challenge for programmes throughout Ethiopia. In general, sustainability ratings have been favourable, with the lowest ratings on roads, water and irrigation projects.

Despite these operational deficiencies, public works outcomes have generally been satisfactory with significant impact on environmental regeneration, increased access to water supply, expanded use of small-scale irrigation and improved access to farming training centres.

Direct support and tailoring the safety net

It was initially anticipated that roughly 80% of PSNP participants would receive aid through Public Works and 20% through Direct Support (unconditional transfers). While the number of Direct Support beneficiaries has increased, the Direct Support component as a percentage of programme participants remained constant (15%). This proportion varies by region and by year (Figure 3). In 2006, this proportion also varied among woredas, ranging from 3% in Enderta, Tigray, to 25% in Boricha, SNNPR.

The light work or community activities for Direct Support beneficiaries that were outlined in the PIM have not been implemented anywhere in the programme. Some woredas supported by NGOs have experimented with crèches or childcare centres. This highlights the lack of priority given to these activities, with woredas reporting that there had been no direction to include such activities in their PSNP plans.

Fieldwork observed progress in implementing the gender provisions of the PIM, although this was uneven across woredas and in elements of the PIM. Women and women's organisations tend to be well represented in PSNP decision-making structures at lower levels, however building alliances with the Women's Affairs Ministry at Federal and regional levels has proven to be more difficult. Although the PIM states that the participation of women in public works should be responsive to their regular work burden, in most cases men and women were found to do the same work and there seems to be no change in this over time.

In 2006, a separate process to design and implement a pilot programme that aimed to tailor the PSNP to pastoral livelihoods was launched. The pilot has demonstrated that a safety net is an effective means of supporting chronically food insecure pastoral households, particularly those who are engaged in agropastoralism or have dropped out of the traditional, mobile pastoral livelihood system. Experience from the pilot shows that the targeting mechanism needs to account for differences in social structures and social cohesion among different pastoral groups. With regards to public works, pastoral communities are easily mobilised to participate in the public works sub-projects that are relevant to their livelihoods.

Currently, the Government is eager to roll out the PSNP pastoral programme to all pastoral areas, particularly into new woredas in Somali.

Monitoring and evaluation (M&E)

The speed with which the programme was launched led to delays both in monitoring reports and the launch of the evalua-

Map 2: Geographic Coverage of the PSNP by type of transfer, 2007

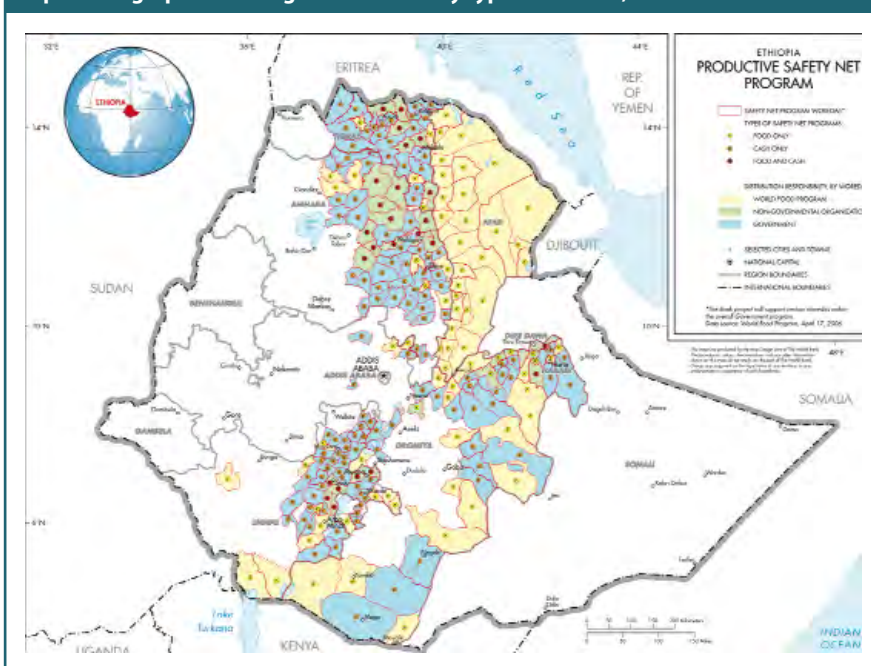


Figure 1: Changing proportion of cash and food in the PSNP, as measured in volume/monthly wage rate

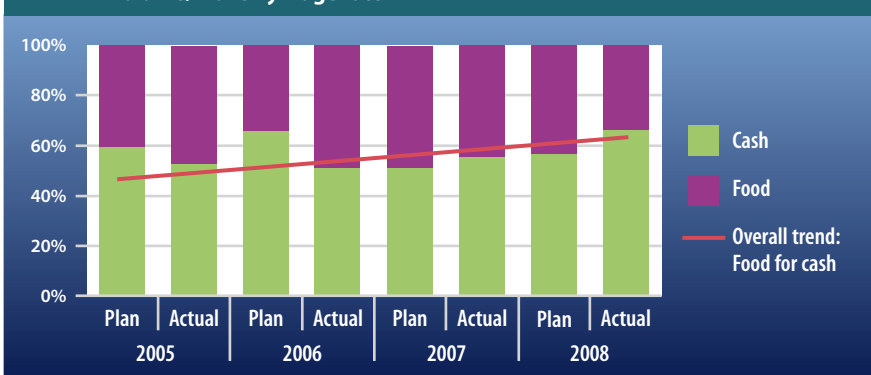


Figure 2: Preference for payments among beneficiaries: cash, food or cash and food payments

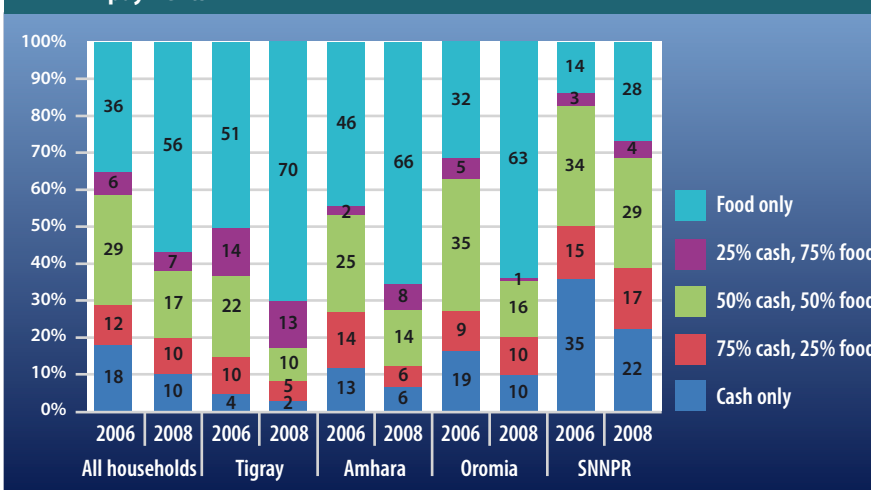
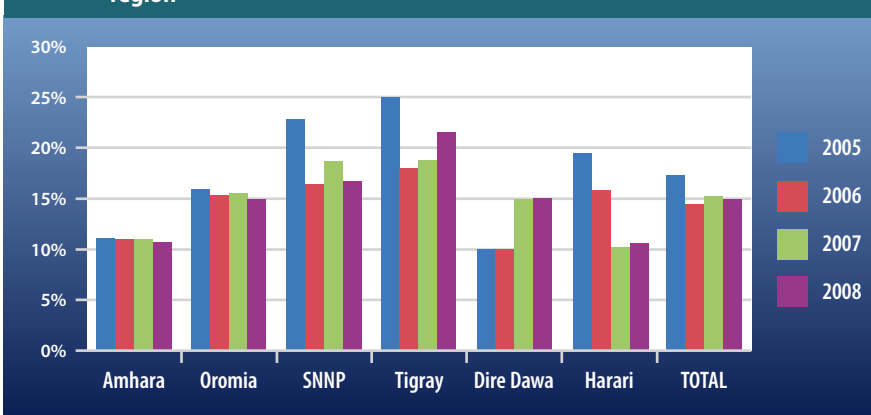


Figure 3: Annual Direct Support participants as a percent of PSNP population by region



tion system. There was little information on programme implementation during the first months of the PSNP. In response, FSCB and donors were forced to establish rapidly an Information Centre to collect real-time information on cash and food transfers and grain market prices from a sample of 40% of programme woredas. These regular reports have proven to be an important source of information for programme managers, as the monitoring reports have continued to be very late and of limited use given the inconsistent quality and incomplete data.

The 2006 FSP M&E Plan reduced the amount of information collected, streamlined the reporting formats and modified reporting procedures. The focus was on generating basic information critical to programme management.

In 2007, the programme expanded the menu of independent systems reviews, augmenting the Roving Financial Audit with Roving Procurement Audit and Roving Appeal Audit. These audits were designed to generate information on the functioning of the programme safeguards.²

During the same period, consensus was reached on the need for a single logical framework. A series of joint government-donor workshops slowly created agreement on what the programme aimed to achieve and how this would be done. The result was a more harmonized approach to monitoring progress towards program objectives. This logical framework was used in each subsequent JRIS Mission to assess implementation and was the guiding document for the PSNP review in 2008.

As with other areas of routine monitoring, the PSNP was slow to develop a robust public works monitoring system as part of its management information system. By 2008, apart from intermittent monitoring through the public works reviews, there was still no database on public works projects and no tracking of public works standards, performance and effectiveness.

Key PSNP accomplishments

Main programme outputs

In 2009, the PSNP provided safety net support to almost 7.6 million rural Ethiopians.

Table 4: Annual direct benefits generated by PSNP (based on 2009 program parameters)	
Total PSNP	
Total number of programme beneficiaries	7,574,480
Total number of households	1,514,896
Total value of transfer (\$)	206,783,304
PSNP Public Works beneficiaries	
Number of households participating in public works	1,272,513
Average number of participation days per household per year	150
Total number of days of public works generated per year	190,876,896
Average value of wages earned per household (\$) per year	137
Value of wage transfer through public works (\$) per year	173,697,975
PSNP Direct Support beneficiaries	
Number of households benefiting from Direct Support	242,383
Value of average annual transfer per household (\$) per year	137
Total value of transfer through Direct Support (\$) per year	33,085,329

Importantly, this shows that large scale cash and/or food transfers are operationally and logistically possible in the resource-poor, low-income rural settings in Ethiopia. The direct benefits of the programme are summarised in Table 4.

Key impacts on households

The 2008 Impact Evaluation found PSNP participation measurably improved household food security, as measured by changes in self-reported household food gap. This effect was strongest among those households that received regular, high value transfers. PSNP households exposed to drought had a 30% higher caloric acquisition growth than non-beneficiaries.

From 2005/2006 to 2007/2008, negative coping strategies were more prevalent among non-PSNP households than they were among PSNP households.

Participation in PSNP public works increased growth in livestock holdings by 0.28 Tropical Livestock Units (TLU) over comparable non-PSNP households – equivalent to a difference of nearly three sheep.

PSNP beneficiaries have increased their use of social services. Of the 46.1% of PSNP beneficiary households reporting that they used health facilities more extensively in 2006 than the year prior, three quarters (76%) said this was because of the PSNP. In 2008, one quarter (26.7%) of households reported increased use of health facilities over 2007 and nearly half (47%) attributed this increase to the PSNP. In 2006, half (49.7%) of respondents stated that they kept their children in school longer than in the previous year, and 43% attributed this to the PSNP.

The 2008 Impact Assessment measured the combined impacts of the PSNP and the Other Food Security Programme (OFSP, the second pillar of the FSP focusing on providing credit services to PSNP households). Households that received high value, regular support from the PSNP and had access to the OFSP, experienced 0.81 months (or 25 days) greater food security from 2006 to 2008 than households receiving neither the PSNP nor OFSP. Similarly, livestock holdings of PSNP households with support from the OFSP increased by 0.334 TLUs, while the value of their livestock increased by 14.3% as compared to non-beneficiary households.

While OFSP has only a marginal impact on agricultural productivity when implemented alone, when combined with the PSNP the results showed a 38% increase in maize yields. This suggests that by allowing households to focus on long-term investments and providing more regular cash flow, the PSNP is a critical element of a strategy to effectively improve agricultural productivity.

Key impacts on communities

The bulk of investments were concentrated in soil and water conservation (SWC) and rural feeder roads, with selected investments in natural resource management and social services. In 2008, 92% of households indicated that their community had benefited from the construction of roads, while 88% reported benefiting from SWC on communal lands. Public works are increasingly perceived to benefit individual households as well. Public works are generally evaluated to be of a high technical standard.

Cost efficiency of the PSNP

The PSNP compares favourably with international experience on public works programmes, for its targeting, high wage intensity and a low administrative cost due to its use of existing government systems and the programme scale. Approximately 17.2% of total programme cost is dedicated to staff time, administrative costs and capacity building.

Graduation from the PSNP

Promoting graduation

To promote graduation, PSNP participants were to have access to the OFSP, which was financed through a Federal Government Specific Purpose Grant to regions and the donor-financed Food Security Project, amounting to roughly \$100 million per year. Households were provided subsidised credit to rebuild their asset base (in the case of the Food Security Project which targets the poorest of the poor) or to purchase “household packages,” which were various combinations of agricultural inputs sometimes based on a business plan developed with support from the extension service. The Government’s Special Purpose Grant also financed investments in rural infrastructure, such as roads and water resource development, and the Resettlement Programme.

Recognising the complementary roles of the PSNP and OFSP to enable households to move out of food insecurity, starting in 2006 the Government specifically targeted OFSP household packages to PSNP participants. Government targets were set to achieve approximately 30% annual coverage of PSNP beneficiaries with the OFSP for three years. One of the main challenges to achieving this coordination was that the agricultural extension system was under-resourced and there were too few sufficiently skilled DAs. The government-initiated reform to upgrade this system was seen to be important for the success of the PSNP and OFSP, particularly the move to allocate three DAs to each kebele in the country and to ensure that posts are filled with people holding a diploma.

Initial experience with the OFSP found that delivery mechanisms were not always appropriate, which was reflected in low repayment rates and consequently low coverage. Specifically, there were no guidelines on how credit or revolving funds should be managed. When guidelines did exist, they were not always followed. By 2008, the Food Security Project had collected only 72% of loans that had fallen due and was working with the Government to transfer revolving funds to rural savings and credit cooperatives to ensure that they were properly managed.

The overall strategy to promote graduation has focused on households with available labour and land. Recently, the FSCB has expanded the scope of support to include non-farm activities to better respond to the needs of young people, who generally have no land, in rural areas.

Determining graduation

In 2007, the Government initiated a process to set graduation criteria for the programme.

² The term ‘safeguards’ refers to those mechanisms that aim to ensure that the programme resources are used for the purposes intended.

Table 5: Graduation from PSNP: Food Sufficiency and Food Security

	Food Sufficiency	Food Security
Definition	A household can be deemed food sufficient when, "in the absence of receiving PSNP [or emergency] transfers it can meet its food needs for 12 months and is able to withstand modest shocks."	Food security is defined as "access by all people at all times to sufficient food for an active and healthy life."
Application	At the point that a household becomes food sufficient, it no longer needs to receive transfers (except in the event of a major shock). However, further support in building household assets will be needed before households obtain a significant degree of resilience and are able to sustainably access food and income.	The use of the phrase 'food security' and its definition above imply a degree of resilience and suggest that food security is a relatively sustainable state. Some households will only graduate from the PSNP during the programme life and will need continued support from the household asset building component, while other households will graduate completely from the FSP.

Thus, the Federal Government, regions and donors developed a set of objective asset-based benchmarks tailored to local conditions to measure a household's food security status. These benchmarks and an accompanying Graduation Guidance Note clarified that there were two levels of graduation: graduation from the PSNP upon obtaining food sufficiency and graduation from the FSP upon obtaining food security (Table 5).

While providing objective criteria against which to assess the assets of households, the overall system to identify households for graduation remained weak. Problems with communicating the benchmarks and graduation process resulted in widespread confusion. Additionally, the design of the system placed a heavy workload on DAs, who were regularly required to collect detailed household data.

Realistic expectations of graduation

Approximately 692,002 households (around 3.5 million people) received credit financed by OFSP and an additional 355,279 households received credit from the donor financed Food Security Project between 2002 and 2007. A number of independent studies have concluded that OFSP coverage was generally insufficient to meet the demand for loans among PSNP beneficiaries. While government reports suggest that access to a single household package should be sufficient to enable graduation, other evidence shows that the process towards graduation is more complex. PSNP beneficiaries indicated the need for two or three interventions per household to achieve food security.

There has been limited progress towards graduation to date. Between 2007 and 2009, around 280,000 individuals graduated from the PSNP. Although this is perhaps not insignificant given the adverse events of 2008, it falls well short of the national goal.

Looking Ahead

The next phase of the PSNP (2010-2014) is focused on strengthening implementation in all woredas. Measures include strengthening the monitoring system to ensure a regular flow of data to programme managers, adopting a more strategic approach to capacity building, reinforcing accountability and transparency measures at all levels and expanding these to the food management system and increasing the responsiveness of the program to transitory shocks. Greater attention to public works is anticipated to result in more sustainable public works sub-projects and enhanced programme impact within communities.

For the next phase of the PSNP, and more specifically the broader FSP, the Government

has reformed the design of the OFSP in ways that should substantially strengthen it. These reforms have focused on the institutional arrangements for financial service delivery, including the development of multiple financial products tailored to the need and capacities of different types of households. Reforms also aim to strengthen the extension system and micro enterprise development programme to deliver market-led and demand-driven support to households.

Implementing this reformulated OFSP will likely result in higher levels of graduation from food insecurity within the next five years. While it is likely that the scale of the PSNP will reduce as households begin to graduate into food sufficiency, the notion of a 'floor' is central to this model - it suggests that a long-term social protection system in rural areas is important in order to both protect household assets and to create the type of agricultural production synergies currently witnessed between the PSNP and OFSP.

Box 2: Key Lessons learned

(a) The PSNP has demonstrated the value of a shift away from a predictable humanitarian response system to a more development-oriented approach to addressing food gaps. There is evidence that livelihoods are stabilising and food insecurity is being reduced among beneficiary households.

(b) Large-scale safety nets in low-income settings. The PSNP had a dramatic start, reaching around 5 million citizens in the first year of operation. It serves as an example of a rural safety net operating at scale that reaches a large number of dispersed, low-income rural residents with diverse livelihoods, targeted on a household basis.

(c) Safety nets in drought-prone areas. The PSNP is an effective safety net tailored to agrarian contexts while promoting longer-term improvements in rural productivity in areas affected by recurrent shocks.

(d) Shifting from food aid to cash. Households can often use cash to respond better to their needs. The PSNP offers lessons learned from one of the world's few large-scale efforts to shift from food to cash-based transfers.

(e) Productive and pro-growth impacts of social safety nets. The PSNP aims to refocus the international community's approach to food insecurity by shifting it away from meeting short-term food needs through emergency relief towards addressing the underlying causes of household food insecurity. The goal of the PSNP is to invest in productive assets in rural communities, as well as provide asset protection for households against shocks as part of a rural growth and poverty reduction strategy.

The next phase of the PSNP will consolidate and strengthen the RF mechanism to provide a predictable response to transitory food insecurity in PSNP woredas.

Conclusion

The PSNP clearly demonstrates the challenge of implementing a social protection programme in a low-income environment. Deficiencies in implementation resulting from limited human and physical capacity undermine the potential impact of the PSNP in many areas. Ensuring quality implementation in all programme areas remains a significant challenge for the future.

Nonetheless, Ethiopia's PSNP has demonstrated the value and potential of a transition from addressing food insecurity through the humanitarian response system to a system that is development-oriented.

Most importantly, PSNP has created, for the first time, a secure entitlement of households to a safety net from the Government. For the more than seven million people who receive PSNP transfers annually, this enables them to meet consumption needs, mitigate risks and avoid selling productive assets during times of crisis. As a result, there is evidence that livelihoods are stabilising and food insecurity is being reduced among beneficiary households. Similarly, it is increasingly apparent that the public works investments in soil and water conservation can result in significant improvements in the natural environment. This needs to be consolidated and built on.

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(f) It is possible to combine effectively productive and protective objectives within one safety net programme, but measures need to be put in place to ensure that one objective does not usurp the other. The PSNP suggests that it is possible to implement a large-scale unconditional transfer programme together with a public works programme when there are sufficient synergies in terms of target populations and geographic coverage. However, attention needs to be devoted to carefully reviewing all aspects of the programme design and implementation to ensure that the procedures and systems are in place to deliver on both objectives.

(g) The strongest implementation comes when key stakeholders have a shared understanding of programme goals and principles. This, in part, accounts for differences in the quality of implementation from woreda to woreda. Ensuring ownership and shared understanding with political and administrative stakeholders as well as technicians is important. Further work in defining key principles may better enable the development of this shared understanding.

(h) Tailoring a safety net program to respond to specific groups and different vulnerabilities is easier when safety net interventions are within the mandate of an implementing ministry. Building linkages from the PSNP to other departments within MOARD has proven to be easier than linkages to other ministries, such as Ministries of Health and Women's Affairs. This suggests that a safety net programme is best positioned to respond to the vulnerabilities under the responsibility of a single Ministry.

A fodder production group has decreased Sead's time looking for pasture

Beyond the indicators

Assessing project impact on children's lives

By Holly Welcome Radice, Maria Ruiz-Bascaran, Abebe Zewdu, Oumar Mohamud, Mekdes Asfaw, and Mahlet Bezu



Pictures from left to right: Holly is the Head of Livelihoods & Nutrition Information Systems. Maria is the Senior Programme Manager of the RAIN project and former programme manager for PILLAR II. Abebe is the DRR Coordinatorm Oumar is Project Coordination-Somali and Mekdes is Project Coordinator- Afar. All work for the PILLAR PLUS project and with Save the Children UK Ethiopia. Mahlet was previously interned with Save the Children UK Ethiopia and currently is pursuing a masters at Lund University

Save the Children UK would like to thank the families in the Afar and Somali Regions that participated in these interviews and ECHO (European Commission Humanitarian Aid Department) for funding this project.

In humanitarian work, how do we know that we are positively reaching distinct members of a community? When we calculate beneficiary households, can we be sure that everyone in the household is really benefiting? And is it clear to what extent they are benefiting? These are questions that all non-governmental organisations (NGOs) struggle with in programme evaluation. Save the Children UK Ethiopia recently sought to find answers to some of these questions in one of its projects.

For nearly 20 years, Save the Children UK has been providing support to pastoral communities in Ethiopia, with current programmes in the Somali and Afar regions. One project is a drought preparedness and risk reduction project, called PILLAR (Preparedness Improves Livelihoods and Resilience), funded by ECHO's Regional Drought Decision (RDD). The project was implemented in two phases between April 2008 and June 2010 in selected drought districts of the Afar and Somali Regions. PILLAR seeks to contribute to community level drought risk reduction through prevention, mitigation, preparedness and response through a range of activities focusing on the three pillars of pastoralism— people, livestock and natural resources.

PILLAR has performed well against its objectives and indicators, with some 18,000 households reached across two regions. This is good news for the community, the NGO, and the donor. Being a child focused NGO, Save the Children UK wanted to understand and document to what extent PILLAR has impacted the lives of children.

Impact assessment involving children

Internationally, Save the Children UK aims to ensure that child participation—informed and willing involvement of children—is meaningfully incorporated into all its work. Some direct

benefits for children had already been revealed in the communities. A local teacher in Afamana Tibe dha in Afar had mentioned that since the construction of a water point in the village, students were attending classes more regularly and enrolment had increased by 40%. To get a sense of some of PILLAR's impacts on children, Save the Children UK conducted a rapid field assessment in six beneficiary communities and case studies of six beneficiary children were completed. The case studies were based on focus group discussions and individual interviews with selected beneficiaries and discussions held separately with adult beneficiaries and their children.

Children who were interviewed belonged to families that were involved in water point construction, small scale irrigation and income generating activity micro-projects. According to those children and their caregivers, project impacts were seen similarly. Broadly the answers of the interviewed children were centred on two categories, household and personal for children, as shown in Table 1.

These findings show that the interventions went well beyond what was measured in the indicators—availability of water in the dry season and protected / diversifying livelihoods—and that the interventions had layers of

Table 1: Project impact as seen by children

Household	Personal for children
<ul style="list-style-type: none"> • Increased food consumption • Increased food diversity • Increased access to basic needs (e.g. school supplies, medical) • Increased food and milk production • Availability of items for purchase • Access to clean water 	<ul style="list-style-type: none"> • More leisure time • More time with parents • Less time with chores • Regular attendance at school • Punctuality at school • More time for studies

Field Article.....

effect. Immediate results such as better nutrition, access to basic needs, access to clean water were valued by the children. Most heartening were the reports of increased school attendance and reduction in time spent on chores and even more time to play. These indirect benefits are positive and encouraging for long term community resilience as education is a key component to improving livelihoods.

Children as direct beneficiaries

Such an assessment is not scientific by any means, but the value is obvious. It serves as a singular opportunity to 'ground truth' the effect of interventions on different groups within a population. For Save the Children UK's implementation team, this exercise was helpful to see the layers of impact that the project has had. Children in the interviewed beneficiary households clearly directly benefited from the interventions on personal, household and community levels.

In a project focusing on community resilience, children may normally be viewed as indirect beneficiaries. Additionally, the humanitarian nature of the project could be mistakenly viewed as only providing short term insurance against shocks. However, this rapid assessment has discounted both of these theories. Children in these communities have received direct, immediate benefits. If these benefits identified are maintained, the investment will surely have a profound affect on the future of individual children's lives and ultimately on community resilience.

Ultimately, the assessment gave some ideas regarding what interventions to build on, better to target children in disaster risk management (DRM). The next phase of PILLAR will work directly with the children in Alternative Basic Education schools. This scheme will pilot children-led DRM committees that will look to build the capacity of children and their caregivers to be better able to reduce disaster risks within their own communities.

Finally, such an assessment is an opportunity to listen to and learn from children. Fostering the practice of voicing opinions and contributing to community matters can be an empowering process. In pastoral communities, such as those targeted in PILLAR, being able to speak on behalf of one's community is an essential tool in reduction of vulnerability to drought. It can encourage a generation to be proactively contributing to their own community's involvement in early warning, early response and community preparedness.

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The Emergency Nutrition Coordination Unit of Ethiopia roles, responsibilities and achievements

By Isaack B. Manyama, Gugsu Abate and Mathewos Tamiru



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The Emergency Nutrition Coordination Unit (ENCU) is located in the Disaster Risk Management and Food Security Sector (DRMFSS), Ministry of Agriculture and Rural Development, Ethiopia.

The history of the Emergency Nutrition Coordination Unit (ENCU) can be divided into two five-year phases: Phase One, the inception phase (2000-2005) and Phase Two, the expansion phase (2005-2010).

Inception Phase (2000–2005)

Recurrent drought has been a key feature of Ethiopian life for several decades leading to widespread crop and pasture failure and periodic severe humanitarian crises. In response, Ethiopia has carried out numerous seasonal needs and nutrition assessments and programme activities. Initially, the nutrition assessments were characterised by a lack of national level standardisation and coordination, leading to duplication and misguided allocation of resources. In the year 2000, for example, a study into the quality of nutrition surveys in Ethiopia¹ found that only five percent of the 200 nutrition surveys conducted over a 7 year period were of acceptable quality. As a result, the ENCU was established in November 2000 within the Early Warning Department (EWD) of the then DPPA (Disaster Preparedness and Prevention Agency now Disaster Risk Management and Food Security Sector (DRMFSS) under the Ministry of Agriculture. At its inception, the ENCU was funded by WFP and later by UNICEF. Since then, ENCU's routine activities continue to be funded by UNICEF, while staff costs have interchangeably been funded by both agencies.

At the time of inception, the ENCU was charged with fulfilling three major functions:

- a) Coordination of emergency nutrition assessments, quality assurance and responses. A total of 266 surveys were coordinated by the ENCU during the first phase.
- b) Establishment of a Multi-Agency Nutrition Task Force (MANTF) for coordination, information sharing and discussion of technical issues among nutrition partners working in Ethiopia. The MANTF forum was established and is operational to date.
- c) Collection and collation of reports and results of nutrition surveys conducted throughout the country and nutrition information database. The Nutrition data base was established in 2005 and regularly updated since then.

Standardisation and harmonisation of emergency assessments and response was not among the major functions of the ENCU at inception. However the ENCU coordinated the development of the National Emergency Nutrition Assessment guideline in 2002, which aimed to standardise emergency nutrition assessments in Ethiopia. In 2004, emergency nutrition intervention guidelines were developed to harmonise and standardise implementation and management of nutrition programmes.

Expansion Phase (2005–2010)

By 2005, it was evident amongst partners and government that ENCU had played a significant role in coordination of emergency nutrition assessments and response and therefore, its mandate and functions at federal level were expanded. In order to fulfil its extended role, staffing also increased from one to four staff (one team leader, one nutrition specialist, one information analyst and one administrative assistant). In the second half of 2006, regional level ENCUs (R-ENCUs) were established in five drought-prone regions (SNNP, Tigray, Amhara, Oromia and Somali) as part of strengthening the early warning system and coordination of emergency nutrition response. Each R-ENCUs is integrated within the Food Security, Disaster Prevention and Preparedness (FSDPP) of the respective region. All the five R-ENCUs are fully operational, with two staff: an information analyst and nutrition expert. The expansion of the ENCU at regional level was supported by UNICEF with funding from the European Commission until 2009, when UNICEF took over. The establishment of a R-ENCUs in Afar region is currently in progress.

Following the roll out of the Nutrition Cluster approach at national level in 2007, the ENCU mandate again expanded to include coordination of Nutrition Cluster activities. In addition, to its previous roles on coordination and quality assurance of emergency nutrition assessments, information management and dissemination, and coordination amongst partners, the ENCU has assumed three new functions:

- Capacity strengthening of early warning system at federal and regional levels
- Coordination of Nutrition Cluster activities
- Coordination of operational research on emergency nutrition assessments.

The functions of the ENCU are described in greater detail below.

Coordination and quality assurance of emergency nutrition assessments and response

Analysis of the nutrition situation

The nutrition situation in Ethiopia is monitored by analysing admission trends of new severe acute malnutrition cases in Therapeutic Feeding Programme (TFP), analysing nutrition related early warning data and information systems received from woreda (district), regional and national level. Depending on the situation, emergency nutrition surveys (baseline, monitoring or end-line) are conducted based on the existing national guidelines to ascertain the situation and recommend appropriate responses. The nutrition situation is also monitored through updating the woredas identified as 'hotspot woredas' based on pre-agreed criteria. The 'hotspot woreda' update is undertaken as a consultative process carried out at the regional and federal level. A guideline has been developed to standardise the classification/update process, which enables key actors to prioritise areas requiring particular focus. The ENCU plays a key role in provision of nutrition information used during the classification process as well as coordination and sharing of the hotspot list with nutrition cluster partners after approval of the DRMFSS.

The Government also conducts bi-annual food security assessments, and monthly new TFP admissions are summarised in addition to the routine TFP admission trend analysis outlined above. Unusual increases in TFP admissions in March to May period informs the DRMFSS EWS and partners of a likely worsening nutrition situation in the forthcoming 'hunger period' (from June to August in agrarian communities²). The DRMFSS/ENCUs triangulates the TFP data and survey results with other food security information and provides an estimate of the anticipated prevalence of malnutrition in the respective assessment period. This level of prevalence is applied to the estimated total number of rural under-five chil-

¹ Spiegel et al (2004). Quality of Malnutrition Assessment Surveys Conducted During Famine in Ethiopia JAMA. 2004;292:613-618

² The hungry season is January to February in the pastoralist communities.

dren (usually 14.5%³ of the rural population) from the woredas requiring humanitarian assistance. Based on this analysis, beneficiaries needing either therapeutic or supplementary feeding are estimated for the period covered by the Humanitarian Requirement Document (HRD) issued by the Ethiopian Government.

Quality assurance of standard surveys

All nutrition survey proposals are approved by the ENCU before they are undertaken. Partners planning to conduct emergency nutrition assessment are required to prepare a survey proposal and submit this for review and validation. The proposal is reviewed in terms of objective/rationale, methodology, planned analysis and how the survey will be organised in the field. In the process, partners' capacity is assessed and if deemed to be low, consideration is given for alternative or additional partners to conduct the assessment. After the review is complete, written feedback is provided to the respective partner. Since March 2006, all surveys have been planned, implemented and analyzed using SMART methodology and Emergency Nutrition Assessment (ENA) software (2007 version).

Upon completion of the survey, partners are required to submit the raw data to Federal ENCU for quality checks. The data is scrutinised according to agreed criteria along with respective preliminary reports before the report is shared with government and partners. A total of 237 nutrition surveys were carried out based on the SMART⁴ methodology between 2006 and 2010 and checked by ENCU. So far, only 10 surveys have been rejected because of poor data quality. The remaining 227 surveys' findings have been published in the ENCU quarterly bulletin of emergency nutrition and posted in the DRMFSS web site: www.dppc.gov.et/pages/ENCU.htm. Preliminary reports of the respective surveys are reviewed in terms of content and interpretation and are cross-checked with recommended reporting format. They are also checked to ensure that conclusions, recommendations and classification of the nutrition situation are coherent and consistent with information based on anthropometric and contextual factors (for example, water and sanitation, food security and health related indicators).

Feedback is provided to the respective partner on the quality status of their survey. It is important to note that the quality of surveys and the accompanying reports depend very much on the existing human resources at that particular point in time within the agency/partner. Where there is high staff turnover among partners, sustaining high quality surveys cannot always be guaranteed. In the case of poor quality surveys, bilateral discussions and clarifications are conducted and in most cases, partners accept the ENCU's feedback and recommendations. The surveys classified as 'acceptable' are submitted to the DRMFSS with a note on the data quality and report for information and approval. After the DRMFSS approval, the respective partner is informed and requested to organise a feedback at regional/woreda level where the assessment was conducted, including planning for appropriate response.

Apart from surveys, quality assurance has been expanded to cover Community Based Nutrition (CBN), Community Health Day

Table 1: Number of nutrition surveys conducted in Ethiopia by region, 2000-2010

Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
SNNPR	9	5	35	30	14	25	20	16	36	26	9	225
Oromia	3	2	20	27	22	20	14	6	9	13	13	149
Amhara	5	9	24	17	9	7	6	4	8	13	9	111
Somali	8	5	5	5	8	11	12	2	0	7	1	64
Tigray	0	0	6	7	3	3	0	8	0	4	1	32
Afar	0	0	4	5	1	6	4	2	1	1	2	26
Gambella	0	0	0	0	0	0	0	0	0	0	1	1
Beneshangul gumuz	0	0	0	0	0	0	0	0	0	1	0	1
Harari	0	0	0	0	0	0	0	1	0	0	0	1
Total	25	21	94	91	57	72	56	39	54	65	36	610

(CHD) and Enhanced Outreach Strategy (EOS) community based bi-annual screening data. ENCU have also developed the EOS screening quality checks guideline currently being integrated into the EOS implementation guideline.

Table 1 shows the number of nutrition surveys conducted in Ethiopia since the inception of the ENCU.

Coordination of Emergency Nutrition Responses

Emergency nutrition responses/interventions are usually triggered by acute malnutrition prevalence threshold levels, as per 2004 emergency nutrition intervention guideline. Since it is not possible to conduct standard assessments in all hotspots, woredas classified as priority 1 are given preference for implementation and/or strengthening the existing nutrition interventions.

The relevant federal and R-ENCU contact capable and willing partners to initiate emergency nutrition interventions in the identified woredas, through monthly, ad hoc or bilateral meetings. During the meetings, consensus is reached with regard to who, what where and how (i.e. process to be followed in engagement of the regional and woreda authorities). This averts duplication of coordination efforts and overlaps among partners. However, sometimes partners engage with the regional authorities directly and therefore the above mentioned processes are not necessary.

Coverage of emergency nutrition interventions in hotspot woredas is monitored on a monthly basis based on national and Sphere standard indicators and shared among partners. The ENCU also uses the information to advocate for expansion of interventions in hotspot woredas, particularly priority 1 that may not yet be covered, or in new emerging hotspot areas. Overall, the performance of emergency interventions has been impressive and consistently above national and Sphere standards thresholds in recent years.

Information management and dissemination

A nutrition database has been created to store survey results as well as other data from large scale programmes such as the EOS and Productive Safety Net Programme (PSNP). Over the last 10 years, 592 nutrition surveys have been conducted in hotspot woredas and the raw data and summary reports of these surveys are posted on the DRMFSS web site (see Table 1). The survey results are used for information sharing and for triggering nutrition interventions, which have saved many lives.

The nutrition information available is regularly analysed and shared electronically and with nutrition cluster partners through monthly MANTF meetings. ENCU also disseminates the information through its emergency nutrition bulletin (available at www.dppc.gov.et/pages/ENCU.htm), which provides detailed analysis and presentation of the survey results and TFP monthly admissions and other performance indicators on a quarterly basis. Moreover, monthly nutrition situation updates are prepared and shared with key government departments and agencies. In addition, ENCU hosts many consultation meetings with missions, consultants from partners, and donors inside and outside the country who wish to learn how the ENCU works and to engage in information sharing. There has been also improved analysis, knowledge and utilisation of nutrition information for planning, decision making and for monitoring the evolving nutrition situation at national and regional levels.

Capacity strengthening

The ENCU has focused on four main areas to support capacity strengthening:

- i) Capacity mapping
- ii) Training on emergency nutrition assessments
- iii) Database development and information management
- iv) Revision/development of guidelines

i) Capacity mapping

The ENCU in collaboration with partners has developed a food and nutrition '3W's' matrix of who is doing what and where. This tool contains a wealth of information for each of the woredas, such as hotspot ranking, survey results, and nutrition interventions being implemented and by respective partners. It also provides information on food aid allocation, dispatch information and challenges experienced, provided by the WFP country office. This tool is updated on a monthly basis. The ENCU use the tools to monitor the intervention coverage in terms of availability of TFP and TSF services in the hotspot woredas and in woredas where needs are not being met. The ENCU also maps the technical capacities of the nutrition cluster partners in terms of conducting standard assessment and emergency nutrition interventions. This matrix is completed through meetings and bilateral discussions and feedback with respective partners.

- ii) Training on emergency nutrition assessments

³ The 14.5 percent is based on the FMOH estimates

⁴ Standardised Monitoring and Assessment in relief and Transition

The ENCU focuses on planning and conducting capacity building sessions to ensure that partners at national and regional level use the latest knowledge and skills in nutrition assessments. For example, a series of SMART trainings were conducted at federal and regional levels to enhance skills and knowledge of the staff of DRMFS and its partnering NGO agencies. The training is aimed at harmonising planning, implementation, analysis and reporting of nutrition assessments. As a result, partners' capacities for conducting standard emergency nutrition surveys have significantly improved at both regional and national levels.

The use of the SMART methodology has revolutionised the execution of the standard assessment in Ethiopia. Benefits include improved and shortened planning time for standard surveys, i.e. reduced the challenge of manual calculation of sample size, number of clusters and assigning clusters based on probability proportion to size of the population. The inbuilt plausibility check in the ENA software provides nutritionist and survey teams with the ability to assess the quality of the data collected while the survey is in process. Also, as part of quality assurance at the ENCU, the plausibility check guides whether the survey data and information is worth using for planning and decision making.

iii) Database development and information management

The ENCU is currently in the process of strengthening the R- ENCU's capacity with the aim of decentralising expertise for emergency nutrition assessment, quality insurance, and situation analysis and data management. A user friendly TFP database to be used at woreda level is also in the process of development. This will facilitate utilisation of nutrition information for planning, decision making, and monitoring/early warning, and enhance and improve reporting at woreda level.

iv) Revision/development of guidelines

The ENCU has coordinated the development and revision of the national emergency assessment and intervention guidelines to ensure that partners implement emergency nutrition activities based on the latest knowledge, skills and best practice in the field. The 2002 emergency assessment guideline, for example, was revised in 2008 in line with SMART and ENA software. The 2004 emergency intervention guideline is in the process of being revised to incorporate the 2008 Global Nutrition Cluster intervention tool kit. A stand alone moderate acute malnutrition (MAM) guideline will also be developed to guide and standardise implementation of supplementary feeding programmes in the country. Also in 2010, ENCU coordinated the development of new methodology for seasonal assessments and timely response focusing on strengthened information and surveillance system in line with the Governments Disaster Risk Management (DRM) policy.

Coordination of the Nutrition Cluster

Alignment of the MANTF with the IASC

When the nutrition cluster approach was introduced globally in 2007, it was not a new approach in Ethiopia. Similar nutrition coordination mechanisms existed through the MANTF. The main objective of the cluster approach at global and national level is to strengthen humanitarian response by demand-

ing high standards of predictable leadership, accountability and partnership in emergency response. In Ethiopia, the Government took the cluster lead through sectoral task forces led by the respective ministries. In view of this, ENCU was mandated to coordinate nutrition cluster activities and the MANTF terms of reference were revised to align with the IASC and national level cluster guidance note. It is important to understand that the emergency nutrition situation in Ethiopia is characterised as slow onset chronic emergency and therefore, largely predictable. This predictability calls for sustained and reliable coordination with capacities to implement the cluster approach integrated within the government structures. UNICEF has created four fixed term positions at the ENCU in 2010 to ensure stable, predictable, effective coordination and leadership of the nutrition cluster activities in Ethiopia. The role of the Nutrition Cluster has been to ensure application of national standards, guidelines and protocols in emergency assessment and response, advocate partners and government for timely assessment and response, undertake data and information, and quality assurance. ENCU liaises closely with UNICEF, the nutrition cluster lead agency, on all the above responsibilities. It also advocates for donor funding among nutrition cluster partners. UNICEF, Nutrition Cluster lead agency also has the role of "provider of last resort" when all other options for emergency related response are exhausted.

Decentralisation of the Cluster Approach

A major development achieved by the ENCU has been the roll out of the nutrition cluster approach to the regions. This has significantly improved awareness of cluster partners' responsibilities, contingency planning/preparedness, as well as the strengthening of nutrition information analysis and sharing among partners in the five regions with R-ENCUs. However, plans are under way to strengthen the regional nutrition cluster capacities for coordination of emergency assessments and response where it is weak.

Standardisation of emergency nutrition intervention proposals

In order to standardise the preparation of the proposals and assist partners to be focused in proposal preparation, the ENCU prepared a detailed nutrition cluster proposal outline based on the Humanitarian Relief Fund (HRF) format. This was intended to shorten the time for proposal review and facilitate accelerated approval and release of HRF funds to the respective partners, with an overall objective of improving timeliness and coordination of emergency nutrition responses. The ENCU organises a joint nutrition cluster review by sharing the original proposal with a review committee composed of six members (UNOCHA, UNICEF, WFP, UNFPA (gender) and ENCU) and two members normally from NGOs who are not related to the proposal application. All members participate equally in the review process and decision making. Individual reviewers' comments are discussed during a joint review organised by ENCU and a joint feedback note is prepared and shared with HRF based on the consensus from the review committee.

During the review process the committee ensures that the proposal has addressed all the

important issues as per national intervention guidelines and format. The application is rated on a four point scale of quality. Based on the level, the proposal is either recommended for HRF board review and funding or re-submitted to the cluster for final consideration for funding or, it is rejected. In situations where the partners are not able to get funds from donors bilaterally or the cluster faces inadequate funding, ENCU communicates with the respective donors directly or through UNICEF and advocates on the importance of funding the proposed interventions. In most cases the advocacy has been successful.

One of the limitations of the cluster review process in Ethiopia is that not all emergency nutrition intervention proposals are reviewed by the nutrition cluster. Partners with adequate funds or funded bilaterally usually do not submit their proposals to the nutrition cluster for review. Despite this, the cluster review process has proven to be an important advance in helping to avert duplication of efforts, maximise resources and increase coverage of nutrition interventions in hotspot woredas.

Operational research on emergency nutrition assessments

ENCU/DRMFSS has been collaborating with national and international bodies in conducting operational research particularly in the area of emergency nutrition assessment. For example, in 2006, with funding from the European Community through UNICEF Ethiopia, ENCU commissioned a study into the relationship between weight-for-height, MUAC and body shape in pastoralist, agro pastoralist and agrarian populations in Ethiopia⁵. The findings helped to shed light on the implications of interpreting nutrition survey results in pastoralist populations and to improve understanding, both within Ethiopia and at a global level, regarding the applicability and appropriateness of MUAC vs. WHZ indicator use to assess the nutrition situation in such communities.

In 2009, ENCU/DRMFSS, in collaboration with Nutrition Works⁶, conducted secondary data analysis of the contextual factors identified during emergency nutrition surveys. The result of the study was presented and discussed by nutrition cluster partners in Ethiopia in September 2009⁷. There were consensus that the final emergency nutrition assessment guideline should reflect the report/study recommendations and standardise the collection, analysis and reporting of the contextual factors, as in the case of anthropometric and mortality information collected during the surveys. As a result of the recommendation, contextual factors are now included in the 2008 revised national emergency guidelines being funded by UNOCHA-HRF in Ethiopia and the finalisation of the 2008 draft guideline has started.

⁵ ENCU 2007: Report concerning the analysis of data collected for the MUAC/weight for height/body shape research study. Prepared by Mark Myatt, Institute of Ophthalmology, University College London. See summary in Field Exchange, Issue No 34 (2008). M Myatt et al. Effect of body shape on weight-for-height and MUAC in Ethiopia. October 2008. p12. <http://fex.enonline.net/34/effect.aspx>

⁶ Nutrition Works (a partnership of international nutritionists based in UK)

⁷ Nutrition Works, 2009. Analysis of Nutrition Surveys in Ethiopia, Workshop Report September 22-23rd Addis Ababa. See summary in Field Exchange, Issue No 37 (2009). Contextual data collection in nutrition surveys in Ethiopia, November 2009. p14. <http://fex.enonline.net/37/contextual.aspx>

Future challenges and opportunities for the ENCU

Funding

During the mid-term review of the UNICEF country programme in 2009, it was recommended to incorporate the ENCU as part of the UNICEF structure from mid 2010, with four fixed term positions. This presents an opportunity for establishing effective leadership and in particular, predictable coordination of the nutrition cluster activities as part of UNICEF's Core Commitment for Children in emergencies, while maintaining close coordination with the government. Despite the reinforcement of technical staff, the ENCU's roles and mandate continues to expand and the workload remains a significant challenge. In light of this, UNICEF and DRMFSS have recently agreed to recruit additional staff to focus on strengthening of the ENCU nutrition information systems.

Moderate acute malnutrition

Over the years, ENCU and cluster partners have faced significant challenges in management, monitoring, evaluation, reporting and coordination of nutrition interventions addressing MAM. The 2004 emergency intervention guideline provides limited guidance on the implementation of MAM interventions, reflecting the lack of guidance at the global level. There are also challenges with the adoption of WHO growth standards and the related implications on the implementation of emergency nutrition interventions. Moreover, TFP interventions are not always linked with supplementary feeding programmes and other related interventions. Recognising these challenges, a proposal for revision of the 2004 guidelines and development of separate MAM guideline has been accepted by the government and the revision process has started. This provides a unique and timely opportunity for addressing MAM and other relevant emergency nutrition interventions based on recent developments in this technical area.

Assessing pastoral populations

The lack of international consensus on how the nutrition situation in pastoralist populations should be assessed and characterised in view of their body shape continues to present challenges. To address this, the ENCU/DRMFSS has initiated development of pastoralist survey method studies in collaboration with Action Contre la Faim (ACF) Ethiopia and nutrition partners in Ethiopia that may lead to separate methods for nutrition assessments in pastoralist populations in the future.

Linking nutrition and food security/livelihoods programmes

Another significant challenge has been the absence of or weak linkages between emergency nutrition interventions and long term food security/

livelihood and emergency recovery programmes. Focus is now being placed on articulating alignment of future emergency nutrition interventions with implementation of new government policies in relation to DRM and Public Health Emergency Management (PHEM). This is also likely to be addressed by the proposed guideline revisions. Lack or delayed establishment of a nutrition information/surveillance system, however, will continue to impair the effectiveness of the envisaged early warning systems, on which preparedness, prevention, mitigation and early response components of the DRM policy are based. The existence of the R-ENCU presents a unique opportunity for improved coordination of emergency nutrition assessments, timely response, monitoring and evaluation, accountability, and quality assurance of emergency nutrition interventions which is currently weak.

Information systems

Over the years, ENCU has built a reservoir of nutrition data and information that can be used as a reference for a future information system that integrates emergency and non-emergency nutrition information. Such a system can provide an important input for development of nutrition data and information for disaster risk mitigation and prevention in line with the government's DRM policy.

The ongoing OTP roll out implemented by the federal Ministry of Health (FMOH) provides a unique opportunity for integration of management of acute malnutrition into longer term nutrition programmes, such as CBN and micronutrient deficiency control programmes.

The Government's National Nutrition Programme (NNP) provides considerable opportunities for the integration of emergency and non-emergency nutrition information systems, as well as integration of the ENCU functions into the government structures. The paradigm shift from crisis management to risk mitigation and prevention requires strengthened and improved early warning systems of all the sectors including nutrition. The integration of ENCU into the government working system includes preparation and implementation of common DRMFSS-ENCU/UNICEF annual work plans supported by UNICEF. This ensures government ownership and presents positive signs for future integration within the government structures. ENCU has also secured government and partners trust in the ENCU's work and strengthened linkages between respective government institutions, UN agencies, donors and NGOs implementing emergency nutrition activities in Ethiopia.

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The experience of multi-storey gardens in Ethiopian refugee camps

An example of gardening in a camp setting



Mulugeta Wtsadik/UNHCR, Ethiopia, 2009

By Mulugeta WTSadik

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UNHCR Ethiopia officer, Administration Refugee-Returnee Affairs (ARRA) and ZOA Refugee Care wish to thank all the people directly or indirectly implementing the multi-storey garden (MSG) and poultry production. We acknowledge the important contributions of the following individuals without whose hard work and support the pilot project could not have materialised: Ms Sabine Wahning (UNHCR Ethiopia), Ms Allison Oman (UNHCR Kenya), Mr Ahmed Fall Baba (UNHCR HQ), Mr Tesfaye Bekel (UNHCR Ethiopia), Dr Dejene Kebede (UNHCR Ethiopia), Mir Ajit Fernando, Ketyibelu and G/Giories (UNHCR Sub-office in Shire), Mir Bekele and Dereje Bogale (UNHCR sub-office in Jijiga) and Mr John Bosco Kinama (JTZ in Dadaab, Kenya) who conducted field training for national staff and refugees..

Ethiopia hosts around 112,201 refugees. Approximately 1,564 reside as urban refugees, while the remainder live in eight different refugee camps. The majority of refugees are of Somali (K/Beyah, Shedr, Awbarre and Boqolmayo), Sudanese (Fugnido and Sherkole) and Eritrean (Mayani, Asayta and Shimelba) nationalities.

UNHCR have regularly conducted nutrition surveys amongst this refugee population. Since 2007, the nutrition surveys have also included measurement of haemoglobin using haemocues. These surveys have found alarming levels of anaemia despite the fact that fortified blended food has been provided since 2007 - when corn soya blend (CSB) was introduced to the general ration by the World Food Programme (WFP). Slight but insubstantial improvements in anaemia rates have been observed since. In 2008 and 2009, data still showed an anaemia prevalence >20%, with up to 42% prevalence among children under five years. Anaemia prevalence amongst women of reproductive age ranged from 6% to 27%. Given this, UNHCR now provides CSB to all children between 6 and 23 months. This complements the WFP ration of wheat, vegetable oil, CSB, pulses, salt and sugar. It is assumed that with such high levels of anaemia, there are probably other micronutrient deficiencies in the camps, e.g. zinc. Zinc levels have not been measured as the required methods are too complicated, given the location of the camps and the logistical infrastructure needed.

Multi storey gardens and poultry projects

In order to address this micronutrient problem and more generally improve food security, UNHCR undertook a pilot programme of introducing multi-storey gardens (MSG) and poultry into three camps (Shimbelba – Eritrean refugees, Awbarre and Kebribeyah – Somali refugees). This initiative was funded through UNHCR regional and HQ funding.

The specific objectives of the projects were to increase availability of vegetables and eggs at household level, thereby improving micronutrient status of vulnerable refugees. It was also expected that the MSG project would improve the infant and young child feeding practices of mothers, thereby improving child nutritional status. MSG is a farming technology adopted in areas with little land space and where there is water scarcity. Space is often at a premium in refugee camps. Furthermore, as the vegetable production takes place at household level, it has the advantage of reducing workload and time requirements associated with more traditional garden systems.

The pilot project began in April 2008 with a two day training of the selected implementing partner (ZOA) on MSG and poultry production, held in Addis Ababa. ARRA (Administration for Refugees and Returnee Affairs) are the government of Ethiopia (GoE) counterpart jointly working with UNHCR on the initiative. Training was conducted by UNHCR HQ staff. A UNHCR consultant with experience working on MSGs in Kenya conducted training at camp level (three days training per camp) and wrote a field manual. WFP provided technical advice as well as providing sacks and empty vegetable oil cans. This phase of the project was completed by November 2008.

