# Ethiopia: situation analysis for Transform Nutrition

## 1. Nutrition outcomes

Ethiopia is the second-most populous country in Africa, at nearly 84 million. Approximately 14% are children under five years of age (Central Statistics Agency 2007). These children and their mothers suffer disproportionately from the poor health and nutrition situation in the country. In fact, malnutrition is the underlying cause of 57% of child deaths in Ethiopia (SCUK 2009), with some of the highest rates of stunting and underweight in the world. As for women in the country, over a quarter had a low body mass index (BMI) (<18.5) in 2005; nearly one third among women 15-19 years of age. Contributing factors to undernutrition include widespread poverty, limited employment opportunities, poor infrastructure, high population pressure, low education levels, inadequate access to clean water and sanitation, high rates of migration and poor access to health services (Getahun 2001, Bhutta 2008). Without increased efforts to improve the nutrition status of vulnerable groups such as mothers and children under two years old, Ethiopia risks falling short of reaching the Millennium Development Goals (MDGs) of halving underweight and reducing child mortality by two-thirds by 2015.

While there has historically been an understandable focus on recurring humanitarian crises in Ethiopia, which have at times manifested as nutrition emergencies, there has also been a lack of policy and implementation around the problem of long-term, chronic malnutrition. This analysis focuses mainly on chronic malnutrition among young children and the current program and policy environment in place to prevent it, rather than emergencies and acute malnutrition, which tend to have different actors engaged in responsive action rather than preventive work (Taylor 2011).

Nutrition outcome data (Table 1) are taken from the three most recent Ethiopia Demographic and Health Surveys (EDHS) (Measure DHS 2000, 2005, 2011). As of 2011 the under-five mortality rate was 88 per 1000, stunting prevalence was 44.4%, and underweight prevalence was 28.7%. These rates have decreased quite a bit in the past decade, most notably with mortality almost halving. Additionally, at the current rate of 1.22 percentage points per year, Ethiopia is finally on track to meet the first Millennium Development Goal (MDG1) target of halving the number of underweight children under five years of age. However, Ethiopia still needs a concerted effort to accelerate reductions in undernutrition.

**Table 1**. EDHS data on prevalence of key child (<5 years) undernutrition outcomes

| | **2000** | **2005** | **2011** | **2015 Estimate[1]** | **2015 MDG Goal[2]** |
|---|---|---|---|---|---|
| U5 mortality rate (per 1000) | 166 | 133 | 88 | 59 | 61 |
| Stunting | 57.8 | 51.5 | 44.4 | 39.5 | N/A |
| Wasting | 11* | 12 | 9.7 | - | N/A |
| Underweight | 42.1 | 34.9 | 28.7 | 23.8 | 23.8 |
| Anemia (6-59 months) | N/A | 53.5 | 44.2 | - | N/A |

[1]Based on the current rate from 2000-2011

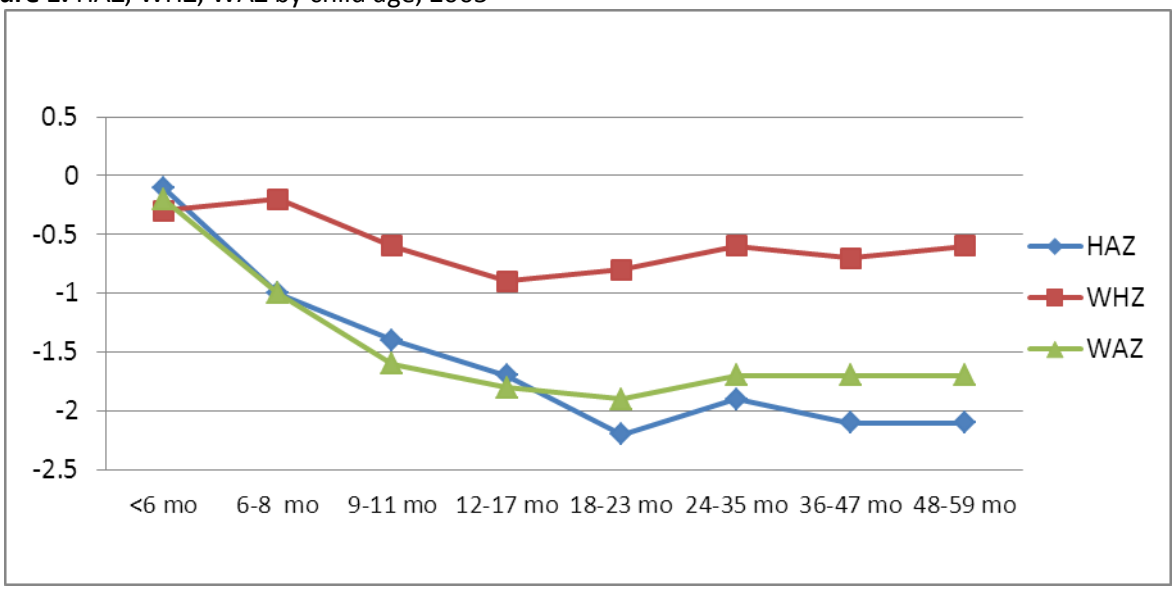
[2]Based on 1992 estimates from www.mdgss.un.org and www.mdgmonitor.org

