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Ethiopia, Factor 11: Malnutrition

### **Ethiopia: Child Malnutrition-Approaches and Solutions**

Malnutrition is at crisis levels in Ethiopia. Among a population of eighty five million, forty six percent of the Ethiopia population is undernourished. Ethiopian children are at the highest risk of malnutrition. Nearly fifty percent of the under- five death rate in Ethiopia is related to malnutrition. Two growth-related nutrition issues are of great concern to the plight of Ethiopian children: stunting and wasting. Stunting is chronic, long term malnutrition and is essentially a “failure to reach one’s biological potential for growth”. Stunting effects forty seven percent of children under age five in Ethiopia. Wasting, or significant recent or current weight loss, effects fifty two percent of children under age five”. (Baginski) Malnutrition is frequent among people of all Ethiopian regions, ages and sexes with the most vulnerable being women of child bearing age, children under the age of five and those living in rural regions. Childhood malnutrition effects the future productivity of a society and is a continuing problem in most developing countries. Malnutrition in children is the consequence of many factors including poor food quality, insufficient food and repeated infectious diseases. Causes of malnutrition are closely linked to the overall standards of living and basic needs, such as access to food, health care, education and housing. Children are more prone to suffer from nutritional deficiencies than adults. Malnutrition is a related cause in about half of all deaths occurring among children in developing countries. Children with moderate malnutrition, not just those with severe malnutrition, have an increased risk of dying.

The typical Ethiopian family is much larger than most families in most other countries. The average family size is between six and seven members, Ethiopia has the second highest population in Africa. There are many different ethnic groups found in Ethiopia including Amhara, Tigra, Somali, Sidamo, and Oromo people. Ethiopia has one of the fastest rising non-oil economies in all of Africa. However, “over forty percent of the population lives below the international poverty line, surviving on less than just one dollar each day.” (Megablew) Over four-fifths of Ethiopians live in rural areas, where it can be hard to access health care facilities. In 1991 following the regime’s collapse, a large number of medical professionals left during the communist era. There continues to be a shortage of doctors and nurses in Ethiopia. Common illnesses in Ethiopia includes malaria, tuberculosis, and respiratory infections. Only one in ten people have access to proper sanitation, therefore diarrheal diseases and cholera are a constant threat. Ethiopian economy relies mostly on agriculture, which brings in nearly half the countries earnings. Ethiopia in the last decade has been hit with devastating droughts which have caused large food shortages. Ethiopian farming methods remain very basic. Livestock is a common farming activity; while meat and skins from goats and sheep are exported. The farmers plant mostly root vegetables, millet, maize, teff, beans, wheat, and sorghum. Only four percent of the farming land is irrigated. Investment in farming and the supply of better seeds and fertilizer could lead to a significant increase in crop yields. With the shortage of secondary schools, children in Ethiopia usually leave school by the time they are twelve years old. Most of the children who leave school come from poor families. When these children leave school, they take on domestic or agricultural work or try to find employment in the local cottage industries.

Today, more than two out of every five children in Ethiopia are stunted. As many as eighty one percent of all cases of child undernutrition go untreated. “Forty four percent of health costs associated with undernutrition occur before children turn one year old. Sixty seven percent of the adult population

suffered from stunting as children. The annual costs associated with child undernutrition is equivalent to sixteen percent of gross domestic product. “(The Cost)

Underlying factors are key to understanding the causes of child malnutrition in Ethiopia: insufficient nutritious food and availability; inadequate provision of a healthy environment; maternal wellbeing and quality of caring practices; women’s decision-making power and control of resources; and political factors (Realising).

Children’s nutrition cannot be insured if households do not have acceptable food security. One of Ethiopia’s biggest challenges is that nutritious and affordable foods are most likely unavailable to its citizens. The country’s chronic food insecurity is the result of a combination of economic and environmental factors. Ethiopia has seen a long term trend of high population growth, environmental degradation, lack of land holdings and lack of on-farm technology innovation. “Since the 1960’s the population has increased almost threefold, whereas food production per capita and landholding has declined 43% and 68% respectively.” (Realising) The majority of small scale farm households are unable to produce food that is diverse and nutrient rich. Food deficiency is also a result of drought and price hikes. “In some communities families cannot afford needed food even when all their income is focused on it.” (Realising)

A healthy environment is also key to child nutrition. Clean water, sanitation, and good hygiene practices are critical to children’s health and nutrition status because chronic diarrhea and parasites hinder even the healthiest diets. Ethiopia’s access to clean drinking water has improved over the years on a national level yet is still not consistently available to over forty percent of those living in rural areas.