Table 1: Nutritional status of children 6-23 and 6-59 months of age

Camp	K/Beyah	Awbarre	Shimelba
No. of beneficiaries (households) surveyed	40	45	43
No. (%) who developed MSGs	37 (91%)	39 (93%)	43 (100%)
No. of sacks developed by beneficiary	1 sack (0%) 2 sacks (2%) 3 sacks (5%) 4 sacks (7%) 5 sacks (70%) 6+ sacks (7%)	1 sack (2%) 2 sacks (11%) 3 sacks (28%) 4 sacks (20%) 5 sacks (28%) 6+ sacks (4%)	1 sack (2%) 2 sacks (7%) 3 sacks (5%) 4 sacks (7%) 5 sacks (70%) 6+ sacks (9%)
No. (%) beneficiaries have started to harvest vegetables	30 (75%)	36 (80%)	43 (100%)
No. (%) beneficiaries who have sold vegetables	0 (0%)	2 (4%)	6 (14%) Average income 31 Birr/month
No. (%) beneficiaries eaten eggs	Chickens are still small/too immature to lay eggs and breed	Chickens are still small/too immature to lay eggs and breed	15 (35%) Average 7.5 eggs eaten per week
No. (%) beneficiaries who have recycled water	31 (77%) Average 71.2 litres/week	28 (62%) Average 79 litres/week	32 (74%) Average 146 litres/week

Implementation of the project commenced in January 2009 with ZOA providing the initial funding. UNHCR funding commenced in April 2009. One hundred and sixty seven households were selected in each pilot camp with each household encouraged to construct five MSGs. Households were also provided with three poultry (one cock and two females). Target beneficiaries were family members with a case of anaemia or malnutrition, large female-headed families and people living with HIV/AIDS. Some model farmers and other 'interested' people were also selected.

Evaluation of pilot project

An evaluation of the pilot was conducted in October 2009 by UNHCR/ZOA and ARRA. The evaluation objectives were to identify lessons learned and challenges of the project in relation to implementation capacity and cost effectiveness,



Multi-storey gardens (MSG) method

MSGs use 50kg cereal bags and empty oil cans. The cereal bags are used for growing the produce. The oil cans are filled with rocks and placed in the centre of the upstanding cereal bag. Holes are drilled in the sides and bottom of the tins. A soil blend is placed in the bag between the bag and the tins. Seeds are then planted in the soil on the top of the bag.

When it is time to 'thin out' the seedlings, some of the small plants are removed from the top and, after holes are made in the sides of the bags, the seedlings are planted along the sides of the bags. This means the top and sides of the bags are utilised for growing.

In areas where water is in short supply, this is a very economic way to utilise extremely limited resources. Each bag only needs to be watered twice daily with 5 litres of water. The water is poured into the tin at the centre of the bag and drains through the stones down through to the end of the bag of soil, irrigating all the plants throughout the depth of the bag. It is recommended to use household waste water after rinsing out clothes or bathing, and also waste water from around water points. However, it is important to incorporate and integrate waste management into the programme so as not to further limit water resources necessary for other activities. A standard kitchen garden requires much more water than that used in the MSG approach.

Tools needed

Jembe – used to dig the soil that will be mixed with other components for constructing the garden.
Forkjembe – used to dig the soil in hard ground areas.
Spade – used to collect and mix the soil components.
Tinsnip/Knife – used to cut off the top part of the tin.
Tin punch – used to punch holes in the top and bottom of the tin.
Wheelbarrow – used to measure and transport the various soil parts.

Equipment needed

Perforated tins
Sacks
Gravel clay soil
Sand soil (main part)
Manure
Seeds
Water
Jerry can

Suitable vegetables for MSG

(Common name/Somali name)
Dania – Coriander/Dania
Sukuma wiki – Collards/Sukuma
Capsicum – California wonder/Pilipilihoho
Egg plant – Black beauty/Birganya
Spinach – Fordhok giant/Spinach
Tomatoes – Caj, M82/ Nyanya
Okra – Pusa sawani /Bamia
Amaranthus – Terere/Terere



Poultry project in action

Mulugeta Wtsadik/UNHCR, Ethiopia, 2009

and also pay from between 2-5 Birr per jerry can. Not enough plastic sheets were provided for water harvesting and storage. UNHCR have been trying to encourage refugees to re-cycle water from showers and washing food. Some households do this but only a minority.

There have also been issues around lack of variety of seeds and seedlings, as well as inappropriate seeds, used in the MSG. Furthermore, some beneficiaries were not provided with adequate tools and wheelbarrows

and not all beneficiaries have been using the sides of sacks for transplanting. Also, the principle of using a limited number of vegetables per sack is not well understood by beneficiaries, project animators and the agronomist attached to the programme. Another issue has been pest control and vegetable diseases.

The least successful part of the pilot was the poultry programme. There were many challenges here. One issue was whether it is appropriate to combine MSG and poultry interventions in the same refugee household, given that poultry will eat crops. Another problem was that the chickens bought by ZOA in Addis Ababa were too young and as they were distributed during the rainy season, a large number of them died from disease. There was also a problem with feeding the chickens with chicken feed being taken out of the WFP ration so that there was less food available for households. The chicken feed provided by ZOA only lasted a month.

The evaluation also found that follow up from ZOA and UNHCR at camp levels has been limited. Furthermore, monitoring has been weak. Certain activities that were meant to take place according to the project proposal were not implemented. These included establishing a vegetable nursery site for seedling production, construction of water troughs in KebriBeyah and Awbarre near the water distribution point, pest control activities, development of field manuals on MSG in the local language, and egg production and consumption surveillance.

In spite of these problems however, the MSG project is well accepted by refugees and has been requested by households not included in the pilot programme. The project allows refugees to choose what they want to plant and eat and contributes to a sense of dignity, while the presence of green spaces and the sight of food growing also contribute to a sense of well-being. There is

also a 'domino effect' as households sell or give away excess produce to their neighbours so that there are small enclaves where people are eating better and enjoying fresh foods. Furthermore, some of these refugees are already trying to duplicate the MSG on their own initiative.

Conclusions and recommendations

The MSG project should continue and be rolled out to other camps while the poultry rearing project should discontinue. The poultry project should be stopped largely due to incompatibility with an MSG project, i.e. the chickens ate the MSG produce. Other reasons included expense and time required for implementation, difficulty of finding an appropriate chicken breed and the need for chicken house construction material.

Problems with water in the MSG project necessitated a number of measures including construction of water traps at water distribution points to use waste water, assessment of water that be can collected through spillage during the dry season, encouraging refugees to maximize water recycling, exploring the potential for roof water harvesting from buildings in the camp and increasing the number of water storage containers in the camps.

There were also recommendations about the techniques used in the MSG. For example, it is important to understand that the life of a sack is around nine months if good watering techniques are used. After this point, beneficiaries will need to replace the sack. The animators and agronomists should also provide advice to the beneficiaries on the appropriate ratio of top soils, manure and sand soil, which is fundamental to optimal growth of vegetables, water conservation and utilisation. The implementing partner should also ensure that all sides of the sack are used, that beneficiaries do not use inappropriate vegetable seeds to grow crops like cabbage, carrot or onion and that refugees are encouraged to establish a nursery garden for seedlings. Furthermore, there is a need for households who succeed to be encouraged to share their experiences with the refugee camp. There is also a need for refresher training for the project officer, agronomist and animators as well as partners like ARRA.

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and to develop recommendations for current and future programming direction.

The evaluation involved questionnaires that assessed any increases in vegetable consumption, amounts of vegetables sold and any decreases in percentage of monthly rations sold to buy vegetables. There were also questions about water usage to support the MSGs and concerning egg consumption.

The questionnaire was administered to 50 out of 167 households that were randomly selected in each camp. Focus group discussions were also held with 15-20 randomly selected households who were not included in the household survey and with an additional five households who were not one of the 167 beneficiary households. Data from the primary analysis are presented in Table 1.

Other key findings from the evaluation included the following;

- MSGs need less water than ordinary backyard gardens.
- Vegetables grow faster in MSGs than if grown in the ground. Two harvests can be obtained in the time that it takes for one backyard harvest.
- On average, a HH recycles 60-120 litres of water a week. One sack needs up to 10 litres of water per day.
- Refugees acquired new agricultural skills.
- Households diversified their meals on average three times a week.
- There was a decreased tendency to sell rations to obtain vegetables.
- Some households shared vegetables with neighbours not included in the pilot.

Challenges

In spite of the MSG project success, there have been certain challenges. Perhaps the most significant has been water shortages and spillage of water at distribution points in the Somali camps. UNHCR have tried to address this issue but in some cases, problems appeared insurmountable. Although UNHCR provides water for Somali refugees and local populations, there is not enough drinking water during the dry season let alone for MSG use. Refugees have to queue at water taps and there is a great deal of spillage in taking water home. Water is also collected from rain-water birkads but people have to carry water long distances



An example of multi-storey gardening

Mulugeta Wtsadik/UNHCR, Ethiopia, 2009

This article describes experiences and observations around the successful decentralisation and scale up of the outpatient management of severe acute malnutrition in Ethiopia in the period 2008 to 2010. It includes achievements, the challenges around monitoring and reporting and ongoing steps needed to strengthen and assure service quality.

Following up on the experience of decentralising outpatient therapeutic care in 100 districts of Ethiopia in 2008 (Field Exchange, No 361), this article describes how this was further rolled-out in 606 districts of Amhara, Oromia, SNNP and Tigray regions between 2009 and September 2010.

Background

Ethiopia has one of the highest children under-five mortality rates, with malnutrition contributing to 57% of all children deaths². The 2005 Demographic and Health Survey revealed that 2.2% of children under-five are severely wasted³, a condition associated with a mortality rate of 13% (7.3 to 18.7%)⁴.

When adopting the Millennium Development Goals (MDGs), the Government of Ethiopia (GoE) committed to halve by 2015 children under-five malnutrition (MDG 1) and mortality (MDG 4). This has been reflected in its Plan for Accelerated and Sustained Development to End Poverty (PASDEP, 2005-2010⁵). The strategy under the third Health Sector Development Programmes (HSDP III, 2005-2010⁶) addresses the major causes of child mortality that account for 90% of under five deaths, i.e. pneumonia, neonatal conditions, malaria, diarrhoea, measles, HIV/AIDS and malnutrition.

A series of nutrition articles published in the medical journal, *The Lancet*, in January 2008 defined the magnitude and consequences of undernutrition and demonstrated the availability and potential benefits of proven interventions, including the management of severe acute malnutrition. Therefore, increasing coverage of and access to Outpatient Therapeutic Programme (OTP) is one of the key elements that contribute to the achievements of the MDGs 1 and 4, among other key food security and nutrition interventions currently being implemented in Ethiopia.

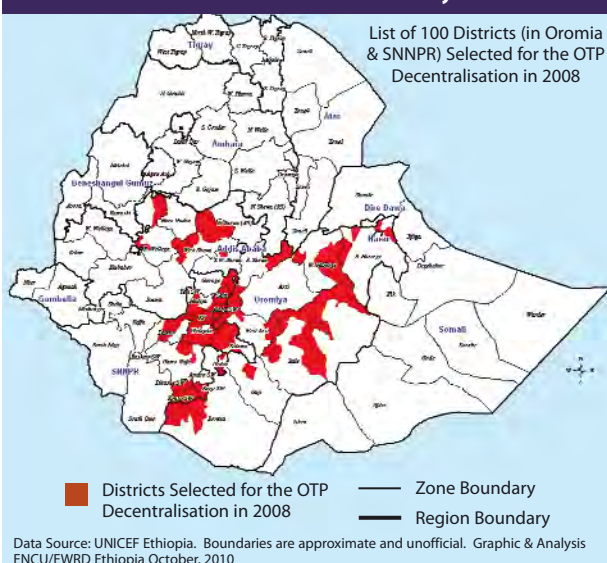
How the OTP decentralisation started in 2008

UNICEF has been advocating for the integration of the management of severe acute malnutrition into the Ethiopian government health system since 2004. With Government leadership, in- and out-patient care had been successfully integrated into 165 hospitals and health centres by January 2008. However, the idea of integrating outpatient management of severe malnutrition into the Health Extension Programme⁶ (i.e. allowing health extension workers to provide curative services) was still being discussed at the time of the March/April 2008 rain-failure in the southern part of the country.

In May 2008, dramatic and rapid increases of severe acute malnutrition levels were reported in Oromia and Southern Nations, Nationalities and People's (SNNP) regions. This was the result of the poor performance of the March/April rains in the southern part of the country combined with the prevailing high market prices (food prices in rural Ethiopia had risen by 250% between 2006 and 2008⁷). In these two regions alone, 193 districts were affected where over 23 million people lived. The Ministry of Health (MOH) and international non-governmental organisations (NGOs), with UNICEF support, began implementing emergency feeding programmes under the coordination of the Emergency Nutrition Coordination Unit (ENCU).

The MOH concluded that the best option to prevent high mortality due to malnutrition was to decentralise the outpatient management of severe malnutrition to the health post/sub-district level. In July 2008, UNICEF was requested to support the Family Health Department of the Ministry to rollout OTPs in 100 drought affected districts of Oromia and SNNP regions (See Map 1). This involved 1,239 health posts and 2,478 health extension workers.

Map 1: Map of the 100 districts in Oromia and SNNPR selected for the OTP decentralisation in July 2008



¹ Sylvie Chamois (2009). Decentralisation of out-patient management of severe malnutrition in Ethiopia. Field Exchange, Issue No 36, July 2009. p12. <http://fex.enonline.net/36/decentralisation.aspx>.

² National Strategy for Child Survival in Ethiopia, Federal Ministry of Health, Ethiopia, July 2005.

³ Defined as weight-for-height < -3 z-score.

⁴ Steve Collins, Nicky Dent, Paul Binns, Paluku Bahwere, Kate Sadler and Halister Hallam. Management of Severe Acute Malnutrition in Children. *The Lancet*, Vol. 368, December 2006.

⁵ The PASDEP and HSDP III cover the period Sept 2005-Aug 2010, which corresponds to the Ethiopian calendar years 1998-2002.

⁶ The Health Extension Programme delivers primary health and nutrition services at sub-district level by two female Health Extension Workers based in health posts; there is one health post per sub-district covering an average of 5,000 people.

⁷ FEWS NET Ethiopia food security updates, USAID and WFP, 2008.



Health Extension Worker providing health and nutrition education during a household visit, Menkere health post, Tigray region

Decentralisation and scale up of outpatient management of SAM in Ethiopia (2008–2010)



By Sylvie Chamois

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Disclaimer: the findings, interpretations, and conclusions in this article are those of the authors. They do not necessarily represent the views of UNICEF, its Executive Directors, or the countries that they represent and should not be attributed to them.

Box 1: Some key programme definitions used in Ethiopia**Therapeutic Feeding Unit (TFU):**

Units in hospitals and health centres offering in-patient care to the severely malnourished cases. If OTP is not available in the catchments area, TFU offers full in-patient care with Phase 1, Transition Phase and Phase 2 with an average length of stay of 2 to 3 weeks. When OTP is available in the catchments area, only the complicated severe cases, as defined by a lack of appetite and the presence of medical complications, are admitted in TFU. Usually, patients only stay as long as they require Phase 1 treatment (2 to 7 days) and then progress to out-patient care.

Out-patient Therapeutic Programme (OTP):

Programme runs from health centre or health post offering out-patient care to severely malnourished cases who have appetite and who do not have any medical complications (this group usually represents over 90% of all the cases). At admission, children receive a medical check to determine if they warrant direct referral to the nearest in-patient TFU. If they are well enough to be treated as an out-patient, they receive systematic treatment and a ration of RUTF. Patients are seen on a weekly or fortnightly basis, but caregivers are encouraged to return to the OTP if the child's condition deteriorates during that time. The average length of stay in OTP is 4-8 weeks.

Therapeutic Feeding Programme (TFP):

Combination of in-patient (TFU) and out-patient (OTP) therapeutic feeding for the treatment of severe acute malnutrition.

Community Management of Acute Malnutrition (CMAM):

International appellation for timely detection of

severe acute malnutrition in the community (social mobilisation), provision of treatment for those without medical complications with RUTFs or other nutrient-dense foods at home (OTP) combined with a facility-based approach for those malnourished children with medical complications (TFU or Stabilisation Centre). An approach endorsed by the World Health Organisation, UNICEF and Standing Committee on Nutrition.

Enhanced Outreach Strategy/ Targeted Supplementary Feeding (EOS/TSF):

The EOS/TSF for Child Survival is a joint programme under the United Nations Development Assistance Framework (UNDAF, 2007-2011) with the Government of Ethiopia. UNICEF is supporting the Ministry of Health (MOH) to conduct twice yearly campaigns of Vitamin A supplementation and deworming to every child under five in the country⁸. In TSF selected districts, the EOS is also screening for malnutrition all children under five, and pregnant and lactating women⁹. WFP is supporting the Disaster Risk Management and Food Security Sector (DRMFSS) of the Ministry of Agriculture and Rural Development (MOARD) to deliver two supplementary rations of Corn Soya Blend (CSB) and oil to children and women identified with acute malnutrition during screening¹⁰.

Community Health Days (CHD):

CHDs are currently being phased-in in Ethiopia as the EOS is being phased-out. It is quarterly local health events organised at the sub-district/ health post level by the health extension workers to provide Vitamin A supplementation and deworming on a six-monthly basis and screening of children and pregnant and lactating women on a quarterly basis.

This programme has been described in a previous issue of Field Exchange referred to earlier (No 36). Key elements of the programme were as follows. In July and August 2008, all the 2,478 health extension workers were trained in the identification of severe acute malnutrition, referral of the complicated cases to inpatient facilities and management of the uncomplicated cases of severe acute malnutrition. As of November 2008, 51 districts (50% of the initial plan) were managing OTPs in 455 health posts (36% of the total number of health posts in the 100 districts), raising the service coverage from 38 to 65% in the two regions' affected areas. A total of 27,739 children were reported to have been admitted in the 455 therapeutic feeding sites with overall positive performance indicators: 77.6% recovery, 0.7% mortality and 4.2% defaulter rates.

The MOH has since endeavoured to strengthen the existing OTPs in the 455 health posts and effectively continue the rolling-out of the plan to the remaining 784 health posts in the two regions and more widely nationally. As of September 2010, there are over 6,400 health posts delivering OTP services and 280 inpatient Therapeutic Feeding Units (TFUs) in 691 districts of Ethiopia out of which 89 are supported by NGOs. This scale up by GoE is a remarkable achievement. The article below details some of the key developments in achieving this.

How the OTP rollout was implemented
Advocacy and coordination

Post- 2008 experience of decentralising out-patient management of severe acute malnutrition in 100 districts, the GoE was keen to implement the rollout through their system and to ensure maximum integration and capacity development within the existing decentralised Health Extension Programme. UNICEF's role was to support GoE in this process.

It was also necessary to find the right fit for a tripartite partnership between GoE, NGOs and UNICEF, each playing their role for the rollout to be successful. NGOs had difficulties engaging in the process as the GoE preferred to implement the programme itself. There were concerns expressed by the NGO community about the proposed speed of scale up for this type of programme and fears that quality of service may suffer. There may also have been some concerns about the possible lack of NGO role in this scale up.

UNICEF advocacy role was to find the right link between the GoE and the support NGOs could provide. This was achieved through three types of coordination meetings:

- Type 1:** Involving all parties: nutrition cluster meetings were held at the ENCU and attended by NGOs, UN agencies, relevant government counterpart agencies and donors.
- Type 2:** Between NGOs, donors and UN agencies: regular meetings were organised by UNICEF as a means of encouraging donor support and to ensure good coordination with the NGO sector, and
- Type 3:** Between UNICEF and the Government.

This resulted in agreement that there should be joint monitoring of the OTPs (and TFUs) by all stakeholders, e.g. GoE, NGOs and UN agencies. NGO collaboration was to be requested by the GoE in those geographical areas where capacity for OTP (and TFU) rollout was limited. The predominant NGO role in these areas should and would be to support and build up Government capacity. These meetings were held for approximately one year from May 2009 and proved useful during a difficult transition period for various stakeholders.

Coordination at regional level was led by the Regional Health Bureaus through the Health and Nutrition Task Forces.

Donor support

UNICEF developed an emergency nutrition response plan for 2009 and 2010 and donors were invited to contribute funding. Donor support for the rollout of OTP in the four target regions was secured from the Humanitarian Response Fund (HRF), OFDA, Governments of Japan and Spain, CIDA, DFID, SIDA and ECHO¹¹.

Development of regional action plans

UNICEF helped to instigate the development of action plans in the four target regions (Amhara, Oromia, SNNPR and Tigray) in conjunction with the Regional Health Bureaus. These four regions were selected on the basis that they were the most severely affected by drought in 2008, their high population density and existence of a functional Health Extension Programme. Regional planning took place within regional task force meetings and involved NGOs where they were able to pledge commitment to training and monitoring.

Adaptation of the strategy to regional contexts (Afar and Somali regions)

Afar and Somali regions (arguably regions most prone to food insecurity) were not initially included in this scale up due to the mobility of their populations and consequent difficulties of integrating OTPs into existing health structures. Furthermore, Somali and Afar are not population dense so that health posts would serve only a few children, also security and access are continuously problematic in the regions. However, GoE with UNICEF and NGO support, fielded mobile health and nutrition clinics based upon guidelines developed in March 2008. Mobile teams visit communities every one to two weeks to implement OTP management as well as Integrated Management of Childhood Illnesses, promotion of hand washing and safe water. As of September 2010, there are seven mobile clinics run by the GoE in Afar, including two using camels. In Somali region, the GoE runs twenty mobile clinics while NGOs support another seven.

Technical assistance for training and follow-up

During the scale up, Regional Health Bureaus organised trainings with UNICEF and NGO support mainly targeted to health extension workers and HEP supervisors, but also including local zone and district officials. Training of health workers and doctors on the inpatient management of severe acute malnutrition was also provided with the aim of setting up a minimum of one inpatient unit per district for the management of complicated cases. UNICEF recruited six nutrition specialists to support the organisation and conduct training, as well as post-training visits and supportive supervision. Training was similar to that carried out during the 2008 decentralisation programme in Oromia and SNNPR.

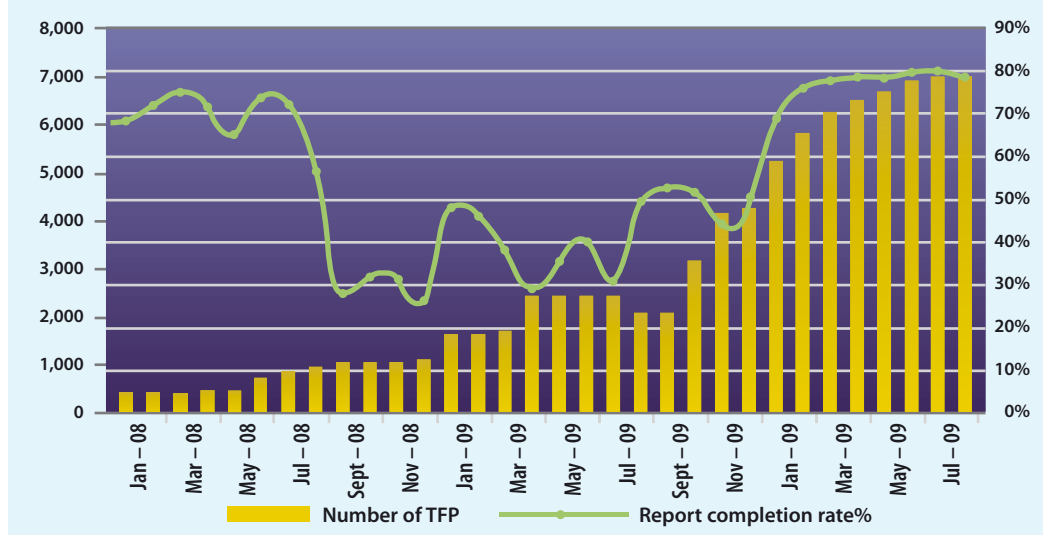
⁸ Vitamin A is supplemented to children 6-59 months old and deworming tablets are administered to children 2-5 years old.

⁹ Are screened for malnutrition: children 6-9 months old, visibly pregnant women and women breastfeeding a less than 6 months old infant.

¹⁰ Eligibility for TSF: Children with MUAC < 12 cm and/or bilateral oedema and women with MUAC < 21 cm. One TSF ration is composed of 25 kg of CSB and 3 litres of oil for 3 months.

¹¹ See acronyms listing on page 92.

Figure 1: Number of Therapeutic Feeding Programmes (OTP & TFU) and monthly report completion rate in the four target regions (Amhara, Oromia, SNNPR and Tigray), Jan 2008 to August 2010¹³



Provision of supply and logistic support

In 2009, an amount of Ready to Use Therapeutic Food (RUTF) was imported, although the 'Hilina Enriched Food Processing Centre', the Nutriset franchised company, provided most of the supply. From 2010 onwards, UNICEF is planning to only procure RUTF locally¹². It had been anticipated that NGOs would procure their own RUTF where they were supporting districts, however it appears that some preferred or expected UNICEF to procure the commodity on their behalf. Furthermore, a number of NGOs advocated for provision of contingency stocks in the event of shortages.

UNICEF also became involved in some of the logistics of the programme where GoE needed additional support. UNICEF would therefore, in some cases, distribute RUTF to zonal or district level. For the remote districts, provision for supply transportation down to the health post level was included into the regional action plans.

Enhanced programme monitoring and quality insurance

Ensuring good programme monitoring and quality proved to be challenging with the rapid multiplication of OTP sites. UNICEF supported the GoE working on the three following aspects of programme monitoring and quality insurance:

a) Improved report quality, timeliness and completion

One priority was to increase and maintain high monthly statistics report quality, timeliness and good completion rates.

Figure 1 shows that the report completion rate was 69% in the four target regions before the OTP rollout (Jan - Aug 2008) and dropped to 42% with the OTP expansion (Sep 2008 to Dec 2009).

In September 2009, the Minister of Health sent a letter to Regional Health Bureaus to emphasise the importance of getting timely and accurate reports for enhanced programme monitoring. In addition, UNICEF recruited in November 2009 four technical assistants, one attached to each regional ENCU, to look at reporting systems, identify bottlenecks for quality and timely reports and take appropriate actions in conjunctions with the GoE. This resulted in the achievement of 77% report completion rate between January and August 2010. Reports usually reach the federal level within a maximum of one month after the end of each month of activity.

Other longer-term actions initiated by GoE and UNICEF on reporting are:

- i) Development of a user-friendly software to be decentralised to the District Health Offices (currently under development)¹⁴. It is expected that this tool will improve reporting as well as district and regional capacity to analyse/use data for programme management. The software will also include growth monitoring,

Table 1: Summary of results from joint monitoring assessments in the four target regions (Amhara, Oromia, SNNPR and Tigray), September 2009 to September 2010¹⁷

Region*	Number of districts assessed	Number and % of districts scoring:		
		< 50%	50-70%	> 70%
Amhara	59	20 (34%)	27 (46%)	12 (20%)
Oromia	53	9 (17%)	30 (57%)	14 (26%)
SNNPR	3	0	3 (100%)	0
Tigray	16	6 (38%)	9 (56%)	1 (6%)
Total	131	35 (27%)	69 (53%)	27 (20%)

*Joint monitoring started in September 2009 in Amhara and Oromia and in April and June 2010 in Tigray and SNNPR respectively.

vitamin A supplementation and deworming indicators.

- ii) Piloting of health extension workers sending OTP data using SMS for improved timeliness and completion rate (ongoing and results expected in 2011).
- iii) Integration of nutrition indicators into the Health Management Information System (not yet achieved)¹⁵.

b) Development of joint monitoring tool and system

Following on the recommendation to undertake joint monitoring of the programme (GoE, NGOs and UNICEF), a sub-working group chaired by UNICEF was formed with ACE, Concern, GOAL, MSF-Greece and MSF-Holland. They met weekly between May and June 2009 to develop a monitoring checklist for field assessments. The tool was then discussed with the regional authorities in Oromia and SNNPR, tested and modified between July and August 2009. It was agreed where NGOs operate, that they were to be the partner of the MOH and UNICEF for all joint monitoring work. They were also invited to participate as much as possible outside of their traditional support area.

In SNNPR, by the first week of August 2009, a team composed of Regional Health Bureau, NGOs¹⁶, regional ENCU and UNICEF, made the final modifications to the checklist for OTP and TFU assessment, grading individual components of the practices observed. It was agreed that a three tier grade banding could be useful to identify the level of programme support needed at district level, where:

- Grade over 70%: working very well with minor support needs only
- Grade 50-70%: working well but with some technical and logistic support needs requiring attention
- Grade under 50%: has major support needs to refresh skills of staff and where operational systems need to be established

In districts where NGOs provide minimal support to MOH, the NGO in collaboration with MOH would address the agreed support needs. In all other districts, it was suggested that the Regional Health Bureau request additional support from UNICEF and/or selected NGOs.

The testing in Oromia and SNNPR also allowed for Regional Health Bureaus and partners to learn more about the resource needs to manage regular joint monitoring, especially in terms of key personnel time and transportation needs. It was initially thought that the six additional staff recruited by UNICEF to support the OTP rollout in the four regions would also be involved in the joint supervision. However, this additional capacity coupled with the GoE and NGO capacity was not sufficient to establish adequate monitoring of the programme (it takes a full week for a monitoring team to assess the practice of health extension workers and health workers in 40-50% of all OTP sites and all TFUs in one district).

¹² As of September 2010, there is only one local RUTF factory in Ethiopia and a second one is planning to start production in October 2010.

¹³ Source: TFP database, ENCU/DRMFSS/MOH, Ethiopia.

¹⁴ At the moment, the database is kept by the ENCU at federal level.

¹⁵ Health extension workers salary is conditioned to the submission of the HMIS reports to the District Health Office.

¹⁶ Concern, GOAL, Save the Children-US, Samaritan's Purse and International Medical Corps (IMC).

¹⁷ Source: UNICEF Ethiopia.



Mother and child waiting for admission to the OTP, Senebete Senkete Health Centre, Siraro woreda, Oromia region

Table 2: Number of TFUs per district and hotspot priority in the four target regions (Amhara, Oromia, SNNPR and Tigray), September 2010¹⁸

Hotspot priority number*	Total number of districts	Number of districts with no TFU	Number of districts with at least 1 TFU	% of districts with TFU
1	176	70	106	60%
2	96	52	44	46%
3	99	75	24	24%
Total	371	197	174	47%

* Districts affected by food insecurity and in need of humanitarian assistance are classified into hotspots priority 1 (high), 2 (medium), 3 (low) and 4 (not affected).

Table 3: Summary results from TFP coverage surveys conducted in each of the four target regions, 2010¹⁹

District assessed and date*	OTP period coverage	OTP point coverage
Wadela, Amhara region, March 2010	19%	10.4%
Arsi Negele, Oromia region, January 2010	48.8%	21.2%
Mareko, SNNP region, January 2010	60.9%	37.8%
Tahtay Machew, Tigray region, March 2010	56.2%	27.3%

Consequently, in September 2009 UNICEF developed a Project Cooperation Agreement with the NGO Population Service International (PSI) to deploy twenty field monitors in an effort to boost programme quality in all hotspot districts in the four largest regions. A total of 131 districts were monitored from September 2009 onwards. As of September 2010, 20% of districts were working very well with minor support needs only (ranked over 70%), 53% were working well but with some technical and logistic support needs requiring attention (50-70%) and 27% have major support needs to refresh skills of staff and where operational systems need to be established (under 50%), (Table 1).

In spite of the impressive increase in service access that has been achieved in districts that have rolled out OTP to health posts at sub-district level, the monitoring has helped to identify key areas where the programme needs strengthening.

The availability of one functional TFUs per district as planned is still limited. Sixty per cent of 'priority 1' hotspot districts have at least one TFU, compared with 46% of districts in hotspot priority 2 and 24% in hotspot priority 3 (see Table 2). Also see Map 2.

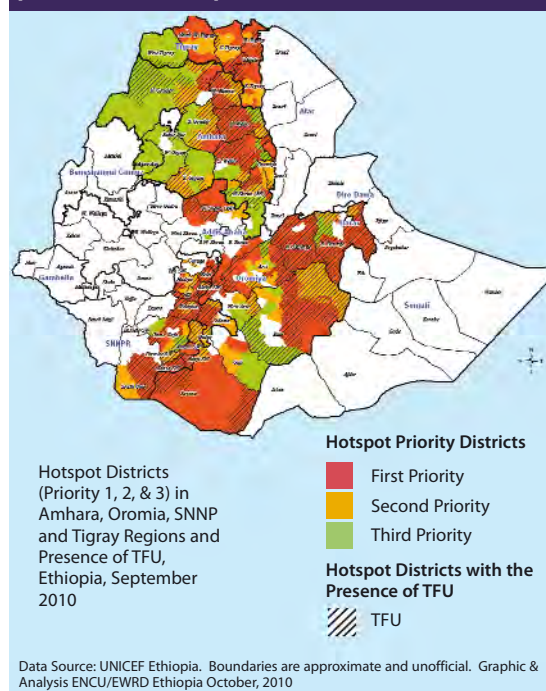
The low proportion of referral from OTP to TFU in some districts is also a concern and should be studied further. It is not known how much of this is due to very early detection reducing the number of complicated cases, or as highlighted in the four TFP coverage surveys conducted recently (Table 3), for other reasons affecting access. These include low level of active community mobilisation and lack of skills among some health extension workers to identify and refer the complicated cases, caregiver refusal to go to the TFU because it is too far, lack of capacity to pay for transport, lack of food for caregivers, opportunity cost for caregivers of staying away from their home, etc.

Health Extension Programme supervision by MOH is not always working adequately due to lack of trained staff skilled to mentor/super-

Box 2: Summary of recommendations from the four coverage survey reports

- Ensure uninterrupted provision of service by avoiding scheduling conflicts for health extension workers (HEWs).
- Maintain continuous supply of therapeutic products.
- Improve technical skills of HEWs and health centres staff through formal and on-the-job training.
- Strengthen record keeping, training (formal and on-the-job) and monitoring progress of registered beneficiaries.
- Establish regular supportive supervision for HEWs by their Health Extension Programme (HEP) supervisors and district focal persons.
- Continue joint monitoring assessments (GoE, NGO and UNICEF).
- Ensure involvement of community health worker (CHWs) in active case finding and defaulter tracing.
- Integrate TFP with other health/nutrition/food security programmes in the district. For example, the formation of linkages to improve active case finding during the quarterly Community Health Days screening, house-to-house visits, routine sanitation activities (e.g. pit latrine construction), family planning services. In all community conversations, HEWs should raise awareness on the links between the TFP and the Growth Monitoring sessions, especially when cases of SAM are identified.
- In Community-Based Nutrition districts, give refresher training to CHWs to replace those who are no longer active and to ensure sufficient numbers to satisfy the district's plan of one CHW to serve 25 to 30 households.
- In Tigray, establish OTP service at sub-district/health post level in the northern rural parts of the district.
- Improve RUTF storage facilities at district level and in all health facilities to protect it from rats/rodents.

Map 2: Map of hotspot districts (priority 1, 2 and 3) in Amhara, Oromia, SNNP and Tigray regions and presence of TFU, September 2010



Indrias Getachew, Ethiopia, 2010



vised OTP activities. Some supervisors are sanitarians, not health staff, and are not familiar with the programme. Some districts lack the full quota of supervisors (one per five health post). Lack of capacity and effective management from District Health Offices managers and lack of transport to facilitate visits to OTP sites may also contribute to shortcomings. When assessing the programme, the monitors (GoE, PSI/ UNICEF and NGO) also build the capacity of the HEP supervisors and District Health Offices managers using the checklist and providing on-the-job support.

Health extension workers in most districts observed so far urgently need follow up training to refresh/strengthen their skills. OTP protocols are not always being maintained, and errors in anthropometry are still observed. This can result in moderate acute malnutrition cases included in the programme, and unduly long length of stay. Recording and reporting also remains a challenge. A system for regular supply management and distribution is yet to be established in many districts.

Where Therapeutic Feeding Programmes and Community-Based Nutrition (CBN) programmes co-exist, the District Health Office has sometimes failed to capitalise on the oppor-

tunities provided by the CBN programme enhanced training and support for health extension workers and community health workers. Community mobilisation needs to be strengthened in districts that have as yet not included it in the training or programme set up.

Another issue is that some NGOs are still in implementation mode, providing nurses to work alongside health extension workers for each OTP (involved in recording, reporting, supply management and child treatment). It is intended that NGOs work to develop capacities by mentoring, supporting quarterly reviews and developing District Health Offices skills to manage monthly reporting and supply management systems, rather than providing staff to help service delivery. On the other hand, some NGOs are still facing difficulties working on capacity building and dialogue is still required to achieve the smooth partnership that UNICEF is promoting.

In addition, there is insufficient access to safe water at health post level. It was recently suggested in Amhara that whether OTP sites have sanitary latrines and safe water should be

¹⁸ Source: UNICEF Ethiopia.

¹⁹ Source: EHNRI.

an additional indicator for inclusion during assessments and monitoring.

Routine drugs are not always being administered by the health extension workers, although the State Minister of Health authorised the provision in a letter dated January 2010. This has also been included in the Community Case Management of Childhood Illnesses together with the community treatment of malaria, diarrhoea and pneumonia (January 2010).

c) Partnership for programme coverage surveys

UNICEF developed a partnership with MOH and Concern to build the capacity of the Ethiopian Health and Nutrition Research Institute (EHNRI) to assess TFP programme coverage using the Centric Systematic Area Sampling (CSAS) methodology. The approach has been used previously by NGOs in small programme areas (individual districts). For exposure to the methodology and capacity building, one coverage assessment was completed by the EHNRI with Concern technical support in each of the four regions in January and March 2010 (Table 3). Findings and recommendations were discussed at regional level and action plans were developed to address the issues (see Box 1).

In September 2010, a consultant was brought in by Concern and UNICEF to develop and propose to the MOH a coverage survey methodology that would allow assessment of programme coverage over wider geographic areas (at the moment, the methodology does not allow for assessment of more than one district at a time). A subsequent step will be to pilot and validate the new methodology before building the capacity of regional authorities to plan for and conduct regular surveys as part of their programme monitoring.

Progress and results

The Government of Ethiopia has, within a short space of time, managed to provide access to services for the majority of families affected by severe acute malnutrition in four regions of the country. In less than two years, service coverage for severe acute malnutrition has reached 49% and 48% of health posts and health centres respectively running OTPs and 17% and 92% of health centres and hospitals respectively running TFUs (Table 4). Consequently, there is now earlier detection of severe acute malnutrition cases reducing the number of complicated cases needing specialised inpatient care.

Furthermore, key monitoring results in terms of SPHERE standards²⁰ are impressive. Between January 2008 and August 2010, a total of 370,559 children were reported to have been admitted to in and out-patient therapeutic feeding sites in the four regions with overall positive performance indicators: 82% recovery, 0.7% mortality and 5% defaulter rates (Table 5). Also see Figure 2.

Lastly, the GoE is now in a much better position in terms of national capacity and preparedness to respond to any increases in severe acute malnutrition levels.

Key contributing factors to success

There have been a number of important contributory factors to the success of this programme. Key amongst these are:

- Central and regional government commitment to develop policies and guidelines on decentralised treatment of severe acute malnutrition and to integrate services into the wider decentralised health programme. The outpatient management of severe acute malnutrition is now fully part of the Community Case Management of Common Childhood Illnesses implemented through the Ethiopian Health

Extension Programme.

- Advocacy to promote this approach and to provide technical assistance to all relevant field level actors.
- High educational levels, technical skills and commitment amongst programme staff working within the health sector, e.g. health extension workers, nurses and doctors.
- Enhanced coordination between GoE, UNICEF, NGOs and donors creating an environment in which all stakeholders could contribute skills and resources to best effect.
- Simplicity and efficacy of OTP approach both for the service providers (health extension workers) and service users (patients and caregivers).

Ways forward

Key next steps are to continue the OTP roll-out at health post level and expand TFU coverage to reach a minimum level of one TFU per district. It will also be important to include therapeutic feeding items in the Essential Drug/Commodity List to resolve some of the supply and logistic issues. Similarly, the inclusion of basic TFP indicators into the Health Management Information System (new admissions and performance) will be an important step towards fully integrating and sustaining the programme, together with advocacy for an increased allocation of funds to the Health sector to absorb the programme cost. Continued joint supervision visits are also essential to address service quality and build the capacity of the supervisors in charge of programme implementation. Linkages with other programmes must also be developed. These should include improved access to safe water and health services by working with Ministry of Water Resources and linking with community health workers of the Health Extension Programme, and improved and expanded management of moderate acute malnutrition (this will become an even greater priority as Ethiopia adopts the new WHO Growth Standards). Finally, after two years of implementation, it is becoming increasingly urgent to conduct a comprehensive programme evaluation and to study a number of issues, including the reasons for low TFU admission rate in some districts.

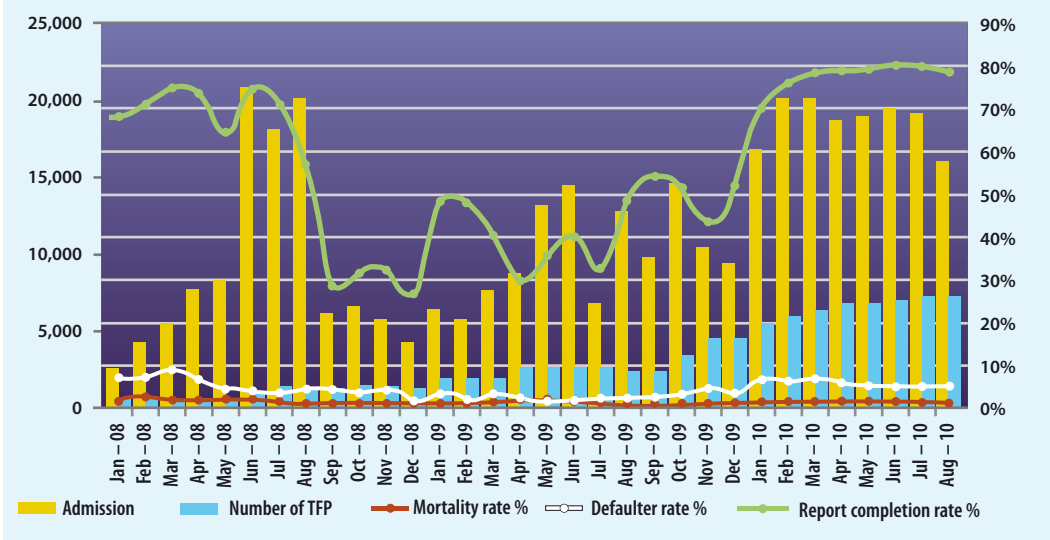
For more information, contact: Sylvie Chamois, email: schamois@unicef.org

Table 4: Number and coverage of OTP & TFU per type of health facility in the four target regions (Amhara, Oromia, SNNPR and Tigray), September 2010

Hotspot priority nb*	No. of woreda	Total no. of Health Posts	No. of HP running OTP	% of HP running OTP	Total no. of Health Centres	No. of HC running OTP	% of HC running OTP	No. of HC running TFU	% of HC running TFU	Total no. of Hospital	No. of Hospital running TFU	% of Hospital running TFU
1	176	4,113	3,122	75.9%	457	309	67.6%	124	27.1%	15	14	93.3%
2	96	2,203	1,651	74.9%	224	151	67.4%	44	19.6%	9	9	100.0%
3	99	2,326	803	34.5%	95	43	45.3%	24	25.3%	10	9	90.0%
4	235	3,844	524	13.6%	482	99	20.5%	22	4.6%	28	25	89.3%
	606	12,486	6,100	48.9%	1,258	602	47.9%	214	17.0%	62	57	91.9%

* Districts affected by food insecurity and in need of humanitarian assistance are classified into hotspots priority 1 (high), 2 (medium), 3 (low) and 4 (not affected). Source: UNICEF Ethiopia.

Figure 2: OTP & TFU monthly admissions and performance in the four target regions (Amhara, Oromia, SNNPR and Tigray), Jan. 2008 to August 2010



Source: TFP database, ENCU/ DRMFSS/ MOH, Ethiopia

²⁰ The SPHERE project, Humanitarian Charter and Minimum Standards in Disaster Response.

Table 5: OTP & TFU performance in the four target regions (Amhara, Oromia, SNNPR and Tigray), Jan. 2008 to Aug. 2010

	TFP performance	SPHERE standards
% of reports completed	63.4%	–
Number of admissions	370,559	–
Cured	272,261 (82.5%)	> 75%
Died	2,481 (0.7%)	< 10%
Defaulter	15,392 (4.7%)	< 15%
Medical transfer	3,627 (1.1%)	–
Transfer from OTP to TFU and from TFU to OTP	28,357 (8.6%)	–
Non respondents	8,054 (2.4%)	–

Source: TFP database, ENCU/ DRMFSS/ MOH, Ethiopia.

History of nutritional status and Concern's response in Dessie Zuria woreda, Ethiopia

By Sarah Style



Sarah graduated with a Masters in Public Health Nutrition from the London School of Hygiene and Tropical Medicine in 2009. She recently returned from Ethiopia having completed an internship with Concern Ethiopia.

The author acknowledges the technical and editorial support of Emily Mates in writing this article and the work and support of the Concern Ethiopia team.



Focus group discussion in Guguftu kebele to investigate underlying causes of malnutrition



Dessie Zuria is one of 21 woredas (districts) in South Wollo Zone of Amhara Region, Northern Ethiopia. The nutrition situation in Dessie Zuria has remained at 'serious' levels for the past 10 years, with the global acute malnutrition (GAM) rate only once dropping below 10% (cut off advised by Ethiopian guidelines to classify an emergency situation) in 2004 in the presence of an emergency feeding programme (Figure 1).

In 2008, Dessie Zuria was classified as a 'hot spot' area by the regional early warning department due to failure of the short belg rains on which the majority of the population depend. Following the results of a nutrition survey, Concern Ethiopia initiated a targeted supplementary feeding programme (TSFP) in July 2008, which has continuously operated since then. However, malnutrition rates in the woreda to date have remained relatively un-changed, despite two years of a TSFP intervention. The TSFP has been a well implemented programme, evidenced by high coverage rates (October 2008, TSFP period coverage 84.5%, TSFP point coverage 68.3%). However, recovery rates have been sub-optimal, particularly during 2009 (recovery rate 27%, non-recovery rate 59%, re-admission rate 57%) thus raising the question of what is going on in this area that may have contributed to the lower than hoped for recovery rates in the programme.

In order to further investigate this issue, three focus group discussions (FGDs) and four case studies were carried out in selected distribution areas in the woreda. In order to provide as representative a selection as possible within the time allowed, two areas, Guguftu and Gelsha, known for their chronic nutritional status were selected. Both are situated in the higher highlands.

Serdem, a lowland kebele (village) situated near the town of Kombolcha was selected also. All children providing case studies were purposively selected based on having been readmitted (some on more than one occasion) to the SFP. Primary and secondary data was also reviewed including (but not limited to) Concern's 2006 Dessie Zuria Livelihoods Analysis (also building on suggestions from the Agricultural and Rural Development Agency), 2008-09 recovery information, 2008-09 early warning information (Concern and woreda) and 2008-10 Dessie Zuria Nutrition Surveys that included reports from the Woreda Agriculture and Rural Development Office (WARDO).

The relatively static nutrition situation in Dessie Zuria implies that this high level of acute malnutrition is becoming 'typical' for this population, who in the face of chronic food insecurity, are finding it increasingly difficult to recover from the repeated shocks. The chronic food insecurity in the woreda is also evident in the high prevalence of stunting. The July 2010 nutrition survey estimated global stunting at 47.5% (this is not significantly above the national average)¹. This figure is unlikely to be inclusive of older age stunted children as survey team leaders were trained to ascertain age using local seasonal calendars and had a good understanding of child developmental stages. The leaders were therefore able to validate the likelihood of the reported ages. Only when age was unclear, was the height cut off of between 65-110cm (proxy 6 months to 5 years) used to consider children for the survey. Whilst harvests have been particularly poor in the last three years, indications are that an increasing number of households are unable to support themselves, even in a year of good harvest.

Concern has been present in Dessie Zuria for 10 years where it has supported the woreda through both development and emergency programmes. Based on the findings of the 2006 livelihoods analysis, Concern initiated a liveli-

hoods programme in 2007, initially targeting 11 of the 31 kebeles in the woreda. Some of the key problems to be addressed were low rainfall, crop productivity and production (particularly in the higher-highland areas) and lack of agricultural diversification and non-agricultural sources of income. Although this programme has not been running for long and therefore cannot yet be expected to have solved all of these problems, we have not seen a reduction in chronic acute malnutrition, even with TSF interventions, the Governments general food distribution (GFD) and the Ethiopian social protection mechanism, the Productive Safety Net Programme (PSNP) (that provides food or cash for work for the poorest of the poor).

It has been suggested that the "repeated 'emergency' operations are in fact serving the function of a welfare or safety net programme in the face of chronic poverty in the Wollo area of Ethiopia".

Key challenges to improving Dessie Zuria's nutrition situation

The following key challenges were highlighted from analysis of the FGDs and case studies as well the aforementioned review of primary and secondary information provided by relevant Dessie Zuria woreda offices and Concern.

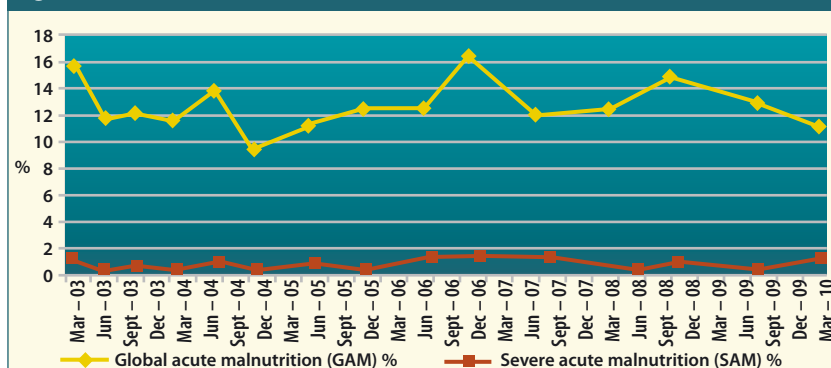
Climatic conditions and topography

Dessie Zuria rainfall is erratic and precarious. Although the rains this year have improved, woreda reports and surveys have indicated that the belg rains have been wholly inadequate for the last 3 years leading to insufficient or non-existent crop production. This was further confirmed by the FGDs and case studies. The higher-highlands, being totally belg dependent, have been particularly affected. They are also more vulnerable to climatic variations due to being dominated by sloping land, with the soil erosion and colder weather making it difficult to grow crops. Additionally, small land holdings and population pressure, exacerbated by poor



Hayat Seid, female, 29 months, has been in and out of OTP and SFP five times

Figure 1: Prevalence of GAM and SAM in Dessie Zuria woreda (2003 – 2010)



¹ National average for stunting is 46.5% (Ethiopia DHS, 2005).
² Sharp and Devereux, 2004. 'Destitution in Wollo (Ethiopia): chronic poverty as a crisis of household and community livelihoods', Journal of Human Development and Capabilities, 5: 2, 227 – 247.
<http://dx.doi.org/10.1080/1464988042000225140>

resource management and overuse, have also led to declining productivity.

In order to further investigate this link, the readmission rates from Concern's supplementary feeding programmes (SFPs) from July 2009 to June 2010 were analysed at kebele level and by agro-climatic zone. The results found that the five kebeles with the highest readmission rates were all from the higher highlands (as opposed to the highlands, midlands or lowlands). This gives testament to this area's increased vulnerability to factors leading to food insecurity, such as a colder environment resulting in higher metabolic rate, smaller land holding, erosion and the slow recovery of SFP beneficiaries, with high numbers requiring re-admission to the programme.

Food insecurity

The livelihoods and livelihood assets in Dessie Zuria are also frequently affected by shocks. Livelihoods analysis has indicated that crop production cannot be expected to offer much by way of outputs except in very limited areas such as in the lowlands, where crops depend on the more reliable meher rains and less undulating topography. Case studies conducted with parents of moderately acutely malnourished (MAM) children repeatedly readmitted to SFPs, found that due to crop failures and lack of other nutritional produce, households are often unable to use the SFP ration as intended i.e. as a supplement for the normal family diet. FGDs confirmed that the poorest of the poor are frequently unable to provide additional food from their own production to supplement SFP food. This means that even with supplementary food, beneficiaries' food intake is insufficient for recovery. This is further compounded by frequent sharing of the SFP food with other hungry siblings not in the feeding programme. Although parents knew that the SFP food was intended only for the malnourished child, they found it impossible to ignore the hungry cries of their other children who were not enrolled. Despite education on use of the supplementary food at every distribution site, one case study mother admitted to eating the SF food that was intended for her child, in order to improve the quality of her breastmilk. In children >6 months, supplementary food rations are intended for consumption by the child to complement breast-feeding.

The dependency on agriculture is also disproportionately large, given the precarious weather conditions. Although the woreda's climate and topography make it difficult to grow a diverse range of crops, there is a need for agricultural diversification to reduce reliance on single crops; a key objective of Concern's livelihood programme. More climatically tolerant seeds have been introduced in the last two years as a recovery mechanism and have proved a success. FGDs highlighted that potato seeds have provided a good opportunity for recovery as they can be eaten, used as a cash crop and are suited to the ecological zone. Expansion of such activities could aid in improving communities poor dietary diversity. Diets are dominated by carbohydrates with little fruit/vegetable consumption, exacerbated by limited knowledge of caregivers in the preparation of nutritious food. Consumption of meat and meat products is almost non-existent; farmers cannot afford to eat the products as they need to sell their livestock/meat as a source of income. The population's resilience to agricultural shocks is further reduced by the lack of off-farm activities, as back up strategies in case of crop failure

(again being addressed by the livelihoods programme). Although the woreda's current food security situation is showing improvement due to a productive belg performance in June/July, unless this trend continues over the longer-term, the nutrition situation will most likely remain bleak in the absence of further multi-sectoral action including expansion of the Concern livelihood programme.