*Not re-calculated using 2006 WHO growth standards; re-calculated figure will be higher

Underweight is reflected by wasting, stunting, or a combination of the two, and therefore MDG1 can be achieved by decreasing the prevalence of either or both (Richard 2011). In Ethiopia, stunting prevalence increases rapidly after six months of age through to two years (figure 1), highlighting the need for more

resources devoted to preventing undernutrition during the critical window from conception to two years of age (also known as the first 1000 days), after which it is almost impossible to recover from the developmental deficits (Hoddinott 2008, Alderman 2006).

**Figure 1.** HAZ, WHZ, WAZ by child age, 2005

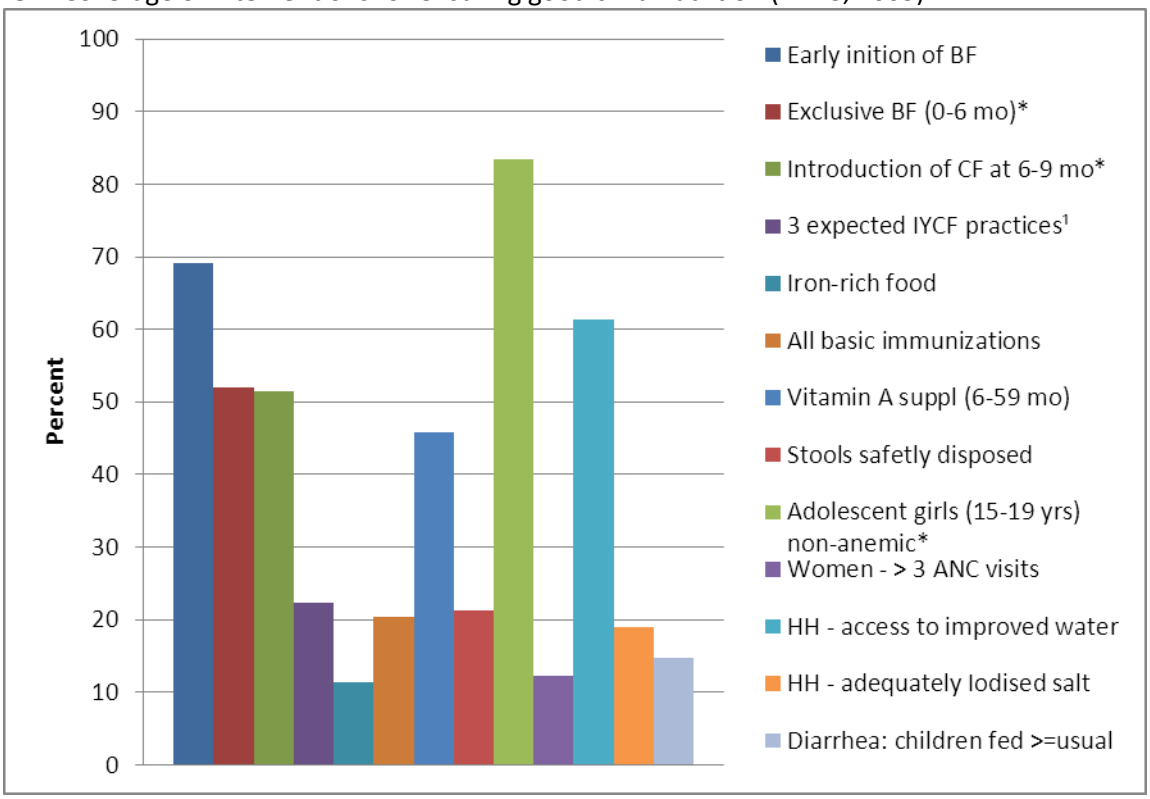



Source: Author's calculations derived from EDHS 2005

Micronutrient deficiency, also known as "hidden hunger", because it is less visible to the naked eye, is an additional, yet related issue in Ethiopia. The anemia rate among children 6-59 months remains high at over 44%, contributing to morbidity and mortality. Iron deficiency is the cause of half of all anemia cases. Iron deficiency and anemia can result in deficits in cognitive, behavioral, and motor development, and educational achievement (Domellof 2011). As of 2005, only 11% of children 6-59 months of age were consuming an iron rich diet. While there is no EDHS data on vitamin A deficiency, coverage of vitamin A supplementation has risen substantially since 2005, and is currently above 90% (SCUK 2009). The proportion of households consuming iodized salt remains very low, mostly due to political and management issues. Collaborative work among donors, the government, and the private sector has begun to address this. In March 2011 a proclamation was issued requiring that all salt be iodized (Yohannes 2012). In the meantime iodine oil capsules have been distributed to 1.2 million children under five.

In addition to the basic, or environmental, factors mentioned above, multiple underlying factors contribute to child malnutrition. Along with disease, quantity and quality (in terms of nutrient adequacy) of diet are the most proximal (UNICEF 1990). Proper infant and young child feeding (IYCF) practices remain sub-optimal in Ethiopia (Figure 2). According to the 2011 EDHS, nearly half of infants less than six months of age are still not exclusively breastfed. Timely initiation of complementary foods remains low and the quality of older infants' diets is extremely poor, with only 3% of children 6-23 months having a minimally acceptable diet and only 4% meeting the minimum dietary diversity threshold of four food groups.

