FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

# NATIONAL NUTRITION PROGRAM

## 2016–2020

JULY 2016

# DECLARATION OF NNP IMPLEMENTING SECTORS

We the undersigned, representing the Government of the Federal Democratic Republic of Ethiopia, National Nutrition Coordinating Body, fully recognize each ministry's mandate and pledge our commitment to support the achievement of the targets laid out in this National Nutrition Program document and the Seqota Declaration implementation manual. We will strive towards equitable and sustainable multisectoral actions to realize optimal nutritional status for all Ethiopians and to end hunger by 2030. We, as a government, recognize that the high malnutrition rate in Ethiopia is completely unacceptable. Hence, we shall work through enhanced strategic partnerships to prioritize the elimination of malnutrition from Ethiopia as one of the primary strategies for achieving the second Growth and Transformation Plan.

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# ACRONYMS

| | |
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| AEW: | Agriculture Extension Worker |
| AGP: | Agriculture Growth Program |
| AMIYCN: | Adolescent, Maternal, Infant and Young Child Nutrition |
| ANC: | Antenatal Care |
| BMI: | Body Mass Index |
| CAADP: | Comprehensive Africa Agriculture Development Program |
| CBN: | Community Based Nutrition |
| CHD: | Community Health Day |
| CMAM: | Community Management of Acute Malnutrition |
| CSA: | Central Statistics Authority |
| DRMCC: | Disaster Risk Management Coordination Commission |
| ECCD: | Early Childhood Care and Development |
| EDHS: | Ethiopian Demographic and Health Survey |
| EIAR: | Ethiopian Institute of Agricultural Research |
| EOS: | Enhanced Outreach Strategy |
| EPHI: | Ethiopian Public Health Institute |
| FAO: | Food and Agricultural Organization |
| FMOH: | Federal Ministry of Health |
| FTC: | Farmers Training Center |
| GDP: | Gross Domestic Product |
| GM: | Growth Monitoring |
| GNP: | Gross National Product |
| GTP: | Growth and Transformation Plan |
| HAB: | Household Asset Building |
| HDA: | Health Development Army |
| HEP: | Health Extension Program |
| HEW: | Health Extension Worker |
| HH: | Household |
| HMIS: | Health Management Information System |
| HP: | Health Post |
| HSDP: | Health Sector Development Program |
| HSTP: | Health Sector Transformation Plan |
| HW: | Health Workers |
| IEC: | Information Education Communication |
| IFAD: | International Fund for Agricultural Development |
| IFPRI: | International Food Policy Research Institute |
| IGA: | Income Generating Activities |
| IMNCI: | Integrated Management of Neonatal and Childhood Illnesses |
| IRT: | Integrated Refresher Training |
| ISS: | Integrated Supportive Supervision |
| ITN: | Insecticide Treated Net |
| IYCN: | Infant and Young Child Nutrition |
| MAM: | Moderate Acute Malnutrition |
| MDG: | Millennium Development Goals |
| MOANR: | Ministry of Agriculture and Natural Resources |
| MOE: | Ministry of Education |
| MOI: | Ministry of Industry |

| | |
|---|---|
| MOFEC: | Ministry of Finance and Economic Cooperation |
| MOFED: | Ministry of Finance and Economic Development |
| MOH: | Ministry of Health |
| MOLFR: | Ministry of Livestock and Fisheries |
| MOLSA: | Ministry of Labor and Social Affairs |
| MOT: | Ministry of Trade |
| MOWCA: | Ministry of Women and Children Affairs |
| MOWIE: | Ministry of Water, Irrigation and Electricity |
| NACS: | Nutrition Assessment, Counseling and Support |
| NCD: | Non-Communicable Disease |
| NFFSC: | National Food Fortification Steering Committee |
| NNCB: | National Nutrition Coordinating Body |
| NNP: | National Nutrition Program |
| NNPMSC: | National Nutrition Program Management Steering Committee |
| NNS: | National Nutrition Strategy |
| NNTC: | National Nutrition Technical Committee |
| NSFP: | National School Feeding Program |
| NSAS: | Nutrition-Sensitive Agriculture Strategy |
| ORS: | Oral Rehydration Salt |
| PFSA: | Pharmaceuticals Fund and Supply Agency |
| PHCU: | Primary Health Care Unit |
| PLW: | Pregnant and Lactating Women |
| PMTCT: | Prevention of Mother-To-Child Transmission |
| PPP: | Purchasing Power Parity |
| PSNP: | Productive Safety Net Program |
| REACH: | Renewed Efforts Against Childhood Hunger |
| RNCB: | Regional Nutrition Coordinating Body |
| RUSF: | Ready-to-Use Supplementary Food |
| RUTF: | Ready-to Use-Therapeutic Food |
| SAM: | Severe Acute Malnutrition |
| SDG: | Sustainable Development Goal |
| SHN: | School Health and Nutrition |
| SBCC: | Social and Behavioral Change Communication |
| SUN: | Scaling Up Nutrition |
| TB: | Tuberculosis |
| TVET: | Technical and Vocational Education and Training |
| UNGNA: | United Nations Global Nutrition Agenda |
| UNICEF: | United Nations Children's Fund |
| USI: | Universal Salt Iodization |
| WASH: | Water, Sanitation and Hygiene |
| WFP: | World Food Program |
| WHO: | World Health Organization |