Food Aid

In April 2010, nutrition survey results indicated that although the main source of income was household's own production, 82.4% of households had access to food aid. This is nearly double that of 2008, increasing pressure on resources. While GFD and PSNP have inevitably aided household food security to some extent, focus group discussions have indicated that distributions are often less than that forecasted by the woreda, in terms of quantity and frequency of provision (of cash/grain). Additionally, in Seredem, cash rations in March 2010 were found to be of little value due to price increases in the market. FGDs and case studies highlighted the influence of these factors on communities' inability to recover as well as the recovery being exacerbated by the limited linkage between GFD and SFP beneficiary lists. However, it was also pointed out that where provided in sufficient quantities, the GFD/PSNP did help to reduce sharing of SFP among households.

Poor infant feeding practices

In this district, inadequate infant feeding practices are suspected to have a considerable influence on children's ability to recover from malnutrition, and to maintain their recovery. FGDs have found that feeding infants a mixed diet of water and breastmilk is a common occurrence. This is worrying, given the poor water, sanitation and hygiene (WASH) conditions in the woreda (see below) and the likely exposure of infants to harmful pathogens. All caregivers reported to having received education on sanitation and hygiene provided during Concern's SFP distributions and by community outreach, and therefore had improved knowledge in this area. However, some added that although they had received this education, it was sometimes difficult to implement practically, due to heavy work loads and lack of family support.

Data from nutrition surveys has consistently indicated a low prevalence of exclusive breast-feeding in infants < 6 months. In the most recent nutrition survey (July 2010), introduction of complementary foods from 6 to 9 months was reported by only 66% of caregivers. This indicates that complementary foods are frequently introduced too late. Many infants are receiving only breastmilk/water for too long, therefore not obtaining sufficient energy or nutrients to meet their increased needs. This is further exacerbated by the inadequate quality and quantity of complementary foods. Higher rates of malnutrition are consistently found in children aged 6 to 29 months, compared to older age groups. FGDs also identified that many caregivers often prefer to take their sick child to traditional healers rather than modern health services. Some households still rely on traditional/spiritual healing to cure their children of malnutrition due to a belief in the 'evil eye', suggesting that they might not identify the cause of the sickness as being nutrition related. FGDs and case studies indicated that such beliefs tended to be more common of older carers such as grandparents, whereas most of the younger women demonstrated their understanding of the health and nutrition related education provided through Concern's



Beyenech Hussien (female, 19 months) has been in and out of OTP and SFP on 4 occasions (Gugufu kebele)

community activities. The community mobilisation has led to greater awareness among the mothers and caregivers and increased their ability to detect early signs of malnutrition, as well as contributing to improvements in hygiene practices and utilisation of health services. Furthermore, local transporters are charging less for any transportation to health centres realising that this is for their children. Nevertheless, children's nutritional status could also benefit from an increased involvement of traditional healers in any future health-related interventions in order to improve health seeking behaviours.

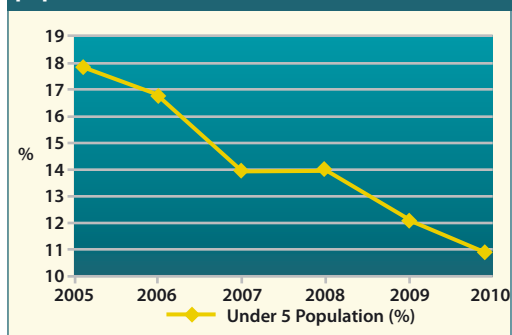
Health environment

Nutrition survey results regularly reveal that less than half of all households (44%) have access to protected water supplies and just over half (53%) report to using a pit latrine. Observations from the field confirmed the poor sanitation and hygiene conditions in which some families are living. For example, many households in the highlands live with their animals and their excreta. Whilst this is reported to be a method of increasing warmth in the cold highland areas, it is also likely to be a source of increased infections and illness to younger children. As a result of the poor WASH conditions in households, nutrition surveys consistently find diarrhoea to be the most prevalent illness among children under 5 years and accounts for approximately 60% of illness. Concern has over the last few years significantly increased activities to provide clean water pumps to a greater number of kebeles. Nevertheless, it appears that further development in WASH infrastructure is required, to aid improvements in Dessie Zuria's nutrition situation.

Coping strategies

The seriousness of the Dessie Zuria situation is highlighted by the type of coping strategies that households have adopted, the most poignant of which is related to the dramatic decrease in under-5 population over recent years. The under-5 population has declined rapidly, reducing from 18.0% in 2005 to 10.8% in 2010 (Figure 2). This begs the question as to why people have

Figure 2: Under-5 population (% of total population) in Dessie Zuria (2005 – 2010)



stopped having babies - the steady decline indicates that this is not a mortality issue. The Government's efforts to scale up family planning services and uptake have increased over the last few years and are likely to have considerably influenced this decline. Furthermore, according to FGDs, households have been more willing to embrace these efforts over the last five years, due to the high levels of food insecurity. Participants indicated that people are choosing to have fewer children as they simply cannot afford to feed so many mouths. Many individuals stated that once the situation improves they wish to start having more children again, for security in their old age and to help them with farm activities.

Conclusions

Despite the current improvement in food security, the woreda's reliance on unreliable and erratic rainfall suggests that this improvement may be short lived; studies in the larger Wollo area have found that poverty appears to be worsening rather than improving³. Without Concern's presence in Dessie Zuria over the past 10 years, mortality rates are likely to have declined, along with progress in the area of livelihoods, health and nutrition which evidently has been made. However, the situation is complex. Improvement in agricultural production, for example, cannot be 'stand-alone' and requires "an integrated and holistic approach involving various sectors and sub-sectors"⁴. Additionally, it is important to consider the "physical and economic access that a child or his or her caregiver has to that food, the caregiver's knowledge of how to use available food and to properly care for the child, the caregiver's own health status, and the control the caregiver has over resources within the household that might be used to nourish the child"⁵. SFP alone cannot prevent occurrence of malnutrition and therefore is not a complete surprise that SFP inputs over the last two years has not translated into improvements in malnutrition rates. What is clear, however, is that SFP interventions cannot be successful without regular and sufficient general rations. Based on these research findings, a strategic multi-faceted, multi-sectoral response is required, that addresses both acute malnutrition and its root causes. This response should include, amongst others, infant and young child feeding interventions and enabling increased food access to families with young children through provision of small livestock and agriculture inputs. There are also plans for WASH interventions to work towards changing negative behavioural practices. Looking to the future, it will be useful to see how the malnutrition situation changes and why, so that the whole community learn how best to protect the nutritional status of its children.

For more information, contact: concern.ethiopia@concern.net

³ See footnote 2.
⁴ Chanyalew D. (2005). Food Security and Malnutrition in Ethiopia. Chapter 3. An Assessment of the causes of malnutrition in Ethiopia: A contribution to the formulation of a national nutrition strategy. International Food Policy Research Institute. Washington. USA.
⁵ Benson T, Shekar M. (2006). Trends and Issues in Child Undernutrition, Disease and Mortality in Sub-Saharan Africa, 2nd Edition. 2006. Washington. World Bank.



EHNRI

Profile and role in the National Nutrition Programme

Entrance to EHNRI compound

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Website:	http://www.ehnri.gov.et
Director General	Dr. Tsehaynesh Messele
Deputy Director General:	Dr. Amha Kebede (Research Technology Transfer)
Contact:	Dr. Cherinet Abuye (Director, Food Science and Nutrition Research Directorate) Email: cherinetabuye1@yahoo.com

This article is based on a meeting between Carmel Dolan, ENN and Dr Cherinet, Director, Food Science and Nutrition Research Directorate.

Dr Cherinet began working for the ENI, predecessor to the EHNRI, in 1988 and has been Director of the Food Science and Nutrition Research Directorate at EHNRI since 2009. Previously he held various positions within the institution including assistant researcher, senior researcher and team leader. He holds a PhD in Public Health (Nutritional Epidemiology) and an MSc in Applied Nutrition.

Dr Cherinet would like to thank the following staff for their contributions to this article: Dr. Tsehaynesh Messele (EHNRI Director General), Dr. Amha Kebede (EHNRI Deputy Director General), Ms. Aregash Samuel (Food Science and Dietetics Research Case Team Leader), Ms. Lakech Goitom (Associate Researcher – Food Science and Dietetics), Ms. Tsehay Assefa (Associate Researcher – Nutrition), Mr. Habtamu Fafa (Nutrition Research Case Team Leader).

Historical overview

The Ethiopian Health and Nutrition Research Institute (EHNRI) is the result of a merger in April 1995 between the former National Research Institute of Health (NRIH), the Ethiopian Nutrition Institute (ENI), and the Department of Traditional Medicine (DTM) of the Ministry of Health. The EHNRI, as a government organisation, is the primary body in Ethiopia for carrying out research, training and providing services for the public and organisations in the areas of health and nutrition.

National Research Institute of Health (NRIH)

The NRIH was the oldest of the three units and began life as the Medical Research Institute in 1942. In the late 1950's, it became the Pasteur Institute of Ethiopia, following an agreement with the Pasteur Institute of Paris and named after the French chemist Louis Pasteur (1822-1895) who invented the first vaccine for rabies. In the early 1970's, it was agreed that the Ethiopian Government would take over the

running of the Pasteur Institute and it was renamed the Central Laboratory and Research Institute. Towards the end of the twentieth century, it evolved into the National Research Institute of Health (NRIH), which focused its energy on making significant contributions towards improving the health of the country.

Ethiopian Nutrition Institute (ENI)

The Children's Nutrition Unit (CNU) was founded in 1962 as a joint Ethio-Swedish project. It became the ENI in 1968, when the Ethiopian Government took over responsibility for and increased the scope of the nutrition programmes to include pregnant and lactating women, school-age children and other adult groups. It carried out nutrition and food science related research and interventions, as well as providing nutrition training and laboratory services to the public, universities and other organisations. This was realised by specialist teams working on medical nutrition, community nutrition, food production, training and information, and through its well-equipped Food Science and Nutrition laboratories.

Major achievements of the ENI include the development of a National Food Composition Table, development and production of a supplementary food for infants and children called FAFFA (meaning 'to grow big and strong'), as well as other types of complementary and therapeutic foods. It also developed a strong presence in local communities through establishing field stations to carry out surveys and research on aspects of nutrition, the production, storage and preparation of locally available foods, and through the dissemination of educational materials and information to the public.

National Nutrition baseline survey dissemination workshop – Dr Amha giving the opening speech



Department of Traditional Medicine (DTM)

The DTM was established in 1979 under the Ministry of Health to undertake research, and promote the production and use of traditionally used medicines. This was at a time when almost 80% of the Ethiopian population relied on traditional medicines to treat various ailments. Major research was undertaken to develop safe, effective drugs from selected medicinal plants being used and to identify those that could have a potentially harmful effect on the population. Hundreds of medicinal plant species were identified and their uses determined for various types of ailments.

The mandate of the EHNRI

The NRIH/ENI/DTM merger allowed the bringing together of complementary expertise and laboratory facilities to allow for maximum utilisation of available resources and create an atmosphere conducive to research. More recently, the Institute implemented 'Business Process Re-engineering' to facilitate a restructuring of the organisation and its activities so that it can more effectively discharge its responsibilities in line with the Ethiopia Health Sector Development Plan (HSDP III/IV (HSDP IV covers the period 2010-2015). HSDP IV is geared towards protecting and promoting the health and wellbeing of the nation.

Under the new structure, a Director General and two Deputy Director Generals head the EHNRI. One of the deputies heads the Research and Technology Transfer wing of the Institute, which is tasked with tackling priority public health and nutrition problems through problem focused research in order to improve the health of the country. The other deputy heads the Public Health Emergency Management division of the Institute, which works to anticipate, prevent, prepare for, detect, and respond to public health threats so that negative health and socio-economic impacts are minimised.

The Institute also has the mandate to establish and maintain a high quality, sustainable laboratory system throughout Ethiopia. This delivers quality and accessible laboratory services relating to the occurrence, causes, prevention and diagnosis of major diseases of public health importance and to establish and support National Laboratory Quality Assurance programmes and systems.

The Institute is well placed to carry out all of its tasks, with almost 200 research and technical staff, 250 support staff and well-equipped laboratories. It also benefits from the generous support of the Government of Ethiopia and various national and international organisations, with total funds of around 25 million birr and \$20 million USD per year (in cash and in kind) received.

Organisations that support the Institute include WHO, UNICEF, World Bank, Centre for Disease Control (CDC) Atlanta, Japan International Cooperation Agency (JICA), the Food and Agriculture Organisation (FAO) and various non-governmental organisations through joint research projects. Also, collaborative research projects are carried out with local universities, as well as with international partners, research institutes and institutions of higher learning.

Current major programmes include joint cooperation with CDC for a national surveillance study of HIV/AIDS, sexually transmitted

infections, malaria, and tuberculosis and strengthening of laboratories at central and regional level. Also, there is significant collaboration with JICA, WHO, and local and international Rotarians for polio surveillance. In collaboration with WHO and the Foundation for Innovative New Diagnostics (FIND), EHNRI has set up a lot testing centre for malaria with the objective of providing this service for the whole of Africa. This centre is one of only three globally, the other two being in Cambodia and The Philippines. A Rapid Test Kit has also been established at EHNRI. At present there is also strong collaboration with the governments of China and South Korea on research into traditional medicines.

Support for the National Nutrition Programme

One of the most significant programmes that the Institute is currently involved in is the National Nutrition Programme (NNP). The NNP is an ambitious nutrition programme, developed by the Ministry of Health with partners, in order to implement the country's first National Nutrition Strategy endorsed in February 2008. It is designed to not only address emergency interventions and food insecurity but also focus on preventive interventions, as well as address the fragmented nature of past interventions by taking into account the multi-sectoral nature of nutrition. The overall aim is to reduce the magnitude of malnutrition in Ethiopia, particularly amongst the most vulnerable groups of children under five, pregnant and lactating women, and people living with HIV (PLHIV).

The Food Science and Nutrition Research Directorate (FSNRD), part of the Research and Technology Transfer wing of the Institute, is carrying out NNP activities as part of its regular operations. The mandate of the directorate is, firstly, to determine and monitor the magnitude, distribution and determinants of malnutrition in the country and, secondly, to carry out effective research to develop an evidence base that offers innovative solutions to reduce and eradicate malnutrition. Research includes the development of new food products and processing and preservation technologies. The directorate also offers laboratory services to the public and organisations, supports curriculum development and teaching at universities, and carries out demand based 'on-the-job' training for various organisations on health and nutrition related topics.

This Directorate has been responsible for many innovative nutrition interventions in Ethiopia since its inception, including the development of food composition tables, menu development for chronic health problems and micronutrient research. Currently, with the advent of the NNP, nutrition is once again in the spotlight in Ethiopia at a time when the economy has been enjoying steady growth. However, this has not been matched by a corresponding fall in the level of malnutrition that development can bring.

The Directorate's role in the NNP is based around carrying out critical surveys and research that will create a greater understanding of the current nutrition situation in the country and help to shape the scaling up of the programme. The Directorate also undertakes monitoring and evaluation of various components of the programme as they are implemented, and the NNP as a whole.

Table 1: Nutritional status of children 6-23 and 6-59 months of age

Indicators	Measure*	Survey findings (June 2009)	
		6-23 months	6-59 months
Stunted	Height for age <-2SD z score	33.8%	37.6%
Wasted	Weight for height <-2SD z score	16.0%	11.7%
Underweight	Weight for age <-2SD z score	34.6%	33.9%

*Based on NCHS/CDC Reference Population 1977.

Table 2: Breastfeeding and complementary feeding statuses of children 0-23 months of age

Indicators*	Survey findings (June 2009)
Ever breastfed	97.4%
Breastfed within the first hour of life	45.5%
Fed colostrum (first breast milk after birth)	60.2%
Exclusively breastfed from 0-5 months old	51.4%
Aged between 6-9 months and introduced to complementary food at 6-7 months	59.2%

*Based on WHO indicators and methodology.

Table 3: Maternal nutrition practices during pregnancy and lactation

Indicators	Survey findings (June 2009)
Percentage of women who had four or more antenatal clinic visits during last pregnancy	36.3%
Food consumption during pregnancy increased	11.6%
Food consumption during pregnancy decreased	52.5%
Received iron-folate as part of antenatal care	17.3%
Showed symptoms of night blindness (proxy for vitamin A deficiency)	32.2%
Women 15-49 years old who received vitamin A within 2 months of giving birth	17.6%
Households using iodised salt (goitre prevention)	5.1%

Nutrition surveys and understanding factors that cause malnutrition

An integrated national nutrition baseline nutrition survey has already been designed and successfully conducted by EHNRI in June 2009 at the national level. The aim was to collect information on basic indicators of nutritional status such as under-five, adolescent girl and maternal malnutrition and morbidity. Within the household, conditions such as food security, clean water, safe sanitation facilities, hygiene practices, maternal care practices and access to health services can have an impact on the nutritional situation, so data was also collected on these indicators, amongst others.

The survey report, which includes the full results of the survey, can be found at www.ehnri.gov.et. As expected, the findings are mostly in line with the Ethiopia Demographic Health Survey (EDHS) 2005, but serve to highlight the magnitude of the nutrition problems in Ethiopia and the importance of NNP implementation. The NNP particularly focuses on the period from birth to two years of age, which is seen as the 'critical window' for the promotion of good growth, health, and behavioural development through optimal infant and young child feeding. Thus indicators relating to this age group are the most critical to understand since this is where



Listening to the opening speech at the National Nutrition baseline survey dissemination workshop

EHNRI Public Relations Office, 2010

Assessment of national capacity for implementing the NNP

EHNRI also commissioned a series of studies in order to create a clearer picture of the nutrition professionals available from federal to sub-district levels to implement the NNP and the capacity of nutrition training institutions to supplement and strengthen this cadre. A further study was conducted to assess current behaviour change communication activities, with a view to developing a comprehensive communication framework that would complement the implementation of the various NNP activities.

Major findings of the two studies on personnel and training for nutrition found that there is a shortage of trained professionals at federal, regional, zonal and district levels to effectively implement the NNP. Recommendations focused on developing a uniform structure at each level with clearly defined roles, placing greater significance on in-service training and developing a new generation of nutrition professionals. This is to be achieved through creating a Technical Advisory Group to support universities to strengthen existing and develop new short and degree courses and strong nutrition curriculum, focusing on university staff development and creating greater linkages between universities.

Behaviour Change Communication in the NNP

Systematic behaviour change approaches are extremely important to bring acceptance of nutrition interventions in communities. However, this communication study found that current nutrition behaviour change communication (BCC) activities are fragmented and under-exploited. A framework, under which new BCC activities should be developed, has been produced as part of the study. The BCC framework aims to increase the capacity of each household to use existing food resources to maximum advantage by taking into account Government policy, socio-economic status, culture, and gender issues. The study also outlined the actors that should be involved in planning and implementing new BCC activities and the training necessary for them. All of these studies are available at www.ehnri.gov.et.

Research focus for the NNP

One of EHNRI's strengths is in its research capacity. It was on this basis that it was given the mandate to set up and run the Operational Research Programme (ORP). This programme, as part of the NNP, exists due to the recognition of the complexities inherent in programme implementation. It aims to identify and carry out studies that can ultimately bring about new insights and understanding to improve implementation and shape the scaling-up of the NNP. By doing this, it provides managers and policy-makers with the information they need to improve the existing delivery activities and plan future ones.

The programme is ambitious in its size and scope, and potentially one of the largest of its kind ever carried out in nutrition. A lot of the groundwork is already in place. To ensure that high quality studies are carried out that can inform nutrition programme planning and implementation, selection of the research entities to carry out the studies will be done through a competitive-bidding process.

Priority research areas have been identified and agreed upon in consultation with nutrition partners. These include on issues specifically related to Community Based Nutrition (CBN)

such as quality of services, data quality, programme scale-up to reach pastoralist communities, and Health Extension Worker skills. Other areas of research focus include the feasibility of local production of micronutrient-rich processed foods, using micronutrient powders to improve complementary food quality, effectiveness of the media to deliver BCC messages, and micronutrient interventions, such as pregnant women's compliance to daily iron supplementation.

This research will be carried out and results disseminated over the next two years, so that they will have a direct impact on current and planned programmes being implemented as part of the NNP. Furthermore, each year of the NNP, EHNRI will identify with nutrition partners the most critical operations research that needs to be carried out as part of the ORP in order to improve NNP implementation.

Establishing a national nutrition database

EHNRI also has the responsibility to set up and run a comprehensive nutrition database. Its purpose is not to take over the role of existing sources of nutrition information, such as the database held at the Emergency Nutrition Coordination Unit (ENCU), but rather to gather 'under one roof' all emergency, programmatic and nutrition survey data from existing sources. This will enable the interpretation and use of this data effectively for inputs into management decisions, long term planning, evaluation and related purposes for the CBN and other nutrition-related programmes.

Potential outputs from the database in order to meet these needs include quarterly bulletins containing interpretation of risks to nutrition from early warning and nutritional data, quarterly reports monitoring nutritional outcomes and NNP implementation, and annual publications on the state of nutrition in Ethiopia to estimate long-term nutritional trends and factors determining these. At the same time, stakeholders will be able to request specific data from EHNRI as required.

A positive future

There are exciting times ahead for EHNRI, and particularly the FSNRD, as it continues to play a significant role in implementing the NNP, including the ORP, developing the nutrition database and also carrying out micronutrient surveys and numerous evaluation studies. The Directorate is also advocating for a food fortification agenda and plans to conduct studies on various aspects of fortification at the community and industrial levels. Further studies are planned on the relationship between nutrition and chronic health problems, as well as on food consumption patterns and composition. Furthermore, quality control and quality assurance work will continue on the salt iodisation programme as it continues to be scaled up.

The Directorate has high ambitions to be at the forefront of all nutrition interventions in the country and sees the NNP as a great opportunity to increase the capacity of the young but dedicated staff through their work, with numerous partners and increased opportunities for training. This is indeed a huge opportunity for the Directorate to push forward and continue to make a significant contribution to the success of the NNP, as well as for the country to banish the high rates of malnutrition to the annals of history.

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interventions are most needed. Major findings related to this age group are highlighted in the Table 1.

The nutritional status figures of both the 6-23 months and 6-59 months groups fluctuated. Mothers from rural areas with a low Body Mass Index (BMI) and mothers with low levels of education were at greater risk of having a malnourished child. The nutritional status of the child also depended on their age and the region that they live in. Children between 18-23 months were more likely to be stunted (43%), those between 12-17 months had higher rates of wasting (17.5%) and those between 24-35 months were more commonly underweight (39.3%). Children were more likely to be stunted in Amhara and Afar, wasted in Afar and Somali, and underweight in Afar and Tigray regions.

Key survey results related to breast and complementary feeding are indicated in Table 2. The breastfeeding results particularly varied based on the mother's level of education. Mothers with a higher level of education were more likely to have ever breastfed their child, breastfed within the first hour of life and fed colostrum to their newborn infant.

Maternal nutrition is critical to ensure the health of the mother during pregnancy and after birth, and to ensure the strong development of the child. If the mother does not receive sufficient nutrition and supplementation during pregnancy, there is a good chance that this may adversely affect the development of the child. Key indicators related to the nutritional status of pregnant and lactating women found in the survey are shown in Table 3.

Increased food consumption and iron-folate supplementation was more likely amongst younger women, those who lived in an urban area and those of higher educational status. Symptoms of night blindness were less likely and vitamin A supplementation higher for women living in urban areas and those with higher levels of education. For iodised salt, a higher percentage of rural households, compared to urban households, were using it.

The little change found in key nutritional indicators since the Ethiopia DHS survey of 2005 shows that many challenges remain. However, the next few years, during which the various components of the NNP will be implemented, is the critical time that interventions will be scaled up. An end line survey, planned to take place during 2013, should show the impact of these interventions.

By Antoinette Powell



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Rapid response and long-term solutions: Christian Aid and food security in Ethiopia

Suku Deda's village of Sabant in southern Ethiopia was devastated by drought (see case study)

Food insecurity is a deep-rooted problem for Ethiopia. With almost half the country's population of 78.6 million living in deep and long-term poverty, many people are vulnerable to drought and moderate and severe acute malnutrition. With millions of Ethiopians regarded as chronically food insecure, even in years when the rains are good, many face uncertainty over how they will feed their families each day, every year.

When Christian Aid began working in Ethiopia in the 1970s, the country – and indeed the whole of the Sahel region – was suffering the devastating effects of a famine which left hundreds of thousands dead. Less than ten years later, Ethiopia was once again in the grip of another drought which led to what BBC journalist Michael Buerk described as a “biblical famine”. At its height, the 1984/85 famine was claiming hundreds of lives each day in the Mekelle Relief Camp in the northern Tigray region of Ethiopia alone. Further food shortages followed the 1984-1985 famine in 1992, 1994, 2000 and 2002, and more recently in 2005 and 2008. These emergencies highlight the persistent food insecurity which characterises life for many Ethiopians.

Christian Aid response

In each of these emergencies, Christian Aid responded rapidly through a network of partners to provide relief and rehabilitation support to those most in need. These partners – local organisations based within the communities with which Christian Aid work – are central to Christian Aid's capacity to respond in emergencies, as well as the organisation's wider development work. Christian Aid remains non-operational in the belief that local organisations, rooted in the communities they support, are best placed to understand the issues local

people face and the solutions most appropriate to each context. Working through local partners at the grassroots level is also considered essential to maximise impact and ensure sustainability. These organisations also provide a key connection to the rapidly changing environment and alert to potential emergency situations. When emergencies do strike they are already based within the communities that need support, and so are often better able to respond with agility than organisations that need to bring in staff and resources.

Such an approach enables Christian Aid to adapt emergency response to ensure that the support meets the needs of each affected population. For example, in 1984 when Christian Aid could not reach the northern areas most affected by Ethiopia's drought by travelling north from Addis Ababa, cash was provided to the Emergency Relief Desk based in Sudan to purchase grain locally and provide it to affected communities. More recently, the Ethiopian Evangelical Church Mekane Yesus (EECMY), supported by Christian Aid, set up a cash for work project in southern Ethiopia enabling communities to purchase locally available food when their crops failed.

Surviving drought and developing communities

Although ensuring that food aid and other relief reaches communities in need is critical during droughts and other emergencies, humanitarian response must work alongside longer term solutions to poverty. So, when the immediate needs during or in the aftermath of a disaster have been met and the eyes of the world move on, Christian Aid partners remain with the affected communities ensuring that the long-term work of rebuilding lives and livelihoods is not neglected.

Following the failure of seasonal rains in late 2005, large parts of southern Ethiopia faced serious water shortages. Vast areas of crops were lost and with pastoralists and sedentary farmers unable to find pasture and water, many livestock died. More than two million people were affected, leaving them uncertain of how they and their families would survive. This is reflected in the situation of one woman, Suku Deda:

Suku Deda was caring for her ten children in Sabant village, southern Ethiopia when this drought devastated the herd of cattle she had carefully increased year on year in order to support them. Along with other women in the community, Suku had set up a cooperative through which she sold milk and cheese enabling them to earn a small income and ensure their children had enough to eat each day. The drought devastated this business with the women's cattle dying one by one, leaving them with no food and no source of income. Having worked determinedly to build her business, Suku was reduced to waiting for external help saying, “If nothing comes, we can do nothing. We will just wait and sit and die.”

Christian Aid partner, the EECMY, works with some of the most marginalised communities in Ethiopia including pastoralist communities in the country's south. Recognising that many people – like Suku – had been left without any means to feed their families following the failed rains in 2005, EECMY responded quickly. With food still available in the south, despite people's inability to afford it, they provided cash injections to avoid damaging the local economy by bringing in supplies at the expense of those already available. At the same time they also realised that this was an opportunity to put in place measures to help protect communities from the effects of other droughts that would inevitably occur in the future.

EECMY's cash for work project provided not only a welcome source of income for families, but also brought communities together to build structures including ponds to catch rain water. This has enabled them to make better use of this scarce resource in the years that have followed. Fifteen-year-old Dhaba, who is a Borana pastoralist, described EECMY's project saying, “If anyone else came here to do this work we would be so disappointed. This is our opportunity to work on our own development and I want to be a part of this.”

Increasing resilience to avoid disaster

It is not only in the aftermath of emergencies that Christian Aid's partners carry out projects. Increasing communities' resilience to disaster is another key aspect of the organisation's work on agriculture and other food security projects in Ethiopia. This has brought a radical change in the lives of men like Muhe Shehu Ibrahim

Case Study 1: Muhe Shehu Ibrahim's story

Muhe's father and grandfather were both farmers, but growing enough for the family to eat had always been difficult. In 1984, this task became impossible. “In 1984/1985, for the first time, we received food assistance,” explains Muhe. “There was a funeral committee. That committee had one job; to organise funerals. They were paid in food. For almost a year we continued to bury people.”

Muhe and his father before him had no irrigation system and had relied on just two crops – heavily dependent on water – to feed their family. “My father and my grandfathers used to plough these lands. Production was very difficult,” says Muhe. “They were full-time farmers. Everything was natural. We produced only teff and sorghum; we didn't know any other crops.” “There was a drought and we faced difficult problems. For teff and sorghum we could only have one harvest. When the rains didn't come we had no harvest, we were forced to sell our ox. We sold the

ox for cheap prices and bought the food for expensive prices - so we still faced problems because we couldn't afford to buy enough food.”

Despite the failure of many farmers to grow water-hungry crops like sorghum and teff, many Ethiopians note that the rivers in the northern Amhara region never ran completely dry. It was simply that without effective irrigation systems, families like Muhe's could not make use of the little water that remained available.

Christian Aid partner Water Action worked with Muhe and others from his community, providing training to help them make best use of the water available to them, suggesting drought resistant crops which can be planted at different times of the year and installing an irrigation system.

“I produce three times a year,” says Muhe. “Since Water Action, I haven't thought about food problems.”

who lives in Harbu in the north west of the Amhara region (see case study 1). When carrying out interventions like described, which aim to reduce communities' resilience to natural disasters, Christian Aid is keen not only to identify areas where these events are particularly likely. The organisation also targets the communities least able to cope because of high levels of poverty and who in many cases have been pushed to the margins of society.

Working with three Ethiopian organisations, Agri-Service Ethiopia, Action for Development and Women Support Association, Christian Aid is currently implementing a project funded by the European Union to increase the food security of households in Dasenach, Maalee and South Ari woredas in South Omo zone in Southern Nations, Nationalities and Peoples Region (SNNPR). Despite facing annual food shortages lasting between six and nine months, these areas have been left out of many development initiatives within the SNNPR where South Omo is located. Consequently levels of poverty remain high, with over 50% of the population living below the poverty line. And yet these woredas lie along the Omo River that could be used to provide irrigation for the surrounding areas and for fishing. This project will involve developing small scale irrigation schemes which, along with ensuring that a more diverse range of seeds are planted and organic fertilisers are produced and used, should increase crop yields across the area. In addition, training and support for fisheries and livestock production will ensure that communities are less dependent on one food source. Although 20 per cent of the population required food aid in 2009, if these natural resources were fully utilised the area could produce enough food without relying on external support: Christian Aid is working with these communities to exploit this potential.

Addressing climate change

This work on the ground, responding to emergencies and building people's resilience so that floods, droughts and other extreme weather conditions do not become disasters,

will not remain effective if we do not also keep an eye on the context in which we are working. While scientific evidence on the causes – and indeed future effects – of shifting weather patterns around the world remains inconclusive, it looks likely that the changes Ethiopia has already seen are a result of climate change caused by increasing CO2 emissions. Ethiopia reports an average rise in temperature across the country of 0.20C every decade for the last 50 years and an increasing number of droughts. With patterns of rainfall predicted to become even more uncertain in the coming years, this is a phenomenon that any development agency working to help Ethiopians lift themselves out of poverty simply cannot afford to ignore.

In 2009, Christian Aid funded one of its partners, Citizens Solidarity for the Campaign Against Famine in Ethiopia (CS-CAFÉ), to conduct a study on climate change. The study found that awareness about climate change has dramatically increased during the past 10 years, and that farmers are increasingly noticing changes that may well be climate-related. These include increased incidence of insects, weeds, plant and animal diseases, changes to potential crop growing periods, and shifts in which areas are suitable for growing crops. The findings of this study will enable Christian Aid to work with partners to identify how they can support communities to adapt to the changing weather patterns they are already seeing, and how to mitigate the impacts of climate change in their work.

The Ethiopian Civil Society Network on Climate Change (ECSNCC) is a non-governmental organisation which began a localised campaign on climate change as part of Countdown to Copenhagen in September 2009. ECSNCC used their network to collect signatures calling for climate justice and to hold events such as climate hearings across Ethiopia. Work helping communities to adapt to the changing climate within Ethiopia is complemented by Christian Aid's campaign at international level which calls for swift action by governments around the world, and particularly in industrial nations, to curb carbon emissions.

A future without hunger

While Christian Aid will continue to respond to the emergency needs of Ethiopians affected by the country's high levels of food insecurity, the organisation believes that with continued support it will be possible to break this cycle of hunger. By drawing on its experience of building communities' resilience to drought and other disasters and looking for new opportunities for this work, the organisation aims to change the outlook for some of the poorest and most marginalised Ethiopian communities.

In the face of climate change, Christian Aid will seek to mitigate its impacts and support people to adapt. Despite the increasing challenges the changing climate brings, Christian Aid believes that communities who need food aid year after year can be supported to achieve self-sufficiency where neither children nor adults go to bed hungry each day.

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Completing the Jigsaw Puzzle: Joint Assessment Missions (JAM)

By Allison Oman



Allison is the Senior Regional Nutrition and Food Security Officer for UNHCR based in Nairobi, Kenya. She works with countries in the region to give technical support and advice on a wide range of interventions, including food distribution, IYCF,

CMAM, food and cash vouchers and coordinates/collaborates with key partners for camp and non-camp based refugee populations. She is a proud member of the Nairobi Nutritionists.

Special acknowledgements to Kate Ogden and Mark Gordon of WFP for their warm and fluid partnership on refugee issues, and to the team members of the recent JAM in Ethiopia and the UNHCR nutritionist Mulugeta W/T Sadik. Finally, thanks to those who temporarily find themselves without a country or home, and graciously allow us to work with them to resolve the problems inherent in living as a refugee in a camp or non-camp setting - reminding us that being a refugee is a context, not an identity.

Food security continues to be a challenging and often elusive possibility for many of the almost 2 million camp-based refugees worldwide. In East and the Horn of Africa, almost every country in the region hosts protracted refugee situations, where refugees live encamped and rely primarily on food aid to meet their monthly food requirements. UNHCR partners closely with the World Food Programme (WFP) to meet the basic food needs of the refugees in places where food aid is required. WFP is committed to supplying approximately 2100 kcal/person/day in situations where the refugees are not able to significantly or consistently contribute to their own food intake - a situation in many of the refugee camps in East and Horn of Africa, including Ethiopia. UNHCR, within the overall mandate of protection, is focused on ensuring that the food is part of the overall basic assistance package and meets the minimum nutritional requirements, at times augmenting the general food distribution with complementary foods when necessary to bolster micronutrient content or enhance dietary diversification.

Joint assessment missions (JAM)

In order to assess the food security and coping mechanisms of refugee caseloads, joint assessment missions (JAM) have been



Mesfin Teklu, WFP, Ethiopia, 2006



Lubna Khan, Ethiopia, 2010

Children in Malkadida Camp

Case study 1: Discussions with the Women's Association In Malkadida Camp

During lively discussions with the Women's Association in Malkadida Camp, Dollo Ado, Ethiopia, Aisha explained her monthly use of the ration:

I have a family size of five. When I get my ration I receive a 50kg bag of wheat grain and an additional 30kg in a sack. I sell the 30kg for 2birr/kg and receive 60 birr. With this money I purchase milk, tomatoes and some firewood. If there is money later in the month, I might buy some onions and potatoes. I take the 50kg sack to the mill and I have to pay one scoop payment for every 2 scoops I grind. The prices are very high. We then eat the wheat flour with the red beans, oil, sugar and famix (CSB) plus the food I bought at the market. Often the food does not make it to the end of the month and I borrow from friends or take food from the store-keeper on credit. We prepare the wheat in three ways- if it is flour, we make injera (flat bread), if it is semi-ground we make ugali (porridge) and if it is unground, we grind it by hand, soak it and cook it with beans and oil- but it is not good like this for the children, it gives them stomach ache. I would like to buy rice and pasta but it is very expensive in the market, so I eat what I am given and sell what I can to buy a few other essentials.

Aisha, Malkadida Camp, October 2010

organised since 1994 and are carried out in most protracted refugee situations every two years. These review/re-assessment missions are a unique opportunity for UNCHR and WFP to undertake a joint analysis of the ongoing context in the field and determine programmatic options for supporting the refugee caseload with food and other needs. A JAM Guideline, drafted in 2004 and revised in 2008, represents a working manual with many tools and suggestions for best practice in examining food and non-food needs and fulfilling organisational responsibilities. These are laid out in the 2002 (updated in 2010) memorandum of understanding (MOU) between UNHCR and WFP. According to the guidelines, "The ultimate goal of the partnership between UNHCR and WFP is to ensure that food security and related needs of the refugees and returnees (and persons of concern) that UNHCR is mandated to protect and assist are adequately addressed." (MOU, paragraph 2.1).

Food aid provision to refugees

UNHCR provides complementary foods and selective nutritional supplies where indicated. In some refugee situations worldwide, refugees have access to formal legal labour, to agricultural lands for own cultivation or to significant livelihood opportunities that support their ability to provide some or all of the food for themselves. In some places, the location of the refugee camps (dry, desertified areas) or the political situation (no freedom of movement or no work permits available) or demographic constraints (camps of new arrivals, camps of primarily women and young children, or camps far from economic opportunities) curtail the possibility of refugees growing or purchasing their own food. In these instances, food aid is requested by the host government and in most situations provided by WFP.

Refugees are also in need of non-food items (NFI). Some essential NFI are provided by UNHCR on a periodic basis (or as a 'one-off' distribution) such as cooking fuel, kitchen sets and plastic sheeting. Additional NFIs provided by other implementing partners or groups include books, clothes or shoes, while some NFIs are not provided at all, e.g. wash basins, combs, adornments, tea kettles. In refugee settings where there are few economic opportunities, the refugees will often use the sale of the ration to purchase NFIs that are not provided.

WFP, according to international standards, has determined that a 'full ration' is a food

basket that has a value of approximately 2,100 kcal/per person/per day, with commodities that have adequate protein and fat content, as well as key micronutrients in sufficient quantity. In practice, the ration rarely meets 100% of these key benchmarks, often due to very low levels of vitamin C, iron, or calcium. The ration caloric value can also be adjusted if external factors such as an unusual demographic situation (predominantly adult men in a camp or a high altitude camp) suggest that a higher caloric value is needed for a majority of a population.

It should be noted that the 'magic number' of 2100/kcal/day is not the actual daily caloric intake for any single group, but rather represents a household average based on a family of five where there are two adults and three children. It is based on the assumption that the overall ration will be pooled by the family and shared out according to need, so that the household members with higher caloric need will have their ration augmented by the ration of those with lower caloric need (young children). The demographic profile of the household is very important - for smaller household sizes, if there are several children and one adult, then the calories will be most likely sufficient as the pooled calories can be shared and will meet the adult caloric needs. However for a household with one adult, there are often food shortages when the individual is fully dependent on the ration, because the 2100 kcal does not meet the daily requirements of an adult. One of the challenges of a JAM is to ensure that the ration value and commodity composition is appropriate for the majority of the refugees in the camp.

Food basket of refugees in Ethiopia

Food security in an encamped refugee setting, such as in Ethiopia, Kenya, Djibouti, and Sudan, is often centred around a food aid ration that is intended to provide most, if not all, of the average 2100 kcal/ person/day target for households. The JAM exercise determines whether or not this level of food aid is required by seeking to determine how refugees are coping within the camp, what access they have to income such as agricultural land or daily labour, and whether there are any clear indications that a majority of refugees are able to meet some or all of their own food needs.

Refugees in Ethiopia are currently receiving approximately 2,450 kcal/per person per day because the JAM in 2008 determined that an additional 350 kcal was needed to replace the

losses from refugees having to mill the whole-grain cereal (primarily maize) distributed. The 350 kcal addition was meant to make-up for both the losses in milling (dehusking/milling the cereal into flour reduces the overall quantity) as well as the cost of milling (most refugees use commercial mills). It assumes that after milling deductions, the ration meets the 2100 kcal average ration level. The refugees in Ethiopia are considered to be highly dependent on food aid because of their lack of economic opportunities, including agricultural production. The majority of refugees in Ethiopia are living in arid lands isolated from major commerce, systematic employment opportunities or even agricultural production. Therefore the refugees on average are not able to meet their own food needs and rely heavily on the food aid provided.

Unfortunately, the food aid is quite monotonous with very little variation for refugees living in protracted refugee situations like Ethiopia. Refugees receive a ration basket that provides cereal, oil, pulses, fortified blended food, sugar and salt. In order to diversify the diet to acquire fresh fruits and vegetables, spices and occasional animal products (meat, eggs, and milk), refugees will often sell or exchange part of the ration to purchase other food items. Often these sales/exchanges of ration items for other food items are at very poor terms of trade due to surplus of food aid after distribution and the high cost of bringing fresh foods into the often remote areas. In many cases, refugees are selling food aid for less than the actual cost of the food (including transport). However, the need for diversified and more balanced diets, with foods that are culturally appropriate or more appreciated, represents an important trade for refugees and goes beyond the actual cost or value of the food. The JAM will often note that the high level of sale of the ration reflects a desire for dietary diversity to both enhance the nutritional value of the meal or the palatability of the monotonous ration (see case study 1).

The challenge of JAM

An ongoing issue in JAM in assessing the level of food security is to determine what refugees need in terms of food and NFIs based on what they receive through food aid and NFI, and what a refugee household can self-provide in terms of own production, income, remittances, savings, and barter/trade. Clearly agencies would prefer to spend the least resources



A water point in Melkadida camp, Kenya

Lubna Khan, Ethiopia, 2010

needed, yet at the same time ensure that refugees are, to some degree, food secure. There is therefore a need to understand what refugees can provide and what needs to be provided.. This can vary widely from country to country, from camp to camp and then from household to household within the camp depending on level of self-reliance of the family.

UNHCR and WFP undertake a JAM in order to understand the situation, needs, risks, capacities and vulnerabilities of refugees with regards to food and nutritional needs. In order to understand this, the JAM must look not only at the food security of an individual household, but also develop a basic understanding of all of the assistance programmes in the camp. In order to understand this it is necessary to look into different sectors, different programme areas and the diverse causal areas that can lead to food and nutrition security for refugees. These include access to agricultural land, cooking fuel sources, milling and transportation costs, health and nutrition services, special nutrition programmes, infant and young child feeding, income generation and livelihood opportunities, to name a few.

Regional JAM training

Over the last two years, UNHCR and WFP have been attempting to standardise the JAM process to improve outcomes, including key achievable recommendations and a report reflecting the key issues. To that end, two joint regional trainings have been organised in Rwanda and Ethiopia, with a third planned for November 2010 in Jordan. The regional trainings have highlighted the stages of a JAM from terms of reference (TOR) to field work to debrief to joint plan of action. Participants are invited from

WFP and UNHCR offices as well as key implanting partners or government representation. The goal of the training is to enhance understanding of the joint process, to discuss how it relates back to the shared MOU and utilisation of the JAM Guidelines.

Traditionally a JAM has six distinct stages: planning and drafting of the TOR, creating the thematic teams and the thematic checklists, training of participants in the JAM before the field work, undertaking the field work and review of the secondary data, information analysis, and drafting of the report and key recommendations, finalisation of the report and development of the joint plan of action to operationalise the recommendations. Participation of both UNHCR and WFP is essential at all of the six stages to ensure that both agencies have input on the key issues to address and are part of the investigation and analysis. Typically a JAM will have either five or six thematic teams and each of the teams will comprise a mix of UNHCR, WFP and implementing partner staff. This adds to the richness of the discussion and the analysis as different team members have unique perspectives and experience, yet must reach consensus with one another.

Ethiopia JAM 2010

In the JAM which took place in Ethiopia in October 2010, there were five thematic teams covering food security and coping strategies (team 1), logistics, roads, warehousing, NFI and markets (team 2), health, nutrition, education and school feeding (team 3), environment, shelter, cooking fuel, livestock, WASH and agriculture (team 4), and durable solutions, new arrivals, refugee numbers, host community and contingency plans (team 5). Three separate operational teams travelled to the different areas of Ethiopia due to the large geographic distances between the camps- one team to the North to focus on the Eritrean caseload, one team to the East to focus on the three Jijiga-area Somali camps and one team to the South to address the Somali caseload in Dollo Ado. The JAM organisation ensured that each team had representation for the five thematic areas from the different agencies and was scheduled to ensure that each camp received one to two days of field work. The actual information gathering of the JAM is in three distinct phases - review of secondary data, field work and then analysis. After the thematic teams have determined their key findings and recommendations, these are then shared with the other thematic teams in

the wider JAM mission in order to reach consensus taking all into account. This process of consensus is very important for the JAM because it not only encourages assessing issues from a multi-sectoral viewpoint, but also ensures that the recommendations reflect the different capacities and expertise of the agencies involved.

In the Ethiopia JAM, the different teams were charged with using secondary data, field work and analysis to review the current provision of services, the changes and potential improvements in the last two years, as well as the progress made on the JAM recommendations made in the previous JAM 2008. The JAM 2010 focused on the relatively new Somali caseload in the south and the expanding Eritrean refugee population in the north, as well as those living in camps and in scattered settlements in the Afar region. Key issues highlighted in the TOR included the lack of meaningful durable solutions available beyond resettlement, provision of basic assistance to the hard to reach caseloads (Afar and Dollo Ado) and the protection concerns, including sexual and gender based violence. The report should be completed by the end of November 2010 and the key issues/recommendations in the report will serve as the basis of the joint plan of action between UNHCR, WFP, ARRA and the implementing partners for the next two years.

In many ways, a JAM is a jigsaw puzzle, where the different pieces come together to represent the food security of the refugees living in a camp. How refugees configure their lives within the limitations and opportunities of a camp, how food is shared, sold, bartered, the household decisions regarding food preferences and meal planning for different household members, the purchase of necessary non-food items or additional luxury items, the possibilities of income generation, day labour or employment opportunities, the opportunities for agricultural production or livestock raising and the provision of basic services including adequate shelter, water, hygiene, sanitation and the availability of adequate health services. All of these are pieces that allow us to construct a profile of the households in the camp in order to then determine both the opportunities for self-reliance as well as the need for external assistance.

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Case study 2: A snapshot of a JAM debriefing during the field work

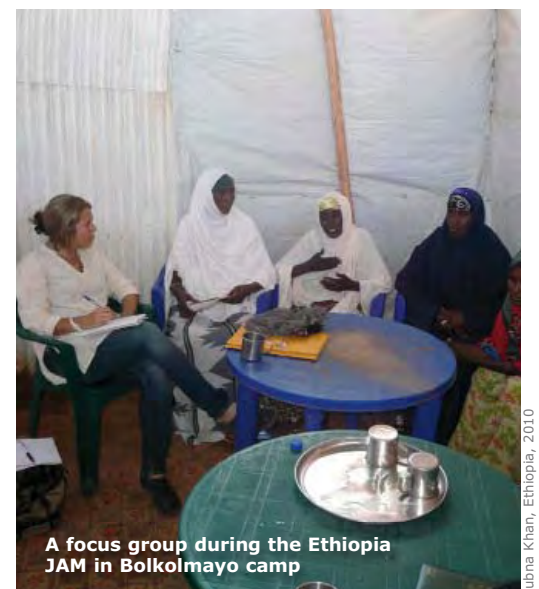
At 5:30pm, the last team, Team 3, arrived in a cloud of dust and emerged from their filthy land cruiser. They had been delayed in the camp in order to complete one final focus group discussion with the community health workers. They entered the outdoor meeting hall just as the sun was beginning to set. It was still hot, about 40 degrees, and the fluorescent lights were attracting the crickets that had hatched the day before. As each team leader rose to discuss key points and recommendations, they were dive bombed by a swarm of crickets, which covered their clothes and occasionally dropped into their shirts.

The discussion was lively, at times heated, as the different groups discussed and debated the findings of the day. "Ok, so people are selling the ration to buy other foods- which ones?" "How much is a kg of wheat worth?" "Who is making the profit from the mill?" "How many refugees are working with the NGOs?" "Who are

the primary groups considered vulnerable?" "Do people like the dome tents? What were they saying they would prefer for shelter?" "How soon can we end water tanking?" Each group presented and debated, making notes on recommendations and discussing until the entire team agreed on the issue and some possible solutions.

It was now 9:00pm - dinner and a shower waited and there were still final notes to type and changes to make before the JAM in this camp was completed. The teams would be leaving at 6:30am the next morning for the other camp. The JAM coordinator thanked everyone and called it a night, and the exhausted but excited team wandered into what remained of the evening, still debating the relative merits of wheat flour compared to wheat grain.

Dollo Ado, October 2010



A focus group during the Ethiopia JAM in Bolkolmayo camp

Lubna Khan, Ethiopia, 2010

World Vision programme for severe acute malnutrition in SNNPR



Follow up appetite testing at a health facility

Mesfin Teklu, WV, Ethiopia, 2006

By Dr. Sisay Sinamo and Dr. Gedion Tefera



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has worked in emergency nutrition and community based nutrition projects like essential nutrition package and PD/hearth.

We would like to express our thankfulness to the community where World Vision works and to our partners, especially the Ministry of Health. We also would like to thank World Vision Ethiopia for allowing us to publish our field generated learning. Special thanks go to World Vision Canada/Nutrition Centre of Expertise staff who welcomed this opportunity to publish, and to the ENN staff who supported us during field level documentation and editing of this article.

World Vision Ethiopia (WVE) is a non-governmental organisation (NGO) that has been working in Ethiopia implementing cross-sectoral relief, rehabilitation and development programmes since 1971. A WV supported programme to support community based management of acute malnutrition¹ in the Southern Nations and Nationalities Region (SNNPR) has been in operation since November 2006.

WVE implements cross-sectoral programming through Area based Development Programmes (ADPs). These operate independently of each other while benefiting from regional programme office oversight and national level coordination. The 'life-cycle' of an ADP is usually approximately 15 years with a programme planning review following a 5 yearly cycle (current Durame ADP plan is for 2006-2010). Programming partners and stakeholders include multi-sectoral faith-based organisations (FBOs) and community-based organisations (CBOs), as well as other international NGOs (INGOs), NGOs, communities and the Government of Ethiopia (GoE).

Context

The SNNPR region is characterised by a highly localised pattern of micro-climates. With 45% of the region's Gross Domestic Product (GDP) relying on agriculture, there is a strong correlation between livelihood and seasonality for individuals and communities alike.

A nutritional survey conducted by WVE in June 2006 in the Durame ADP revealed a global acute malnutrition (GAM) rate of 8.5% and severe acute malnutrition (SAM) rate of 1.3%. The crude mortality rate (CMR) and under 5 mortality rate (U5MR) were 0.31 and 0.89 deaths/10,000/day, respectively. A further WVE rapid assessment using mid upper arm circumference (MUAC) in September 2006 found substantial moderate acute malnutrition (n=2207) and severe acute malnutrition (n=258) in children less than five years of age. Based on these assessments and at the request of the regional and zonal health offices, it was decided that a programme to manage acute malnutrition at community level should be implemented by WVE from October 2006. Accordingly, a Memorandum of Understanding (MoU) was agreed between stakeholders for the programme to run for one year until September 2007. The programme was supported by Valid International and implemented by Ministry of Health (MoH) staff and three WVE staff hired to coordinate the activities.

Programming approach

Commitment was obtained from the health bureaus at different levels and UNICEF agreed to provide Ready to Use Therapeutic Food (RUTF) and IMCI² drugs. An understanding was reached to establish a Stabilisation Centre (SC) at Wota health centre. A developmental approach was adopted towards programming, to develop capacity of the MoH to provide effective treatment for SAM within the routine health system. Orientation for MoH staff took place between mid November and early December 2006. Eight MoH staff from seven OTPs and one health staff from the SC were trained on OTP and SC case management. An additional 19 WV staff from Ethiopia, Kenya, Sudan, Somalia, Uganda, Canada, US and World Vision International (WVI) were also trained.

Admissions started at seven OTP sites and the SC. A Supplementary Feeding Programme (SFP) component was not included, as this should be provided by the GoE Extended Outreach Strategy/Targeted Supplementary Feeding (EOS/TSF) programme.

Key lessons from the 2008 programme

The end of term evaluation of the programme identified a number of key lessons:

An effective linkage between the OTP and EOS/TSF programmes was not realised during the programme. Due to the timing of screening and registration for the EOS/TSF programme (every six months), children discharged from the OTP were not able to receive a timely supplementary food ration from the programme. Hence, on discharge, children were provided with a protection supplementary food ration until the next screening and registration.