**Figure 2**. Coverage of interventions for ensuring good child nutrition (EDHS, 2005)




[1]Child 6-23 months received either breast milk or milk substitute, was fed at least 3 food groups, and was fed the minimum number of times per day for age.
*Data from EDHS 2011 Preliminary Report

## 2. Nutrition-relevant programs and policies

### A. Nutrition-specific

A National Nutrition Strategy (NNS) was developed in 2008, with an overall goal of ensuring that all Ethiopians are able to achieve an adequate nutritional status in a sustainable manner. The NNS is operationalized through the National Nutrition Programme (NNP), a ten-year initiative aiming to reduce levels of stunting, wasting, underweight, and Low Birth Weight (LBW) infants. The first phase focuses on supporting service delivery and institutional strengthening and capacity building, with an overall objective of better harmonization and coordination of approaches to manage and prevent malnutrition. Although nutrition was recognized in the NNS as being multi-sectoral, responsibility for overall coordination was given to the Federal Ministry of Health (FMOH) (SCUK 2009).

Under the NNP service delivery component and implemented by Health Extension Workers (HEWs) and Volunteer Community Health Workers (VCHWs), Community Based Nutrition (CBN) is a preventive community-based nutrition program employing GMP, individual and group counseling on child care and feeding, and screening for and managing malnutrition. UNICEF and the World Bank are funding CBN and it is being scaled up at the district level, with the goal of complete rural district coverage by 2013.

In 2011 the Government of Ethiopia (GoE) instituted a shift in staff involved in health and nutrition interventions. Community volunteers dealing with 50 households each will be replaced by a Development Army of local volunteers who will deal with 5 households each. While the smaller worker-to-household ratio is good, there is some worry about the effectiveness of this approach.

Supporting CBN is the Integrated Family Health Programme (IFHP) is a $50 million, USAID-funded, five year (2009-2013) project to improve maternal and child health across 300 districts. Nutrition activities include promoting maternal and child nutrition using the Essential Nutrition Action (ENA) approach of behavior change communication around seven key evidence-based nutrition interventions. The programme also seeks to build capacity of the overall health system. IFHP is jointly implemented by John Snow, Inc (JSI) and Pathfinder International.