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# 1

# INTRODUCTION

## 1.1 BACKGROUND

### 1.1.1 COUNTRY PROFILE

Ethiopia, located in the Horn of Africa, lies between 3° and 15° North and 33° and 48° East. The total area of the country is around 1.1 million square kilometers. As of 2007, Ethiopia's population has been growing at a rate of 2.6% per annum (CSA, 2007). At this rate, the total population will number 104 million by 2020. This rapid population growth exacerbates critical gaps in basic health services, and in food and nutrition security (MOH, 2008). The majority of the population (84%) lives in rural areas, and subsistence agriculture is the mainstay of their livelihood and economic productivity.

The Government has been implementing a comprehensive economic reform program over the last two decades. The reform program has resulted in remarkable economic performance; macroeconomic stability was attained. A real gross domestic product (GDP) growth rate of 11% per annum has been achieved since 2003. According to the Ethiopia poverty assessment, Ethiopian households have experienced a remarkable reduction in poverty. In 2010, 56% of the population was living on less than US$1.25 per day (known as purchasing power parity or PPP). That figure was expected to further decrease to 22.2% by 2015 (EPA, 2012; MOFED, 2013). Yet due to high population growth, the absolute number of people living below the poverty line has decreased more slowly than expected over the last 10 years. While 38.7% of Ethiopians lived in extreme poverty in 2004–2005, five years later this figure had dropped to 29.6%, as measured by the national poverty line of less than $0.6 per day.

Ethiopia has developed the second stage of its 5-year development plan, called the Growth and Transformation Plan II (GTP II), covering the period 2015/16 to 2019/20. The overarching objective of the plan's second phase is the realization of Ethiopia's vision of becoming a lower middle-income country by 2025. GTP II thus aims to achieve high economic growth within a stable macroeconomic environment while at the same time pursuing aggressive measures towards rapid industrialization and structural transformation (MOFED, 2015).

## 1.1.2 MALNUTRITION

Malnutrition in all its forms is a global burden that affects almost every country in the world, leading to serious public health risks and incurring high economic costs. Improvements in nutrition will contribute significantly to reducing poverty and to achieving health, education, and employment goals (Global Nutrition Report, IFPRI, 2014). Nutrition stimulates economic growth, which improves the mental health and physical productivity of the labor force. Eliminating undernutrition in Ethiopia would prevent losses of 8–11% per year from the gross national product (IFPRI, 2014, UNGNA, 2015). Globally, hunger and undernutrition reduce gross domestic product by US$1.4–2.1 trillion a year (Compact, IFPRI 2016). The World Bank estimates that undernourished children are at risk of losing more than 10% of their lifetime earning potential, thus affecting national productivity, and recently, a panel of expert economists at a Copenhagen Consensus Conference concluded that fighting malnutrition should be the top priority for policymakers and philanthropists (Copenhagen Consensus, 2012). The benefits of better nutrition to health, schooling, and productivity would be tremendous. Improving the national nutrition status is therefore a priority area that needs urgent policy attention to accelerate socioeconomic progress and development.