The community outreach activities are conducted primarily through the efforts of volunteer community health promoters (CHPs) and supervised by the health extension workers (HEWs). The CHPs are responsible for referrals from the community, making them the gatekeepers to the OTP programme. However they are not supervised effectively when conducting anthropometric measurements. In addition, the role of the CHP in the community does not include frequent and comprehensive screening for malnutrition. Unless other community screening measures are employed, the OTP service coverage is likely to be low, possibly resulting in late presentation and increased risk of mortality. Future community sensitisation and mobilisation efforts should aim to disseminate knowledge of community based management of acute malnutrition more widely through other channels, to encourage self referral.

The outcome indicators for the programme all exceeded SPHERE standards (see Table 1). These outcomes also compared very favourably with other community therapeutic care (CTC) programmes. The period coverage of the programme was estimated at 67% which, multiplied by the percentage of children cured (95%), suggests approximately 64% of needs were met. Rates of reported weight gain in the programme were lower than expected for a CTC programme (5g/kg/day). This was likely due to the RUTF ration being shared during times of need. Slow weight gains during the programme were not reliably followed up by clinicians according to the 'alert protocols' and discharge decisions were inconsistently applied. These factors combined to lead to an extended stay in the programme for some individuals, which meant an increased use of resources (RUTF and workload) and ultimately reduced the cost effectiveness of the intervention.

The weak supervision by clinicians of the MUAC measurement taken to admit children meant that, in many cases, it was effectively the CHP making the decision to admit the child to the OTP. Training of staff was frequently weak with regard to follow up and management of cases. A weakness in logistical management at all levels was found. The main weakness was in ordering and regulation of the RUTF supply.

¹ Formerly called CTC (community based therapeutic care).

² Integrated Management of Childhood Illness

Figure 1: Trend of OTP/SC admissions, 2007

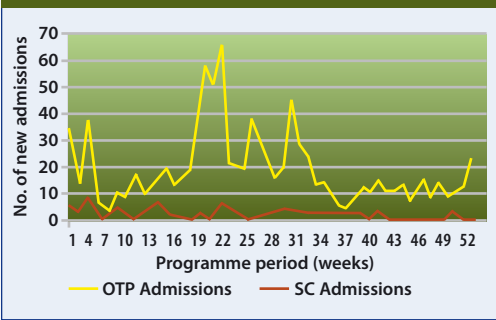


Figure 2: Admissions to SC as percentage of OTP admissions, 2007

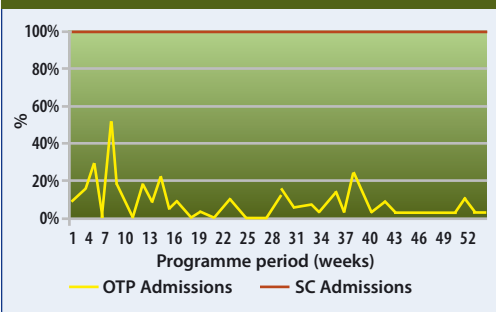


Table 1: Programme outcomes compared with SPHERE standards

	Durame ADP OTP	SPHERE standard
Cured	95 %	> 75 %
Default	3 %	< 15 %
Non-Cured	1 %	Not stated
Died	1 %	< 10%

As the programme evolved, the admissions to the SC and OTP decreased over time (see Figures 1 and 2). This is indicative of an increasing skill level amongst the OTP clinicians in cases management, as well as of the beneficial effect of the decentralised public health approach of community based management of acute malnutrition, i.e. early presentation and timeliness of treatment. A general improvement in food security over the time period may also have accounted for some of this positive trend.

Durame ADP programming plans for 2008 included interventions that aimed to tackle underlying causes of child malnutrition and mortality. Some of the more relevant programmes included care and support of people living with HIV (PLWH) and orphans and vulnerable children (OVCs), household food security programmes, water and sanitation projects to provide potable water and income generation activity (IGA) schemes. These programmes could have been linked to

Table 4: OTP indicators, Durame ADP, October 2009 to March 2010

Name of ADP	Durame
No. of OTP sites	35
No. of children admitted in OTP	273
No. of children admitted in SFP	447
No of VCHWs trained on community based management of SAM	410
No. of MoH staff trained on community based management of SAM	117
No. of WV staff trained on community based management of SAM	1
Recovered	286 (99%)
Death	0
Default	0
Relapse	3 (1.6%)

Table 2: Summary of ADP level nutrition information

Name of ADP	WV Sub-office	ADP Total population	Total 6-59 months	GAM*	SAM*	Data Source	When were the data collected	Level where the data were collected
Quacha Birra	WVUS	142,221	19,643	17.6 %	1.5 %	Rapid Nutrition Assessment	March, 2009	ADP and District Gov Offices
Omosheleko	WVUS	204,571	34,771	24.9%	2.35 %	Rapid Nutrition Assessment	March, 2009	ADP and District Gov Offices
Shone	WVUS	228,614	38,864	34.0%	2.5 %	EOS mass screening	Dec, 2008	ADP and District Gov Offices
Durame	WVUS	171,968	29,235	28.9%	0.5 %	EOS mass screening	Dec, 2008	ADP and District Gov Offices
Total		747,374	122,513					

*Proxy data for GAM and SAM since based on rapid/mass screening.

Table 3: Project partners and areas of partnership

Partners	Areas of partnership
UNICEF	Provide some of the supplies needed for the implementation of this project such as essential drugs, insecticide treated nets, and RUTF.
Regional Health Office	Liaise logistics transfer between UNICEF and woreda MoH
WVE	Allocate funding for the project. Supplement essential drugs, provide OTP/SC cards and formats, e.g. follow-up cards, tally sheets, reporting formats, and supply protection ration that cannot be covered by other partners. Work with the DMFSS Desk to link children discharged from the OTP to the EOS/TSF. Work closely with DMFSS Desk to ensure linkage between OTP and SFP.
DMFSS Desk in the woredas Agriculture and Rural Development Offices	Facilitate supplementary food ration distribution (Corn Soya Blend, oil and sugar) for moderately malnourished children. Work with MoH to ensure proper referral between OTP and SFP.
WFP	Provide SFP commodities to DMFSS desk. Monitor distribution of SFP commodities.
CHPs	Participate in case identification, referral and follow up.
All partners	Participate in the project review.

the community-based management of acute malnutrition programme, by virtue of their shared objective to impact their livelihood and work with vulnerable caregivers and children.

Follow-on programme to manage SAM (2009–2010)

In 2009, Ethiopia was affected by another short term mid year rain failure. Shone, Durame, Qacha Birra and Omosheleko ADPs in SNNPR were amongst those woredas most severely affected and had not yet recovered from the effects of the 2008 food crisis.

The lessons learnt from the Durame project (November 2005-December 2007) were instrumental in designing a programme to manage acute malnutrition in the four ADPs. The programme began in October 2009 and was based upon Government national guidelines for the management of SAM at both facility and community level³. It was developed in response to findings of a Rapid Nutritional Assessment conducted in two ADPs (Omosheleko and Quachabira) in March 2009 and MUAC mass screening conducted by the EOS programmes in December 2008 in Shone and Durame ADPs. See Table 2 for the prevalence of GAM and SAM in the four ADPs. Additionally, early warning reports from the four ADPs indicated deterioration of the food security situation in the areas due to lack of early rain (March and April 2009). The government identified the four ADPs as high priority areas for nutrition response.

In 2008, the GoE had already started implementing and scaling up SAM management in the four ADPs and integrating this within the routine health care delivery. However, the programme had many capacity gaps that

needed to be filled. In 2009 there was no adequate rain during the short rainy season and the local administration and regional Emergency Nutrition Coordination Unit extended a request to WVE for support. Furthermore, MOH and UNICEF with other partners planned to establish one OTP per kebele and one or two therapeutic feeding unit (TFU) SCs per woreda. WV contributed to this initiative through a partners' capacity building approach and helped expand and strengthen the existing programmes in the four ADPs' operational areas.

The current project is being implemented for 12 months from October 2009. It targets an estimated 4,559 children under five years of age with severe acute malnutrition in four ADPs. A key aim of the project is to help build the capacity of government staff in the health centres, health posts and community volunteers for smooth integration of the emergency intervention into the government system. Areas of partnership are reflected in Table 3. Key elements of the project envisaged at the outset were:

- Implementation of community-based nutrition projects in parallel with the emergency intervention using the Essential Nutrition Actions (ENA) Approach. Community education to include infant and young child feeding and maternal nutrition practices.
- The project has a number of capacity building elements and will be handed over at the end of the funding period (September 2010). During transition, the MoH will start to run most of the project activities.

³ Protocol for the management of SAM. Ethiopia-FMOH, 2007.

- Links will be established between this project and other ADPs' food security and development projects that impact household food production, consumption and income. The OTP and SC will be linked with the existing EOS/TSF with the 'back up' of a WV protection ration (see below). Acutely malnourished children will be identified through community-based screening or by self-referral.
- The ADPs will conduct a local capacity assessment on management of acute malnutrition in the community to identify gaps. Trainings will be designed based on this assessment. During the initial assessment conducted before the programme started, there are no operational SC/OTPs, facilities. Hence, one facility will serve as an SC and four or five OTP sites for initial opening in each of the woredas. These would subsequently be expanded and strengthened based on need. Where SCs and OTPs are already in operation, these would be strengthened based on assessment findings.
- WVE and woredas MOH will conduct a one-day orientation session for Kebele leaders, HEWs, CHPs, school teachers, and community workers already working on community mobilisation, active case detection and defaulter tracing. The HEWs from the most severely drought affected kebeles will be trained first, followed by those in less severely affected woredas.
- WVE will be responsible for the purchase of essential medicine and other supplies needed, as well as hiring of vehicles for transportation of supplies and referrals, assisting government health staff with screening and admission, periodic monitoring and supervision of the project implementation together with the woredas health offices. WVE will also print the different registration cards (SC charts, OTP admission and ration cards, etc) and monitor the recording and the weekly and monthly reporting together with the woredas' health offices.
- WVE will liaise with UNICEF and Regional Health Bureau for the timely provision of drugs and supplies to the health facilities through existing systems for logistics transportation. WVE will fill gaps in the logistics pipeline, if needed.

The key programme design changes that emerged from lessons learnt from the 2006/7 programme were:

- WV staff were not used to implement directly the programme but focused on capacity building of partners, e.g. clinical officers and HEWs, adopting a minimum support approach.
- WVE supplied a protection ration for children discharged from the OTP as it could not be assumed that these children would be enrolled on the EOS/TSF.
- The referral system to SCs was changed to rely on self-referral, where mothers/caregivers now take their children from OTP to SC. Previously WV had hired vehicles to transport 'complicated' SAM children from OTP sites to SC.

Six month review

Local MOH have taken the lead in implementing the OTP, SC and community mobilisation components, as well as beneficiaries follow-up in the community and referral to the EOS/TSF. Volunteers have screened and referred children to the OTP sites.

After the first six months of the programme (to March 2010), there are already a number of achievements:

Health facility assessment and stakeholder analysis were conducted involving 127 health posts and twenty health centres. WVE conducted joint woreda level planning workshops based on these assessments. The capacity gaps identified were presented to local MOH office managers resulting in discussions and joint plans regarding how to fill these capacity gaps.

By the end of March 2010, the programme had scaled up and was being implemented in 125 kebeles in the four ADPs. A total of 761 volunteer CHPs have been trained and are working with the HEWs in OTP sites. A total of 113 OTP sites have been strengthened/established. By the end of February, 2010, 1116 children were in the OTP, with the figure rising to 1438 children at the end of March 2010.

Children discharged from OTP sites received CSB/Famix and vegetable oil. The ration comprises 8.3kg/month of Famix and 1kg of vegetable oil per child per month. A total of 52.016MT of CSB/Famix and 6.153MT of vegetable oil were distributed up until the end of March 2010.

Other activities completed during the first six months of the programme included renting cars to provide onsite technical support and supervision, printing and laminating necessary OTP guidelines and protocols, and hiring a nurse and two RUTF distributors in each ADP project area. In some ADPs, food was provided for caregivers while they were staying at the SC. Two planned activities that were not possible were purchase of RUTF buffer stocks due to limited budgets as a result of the economic crisis, and monthly review meetings with government health workers, due to competing work demands on government staff.

Major challenges of the programme noted at the six month review included:

- Delayed staff recruitment
- Lack of routine medicines in some OTP sites
- Irregular use of tally sheets at OTP sites
- Delay of purchase of some commodities, such as computers and essential medications, due to lengthy purchase processes.
- Predicted shortage of CSB/Famix and vegetable oil in the coming months.
- Limited capacity of staff to use the WV database

Despite these challenges, OTP programme outcomes are very good, reflected in Table 4 using Durame ADP as an example.

Minimum support: PD Hearth

WV has recently completed an exploratory PD Hearth programme in Atbi Womberta ADP where a SAM management project had been phased out to a 'minimum support project'.

Among all children under 5 years measured in the district, a total of 240 children were found underweight (weight for age <-1SD) of which 51.7% were severely under weight (<-3SD) and

31.7% were moderately under weight (>-3 and <-2SD). Children found with oedema and severe wasting were referred to the health facilities. A 'Positive Deviant Inquiry' was conducted with the 'Positive Deviant Mother' to draw on her experiences of child care, feeding and health seeking behaviours and in order to develop the feeding menu and key health messages to promote during the Nutrition Education and Rehabilitation Sessions (NERS session). Twelve days of NERS sessions were organised, with each session composed of 10 non-PD mothers and two PD Mothers. For each group, a 12 day feeding session was conducted with close monitoring and with follow up by the PD mothers and the HEWs. Growth monitoring was conducted on admission, during follow up, on discharge and after 12 days discharge and home follow up. A total of 240 mothers and their children participated.



A volunteer community health worker conducting screening

Over a 1 month period, nearly one quarter of the children (24%, n=58) gained 0 – 200g in weight, 13% (n=32) gained 200 – 400g, 28% (n=66) gained 400g – 1kg and nearly one third (30%, n=71) gained over 1 kg. Five children (2%) in the programme lost weight and eight children (3%) did not respond. Over half of the children (58%) were rehabilitated successfully based on PD hearth programme discharge criteria (weight gain of at least 400g). Weight for age z score was used to determine the outcome. The proportion of children with severe underweight declined from half (51.7%, n=124) to under one-quarter (23%, n=55) of the children. Follow up assessment was conducted and 85% of the mothers had managed to teach their neighbours to practice the new skills they had gained.

Based on this and other experiences, WV consider that in resource poor settings, PD hearth is a practical and sustainable behavioural change approach to prevent malnutrition and contribute to child well-being outcomes. WVE emerging policy in Ethiopia is that when SAM continues at low levels, perhaps following an emergency intervention, OTP can be mainstreamed into the regular health system to provide services for acutely malnourished children with PD Hearth focusing on preventative rehabilitation services in the community.

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School of Nursing and Midwifery & Pre-Service Training on Nutrition, Hawassa University, Ethiopia

By Aweke Yilma Dubi, Head, School of Nursing & Midwifery



Ethiopia is one of the least developed countries in the world. According to the Government's Interim Poverty Reduction Strategy Paper (2000-2003), over 45% of the population lives below the poverty line. A consequence of this widespread poverty is low levels of human capital accumulation. Whereas countries at the forefront of development often invest in education and aggressively engage in human capacity development and knowledge transfer, those who do not or cannot often fail to bring about significant development. Poverty reduction is a major issue for Ethiopia and capacity building in the public and private sectors is a key building block to accelerate much needed socio-economic development.

The Higher Education Training Capacity Building Programme is part of the development effort of the Federal Government, regional states and the private sector. This aims to create countrywide sustainable human resource capacity that is responsive to changing circumstances. The development of higher education is among the highest national priorities. It is viewed as the major instrument towards achieving food security and alleviating poverty and other social and technological problems the country is facing. Hence, capacity building is the cornerstone of sustainable development in Ethiopia. In addition, there is a need to build the research capacity and address the critical issues of the country, particularly in relation to malnutrition and diseases such as HIV.

Hawassa University

Hawassa University, previously known as Debub University, was established in April 2000 by merging three colleges, namely Hawassa College of Agriculture, Wondo Genet College of Forestry and Natural Resources, and Dilla College of Teachers Education and Health Sciences. Located at the centre of the Great Rift Valley in Hawassa city, the University is the largest and most comprehensive University in the Southern Nations Nationalities and People's Regional state (SNNPRs) and in the southern part of the country. It has 24 academic departments, four institutes, three colleges and 58 academic programmes, with more than 20,000 students involved in 41 undergraduate, 22 Masters and 2 PhD programmes. There is 960 academic and 1,100 administrative staff.

In the School of Nursing and Midwifery, there are 800 nurse and midwifery students and 30 academic and administrative staff at differ-

ent academic levels, ranging from assistant professors, and lecturers to graduate assistants. Staff have a diverse range of professional qualifications in the areas of curriculum development, public health, international health, maternal and child health, midwifery, adult health nursing. Unfortunately, the School of Nursing and Midwifery has no staff trained in nutrition or with a nutritional background.

The education of nurses and midwives

In order to meet the national aim of creating sustainable human resource capacity for health and nutrition services, the School of Nursing and Midwifery offers undergraduate training to prepare the nurses and midwives for the demanding environment of Ethiopia. This environment is characterised by high prevalence of HIV/AIDS, high maternal and infant mortality rates, malnutrition and frequent emergencies, as well as high levels of staff attrition. The role of nurses and midwives in Ethiopia has had to diversify and broaden, so that in addition to hospital based clinical work, they need to be able to work in community-based programmes in areas, such as therapeutic and supplementary feeding and HIV.

To help prepare the graduates for these roles, the School has designed a Community-Based Training Programme (CBTP) and Team Training Programme (TTP). This involves students being deployed to remote and hard to reach communities affected by drought, high levels of malnutrition and communicable diseases. During this period, the students work with community members to assess their health and nutrition related practices, such as food intake and food taboos, infant and young child feeding practices, feeding of infants and children during periods of sickness, nutrition during pregnancy, food hygiene, storage and preservation. The students plan, implement and evaluate activities aimed at addressing the identified problems in collaboration with community members.

In addition to the CBTP and TTP programmes that are well integrated into the formal undergraduate curriculum, the School conducts pre-service trainings (PST) on new competencies and concepts that, although not formally integrated in the existing curriculum, are seen as very important for the students professional development. In collaboration with governmental and non-governmental organisations such as Save the Children, World Health Organization (WHO), World Vision,

Plan Ethiopia and professional associations, the school offers PST on Nutrition in HIV, Integrated Management of Neonatal and Childhood Illnesses, Prevention of Mother to Child Transmission of HIV, Comprehensive HIV/AIDS care, Palliative Care, Infection Prevention and Injection safety. These PSTs are usually conducted when students prepare to enter their clinical years, a few months before they graduate and go into the community. This facilitates the immediate application of their newly acquired knowledge and skills.

Stakeholders, such as the WHO, Ministry of Health and Ministry of Education as well as employers, have clearly stated the importance of equipping the graduates with the necessary knowledge, skills and attitude (competency) to tackle new health and nutrition problems and emerging technologies. PST is viewed as a particularly cost effective approach in terms of money and time expended. Pre-service training has many advantages when compared to in-service training (IST) in that it creates the opportunity for building the capacity of large numbers of potential health professionals within a short period of time. The existing infrastructure and system of a university/institution helps keep costs low. Furthermore, PST provides a golden opportunity to equip graduates with the requirements of the work environment and enable them to integrate themselves into the community norms and cultures. In contrast, IST, though very useful, can be very costly in monetary terms and can take staff away from their place of work for considerable periods of time in an already under-staffed environment.

Cognizant of the role the School plays in producing a critical mass of nurses and midwives for nation building and the benefits of working in collaboration with new partners and stakeholders, Hawassa University is re-designing the overall university curriculum into a modular system. This presents another opportunity to integrate areas of concern into the nursing and midwifery training programme.

In line with this development, the School is actively seeking collaboration with partners to build the capacity of faculty members in the area of nutrition in emergencies and in HIV/AIDS and nutrition. This is needed to equip the teaching staff with additional skills and knowledge to pass onto the nurse and midwifery students though the new modular approach. Existing faculty staff do not currently have all the knowledge and skills to design and teach a new module on nutrition in emergencies or on HIV/AIDS and nutrition. Specific technical areas in need of capacity development for faculty staff are in infant feeding in emergencies and community-based management of acute malnutrition; all pressing problems in Ethiopia. Recently, the School has started a discussion with World Vision Ethiopia and Tufts University in USA on capacity building of faculty staff in the areas of infant and young child feeding and HIV/AIDS and nutrition. This offers a positive step forward towards strengthening the quality and content of teaching in the future.

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A farmer plows his field with the traditional yoke and pair of cattle

A. Simons/FH Ethiopia, 2010



Market-led Livelihood Recovery and Enhancement Programme and integrating ENAs

By Andrew Simons, Daniel Gebeyehu, Getachew Gemtesa and Markos Kidane



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Food for the Hungry Ethiopia (FHE) began working in Ethiopia in 1984 through aid efforts in response to the famine at that time. In the beginning, FHE operated through partner organisations, delivering emergency food aid to those affected by the famine. The recurrence of famine ten years later motivated FHE to become an operational non-governmental organisation (NGO), directly implementing relief and rehabilitation programmes in the country. Since that time, FHE has grown tremendously and has taken further measures to address the root causes of poverty through tackling issues related to sustainable development.

FHE implements various types of projects in four regional states in Ethiopia: Oromia, Amhara, Southern Nations, Nationalities, and People's Region (SNNPR) and Benishangul Gumuz. The projects include:

Food Security: FHE implements relief interventions to soften the impact of drought in chronically food insecure woredas in Amhara and the SNNPR.

Agriculture & Environment: This includes training in agronomic practices, micro-irrigation, animal health, fruit and coffee production, environmental protection and natural resource management.

Child Development & Education: Social development, child health, education support programme and income generating activities. This programme is geared to improve the lives of children, mostly orphans.

Health & Nutrition: Micronutrient interventions, nutritional supplementation, dietary diversification and disease control training.

Water & Sanitation: Building of hand-dug and shallow wells, springs, roof catchments, potable water supply schemes, cattle troughs, latrines, and hygiene promotion.

HIV/AIDS: HIV/AIDS prevention and awareness education.

The Market-led Livelihood Recovery and Enhancement Programme (MLREP)

The MLREP, funded by USAID-OFDA1, was launched in March 2009 and is a three year programme. The MLREP aims to improve the food and livelihood security status of small-holder households in the three target districts (woredas) in SNNPR. The project covers 33 kebeles (village associations) in the three districts. The primary target beneficiaries of the project are the acute and chronically food insecure households (HH) in the target districts. To ensure the targeted beneficiaries will be able to realise food self sufficiency and produce surplus products for the unmet market demand, the project has integrated various livelihood components that arose following the results of a Value Chain Analysis (VCA) study (see below for more information). All interventions have been planned based on the needs and potential of the target communities. Targeting criteria developed by FHE and the government District Office of Agriculture (DOA) are used by local leaders to select beneficiaries. The programme targets HHs who normally produce grain for food and sell any surplus as their sole source of revenue. These HHs have been forced to purchase grain at unprecedented costs arising from the Global Food Price Crisis (2008-2009), during which food prices in Ethiopia escalated significantly.

MLREP components

Relief element: Cash For Work (CFW)

This component aims to provide temporary employment and thus income to chronically food insecure HHs and, at the same time, create productive community assets through their labour contribution. FHE undertakes nursery operations and the construction of ponds for livestock through CFW as a temporary employment scheme. The majority of the nursery workers are women who have suffered from the drought and food price crisis.

Micro-credit provision

All agricultural inputs and equipment are delivered to farmer groups on a credit basis through the Omo-Micro Finance Institution (OMFI). The beneficiaries are organised initially into producer and marketing groups, and should eventually grow into cooperatives by the second and final years of the programme cycle. The proposed programme's agricultural inputs will be distributed on a loan basis. This differs from the usual OMFI operating procedure where cash is normally disbursed to a beneficiary for a loan. In this programme, however, the input (beehive, water pump, etc.) is delivered directly to the beneficiary and then OMFI recovers the loan value of the agricultural input over time.

Livestock/seeds

FHE intends to increase livestock productivity through introducing higher yielding local breeds, improving livestock husbandry practices, promotion of dairy farming and improved forage production. Further, it will work to strengthen the market link for livestock producers, so that they are able to generate better income from their production. The seed sub-sector focuses on seed provision of marketable and high yield improved varieties, aiming at increasing and diversifying incomes and livelihoods of the affected farming HHs.

Irrigation

Small scale irrigation is promoted through hand dug well construction and delivery of motorised pumps. The programme supplies locally available materials and skilled labour during well construction and provides water lifting pumps based on the depth of the well through a micro-credit system arranged with OMFI.

Value chain analysis (VCA)

VCA is useful for producers who are trying to integrate into markets in a manner which would provide for sustainable income growth. VCA provides the answer to the question, 'which commodity should be pushed further in terms of ease of access to input and output markets?' Four crops/commodities were identified based upon on these 'ease of access' criteria:

Honey was strategically selected as the value chain to be implemented because of potential for income gains and the central role of bees in improving and enhancing overall food security through pollination of food crops. Additionally, forage seedlings that flowered were selected to be grown in the CFW nurseries, to link with those beneficiaries who would be focusing on the honey value chain.

Potato is among the most efficient commodities for converting natural resources, labour and capital into a high quality food. Because of its short maturity period (improved variety), it is very strategic at mitigating food crisis in disas-

¹ US Agency for International Development-Office for Disaster Assistance



Improved beehives, which produces significantly more honey than a traditional hive



An example of vertical farming in a FH Project

ter situations and offers better opportunities to grow more quantities of food on less land in relatively short growing periods.

Haricot beans are 'number one' both in terms of volume of export and revenue generated among all pulses grown in Ethiopia. The high nutrition value of the crop is also encouraging the programme to promote mass production in the programming areas.

Pepper is known as a cash crop and promoting its increased productivity enables an increment in household income level. This type of pepper is dried and ground and makes the base ingredient of common food spices (called berbere) found in almost all Ethiopian cuisine.

Cash crops analysis

The VCA has pointed out marketable commodities that can be produced with high potential through provision of necessary service supports along the value chain. FHE has a crucial role to stimulate the support system in the target woredas to improve the productivity and marketing of the commodities by assisting farmers to adopt best agronomic, processing and marketing practices.

Integration

The MLREP programme is not a standalone initiative, but rather dovetails with the Government of Ethiopia's (GoE) led Productive Safety Net Programme (PSNP) programme. The MLREP programme targets PSNP beneficiaries to help them build assets and graduate from the PSNP programme.

FHE coordinates, shares information and collaborates closely with many actors in the programme design, implementation, monitoring and evaluation of activities. At the field level, FHE works with the DOA to implement the different activities planned in this sector. The officers provide technical assistance in the selection of sites and beneficiaries, identification and sourcing of appropriate inputs, the training of beneficiaries, etc. FHE is represented on each targeted District's Food Security Task Force and ensures the programme is integrated with the development plans of the GoE and other NGOs. The research centre in the region acts as a source of technologies, information and knowledge by providing trainers, improved varieties of agricultural inputs and improved agricultural practices. The private seed suppliers serve as reliable sources of improved seed varieties.

The programme has a strong coordination focus with other projects and this provides FHE with the opportunity to share experiences and research outputs that can be applied in other areas.

The Care Group Model for integrating Essential Nutrition Actions (ENAs)

After the completion of the first year of the MLREP, initial benefits were seen at the HH level as far as some income generation/asset

creation. However, there was no obvious evidence that this increased income was being put to use to improve the nutrition and health outcomes of the most vulnerable members of the family. Therefore, it was decided to modify the second and third year plan to include a nutrition education component (which will take effect in early 2011). The design is based on the successful integration of a similar nutrition component into the PSNP being implemented by FHE in the South Gondar woredas of Amhara Region called the Care-Group Model.

The programme will use volunteers to disseminate nutrition and hygiene related messages to MLREP targeted beneficiary mothers. Community volunteers, selected by Health Extension Workers (HEW) and kebele officials, will be trained on Essential Nutrition Actions (ENA) (optimal breastfeeding, complementary feeding, feeding of the sick child, women's nutrition, control of Vitamin A deficiency, and control of anaemia and iodine deficiency disorders) and Essential Hygiene Actions (EHA). The HEWs will take the lead and FHE will provide educational materials and facilitate the training.

The Care-Group Model approach focuses on mothers of reproductive age who are beneficiaries of food aid (parallel PSNP or relief programmes) and MLREP activities. Mothers will be divided into groups of ten to fourteen and each of these groups will elect one 'leader mother' who will be responsible for leading discussions in the group under the guidance of the volunteer promoter. The promoters meet with the lead mothers every two weeks for about two hours. Religious and community leaders can also serve as co-promoters.

During Care-Group meetings, promoters will teach lead mothers by using flip charts (developed in other FHE programmes) for a total of 20 sessions. Similarly, lead mothers will discuss the same topic with mothers in their group. After completion of the session, the groups will continue the meeting and will discuss other health and social related issues. The cycle of all lessons should take approximately ten months. Establishing mother to mother meetings should help mothers learn the ENAs and discuss issues together to help bring about the desired behaviour change which can improve the nutrition and health outcomes of the children in the community.

Outcome indicators

The following outcome indicators will be measured:

- Mothers who practice hand washing at two critical times, at least.
- Mothers of children under six months who practice exclusive breastfeeding based on 24 hour recall
- Mothers who increase the amount of fluid during childhood diarrheal illness
- Mothers of children under 5 years using appropriate food diversification of complementary feeding

Field Article

- Mothers whose household builds a latrine and uses it
- Households who invest in growing/purchasing nutritious foods and are educated on preparation methods

In order to measure impact, household food consumption patterns and hygiene practices will be recorded through interview before the nutrition component is launched. Comparisons in behaviour of the households can be made when a follow up survey is completed after the programme has run for a year. Regular mini-KPC (knowledge, practice, and coverage) surveys to ascertain any improvements will also be undertaken.

Raising awareness during public gatherings

FHE volunteers will also educate the MLREP beneficiaries at MLREP temporary employment sites (nursery and cattle ponds) and food aid commodity distribution sites (part of a different relief programme) through mass education. The education will mainly focus on the ENA messages and the EHAs will focus on hand washing at appropriate times using soap or ash, creation of hand washing stations at the household and other community settings (e.g. marketplaces), proper disposal of faeces, and effective point-of-use drinking water treatment in households. FHE will arrange 20 minute session for education before distribution and any kind of public work, like nurseries management, pond constructions and others. Community volunteers as well as social workers in the organisation will give the education in collaboration with HEWs.

Lessons and opportunities

FHE has found that even the most food insecure households are able to participate in the micro-credit scheme established. The key is to provide these households with an appropriate loan based on their needs and capabilities to make payments in the long-run. One key element involved with this has been for FHE to serve as a 'middle man' to negotiate better terms for the farmers with the OMFI. For example, FHE has helped to lengthen the time required to pay back loans for certain agricultural based loans that better coincide with the agricultural production seasons. Proper training and other supplementary inputs are also necessary for the successful implementation of the micro-credit scheme.

Additionally, FHE has helped significantly by 'pushing' OMFI into rural kebeles. As transaction costs to OMFI are high for smaller loan amounts, support in capacity building - such as motorcycles for the OMFI regional field offices - has lowered the costs for OMFI to do business with the most poor. This has lowered a barrier for OMFI to help improve the access to these credit services for rural vulnerable households, making it more likely they will travel to the rural areas to look for loan customers.

Supplying a packaged approach is an effective way to reach desired results in as the complementary inputs provide a larger impact than providing single inputs. For example, providing bee fodder to beneficiaries, in addition to the access to the microfinance loan for the beehive, will allow their ultimate honey production to be higher, making a better chance for successful repayment of the loan.

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An overview of REST's implementation of the Productive Safety Net Programme

By The Relief Society of Tigray (REST) Mekelle Team



The Relief Society of Tigray (REST) has been in existence in Ethiopia for over 30 years, starting out as a relatively small organisation in 1978 in response to the needs of Tigrayan's displaced because of drought and food insecurity to neighbouring Sudan. The 1984/5 famine that affected large numbers of the Tigrayan population saw REST implementing large scale cross border (with Sudan) humanitarian relief programmes. In 1987, REST oversaw the agricultural rehabilitation programme, established to assist 160,000 repatriated Tigrayan refugees to rebuild their livelihoods.

Tigray is a region of over 4.3 million people (out of a population of 76 million in Ethiopia) in the north of Ethiopia. Eighty per cent of the population live in rural areas, of which the majority are subsistence farmers producing, on average, only 40% of their annual minimal food requirements. Gross Domestic Product (GDP) per capita is US\$115.00 and 89% of the population earn less than US\$2.00 a day. Average life expectancy is 43 years.

In 1991, REST was registered as an indigenous non-governmental organisation (NGO) and since this time, has focused on longer term development programmes whilst maintaining capacity in emergency response. Today, REST is one of the largest indigenous NGO's in Ethiopia, with the head office in Tigray's capital, Mekelle. REST has 700 staff and is funded by many donors and international NGOs, with an annual budget of around USD\$10 million (2010). REST works in 23 out of 34 woredas (districts) in Tigray.

REST priorities and programme areas

The stated goal of REST's programming is to bring about food security for households within its operational areas. REST is organised into a number of departments as follows:

- Environmental Rehabilitation and
- Agricultural Development
- Irrigation Development
- Health
- Education
- Rural Water Supply
- Relief and Rehabilitation
- Supplies and Logistics
- Planning and Coordination
- Research and Policy Development

Relief and Rehabilitation

From its inception, REST has provided emergency relief across Tigray and as a result, has developed significant experience and capacity in this field. Following the end of the civil conflict in 1991, the strategy evolved to integrate emergency programmes within development processes. For example, free food distributions were restricted to the most vulnerable in an emergency (estimated to be around 20% of the emergency affected population at any one time) whilst the remaining 80% receive food as part of food for recovery programmes.

Furthermore, REST has developed very rich experiences in drought and disaster management and in early warning and disaster preparedness. This has enabled REST to initiate responses to droughts or other shocks at an early stage.

As part of disaster response management, REST initiated a strategy that food aid 'should go to the people and not bring people to the food'. As a result, REST manages a number of distribution points close to those in need in all its operational woredas and has an overall storage capacity of 50,000 metric tons (MT) of food. Over the past five years REST has delivered 393,000 MT of food assistance, 2,100 oxen, 2,550 sheep, and 800 donkeys. In addition, 4,900 households have bought farm implements from REST.

Implementation of the Productive Safety Net Programme (PSNP)

REST has been an implementing partner in the national PSNP since 2006 working in six chronically food insecure woredas in Central, Eastern and Southern Tigray (Ahferom, Degua Tembien, Mereb Leke, Werie Leke, Wukro and Raya Azebo) reaching over 450,000 beneficiaries (see Figure 1).

The PSNP is a multi-year programme with resources committed to 2014. The overall goal of the programme is to make a sustained change to food security and livelihoods of chronically poor communities and reduce their vulnerability to disaster shocks. The PSNP utilises food and cash transfers to support household food consumption, build community assets and provide a platform for the engagement of the most poor in agriculture-based food security packages and programmes. The REST PSNP originally provided food transfers for a period of eight months for contributions to public works by able-bodied PSNP beneficiaries, and for a period of 10 months for direct support beneficiaries (disabled persons, the elderly, sick and female headed households). From 2008, the transfer period was similar to that of the government PSNP for six months for public work and direct support. The food entitlement is 15 kg of grain, 1.5 kg pulses and 0.45 kg oil per month per

household. This is a larger monthly food transfer compared to other PSNP implementing agencies. REST also distributes 4.5 kg/month/person of corn soya blend (CSB) to malnourished children (low weight for age) and pregnant and lactating mothers, based on regular growth and nutritional monitoring by health service institutions. This food is also distributed during emergencies to PSNP and non PSNP beneficiaries. REST's distinct approach to the PSNP is on integration of activities with other national programmes activities at the woreda and village level to maximise coverage and impact.

REST's Environmental Rehabilitation and Agricultural Development Department oversees the natural resource management related activities in the PSNP in tandem with the Irrigation Development and Rural Water Supply Departments. Natural resource management is viewed as a key activity area in order to reduce the effects of drought and soil erosion, and to increase food security through irrigated agricultural production and increased livestock holdings. Natural resource projects account for more than 90% of the total public works budget. All natural resource activities are implemented at watershed level. Typically, soil and water conservation projects include physical measures (stone bunds, hill side terrace, trench bund, gull treatment, micro-basin and pitting for plantation), biological measures (which includes area closures for regeneration, grass strips, and afforestation) and water harvesting measures (river diversion, mini dam, water harvesting check dam, open hand dug well, spring development). Since 2005, REST has treated and developed over 57,000 hectares of degraded hill sides, 442 kilometres of large gullies, seven mini-dams, 11 river diversions, 190 water harvesting check dams and 645 open hand wells in the PSNP woredas.

Watershed management is another key natural resource activity. This involves the construction of stone walls and trenches to retain water, provide moisture for shrubs and trees, re-charge the groundwater, prevent soil erosion and thereby enable cultivation in the previously dry valleys and river beds of diverse

Figure 1: USAID/REST PSNP – Productive Safety Net Programme Woredas





Vegetable production from open hand dug well

crops (fruits, vegetables and drought resistant crops) throughout the year. REST also supports implementation of micro-irrigation check dams, open medium and large hand dug wells, livestock development, crop development and clean water supply activities.

PSNP implementation process

All activities are closely managed by committees at the community level. At the Tabia level, PSNP has two task forces: kebele/Tabia food security task force (KFSTF) and community food security task force (CFSTF). Both task forces have representation from local administration, health extension, teachers, youth, and farmer and women associations. The role of the KFSTF is to consolidate public work plans, prepare PSNP plans in consultation with woreda sectors, verify PSNP clients and to evaluate PSNP activities.

Comprising three females, three males, a youth representative and development agents (DA), the CFSTF is responsible for targeting the eligible communities, identifying public work and direct support participants and for mobilising the community jointly with DAs for participatory works planning. CFSTF also organise public meetings to discuss the proposed list of PSNP beneficiaries, encourage comments from people attending the meeting and make amendments to the list as required, to



Hill side terrace to conserve soil and water

reach overall agreement among the community on the list of PSNP clients. This list is submitted to the KFSTF, which ensures there is no stigma against the inclusion of eligible people living with HIV. The CFSTF also participate in regular review of PSNP clients, monitoring the implementation of public works and informing appeal process to the community.

In addition to REST's links with the KFSTF and CFSTF, REST is a member of the woreda level food security task force and technical assistance team. The role of REST at this level is to strengthen the community and woreda management capability through capacity building and technical assistance.

Micro-credit support activities

REST integrates bee keeping, dairy, small ruminant, vegetable and fruit production to the needy PSNP beneficiaries to increase their food security. These are described in case studies in Box 1.

PSNP linkages with Nutrition

The PSNP is closely linked to key government national health and nutrition programmes including the Health Extension Programme, HIV/AIDS programme, the National Nutrition Programme (NNP) and national Outpatient Therapeutic Programme (OTP) roll-out. Linkages are through the provision of supplies to health posts (gloves, weighing equipment, teaching aids), provision of CSB for malnourished children, capacity development including training, and through the referral of moderately and severely malnourished children from PSNP households to the clinics and health posts.

REST/PSNP provide capacity building focused on the NNP components for community health workers, health extension workers

and health staffs in order to facilitate the effective delivery of information, education and communication (IEC) activities.

REST/PSNP pursues nutrition and health improvements by integrating agriculture with IEC. Interventions target women and children (0-24 months) and focus on improving family diets in terms of intake/consumption and quality/diversity through increased farm production, storage and processing of high value and surplus crops. Food for work and food as incentive programmes are also key areas of activity. These make special provision for supplementary food for children, as well as increasing women's and community education and knowledge to enhance mother and child health to bring about positive behaviour change.

Measuring the impact of the PSNP

Environmental

Annually, it is estimated that Ethiopia loses over 1.5 billion tons of topsoil from the highlands including Tigray, which is equal to a loss

Box 1: Micro credit support case studies



Landless beekeeping groups in area closures (Wukro woreda)



Communal hand dug well (Wukro woreda)

Bee keeping

In Ayna-alem village of Kiltse-Awlaelo woreda, REST is working with young landless families to form bee-keeping groups in areas where there is ongoing watershed management that allows bee fodder to be grown (flowers). REST provides a Birr 3600 loan to each person to enable capacity building to get started and establish bee hives. Each bee group has, on average, 40 hives and can sell the honey as well as bee colonies. When managed well, 12 quintal (1 quintal = 100kg) of honey can be harvested per person and sold for Birr 120 per kg. In addition, the beneficiaries raise bee colonies and sell them to the market at average price of 700 Birr/colony.

Income for water pumps

A 32 year old farmer, Gebre Kassa, lives in the eastern zone of Tigray and is one of the PSNP clients. He says that, "the safety net programme has saved our lives. Apart from the grain we get as payment, it has changed our work ethics. The implemented catchment treatment activities recharge the ground and our degraded grazing land is saved from erosion and is rehabilitated. As a result, the village PSNP beneficiaries are able to develop open hand dug wells for irrigation and grow vegetables for the market and consumption. Income of PSNP families has increased from time to time from sale of vegetables and other livestock products"

Gebre and his family depend on subsistence farming and off-farm income as daily labour. As a result of natural resource activities, he and his neighbours

developed an open hand dug well for irrigation using PSNP public works. From the other food security programmes he has gained credit access for a motor pump and has planted tomatoes in his half hectare of land and earned 7,000 birr income. He was then able to lease another half hectare of land in the village and increase his income to 15,000 birr. The change is seen in many aspects. He says, "In the first place we are able to get income and adequate and variety food, we are dressing well and my children are attending school, and I am able to pay the credit."

Milk cooperative

Established in 2005, the members of the Milk Cooperative have increased from 15 to 30. The average milk production capacity and profit is high as shown in Table 1.



Gebre with his motor pump



Dairy development rural families (Degua-tembien woreda)

Table 1: Six month milk delivery and expenditure, 2009

Month	Milk delivery litres	Average revenue Birr	Expenditure for milk supplies Birr	Employment costs Birr	Home rent Birr	Net profit Birr
January	5398	40800	24291	500	600	15409
February	5070	40800	22815	500	600	16885
March	5070	40800	22815	500	600	16885
April	6540	52700	29430	500	600	22170
May	6300	52600	28350	500	600	23150
Total	28,378	227,700	127,701	2,500	3,000	94,499

of 1.5 million tons of grain to the country's harvest. Soil erosion is a very serious threat to food security and requires urgent management in Tigray and the PSNP areas. Soil loss in the PSNP woredas was estimated at 42 tons/hectare/year before the PSNP. Based on the PSNP impact assessment (conducted by the World Bank), the average soil loss is now estimated at 19.4 tons/hectare/annum. This means that the watersheds and treated land activities are saving the region an estimated 1.1 million tons of soil per annum, and have the potential to continue having such a positive impact.

The planting and area closures that have been put in place also have the potential to contribute significantly to carbon sequestration. There are likely to be local and global benefits in terms of potential earnings from carbon credits, as well as reduced global warming as a result of reduced green house gases.

Asset ownership

Resiliency grows in parallel with the accumulation of productive assets by integrating other food security packages into PSNP target households. This entails providing diverse agricultural inputs and technologies to asset less poor households in a manner that enables them to own motor pumps, livestock, money, built houses in nearby towns, and fruit trees to produce more and diverse range of food crops and livestock for consumption and for market. As a result, households are more confident in taking out additional loans to maximize their income. Current research studies indicate that there is no significant difference in oxen ownership among the households. This indicates that most households own oxen as the result of income increment and credit access from PSNP and other food security programmes.

Nutritional status

In 2008, REST carried out a nutrition survey¹ to identify whether any changes in prevalence of wasting, stunting or underweight had been achieved in the PSNP programme areas compared to the baseline survey prevalence identified in 2005. The findings were also compared to the prevalence of wasting, stunting and underweight in a non-PSNP (control) woreda (Hintalo wajirat). Table 2 presents some of the findings.

The prevalence rates of wasting, stunting and underweight were found to have reduced in 2008 from the baseline levels reported in 2005, by 2.6%, 11.8% and 10.7% respectively.

Indicators	REST PSNP			Non REST PSNP
	Baseline 2005	Target 2008	Actual 2008	Actual 2007
% of children 0-60 months that are wasted (<-2WHZ)	7.2%	2%	4.6%	12.5%
% of children 0-60 months that are stunted (-2HAZ)	50%	34%	38.2%	42.4%
% of children 0-60 months that are underweight (-2WAZ)	45%	32%	34.3%	34.8%

WHZ: weight for height z score; HAZ: height for age z score; WAZ: weight for age z score
* The woreda taken for non-REST PSNP was Hintalo wajirat (2007).

These results are encouraging and suggest that the PSNP activities are having a positive impact on nutrition outcomes. When compared to the non-REST PSNP (control) area, the prevalence rates of wasting, stunting and underweight were also lower in the PSNP areas. This suggests that the change in prevalence was due to the impact of the PSNP.

Understanding the causes of stunting

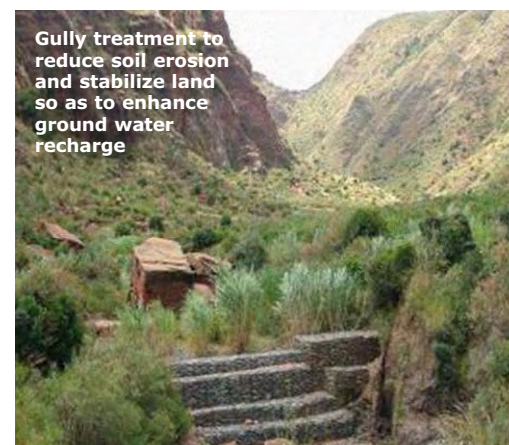
The REST policy and research unit studied the determinants of child stunting in the REST PSNP woredas using regression analysis (see Table 3). The study found that the chance of stunting among children from households who are dependent on the PSNP increased compared to those who depend on producing and purchasing their own food. Households who own livestock were found to be less likely to have stunted children. Family size, as expected, was strongly associated with the probability of a child being stunted, with the risk of child stunting being higher if the household had more family members. Likewise, a mother's education is negatively correlated with child stunting, i.e. a mother who is literate had a lower probability of a child who was stunted compared with those who are illiterate. Access to nutrition education is negatively and significantly correlated with levels of stunting. This suggests that a mother of a child who has been exposed to nutrition education has a lower probability of a stunted child, compared with those who have not participated in nutrition education.

The results also showed that child stunting is more likely to be prevalent in households who don't have a toilet. Access to a potable water source was found to decrease the risk of stunting, however, this was not statistically significant. One interesting result from the regression analysis was that contrary to the general impression, a child from a female headed household was less likely to be stunted than a child from a male headed household, though this difference was not statistically significant.

Overall, the analysis of determinants of child stunting level signifies that increasing access to livestock (cows and shoats), female literacy, nutrition education and latrines has role to play in reducing the prevalence of levels of stunting in Tigray.

Household food security

Information on the number of months in the last year in which a household was not able to



Gully treatment to reduce soil erosion and stabilize land so as to enhance ground water recharge

maintain a minimum level of food security, i.e. the ability to access food, was also assessed (following the FANTA guidelines¹). Typically, the months of June to September are the food gap months when food insecurity is most severe in Tigray. The 2008 survey showed that 70% of PSNP households had adequate food for at least eight months in a year, of which only four months was from a household's own production. The 2008 findings were an improvement on the baseline survey findings and this improvement was attributed to three interlinked factors: the PSNP food transfers to meet immediate household food gaps, the creation of local employment and income generation opportunities, and use of the PSNP as a stepping stone to access other food security packages.

According to the survey results, the major reasons given by respondents for failing to produce sufficient annual food needs were shortage/absence of land (49%), rainfall shortages/excess (36%), lack of oxen (16%) and crop losses due to damage, pests, disease and flooding (5%). The major coping strategies practiced by the people in the project areas during food shortages were reported as borrowing cash or food (22%), eating less preferred food (21%) and eating fewer meals per day (25%).

Farmers confirmed that the PSNP had helped minimise household level stress associated with hunger and poverty. It enabled them to salvage their productive assets rather than forcibly selling them to cover consumption needs, and allowed them avoid distress migration in search of food and employment. The food for work activities ensured short-term

Table 3: Parameter estimates of a logistic model for determinants of children stunting level (N = 5391)

	Coefficient	Standard error	Z	Significance level	P>z [95% Confidence Interval]	
Gender	-.0074053	.085988	-0.09	0.931	-.1759387	.1611281
Age of mother	.0002603	.0050509	0.05	0.959	-.0096394	.01016
Family size	.0382093	.0182387	2.09	0.036 **	.002462	.0739566
PSNP beneficiary	.2180809	.0648287	3.36	0.001***	.091019	.3451429
Irrigation plot	.1096148	.0857793	1.28	0.201	-.0585095	.2777391
Duration of breast feeding	.0110853	.0201191	0.55	0.582	-.0283474	.0505179
Nutrition education	-.3741028	.1689836	-2.21	0.027 **	-.7053046	-.042901
Water availability	-.0582521	.0645057	-0.90	0.366	-.1846809	.0681768
Latrine availability	-.0992738	.0790179	-1.26	0.100	-.2541461	.0555985
Full vaccination	-.1772792	.9174281	-0.19	0.847	-1.975405	1.620847
Oxen per capita	.0212997	.1831977	0.12	0.907	-.3377613	.3803607
Cow per capita	-.5413497	.1443165	-3.75	0.000***	-.8242049	-.2584946
Shoat per capita	-.1123467	.0482356	-2.33	0.020**	-.2068868	-.0178066
Literacy of mother	-.1688753	.0675757	-2.50	0.012**	-.3013212	-.0364295

Note: ** = significant at p<0.05; *** = significant at p<0.01.

¹ 30 by 30 cluster methodology was employed in all six PSNP woredas.

² MSc by Teklebirhan Aydebeb

employment opportunities for many of the resource poor farmers in the project area and additional relief food assistance coming to the area, further acting to stabilise the situation.

Dietary diversity

The household dietary diversity score is a proxy indicator for socio-economic status and the ability of households to access food. Household dietary diversity score is reflected in the number of different food groups consumed over a given reference period. To gauge the level of dietary diversity, sample households were asked about the number of different food groups consumed using a 24 hour recall period and a broader non-time bound question about numbers of foods consumed². The results of the survey indicate that the overall mean dietary diversity score in the REST PSNP project area is five. This implies that, on average, households had consumed about five different food groups within the previous day indicating a 47% improvement against the baseline figure of 3%. The main factors contributing to the improvement of the dietary diversity score are expanded and diversified production of crops and vegetables and expanded mainstreaming of health and nutrition education through the REST PSNP and other Food Security Programmes over the last four years.

Future challenges and opportunities in the REST PSNP woredas

Drought

Although the PSNP has significantly improved household resilience to shocks in Tigray, drought and increasing market shocks (inflation/price increases) continue to threaten the livelihoods of the poor. These can potentially undermine the assets developed both under the PSNP and with REST's programmes more widely. To preserve the PSNP results, additional efforts are required in water harvesting and management and the provision of potable water supplies both for humans and livestock. Drought and other shocks could also undermine the improvements seen in nutritional status of children under five, particularly levels of wasting which are sensitive to short term shocks.

Inflation

The increase in food prices is affecting food security, especially given that the majority of PSNP beneficiaries are net food purchasers (Tigray has the second highest food price inflation in Ethiopia). Although the PSNP transfers are assisting PSNP households to absorb the food prices to a certain extent, additional shocks (drought, hail, flooding) are compounding factors. For direct support beneficiaries (the disabled, orphans, the elderly, people living with HIV/AIDS) who have no other sources of income, price increases and the reduction of food transfers in the programme from 10 to eight months could have a negative impact on this group.

Lack of strong market intermediaries

The production of economic crops like vegetables, spices, and fruit is expanding in rural communities, especially as access to irrigation water through the public works is increasing. Lack of strong market intermediaries, however, in these rural and marginalised areas is creating a disincentive to production. Additional efforts are needed, therefore, to strengthen the market environment by developing market infrastructure, market information dissemination systems, and strengthening market intermediaries.

PSNP graduation

Graduation from PSNP needs special attention. To encourage household to graduate and reduce risks associated with graduation, households who are in a good position to progress towards graduation should get a food transfer for fewer months than other client groups.