Alive and Thrive (A&T) is a $70 million, Gates Foundation-funded, five-year (2009-2013) initiative to improve infant and young child feeding practices by increasing rates of exclusive breastfeeding and improving complementary feeding practices in Ethiopia, Bangladesh, and Vietnam. Working with IFHP, A&T is utilizing the existing health extension program (HEP; seeks to expand health care infrastructure with health posts in rural areas staffed by a cadre of health extension workers) as the main platform for delivering its community-based interventions, making use of frontline health workers and volunteers.

The $54 million, USAID-funded ENGINE project (Empowering New Generations to Improve Nutrition and Economic Opportunities) is an upcoming 5-year integrated nutrition program led by a consortium of organizations, including, Save the Children, Valid International, Tufts University, Johns Hopkins University, World Vision, and Land 'O Lakes International Development. The goal of the program is to improve the multi-sectoral nutrition policy environment, improve maternal, infant and young child feeding practices, and ultimately decrease child mortality through sustainable, comprehensive, and coordinated evidence-based interventions (Valid International 2012).

While the primary purpose of this paper is to shed light on the landscape surrounding chronic malnutrition in Ethiopia, specifically stunting, it is worth mentioning the efforts in place to identify and treat acute malnutrition. There are many NGOs working in this area, such as Save the Children, Valid International, and Concern Worldwide. Additionally, through the GoE's interim Enhanced Outreach Strategy (EOS) seven million children are screened for malnutrition every six months and if needed, are referred to the Targeted Supplementary Food (TSF) Program or the Therapeutic Feeding Program (TFP). The EOS has also achieved high coverage rates, greater than 90%, of vitamin A supplementation and de-worming of these children (SCUK 2009). These efforts are currently being transitioned from biannual campaigns into community based nutrition activities in over five hundred districts.

**B. Nutrition-sensitive**

"Nutrition-sensitivity" is a notion that helps describe the degree to which an indirect intervention positively affects nutrition outcomes. Indirect (or "longer route") interventions include actions within sectors such as agriculture, social protection, water and sanitation that do not necessarily have nutrition reflected in their core objectives (despite their potential impact on nutrition). While these interventions can have an impact on linear growth, the effects are less readily observable and attributable (Piwoz 2011).

In 2005 as part of its Food Security Program, the GoE started the Productive Safety Net Program (PSNP) of public works and direct support. Following successful models in Latin America, the objectives of the PSNP are to provide predictable and reliable cash or food transfers to the chronically food insecure population in a way that prevents asset depletion at the household level and creates productive assets at the community level. The idea is to transition away from the emergency relief system. Of 7.5 million beneficiaries, 40% receive food and 60% receive cash. Cash offers more flexibility to households and is less disruptive to local markets, while food transfers are useful during times of high inflation. John Hoddinott and colleagues at IFPRI found statistically significant impact of the PSNP on participants' food security status in 2011 (Berhane 2011). Unfortunately, nutrition outcomes have not been measured, thus it is not possible to attribute impact on nutrition.

An Agriculture Growth Program (AGP) is in the works, also under the GoE Food Security Program, which will support farmers to increase production and productivity, enhance local government capacity to provide services for increased productivity, and to develop private sector linkages. AGP will focus only on geographic areas of high agro-ecological potential, and will thus exclude many food insecure districts. However, the Household Asset Building Programme (HABP, previously called the Other Food Security Programme) is targeted at chronically food insecure areas and is meant to transform subsistence into small-scale commercialized farming in those areas. To achieve this, HABP will help food insecure households diversify their income sources and increase productive assets (Ripoll 2012).

## 3. Nutrition-relevant capacities

### Research

The Ethiopian Health and Nutrition Research Institute (EHNRI) was delegated by the NNP to be the lead agency for all monitoring, evaluation, and research needs. EHNRI focuses on nutrition surveillance and has a nutrition information management system. However, the institute suffers from human resource constraints, with high staff turnover. To deal with this the EHNRI will pursue formal training for existing staff, while also requesting secondment from international organizations.

In Ethiopia there are few higher education programs in nutrition, which is also due to lack of capacity. However, some partnerships with international universities (Montpellier, Wageningen, Tufts) have been helpful in strengthening curricula and improving research methods.