Poor maternal health and nutrition have a key impact on child malnutrition. In Ethiopia, the combined effects of chronic food insecurity and high fertility (5.9 children per woman) translates into a poor nutrition women. “Thirty percent of women and adolescent girls are undernourished.” (Realising) Women’s nutrition is critical to a child’s nutrition as it is vital to both fetus growth and adequate lactation. Maternal health seeking behavior also plays an important role in child nutrition. Prenatal care has been found to reduce the risk of stunting. “Only forty percent of women receive prenatal care. With a regional average closer to seventy five percent, Ethiopia has much work to do to reach and educate mothers.” (Report) Cultural practices such as avoiding nutritious foods during pregnancy for fear of baby being large and labor more difficult makes problems worse. Since mothers are primary caregivers in most Ethiopian families their knowledge about nutrition is important to a child’s nutrition. “Inadequate breastfeeding practices and poor complementary feeding are major contributors to child stunting.” (World)

Vitamin A deficiency (VAD) is a severe public health problem in Ethiopia effecting around sixty one percent of children 6-59 months of age in all regions of the country. The situation is probably worse in emergency effected areas. Clinical Vitamin A deficiency, untreated can lead to childhood blindness and it is likely that Vitamin A deficiency is one of the major contributing factors to the high under-five mortality rate in Ethiopia. “Globally, thirty percent of the world's population is affected with iodine deficiency disorder. In Ethiopia, one out of every 1000 people is effected and about 50,000 prenatal deaths occur yearly due to iodine deficiency disorder.” (NUT-ET) The rate of goiter (caused by iodine deficiency) in Ethiopia is at emergency levels according to World Health Organization standards. This is in part because of the marked decrease in the amount of iodized salt being consumed in Ethiopian households compared to a decade ago. About 685,000 babies are born to mothers with iodine deficiencies and as a result stand a risk of suffering from some degree of learning disability. Anemia is a widespread health problem affecting more than two billion people worldwide — one third of the world's population. “More than half of Ethiopian children age 6-9 months and 27 % of Ethiopian women aged 15-49 are anemic (mainly due to low blood iron status).” (NUT-ED).The consequences of anemia are multiple. Iron

deficiency can delay muscular and nervous system development and mental performance, especially in preschool age children. In adults, anemia reduces work capacity, mental performance and reduces tolerance to infections. Iron deficiency anemia can also cause increased maternal mortality due to bleeding problems. Maternal anemia can also lead to prenatal infant death, low birth weight, and pre-term births.

International evidence highlights that mothers who have more freedom and decision making power within the family are more likely to have well-nourished children. In Ethiopia, women's low social status means that they often have little control over family resources, which can be devastating to their children given that they are typically the primary caregivers. Women are more likely to use the family income to provide nourishing food for their children.

Political factors play a critical role in determining children's nutritional outcomes. Although Ethiopia has experienced multiple food emergencies over the past decades it has only recently developed a plan to cope with more than food security issues. The National Nutrition Strategy (NNS) and the National Nutrition Program (NNP) are two key policy instruments that were launched in 2009. These policies accelerated progress by dealing with both the immediate and underlying causes of malnutrition. This has been effective by providing high impact interventions such as Vitamin A supplementation and deworming as well as community based nutrition intervention and education. "The Government of Ethiopia's Productive Safety Net Program (PSNP) is one of the largest safety net programs in the world." (Cost) The PSNP is a major component of the Government of Ethiopia's Food Security Program to build reserves for food security especially during floods and droughts. PSNP's objective is to prevent the depletion of household assets, to stimulate markets and improve access to services, and to rehabilitate and enhance the natural environment through public works. "The program has a target caseload of more than six million beneficiaries in 319 communities throughout Ethiopia. USAID is the largest bilateral donor to PSNP, contributing 20 percent of the budget. The design phase for the future generation of PSNP and Household Asset Building Program (HABP) officially started in June 2013. USAID's Ethiopia mission, with nine other donor partners, is actively engaged in jointly shaping the vision for the next generation program together with the Government of Ethiopia." (Cost)

A decrease in hunger and malnutrition will require Ethiopia to increase its current intervention programs especially in agriculture. Around eighty five percent of the country's population survives by growing crops on small plots of less than five acres. Frequent droughts and soils that have been depleted of nutrients often lead to low crop yields and considerable food insecurity. Increased and promoted use of technology, extension support and availability to markets can improve outcomes for all including the most vulnerable. One of the key determinants of child nutrition is the distance of the household to marketplace. "The probability of a child to be stunted or underweight will increase exponentially with every kilometer in distance to market." (Quarterly)