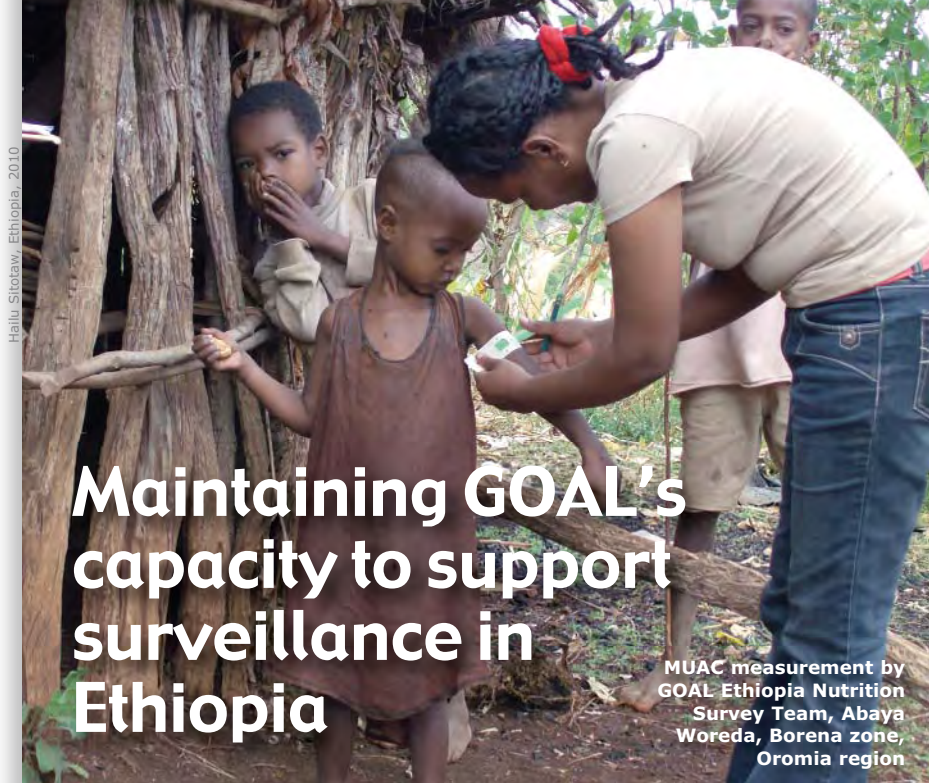
Health and nutrition

Using screening and nutrition surveys could help to highlight potential areas that need special attention. In addition, nutrition survey on the impact of PSNP could be used to design approaches to achieve greater impact on nutrition outcomes, particularly stunting.

Conclusion

The roll out of the PSNP through which the most vulnerable households are guaranteed food resources has helped in maintaining and/or improving nutrition levels. This is complemented by increases in confidence and aspirations by PSNP households evident in their widened participation in food security packages that in turn have enhanced the ability to cope with shocks.

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Hailu Sitotaw, Ethiopia, 2010

Maintaining GOAL's capacity to support surveillance in Ethiopia

MUAC measurement by GOAL Ethiopia Nutrition Survey Team, Abaya Woreda, Borena zone, Oromia region

Ethiopia has suffered from numerous natural and man-made emergencies and continues to be vulnerable to rapid and slow onset emergencies. Since the major famine in 1984/85, considerable efforts have been made to install a credible and effective early warning system (EWS) as part of emergency preparedness to enable a timely disaster response. In line with improvements internationally in early warning and emergency assessment tools, the government of Ethiopia has increased its drive to develop a more effective EWS. It has been supported by many international agencies in this endeavour who, in turn, have made use of new methods such as the Household Economy Approach (HEA) and, more recently, the Integrated Humanitarian Phase Classification (IPC) system (introduced by USAID and FAO respectively). A new EWS has been established in Ethiopia to classify woredas (districts) according to the extent of food insecurity using 'hotspot' monitoring (see articles on DRMSS and on ENCU in this issue of Field Exchange).

At the same time, the government's focus on managing emergencies has also changed from the traditional disaster management approach to a more advanced and scientific 'disaster risk management' (DRM) approach. This emphasises 'domestic knowledge and community capacity' for prevention and mitigation of an impending emergency. The DRM approach has enabled communities to play a leading role in related activities through the application of indigenous early warning knowledge. Thus, communities have a chance to share local solutions for local problems. Such indigenous practices are taken account of in the EWS, which monitors any changes to this normal behaviour and indicates when emergency interventions may be needed.

Background to GOAL

Like many international non-governmental organisations (INGOs), GOAL Ethiopia started nutrition programming in 1984 in response to the large scale famine in the northern areas of the country. In 2003, following a large-scale food security crisis, GOAL Ethiopia expanded its operational presence to two regions, namely SNNPR (Southern National and Nationalities Peoples Region) and Oromia Region. This operation supported eight large woredas to implement therapeutic and supplementary feeding programmes for under fives and pregnant and lactating mothers. GOAL also started working on recovery and development programmes in the areas of livelihoods, child survival and development and in some areas, WASH (water, sanitation and hygiene) activities are being implemented.

By Zeine Muzeiyn and Ewnetu Yohannes



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Ewnetu Yohannes had a thirteen years experience in the area of Nutrition, Health and Livelihood expert and worked in government and local NGOs. Since 2009, he has been working as an Early Warning System Development Officer for GOAL Ethiopia.

Thanks goes to GOAL Ethiopia Senior survey coordinator who provided valuable inputs.

GOAL Ethiopia aims to respond to any emergency in Ethiopia (within its operational capacity) in a timely manner through its HRP (Humanitarian Response Programme), which has three arms: an Early Warning Department, a Survey and Assessment Department and an Operational Response Unit.

Process and outcome indicators used in the EWS

The Government collects two types of early warning indicators to identify hotspot woredas: process indicators and outcome indicators. Each hotspot woreda is divided into three types, priority 1, 2 and 3 relating to the severity of the situation. A priority 1 woreda is the most severely affected, needing urgent humanitarian intervention whilst priority 2 and 3 woredas, though needing assistance, do not require the scale of response needed in a priority 1 woreda. Typically, in Priority 2 woredas, strengthening existing aid interventions and close follow up is recommended whereas in priority 3 woredas, close follow up on the food security situation and other related aggravating factors may be needed.

At the time of writing this article (Sept 2010), there were 335 hotspot woredas flagged in Ethiopia. This represents a significant number of potentially needy woredas and highlights the ongoing need for an effective EWS and response capacity.

Government-led multi-agency teams go to pre-selected food insecure areas in each region to assess potential hotspot woredas; assessment timing is informed by seasonality. The criteria used during the assessment includes levels of acute malnutrition, food security situation, therapeutic feeding programme admissions, stress conditions and levels of migration among others (see Table 1). The classification process is carried out at the regional and reviewed at federal level. Where necessary, overall prioritisation of the woredas is reviewed. For example, on the first assessment or hotspot classification which categorises a woreda as priority 1, the situation may have improved to such an extent that it can be re-classified as priority 2 or 3 according to the multi-agency assessment of the indicators.

Examples of process indicators for estimating levels of food insecurity are sales of assets, unusual livestock death, increased school drop-out, consumption of wild foods, increased begging, increased request for external assistance, and reduction of meals eaten daily. Most stress indicators are showing how a particular hazard affects the population and the strategies they deploy to survive. Table 2 provides an overview of how these process indicators are classified according to a scale of 1-5, with 5 being the worst level of food insecurity and livelihood erosion. Table 3 describes the indicators and associated livelihood impact.¹

Outcome indicators reflect the magnitude of the shock on those affected and are normally reflected through the deterioration of health

¹ Source of Tables 1-4: Guidelines for Analysis and Identification of Areas of Concern (Hot Spots) for Effective Food Security Monitoring and Programme Decision Making, the Early Warning Working Group (EWWG) chaired by the Disaster Risk management and Food Security Sector (DRMFSS) - Ministry of Agriculture and Rural Development (MoARD) - Federal democratic Republic of Ethiopia, September 2009.

Table 1: Process indicators for hotspot monitoring

Weather condition such as onset of rain, cessation time, number days with dry spells, occurrence of hailstorm, flood situation.
Crop production and livestock condition such as dietary diversification, availability of staple foods, land preparation, land cultivated and covered by seed, condition of harvest, agricultural inputs supply, herd size, pasture status, milk production/head/day.
Market price such as major food crops price, livestock price, source of supply, terms of trade between livestock (goat) and major food crop (maize), crop price during harvest/dry season, price of livestock during harvesting/dry season.
Socio-economic conditions such as migration, wages per day, other sources of income, coping capacity of the community.

Table 2: Process indicators and associated severity scale

Indicator measures/assessed	Scale of Measurement				
	Class 1	Class 2	Class 3	Class 4	Class 5
Livestock death	None	>0-≤2% of herds	>2 - ≤10% of herds	>10 - ≤25% of herds	>25% of herds
School drop-out	≤5% of students	>5 - ≤10% of students	>10 - ≤25% of students	>25 - ≤50% of students	>50% of students
Sales of productive assets	None	Moderate	High	Very high	Exhausted
Increased sales of firewood and charcoal	Normal	Moderate	High	Very high	Very high
Consumption of seeds	No	No	No	Yes	Yes
Consumption of health threatening foods	None	Sometimes	Few days	Most days	All days
Increased begging	No	No	No	Yes	Yes
Increased request for external assistance	None	≤5% of households	>5% - ≤10% of households	>10 - ≤20% of households	>20% of households
Switching in livelihood protection expenditure	None	Normal	Few items switched	Some items switched	Most items switched
Reduction of meals	≤5% reduction	>5% - ≤15% reduction	>15% - ≤30% reduction	>30% - ≤50% reduction	>50% reduction
HH level destocking (commercial, slaughtering)	None	Normal	High	Very high	Massive

Table 3: Food insecurity indicator description and livelihood impact

Indicators description	Impact on livelihoods
Highly Above Normal (HAN) (1). Indicator is above average or conditions are improving (a very high positive change, above average) (>=25%)	Large Improvement – (Risk: Minimal). Occurrence of, or likely predicted event improving livelihoods. <i>Stress Indicators:</i> no impact, very huge, large positive change from normal.
Above Normal (AN) (2). Indicator is above average or conditions are improving (a positive change above average) (>10 to <25%)	Improving – (Moderate Risk: Hazard). Occurrence of or likely predicted event improving livelihoods. <i>Stress Indicators:</i> no impact, large positive change from normal (small change).
Normal (N) (3). The process indicator is just about average (a small change below average) (</>10%)	Improving or Small Change. Normal or very small change from normal conditions prevail. <i>Process Indicators:</i> small negative change from normal (moderate).
Below Normal (4). Process indicator shows a huge negative change from average (>25 / <50%)	Severe. Stress Indicator indicates very high abnormal conditions stressing livelihoods, with high vulnerability. <i>Stress Indicators:</i> large and compounding negative changes.
Failure/ Critical (5). Process indicator show a strong major likely impact on livelihoods (>50%)	Very Severe: Stress indicator show alarming proportions and leading to immediate impact on livelihoods stress, with high vulnerability. <i>Stress Indicators:</i> have immediate, large and compounding negative changes.

Table 4 Outcome indicators: health and nutrition thresholds by severity scale

Indicator measures/assessed	Scale of Measurement			
	Class 1	Class 2	Class 3	Class 4
Global acute malnutrition (GAM) prevalence	<3% WFH* <-2 z-score	3% - <10% WFH <-2 z-score	10% - 15% WFH <-2 z-score	>15% (WFH <-2 z-score)
Migration	Normal	Spread	Concentrated	Distress
Displacement	None	Spread	Concentrated	Distress
Morbidity	Normal	Serious	Severe	Critical
Crude Mortality	<0.5 /10000/day	0.5 - <1 /10000/day	1 - 2 /10000/day	>2 /10000/day

Box 1: Micro credit support case studies

A 65 year old man was noted using a plough and sowing seeds one month earlier than normal in a village. At that time, the GOAL EW officers were collecting the EWS data from the village and asked the man "why are you ploughing and sowing unusually early in the dry season when the rains are not due for another month?" The old man replied, "you know my son, I am an old person and have grown up watching the 'signs' of 'good' and 'bad' season in my village for a long time. I follow the wind direction at dry season. If it blows from the west-east direction, then I know the coming rainfall will start early. When it blows from the east-west, the rain will be late. This is why I have started to plough and sow maize seed and wait the onset of early shower rain and

use this opportunity to secure my food needs". To verify this indigenous knowledge, the GOAL EWS officer went back one month later to monitor the status of the area ploughed and witnessed that this was the only farm with green maize seedlings. Others had not started ploughing their land and missed the good opportunity offered by the earlier 'shower' rains.

Because of this evidence, the trend to plant earlier has expanded to other villages with farmers practicing this 'indigenous early warning information and use the 'early' shower rain to grow a fast growing local maize seed called 'yanase'. They also sow hybrid maize seed in normal rainfall time in the month of March.

and nutritional statuses of the affected community. The health and nutrition thresholds applied to for the indicators to define the extent of an emergency are outlined in Table 4.

In most cases, the presence of disease outbreaks, food insecurity and high rate of acute malnutrition are the main driving force for implementing an assessment. Typically, the Early Warning Department is alerted by the health sector when there is an unusual increase in acute malnutrition cases attending health facilities. Based on the information received, standardised nutrition surveys are conducted to assess the situation and make recommendations for possible nutrition intervention.

GOAL's Support to the EWS

GOAL's Early Warning Department collects EW information through field based assessments undertaken by GOAL staff who work through the Government's rural health extension workers (HEWs) and in response to rapid assessments undertaken by the Government's ENCU (Emergency Nutrition Coordination Unit) that flag 'hotspots'.

The GOAL EW officers travel extensively at woreda level, collecting and screening early warning indicators and/or reports from the field. In all areas, including GOAL's RDP (Rural Development Programme), GOAL uses routine information collection and triangulates it with Government and UN agency assessment reports. If information concurrently indicates the deterioration of a situation to a Priority 1 or Priority 2 status, upon request by the ENCU, a GOAL nutrition survey and assessment team is deployed to verify the severity of the situation. This involves a standardised nutrition survey using the SMART (standard measurement and assessment research tool) methodology.

In addition, each month GOAL EWS focal persons at regional level monitor and collect qualitative data from systematically selected woredas and kebeles (a group of villages) using key informants. The key informants are made up of 12-20 people who represent the community and include woman, religious leaders', youth and aged people with indigenous knowledge. They are involved in group discussions undertaken every month at which they discuss in depth any forewarning signs of changes in social and economic trends in the village, disease outbreaks, increases in cases of acute malnutrition, etc. An example of the benefits of capturing indigenous early warning information is described in the case study in Box 1.

After the monthly information is analyzed by the GOAL regional focal personnel, a report is submitted to the GOAL Addis Ababa office

where quality assurance checks are in place. The data and report is then shared with the Federal level along with other similar partners during the monthly national EW meetings. The Federal level triangulates this information and finally shares it with the ENCU for action, if needed. On average, the whole process takes one month from information collection up to sharing the findings to partners and other government offices.

GOAL nutrition assessment capacity

GOAL staff attends the EW coordination meetings at federal level during which the list of hotspot woredas is issued. Agreement is then reached on the agencies responsible for nutrition assessment of these woredas, with the aim of verifying whether the EWS data is reliable in terms of detecting increases in prevalence's of global and severe acute malnutrition (GAM and SAM).

GOAL Ethiopia maintains 21 staff at any one time to support nutrition surveys. Each survey costs approximately USD\$ 8,500, which includes vehicle hire to carry out data gathering and data analysis and dissemination. GOAL capacity in this area is funded by the US Office for Disaster Assistance (OFDA) and ECHO (European Commission Humanitarian Office). In any month, GOAL has capacity to lead on up three nutrition surveys depending on the context. In 2009, a total of nine nutrition surveys were carried out in the country, of which four were undertaken by GOAL in hotspot woredas. Three of these surveys showed levels of acute malnutrition to be above the levels defined as an emergency in Ethiopia. Between January to June 2010, 12 nutrition surveys have been carried out by GOAL Ethiopia of which three were conducted in priority 1 hotspot woredas.

Since GOAL is operational in many areas in Ethiopia, it is often necessary to do base line survey, follow up survey and end line survey at different times. Moreover, GOAL is often approached by the Federal ENCU and Federal Disaster risk management and food security sector (DRMFSS) to do nutrition survey for partners and for regional ENCU consumption. To be able to conduct all of these surveys, GOAL Ethiopia found it necessary to increase the quality and quantity of the survey team. GOAL plans to increase its capacity to carry out four nutrition surveys in any one month by increasing the nutrition team to 28.

As well as collecting mortality and anthropometric data during the nutrition surveys, data on health behaviour, recent sickness, child care, market prices, migration and food security

are gathered. This data is used to guide programmatic intervention and/or to provide the relevant government entities with qualitative information on food security and its prospect.

In lieu of the assessment findings and subsequent recommendations, if GOAL has the capacity and the authorisation to intervene in an unsupported woreda, it will do so in line with recommendations made. Over the last 63 months (from August 2005 to June 2010), GOAL Ethiopia has conducted 60 nutrition surveys (a small number of which were on behalf of other NGOs in collaboration with the ENCU) and has intervened in approximately 95% of woreda's with an identified need for management of acute malnutrition.

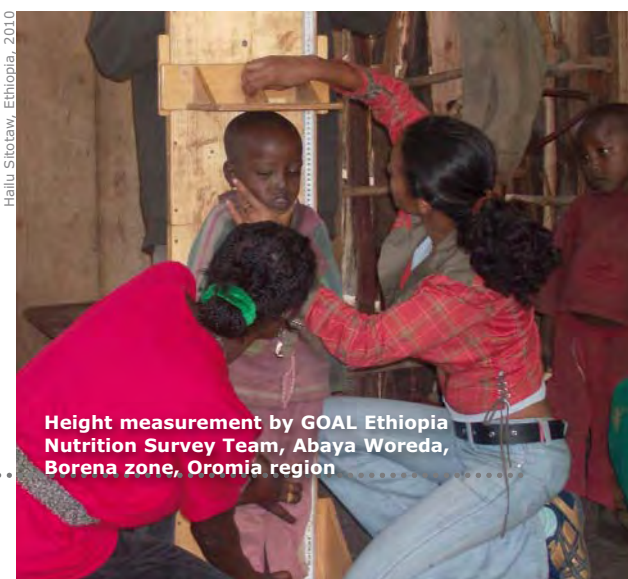
Focus on Capacity Development

GOAL nutrition survey staff always carries out surveys with government staff at woreda and regional levels and focus on building government capacity in planning and conducting surveys, analysing data and report writing. Moreover, as a part of sustainable capacity building, one person from the Government Regional Health Bureau takes an active role in analysing and writing the draft survey report.

GOAL also recognises the significance of HEWs in collecting locally pertinent food security and health/nutrition information on a daily basis, which provides information for the government when considering some form of emergency intervention. In recognition of this, GOAL provides a two-day standardised nutrition survey training for HEW's followed by a practical session before the commencement of the actual data collection. This training is provided for any woreda where a nutrition survey is going to be conducted.

Since food insecurity has a cyclical nature in Ethiopia, the numbers of hotspot woredas varies and the government demand for conducting nutrition surveys will also vary. GOAL has established a good reputation over time within government for carrying out reliable and high quality surveys and therefore, demand for GOAL's experience in this area is high. However, there is a limit to the direct support that GOAL can or should undertake in this regard. It is particularly important that regional capacity is further developed to meet the demand for nutrition surveys and EWS assessments over the long term. GOAL is committed to focusing on capacity development in the ongoing programme of work in Ethiopia.

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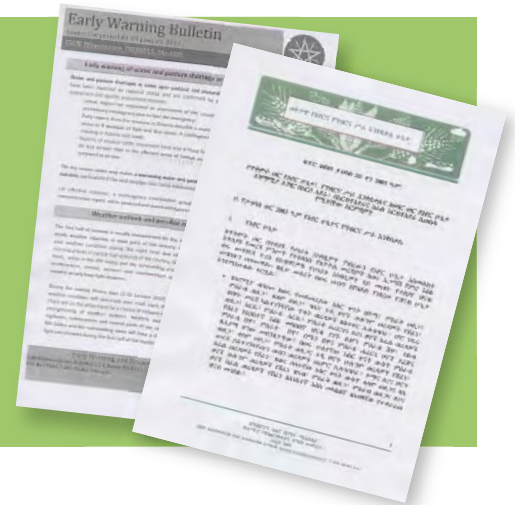
Height measurement by GOAL Ethiopia Nutrition Survey Team, Abaya Woreda, Borena zone, Oromia region

The Evolution of Ethiopian Government's Early Warning System

Dr Kassahun Bedada Beyi

Dr Kassahun Bedada Beyi is Early Warning and Response Case Team Coordinator with the Early Warning and Response Directorate. This is located within the Disaster Management and Food Security Sector of the Ministry of Agriculture and Rural Development. He holds a BSc in Plant Science and a MSc in Pest Control. He has a longstanding engagement on early warning activities.

The author would like to acknowledge the support of the Early Warning and Response Directorate.



Disaster Management structures and systems have a relatively short history in Ethiopia having evolved after the 'great famine' of 1973/74 when the first government institution, the Relief and Rehabilitation Commission (RRC) was created. The RRC (subsequently called the Disaster Prevention and Preparedness Commission (DPPC)) had responsibility for providing support to disaster affected populations, particularly for those affected by severe drought. Around this time, the need to develop an early warning system (EWS) as a crucial component of disaster management become apparent, as over a quarter of a million deaths in the central and northern highland areas of the country were reported. The lack of a national preparedness strategy and the absence of an effective EWS revealed a pressing need to concentrate and strengthen the government's capacity to produce early warning information on which to base its response to future emergencies.

The birth of Ethiopia's Early Warning System

The Ethiopian economy has largely been dependent on subsistence agricultural production and any climatic abnormalities can have a direct effect on food production and ultimately on food availability. Therefore, food production monitoring became a key component of the EWS.

The Ethiopian Health and Nutrition Research Institute (EHNRI), backed by the RRC took a leading role in the 1970s in the evolution of the EWS. A system known as the 'Disaster Area Assessment' was developed to assess the levels of food insecurity among drought affected cropping and pastoral communities. The system had weaknesses, however, in that it did not provide continuous monitoring data to inform decision making, though aspects of this system still form part of the national EWS today.

In 1975, an Inter-ministerial Technical Working Group (TWG) was convened under the auspices of the DPPC. The role of the TWG was to advise on the technical aspects of a strengthened system that could provide more reliable and continuous food security and nutrition data by which to assess the national food and nutrition situation. Subsequently, in 1976, the TWG recommended that a permanent system be established to continuously collect information related to food and nutrition. This would link with the activities of government agencies with mandated responsibilities for various aspects of agriculture and food production, including nutrition.

The permanent reporting system was called the 'Early Warning System (EWS)' and emphasised the prediction of food shortages, to distinguish it from its more ad-hoc surveillance predecessor. Rather than set up a new agency to execute this new EWS, the TWG also recommended that the national EWS programme be implemented collaboratively by of the following agencies:

- The Relief and Rehabilitation Commission
- The National Meteorological Service Agency (NMA)
- The Planning and Programming Department of the Ministry of Agriculture (MOA)
- The Livestock and Meat Board of MOA
- The EHNRI

A key principle adhered to when the EWS was officially launched was that activities should be undertaken utilising existing government structures and thereby maximising the use of existing resources. The DPPC is the agency responsible for monitoring the food situation in the country and for taking appropriate measures to mitigate these shortages and therefore, was given the mandate to coordinate the EWS. Other agencies were given the responsibility for data collection.

Preparatory activities, including the training and posting of the first DPPC field agents, arrangement for programme funding and design work occupied most of 1976. The new EWS programme was finally officially launched in January 1977 and remained in place for eight years until the establishment of the Food Information System (FIS) by the Food and Agricultural Organisation (FAO) in 1984.

The EWS and FIS continued to be implemented simultaneously until the collaborative effort could not be sustained and eventually, the FIS committee dissolved and the Early Warning and Planning Service at the DPPC (later changed to the Disaster Preparedness and Prevention Agency-DPPA with additional mandate) took over the full operation of the FIS in 1985.

The system was highly centralised in that data collection, analysis, interpretation and report writing were carried out in the capital, Addis Ababa. Appeals for international relief assistance, relief allocations and decisions regarding relief interventions were communicated from the central level. The role of local authorities and communities in early warning and response was minimal.

The DPPA, although responsible for the interventions, had also been dependent on other line departments for the collection of most of the data needed for early warning. At the same time, these institutions were also

carrying out their own early warning activities and there was considerable duplication of efforts.

The socio-political and economic change adopted in the country, particularly after the ratification of the new constitution in 1995, was geared towards decentralisation of power and responsibility to the Regional States and a decentralised disaster management system. Emphasis was placed on the role of local communities for planning, implementation and evaluation of relief measures. In the process, the evolution of a new disaster management system and the implementation of civil service reform brought about major changes to the implementation of disaster management in the country.

The establishment of the Disaster Management and Food Security Sector

In 2008, the power and responsibility of the DPPA shifted to the Ministry of Agriculture and Rural Development (MoARD) [now MOA]. MoARD established the Disaster Management and Food Security Sector (DRMFSS) comprised of two directorates. One of the directorates, the Early Warning and Response Directorate (EWRD), is today responsible for collection, analysis and dissemination of early warning information on all disasters that impact on food security.

The current system

The EWRD collects early warning information on a regular basis from the District (woreda) level in nine Regional States and one administrative council. The EWRD also works with the government's Emergency Nutrition Coordination Unit (ENCU), which is a unit of the EWRD and has a wider mandate to quality control all nutrition studies in the country (see article on the ENCU in this issue of Field Exchange).

Examples of the types of early warning indicators collected include:

- The occurrence of extreme conditions (hail storms, unseasonal rainfall, extreme temperature)
- Ploughed and cultivated land available
- Supply and distribution of agricultural inputs, e.g. fertiliser
- Crop condition and production prospects
- Disease and pest outbreaks affecting crops and livestock
- Supply of feed and water for livestock
- Sudden movement of livestock
- Nutrition status of the population, particularly in pastoral areas, and with the appearance of increased incidence or 'hot spots'
- Emergence of conflicts
- Spread of human diseases

The Regional States each have their own Disaster Management Bureau. Within these, Regional Early Warning Officers are based. Early Warning Offices also exist at woreda level. In four states (Tigray, Amhara, Oromia and SNNPR) they are well established. In pastoral woredas in Somalie, Afar, Gambela, Benshangul-gumuz regional states, they are not fully established.

The Early Warning Officers are responsible for the collection of information from the grass roots level. Originally, the system was designed so that woreda level officers, upon receiving information from the grass roots level, would compile and analyse the information. This information is then transferred to the zone and regional offices and also to the federal EWRD electronically. However, the internet system is not yet functional so information is collected using telephone communication from the Zonal Disaster Management Offices. Information from zonal and woreda level is compiled and analysed together with additional information collected from line ministries and other information sources, notably the NMA.

The early warning information is disseminated on a regular basis through a monthly Early Warning and Response Bulletin prepared in the national working language (Amharic) and more recently in English. This is distributed to regional states and different stakeholders in Addis Ababa. The Bulletin contains detailed information on rainfall patterns, crop and livestock conditions, terms of trade (shoat to maize), food prices, water availability, nutrition survey data, nutrition programme coverage and relief pledges (food and non-food items) by region. It also includes information on funding shortfalls by sector (food, nutrition, water and sanitation, education etc) and contains a summary of the key findings from the EWS data.

The regional states are expected to duplicate the EW information and distribute it within their region. Woreda offices are also expected to duplicate the information and distribute it to community farmer's training centres where farmers gather to exchange information with development agents and with each other.

Utilisation of the EWS

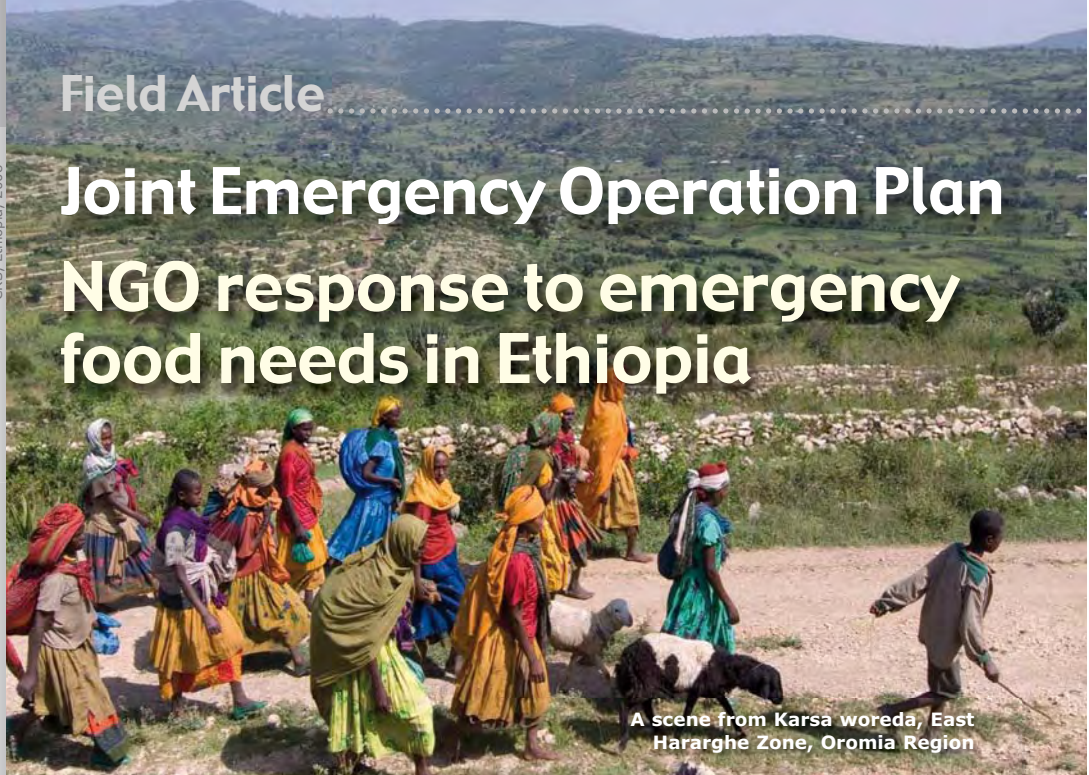
The government's EWS has evolved considerably over the years from an ad-hoc surveillance system in the 1970s that focused on drought affected areas, to a highly centralised system in the 1980s which, though more effective did not involve affected communities in decision making, to today's system, which is highly decentralised. The current system utilises local knowledge and information at the grass roots level and has a bi-directional dissemination process of early warning information. Today's system also integrates nutrition information, pastoral as well as cropping area information, and is linked to monitoring programmatic response capacity.

It can be said that the EWS is becoming successful as the demand for EWS related information is increasing, the range of stakeholders to which EWS information is disseminated is growing and information contained in the EWS bulletins is in greater demand. The development of a woreda-net internet infrastructure will increase the speed and transmission of EW information from the grass roots. In addition, the EWRD is working to include satellite information in the EWS to monitor the food production condition in all areas and to predict the likely occurrence of disasters ahead of time more effectively.

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Joint Emergency Operation Plan NGO response to emergency food needs in Ethiopia

CRS, Ethiopia, 2008



A scene from Karsa woreda, East Hararge Zone, Oromia Region

By Alix Carter



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Many thanks to all the Joint Emergency Operation Plan (JEOP) partners - CRS (JEOP lead agency), CARE, World Vision, FHE, Save the Children US, Save the Children UK, and REST - for their time and effort provided through information and interviews with key staff members responsible for implementing and managing JEOP.

Emergency food relief continues to be a recurrent need in Ethiopia since the Ethiopian famine of the 1980s, which was so severe that it demanded global attention and response. Institutional donors and non-governmental organisations (NGO) have been responding with emergency food relief during crisis years for decades to alleviate hunger. Massive food shortages resulting from severe drought plague the country and drastically hinder production in this predominantly rain fed agricultural economy with 83% of livelihoods in the agriculture sector¹. The Government of Ethiopia recognised that a system to prepare proactively for cycles of drought while addressing chronic food insecurity was required to protect its citizens. It responded in 2005 by creating one of the largest safety net programmes in Africa – the Productive Safety Net Programme (PSNP)² (see article in this issue of Field Exchange by Matthew Hobson).

Despite the positive impact of PSNP, the need for emergency food aid during times of acute food insecurity and shock still persists, as the resources in PSNP are not enough to address all vulnerable populations and mitigate acute food insecurity. The US Government reports that 25 million people in Ethiopia go hungry every year, the most chronically food insecure being children under five years and women³. The Government of Ethiopia's humanitarian appeal of January 2010 identified 5.2 million people in need of humanitarian food relief assistance across the country this year.⁴ Emergency food aid programmes administered jointly by the Government, World Food Programme (WFP) and NGOs remain essential to meet the food needs of Ethiopians and control malnutrition and deaths resulting from hunger. This article discusses one such programme, the Joint Emergency Operation Plan (JEOP) – a consortium food relief programme implemented by seven NGO partners. Implementation by NGOs of this type of programme is rare, as large scale emergency food aid programmes are usually implemented through WFP channels in other countries. However, through collaborative partnership and continued funding from the United States Agency for International Development (USAID) Food for Peace Programme (FFP), NGO partners Catholic Relief Services (CRS), Save the Children (SC) US and UK, CARE Ethiopia, World Vision, Food for the Hungry Ethiopia (FHE), and Relief Society of Tigray (REST) are playing an active role in addressing emergency food needs across Ethiopia for almost two million people per distribution (round).

¹ US Government, Feed the Future, 2010
² Hoddinott, J. IFPRI, 2010
³ US Government, Feed the Future, 2010
⁴ Government of Ethiopia, Humanitarian Requirements Document, January 2010

History and significance of JEOP

JEOP has existed in different forms since 1984. It began life as the Churches' Drought Action Africa /Ethiopia (CDAA/E), a faith based consortium of CRS, Lutheran World Federation (LWF), Ethiopian Catholic Secretariat (ECS) and Ethiopian Evangelical Church Mekane Yesus (EECMY). CDAA/E was initiated in response to the famine of 1984 when LWF extended an invitation to other relief and development agencies for a joint Catholic-Protestant appeal for Africa. Agencies recognised that the magnitude of the need was too large for any one agency to handle alone and joint action would yield greater response and impact. Due to the severity of the crisis in Ethiopia, lobbying efforts for funds and food were heavily focused on Ethiopia and a partnership dedicated to the country was formed. The partnership and its name evolved to become Joint Relief Partnership (JRP) in 1986 with CRS in charge of the coordination and logistics, like it is today.⁵ The partnership was reactivated in 2000 under its current form, JEOP, with five members (CRS, SC-US, WV, FHE, CARE). CRS is the lead agency. In later years, REST and SC-UK also joined.⁶ All partners are or have been USAID cooperating sponsors, but it has shifted from being a faith based partnership to one which includes secular agencies as well.

JEOP remains dormant in non crisis years. It is activated, in close collaboration with the Government of Ethiopia, when chronic food insecurity is exacerbated by emergency shocks, requiring additional coverage and emergency food relief. As a result of a decade of recurrent shocks, JEOP has been operational seven of the last ten years, providing a significant portion of the emergency food needs for the country (see Figure 1).

The current JEOP was activated in August 2008 to respond to the Government's Disaster Risk Management and Food Security Sector (DRMFSS) request for emergency food assistance. This followed extended drought earlier in the year leading to massive food production shortages and rising food prices. Lane Bunkers, Country Representative of CRS, describes JEOP as "A historically significant NGO consortium with a ten-year track record of responding to emergency food needs in Ethiopia. Working in close collaboration with the Government of Ethiopia, the World Food Programme, and international donors, JEOP members play a critical role in reducing food insecurity and protecting investments made through long-term development projects such as the Productive Safety Net Programme and others."

USAID/FFP recently approved an 'Extended JEOP' that will continue through 2012. Extended JEOP includes new monitoring and evaluation activities, a standardised joint agency Early Warning System, and capacity building for partners. These components are intended to improve programme accountability and expand JEOP's function as a risk assessment and preparedness mechanism, in addition to its regular mandate of providing emergency food relief. The significance and aspirations of these new programmatic aspects are discussed further below.

Programme design and implementation

The JEOP of 2008 was designed with the primary objective of *saving human lives and protecting livelihoods through the distribution of food to targeted drought-affected populations*. More

specifically, the programme planned to address the immediate food security needs of drought-affected populations, prevent further depletion of household assets, and reduce distress migration of an affected population⁷.

As the lead agency, CRS is responsible to call forward hundreds of thousands of metric tons of grains, blended foods, pulses, and oil commodities. The agency then oversees the logistics process from shipment at the port of Djibouti until commodities are transported to four primary warehouses placed in different strategic locations of the country. Each of the partners is responsible for collecting their share of the commodities and arranging secondary transport for delivery to their respective distribution sites across the country.

JEOP food distribution is conducted in rounds during which NGO partners distribute rations to targeted households. Distribution of food to the 1.8 million (on average) beneficiaries per round is directly conducted by each of the partner agencies, or in some cases through their local partner agencies on the ground. Implementation of the programme requires very close collaboration with the Government at all levels, starting with the federal DRMFSS structure all the way down to regional, zonal and district level authorities. While NGOs are primarily responsible for handling and distributing commodities, the allocation of food to each district and targeting of individual beneficiaries is processed through Government channels. Due to the nature of the aid system in Ethiopia, NGOs must refer to the Government for all allocations of emergency food relief based on figures from the Humanitarian Requirements Document, the official appeal mechanism of the Ethiopian Government. These appeal figures are based on the assessment results of a joint multi-agency assessment team that conducts surveys at least twice a year to determine humanitarian needs in both food and non food sectors.

JEOP rations are equivalent to the World Health Organisation standard of 2,100 kcal intake per day (see Table 1 for a breakdown of JEOP rations). Rations for each household are provided at local distribution sites based on household size. The federal Government, CRS, WFP, and USAID convene before each round for a prioritisation meeting to determine food allocations for each target region and zone. A list of priority woredas⁸ and kebeles⁹ for the round based on the severity of the food shortage and the availability of resources to respond is drawn up. A woreda level food aid task force comprised of officials from Government line offices of rural agriculture and development, administration, health, and education is in charge of identifying the most vulnerable households to receive food rations. This process of selection is challenging and at times the woreda allocation provided by the federal Government is not enough to meet local needs. At the most local level, a kebele task force of local officials, elders, religious leaders, development agents, and NGO staff oversee distribution at the site to ensure that the identified households receive their rations.

Programme impact and success

The JEOP consortium was responsible for one third of all emergency food relief in Ethiopia between August 2008 and June 2010. During this period, the programme provided 14 rounds

Figure 1: Total emergency food needs and JEOP contribution

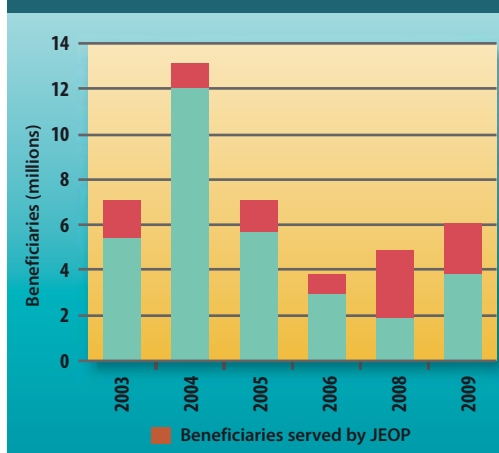


Table 1: JEOP ration breakdown, 2010

Energy based cereals (Wheat)	15 kg/person/month for all drought affected people
Protein supplement (Corn Soya Blend)	4.5 kg/person/month for 35% of beneficiaries considered most vulnerable (children under five years and pregnant and lactating women)
Pulses (Yellow split pea)	1.5 kg/ person /month for all drought affected people
Vegetable Oil	0.45 kg/person /month for all drought affected people

Case study 1: Ato Abera Yimam's story

Ato Abera Yimam, 50 years, lives in Tenta woreda with his wife and seven children. Ato Abera and his family faced complete crop failure due to the long drought period. Without any other sources of income, his family members were on the verge of death before they became beneficiaries of JEOP, through World Vision. "I was scared that my child would die.... The programme is a life saver and a true helper of the vulnerable and the poor. Had it not been here, I would have lost my family or they would have lost me." Of course, Abera is just one of millions of people with similar stories of hardship whom JEOP has addressed over the last two years.

of food relief amounting to almost 500,000 MT of food and reaching over 1.8 million beneficiaries on average each round. In interviews with each agency and through review of programme documents, the impact and success of the programme are clear. Key strengths and achievements of JEOP are identified as follows:

A lifeline for vulnerable households

JEOP is meeting its primary mandate to save human lives. The most food-deficient households are selected using a combination of assessment mechanisms provided by the partners and the Government. Households targeted under JEOP are receiving timely food commodities that are acting as a lifeline for these families. This is expressed through countless interviews with beneficiaries undertaken by each of the partners (see case study 1).

⁵ Solberg, R. A Miracle in Ethiopia, 1991

⁶ In 2009 CRS also included other international organization including Samaritan's Purse, GOAL, and the former Joint Relief Partnership member's Ethiopian Orthodox Church (EOC) and Ethiopian Evangelical Church Mekane Yesus (EECMY). However, these agencies are not current implementers of JEOP.

⁷ CRS, Fiscal Year 2009 Annual Report, October 2009

⁸ A woreda is an administrative division of Ethiopia (managed by a local government), equivalent to a district.

⁹ A kebele is the smallest administrative unit of Ethiopia similar to a ward, a neighbourhood or a localised and delimited group of people. It is part of a woreda, or district, itself part of a zone, grouped into ethno-linguistic regional zones.



CARE Ethiopia JEOP field staff at a distribution site in Chiro Woreda, West Hararghe Zone, Oromia Region

CRS, Ethiopia, 2009

Field Article

Flexible and complementary to other development and safety net programmes

JEOP targets food insecure households that are not covered through the PSNP. It thus provides a complementary intervention to prevent acute food shortages from depleting overall community progress gained through PSNP. JEOP seeks to protect the large investment of donors, like USAID, in the PSNP and other long term development programmes. The extended JEOP includes new elements designed to counter potential increases in need with more predictable and timely response to address needs at the most critical time - between the needs identification and actual food delivery. JEOP is flexible and has the ability to expand to all areas of the country as needed. If the implementing partners are not operational in a specific area of need, CRS arranges sub-grants with other partners in order to reach the most vulnerable populations.

Challenges and lessons learned

While the programme has managed successfully to meet its objectives and the partnership has been described as positive by all of the implementing agencies, there are certain challenges.

Delays and changes in allocation of food aid figures to partner agencies represent one of the major problems faced by the programme. There have been different situations in which the food could not be released locally until the final figures for the round were communicated from the central federal level and reached the woreda. Or, an agency would be ready to distribute food in an area only to find out that the area was no longer included in the round. Communication and capacity gaps between or at different levels of Government are part of the problem. The JEOP programme is very flexible in responding to the Government's repeated requests to make adjustments to the plan, such as inclusion or exclusion of woredas and fluctuations of beneficiary numbers which are often required due to changing needs and priorities. However, these delays and readjustments to

figures impact the most needy as they are forced to wait until partners are permitted to distribute food. JEOP partners are striving to reduce these problems in future rounds.

The arrival of huge shipments of commodities to ports and warehouses in a very short time frame create congestion and difficulty for partners to secure enough space for their commodity storage, especially as most agencies are also storing PSNP food. In addition, secondary transport to distribution sites proved difficult for some JEOP partners, due to a limited number of reliable transportation vendors and price fluctuations resulting from high demand and competition. These are regular challenges faced by large scale commodity based programmes and different strategies have been used to overcome these problems.

A way forward: the future of JEOP

In the Extended JEOP, partner agencies are considering options for a pooled transport system that could circumvent these logistical issues in the future.

In light of the programme challenges, agencies emphasize the immense benefits of partnership. Through monthly meetings and regular communication, the seven JEOP members are able to share their experiences and challenges with one another to develop solutions collectively. Through combining the efforts and experience of all its partners, JEOP achieves a critical mass of capacity to provide food relief to millions.

Extended JEOP is currently underway and will run through 2012. Food allocation will still be based on the humanitarian needs. This JEOP phase seeks to provide more flexible and timely assistance to all affected Ethiopians through a two year guarantee of continued funding from USAID. This enables long term strategic planning and a new fund management structure of a core team of experienced staff headed by a Chief of Party directly responsible for JEOP. Key highlights of the Extended JEOP include a new Monitoring and Evaluation system to improve programme quality and accountability, a joint Early Warning system which will standardise the data collected from each agency to support national early warning efforts, and closer integration with nutrition and development initiatives, like PSNP, to enhance overall coordination between sectors and programmes.

Collective lessons learned with regard to logistics and coordination are also addressed in the Extended JEOP to avoid bottle necks and provide assistance to vulnerable people in a more efficient and reliable manner. JEOP is striving to move beyond food response by examining emergency response more broadly and seeking additional resources in order to make linkages with other programming efforts, particularly in nutrition and livelihood protection. Partners recognise that different strategies and innovations are required if Ethiopia is to move beyond food aid response. The Extended JEOP signifies a positive step towards bridging the gap between disaster preparedness and reduction and emergency response.

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Protects household assets

Beneficiaries often emphasize the programme's support with regards to the protection of essential household assets, such as livestock or agricultural equipment. Without assets, a family's chances of escaping the cycle of food insecurity and vulnerability, is further threatened.

Keeps families together and children in school

Migration to urban areas in search of daily labour is another common coping mechanism for farming households in times of crisis. This both separates families, with males migrating and leaving the burden of all domestic duties on the females, and prevents farmers from working on their farms for the next harvest, thus perpetuating the cycle of food insecurity. Fitsum Wineh, 48, a REST beneficiary in Debre Tembien woreda of Tigray Region stated, "Without this food, my family members would have been at serious risk, and my husband would have had to leave to search for food for the family. He stayed home with his family and was given the opportunity to preserve improved seeds from being eaten and produce subsistence food for the household" she added. "It prevented the family from disintegration."

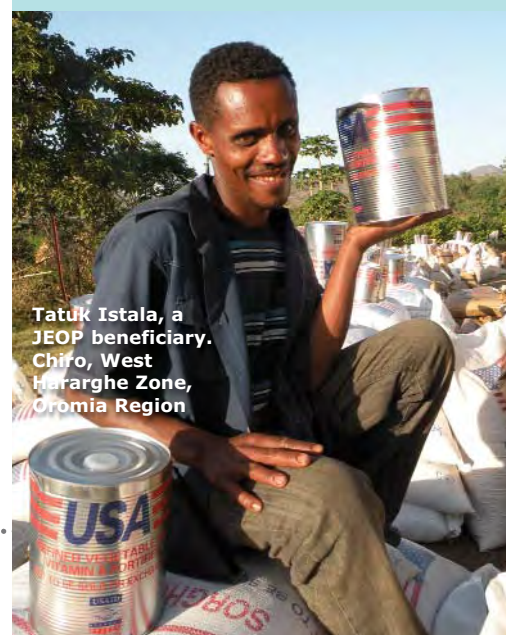
A particularly moving example is provided by CARE Ethiopia from its JEOP operational district in West Hararghe Zone of Oromia Region (see case study 2). Another example comes from SC-US from amongst community members in Cheretie woreda of Somali Region. Here, 846 people were about to be displaced to a refugee centre due to a lack of food before JEOP intervened. The support enabled these households to stay in their community. Cheretie is now being covered by PSNP.

Strong accountability of partners

Since NGOs directly administer and implement this programme, the accountability requirements are very high - every sack of food received into the programme must be accounted for to USAID. The accountability requirements for NGOs are especially stringent and JEOP partners closely monitor the food commodities through all stages until they reach the beneficiaries. Partners provide full transparency for Government counterparts through close collaboration on the ground during targeting and distribution. All JEOP partners have a strong reputation for meeting international and national humanitarian standards and providing quality services while adhering to both donor and Government regulations. They have a long standing presence in the country during which they have developed good capacity to manage effectively food relief programmes. All agencies have positive working relationships with the Government, enabling efficient and well coordinated responses.

Case study 2: Tatuk Istala's story

Since becoming orphaned ten years ago, Tatuk Ishtala, 25 years (see picture), has cared for his six younger siblings on a daily labourer income equivalent to one US dollar per day. The family only had enough to eat once a day, if they ate at all. "Before we received this food, all of my siblings had dropped out of school. Now, all of my brothers and sisters, except one, are attending school. This is because of JEOP," Tatuk stated, "I am illiterate and I don't need my siblings to be the same. I want them to finish school and make an achievement."



Tatuk Istala, a JEOP beneficiary. Chiro, West Hararghe Zone, Oromia Region

CRS, Ethiopia, 2009



By Emily Mates



Emily Mates is a public health professional with a focus in nutrition. She recently left Concern Worldwide, Ethiopia where she worked for many years in emergency and development health and nutrition programming

The author would like to thank the Ministry of Health in Ethiopia, who so often showed impressive commitment for a new service that added to their already heavy workload. With thanks also to the staff of CONCERN; a privilege to work with a great team, where no task was too much nor distance too far to travel in the pursuit of supporting quality services for malnutrition.

CONCERN is especially grateful to OFDA for the generous support (both financial and otherwise) that enabled the N-CMAM programme to happen.

Integrating OTP into routine health services CONCERN's experiences



This article describes the history of an international non-governmental organisation (INGO)-implemented programme that evolved from an innovative emergency intervention into a longer-term initiative, to support the Ministry of Health (MoH) to integrate treatment services for Severe Acute Malnutrition (SAM) within the routine health system. The article describes the community-based management of acute malnutrition (CMAM) approach, a timeline of CMAM programming in Ethiopia and CONCERN's national CMAM (N-CMAM) programme and a description of the N-CMAM programme goal, activities and programme results. It concludes with a discussion of key factors contributing to the enabling environment and analysis of challenges, lessons learned and programme limitations.

The approach

The N-CMAM programme was implemented using a partnership approach, with the focus firmly on 'ownership' by the MoH. The aim was for the programme to establish a much needed service during 'normal' times and to provide a base of capacity from which services could be rapidly scaled-up at times of crisis. The programme provided a package of 'minimal support' to the MoH, which consisted of training (set-up, on-the-job and training-of-trainers (ToT)), joint supervision, workshops, experience sharing visits and community mobilisation support. The programme emphasised learning and innovation, in order to regularly refine and adapt the approach. The programme also provided considerable support to CONCERN's emergency nutrition interventions.

While the minimal support package was important, the most crucial aspect of the programme was the *nature* of the dialogue between the partners. CONCERN attempted to

find the right balance between providing the support that was required and ensuring that the MoH were in the 'driving-seat' at all times. In this way a strong partnership developed, with all levels of the MoH steadily gaining confidence in their ability to offer quality CMAM services. When the food crisis of 2008 developed across much of the country, the MoH (with support from UNICEF and partners) were able to rapidly scale-up decentralised CMAM services through the national Therapeutic Feeding Programme (TFP) 'roll-out' and implement the required policy changes. To date, approximately 50% of health facilities are offering CMAM services, a huge achievement across a vast country.

CMAM/TFP in Ethiopia

CMAM programming is the internationally recommended way of treating severe acute malnutrition (SAM).¹ In Ethiopia, the national TFP (Therapeutic Feeding Programme) roll-out is being implemented using the CMAM approach, as such the terms CMAM and TFP are often used interchangeably (see Box 1). CMAM/TFP combines in-patient and outpatient care for children (6-59 months) suffering from SAM (mid upper arm circumference (MUAC) <11.0cms, weight for height (WFH) <70%, and/or bilateral pitting oedema). It is recommended that there is at least one in-patient unit located in each district (woreda). An OTP (Outpatient Therapeutic Programme) site is ideally established in the health posts located in each village/kebele, staffed by community-based Health Extension Workers (HEW). The CMAM approach recommends extensive community mobilisation, as the success of OTP is dependent on a well-informed and responsive community.

Box 1: Technical description of TFP/CMAM in Ethiopia

The majority of children with SAM who have no medical complications and have a good appetite (around 90%) are treated as outpatients from their local health posts and health centres through the OTP. OTP services are provided on a weekly basis, where the children receive a medical check and rations of Ready to Use Therapeutic Food (RUTF), most commonly the product *Plumpy'nut*®, according to their body weight. Children stay in the programme until they reach their target weight (15% increase in weight from admission or, >85% WFH, absence of oedema), which usually takes around eight weeks.

For children suffering from complications associated with SAM and/or no appetite and for infants <6 months of age, inpatient care is provided in Stabilisation Centres (SCs), also known as Therapeutic Feeding Units (TFUs), which are located in hospitals or health centres. These children need specialised medical care, which is provided with in two phases (phase 1, transition phase to phase 2) as per national protocols. Children can generally progress to outpatient care to complete recovery, once medical complications have resolved and/or appetite returned.



¹ WHO, UNICEF and SCN Informal Consultation on Community-Based Management of SAM in Children, Geneva, 21-23 November 2005

Table 1: Key events timeline in Ethiopia

2000	First CTC/CMAM piloted in Ethiopia (Wolayita and Hadiya Zone, SNNP Region), Valid International with CONCERN and Oxfam.
2003	CTC/CMAM Research programme, Valid International/CONCERN, South Wollo Zone, Amhara Region – testing the efficacy and safety of the CTC/CMAM approach.
2003/4	Food crisis developed across many areas of the country. Many INGOs moved to programming using the CMAM approach, but coverage of services was low and only in certain areas. MoH-led evaluation of the emergency response identified an urgent need for rapid scale-up of SAM services.
2004	First national guidelines for the management of SAM introduced, focused on in-patient treatment.
2005	Demographic Health Survey (DHS) estimates national prevalence of acute malnutrition (children under-5) unchanged at 11%; stunting prevalence reduced by 5%, to a national rate of 47%. ³
2005/6	HSDP-3 launched. Roll-out of Health Services Extension Package (HSEP) to be implemented through a cadre of 35,000 female community-based Health Extension Workers (HEWs).
2005-2007	Relative period of food security across most of the country, although pockets of malnutrition remained. Screening figures from the new EOS programme (2004 onwards) highlighted very high levels of endemic acute malnutrition. ⁴
March 2007	MoH endorsement of the revised national SAM guidelines, including extensive description of OTP and community mobilisation.
February 2008	Ethiopia co-hosts the launch of Lancet series on Maternal and Child Undernutrition. The National Nutrition Programme (NNP) for Ethiopia also launched ⁵ , both events providing evidence of the changing policy environment; with nutrition emerging from relative obscurity to the forefront of the policy agenda, at both national and international level.
April 2008	Attendance of State Minister of Health at international CMAM conference in Washington DC. This was an important event because Ethiopia's leading role in the continuing history of CMAM development was reiterated, particularly with regard to government-led programming.
2008/9	Food crisis developed across many areas of the country. OTP services rapidly decentralised down to health post (village) level across the four main regions of the country. ⁶

Origins of the 'partnership' approach

Many NGOs responding to emergency situations from 2003 to 2005 using the CMAM approach had highly successful programmes. However, frustration arose when NGOs attempted to 'hand over' to the MoH once the acute emergency phase was over. Attempts to achieve full transition to MoH-led service provision appeared to fail. This was most likely due to the nature of emergency programming, where substantial inputs were required to rapidly scale-up response to a deteriorating situation. Emergency programming necessarily took on a vertical approach, as it required cars, staff, stores, supplies, etc, in order to reach the objectives of 'saving lives' in a timely fashion.