### Implementation

The FMOH supervises trainings given by NGOs to extension workers, implements programs at the regional, district and community levels. However, there is a lack of senior-level nutrition specialists in the FMOH. Staff turnover in government jobs is very high due to small financial incentives. This creates a need for repeated trainings of staff. Even though there are more field level health staff now than ever, there are reports of health extension workers being overburdened with tasks.
To elaborate on the topic of implementation capacity, more coordination is needed to harmonize programs running at the same time in the same areas so as not to produce diminishing returns. Adding more programs risks stretching local capacity and can reduce the impact of each program. For example, already overworked health extension workers are often tasked with supervising community volunteers of one or more programs other than the HEP (Rajkumar 2012). To avoid this detrimental scenario

linkages between programs need to be considered more fully and explicitly when monitoring and evaluation are conducted.

UNICEF acts as an implementer at times, such as with CBN and works very closely with the national government, supporting programs at the district level. Overall, there is a great need to enhance implementation capacity.

**Policy advocacy**

Ethiopia signed onto the SUN (Scaling Up Nutrition) Movement as an "Early Riser." The SUN Movement is a cooperative global effort composed of more than 100 organizations and governments committed to work together to fight hunger and undernutrition, specifically focusing on the first 1000 days, the key childhood development window between pregnancy and age two (Bezanson 2010).

A&T does policy and advocacy work at the federal, regional, district, and community levels. Specifically, A&T is using targeted and evidence-based advocacy to raise policymaker and civil society understanding of IYCF issues and to garner consensus, sustained commitment, and support.

According to Net-mapping done by A&T, the FMOH is the biggest hub for advocacy in the country. It has legal authority over leading child nutrition issues, and thus it has the power to influence policy makers in this realm. For example, the FMOH advocated for moving beyond focusing just on food by showing high levels of malnutrition in an area with high food production (Amhara). Two multi-stakeholder forums, the Nutrition Technical Working Group (NTWG) and the Multi-agency Nutrition Task Force (MANTF) also scored high on advocacy. Further, UNICEF is actively engaging in advocacy activities (Menon 2012).

## 4. Future plans, opportunities, challenges

**Future Plans**

The NNP is in a process of revision so as to align the end of the first phase with the MDGs (2015), and to strengthen existing initiatives and include recently developed initiatives such as the Accelerated Stunting Reduction Initiative (ASRI) and Food Fortification Alliance (FFA).

A key goal of the NNP is to harmonize nutrition efforts via improved coordination. Various linkages are being explored among the following programs and sectors: PSNP; Water, Sanitation, and Hygiene (WASH); MoARD programs; Ministry of Education (MoE) programs; HIV programs.
Improved targeting, base decisions on improved nutrition surveillance systems. One example is a small pilot project attempting to strengthen community-level linkages between core nutrition interventions under the NNP and the activities of the PSNP (Rajkumar 2012). This type of intersectoral collaboration represents a promising exchange that needs to be replicated and scaled up.

Strengthening Ethiopia's nutrition information and surveillance system is an additional key goal of the NNP. Strengthening the research capacity of the EHNRI would contribute to a more robust system, as well as contribute to more appropriately targeted programs

**Opportunities**

There are many potential opportunities for successfully tackling these problems in Ethiopia. One positive sign is the growing interest in addressing undernutrition amongst senior government officials (eg., prime minister) and donors. The SUN movement has been a catalyst in this. Momentum should be harnessed at this critical juncture to push for more integration and cooperation among sectors, for example incorporating nutrition into the PSNP. Identifying high-level nutrition champions is an important factor. Building on the experiences of previous large-scale programs to improve infant feeding practices and nutrition in Ethiopia can offer useful insights and potential solutions.