In 2013, the World Bank and its Agricultural Growth Program (AGP) began targeting eighty three districts in Ethiopia for support for increased agricultural productivity, enhanced market access for key crops and livestock products, and improved food security. The AGP will support the Government in reducing food insecurity, vulnerability and environmental degradation by providing farmers with improved access to market information, finance and other services through support from key public and private institutions, including farmer organizations and public advisory services. The AGP is increasing agricultural productivity and household income by scaling up best practices among farmers and rural businesses, especially targeting key selected agricultural commodities. Additionally, "the AGP is supporting small scale agricultural water development and management that would strengthen the management of watersheds and thereby increase agricultural production, reduce environmental degradation, and mitigate weather induced risks including those related to climate change." (Improving)

Funds from the AGP ambition are establishing or bringing upgrades to rural roads and physical markets to improve market access for agricultural produce and, thereby, farmers' income and health.

The University of Maryland, Wolkite University, Debre Berhan University, and Bahir Dar University are implementing a Women in Agriculture program in Ethiopia. The program reflects the success and learnings from University of Maryland's Women-in-Agriculture (WIA) program in Afghanistan. The primary goal of (WIA) Ethiopia program is to improve family food security by building university capacity to deliver training in agriculture and nutrition to women with limited resources. The core activities of the WIA are collaborations among universities, partners, and communities to share experience and resources, translate knowledge into practice, and extend agricultural technologies and innovations to communities. The program develops central demonstration farms plots that simulate home gardens, which will be used to train women extension workers and female farmers. Additionally, the program trains women extension workers to facilitate local Farmer Field Schools that demonstrate new methods and skills to women farmers. The program includes developing and improved vegetable gardening, small-scale livestock production, preparation of nutritious meals, and marketing of home grown products. The emphasis on women to women educational interactions in local communities with improved research, innovation, and outreach has greatly benefited women in the rural and urban areas who are often unreached by extension services.

Recommendations for ongoing interventions in Ethiopia include the promotion of nutrition awareness to the entire population. The country must enhance the importance of nutrition education especially in the first five years of a child's life. The government should focus resources toward maternal and young child health resources. Resources should be provided to improve nutritional interventions in breast feeding practices. The International Medical Corps has enforced services in specialized training in the treatment of severe and acute malnutrition in children and pregnant and lactating women. These services provide screening, follow-up, and nutrition education. Part of the successful portion of this program is the Mother Care Group approach, where mothers share useful child rearing tips with other mothers in their community.

The idea of this approach is to prevent malnutrition before it takes hold. Another program that has had remarkable results is sponsored by the Probitas Foundation. This program sets up medical care and dispensaries in local schools. In this respect families and children can be provided access to sanitary and nutritional information as well as medical and nutritional follow-up when necessary. Additionally, children can be afforded regular checkups and medical records established. Both of these programs hold promise and I believe their success should be developed across the country.

Food fortification programs should be started that include staple foods with additional vitamins. A program of growing and public health education about vitamin rich foods, such as the orange fleshed sweet potato would add nutritional choices to the Ethiopian diet. These programs have shown success in Mozambique and Uganda. A full national coverage of childhood Vitamin A supplementation should be instituted. Postnatal medical check-ups should be promoted to support these programs.

The promotion of public-private partnerships should be used to engage the private sector in better understanding and incorporating the health and nutritional needs of the population in their products, promotions and distribution. Programs that improve agricultural productivity, crop diversification and education are fundamental alongside health interventions. Programs of water protection, availability and sanitation through aid, training and government support are important to protect the general health of communities. Mainstream nutrition should be put in place in every development program. By addressing child nutrition and preparing youth for better learning opportunities it lays the foundation for health and economic growth in Ethiopia.

Kebede Worku, State Minister of Health, for Ethiopia said:

“If we invest in nutrition, we will see social and economic gains. Improved nutrition can have a positive effect for individuals and communities in all areas of life – health, education, and productivity- there are no negative consequences of investing in improved nutrition.” (Cost)

When a child is undernourished the negative consequences follow that child for his/her entire life. Those negative consequences also have grave effects on the economies and living standard where they live, learn and work. A multifaceted approach of development, interventions and vigilance in child undernutrition in Ethiopia must be addressed and sustained from within and supported around the world.

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