After the peak emergency period was over, while capacity would certainly have been built within the MoH through trainings, skill development, etc, the vertical nature of programming generally meant that the MoH were not the lead partner, or driver of the response. It was then often challenging for the MoH (in a resource-constrained environment) to assume responsibility for a programme which had not been 'theirs' in the first place.

Box 2: Outline of the National Nutrition Programme (NNP)

The objective of this programme is better harmonisation and coordination of various approaches to manage and prevent malnutrition. The NNP aims to reduce the levels of stunting, wasting, underweight and low-birth-weight infants, thus contributing to Ethiopia's efforts to reach the relevant Millennium Development Goal (MDG) indicators by 2015. The NNP consists of two main components:

- 'Supporting Service Delivery' which includes 'increased access for the management of SAM.'
- 'Institutional Strengthening and Capacity Building'.

The development of the NNP should be considered a major achievement for Ethiopia, as the country endeavours to tackle its long-standing problems with malnutrition. Rigorous evaluation of the NNP will be essential, to maximise the learning from this initiative.

The reaction to this frustration was to devise a new strategy of using a partnership approach. This involved establishing CMAM services (particularly OTP) in 'non-emergency' times with the focus firmly on 'ownership' by the MoH, i.e. looking at involving the MoH in longer-term programming from the start. It was envisaged that this would not only establish a much needed service during 'normal' times, but would also provide a capacity base from which services could be rapidly scaled-up at times of food crisis. Programming that viewed sustainability as the primary objective necessarily required that the thinking move away from traditional emergency dominated approaches, to one of partnership. In doing so, the nature of the dialogue between the partners was the most crucial element in defining the relationship dynamics that in turn determined programme success/failure. N-CMAM developed partnerships with:

- The MoH.* Formal 'Memoranda of Understanding' (MoU) were regularly signed between the MoH/Regional Health Bureau (RHB) and CONCERN in the four main regions. These MoUs proved to be very important documents, as they transparently outlined roles, responsibilities and expectations of each of the partners. In particular, they described CONCERN's role as that of technical assistance, rather than that of direct implementation. The MoUs also directed the expansion of services within the regions according to the needs and interests of the MoH.
- UNICEF.* UNICEF is mandated to support government health services for management of SAM. They have acted as centralised Ready to Use Therapeutic Food (RUTF) procurers and suppliers to the RHBs.
- Valid International.* As the originator of CMAM (originally Community Therapeutic Care (CTC)) approach and long standing technical partner of CONCERN. Co-founder of the N-CMAM programme.
- Other NGOs.* Through coordination fora, provision of training and support for CMAM-related activities, on request.

This partnership approach was in line with CONCERN's global strategy, which reflects a move away from direct implementation towards working through local partners (for N-CMAM, the lead partner being the MoH).

Ownership, Commitment, Integration = Sustainability

Several words can be used to describe processes associated with sustainability: integration, ownership, commitment, all of which can be hard to define and are prone to subjectivity. It is important to note that these terms often mean different things to different people in different contexts. Children suffering from SAM is an emotive subject, undoubtedly due to the elevated endemic levels seen in countries such as Ethiopia, and its associated high mortality rate if left untreated (or poorly treated). As a result, views on the most appropriate strategies for treatment and acceptable standards of programme quality can be somewhat contentious.

The term 'ownership' became something of a mantra for the N-CMAM programme, with the understanding that "ownership equals internalisation, i.e. is self-maintaining".² Experience has also identified that the term 'commitment' is often the single most important element that determines whether OTP services can be successfully established, and whether they will continue on or not. However, even if commitment is high at OTP service delivery level (health centre or health post), each part of the health system has to be functioning on the most basic level, in order for the service to be successful. For example, if the logistic system is poorly functioning resulting in RUTF stock-outs, the OTP service will collapse; 'no product, no programme' describes it well. So commitment/ownership, while the key element, is not enough on its own. It is important to note that this is not unique to SAM programming. The attempted integration of a new health/nutrition initiatives into routine health delivery require that the system is functioning at least at moderate level, in order to succeed.

Table 1 summarises the timeline of key events in the evolution of acute malnutrition management in Ethiopia. Table 2 summarises the timeline in N-CMAM development.

N-CMAM Programme Goal

The goal of the N-CMAM programme is to reduce morbidity and mortality associated with SAM in Ethiopia, through supporting the MoH to scale-up quality CMAM services (particularly OTP) within the routine health delivery system; that continues to function over the longer-term and can therefore be rapidly expanded during times of food insecurity.

N-CMAM activities and the 'minimal support' package

In addition to the support given to CONCERN's emergency interventions (see Box 3), the N-

² Handy, C. Understanding Organisations (4th Ed) 1999. Penguin.

³ Ethiopian DHS 2005

⁴ While the quality of EOS screening figures was not assured, it was the first time that screening for malnutrition had been conducted at-scale; the very high absolute numbers of children <5 years with acute malnutrition provided policy-makers with a powerful advocacy tool.

⁵ The NNP has been designed to translate the National Nutrition Strategy into a 10-year action plan in two phases; the first phase is for 5-years 2008–2013, at an estimated cost of \$370 million.

⁶ Chamois, S. 'Decentralisation of out-patient management of severe malnutrition in Ethiopia', Field Exchange, ENN, July 2009, Issue 36.

Table 2: N-CMAM programme timeline

July 2005	Grant awarded from the US Office for Disaster Assistance (OFDA) to pilot an integrated partnership approach with the MoH for scale-up of SAM services. Grant to CONCERN, sub-grant to Valid International – project implemented together in light of synergistic relationship. Valid providing the ideas/innovation, CONCERN providing the historical base and well-established systems that allowed for programming in Ethiopia. The programme was implemented jointly for two years, after which CONCERN continued alone.
Oct 2005	Meeting with UNICEF with informal partnership formed. UNICEF to continue scaling-up support for the MoH to establish in-patient services (with some support for OTP). CONCERN/Valid to focus on supporting the MoH to establish OTP in selected operational areas.
2006/7	TFP working group formed (MoH, UNICEF, CONCERN, and Valid International). Development of 'TFP strategy paper', which outlined the strategies and guiding principles of national scale-up of SAM treatment services. It included a summary of key elements that must be in place in order to realise the scale-up of quality SAM services, such as training, reporting, supervision, community mobilisation, etc.
2005 – early 2007	Early stage of the programme, with considerable time spent in building-up relationships with key MoH figures in all four regions. OTP services commenced first in five health centres in Jimma Zone, Oromia region. Slowly increasing number of OTPs established at health centre level (from 0 to 37 HCs in 21 woredas). Through learning and experience, the 'minimal support' technical package was developed (see later), with time/energy also devoted to reviewing, analysing and developing CONCERN's internal CMAM strategy for Ethiopia.
2006 – 7	In collaboration with UNICEF, substantial support given to the MoH in developing the revised national SAM guidelines, which included OTP and community mobilisation activities.
May 2007 – January 2010	Second grant from OFDA enabled rapid scale-up of CMAM services. The N-CMAM programme began to gain influence, partly because of scale-up (from 37 to 187 health centres/posts across 87 woredas) as bigger programmes have louder voices, but also partly due to increasing engagement in what was going on in-country, e.g. input into the revision of national curricula for nutrition, providing the training manual that was adapted for the HEWs for OTP decentralisation, etc.
2008 – 9	Considerable scale-up of CONCERN's emergency nutrition activities (see Box 3). Support given from N-CMAM programme such as budget for supplies, trainings, vehicles, personnel, etc.

CMAM team assisted the MoH in selected areas of the four main regions (Oromia, Tigray, SNNP and Amhara) to establish and maintain OTP services. As UNICEF had been supporting the set-up and monitoring of in-patient units (TFUs or SCs) since 2003, the N-CMAM programme focused mostly on OTP service provision and community mobilisation. However, where gaps existed, the team also supported the set-up of in-patient services. From 2007 onwards, expansion of services was to areas identified by government authorities as most in need, usually determined by early warning data, identification as 'priority hot-spot area'⁷ and EOS screening data.

The 'minimal support' package was developed in consideration of the most important areas where the MoH needed support, to establish and then maintain quality services. The approach used a process of incremental capacity building to ensure that the ownership of the programme was always firmly in the hands of the MoH. The minimal support package included the following activities for set-up of services and provision of ongoing support:

- OTP theoretical and in-patient SAM case management trainings, particularly at start-up of services
- Regular on-the job/ refresher trainings
- ToT trainings

- Joint supportive supervision and follow-up
- Community mobilisation activities
- Conducting pre- and post-workshop assessments
- Facilitation of regular zonal and regional dissemination workshops/ review meetings
- Facilitation of experience exchange visits
- In-patient training and support was provided on an ad hoc basis, when requested by the MoH, UNICEF or other INGOs.

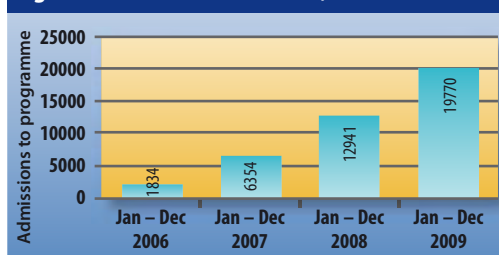
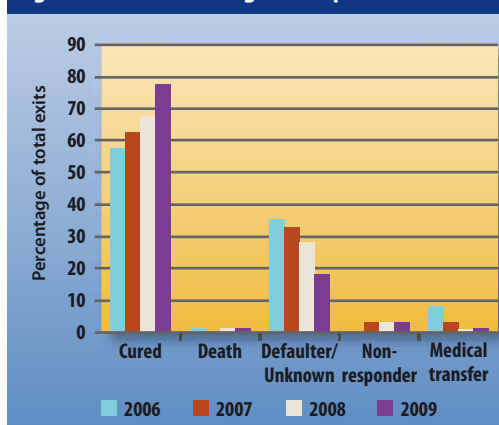
It is important to note that the physical inputs in the minimal support package described above do not capture the relationship dynamics that must also be attended to, if ownership is to be achieved.

Community mobilisation and additional programme activities

Community mobilisation was a strong feature of the programme, with the focus on a more incremental version of community activation than the 'campaign-style' mass screening mobilisation common for emergency programmes. CONCERN's social development staff in consultation with the HEWs and other health staff utilised a strategy in 'new' CMAM areas as follows;

- 1) *Mapping*: identifying key actors and identifying community structures already in existence, particularly those active in health/nutrition
- 2) *Discussing*: commencing a public health dialogue with identified volunteers, including realistic time-frames of availability to screen for SAM and conduct home-visits for follow-up.
- 3) *Training*: 1 day training including sessions on underlying causes of malnutrition, use of MUAC and importance of defaulter follow-up.

As the focus of the N-CMAM programme was on innovation and learning, programme activities have included conducting a number of operational studies. These include a defaulter tracing study regular social development reviews and strategies, health system review, cost-analysis and effectiveness and investigation into the role of traditional practitioners in identification and referral of SAM. Case studies

Figure 1: N-CMAM admissions, 2006-2009**Figure 2: N-CMAM Programme performance**

and examples of 'best-practice' were collected, along with programme learning reviews and evaluations.

At the request of the MoH, N-CMAM activities also included ToT in SAM case management, participation in multi-agency food security/post-harvest needs assessments, support for EOS screening campaigns, support for additional monitoring & evaluation/ supervision activities, extensive attendance at national and regional coordination meetings and involvement in national initiatives, such as the recent Landscape Analysis conducted in Ethiopia.

The N-CMAM team worked alongside CONCERN's health and nutrition unit to conduct numerous assessments. From 2008 to 2010, a total of 25 standard nutrition surveys and 10 rapid nutrition assessments were conducted, mainly to inform phase-in or phase-out of emergency nutrition activities. Additionally nine coverage surveys using centric systematic area sampling (CSAS) methodology were conducted.

Results/achievements

The N-CMAM team relied on reporting channels of the MoH which uses a particular reporting format (developed by UNICEF) that in turn feeds into the centralised database for TFP reporting which is held at Addis Ababa level. However, as these reports are not yet integrated into the regular Health Management Information System (HMIS) reporting system of the MoH, TFP monthly reports were sometimes incomplete and were rarely sent in a timely fashion to regional level. It was often necessary, through a mixture of supervisory visits and reminder telephone calls for N-CMAM staff to collect 'missing' reports. The reporting rate is therefore estimated to be between 75-90% for the statistics presented here.

From January 2006 to December 2009, across the four main regions, 40,899 children with SAM were admitted to OTP services estab-

⁷ The Emergency Nutrition Coordination Unit (ENCUC) produces a 'hot-spot matrix' identifying priority areas in need of nutritional support, which is revised every six months.

⁸ The programme continues on into 2010 but full results will not be available until early 2011.



Emily Mates/Concern Ethiopia

Table 3: N-CMAM programme performance data Jan 2006 – Dec 2010, four regions

Year	Jan-Dec 2006	Jan-Dec 2007	Jan-Dec 2008	Jan-Dec 2009
Total number of discharges (n)	1,343	4,463	10,171	15,496
Cured (%)	56	61	66.9	77.3
Death (%)	1	0.9	1.2	1.1
Unknown (%) ¹⁰	0	11.6	15.1	9.9
Defaulter (%)	35.5	20.3	12.3	7.4
Non-responder (%)	0.5	3.2	3.1	3.2
Medical transfer (%)	7.0	3.0	1.4	1.1
	100%	100%	100%	100%

lished at health centres, see Figure 1.⁸ A steady increase in rate of admissions was observed, with the expansion of OTP services within health centres across the four regions.⁹ Rising admissions could also be due to the higher levels of food insecurity seen in parts of the country where N-CMAM was operational during 2008/9. Table 3 and Figure 2 describe N-CMAM programme performance, with a total of 31,480 discharges from January 2006 to December 2009.

Table 3 and Figure 2 describe N-CMAM programme performance, with a total of 31,480 discharges from January 2006 to December 2009. Table 3 and Figure 2 demonstrate very encouraging programme results. The recovery rate steadily improved from 56% in 2006 to 77.3% in 2009, thus exceeding International Sphere recommendations for >75% recovery rate.¹¹ Most of these gains in recovery are a result of declining defaulter/unknown rates and to some degree, the rate of medical transfer. The trend of improved recovery rates clearly demonstrates the MoH becoming more confident in their ability to offer quality services, with minimum technical support. It also suggests children are less likely to default, with improved access to services and increasing satisfaction with the service.

While an overall declining trend of defaulter and unknown rates was seen, they remained high. This is largely due to the challenging topography in many areas of the country and logistical problems of ensuring that all health facilities had an uninterrupted supply chain of RUTF. The mortality rate was consistently low. However as the number of unknown cases remains high, it is possible that some mortality occurred within this category. As expected, transfer rates to in-patient care reduced as

Table 4: Training data January 2006 – December 2009, four regions

Year	Health professionals	Health Extension Workers	HEW Supervisors ¹⁶	VCHW
2006	108	42	0	565
2007	380	359	0	1,339
2008	547	1,236	113	1,965
2009	534	1,593	284	2,161
TOTAL	1569	3230	397	6030

access to services increased. Where children were identified earlier in their disease process, they generally had fewer medical complications and may not have reached the stage where they lost their appetite. This meant that burden on in-patient services was further reduced and minimised family and household disruption.

Coverage

One of the major principles of CMAM is ‘increased coverage’ of services. During 2010, four coverage surveys using the CSAS methodology were conducted to assess coverage of the national TFP roll-out in the four main regions.¹² Two of the surveys were conducted in areas that had received N-CMAM support. The results were impressive, particularly for period coverage which exceeded the Sphere target of > 50% in a rural area.¹³ Point coverage estimates were lower, highlighting the importance of continued efforts in community mobilisation (see above for a description of community mobilisation activities).

During 2009/10, N-CMAM, in collaboration with Tigray RHB, piloted a new methodology for assessing coverage of OTP services. This ‘Semi Qualitative Evaluation of Access and Coverage’ (SQUEAC) methodology was developed as a less resource-intensive (and therefore more ‘MoH friendly’) way of evaluating programme coverage and identifying barriers to service access and uptake.¹⁴ Between October 2008 and April 2010, three rounds of SQUEAC were implemented, with coverage steadily improving with each round (half of health facilities reaching >50% by the third round). Encouragingly, Tigray RHB not only took the lead by the third round, they also supplied the budget for the survey, with CONCERN providing technical assistance only.¹⁵

Training of MoH health professionals and community members

Table 4 outlines the focus that was placed on training of health staff. It is now well-known that OTP success is contingent on a responsive

Table 5: Summary of N-CMAM regional review meetings/workshops by year

Year	No. of workshops	No. of regions covered	Total number of participants
2007	5	4 (SNNP, Oromia, Amhara, Tigray)	262
2008 ¹⁷	3	2 (SNNP, Oromia)	92
2009	11	4 (SNNP, Oromia, Amhara, Tigray)	897
TOTAL	19		1251

and well-informed community, considerable effort and dedicated resources were therefore also employed for Community Mobilisation (CM) training, using Volunteer Community Health Workers (VCHWs). To ensure trainings were conducted in a standardised manner, N-CMAM staff developed a training manual for the management of SAM during 2006-7, according to National Guidelines. The version has been improved throughout the programme’s life cycle, with CONCERN taking a major role in the development of OTP training materials used at national level.

Workshops

By 2006, CMAM/CTC was still relatively new to Ethiopia and had limited coverage, so a two-day national workshop was hosted in Addis Ababa to bring together the MoH, UN agencies, donors and NGOs. The objective was to discuss

⁹ Figures presented here are for health centres as ‘roll out’ to health post occurred gradually during the year 2009 in N-CMAM areas. From 2010 onwards, programme figures will be collected from health posts.
¹⁰ During the 2007 revision of the national SAM guidelines, defaulters were divided into ‘unknown’ i.e. unconfirmed defaulters and ‘defaulter’ i.e. those defaulters confirmed through a home visit. The values need to be added together for the total default rate.
¹¹ The Sphere project recommends: recovery > 75%, death <10%, default < 15%, coverage > 50% (in rural areas)
¹² The CSAS assessments were coordinated by the Ethiopian Health and Nutrition Research Institute (EHNRI) and the MoH. CONCERN provided the technical support for implementation of the surveys, which were funded by UNICEF.
¹³ Mareko woreda, Gurage zone, SNNP Region: OTP period coverage 60.9% (95% CI: 52.8%-68.6%) and point coverage 37.8% (95% CI: 28.2%-48.1%). Taytaw Machew woreda, Tigray Region: OTP period coverage 56.2% (95% CI: 44.1% - 67.8%) and OTP point coverage 27.3% (95% CI: 15.0% - 42.8%).
¹⁴ Myatt, M. ‘SQUEAC: Low resource method to evaluate access and coverage of programmes’, Field Exchange, ENN, June 2008, Issue 33.
¹⁵ Schofield, L, et al. ‘SQUEAC in routine monitoring of CMAM programme coverage in Ethiopia’. Field Exchange, ENN, March 2010, Issue 38.
¹⁶ Recognising that the new cadre of HEWs were in need of supervision, the MoH trained and deployed HEW supervisors from 2008 onwards.
¹⁷ Fewer workshops were conducted during 2008 as many of the N-CMAM staffs were involved in Concern’s scale-up of emergency programming (see Box 3)



Shemsiya (2 years) failing the RUTF appetite test

Emily Mates/Concern Ethiopia



Emily Mates/Concern Ethiopia



Shemsiya with her family

Emily Mates/Concern Ethiopia

the current status of therapeutic care in Ethiopia and formulate plans for increasing coverage of quality services. From 2007, the N-CMAM team recognised that the facilitation of workshops/review meetings could be a valuable tool for improving the quality of services. MoH staff involved in OTP implementation were brought together in the same room as key decision makers from regional, zonal and federal level MoH, to discuss the challenges faced and devise appropriate solutions (Table 5). These workshops (while expensive and time-consuming to prepare for and conduct) provided excellent opportunities both for developing co-ordination and encouraging accountability among partners. Additionally, 'phasing-out workshops' (after emergency nutrition interventions, see Box 3) proved important fora to reinforce the understanding of roles and responsibilities, including the re-design of action plans for future activities when OTP was transferred back from more intensive 'emergency' level support provided by CONCERN to full MoH management.

Experience-sharing visits

A learning and information-exchange visit by Ethiopian MoH officials to Malawi was facilitated during 2006, with representatives from UNICEF joining the trip. The goal was to learn and share lessons on the treatment of SAM as part of routine health services. The visit provided an excellent opportunity for Ethiopia staff to learn from Malawi's recent national scale-up experience, hearing first-hand about the successes and challenges that the Malawian MoH had faced.

From 2008 onwards, a strategy of experience-sharing visits for MoH staff to other regions within country was employed. Six visits were organised with a total of 181 MoH staff travelling. Health workers who were performing well were invited to travel to areas in need of encouragement, to improve programme performance. The success of these visits hinged on the fact that advice was being given by the MoH to the MoH – not from CONCERN – which gave added weight to recommendations of how to improve service delivery. The visits appeared to act as powerful motivational tools, with potential for longer-term impact.

Discussion

While the programme was always results orientated, it was viewed through the lens of public health. This focus enabled it to keep going through the early years of low recovery rates (only 56% in 2006), in the belief that if services were incrementally established at-scale, improvements in service quality could follow. This was as long as the MoH was provided with sufficient, appropriate and well-targeted support.

At present, the only benchmarks for SAM treatment programmes are provided through the Sphere Project. While reaching these recommendations should always be the aim of the programme, it must be remembered that they have evolved from humanitarian emergency programmes that are generally implemented by well-resourced INGOs. It could be useful if suitable benchmarks for MoH-led national scale-up programmes that provide appropriate reference points for programme quality, especially during the early years of implementation were developed.

A number of key factors/processes, listed below, promoted an enabling environment within which the N-CMAM programme could achieve its objectives.

- a) Continuous and sufficient funding from July 2005 to date, through a series of grants from OFDA and CONCERN-sourced funding, which:
 - Allowed for programme scale-up and continuation, with the ability to deliver on commitments.
 - Enabled regular processes of learning, monitoring and evaluation, with budget allocated for operational studies and innovative programming approaches.
 - Offered dedicated budget for senior staff and an expanded team at capital level that enabled rapid response to requests for technical assistance from partners (MoH, UNICEF, other NGOs), attendance at a wealth of coordination fora and for staff to take an active role in policy developments.
 - Assisted the scale-up to emergency programming, where required (see Box 3).
- b) Strong focus on training of the N-CMAM team in how to support partner staff, rather than undertaking direct implementation. Building the capacity of CONCERN's partner required the team to deliver support from the sidelines, often a more difficult task than direct implementation.
- c) Strong and continued focus on community mobilisation, with dedicated Social Development staff. This helped to create the 'demand driven' version of OTP, whereby the rapid and visible recovery of children acts as a profound motivational force for parents, health workers and the wider community.¹⁸
- d) Initial targeting of districts that had experienced limited INGO support, in an attempt to avoid areas where dependence on NGOs for nutrition-related programming was highest. Additionally, CONCERN invoked a principle of not having a full-time presence in operational areas. Instead, CONCERN had a base in the capital that could provide support and dialogue with the woreda and Regional MoH, but no permanent presence.
- e) The MoUs that were regularly signed with RHBs supplied the all-important official authentication for programmatic aims and objectives.

Challenges

During programme implementation, a number of challenges were experienced. Many of them were common to overburdened health systems,

but some were particularly accentuated with CMAM.

Programme specific challenges

Transport continues to be a major challenge for the MoH across this vast country. Where vehicles exist, they are often in need of maintenance and lack budget for fuel. OTP is a logistically-heavy service modality due to the bulky product (RUTF). Ensuring sufficient and adequate storage space also presents major difficulties. Additionally, the service is not a 'one off' – caregivers need to come back each week for eight weeks on average, requiring the OTP to have regular, uninterrupted supplies to ensure successful outcomes.

Facilitation of sufficient and adequate supervision at-scale was problematic, especially considering the transport challenges described above. While the supervisory visits were always well appreciated by health staff, due to many competing commitments, it was not easy for over-burdened MoH supervisory staff to make enough time for visits to health facilities. A standard supervision checklist for OTP was developed during the programme (in collaboration with UNICEF and the MoH), and is currently being integrated within the routine health supervision system.

Collection and collation of programme statistics was a major challenge. The data presented above is only from health centres. Since the national 'roll-out' of TFP (2008 onwards) and the decentralisation of OTP services to health post level, staff providing regular and accurate reporting face many additional hurdles.

High staff turnover within the MoH was the primary obstacle to ongoing knowledge retention at health facilities, resulting in untrained staff often found implementing OTP. Focal persons for nutrition to co-ordinate and monitor activities at regional, zonal and district level were appointed. However, the high rate of staff turnover meant that it was important to involve all members of the health team from the start, to minimise the risk of the programme collapsing if one person left.

Routine antibiotic treatment was mostly not available at the health facilities as they are supplied through a delivery system that is different RUTF supply.

¹⁸ 'Temporal Integration' Demand driven CTC. Steve Collins, Emergency Nutrition Network (ENN) Special Supplement Series, No. 2, November 2004.



Welcome message by Ato Yohannes, the Deputy Head of Tigray RHB.

Community mobilisation mechanisms were not always clear and readily available for use, resulting in a parallel system needing to be set-up (although the programme collaborated with whatever mechanisms did exist in the community). The UNICEF-supported Community Based Nutrition (CBN) programme now presents an excellent opportunity to integrate SAM screening into the growth monitoring activities carried out by VCHPs, but the modalities of this have yet to be agreed.

Challenges in the environment

Integration of scaled-up OTP as part of routine health delivery provides many challenges for an overburdened and under-resourced health system, including the time taken to actually treat the children, attendance at trainings, reporting, ordering, transport and storage of supplies, etc.

Competing priorities within the health system are also a challenge, since many health/HIV related initiatives are being ‘rolled out’ at the same time in Ethiopia. While improvements in health services are obviously welcome, it does exert pressure, e.g. attendance at trainings can result in health staffs spending considerable time away from facilities. Additionally ‘per-diem’ rates risk becoming competitive, with initiatives that pay higher rates appearing more attractive.

Lessons learned

The length of time that the process of integration requires on many levels. Continual dialogue and interaction with key actors is needed to ensure objectives are being met and opportunities capitalised on.

Development of acceptance at community level. While RUTF offers ‘instant’ solutions (sometimes described as the ‘steroid treatment’ for the dramatic results), understanding by the community of the causes of malnutrition and appropriate health seeking behaviours to treat and prevent it, takes a much longer time to mature.

The importance of using both formal and informal channels of communication and networking to muster influence. As a relatively small NGO, we (unsurprisingly) had limited access to key decision makers. It was important therefore to utilise all available openings in order to advocate for OTP uptake and decentralisation. Informal channels proved remarkably effective in gaining access to important actors of the policy making process.

Personality driven gains. The effect of having key people in key places in the MoH, e.g. a motivated zonal health head, should not be underestimated. Having certain individuals in key advocacy roles is also important, for example, the previous country representative of UNICEF was a nutritionist. While the reliance on key people (or one key person in an area) was undoubtedly a high risk strategy, there was often little alternative. Additionally, while the person/s was in place, opportunities could present themselves, providing unexpected advantages.

Sufficient and adequate supervision is difficult to achieve on a large scale. Joint supervision is essential and must be insisted upon to achieve maximum effect. Improvement in service provision is only likely if the health workers are

convinced that more senior staff are interested enough in programme results. Initially it might be necessary to conduct additional supervision to ensure service quality (especially when the service is new). However, integration into routine health service supervision must be aimed for if sustainability is to be achieved.

N-CMAM Programme limitations

Although a number of ‘strategy meetings’ were held, a strategy as such was not developed. This was partly due to the short-term funding cycles of the programme that presented some barriers for the articulation of a strategic vision. Longer-term funding for N-CMAM proved elusive, despite attempts to secure it.

While the N-CMAM is a much more cost-effective version of OTP than ‘usual’ NGO supported versions, the programme remains relatively expensive. Considerable budget is required for trainings, cars for supervision, staff salaries, etc.

N-CMAM prioritised attention on OTP over the establishment of in-patient services. This decision was taken for two reasons. First, existing UNICEF support for in-patient services (described above) and second, with limited CONCERN capacity, the focus (as public health advocates) should be on the 95% of children who could be treated in OTP. It is acknowledged that alternate views exist, that might consider N-CMAM should have prioritised in-patient care also.

There were a number of missed opportunities. For example, linkages with preventative nutrition interventions were very limited, as were linkages with hygiene and other sanitation activities. Health education at the OTP was irregular and could be sub-optimal.

While the programme’s aims and objectives have always been to support the MoH, it is acknowledged that this particular version of N-CMAM remains NGO-driven, where sustainability after phase-out is not guaranteed.

Conclusions

The N-CMAM programme started from small beginnings and grew into a relatively large and successful intervention. It capitalised on the national and international momentum that was building around nutrition issues. It contributed to the national roll-out of SAM treatment services that is now underway in Ethiopia, by demonstrating that the MoH were well able to manage and implement OTP services of increasing quality at-scale. It reflected that the process might take some time and considerable expense.

The national roll-out of the TFP has been subject to considerable effort from the MoH (supported by UNICEF and other partners). To date, approximately 30% of Ethiopia’s health facilities are offering OTP services, an impressive achievement over a short period of time. The challenge now will be how to maintain quality of the OTP, when implemented at scale. The difficulties of adequate monitoring, supervision and reporting are enhanced, as is the logistic burden for the health service. Strategic planning, along with strong leadership from the MoH will be required, in order that the TFP roll-out can be strengthened and maintained.

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Box 3: Emergency programming

During the food crisis of 2008/9, CONCERN scaled-up to emergency nutrition response, implementing the ‘full’ CMAM package (that included supplementary feeding support, OTP and SC set-up) in 10 woredas. In addition, blanket supplementary feeding distributions were implemented in selected woredas of SNNP, Amhara, Tigray and Oromia regions, in attempts to contain rapidly deteriorating situations.

Total numbers of beneficiaries treated through the programmes during 2008/9:

Intervention	Target group	Total number of beneficiaries
Blanket supplementary feeding (SF) (1 month SF ration provided)	Children 6-59 months	122,361
	Pregnant (3rd trimester) and lactating women (infant <6 months)	20,989
Targeted SFP	MAM children 6-59 months	54,943
	MAM pregnant (3rd trimester) and lactating women (infant < 6 months)	30,069
OTP	11	11,689
TOTAL	19	240,051

The decision to scale-up to the emergency response was made either due to rising admissions to OTP (in areas that were being supported by the N-CMAM programme), or when the results of rapid nutrition assessments or standard nutrition surveys indicated a worsening situation. Decisions for phase-out of emergency interventions were only made once results of standard nutrition surveys indicated that the vulnerable population had sufficiently

‘recovered’ (according to the Ethiopian Disaster Prevention and Preparedness Agency (DPPA) ‘classification of malnutrition’).

Programmatic results mostly reached Sphere recommendations, although some areas experienced poor recovery rates (see field article on Dessie Zuria in this issue, ‘The history of nutrition in Dessie Zuria’).

Along with 25 standard nutrition surveys and 10 Rapid Nutrition Assessments, a total of five CSAS coverage surveys to monitor the quality and impact of these selective feeding programmes were conducted. CONCERN placed a strong and continued emphasis on coverage assessments, due to the importance of measuring and quantifying the levels of service uptake by the target population. The reasons why some areas had high uptake and others low could be understood and lessons learned from both scenarios. Coverage results well exceeded the Sphere recommendations (>50% coverage in a rural area) in all but one assessment (where OTP point coverage was estimated at 46.4%, Dessie Zuria woreda October 2008).

A key challenge for CONCERN’s emergency interventions was how to scale-up and then, crucially, scale-down again, without undermining the work that had been previously done through the N-CMAM capacity building approach. The period of transition back to N-CMAM’s ‘minimal support’ approach could be interesting, as partners were required to realign expectations of assistance once the acute emergency period was over. Phasing-out workshops helped to reinforce the understanding of roles and responsibilities during the transition period, where OTP and SC services were again fully managed by the MoH. Learning reviews were also conducted at the end of each emergency intervention, in order to maximise learning for future interventions.

The Ethiopian Orthodox Church Development and Inter-Church Aid Commission

By Gebreselassie Atsbahha



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The author would like to acknowledge Alive and Thrive, Ethiopia for the efforts it is making to alleviate malnutrition and the problems associated in Ethiopia. The leadership quality of Dr Teweldebirhan Hailu, senior country director of the organisation, as well as the harmony and commitment of the staff is really appreciated.



An EOC-DICAC team surveying a mosquito breeding sites in Amhara region, Guangua district

EOC-DICAC, Ethiopia, 2009

The Ethiopia Orthodox Church (EOC) is one of the oldest churches in the world. The church is also the largest denomination in Ethiopia with more than 40 million followers, which is approximately 40-50% of the total population. One can observe the impacts of EOC in almost all aspects of the country's history and present image and the EOC continues to play an important role in the social, economic, cultural, educational and political life of the country.

EOC-DICAC objectives

In order to respond to both the emergency and longer term needs of the population, the church established a development wing in 1972, the Ethiopian Orthodox Church Development and Inter-Church Aid Commission (EOC-DICAC). The EOC-DICAC is one of a few active ecumenical development organisations in the country. It is engaged primarily with the objective "to help disadvantaged communities attain self reliance by tackling the root causes of poverty, drought, conflict and HIV/AIDS by promoting a sustainable development programmes". The EOC-DICAC works within the regulations and laws governing non-governmental organisations (NGOs). The Vision of EOC-DICAC is to help create a just society in which everyone has access to the basic necessities of life.

EOC-DICAC activities

To achieve its objective, EOC-DICAC is involved in the following major areas of activity:

- Providing emergency and humanitarian assistance
- Implementing rural development programmes
- Building local capacities to implement project activities for poverty reduction
- Assisting vulnerable groups such as refugees, returnees and displaced people
- Supporting the prevention and control of HIV/AIDS and related nutrition needs
- Training/education to ensure equity and promote optimal use of natural resources.

Since its establishment, the EOC-DICAC has implemented many relief and development projects. By mid-2010, the EOC-DICAC was implementing more than thirty projects in different parts of the country covering integrated rural development, water supply and sanitation, relief and rehabilitation, HIV/AIDS

prevention and control projects and refugee and returnee programmes.

The EOC-DICAC has more than 20 US and European based partners and has an annual budget of around US \$ 30 million. The main donors include (but are not limited to) UNHCR, EU, UNICEF, UNDP, Christian Aid, Dan Church Aid, ACT-Forum, Water Aid, Intermon-Oxfam, USAID and World Vision. The EOC-DICAC also works closely with other Church based and Church affiliated organisations.

Emergency response

During periods of drought, internal conflict and other emergency situations, the EOC-DICAC supports the responses arising from the government's national emergency appeals. The EOC-DICAC has the capacity to be involved in life saving interventions through the provision of food aid, farm tools, seeds, small animals/ruminants, supply of water and other basic life saving inputs. Priority is given to supplementary feeding of children and the provision of a monthly take home ration (typically 4.5kg per month) to other vulnerable groups, such as the elderly and the sick.

EOC-DICAC also supports environmental rehabilitation activities in some areas, such as area closures, soil and water conservation structures, seedling production and distribution. Apart from this, the commission has tried to expedite crop production, livestock development activities and introduce vegetables and fruit trees. By so doing, these activities aim to have a role in improving the nutritional status of children and improve dietary diversity of the target families.

In coordination with District Health Officers, orientation and awareness creation on HIV transmission, protection mechanisms and the use of voluntary counselling and HIV testing is also a key activity. Pilot projects on HIV/AIDS orphan care at parish churches have also shown promising success.

To date, EOC-DICAC has made great strides in its service to the disadvantaged populations of Ethiopian society and its programmes have strengthened communities to better sustain themselves during periods of extreme hardship. EOC-DICAC has succeeded in community mobilisation to fight against the root causes of poverty, HIV/AIDS pandemic

and environmental degradation. The organisation has also built schools and health posts to create access for education opportunities and health services for thousands of rural family members in the country.

The water supply scheme construction projects create opportunities for millions of Ethiopian people to get potable water, reduce the workload of women and children, minimise the prevalence of water borne diseases and increased awareness of hygiene and sanitation. Rural roads constructed by EOC-DICAC have also contributed to the mobility of rural communities and increased their accessibility to the nearest towns and markets.

Working with women

EOC-DICAC is very concerned about women's participation in development and makes sure that the following issues are addressed right from the project design up to the phase-out of projects:

- Encourages women to participate at all levels of the project cycle and ensures gender sensitivity.
- Ensures that interventions consider women in equal status with men.
- Built partnership and strategic alliance with local government and civil society organisations (CSOs) to promote gender mainstreaming in development projects at all levels.
- Advocates against violence in terms of person trafficking, as well as female genital mutilation and other harmful traditional practices.
- Intervene in women capacity building so as to enable them acquire technical skills.
- Promotes equal opportunities for women and men in recruitment, staff development and promotion.

The basis for the emergency and development initiatives of EOC-DICAC is the fundamental doctrine of the Church/Bible "Everyone who has gives to those in need". The initiation of the whole effort put by the Church so far has emerged from its doctrine or internal spiritual belief that urges everyone to help those who are relatively poor in the society.

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By Jutta Neitzel

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The findings, interpretations, and conclusions in this article are those of the author. They do not necessarily represent the views of WFP or the country they represent and should not be attributed to them.

The Targeted Supplementary Feeding Programme (TSF)

The Enhanced Outreach Strategy (EOS)/Targeted Supplementary Food (TSF) for Child Survival is a joint programme under the United Nations Development Assistance Framework (UNDAF, 2007-2011) with the Government of Ethiopia. UNICEF is supporting the Ministry of Health (MoH) to conduct twice yearly campaigns of vitamin A supplementation and deworming to every child under five in the country¹. In TSF selected districts, the EOS is also screening malnutrition of all children under five years and pregnant and lactating women.² WFP is supporting the Disaster Risk Management and Food Security Sector (DRMFSS) of the Ministry of Agriculture and Rural Development (MOARD) to deliver two supplementary rations of Corn Soya Blend (CSB) and oil to children and women identified with acute malnutrition during the screening.³

Overview of EOS/TSF

The Targeted Supplementary Feeding programme aims to rehabilitate children under five years old as well as pregnant and lactating women (PLW) identified as acutely malnourished during EOS screenings in TSF selected districts. The programme also aims to reduce the risk of child mortality and through an awareness-raising component, aspires to enhance the basic nutrition knowledge of mothers and other women in communities targeted by EOS/TSF.

Ethiopia is currently among the countries with the highest rates of child mortality and malnutrition in the world. The various long-term strategies initiated by the Government of Ethiopia, such as the Productive Safety Net Programme (PSNP) or the Child Survival Strategy among others, started in 2004/5. It is anticipated that these programmes will take at least 5 to 10 years to have significant impact. The EOS/TSF was developed in 2004 as a 'stop-gap' measure to avoid additional millions of Ethiopian children from dying or becoming malnourished in the meantime. It was carefully designed to create a 'bridge' to the more sustainable and longer-term interventions like PSNP.

The TSF replaced the provision of blanket supplementary food rations alongside the general relief food distribution. The rationale for a more targeted approach was to better respond to the needs of malnourished individuals at a critical physical and mental development stage in their lives and to ensure better targeting than a blanket distribution.

More recently (2008), the National Nutrition Programme (NNP) was approved and provides the broader framework for developing community-based nutrition capacity in Ethiopia. The EOS is now being gradually phased-out and replaced by

quarterly Community Health Days (CHDs) organised and managed by the Health Extension Workers at kebele level. The TSF will be continued at kebele level until the rates of acute malnutrition are low enough to end the programme (i.e. until impact of preventive programmes such as community-based nutrition (CBN) is effective).

The EOS provides key Child Survival interventions to over 11 million children and 700,000 pregnant and lactating women every 6 months. The annual funding is US\$14 million.

The annual requirements of the TSF component, with its present coverage, are currently estimated at about US\$53 million, equivalent to 53,000 metric tonnes of fortified blended food and vegetable oil. These quantities respond to the needs of around one million individuals in 168 woredas in Afar, Amhara, Gambella, Oromia, Somali, SNNPR and Tigray regions. Initially, the programme covered 325 woredas, but due to soaring food prices as well as diminished donor support in early 2008, the programme had to be down-scaled. The initial 325 woredas were the chronically food insecure woredas identified by the Government of Ethiopia during the 2002/3 emergency. The criteria used to select the current 168 TSF woredas were:

- prevalence of moderate acute malnutrition (MAM) >10%
- classification as emergency hotspot woredas in 2006/7
- identification as a food insecure woreda during the December 2007 meher assessment to be a relief recipient in 2007
- not a PSNP woreda in 2007 and, for Oromia and SNNPR, whether the woreda was rolling out the national nutrition programme's CBN or not.

The current TSF woredas do not cover all the hotspot districts in the country. Therefore a special mechanism has been developed to undertake 'ad hoc' TSF distribution in hotspot woredas that are not TSF woredas.

Implementation and design

Every six months and with UNICEF support, Regional Health Bureaus organise Child Survival campaigns. Each district (woreda) that is not a TSF district forms one EOS team per sub-district (kebele) composed of one health worker and one health extension worker. These mobilise the community to come to the nearest health post on a specific day, called the EOS day. On this day, the EOS team will de-worm and supplement with

vitamin A all children under five years. On many occasions, Regional Health Bureaus take the opportunity to deliver other essential services such as measles and tetanus vaccinations, mosquito net distribution, HIV/AIDS prevention, iodine capsules distribution, etc.

In TSF districts, the EOS team is expanded with another two health staff, generally one health extension worker and one support staff, to undertake the screening of children, pregnant and lactating women. These health staff measure the Mid-Upper Arm Circumference (MUAC) of children under five years and check for bilateral oedema. Children and women eligible for TSF are registered in a book and given a TSF ration card. The registration book includes the serial number of the distribution card⁴. There are three carbon copies of the registration book, one for the Food Distribution Agent (FDA), one for the district Health Office and one for the district Disaster Prevention and Preparedness Office (DPPPO). The registration book is then kept by the FDAs. The three carbon copies allow supervisors and field monitors to verify that they are identical and were not manipulated. In addition to receiving the TSF ration, children identified with

¹ Vitamin A is supplemented to children 6-59 months old and deworming tablets are administered to children 2-5 years old.

² The following groups are screened for malnutrition: children 6-9 months old, visibly pregnant women and women breastfeeding a less than 6 month old infant

³ The following groups are eligible for TSF: Children with MUAC <12 cm and/or bilateral oedema and women with MUAC < 21 cm. One TSF ration is composed of 25 kg of CSB and 3 litres of oil for 3 months.

⁴ Ration cards have serial numbers and different colours at each screening round

⁵ Eligible for TFP: children with MUAC <11cm and/or bilateral oedema.

Table 1: Achieved coverage 2005-2009 (source: MTE Team)

	PRRO 10362.0		PRRO 10665.0		
Coverage	2005	2006	2007	2008	2009
No. regions	7	10	10	7	7
No. woredas	165	260	342	166	202
No. pregnant/lactating women (millions)	0.173	0.228	0.369	0.289	0.356
No. of children under five (millions)	0.301	0.484	0.783	0.615	0.756
Total no of beneficiaries (millions)	0.474	0.712	1.152	0.904	1.112

PRRO: Protracted Relief and Recovery Operation

severe acute malnutrition (SAM)⁵ are referred to the nearest Therapeutic Feeding Programme, if available.

During the EOS days, MoH supervisors and UNICEF field monitors undertake spot visits although number of sites visited is limited. In addition, post-EOS coverage surveys are regularly conducted by independent organisations. At Federal level, the Emergency Nutrition Coordination Unit (ENCU) checks screening data and informs the MoH, DRMFSS, UNICEF and WFP of any aberrant data.

The DPPO is responsible for compiling the data from the screening registration book and to request the appropriate amount of TSF food from the regional Disaster Prevention and Preparedness Bureau (DPPB). The DPPB is in charge of transportation and distribution of food to over 1,300 food distribution centres. The food is provided by WFP to all of the regional warehouses. All of the food transportation, distribution and administrative costs incurred by regional government are paid by WFP.

TSF distribution centres are selected through community participation and managed by FDAs (trained and paid females from respective communities)⁶. Once the food is received by the FDAs, the community is informed of the TSF distribution date. Beneficiaries come with a TSF ration card and collect the ration for 3 months. The food basket comprises two 3-monthly rations of 25 kg of Corn Soya Blend (CSB) and 3 litres of oil. The size of the ration has been set to compensate for intra-household sharing. FDAs also pass on four nutrition messages during the distribution. This includes instruction to minimise intra-household sharing and selling of the TSF ration.

At the food distribution stage, the DPPB is responsible for conducting regular food monitoring, complemented by WFP monitoring. Unfortunately, DPPB monitoring results are not regularly shared with partners. WFPs monitors and woreda health and DPPO focal points conduct spot check visits to ensure proper implementation and support to the FDAs. In 2009, through regular spot check visits, WFP monitors interviewed 2,369 beneficiaries in 111 woredas and visited 1,245 distribution centres. Nearly 500 centres were visited during distributions. The monitoring visits check on whether the distribution process is following procedures, including proper documentation in the registration books, registration cards, signboards, etc. Monitors also conduct beneficiary interviews 40 days after the food distribution. Beneficiary interviews enquire about food received and how it is used as well as obtain feedback on the distribution, knowledge about entitlement and nutrition awareness. Following each distribution, FDAs attend a post-distribution woreda review meeting to assess the distribution process and to discuss problems encountered with woreda health and DPPO focal points. Review meetings are conducted at district and zonal level to assess the overall EOS campaign performance, including the quality of the screening process.

WFP's approach verifies whether allocated TSF food is reaching beneficiaries identified through the EOS-TSF screening on a timely basis, and enables follow up at higher levels if need be. Commodity tracking will further benefit from the envisaged Food Management Improvement Project (FMIP). As the programme does not

regularly check on the improvement of the beneficiaries' nutritional status, WFP conducts an outcome survey once a year including data on recovery and mortality rates.

TSF achievements

The EOS service coverage has been consistently high (>90%) since its inception in 2004. A TSF outcome evaluation study⁷ was conducted in 2008. This study aimed to recruit children for a prospective cohort study in eight districts. Children were to be followed up at 1, 2, 3 and 6 months after enrolment in the TSF. At the time of the first follow-up visit, 973 children had received TSF food and were defined as intervention children, and 588 children had not received TSF food and were defined as control children. Overall, at all four follow-up visits, intervention children had greater change in weight-for-height z-scores from baseline than control children ($p < 0.001$). Weight gain differed much less between the two study groups and was not statistically significant, with the exception of the fourth follow-up visits. Changes in MUAC also did not differ greatly between the intervention and control group. However, at the first follow-up visit, the difference was marginally statistically significant ($p = 0.05$).

By the end of follow-up at 6 months, 49.2% of children with a low MUAC at baseline had a MUAC greater than or equal to 12 cm and were considered 'recovered', 47.6% had a MUAC less than 12 cm and were considered 'not recovered', 2.9% had died, and 0.3% did not pick up either the first or second distribution and were considered 'defaulted'.⁸ A similar study conducted in 2009 showed much better results, with a 68% recovery rate after three months food consumption.

In 2008, compliance with TSF programme recommendations was generally poor. The majority of children lived in households where the food was consumed faster than expected, ate less than one-half of the TSF food, or shared the food to some extent with other persons in the household. The authors of the study concluded that although the TSF programme has a beneficial effect on enrolled children, the effect seen was smaller than expected. Numerous reasons for this were suggested, including:

- A large proportion of children enrolled were not acutely malnourished.
- Poor compliance, i.e. food sharing (children living in households with increased food sharing tended to have less improvement in nutritional status than children in households with less food sharing).
- Increased food insecurity during the follow-up period so households may have increased TSF sharing.

A number of recommendations to address these findings were made that included:

The targeting needed to be improved to exclude more children who do not have acute malnutrition, e.g. ensuring better trained screeners, employing supervisory checks on a portion of EOS screening and implementing two stage screening.

The intra-household food sharing should be minimised by more research into reasons for sharing, better education of mothers and increasing TSF rations.

The TSF programme should be linked more closely to health centres to improve the referral

of severely malnourished children for more appropriate therapeutic care.

What challenges has the programme faced?

The programme has encountered a number of challenges. The absence of a national nutrition surveillance system and weight gain monitoring in between the six-monthly screenings prevents regular outcome monitoring. Current information on the nutrition situation is provided through woreda-level nutrition surveys, which are mostly conducted by international non-governmental organisations (NGOs) and cannot be extrapolated to regional or national levels. Such surveys are triggered if a serious nutrition problem has been signalled or as follow up to nutritional programmes.

The 2008 TSF outcome evaluation study observed an inclusion of many children who are actually not malnourished (46% of the surveyed group). However, the error of inclusion clustered very closely around the 12 cm cut off point. This error may be due to the poor quality of the screening (poor health extension workers skills/performance in the identification of malnutrition) or to external pressures to get additional or less beneficiaries on the TSF list. The screening methodology initially combined a pre-selection with MUAC measurement followed by the weight-for-height calculation and oedema checking. This method was complicated and highly prone to errors. In 2006, the methodology was simplified and a new MUAC tape, using a colour code and a poster were developed to increase the awareness and understanding of the children's entitlement to TSF and TFP.

Initially, screening was undertaken by community volunteers that were new and unqualified. The screening is now the responsibility of the health extension workers that are qualified and regularly trained on measuring techniques. Where ENCU cannot confirm the validity of screening data, WFP reduces the ration in line with the previously served numbers or individuals or withholds the food distribution till such a time as a field verification exercise can be undertaken. The withholding of food has however, only happened in a few instances.

ENCU's most recent guidance notes on the EOS screening data quality underscores the need to present credible screening results for effective TSF targeting with limited inclusion and exclusion errors. The note suggests more community mobilisation and sensitisation on EOS/TSF, training of anthropometric measurers, the reduction of the number of children to be screened per HEW per day (from 200-250 to 100 per day), more supervision, better quality data compilation at kebele, woredas and regional level, application of data quality check criteria including plausible maximum levels for moderate acute malnutrition (MAM) (15% of children screened) and SAM (3.2%) and a maximum ratio between SAM and MAM.

⁶ Currently 2,636 women FDAs are trained in the 168 woredas

⁷ Outcome evaluation study of the Targeted Supplementary Food (TSF) programme in Ethiopia. World Food Programme, Ethiopia, June 2009. Jutta Skau, MSc; Tefera Belachew, MD MSc, Tsinael Firma, MD; Bradley A. Woodruff, MD, MPH.

⁸ Although not meeting Sphere standards many consider that the design of the TSF is unique and particularly appropriate to the Ethiopian context so that it cannot and should not be compared to traditional SFPs in terms of project monitoring data and outcome measures.



TFSF beneficiaries in Degehabur, Somali Region

Credit: WFP/Judith Schulte, Ethiopia, 2009

WFP has also piloted a programme using the 'gatekeeper concept' aimed at a reduction in targeting errors. In this approach, a second screening done by WFP-employed nurses is undertaken. The gatekeeper concept was piloted in Afar and SNNPR as those regions were known to suffer from high numbers of false positive inclusions. The strong commitment to the initiative from the side of high-level regional administration officials was a main factor for the success of the pilot in SNNPR. Another round of secondary screening is currently underway by WFP for comparison with MoH screening. Furthermore, UNICEF has developed a funding proposal for more training and supervision so that screening can be improved.

A Knowledge, Awareness and Practice (KAP) study conducted in 2009 compared child feeding and care practices of mother/caregivers of children less than three years of age ($n = 1525$) with their immediate neighbourhood non-beneficiaries ($n = 1531$) in five regions (Tigray, Afar, Amhara, Oromia and SNNPR). The study found that overall, a large proportion of the beneficiary mothers had good knowledge, positive attitude and appropriate practices related to child feeding compared to the control group. Significant differences were observed in their knowledge about optimal time of initiation of breastfeeding, duration of exclusive breastfeeding and optimal time for the introduction of complementary foods compared to their non-beneficiary counterparts ($P < 0.05$).

FDA nutrition education sessions were not implemented at all food distributions and some mothers missed nutrition education as husbands were sent to collect food, especially in Amhara region.