**Challenges**

The main challenges to implementing nutrition interventions in Ethiopia involve issues of coordination and capacity. Nutrition, given its multi-factoral nature should be a multi-sectoral responsibility. However, it has thus far been restricted to the health sector, where the main body responsible, the FMOH, is lacking in capacity. Specifically, the FMOH lacks in human resources, having no senior staff in nutrition. Further, the MoARD appears reluctant to work with the FMOH on nutrition. Right now there is little incentive for the GoE or its donors to seek or enforce systemic collaboration on nutrition. While appropriate nutrition policies have been approved, the focus needs to shift towards ensuring resources for implementation, as well as seeking out opportunities for added value and synergy among programs. Additionally, qualitative work by A&T reveals that, among various stakeholders, there remains a problem of lack of awareness and knowledge around nutrition. Many believe malnutrition to be solely a consequence of general poverty, to be addressed through poverty reduction measures rather than separately. There is communication of sometimes harmful traditional beliefs at all levels, particularly around “genetic” components of stunting, and prelacteal feeding and non-exclusive breastfeeding. Therefore, there is a clear need to target policy makers, opinion leaders, and the community with clear, consistent messages about the consequences as well as the causes of malnutrition, and about proper practices for the improvement of IYCF. It is also important to tailor messages and interventions to socio-cultural context and provide advice on what is possible with local incomes and foodstuffs. Related to this, a lack of regularly scheduled training courses on ENA for new and continuing health professionals is often cited as a barrier to IYCF (Menon 2012).

Lastly, nutrition is not the only thing on policymakers’ and donors’ agendas. In addition to humanitarian emergencies, competition for attention and funding with other development-related concerns such as poverty, HIV/AIDS, and agriculture represents an ongoing challenge in Ethiopia.

## References

Abraham, Yohannes. Ethiopian Legal Brief. http://chilot.me/2011/11/22/salt-iodization-council-of-ministers-regulation-no-20412011/ [viewed on 26 Mar 2012].

Alderman H, Hoddinott J, and Kinsey B, 2006, "Long term consequences of early childhood malnutrition", *Oxford Economic Papers* 58(3): 450-474.

Berhane, G., J. Hoddinott, N. Kumar, A. Seyoum Taffesse. 2011. "The Impact of Ethiopia's Productive Safety Nets and Household Asset Building Programme: 2006-2010." International Food Policy Research Institute, Washington, DC.

Bezanson K, Isenman P. Scaling up nutrition: a framework for action. *Food and nutrition bulletin*. 2010 Mar;31(1):178–86.

Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HPS, *et al*.: What works Interventions for maternal and child undernutrition and survival. *The Lancet* 2008, 371(9610)**:**417-440.
Central Statistics Agency. Population projection (2012) according to the Ethiopia Census 2007.

Domellof, Magnus. Iron requirements in infancy. *Annals of nutrition & metabolism*. 2011 Jan;59(1):59-63.

Getahun Z, Urga K, Ganebo T, Nigatu A: Review of the status of malnutrition and trends in Ethiopia. *Ethiopian Journal of Health Development* 2001, 15(2)**:**55-74.

Hoddinott J, Maluccio JA, Behrman JR, Flores R, Marmoreal R. Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. *Lancet* 2008; 371**:** 411–16.

Measure DHS. Demographic and Health Survey. Ethiopia; 2000. Available from: http//www.measuredhs.com.

Measure DHS. Demographic and Health Survey. Ethiopia; 2005. Available from: http//www.measuredhs.com.

Measure DHS. Demographic and Health Survey, Preliminary Report. Ethiopia; 2011. Available from: http//www.measuredhs.com.

Menon, Aberman, Schiffer, et al. 2012. Policy Landscapes for Infant and Young Child Feeding and Nutrition in 3 Countries. Unpublished Report.

Piwoz E, Sundberg S, Rooke J. Promoting healthy growth: what are the priorities for research and action? *Adv Nutr*. 2011;3:234–41.

Rajkumar AS, Gaukler C, Tilahun J. Combating Malnutrition in Ethiopia: An evidence-based approach for sustained results. The World Bank. 2012

Richard SA, Black RE, CheckleyW. Revisiting the relationship of weight and height in early childhood. Adv Nutr. 2011;3:250–4.

Ripoll, Santiago. Ethiopia Country Report, A comparative study on institutional frameworks for food and nutrition security (FNS) at national level. Institute of Hunger Studies. 2012.

Save the Children UK (2009) 'Ethiopia National Nutrition Strategy: Review and Analysis of Progress and Gaps, One Year On'. London: Save the Children UK.

Taylor, Linnet. Analysing Nutrition Governance: Ethiopia Country Report. IDS. 2011.
Valid International. http://www.validinternational.org/demo/index.php [viewed on 15 Mar 2012].