The conduct of nutrition education only at distribution session sites was considered to be inadequate in terms of bringing behavioural change in child care practices. This implies the need for additional follow up nutrition education sessions and monitoring in-between distributions.

There was clear evidence that the nutrition education made a significant difference in the knowledge of mothers on the preparation of the TSF food. Although the majority of mothers had shared the TSF food with other people in the household, the problem was most common in Tigray and Afar region ($P = < 0.001$). This indicated the need for strict monitoring of compliance and strengthening of the nutrition education given at the food distribution centres in these areas. From focus group discussions it was observed that nutrition education messages passed by the FDA are not given due attention

by the community and hence not implemented in Tigray and Afar regions. In Afar region, there is a strong need for the involvement of traditional clan and kebele leaders while in Tigray involvement of health extension workers is going to be important. Key recommendations from this study included the need to integrate FDAs nutrition

education with activities of Health Extension workers, reducing the distance travelled for collection of TSF food, making mothers attendance of nutrition education a necessary precondition for TSF distribution, distributing smaller amounts of TSF food at a time, and more frequent distributions to prevent sharing. These recommendations are still being discussed with partners.

As a consequence of inadequate regional food transport tendering processes and delayed communication on screening results, targets for timely food delivery after the identification of acute malnutrition are regularly not met. These difficulties are exacerbated by poor infrastructure, e.g. in Somali and Afar regions and difficult terrain in Amhara region. WFP continue to try to address these problems and have had success with the prepositioning of food within Somali region. The programme benefitted from the 'Hubs and Spokes system' which was introduced for the relief programme and resulted in setting up numerous logistic hubs. WFP are now looking more closely at introducing an adaptation of the same system into Oromia by increased prepositioning at secondary warehouses. In addition, the tendering process has improved in many regions with tendering now for a one year period.

Given the large number of distribution points (over 1300) and the difficult terrain in many areas, the regular monitoring of all sites is a challenge for the government and UN partners. In particular, in Afar and Somali region, security is an additional and serious obstacle as travel of food monitors is restrained. In 2008, WFP were facing challenges in Somali region to ensure that assistance reached intended beneficiaries. Access problems meant that screening could not be implemented in all areas of Somali region while the blanket blended food distribution as part of the general relief ration was not reaching all intended beneficiaries. Therefore in April 2008, WFP started distributing food through a relief/TSF hybrid model, using blended food, normally part of the relief programme, through the dispatch and distribution structure used for TSF, i.e. DPPB dispatched the food which was distributed by the women FDAs. WFP used the TSF structures in 17 woredas in Somali region where no screening had taken place since late 2006. Instead of screening, all children under five years and pregnant/lactating women in the woredas received supplementary food through the TSF distribution centres. The trained FDAs also provided nutrition education to the women receiving the food. This model was expected to contribute to improved targeting of blended food to nutritionally vulnerable groups, as many more delivery points were used than the relief programme. It was also

hoped that the model would be used as an alternative in areas with accessibility issues and/or concerns about targeting of blanket blended food assistance through the relief structure. This approach has however not been used since.

In 2009, WFP food monitors concluded that a number of woredas in Afar and Somali regions were not adequately screened and numbers of beneficiaries were consequently not based on reality. In following up with ENCU, the government could also not confirm that screening results were correct. The TSF distribution was then cancelled.

A cost study of the programme conducted in Amhara and Oromia regions in 2007/8 found that excluding food items, the highest cost of the TSF is related to transport which ranges from 75% in Amhara to 79% in Oromia. Next to transport the highest cost is related to personnel (16% in both regions). For a ration of 25 kg of CSB and 3 litres of oil the cost per beneficiary per distribution was found to be \$30.30 and \$23 with and without considering transport. For a typical food distribution centre with an average number of 239 beneficiaries, the cost per year was \$29,988 and \$21,988 with and without considering transport respectively. The study concluded that in order to increase cost saving, the major strategic action that needs to be taken is better targeting both in identifying beneficiaries and geographic targeting towards most severely affected woredas.

Conclusions

Since its inception, WFP and Government have worked hard to roll out the TSF and maintain a difficult logistical operation. The programme has undoubtedly had a significant impact on the prevention and treatment of moderate malnutrition. While the programme does not accord with the more traditional supplementary feeding design and has not reached SPHERE targets, many view the TSF as an important bridging programme well suited to a country where up until its inception, there was very little targeted provision for those children suffering or at risk from moderate malnutrition. WFP and Government have grappled with numerous challenges around the TSF. Some of these are outlined above. Other issues have been around how to strengthen linkages between the TSF and treatment of SAM, as well as linkages with the PSNP programme. WFP have written a series of discussion papers on these topics. While the treatment of SAM has made enormous strides in Ethiopia in recent years as OTP roll out has increased, treatment (and prevention) of MAM has made less progress. Numerous mechanisms are in place to address MAM, e.g. TSF, blanket distribution of CSB as part of relief programmes, targeted SFPs implemented by international NGOs in woredas affected by acute food insecurity and discharge rations for those graduating from OTP programmes. However, WFP and the Government are highly aware of the need for improved coordination and a more 'joined up' strategy for improving the treatment and prevention of MAM. To this end, WFP in collaboration with Government, have recently convened a meeting between key stakeholder agencies to begin the process of formulating a national strategy for the prevention and treatment of MAM.

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Value chain approach to increase production of RUTF/CSB

By Yuki Isogai

Yuki Isogai is Operations Officer for the Ethiopia Nutrition Project/Private Sector Development Specialist with the World Bank. She has a wide range of experiences in private sector development, including in areas of public private partnership (PPP), foreign direct investment (FDI) promotion, tourism development, micro small enterprise (MSE) development, and women entrepreneurship development.

In Ethiopia, 13.7 million people face chronic food insecurity. Out of this figure, the number of people who needed emergency food aid reached about 6.2 million in June 2009. An additional 7.5 million received aid in return for work on community projects as a part of the Productive Safety Net Programme (PSNP).

In September 2006, the Government of Ethiopia adopted its second Poverty Reduction Strategy Paper (PRSP), The 'Plan for Accelerated and Sustained Development to End Poverty' (PASDEP), called for the implementation of the National Nutrition Strategy (NNS) (formulated in 2005/2006) to achieve the Millennium Development Goal 1 (MDG1) for halving hunger, malnutrition and poverty. The National Nutrition Programme (NNP) was designed and launched in 2009 in order to implement the NNS. It encompasses Therapeutic Feeding Programmes (TFP), which utilise Ready-to-Use-Therapeutic-Foods (RUTF), and Targeted Supplementary Food Programmes (TSFP) which require Corn Soya Blend (CSB).

Local demand and supply of RUTF and CSB

The cost of treating the severely and moderately malnourished in Ethiopia is prohibitive since a large share of the feeding products, i.e. RUTF and CSB, must be imported. Table 1 reflects the local supply versus demand gap. Furthermore, it is not only the final feeding products that have to be imported. As the domestic supply of inputs is quite limited (Table 2), a large proportion of these, e.g. powdered milk and soya bean oil, also have to be imported. This means the price of RUTF produced in Ethiopia is quite high relative to other countries. This is highlighted in Table 3

Table 1: Supply/demand gap for RUTF and Corn Soya Blend (CSB) (2008-2009)

	Demand	Local production	Production capacity
RUTF (Plumpy'nut)	~3,273MT	385MT (11.7%)	1,800MT
CSB	~126,000MT	9,683MT (7.7%)	43,200MT

Table 2: Supply/demand gap for inputs (2008-2009)

	Demand	Supply	Remarks
Milk Powder	982 MT	None	No. of milking cows ~9.9 million Total milk output ~976,615 MT
Soya Beans	74,762 MT	6,790 MT	
Soya Bean Oil	7,242 MT	None	

where costs are compared with Malawi. In addition, the freight costs are substantial, e.g. in the case of the RUTF, Plumpy'nut, the air freight costs are \$2.63/kg, while the production costs are \$3.46/kg. The result is that only a limited share of the total number of malnourished people in Ethiopia can be treated using these products.

The total value of imported inputs alone adds up to \$45.99 million/year, while the total RUTF/CSB market is worth, on average, about \$60 million/year. This market is significant, and while development partners (DPs) are willing to purchase RUTF from local producers, local production has not met the demand so far (reflected in Table 1). However, investments in these products are profitable. For example, according to a feasibility study on powdered milk conducted by the Amhara Investment Office, the simple rate of return is 27.6%, which by any business standards, is profitable.

Thus, it appears that opportunities for developing agro-processing businesses within Ethiopia have been missed. Furthermore, promotion of local production of these products would improve the coverage/timeliness of the treatment of malnutrition and contribute to import substitution.

Why are local producers not meeting market demand?

Given the large market, the question arises, why the private sector in Ethiopia has not yet responded to meet this need, particularly since DPs are willing to procure the products from local producers. The World Bank Ethiopian Nutrition Team has conducted a thorough review of this question and identified three major issues, which are interlinked with each

other: lack of market information, low access to finance and a weak value chain (see Figure 1).

Lack of market information

As a number of actors are involved between the farmers and the customers and the chain is quite segmented, market signals are not flowing down through suppliers. Thus, producers, including input suppliers and farmers, do not respond to the market as much as they could.

Low access to finance

Commercial banks normally consider the risks of agro-processing business so high that the level of collateral for related investment is set very high (up to 200%). In addition, the banking sector lacks capacity to evaluate properly the risks of new business areas, like RUTF/CSB production. Therefore, processing companies cannot obtain loans from banks for both capital investment and working capital.

The existing processing companies particularly suffer from lack of working capital. As agricultural products are normally available for only six months after the harvest due to lack of storage, the factories have to purchase inputs during the six months for the whole year of operation. This requires quite substantial working capital. However, banks are reluctant to lend working capital without high collateral, although a loan for working capital is for short-term investment which is low risk. As a result, the operation rate (actual production/production capacity) of these factories is very low, e.g. average of 40% or even less.

Weak value chain

Even if the factories had enough working capital to purchase all required inputs, a problem still remains. There is insufficient supply of quality inputs. This applies for the whole value chain, i.e. RUTF/CSB producers and inputs (oil/powdered milk suppliers). Improvement in the quality and stability of input supply throughout the value chain is essential to increase the operation rate and reduce the level of risk for the industry.

Value Chain Approach with strong Public Private Partnership (PPP)

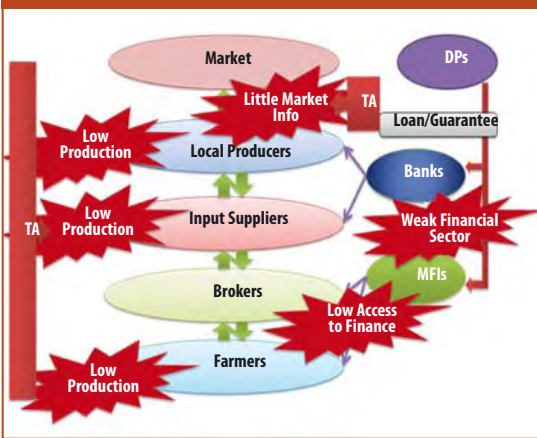
As reflected in Figure 1, production cannot be increased through a conventional approach that focuses on only one of the issues. All the issues affecting the value chain need to be tackled at the same time. To do so, a strong Public Private Partnership (PPP) involving private companies, commercial banks, farms, NGOs supporting farmers, UNICEF, WFP and the World Bank is required. Each actor will need to play a distinct role at various links in the chain. Production will not increase if one link is broken.

Table 3: Production costs of Plumpy'nut (Ethiopia vs Malawi)

Ingredients	Ethiopia (2009)		Malawi (2006)	
	Input Costs/kg*	% of total	Input Costs/kg*	% of total
Milk powder (full fat)	\$0.85	40.8%	\$0.63	44.3%
Sugar	\$0.28	13.5%	\$0.17	12.0%
Vegetable oil	\$0.38	18.3%	\$0.18	12.7%
Peanut butter	\$0.19	9.1%	\$0.18	12.7%
Mineral/Vit. mix	\$0.38	18.3%	\$0.26	18.3%
Sub-total	\$2.08	100.0%	\$1.42	100.0%
Other costs*	\$1.38		\$1.18	
Total	\$3.46		\$ 2.60	

*Other costs includes labour, quality control, packaging, energy and overheads

Figure 1: Why is local production low?



DP: Development partner; TA: Technical assistance; MFI: Micro-finance initiative

To improve the market information flow, DPs including the World Bank, can conduct feasibility studies and organise dissemination workshops, inviting a wide range of stakeholders, i.e. farmers, investors and bankers. This will improve understanding of the market amongst key actors.

Bank reluctance to lend to what they perceive as high risk agribusiness, unless businesses have large collateral, could be addressed through 'guarantee funds'. These funds cover a certain percentage of defaults, could be provided by DPs and would help to significantly reduce the risk for banks. At the same time, technical assistance (TA) to the banking sector is a key to improve their capacity to evaluate the profitability/feasibility of new businesses.

The perception of banks that the agribusiness sector carries risk is not completely unfounded. Due to the relatively primitive production systems at farm level, the existing processing companies have to operate factories with unstable supplies of inputs. New investors therefore hesitate to enter the business as a 'high tech' factory cannot be operated without a strong supply chain. At the same time, there are several NGO projects supporting small farmers to improve the productivity and quality of agro-products which are seeking markets (producers). Support for processing companies should be linked to these efforts on the ground.

The advantages of the value chain approach to increase the production of RUTF/CSB are:

- The targeted market is large and relatively secured by development partner's funds
- A value chain approach simultaneously supports different elements of the value chain, e.g. RUTF producers, groundnut farmers, milk powder producers, thereby creating synergy of impact. This contrasts with more conventional approaches where there is less joined up support.
- It has cross-sectoral effects, i.e. impact on humanitarian activities and national economic growth
- It significantly contributes to import substitution
- It improves the access to and the timeliness of delivery of relevant food products for needy beneficiaries.

As a pilot study, the Ethiopia World Bank Nutrition team has conducted a thorough feasibility study of powdered milk production and means of promoting an investment and link to NGO funded dairy projects, as well as the RUTF producers.

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Standardised training package on SMART methodology released by ACF Canada

Action Contre la Faim (ACF) Canada, with the support of the Inter-Agency Standing Committee (IASC) of the Global Nutrition Cluster, has released the English version of the SMART Methodology Standardised Training Package (STP).

The STP hopes to provide future survey teams with a standardised means of preparing themselves on how to use SMART. With some 400 persons trained in over 20 countries by ACF Canada, participant feedback has been used to design a comprehensive and robust tool that can be applied in different contexts for persons with varying levels of competency. The STP has incorporated the recent (Version 2) methodological advancements in SMART and also contains easy-to-follow presentations, simple exercises, trainer's tips, videos as well as helpful assessment tools to complement the training experience.

Access the STP by registering at <http://www.smartmethodology.org>

Use this site to provide feedback, for questions or further guidance. If you experience any difficulties accessing the site, contact: info@smartmethodology.org

The French version is due for release shortly.

Treatment of severe malnutrition now a core competency in health

By Ann Ashworth and Alan Jackson, International Malnutrition Task Force

Paediatricians took a giant step forward at the International Paediatric Association (IPA) Congress in Johannesburg in August 2010 when they resolved that treatment of malnutrition should become a core competency. It also had the support of the WHO, UNICEF and other United Nations agencies.

The full Resolution adopted at the Congress states:

1. Paediatricians and related health professionals should take responsibility for leadership in addressing the urgent problem of severe malnutrition in all its forms, as it is a major cause of death and disability of children.
2. IPA member societies should assure that all paediatricians and related health professionals have the identification and treatment of severe malnutrition as a core competency, and are certified accordingly.
3. National societies should examine the curriculum, training activities, and evaluation processes to ensure the inclusion of the identification and treatment of severe malnutrition as a core competency.

The Resolution is one of several efforts by the International Malnutrition Task Force to place the problems of childhood malnutrition firmly on the agenda for paediatricians around the world. A similar Resolution was also adopted by nutritionists and other delegates attending the Africa Nutritional Epidemiology Conference in Nairobi in October 2010, accepting their responsibilities and the need to take action in order to effectively address the problems of severe malnutrition.

An important next step will be for national groups to work together to translate the Resolution into action. It is expected that international and local non-governmental organisations (NGOs) will be invited to play an important role and that key activities will include:

- situation analyses
- advocacy to governments influencing deans of medical and nursing schools to include nutrition/malnutrition in curricula
- in-service training for all health workers on prevention and treatment of malnutrition
- developing effective training teams and communication strategies
- identifying champions who will motivate others
- assessing nutritional status at every contact to identify children at risk.

A report of the IMTF pre-congress workshop can be found at <http://www.imtf.org>.

Building national capacity in HIV and Nutrition

By Kate Sadler



Kate Sadler is a nutritionist and senior researcher with a focus on nutrition in emergencies at the Feinstein International Centre. She worked previously with Valid International for six years and with Concern Worldwide for four years prior to that.

Researchers from the Feinstein International Centre and the Friedman School of Nutrition Science and Policy at Tufts University in the USA are contributing to the development of a pre-service training (PST) curriculum in HIV and nutrition for students of a variety of health professions in Ethiopia, as part of the 'Food by Prescription (FBP)' programme (see research piece in this issue).

A Training the Trainers (TOT) Workshop was successfully delivered in September 2010 and the training manual, 'Nutrition and HIV/AIDS: A Training Manual for Nurses and Midwives' was used with some modifications for the delivery of the course. The course consisted of 12 modules that were delivered in a five and a half day workshop, with some of the modules being merged. Sessions included the FBP programme, treatment protocols for adults and children living and/or affected with HIV and/or living with severe and or moderate acute malnutrition.

The workshop included one half day of field visits, with faculty staff assigned to one of three groups as follows:

Group 1: Monitoring and Evaluation of FBP programme in Shashemene clinic 2.

Group 2: Monitoring and Evaluation in an anti-retroviral treatment (ART) clinic in Awassa Hospital (with no food supplementation, for comparison purposes).

Group 3: Monitoring and evaluating the commodity logistics system in relation to the programme.

A total of 17 faculty members and associates were trained representing four faculties (Nutrition, Public Health, Nursing and Paediatrics) from different universities. Faculty members for each of the faculties have, since the workshop, begun to develop plans for integrating materials from the workshop into their existing courses. The Nursing/ Paediatrics and Public Health faculties have specific courses that they can integrate the materials into. The Nutrition faculty found that the material could be introduced in almost all their courses. All groups found the material extremely relevant.

A key discussion held at the end of the course was the potential for integrating the training material into existing activities. A positive outcome of the training was that faculty staff within Hawassa University are able to work together to develop a proposal to roll out the training to other faculty members. This will allow for sustainability of the rollout process within Hawassa University.

Kate Sadler, Ethiopia, 2010



The Tufts team anticipates working with some of the faculty members at Hawassa University in Year 2 to support them as they lead the TOT rollout. Jimma University could also be targeted for the next phase, thus expanding the national capacity building efforts in this crucial area of nutrition in Ethiopia.

For more information, contact: Kate Sadler, email: kate.sadler@tufts.edu

¹ East, Central and Southern Africa Community (ECSA-HC), Food and Nutrition Technical Assistance Project (FANTA), and Linkages Project, 2008. Nutrition and HIV/AIDS: A Training Manual for Nurses and Midwives. Arusha, Tanzania: ECSA-HC.

Scale up Nutrition (SUN): a new global movement

In April 2010 a Road Map to Scale Up Nutrition (SUN) was launched based on a SUN Framework endorsed by over 100 entities including national governments, UN agencies, civil society organisations, academia, philanthropic bodies and the private sector. The SUN Road Map details the means through which national, regional and international actors will work together to establish and pursue efforts to Scale up Nutrition in countries with a high burden of malnutrition, utilising proven interventions and through multi-sectoral and integrated nutrition focussed development policies and processes.

For more information on SUN, go to http://www.unscn.org/en/nut-working/scaling_up_nutrition_sun/sun_purpose.php

Regional CMAM meeting in Ethiopia 2011

In collaboration with the Government of Ethiopia and in consultation with national and international agencies, the Emergency Nutrition Network (ENN) is planning a three day regional meeting on the scale-up of community based management of acute malnutrition (CMAM), to be held in Addis Ababa in November 2011. The aim of the meeting is to facilitate the sharing of lessons learned from Ethiopia, across the region and beyond, and to build consensus on a range of issues relating to national scale-up of services to manage severe acute malnutrition.

A key allied global initiative under which this meeting is located is the Framework for Action to Scale Up Nutrition (SUN Framework)¹. The Road Map for SUN clearly articulates a pressing need for improved sharing of experiences between countries and regions on policy development and programming as one mechanism by which to build national capacity in nutrition. A second, smaller half day meeting will take place on Day 4, when the key issues of relevance to the SUN will be discussed in relation to CMAM and scale up of actions to address all forms of undernutrition.

The meetings are co-funded by Irish Aid and the UK Department for International Development (DFID).

The Ethiopia meeting will identify and document the policy environment, coordination, funding mechanisms, technical and operational considerations that are required to establish, expand and sustain service provision at national level. This forum is also intended to provide policy and programme related information and guidance to countries from Africa and Asia that are planning national level scale-up of CMAM. The forum should inform donors and encourage the most effective use of future resources.

Anticipated participants will be from government in a minimum of 16 countries from Africa and a number of Asian countries. Participants will be facilitated to write-up the CMAM scale-up experience in their respective countries as background papers and for presentation at the meeting. Donors, United Nations agencies, humanitarian agencies and ready to use therapeutic food (RUTF) producers will also be represented. A variety of media will be considered to reach stakeholders unable to attend the meeting.

The meeting will focus on ten thematic areas. These are:

- Policy environment, such as institutional stakeholder interests, governments ability to take on and sustain roll-out strategies.
- Funding, such as estimated costs, sources, mechanisms, sustainability.
- Linkages within the nutrition sector and other sectors.
- Effectiveness of public health systems to support national roll-out strategies.
- Operational issues, such as supplies, coverage and impact, scale up/scale down considerations in emergency response.
- Capacity development, with particular regard to national health systems.
- Linkages with HIV programming, particularly in high-burden countries.
- Integrating infant and young child feeding measures into CMAM, as well as other preventative strategies.
- Future research needs and priorities.
- RUTF supplies, including local production challenges, private sector involvement, and development of standards within the industry.

A meeting report will be produced by ENN, providing an overview of the key issues identified and recommendations for research and policy directions and actions. Background papers prepared on selected country experiences with lessons learned in specific thematic areas will also be produced.

The Government of Ethiopia focal point for this meeting is Dr Ferew Lemma, Senior Nutrition Advisor, Federal Ministry of Health, Ethiopia. Contacts for the ENN organising team are Emily Mates (Ethiopia), email: emily@enonline.net and Marie McGrath (UK), email: marie@enonline.net

¹ See news piece on this page.

Credit: M Lung'aho, Ethiopia, 2010



Training and workshop to integrate IYCF in CMAM

Summary of report¹

Between 23 and 31 August 2010, World Vision International (WVI) and the Emergency Nutrition Network (ENN) held a six day training of trainers (TOT) and two day companion planning workshop in Ethiopia on integration of infant and young child feeding (IYCF) activities into community based management of acute malnutrition (CMAM) programmes. The training took place in Shone ADP² and the workshop in Hawassa Region.

The aim of the TOT workshop was to strengthen the technical capacity of World Vision country, regional and headquarters (HQ) staff. The aim of the companion workshop was to contribute to WV's strategic planning to integrate IYCF support into its CMAM programmes at country, regional and global level. The companion workshop paid particular consideration to locating integration within the Ethiopian Governments policies and programmatic guidance.

ENN consultants from Nutrition Policy and Practice (NPP) led the training, supported by the ENN and WVI headquarter- Nutrition Centre of Expertise (NCOE) technical staff.

Fourteen WV programme staff from Sierra Leone, Zimbabwe, Zambia, Ethiopia, Rwanda, Kenya and Uganda participated in the TOT. They were joined by staff from regional and global NCOE who support Eastern and Southern Africa, and WV support office staff from Canada and the US. An additional five participants participated in the two day planning workshop from WV regional offices, the Sudan Ministry of Health (MoH), and Concern Worldwide.

Five day TOT

The five day TOT used the 'Integration of IYCF Support in CMAM'³ training materials as the technical content. It was a competency based 'hands-on' training built around adult learning principles. The approach used the experiential learning cycle (a learning cycle of experience, reflecting, thinking and acting), employing a variety of training methods. Two days of practice sessions (Days 4 and 5) took place in health facilities within a half-hour's drive of the Shone ADP.

The end of training evaluation was positive. Participants highlighted sessions on behaviour change, counselling skills, forming action and support groups, the 'adult learning' approach to the workshop facilitation, and the practical sessions as especially helpful. Recommendations for future TOT were more practical field sessions, more preparation for field sessions to include orientation of managers of CMAM programmes, and more practical application of HIV and infant feeding recommendations.

Competency ratings (self assessment) increased significantly pre and post training.

Two day planning workshop

The specific objectives of the two day companion workshop were to share cross country/agency experiences on IYCF and CMAM, develop WV action plans to rollout the 'Integration of IYCF Support into CMAM Programming' training material, define operational research questions and explore WV monitoring and evaluation (M&E) around IYCF in CMAM. The 2 day planning benefitted from the presence of Ethiopian university staff to consider Ethiopia-specific recommendations.

Appreciative Inquiry (AI) methodology⁴ was used to explore how IYCF can best be integrated into existing CMAM programmes through working groups. Integration was considered for key contact points in community mobilisation, Outpatient Therapeutic Programme (OTP), Supplementary Feeding Programme (SFP), Stabilisation Centre (SC), and other community services. Integration was also considered for national level pre-service and in-service training, and by international agencies and local partners.

Opportunities

Participants envisaged good synergy and many benefits of IYCF integration in CMAM including improved acute and longer term nutrition and developmental outcomes for children, reduced relapse amongst treated children, and strengthened community component of CMAM programming and continuity of care. There were many suggestions for integration at contact points. Specific to Ethiopia (detailed in the report) priority actions suggested to enable IYCF in CMAM in Ethiopia included training community volunteers on implementation of action-oriented group sessions and support groups, revitalising the Health Education Talks at OTP with action-oriented group sessions and support groups and, researching breastfeeding counselling feasibility at a designated OTP follow up visit. Additional areas identified for action included advocacy for IYCF integration with the existing NNTWG (National Nutrition Technical Working Group) in Ethiopia, development of refresher training (in-service), and embedding IYCF into CMAM in pre-service training.

Participants considered baseline IYCF information was needed to inform integrated activities and may involve surveys of Knowledge, Attitude, Practice (KAP), KAPB (behaviour), KPC (coverage) and community led assessments, ideally prior to setup.

A brief session on M&E discussed the benefits of disaggregating programme age data in programmes

and the potential to include IYCF process indicators in the WV CMAM database. Participants considered a simplified measurement approach of IYCF assessment may be more realistic for programmes; a simplified methodology should be consistent over time and the results not compared to those obtained using globally-agreed indicators and measurement guidance.

Action plans were developed for six countries (Ethiopia, Kenya, Rwanda, Sierra Leone, Uganda and Zimbabwe), the Africa region, two training contexts (SNNP Sudan and Hawassa University, Ethiopia), and for WV Support Offices and Global Health Offices. Training of community based staff featured strongly in plans, in addition to policy/strategy updates at country level, engaging in operational research, and documentation of best practice and lessons learned to inform programming.

At an agency level, opportunities for strengthening technical capacity identified were WV country office assistance through WV-NCOE/Regional Office, development of institutional capacity in Hawassa University, developing linkages with UNICEF, and undertaking operational research.

Constraints

Throughout both the training and workshop, participants identified many constraints to integrating IYCF in CMAM. The lack of a defined operational model for integrated programming limited scale up of integration in action plans. Key operational research needs identified were around impact on nutritional and programme outcomes, effect on IYCF integration on programming caseload, feasibility of integration at key contact points, how to monitor and evaluate programming within the existing CMAM framework and cost-benefit analysis.

Given the gaps in operational guidance, the importance of capturing experiences on integration to inform programming and the need for collaboration and partnership were highlighted. Participants suggested it may benefit to learn by small scale integration, e.g. integrate in one geographic area, or focus on strengthening IYCF with one key contact point.

Conclusions

The facilitators concluded that to move forward on IYCF in CMAM at a national level, it is essential to identify key government and agency partners, as well as seek to locate interventions within national strategies and priorities. In future research, the operational model (or models) for consideration should comprise a multi-component intervention including interpersonal IYCF counselling and negotiation, action-oriented group education, peer support and targeted, context specific messaging.

As a next step, an initiative that looked to address more closely the integration of IYCF in CMAM in the Ethiopian context could draw on Ethiopia's considerable lessons to date from both OTP scale up and IYCF programming. Such an initiative(s) should include experience documentation, operational research and rapid dissemination of lessons learned.

For more information, contact: Sarah Carr, World Vision Canada, email: sarah_carr@worldvision.ca

¹ WORLD VISION International-ENN. Collaborative project to enable Integration of IYCF Support into CMAM Programming at Agency and National Levels. Ethiopia. 23-31 August, 2010. Final Report. 25 September 2010

² Area Development Programme (World Vision)

³ Developed by the ENN in collaboration with the partnership Nutrition Policy and Practice Group (NPP) in 2008, funded by the GNC. Available in English and French at: <http://www.ennonline.net/resources/722>

⁴ This comprised four 'D's: discovery (what are the benefits of implementing IYCF and CMAM), dream (what do we expect to achieve through integration of IYCF in CMAM), design (how to integrate IYCF into CMAM contact points) and delivery (action plan development).

⁵ This comprised four 'D's: discovery (what are the benefits of implementing IYCF and CMAM), dream (what do we expect to achieve through integration of IYCF in CMAM), design (how to integrate IYCF into CMAM contact points) and delivery (action plan development).

Updated HTP resource material for nutrition in emergencies training

The Harmonised Training Package: Resource Material for Training on Nutrition in Emergencies (the HTP) is a resource package to aid course development on nutrition in emergencies. The HTP is an initiative of the IASC Global Nutrition Cluster (GNC) and has been endorsed by the GNC and its member's agencies.

The HTP update to produce Version 2.0 is being undertaken in a 2 year ENN/NutritionWorks (NW) collaborative project¹, funded by the US Office for Disaster Assistance (OFDA). Numerous experts from many different organisations have been involved in writing and reviewing content for Version 2, and have participated generously in the initiative.

The HTP, Version 2 (2011) is being produced by the ENN. The HTP is hosted by the United Nations Standing Committee on Nutrition (UNSCN) at http://www.unscn.org/en/gnc_htp/.

The HTP is organised as a set of 21 modules by subject (see box), each module containing technical information, training exercises and a resource list. It can also be used by individuals to increase their technical knowledge of the sector.

The HTP Modules

Section 1: Introduction and concepts

- Module 1: Introduction to nutrition in emergencies
- Module 2: The humanitarian system: roles, responsibilities and coordination
- Module 3: Understanding malnutrition
- Module 4: Micronutrient malnutrition
- Module 5: Causes of malnutrition

Section 2: Nutrition needs assessment and analysis

- Module 6: Measuring malnutrition: individual assessment
- Module 7: Measuring malnutrition: population assessment
- Module 8: Health assessment and the link with nutrition
- Module 9: Food security assessment and the link with nutrition
- Module 10: Nutrition information and surveillance systems

Section 3: Interventions to prevent and treat malnutrition

- Module 11: General food distribution
- Module 12: Management of moderate acute malnutrition
- Module 13: Management of severe acute malnutrition
- Module 14: Micronutrient interventions
- Module 15: Health interventions
- Module 16: Livelihoods interventions
- Module 17: Infant and young child feeding
- Module 18: HIV/AIDS and nutrition
- Module 19: Working with communities in emergencies

Section 4: Monitoring, evaluation and accountability

- Module 20: Monitoring and evaluation
- Module 21: Standards and accountability in humanitarian response

Version 2 now available (Jan 2011) – Modules 6, 7, 9, 16 and 19. Each module will be available both in word format and as a printer friendly pdf version. All modules will be posted on the UNSCN site as they become available.

Version 2.0 is being produced in English, with translations to follow.

For more information on the HTP Version 2 revision, contact Carmel Dolan Carmel Dolan, NutritionWorks, email:cmadolan@aol.com

¹ NW was commissioned by the GNC to develop Version 1.0 launched in 2008.

Early stages of a 'Food by Prescription' programme for HIV infected adults

By Elizabeth Bontrager and Kate Sadler



Elizabeth Bontrager joined the Feinsein International Centre at Tufts University in 2008, where she coordinates Tufts' involvement in the Food by Prescription programme. She holds a M.Sc. in Food Policy and Applied Nutrition.



Kate Sadler is a nutritionist and senior researcher with a focus on nutrition in emergencies at the Feinsein International Centre. She worked previously with Valid International for six years and with Concern World- wide for four years prior to that.

The authors acknowledge the support of USAID and the Food by Prescription team at Save the Children US.

As global interest in Ready-to-Use Therapeutic Foods (RUTFs) has risen, their use has begun expanding beyond the realm of treating children with severe acute malnutrition (SAM). Of recent interest within the humanitarian community is the use of such products in treating malnourished adults living with HIV/AIDS. In this case, the food is used much like a medical prescription, intended to address malnutrition so that the disease can be treated more effectively.

As the medications for anti-retroviral treatment (ART) have become more widely available in developing countries, greater attention has been paid to the associated role of malnutrition in determining the effectiveness of these drugs in HIV treatment programmes. In settings both with and without widespread food insecurity, weight loss and wasting are significant predictors of mortality among people living with HIV/AIDS (PLHIV), even for those undergoing anti-retroviral treatment.^{1,2} Furthermore, malnutrition at the outset of ART is strongly associated with early mortality after treatment is begun.^{3,4}

Evidence to date

The majority of the existing research in this area has taken place in resource-adequate settings. Here, individuals receiving food supplements have shown improved protein and energy intake, but no consistent improvements in body weight or fat mass, and only minimal improvements in CD4 count, as a measure of disease progression.⁵

Thus far, little has been done to examine the relationship between HIV, food supplementation and survival in resource-poor environments, where malnutrition among PLHIV may be linked to food scarcity rather than (or in addition to) disease, and where the effects of supplementation may be quite different. One controlled study demonstrated that although a group receiving food supplements (in this case, individual rations of corn soy blend (CSB) and vegetable oil) showed greater adherence to ART than the control group (which received no food), there was no significant difference in survival, CD4 count, or weight gain between the groups.⁶ Another study

¹ Tang A, et al. Weight loss and survival in HIV-positive patients in the era of highly active anti-retroviral therapy. *JAIDS* 2002;31:230-36.

² Paton, NI, Sangeetha, A Earnest and R Bellamy. The impact of malnutrition on survival and the CD4 count response in HIV-infected patients starting antiretroviral therapy. *HIV Medicine* (2006), 7, 323-330.

³ Zachariah, R., Fitzgerald, M., Massaquoi, M., Pasulani, O., Arnould, L., Makombe, S., Harries, A.D., 2006. Risk factors for high early mortality in patients on antiretroviral treatment in a rural district of Malawi. *AIDS* 20, 2355-2360.

⁴ See footnote 2

⁵ Koethe JR, Chi B, Megazzini K, Heimburger D, Stringer JS. (2009a) Macronutrient Supplementation for Malnourished HIV-Infected Adults: A Review of the Evidence in Resource-Adequate and Resource-Constrained Settings. *CID* 2009;49: 787-798.

⁶ Cantrell R, Sinkala M, Megazzini K, Lawson-Marriott S, Washington S, Chi B, Tambatamba-Chapula B, Levy J, Stringer E, Mulenga L, Stringer J. A pilot study of food supplementation to improve adherence to antiretroviral therapy among food-insecure adults in Lusaka, Zambia. *J Acquir Immune Defic Syndr* 2008; 49:190-195.

compared the effects of a supplementary fortified spread to those of CSB on acutely malnourished adults starting ART in Malawi. It found that those individuals receiving the fortified spread (a lipid paste made from peanuts) showed greater improvements in several measures of wasting than those individuals receiving the CSB, but also showed no significant differences in mortality, CD4 count, ART adherence, or quality of life⁷.

The Food by Prescription Programme (FBP) in Ethiopia

For all of the above reasons, there is growing interest in programmes designed to address the links between nutrition and HIV, through which malnourished individuals on an ART treatment regimen are 'prescribed' therapeutic food rations in addition to their medications.

In Ethiopia, the Ministry of Health (MoH) began implementing the 'USAID/ Food by Prescription (FBP)' programme in the summer of 2010, with technical assistance provided by Save the Children US. This programme targets beneficiaries diagnosed with either moderate acute malnutrition (MAM) or SAM with two different products for up to six months – fortified blended food (FBF) packaged in individual serving-sized sachets for MAM cases and RUTF (Plumpy'nut) for SAM. The aim is to improve nutritional, clinical, and functional outcomes beyond the time period of the intervention itself.

HIV-infected adults who present with malnutrition at participating health centres are prescribed food rations according to their nutritional status (MAM or SAM). The rations are prescribed during monthly appointments, together with clients' ART medications, and are distributed directly from clinic pharmacies. Clients are monitored closely by health centre staff who collect both anthropometric and disease progression data during monthly appointments.

Examining the impact of food on health and nutrition outcomes

A number of partners are involved in the delivery and assessment of the overall FBP programme, including a group of researchers from the Feinstein International Centre and the Friedman School of Nutrition Science and Policy at Tufts University in the USA. This team from Tufts is carrying out an effectiveness evaluation of the programme, to determine the impact of food supplementation on disease progression and malnutrition among individuals on ART.

Specifically, the Tufts study will examine the effects of a food ration prescribed to malnourished HIV infected adults on recovery from malnutrition, HIV disease progression, patient survival, and persistence of any benefit six months after exit from the programme. Primary outcomes, to be compared between intervention and control groups, include percent weight change, change in CD4 count, survival at six months from programme enrolment, and Body Mass Index (BMI) at six months after discharge. The effects of the food

prescriptions will also be disaggregated and compared according to the amount of time individuals have been on ART, and baseline nutritional status.

The study follows a sample of recruited FBP participants from a number of randomly selected health centres included in Phase I of the programme and a 'control' sample recruited from sites that have access to ART but are not yet being prescribed a food ration (to be included in Phase II of FBP programme rollout). Data for study participants, including all variables needed to assess outcomes of interest as well as confounders, are collected during scheduled monthly clinic appointments. This includes completion of a patient register and a Household Food Security Questionnaire.

and rollout of FBP, but it is often difficult for programme staff to identify and locate all the relevant staff. This means that some eligible clients may present at the clinic but not be seen by trained personnel, and thus not be enrolled in either the programme or the study. In addition, once health workers have been adequately trained and are comfortable with the measurement of relevant indicators, high rates of staff turnover have meant that trained workers may be lost over time and replaced by new, untrained staff. FBP programme staff and the Tufts team will continue to visit these sites frequently to ensure that the implementation of the programme and the data collection are being performed as necessary for both the study and the programme as a whole.

Such large programmes inevitably run into challenges in the way of delays in procurement and pipeline breaks as these systems are first put into place. The rollout phase of FBP in Ethiopia has experienced this as well, and both the programme and the study have needed to accommodate changes to the nutrition protocol as programme staff have worked to address these challenges. The standardisation of the food protocol to account for changes in the availability of commodities has been accommodated into the study design.

Strengthening national capacity

The Tufts team is also supporting pre-service training curriculum development, piloting, and dissemination on nutrition and HIV, in partnership with the Department of Nutrition at Hawassa University (see news item in this issue). This establishment of an HIV and nutrition educational component for health professionals is intended to alleviate some of the inconsistencies in training and awareness of the nutritional needs of PLHIV at the service provider level.

Conclusions

This FBP programme has the potential to improve both the capacity of health professionals to address the nutritional needs of PLHIV and the effectiveness of HIV care and treatment in Ethiopia. Currently, there is almost no documented programme data that can help answer questions around the additional benefits to PLHIV and costs of adding food to an ART regimen, or of the successes and challenges to scaling up a programme of this type. As HIV programmes embrace the need for a nutrition component, there is an urgent need to 'learn by doing' and the phased rollout of the FBP programme in Ethiopia provides a great opportunity to do just this. Data collection is anticipated to take place until December 2011, with results expected in early 2012.

For more information on the research, contact Kate Sadler, email: kate.sadler@tufts.edu or Elizabeth Bontrager, email: elizabeth.bontrager@tufts.edu



Kate Sadler, Ethiopia, 2010

A qualitative component will be added to the impact study during the second year, to examine issues of compliance to the food protocol and utilisation of the ration. Data will be collected for this through a series of focus groups and key informant interviews.

Challenges thus far

In the early stages of FBP implementation, one particular challenge for the Tufts study has been the reliance on health centre staff for data collection. As this programme is included in the Ethiopian MoH National Guidelines for HIV/AIDS and Nutrition, MoH clinic workers are required to participate in the implementation and data collection activities for the programme. This often represents an additional burden on understaffed clinics with large case-loads. It is essential that health workers receive comprehensive training as part of the FBP programme rollout, since many are otherwise unfamiliar with the measurement of malnutrition indicators such as BMI and mid-upper arm circumference (MUAC). A clinic worker training regimen serves as part of the introduction to

⁷ Ndekha M, van Oosterhout JJ, Zijlstra EE, Manary M, Saloojee H, Manary MJ. (2009b) Supplementary feeding with either ready-to-use fortified spread or corn-soy blend in wasted adults starting antiretroviral therapy in Malawi: a randomized, investigator blinded, controlled trial. *BMJ* 2009; 338:b1867.

Emotional Stimulation for acutely and severely malnourished children in SNNPR

By Dr. Alessandro Conticini and Mrs. Valérie Quéré



Dr. Alessandro Conticini joined Play Therapy Africa as Co-Director after having headed the Child Protection, Adolescent Development and HIV Programme at UNICEF Ethiopia, and previously senior researcher for the Macroeconomics and Health Commission in WHO Head Quarter. His work includes directing research, programme formulation and evidence-based policy development for vulnerable children in developing countries.



Mrs. Valérie Quéré is a human rights lawyer and child psychotherapist, with a master degree in international human rights and a number of certifications as a PSS therapist. Mrs. Quéré has been working in the area of justice and gender based violence in several countries. Valérie directs training programmes for law enforcement agents, social workers and child psychotherapists.



PTA would like to thank the Pulitzer Foundation, Ceil, Michael and Christina, for their tireless and enthusiastic support. Our gratitude also to UNICEF for their facilitation and aid.

Methodology

The intervention sites were selected by the Regional Bureau of Health on the basis of the expected severity of food shortage in the monitored districts. The project and its initial methodology were presented to members of all NGOs working with malnourished children in SNNPR. These professionals had an opportunity to express their views and concerns regarding the intervention during a joint review meeting held in Awassa town. Federal and Regional authorities (DPPA and DPPB) were also present and explained the project and its proposed methodology to allow for consistency with mainstream government led programmes. The University of Awassa reviewed the intervention in order to grant ethical approval.

One Health Extension Worker (HEW) and one youth/community volunteer were selected by the Bureau of Health and the Bureau of Youth respectively in each intervention site. PTA then provided a series of practical training that allowed for basic techniques of emotional stimulation and good parenting skills to be acquired by trained professionals. Professionals from NGOs working on the sites were also trained. The training was practical and experiential, meaning that the participants were constantly relating the newly acquired techniques to the ways they themselves had been raised, and the ways they were raising their own children. This allowed for the trained professionals to use the approach in their own domestic life before adopting it as a modus operandum in their work place.

At the end of the training, professionals were requested gradually to introduce the techniques as an additional experimental component of the existing protocol for the management of SAM children. Clinical supervisors were also deployed by PTA to ensure the quality of services provided. Mothers that had one or more children enrolled in Therapeutic Feeding Units (TFU), or Outpatient Therapeutic Programmes (OTP), also received coaching to strengthen the emotional bond with their child and to stimulate him/her physically and emotionally. The intervention was based on coaching, not teaching, so that HEW and Youth

had to organise weekly practice groups among mothers and their children, or organise door to door visits for enrolled mothers to practice with them. The coaching would last for a three months period. In the selected hospital, the coaching took place daily with inpatient children. Mothers were then requested to practice the new skills daily with their children.

In 20 sites, professionals were trained to measure systematically the physical and emotional outcomes of the intervention. The same measurements were conducted for a control group in three sites where SAM was managed but this psycho-social intervention was not being implemented. A total of 555 children under 5 years were followed for the purpose of the study, 49.9% were girls. Nearly one-third (32%) of admitted children were between 12 to 23 months of age, while the remaining were equally distributed in the age range of 0-12 months, 24-35months, 36-47 months, and 48-60 months.

Results

The programme has resulted in the following documented achievements:

Increased Speed of Recovery

Overall, 31.2% of children who received a combination of therapeutic food and emotional stimulation were discharged from TFU and OTP at the end of the fourth treatment week. A cumulative total of 40.7% were discharged at the end of the fifth treatment week. In contrast, no child was discharged before the end of the sixth week in the control group of children who only received therapeutic food.

Children who were provided with a combination of emotional stimulation and therapeutic feeding tended to gain weight at a faster rate than children who were only provided with therapeutic feeding. This has direct implications in terms of the costs of SAM management.

Prevention of emotional, development and intellectual loss/damage

Malnourished children in the intervention group demonstrated equivalent cognitive, emotional and development capacities as children coming from the same socio-economic environment who had not been severely malnourished. In contrast, malnourished children in control groups demonstrated a severe loss of cognitive, emotional and development potential. These data were collected using internationally recognized assessment tools such as the ASQ³, as well as qualitative emotional development observations.

Increased resilience from being exposed to future severe and acute malnutrition

Initial qualitative data indicate that treated children and caregivers may be less likely to relapse into acute and severe forms of malnutrition caused by non-food availability factors. However, this initial finding will need additional investigation before firm conclusions can be drawn.

Cross-fertilisation effect

Mothers who learnt and practiced emotional stimulation with their malnourished child

Research has shown that the survival rate of malnourished children during food crises critically depends not just on the availability of appropriate therapeutic food, but also on the emotional and physical stimulations available for both the child and the caregiver (usually the mother). Studies have shown that the combined use of emergency nutrition support and emotional stimulation techniques provides for lower malnutrition rates, a higher rate of child survival, and quicker recovery from malnutrition¹. Hunger and food insecurity cause serious mental or cognitive disabilities, especially in young children due to chronic nutritional deficits, lack of social/emotional stimulation, parent-child emotional detachment, withdrawal and neglect. At the same time, parent-child emotional deficiencies cause reduced food intake and significantly diminish the overall survival rate of children².

In many emergencies, hunger and food insecurity cause severe stress and damage the psychosocial well-being of the affected population. Conversely, the psychosocial effects of an emergency can impair food security and nutritional status. The latter is particularly relevant for children and their caretakers.

During the 2008/2009 and 2009/2010 food crisis in Ethiopia, with support from the Pulitzer Foundation and collaboration with UNICEF, Play Therapy Africa (PTA) took a leadership role in the management of 49 outreach therapeutic sites (that include but go beyond OTP sites) and one hospital in the Southern Nations (SNNPR). This role involved the introduction of an approach whereby emotional stimulation and good parenting skills were promoted, in addition to emergency therapeutic food distribution for severe acute malnourished (SAM) children.

¹ Supplementing nutrition in the early years: the role of early childhood stimulation to maximize nutritional inputs. Child and Youth Development 2009. The World Bank, Volume 3, N.1.

² Sally Grantham-McGregor et al. Developmental potential in the first 5 years for children in developing countries. The Lancet 2007. Volume 369, Issue 9555, Pages 60 - 70.

³ Ages and Stages Questionnaire (ASQ).

started to apply the same techniques with the other children in the household and gradually sensitized and explained the purpose and benefits of the intervention to their husbands and relatives.

Increased empowerment of women and gender balance in community and family decision making

An initial qualitative assessment⁴ has suggested that the effects of emotional stimulation through filial play coaching have positively impacted not just the level of maternal and child depression, but also provided for women's empowerment within the family and communities for positive decision making. Most of the mothers who participated in the emotional stimulation intervention reported that they felt much closer to their children, and were much more likely than control-group mothers to say that their children had become more independent and playful since recovering from SAM. Many mothers also attributed other changes in family life to the programme, including increases in paternal involvement in child care, the cessation of harsh punishment by one or both parents, and reductions in domestic violence. None of the control mothers whose children received food alone through the OTP programme reported such changes.

Interviewed mothers also reported a progressive positive involvement of neighbours by imitation. Not all women reported equally powerful effects. Factors such as severe illness in the child or parent and extreme poverty tended to mitigate the effects of emotional coaching. However, even many of the very poor mothers attributed remarkable changes in outlook and family communication to the emotional stimulation intervention. This suggests another way of looking at the link between women's empowerment and child survival, which has been traditionally explained by women's agency in health seeking. We suggest the reverse may also be true; programmes to improve care-giving may directly contribute to women's empowerment, and contribute to the promotion of a virtuous cycle to help rescue malnourished children in vulnerable communities.

While further investigation is needed, the preliminary results suggest that a combination of emergency therapeutic food relief for children coupled with emotional stimulation has a leveraging effect, not just on the short term survival and physical and emotional outcomes for children, but also on the prevention of long term consequences⁵. It also suggests that the introduction of emotional stimulation techniques through a coaching approach leads to a gradual shift in the ways children are cared for within the community, increasing the probability of a less violent and more nurturing environment. Mothers were found to continue practising emotional stimulation and good parenting skills principles well beyond the official ending of the programme, suggesting some form of sustainability. Finally, the increased speed of recovery by emotionally stimulated children, and the reported low proportion of relapse among them seem to suggest that the proposed intervention could contribute to reducing the overall intervention costs of severe acute malnutrition.

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The full report, Emotional Stimulation in the Context of Emergency Food Interventions Final Report Addis Ababa – August 2009, is available at: www.ennonline.net and search Resources

⁴ H. Epstein and A. Conticini. "Each child comes with his own luck"? A psychosocial intervention for malnourished children strengthens parental and spousal bonds in Ethiopia. Manuscript submitted for review, 2010.

⁵ See also S. Grantham-McGregor et al. Nutritional supplementation, psychosocial stimulation, and mental development of stunted children: the Jamaican Study. *Lancet* 1991;338(8758):1-5.

Critical analysis of MICAH programme

Summary of published research¹

The efficacy of some single nutrition interventions has been frequently and thoroughly evaluated, e.g. iron supplementation, vitamin A supplementation and salt iodisation. However the effectiveness (efficacy in real world settings) of large-scale integrated health and nutrition programmes has not been thoroughly evaluated. A recent article critically analyses an NGO-led large scale, multi-country 10 year micronutrient and health (MICAH) programme with an adequacy evaluation (a documentation of time trends in the expected direction).

The MICAH programme was launched in 1995 by World Vision Canada and was implemented from 1996-2005 in five African countries, four of which are reported in the paper (Ethiopia, Ghana, Malawi and Tanzania). The programme reached 4 million direct beneficiaries and more than 6 million indirect beneficiaries. Context specific programme plans were developed for each MICAH country within a programme-wide framework of objectives and strategies based on baseline assessments of vitamin A, iron and iodine deficiencies. Multiple interventions, ranging from community-based supplement distribution to fortifying and diversifying foods to national-level advocacy for national policy changes, were conducted to address the deficiencies and target groups identified. Interventions were integrated into existing systems, structures and services, wherever possible, to increase potential for sustainability. Table 1 summarises the MICAH activities.

Programme areas within countries were poor and rural, where few or no other major development organisations were operational. A comparison of MICAH data with Demographic Health Surveys (DHS) data for national rural samples suggests that the selected areas were similar to or worse off than the rural average in each country at baseline. If the DHS data are extrapolated back to the baseline year, assuming a linear trend, then 1997 MICAH indicators in Ethiopia were worse than DHS for Vitamin A capsule coverage in children < 5 years of age, and better for measles coverage and latrine access.

Methods

Cross-sectional surveys were conducted in each programme area at baseline (1996/7), the end of phase one (2000) and the end of phase 11 (2004). The surveys were conducted in the same month of the year in each country. Two-stage cluster sampling was employed, in which clusters were randomly selected using probability proportional to population

size. Key indicators were assessed through structured interviews with a standardised questionnaire and collection of biochemical, clinical and anthropometric data. The sample sizes per country were between 900 and 4801 randomly selected households per survey. Data were collected by trained enumerators and clinical staff. The data were subjected to post-hoc methods of quality determination and if of suitable quality, included in the adequacy evaluation. The magnitude of the change for each key indicator from baseline to follow-up final survey was compared with that observed in published controlled trials and reports of other large-scale programmes. If improvement was of comparable magnitude to the high end observed in controlled trials, the impact was considered high. If the improvements were of a range common in other programmes, the impact was considered moderate. If the change was smaller than other programmes, but greater than zero, the impact was considered low. Testing of differences from baseline to follow up was done by chi-square for categorical variables and t-tests for continuous variables.

Results

Most collected data were of moderate or high quality and therefore included in the adequacy evaluation. There were moderate to large improvements in vitamin A status in Ethiopian school-age children, in children less than 5 years of age in Tanzania and Ghana and amongst mothers in Ghana. Iodine status improved in Malawi and Tanzania. Anaemia rates and malaria prevalence decreased in women, pregnant women and pre-school children in Ghana, Malawi, and Tanzania, but anaemia increased in Ethiopian women. Large increases were reported for rates of exclusive breastfeeding (EBF) and immunisation. Child growth improved to the maximum that would be predicted with the given interventions.

Discussion

Most of the collected data were considered of good quality. The exceptions were anthropometric data in Ethiopia, anthropometric data for children under six months in Ghana and Malawi, breastmilk retinol analysis and urinary iodine in Tanzania and EBF data in all countries. An evaluation of the change in indicators over time (adequacy evaluation) revealed

¹ An adequacy evaluation of a 10-year, four-country nutrition and health programme. Peter R Berti, Alison Mildon, Kendra Siekmans, Barbara Main and Carolyn MacDonald. *Int. J. Epidemiol. Advance* Access published March 3, 2010

many positive results of the MICAH programme (see Table 2). MICAH programme staff reported five aspects of the programme that they believe uniquely contributed to the positive results:

Results-based management identified programme activities that were not producing positive outcomes and allowed for mid-stream corrections. Examples include:

- The decision in Malawi (following the 2000 evaluation) to reduce the geographic spread and intensify the intervention in a smaller area to ensure all participants received the interventions.
- Provision of regular, intensive technical support in the form of regular email correspondence, monitoring and support visits by World Vision technical staff and expert consultants, and annual training workshops.
- Implementation of a broad-based integrated package of interventions rather than relying on a single ‘magic bullet’ intervention.
- Community participation in programme design, implementation, monitoring and evaluation, which meant some interventions could be tailored to suit community preferences. This was especially relevant to animal husbandry, where existing practices differed from community to community.
- Regular supervision of staff in communities.

There were fewer positive results in Ethiopia, which may be because the intervention efforts were diluted over a larger number of beneficiaries compared to other countries. However, there was a positive impact on vitamin A status in school-age children – both an uncommon target and success.

In an attempt to estimate the impact of MICAH independent of other local and global influences, comparisons were made with DHS data for the national, rural samples. Table 2 shows the change in those indicators for which there were both MICAH and DHS data at baseline or follow-up and end-line. The change is measured as the difference of the differences (the difference between the MICAH difference between end-line and baseline and the DHS difference between end-line and baseline). For most indicators in all four countries, MICAH areas outperformed rural areas of the country as a whole. The comparison groups are not perfectly suited as control groups - different years, baseline conditions and other differences not related to MICAH. However, the MICAH performance compared with the DHS (along with the general concordance between coverage and outcome indicators in MICAH samples) suggests the improvements amongst programme beneficiaries are greater than the general trends, and greater than would have occurred MICAH was not implemented.

Although the evaluation has documented the trends over time, it still falls short of a full adequacy evaluation - the causal pathway should be relatively short and simple, the expected impact must be large and confounding must be unlikely.

Conclusions

Numerous nutrition and health impacts were observed in the intervention areas, often of a magnitude equal to or larger than observed in controlled interventions or trials. These results show the value of integrated long-term interventions.

Table 1: Summary table of MICAH interventions^a

			Ethiopia	Ghana	Malawi	Tanzania
Approximate number of ‘direct’ beneficiaries ^b			1.8 million	150,000	1.8 million	255,420
Total implementation cost, US\$ million			16.6	3.3	14.5	3.2
Total cost of evaluation, US\$			559,345	147,866	1,293,018	172,243
Total cost, US\$ million ^c			17.0	3.5	15.5	3.3
US\$ per direct beneficiary per year (Phase I/Phase II)			1.39/0.83	3.37/2.14	1.06/5.06	1.85/1.28
Objective	Strategy	Target group/activity	Ethiopia	Ghana	Malawi	Tanzania
Increase intake and bioavailability of micronutrients (iron, iodine and vitamin A)	Vitamin A supplementation	Pre-school children	D, T, M	P, D, T, A, M		D, T, M
		School-age children	D, T, A, M			
		Post-partum women	D, T, M	P, D, T, A, M		D, T, M
	Iron supplementation	Pre-school children		P, D, T, A, M	P, D, T, A, M	P, D, T, M
		School-age children		P, D, T, A, M		
		Women of childbearing age		P, D, T, A, M	P, D, T, A, M	
		Pregnant women	P, T, M	P, D, T, A, M	P, D, T, A, M	P, D, T, M
	Fortification	Iodized salt promotion	P, D, T, A, M	P, D, T, A, M	T, A, M	T, A, M
		Small-scale flour fortification			P, D, T, A, M	P, D, T, A, M
	Dietary diversification	Small animal rearing	P, D, T, A, M	P, D, T, M	P, D, T, A, M	P, D, T, M
		Vegetable gardens	P, D, T, A, M	P, D, T, M	P, D, T, A, M	P, D, T, M
		Fruit tree cultivation	P, D, T, A, M	P, D, T, M	P, D, T, A, M	P, D, T, M
Infant and young child feeding		Promotion of optimal breastfeeding and complementary feeding	T, A, M	T, A, M	T, A, M	T, A, M
Reduce prevalence of diseases that affect micronutrient status (diarrhoeal, parasitic and vaccine-preventable)	Water and sanitation	Provision of clean water	P, D, T, M	P, D, T, M	P, D, T, M	P, D, T, M
		Latrine construction	P, D, T, M	P, D, T, M	P, D, T, M	P, D, T, M
		Garbage disposal construction	T, M	T, M	T, M	T, M
	Malaria control	ITN distribution	P, D, T, M	P, D, T, M	P, D, T, M	P, D, T, M
		Chemoprophylaxis to pregnant women	P, D, M	M	P, D, T, M	P, D, T, M
		Malaria treatment to pre-school children	P, D, M	T	P, D, T, M	P, D, T, M
	Treatment of worms and parasites	Deworming of pre-school children	P, D, T, M	P, D, T, M	P, D, T, A, M	P, D, T, M
		Deworming of school-age children	P, D, T, M	P, D, T, M	P, D, T, A, M	P, D, T, M
		Schistosomiasis treatment	P, D, T, M	P, D, T, M	P, D, T, A, M	P, D, T, M
	Immunization		Support EPI campaigns	P, D, T, M	P, D, T, M	P, D, T, M
Diarrhoea treatment		Promotion of ORT	T	T	P, D, T	T
HIV/AIDS prevention		IEC re: HIV and AIDS	T	T	T	T
Build local capacity for delivery systems to improve micronutrient status	Education	Health and nutrition IEC to communities	T, M	D, T, M	D, T, M	D, T, M
		Staff and partner training	T	T	T	T
	Advocacy	Influence national policies on nutrition issues	A	A	A	A
		Use of media to communicate nutrition and health messages	T, A	T, A	T, A	T, A

P: procurement; D: delivery/distribution (includes both transport to distribution sites such as health centres and direct delivery to beneficiaries); T: training (includes both community education and training of implementing staff/volunteers); A: advocacy; M: monitoring; ITN: insecticide-treated bednet; EPI: expanded programme on immunization; ORT: oral rehydration therapy; IEC: Information, Education and Communication.

^a Blank cells indicate that MICAH did not work on that target group/activity in that country.

^b Based on target population in MICAH programme communities; not including the significant number of indirect beneficiaries (e.g. 4.7 million in Malawi) of MICAH’s national advocacy and intervention efforts (e.g. iodized salt coverage, EPI and vitamin A supplementation (VAS) campaigns).

^c Costs are in US\$ and based on exchange rates applicable at the time of purchase. World Vision Canada technical support and programme management costs, as well as overhead costs at country and Canada levels, are included.

Source of table: Berti et al (2010). See footnote 1.

Table 2: Standard deviations (SDs) of continuous variables in MICAH surveys in baseline (1996 or 1997), follow-up (2000) and endline (2004)

Year	Ethiopia SD			Ghana SD			Malawi SD			Tanzania SD		
	1997	2000	2004	1997	2000	2004	1996	2000	2004	1997	2000	2004
Breast milk retinol (µmol/l)					1.4	0.5					22.8	13.6
Urinary iodine-school age children (µg/l)				25.4	140.0	132.1		76.9	98.0		20.5	38.9
Haemoglobin Women (g/dl)	1.8	1.1	1.6	1.9	1.9	1.4		1.7	1.6	2.1	1.9	2.0
Haemoglobin – pregnant women (g/dl)	1.7	1.1	1.5	2.2	1.6	1.5	1.7	1.6	1.5	1.6	2.3	1.7
Haemoglobin- children <5 years of age (g/dl)				2.3	1.8	1.5	1.8	1.8	1.7	1.8	1.9	1.6
Height for age (z score)		1.5	1.4	1.3	1.2	1.2	1.5	1.5	1.2	1.5	1.5	1.3
Weight for age (z score)		1.3	1.1	1.3	1.2	1.2	1.4	1.5	1.1	1.4	1.4	1.3

Audience of drama held during PSNP meeting (Laygiant)

P. Fracassi, Ethiopia

Linking PSNP and NNP: experiences and challenges

Summary of report¹

A recent pilot project focused on identifying implementation and eventually scale-up opportunities to link two nationwide programmes in Ethiopia – the Productive Safety Net Programme (PSNP) and the National Nutrition Programme (NNP).

The selection of the pilot woredas within each region was based on the presence of both PSNP and NNP, and specifically on availability of the Community Based Nutrition (CBN) programme, a sub-component of the NNP. A further selection of one kebele in each woreda was made, based on agro-ecological signifiers and were as follows:

- Tigray Region – Hintalo Wajirat, Fikre Alem kebele
- Amhara Region – Lay Gayint, Shesho kebele
- SNNP Region – Domot Sore, Shiamba kebele
- Oromia Region – Gameches woreda, Kokuriftu, Agemti, Sre Kelo Geto and Homicho kebeles.

Preparatory study

A preparatory study was conducted at regional and community levels between 21st July and 22nd August 2009. Primary data were collected from 39 PSNP/NNP stakeholders through key informant interviews (KIIs). In addition, a total of eight focus-group discussions (FGDs) were conducted in four pilot kebeles involving 28 female and 23 male PSNP beneficiaries.

It was found that stakeholders held some common perspectives of malnutrition, causes and solutions. While those interviewed recognised that pregnant and lactating women (PLW) and children are the most nutritionally vulnerable groups, their answers indicated a

narrow focus on:

- Quantity of food, rather than quality and appropriateness of diet for PLW and young children.
- Productivity and marketability of foods, rather than their nutritional content for improved household diet.
- Dietary intake and food security with limited attention given to other well known contributing factors to malnutrition like disease, child care, access to health services and environmental conditions.

The most effective institutional arrangement for coordination at woreda and kebele levels appeared to be the Food Security Task Forces (FSTF). According to KIIs findings, the active involvement of multiple-sector partners in the FSTF was the result of continuous working relationships, strengthened through shared objectives and basic compatibility of interests. In contrast, at regional level, it was noted there were too many coordination platforms, with overlapping functions resulting in increased fragmentation.

Primary data from KIIs revealed a number of inter-sectoral experiences of cooperation at kebele level, although not strictly linked with addressing malnutrition. Findings from FGDs highlighted that a genuine community involvement required understanding and taking into account economic, practical and cultural motives that influence food production and access, as well as consumption decisions at household level.

These findings from the preparatory study are in line with recommendations by others² to “plan multi-sectorally but continue to implement sectorally”. Many of the institutional barriers for improved inter-organisational relationships first reflect administrative organisation in sectors/programmes and second, nutrition as a cross-cutting issue, fitting poorly within this framework. Working in an incremental and opportunistic manner appears likely to succeed with the current institutional structures in Ethiopia. ‘Coordination’ and ‘cooperation’ over specific issues like quality of dietary intake for children and PLW appear to be a promising focus of exchange between PSNP and NNP stakeholders. Mainstreaming of nutrition into the PSNP is expected to maximise the impact of the programme among beneficiaries.

PSNP/NNP linkage opportunities

Findings from the preparatory study together with a general overview of the PSNP/NNP policy framework were used to inform the Consensus Building Workshops conducted in all four pilot woredas and kebeles between 28th September and 16th October 2009. Three major ‘linkage’ opportunities between PSNP and NNP were agreed upon for implementation at institutional and community levels:

- *Capacity Building on Nutrition Security* for key members of the FSTF at woreda, kebele and community levels.
- *Behavioural Change Communication using Education Entertainment (BCCEE)* during payday sessions and other public gatherings. BCCEE encourage PSNP beneficiaries to optimise use of both local and transferred resources for improved nutrition security.
- *Focused attention to PSNP PLW* to protect and enhance their nutritional status and that of their children under two years of age.

Experiences from SNNP and Oromia showed that at an institutional level, nutrition security can be incorporated in the capacity building process of Food Security Task Forces, which comprise multi-sector members from agriculture, water, health, education, and Youth and Women’s Affairs. Half-day sessions were included in Watershed Management Training (Domot Sore, SNNP) and in the PSNP review meeting (Oromia, Gameches) targeting over 100 people including 70 Development Agents (DAs). Basics on nutrition were provided during Consensus-Building Workshops to increase understanding of the nutritional value of different types of foods and on specific dietary requirements for PLW and young children. Improved awareness of the nutrition outcomes to which PSNP could contribute was discussed amongst food security and agriculture stakeholders, considering more rigorously who benefits from their interventions. For example, the nutrition value of selected crop varieties should be included and accounted for. Meanwhile activities with a direct nutritional benefit, like poultry-management schemes, improved post-harvest storage and food processing techniques or home gardening can be



P. Fracassi, Ethiopia, 2010

Drama (counselling by a HEW) conducted during PSNP pay day session (Tigray-Hintalo Wajirat)

¹ Linkages Report (final draft). By Patrizia Fracassi and Lioul Berhanu (2010). Edited by Simon Rolph.

² Maxwell, S. & Conway, T. 2000. Perspectives on partnership. OED Working Paper Series, No. 6, World Bank, Washington, DC.

promoted in household business or investment plans for increased food and nutrition security

Experiences from Tigray, Amhara and SNNP show that BCCEE can be mainstreamed within PSNP pay-day sessions and/or public gatherings to promote changes within the households and the community. Nutrition and care-related behavioural problems were initially identified by a technical team composed of volunteer members from the kebele FSTF. Technical teams chose drama as the medium and emphasised messages around the life-cycle sequence from pregnancy, lactation, to young child feeding from six to 24 months of age. PSNP beneficiaries involved as performers received an orientation on drama and rehearsed under the guidance of a professional theatre performer. Key people at kebele level, such as the Chairman, the Manager, the DAs and Health Extension Workers (HEWs), facilitated events. Woreda level PSNP/NNP stakeholders attended the events in all regions. Regional and zonal food security stakeholders participated in SNNP where the drama addressed family planning and childbirth spacing issues, a reflection of the common concerns of both the food security and health sectors, as well as those of the community.

Challenges in implementation

Implementation of the linkage opportunity with the PSNP to target PLW has proved to be challenging in all regions. To monitor the utilisation of health and nutrition services by PSNP PLW, ‘on the job’ orientation sessions were organised with HEWs and DAs in all pilot kebeles. These sessions examined key indicators using registers and records from available routine services and nutrition programmes. Additional behavioural indicators related to dietary habits of PLW and young children were also included in the checklist. The initial PLW identification was expected to happen during the annual PSNP registration but this proved to be either impossible or where figures were available, the numbers were questionable (e.g. registered 12% PLW while the commonly estimated percentage is 3.5%).

The establishment of work teams among PSNP PLW was also discussed with the kebele FSTF to promote PLW involvement in ‘light’ works during the non-exemption time from public work (i.e. before four months of pregnancy and ten months post partum). Work teams were foreseen to be the basis for the formation of Interest Groups among PSNP women/PLW to engage in production activities with nutritional benefits. Further links were expected with existing development programmes, such as the Household Asset Building Programme (HABP) or community-based services, such as micro-finance and technical assistance. While interviewed PSNP-HABP stakeholders were open to diversifying production investments, they pointed out that other partners like the Women’s Affairs, NGOs or Youth Affairs should be involved in forming and supporting these groups. This ‘linkage’ opportunity goes beyond the PSNP and requires much more time and inputs from different partners to become operational.

Interviewed PSNP stakeholders emphasised the potential contribution of the health sector in monitoring the PSNP key indicators but acknowledged limited information sharing between them both. Monitoring of malnutrition

among children under two years can be ensured through the dissemination of Community-Based Nutrition (CBN) monthly data and Community Health Days (CHD) quarterly data. Currently, CBN programme provides data on underweight and severe underweight among children under 2 years. CHD programme provides data on MUAC<12cm MUAC<11cm or bilateral oedema among children 6-59 months and MUAC<21cm among PLW. In addition, monitoring of access and utilisation of essential health and nutrition services by PSNP PLW can generate communal data for joint planning among members of the Food Security Task Forces.

A ‘linkage’ evaluation was conducted informally with key PSNP and NNP stakeholders, focusing on their view of feasibility and scalability of identified and implemented linkage opportunities. None of the stakeholders believed that scaling-up should be a challenge, especially for capacity building or for the BCCEE. Furthermore, no institutional barrier could be identified to ‘monitoring access and utilisation of health and nutrition services by PSNP PLW’.

Recommendations

For immediate scale-up of identified linkages at institutional level:

The NNP Coordination Body and PSNP Joint Strategic Oversight Committee work together to ensure that identified linkages are mainstreamed in their respective programmes. The NNP document (2008), the PSNP document (2009) and the revised PSNP Planning Implementation Manual (PIM) (2010) already provide the policy framework to justify the need for a multi-sectoral approach.

NNP/PSNP regional and federal coordination bodies endorse and ensure the inclusion of linkages in respective sector plans, enforce implementation through mutually agreed monitoring mechanisms and evaluate performance jointly.

Nutritional objectives and outputs associated with PSNP impact and outcome indicators such as ‘reduced malnutrition’ and ‘increased access and use of health services’ are incorporated in PSNP annual plans at community, kebele and woreda levels. This will enable management of resource allocations, incentives and systems of accountability around them. In line with the NNP Sub-Component 2(d), the NNP ensures that young children and PLW in

families receiving aid are being nutritionally monitored and that their nutritional anthropometry is included in the evaluation of the PSNP.

NNP and PSNP stakeholders at federal and regional levels work together on how to mainstream nutrition security within the existing training curriculum.

The links between food production and consumption should become part of the discussion on how to incorporate agricultural and nutritional considerations from the outset. The existing Training Manual could be the starting point. The Ministry of Health could support these joint trainings so that key members of the FSTF at different levels become change agents to promote adequate and diversified diet for PLW and children under two years.

For immediate scale-up of identified ‘linkages’ at community level:

Capacity building on nutrition security rolled out to kebele and community FSTF members. DAs, HEWs, Community Health Workers (CHWs), women’s and youth representatives are well placed to engage with male and female PSNP farmers for designing interventions and developing/adopting technologies. Interventions and technologies should take into account agro-ecology, household economy, livelihood strategies and cultural norms that influence household decisions over food production, access and use.

Kebele FSTFs should integrate BCCEE during pay-day sessions and public gatherings. Experiences from implementation show that this activity can be managed at community level provided the quality of the technical content is supervised by the HEWs. DAs and HEWs can play a significant role in facilitating the dialogue with the community to influence intra-household dynamics that affect nutritionally vital decisions with regards to allocation of different quantities and types of food to PLW and young children.

For implementation of identified linkages at institutional and community levels:

It is recommended to start the component which ‘focuses attention on PSNP PLW’ in one pilot woreda looking more carefully at the role that PSNP and NNP key stakeholders can have on actual operational output.

A small number of indicators should be prioritised by PSNP and NNP stakeholders for



Drama conducted during PSNP meeting (Laygiant)

monitoring of PSNP PLW utilisation of essential health and nutrition. The initial 'window of opportunity' could be reduced to pregnancy up to 11 months post partum instead of pregnancy to 24 months (as this corresponds more or less to the exemption time of PSNP PLW from Public Work).

Direct links should be established between the FSTF (particularly the early warning system (EWS)) and nutrition programming such as CBN and CHD for monthly and quarterly sharing of data on nutritional status of children and PLW in PSNP kebeles.

The establishment of Interest Groups among PSNP PLW/women needs the involvement of other partners like the Women's Affairs and/or Youth Affairs to support groundwork.

Product-value chain assessment and technical assistance will still remain the responsibility of agricultural partners.

PSNP and NNP stakeholders should optimise the role of home economists in SNNP, Oromia and Tigray by linking them with the HEWs and CHWs to strengthen post-harvest activities, as a necessary link between food production and consumption.

Potential linkages for further discussion:

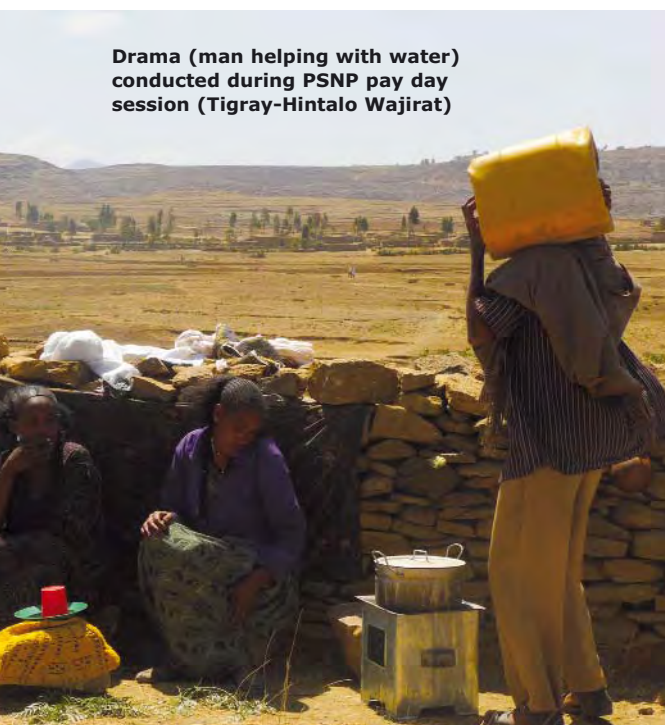
Protection and enhancement of nutritional status of PSNP Orphans and Vulnerable Adolescents (OVAs) through their involvement in 'Healthy Life Style' clubs.

Food fortification, such as inclusion of home fortification micronutrient powders for children under two years and PLW during food or cash transfers and fortification at milling stage of the PSNP food transfer.

Supplementation of PSNP food/cash transfers through local production of 'special blended food' for children 6-11 months and PLW. On a small-scale, this activity could be linked with the establishment of Interest Groups and with an increased role of the Home Economists at woreda level.

Promotion of high-nutrient bio-fortified crops (e.g. high protein maize and orange flesh sweet potato) and improved breeds of poultry, small ruminants and cows through collaboration with research institutes to test and promote selected varieties.

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Drama (man helping with water) conducted during PSNP pay day session (Tigray-Hintalo Wajirat)

P. Fracassi, Ethiopia, 2010

Post-drought restocking

Can its impact be sustainable?

By Ahmed Alkadir Mohammed



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This article reflects some of the findings of Ahmed's MSc thesis on post-drought restocking of pastoral households (2007)

The livelihoods of pastoral communities depend on livestock production. Livestock provide basic subsistence foods such as milk, meat and blood and are also used for wealth accumulation, prestige, insurance and inheritance. The income generated from the sale of livestock serves to buy additional food items, crops and clothing. Moreover, livestock are used as a means of transportation, dowry in marriage and to fulfill reciprocal (social) obligations. Therefore, any adverse factor which impacts negatively on livestock threatens the livelihood and life of pastoral communities.

Recurrent droughts in Ethiopia and Kenya have claimed the lives of livestock and depleted herd sizes. The adverse impact of drought on livestock is significant in Ethiopia and Kenya. For instance, Ethiopia lost 90% of calves, 45% of cows and 22% of mature males between 1983-1984², 37% of cattle between 1984-1986 and 60% of cattle from 1999-2000³. Kenya (Turkana) lost 90% of cattle, 80% of sheep and goats, 40% of camels in 1979-80⁴, as well as 28% of cattle and 18% of sheep and goats in 1991 in Northern Kenya⁵. This loss of livestock affects families, particularly children, women and elders, as their food security is dependent on livestock. It is also pushing pastoral households into destitution and forcing them to drop out of the pastoral way of life.

The traditional means of self-restocking have been eroded in the pastoral community, due to recurrent drought, raiding, conflict, environmental degradation and an increase in population. This has prompted the search for and imple-

mentation of alternative interventions by agencies (non-governmental organisations (NGOs)). NGOs have been shifting their programmes toward livestock based interventions to address the impact of recurrent drought. These interventions include de-stocking, water, veterinary service, restocking, and fodder provision.

Post drought restocking in pastoral communities has become an important area of research in Ethiopia and Kenya. Pioneers of restocking have demonstrated a number of objectives (advantages) of post-drought restocking. Among other things, reintegrating families into a pastoral way of life is shown as one of the objectives. It is also indicated that restocking is contributing to food security and a balanced diet (children), as well as improving economic and social standing⁶. However, a number of professionals in this field argue that many restocked pastoralists do not return to a pastoral lifestyle and are likely to become destitute

¹ Post-drought Restocking of Pastoral Households: Can its impact be sustainable? Master of Arts in Humanitarian Assistance e Program, Friedman School of Nutrition Science and Policy, Tufts University, May 2007. Thesis Advisor: Maxwell, Daniel (Associate Professor, Friedman School of Nutrition Science and Policy)

² Coppock, D. L. 1994. The Borena plateau of southern Ethiopia; Synthesis of pastoral research, development and change, 1980-91. Addis Ababa: International Livestock Center for Africa (ILCA).

³ Coppock, D.L. (2000). GL-CRSP Annual Report 2000.

⁴ Hogg, R. (1985). Restocking pastoralists in Kenya: A strategy for relief and rehabilitation. ODI Pastoral Development Network Paper 19c. Overseas Development Institute, London.

⁵ Barton and Morton, forthcoming publication.

⁶ The Development Fund (2007). Impact Assessment of the Goat Restocking Project in Afar, Zone-2, Berhale. Addis Ababa. 2007 (Aynalem Haile)

in a short period of time. This raises the question of whether the impact of restocking is sustainable and if not, why not?

The objectives of this article are to explore post-drought restocking interventions, highlight their limitations, and suggest practical elements that need to be improved in the future. These objectives are looked at in terms of the sustainability of restocking impact in reintegrating (maintaining) restocked families into the pastoral way of life. The article discusses restocking interventions in the pastoralist areas of Ethiopia and Kenya. It argues that if the right sets of critical factors are considered in design and implementation, the impact of post-drought restocking can be sustainable with regard to reintegrating (maintaining) restocked families into a pastoral way of life. However, restocking affected pastoralists to the level of a Critical Livestock Thresholds (CLT) is key.

The livelihood framework analysis

The livelihoods framework is one of the approaches applied by a number of humanitarian and development organisations to examine the livelihood of a given community and to help design appropriate interventions. According to the livelihood analysis, pastoral communities in the Horn of Africa are vulnerable to recurrent drought, humans and animal diseases, cattle raiding, conflict, bad governance and policies, poor social and economic infrastructure and loss of grazing lands. To determine the implications of this analysis on post-drought restocking, a number of factors must be considered: hindrance of mobility, lack of access to and loss of range land, livestock mortality, poor productivity of milk, and off-spring and diminished herd growth. These all adversely impact the sustainability of restocking.

The poverty trap analysis

In the field of economics, the poverty trap refers to the situation where individuals, communities, regions or economies are caught in extreme poverty and unable to get out of this condition⁷. This analysis is fundamentally based on a Critical Assets Threshold (CAT). It asserts that households that possess assets equal to or above these thresholds recover from shocks, accumulate assets and escape poverty, while those who have assets below these critical thresholds experience decline and collapse of assets and persistent poverty. In addition, this analysis implies that if a shock leaves a household's assets equal to or above the critical thresholds, then recovery and growth is possible and vice versa⁸. (In pastoral communities of Ethiopia and Kenya, the risk of falling into the poverty trap is directly related to the productive livestock assets held at household level and whether this is equal to or above the CLT. The CLT is necessary for sustenance, herd growth, increase in return and recovery from shocks⁹. "A threshold value is the number of animals required to support a person or a family if that person or family was to rely totally on animals for all his or their needs."¹⁰

A study in Southern Ethiopia demonstrates the presence of the poverty trap among the Borena pastoralists. The study identified that household herd size thresholds are 10 livestock units¹¹, below which a household is economically not viable and thus enters a downward spiral of poverty. However, those who are

above this level are expected to accumulate livestock and grow their herds¹². Based on the discussion with pastoralists in Afar Zone of Ethiopia, 30 – 40 small ruminants are the minimum stock to start a pastoralist way of life¹³ (Development Fund, 2007) while 50 – 70 sheep and goats in a proportion defined by the household and of the right age for immediate breeding are suggested for restocking implementation in the Somali region of Ethiopia¹⁴. A similar study in Northern Kenya also demonstrated presence of the poverty trap and the CLT that enables pastoralists to accumulate livestock and grow their herds.

From a restocking perspective, the studies suggest not only who should be restocked, but also the necessity to restock pastoralists to a minimum critical threshold level in order to ensure sustenance, enable herd growth and recovery from shocks¹⁵. The importance of improved veterinary service, livestock and herders' security, and dry season water availability are also emphasised as means to protect and build assets¹⁶.

Other related factors

Many NGO interventions elect to supply small animals (such as goats and sheep) rather than cattle, although some pastoral communities are dependent on a range of livestock and produce from their herds. Small animals alone may not therefore ensure food security for these pastoralists¹⁷. In other contexts, small animals such as goats are preferred as they give milk for the consumption of children and elders and forage easily from bushes and shrubs encroachments¹⁸. Many small NGOs implement restocking programmes using disaster relief funds¹⁹. If animals are bought from other regions, their age, reproductive and milk productive capacity, adaptability and disease profile should be analysed²⁰. Lack of transparency in the purchase process is observed to be one of the limitations in restocking projects. In 1985 and 1987, destitute Borenas were restocked with animals bought by traders, which resulted in a number of disadvantages for the pastoralists²¹. In some instance, sale of the restocking animals has been observed in order to buy other livestock and grain, for payment as part of a bride price and to finance traditional ceremonies²². In order to prevent beneficiaries slaughtering and eating their new herd, it is recommended to provide food for 9 to 12 months during the restocking programme²³. All these factors should be considered during planning restocking interventions.

Critical factors that hinder the sustainability of post-drought restocking

This review has identified the following critical factors:

- Failure of restocking the needy and skilled pastoralists who have a livestock level significantly below the CLT (or the destitute) to the level of CLT.
- Failure of targeting herders whose herd size is below but closer to the CLT.
- Failure of providing the right composition of animals (quantity, sex, age, types, breeding, milk productive species).
- Failure to consider key contextual factors that will affect the outcome of the restocking and the need for other supporting interventions to address these factors (raiding, conflict, veterinary service, pasture/fodder, water).
- Shortage of livestock in the region (resulting in restocking with non-adaptable and diseased animals).
- Loss of rangelands.
- Limited size of funding and inadequate food aid.
- Absence of social and economic infrastructures (hindering emergence and adoption of non-pastoral activities).

Recommendations

The following are recommended to improve the sustainable impact of post-drought restocking interventions:

- Restock pastoralists to a minimum of the CLT.
- Target not only the capable needy and skilled destitute pastoralists, but also target those who have live stock levels below but closer to the CLT.
- Provide the right composition of live-stock.
- Consider the existing situation and provide packages of supporting interventions.
- Coordinate interventions to tackle resources constraints.
- Research and design comprehensive guide lines for restocking.
- Formulate and apply a viable land utilisation policy.
- Research and advocacy on the promotion and funding of non-pastoral activities and the development of social and economic infrastructures.
- Consider and implement restocking projects within a broader development plan and Disaster Risk Management approach.

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⁷ Izhar, B (2005). Why Poverty Traps Emerge

⁸ Carter, R and Barrett, B (2004). The Economics of Poverty Traps and Persistent Poverty: An assets-based Approach. BASICS CRSP Management Entity, Department of Agricultural and Applied Economics, University of Wisconsin-Madison.

⁹ McPeak, G and Barrett, B (2001). Differential Risk Exposure and Stochastic Poverty Traps Among East African Pastoralists. American Journal of Agriculture and Economics.

¹⁰ International Committee of the Red Cross (ICRC). 2004. Livestock Study in the Greater Horn of Africa. Nairobi/Kenya.

¹¹ It should be noted that the focus of this paper is on the significance of a 'self-sufficient' livestock herd size that should be considered in restocking interventions. The authors have used different ways of expressing the critical livestock threshold for Northern Kenya and Southern Ethiopia, i.e. per capita and livestock unit. Generally, approximately 4.5TLU per capita is suggested as a self-sufficiency threshold necessary in more arid rangelands not suffering widespread degradation (McPeak 2000).

¹² Barrett, B et al (2002). Poverty Traps and Resource Degradation. BASIS Brief. No. 6

¹³ See footnote 6.

¹⁴ Save the Children Ethiopia (UK) (2005). Terminal Evaluation of the Restocking/Rehabilitation Program for the Internally Displaced Persons (IDPs) in Fik Zone of the Somali Region of Ethiopia. Acacia Consultants Ltd, 00606/Nairobi, Kenya.

¹⁵ McPeak and Barrett, 2001. See footnote 9.

¹⁶ Barrett, B et al (2006). Welfare Dynamics in Rural Kenya and Madagascar. Journal of Development Studies. Vol. 42, No. 2, 248-277

¹⁷ Oba, G (1992). Ecological Factors in Land Use Conflict, Land Administration and Food and Food Insecurity in Turkana, Kenya. ODI Pastoralist Development Network Paper 33a. London: Overseas Development Institute.

¹⁸ Ayle Gebre-Mariam (1989). Analysis of the progeny history of heifers and does and their off springs: Case of animals; restocked to re-settlers at Yavello, Mega and Moyale in 1985 and 1987. Addis Ababa.

¹⁹ Toulmin, C (1995). Tracking Through Drought: Options for Destocking and Restocking. In Living within uncertainty: New Direction in Pastoral Development in Africa. 95-115 (Ed. Ian Scoones). London: Intermediate Technology Publications. Toulmin, C (1987). Drought and the Farming Sector: Loss of Animals and Post-Drought Rehabilitation. Development Policy Review 5(2):125-148.

²⁰ USAID-Office of Foreign Disaster Assistance: Livestock Interventions: Important Principles for OFDA. 11-19-02. http://www.usaid.gov/our_work/humanitarian_assistance

²¹ Ayele Gebre/Mariam, 1989 (footnote 8) and Development Fund, 2000

²² See footnote 8.

²³ See footnote 10

Food insecurity and mental health among community health volunteers in Ethiopia

Summary of published research¹

A recent study examined self-reported household food insecurity and symptoms of common mental disorders (CMD) among 110 community health AIDS care volunteers living in Addis Ababa, Ethiopia during the height of the 2008 food crisis. In the face of a late-maturing HIV/AIDS epidemic and poorly-distributed public health services, volunteerism in community health care has grown substantially over the past decade in Addis Ababa. Public health facilities rely heavily on the training of volunteers, who provide home-based palliative care, support drug adherence and mediate patient's access to clinical treatment and non-governmental organisation (NGO) assistance. Volunteers typically serve for a period of 18 months, caring for at least five non-kin patients, under the supervision of a local NGO. After 18 months, patients are re-assigned to a new group of volunteer recruits and graduating volunteers leave the service with unknown prospects for employment.

had been volunteering for more than 12 months) and newcomers (who had just started volunteering at the time of the baseline survey).

The researchers used generalised estimating equations that account for associations between responses given by the same participants over three survey rounds, to model the longitudinal response profiles of food insecurity, CMD symptoms, and socio-behavioural and micro-economic covariates. To help explain the patterns observed in the response profiles and regression results, the researchers examined qualitative data that contextualised the cognition and reporting behaviour of AIDS care volunteers, as well as potential observation biases inherent in longitudinal, community-based research.

The Household Food Insecurity Access Scale (HFIAS) was translated into Amharic, and then back translated and revised. Participant households were classified into four levels of food insecurity according to a scheme that closely parallels the published HFIAS protocol. To assess the distribution of CMD symptoms, the researchers used a 29-item version of the WHO self-reporting questionnaire (SRQF) which incorporates eight items derived from Amharic idioms of distress. The SRQF has been previously translated to Amharic and tested for content, construct and criterion validity. Participants were presented with yes or no response categories for each SRQF item/symptom. Though the SRQF is not a diagnostic tool, it was assumed that higher scores were indicative of greater likelihood of having a common mental disorder.

Participants estimated monthly household income at all three rounds. This income was divided by total number of people in the household. Participants also answered three questions addressing household economic coping 'to fulfil basic needs' in the past three months: whether they had started a new income-generating activity, sold household goods, and/or kept students home from school to help in income generation or food preparation. The study categorised participants according to whether they or anyone in their households engaged in one or more of these coping measures versus none in the three months prior to the survey.

At each round, participants reported whether they were receiving free food aid from NGOs and what kinds of food they were receiving. Participants also reported their total number of care recipients, whether they were caring for at least one bedridden care recipient and the total number of hours per week spent in volunteer activities.

Findings

The data showed that food insecurity is highly prevalent (~80%) among AIDS care volunteers in Addis Ababa, that it is associated with household economic factors, and that it is linked to symptoms of common mental disorders. Surprisingly, the volunteers in this urban sample did not report increasingly severe food insecurity or CMD during the peak of the 2008 food crisis. This is a counter-intuitive result that would not be predicted in analyses of population-level data, such as those used in econometrics simulations.

The authors of the study explored a number of possible explanations as to why this poor urban sample was buffered from the local food crisis. One posited explanation was that sufficiency of accessible food is a potentially subjective assessment sensitive to shifting internal standards and social comparisons. Since volunteer caregivers repeatedly interact with care recipients and other volunteers who are perceived to be poorer and hungrier, food insecurity is prone to response shifts in the sample. This is partly supported by the fact that newcomers were more likely than veterans to report improved food insecurity status at Rounds 2 and 3. Another possible explanation or factor may be the impact of volunteerism on wellbeing. Other longitudinal studies have shown that adult volunteers enjoy better physical and mental health and lower risk of mortality than non-volunteers. This might explain why mental health did not worsen over time in the sample. In other words, mental health could have been buffered from stressors by the psychological benefits mediated by AIDS care volunteers' unique social networks and religious beliefs. This is illustrated by representative quotes from volunteers who were interviewed in the study. For instance, a 32-year-old single mother said that, "In all my life, what makes me happiest is [to see those patients] being human—being able to work and feed themselves." A 35-year-old unmarried man said, "Being a volunteer caregiver will get you to...sympathize with human beings... Sometimes I will get aid from NGOs [in return for volunteering]; but you have to forget this thing. By believing in God...and doing God's work, you can live."

The authors raise important policy questions; should the apparent resilience of the study population be supported with food or other material aid? Should they be relieved of their duties with efforts to put care and support in the hands of paid professionals? Or should they become paid community health workers? The authors conclude the paper by arguing for further studies addressing links between food insecurity, mental health, and the potential benefits of altruism.

For more information, contact: Kenneth Maes, email: kennycmaes@gmail.com

¹ Maes, K et al (2010). Food insecurity and mental health: Surprising trends among community health volunteers in Addis Ababa, Ethiopia during the 2008 food crisis. *Social Science and Medicine* 70 (2010), pp 1450-1457

Volunteer support may benefit caregivers as well as beneficiaries



K Maes, Ethiopia, 2008

The study addressed two principle questions. First, did rising food prices in Addis Ababa in 2008 lead to greater experiences of food insecurity and concomitant rise in CMD symptoms amongst volunteers in the sample? Secondly, do factors such as food aid, per capita income or participation in microfinance clubs explain the observed patterns of self-reported food insecurity and CMD amongst the volunteers?

The surveys were administered to a sample of community AIDS care volunteers from two local NGOs, Hiwot HIV/AIDS Prevention Control and Support Organisation and Medhin Social Centre, which provide home-based care for people with AIDS accessing treatment at a public hospital in southwest Addis Ababa (ALERT hospital).

Four Ethiopian research assistants were trained for data collection that took place over three rounds over the course of 2008. The sample included 110 volunteer caregivers (99 women and 11 men) of adult patients receiving treatment at the ALERT Hospital. The gender ratio reflected the overwhelming proportion of women in the volunteer population. The sample was divided into subgroups of 'veterans' (who

Acronyms

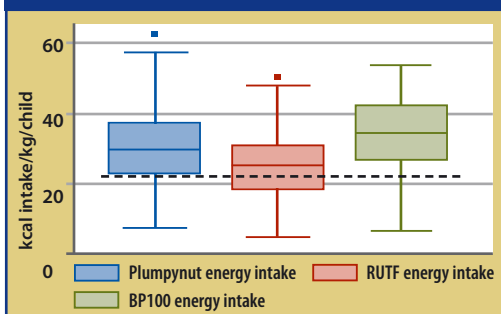
ACF	Action Contre la Faim	FDA	Food Distribution Agent	OFDA	Office for Disaster Assistance (USAID)
ACT	Action of Churches Together	FFP	Food for Peace Programme	OFSP	Other Food Security Programme
ADP	Area based Development Programme (World Vision)	FGD	Focus group discussion	OMFI	Omo-Micro Finance Institution
AHT	Animal health technician	FHE	Food for the Hungry - Ethiopia	ORDA	Organisation for Rehabilitation and Development
AKU	Afran Kallo Union	FIND	Foundation for Innovative New Diagnostics	ORP	Operational Research Programme
ARRA	Administration for Refugees and Returnee Affairs	FMIP	Food Management Improvement Project	OTP	Outpatient Therapeutic Programme
BCC	Behaviour change communication	FMOH	Federal Ministry of Health	OVA	Orphans and Vulnerable Adolescents
BMI	Body mass index	FSNRD	Food Science and Nutrition Research Directorate	OVC	Orphans and Vulnerable Children
CAHWs	Community Animal Health Workers	FSTF	Food Security Task Force	PASDEP	Plan for Accelerated and Sustained Development to End Poverty
CASHE	Commercialisation of Agriculture for Smallholders in Ethiopia	GAM	Global acute malnutrition	PHEM	Public Health Emergency Management
CBN	Community Based Nutrition	GASU	Global Agricultural Scale Up	PILLAR	Preparedness Improves Livelihoods and Resilience
CBO	Community based organisation	GDP	Gross Domestic Product	PIM	Programme Implementation Manual
CBRM	Community Based Resource Management	GoE	Government of Ethiopia	PLW	Pregnant and lactating women
CBTP	Community Based Training Programme	HAVOYOCO	Horn of Africa Voluntary Youth Committee	PLWH	People living with HIV
CC	Community conversation	HEA	Household Economy Approach	PO	Pastoral organisation
CDC	Centre for Disease Control (Atlanta)	HEP	Health Extension Programme	PRRO	Protracted Relief and Recovery Operation
CDAA/E	Churches' Drought Action Africa /Ethiopia	HEW	Health extension worker	PSNP	Productive Safety Net Programme
CESVI	Cooperazione e Sviluppo (Italy)	HH	Household	PST	Pre-service training
CFSTF	Community Food Security Task Force	HMIS	Health Management Information System	RAIN	Revitalising Agricultural/pastoral Incomes and New markets
CHD	Community Health Day	HRF	Humanitarian Response Fund	RCWDA	Rift Valley Children and Women Development Association
CIDA	Canadian International Development Agency	HRD	Humanitarian Requirement Document	RDD	Regional Drought Decision (ECHO)
CLT	Critical Livestock Threshold	HRP	Humanitarian Response Programme	RDP	Rural Development Programme
CM	Community mobilisation	HSDP	Health Sector Development Plan	R-ENCU	Regional ENCU
CMAM	Community based management of acute malnutrition	HSEP	Health Services Extension Package	REST	Relief Society of Tigray
CMR	Crude mortality rate	HTP	Harmonised Training Package	RF	Risk Financing Mechanism
CNU	Children's Nutrition Unit	IFHP	Integrated Family Health Programme	ROBA	Rural Organisation for the Betterment of Agro-pastoralists
CRS	Catholic Relief Services	IGA	Income generating activities	RUTF	Ready to use therapeutic food
CSAS	Centric systematic area sampling	IMC	International Medical Corps	SAM	Severe acute malnutrition
CSB	Corn Soy Blend	IMCI	Integrated Management of Childhood Illness	SC	Stabilisation centre
CS-CAFÉ	Citizens Solidarity for the Campaign Against Famine in Ethiopia	INGO	International non-governmental organisation	SC US	Save the Children US
CSO	Civil society organisation	IPC	Integrated Humanitarian Phase Classification	SFP	Supplementary Feeding Programme
CTC	Community-based Therapeutic Care	ITN	Insecticide treated nets	SUN	Scale Up Nutrition
DFID	Department for International Development (UK)	JAM	Joint Assessment Mission	SMART	Standardised Monitoring and Assessment of Relief and Transitions
DHS	Demographic Health Survey	JEOP	Joint Emergency Operation Plan	SNNPR	Southern Nations, Nationalities, and People's Region
DOA	District Office of Agriculture	JICA	Japan International Cooperation Agency	SQUEAC	Semi Qualitative Evaluation of Access and Coverage
DPPA	Disaster Prevention and Preparedness Agency	KAC	Knowledge, Attitude, Coverage	SWC	Soil and water conservation
DPPO	Disaster Prevention and Preparedness Office	KAP	Knowledge, Attitude, Practice	TFP	Therapeutic Feeding Programme
DRM	Disaster risk management	KAPB	Knowledge, Attitude, Practice, Behaviour	TFU	Therapeutic Feeding Unit
DRMFSS	Disaster Risk Management and Food Security Sector	<i>Kebele</i>	<i>The smallest administrative unit of Ethiopia similar to a ward, a neighbourhood or a localised and delimited group of people. It is part of a woreda.</i>	TLU	Tropical Livestock Unit
DRR	Disaster risk reduction	KFSTF	Kebele/tabia food security task force	TOT	Training of trainers
DTM	Department of Traditional Medicine	LWF	Lutheran World Federation	TSF	Targeted Supplementary Food
ECHO	European Commission Humanitarian Aid Department	MANTF	Multi-Agency Nutrition Task Force	TTP	Team Training Programme
ECS	Ethiopian Catholic Secretariat	M&E	Monitoring and evaluation	Ucodep	Unity and Cooperation for Development of Peoples (now Oxfam Italia)
ECSNCC	Ethiopian Civil Society Network on Climate Change	MEL	Monitoring, Evaluation and Learning	UNDAF	United Nations Development Assistance Framework
EDK	Emergency drug kit	MFI	Microfinance institutions	UNHCR	United Nations High Commissioner for Refugees
EDHS	Ethiopia Demographic Health Survey	MLREP	Market-led Livelihood Recovery and Enhancement Programme	UNICEF	United Nations Children's Fund
EECMY	Ethiopian Evangelical Church Mekane Yesus	MOARD	Ministry of Agriculture and Rural Development	UNOCHA	United National Office for Coordination of Humanitarian Affairs
E-EOS	Expanded-EOS	MoPDE	Ministry of Pastoral Development and Environment of Somaliland	USAID	United States Agency for International Development
EFSL	Emergency Food Security and Livelihoods	MoU	Memorandum of Understanding	VAD	Vitamin A deficiency
EHNRI	Ethiopian Health and Nutrition Research Institute	MP	Micro-plans	VAS	Vitamin A supplementation
ENA	Emergency Nutrition Assessment	MSG	Multi-storey gardens	VCA	Value Chain Analysis
ENCU	Emergency Nutrition Coordination Unit	MUAC	Mid upper arm circumference	VCHWs	Volunteer Community Health Workers
ENI	Ethiopian Nutrition Institute	N-CMAM	National CMAM	WASH	Water, Sanitation and Hygiene
EOC	Ethiopian Orthodox Church	NCOE	Nutrition Centre of Expertise (World Vision)	WFP	World Food Programme
EOC-DICAC	EOC-Development and Inter-Church Aid Commission	NERS	Nutrition Education and Rehabilitation Sessions	<i>Woreda</i>	<i>An administrative division of Ethiopia (managed by a local government), equivalent to a district and itself part of a zone, grouped into ethno-linguistic regional zones.</i>
EOS	Enhanced Outreach Strategy	NFI	Non food item	WorHO	Woreda Health Office
EPI	Expanded programme on immunisation	NGO	Non-governmental organisation	WVE	World Vision Ethiopia
EU	European Union	NIS	Nutrition Information System		
EWRD	Early Warning and Response Directorate	NNP	National Nutrition Programme		
EWS	Early Warning System	NNS	National Nutrition Strategy		
FBO	Faith based organisation	NRIH	National Research Institute of Health		
		NRMD	Natural Resource Management Directorate		
		NERAD	National Environment Research and Disaster Management		
		NRM	Natural resource management		

See also key programme definitions in Box 1, p39 and a guide to key systems and programmes in Ethiopia implemented by the government on p12, Box 1.

Corrections to Field Exchange 39

Our apologies for a number of errors in Field Exchange 39. The Kismayo, Mogadishu, Bayand Bakool are regions of Southern Somalia and not Somaliland as stated (Analysis of looting in the Somali war, Field Exchange 39, p22). Note also a correction to Figures 1, 2 and 3 of the article 'Acceptability trial of a novel RUTF based on soy, lentils and rice' (p12-13). The online edition of Field Exchange 39 has been corrected.

Figure 1: Comparison of average energy intakes (n=69)



Note: The dashed line represents 75% of the Plumpy'nut* energy intake

Figure 2: Weight gain (g/kg/child), n=69

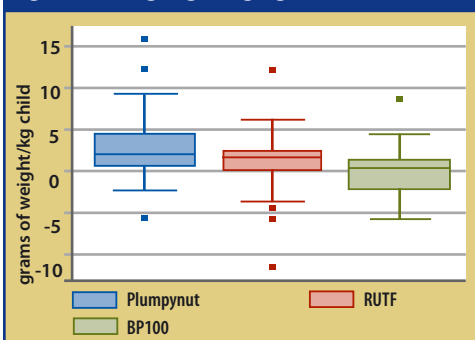
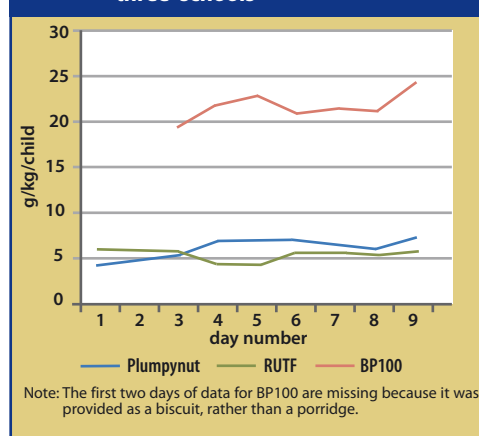


Figure 3: Consumption trends across the three schools



Note: The first two days of data for BP100 are missing because it was provided as a biscuit, rather than a porridge.

Field Exchange

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Caroline Waterman, Mesfin Teklu, Concern Ethiopia, Lubna Khan, Indrias Getachew, Andrew Simons, Patrizia Fracassi, Hailu Sitotaw, Abay Bekele, CRS, Oxfam, Emily Mates, Emma Proud, EOC-DIAC, Mahlet Bezu, Judith Schule, Geraud Laval, Kate Sadler, Mulugeta Wtsadik, Kenneth Maes, Sylvie Chamois, WFP photo library, EHNRI Public Relations Office,

Cover

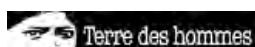
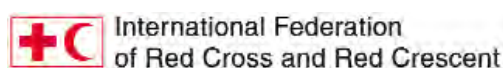
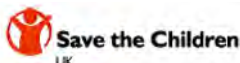
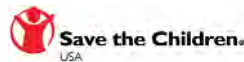
Mother and child on Community Health Day, Fadis Woreda, Ethiopia; P Fracassi, Ethiopia, 2008

Back Cover; A boy in Harar market Simon Rolph, Ethiopia, 2009

The opinions reflected in Field Exchange articles are those of the authors and do not necessarily reflect those of their agency (where applicable).



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The Emergency Nutrition Network (ENN)

grew out of a series of interagency meetings focusing on food and nutritional aspects of emergencies. The meetings were hosted by UNHCR and attended by a number of UN agencies, NGOs, donors and academics. The Network is the result of a shared commitment to improve knowledge, stimulate learning and provide vital support and encouragement to food and nutrition workers involved in emergencies. The ENN officially began operations in November 1996 and has widespread support from UN agencies, NGOs, and donor governments. The network aims to improve emergency food and nutrition programme effectiveness by:

- providing a forum for the exchange of field level experiences
- strengthening humanitarian agency institutional memory
- keeping field staff up to date with current research and evaluation findings
- helping to identify subjects in the emergency food and nutrition sector which need more research.

The main output of the ENN is a tri-annual publication, Field Exchange, which is devoted primarily to publishing field level articles and current research and evaluation findings relevant to the emergency food and nutrition sector.

The main target audience of the publication are food and nutrition workers involved in emergencies and those researching this area. The reporting and exchange of field level experiences is central to ENN activities.

The Team



Jeremy Shoham (Editor), Marie McGrath (Sub-editor) and Carmel Dolan are ENN Technical Directors.



Thom Banks is the ENN's fulltime Desk Operations Officer and provides logistical and project support to the ENN team.



Katherine Kaye is the part-time administration assistant at the ENN.



Chloe Angood is a nutritionist working part-time with ENN on a number of projects and supporting Human Resources.



Matt Todd is the ENN financial manager, overseeing the ENN accounting systems, budgeting and financial reporting.



Orna O'Reilly designs and produces all of ENN's publications.



Phil Wilks (www.fruitysolutions.com) manages ENN's website.



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