In 2013 the Government of Ethiopia together with the African Union Commission published "The Cost of Hunger in Ethiopia 2013," a report that quantifies the social and economic impact of undernutrition (EPHI-AU, 2009). Data in the report included calculations of the costs of child undernutrition in the health and education sectors. The effects of child undernutrition on human capacity and workforce productivity were also quantified. Based on the report's findings, the total annual cost of undernutrition in Ethiopia was estimated at ETB 55.5 billion, equivalent to 16.5% of GDP in 2009 (EPHI-AU). According to the study, Ethiopia could reduce losses by ETB 148 billion by 2025 if underweight rates were reduced to 5% and stunting to 10% in children under 5. Reducing child undernutrition rates to half the current levels by 2025 could reduce losses by ETB 70.9 billion, the study suggests.

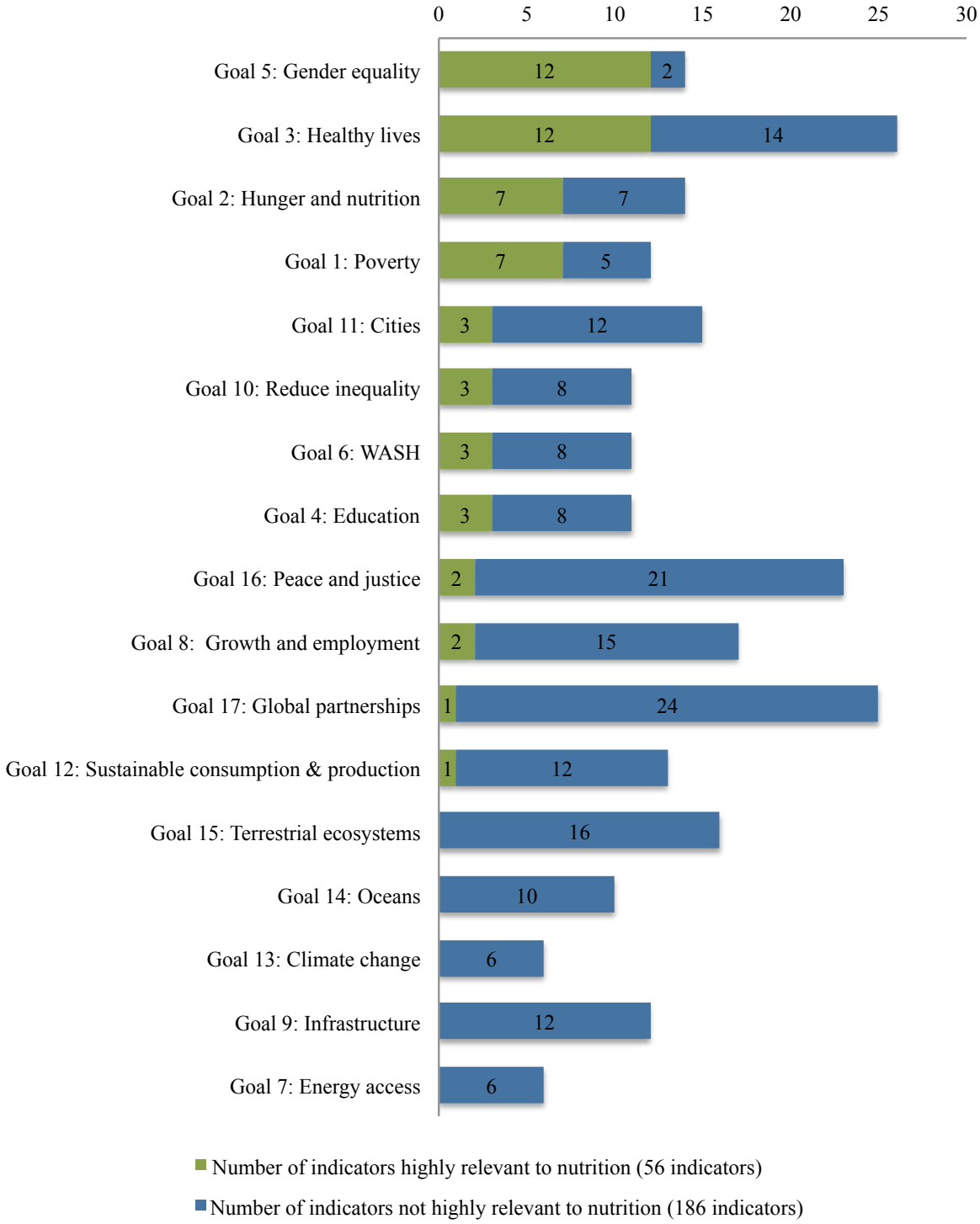
## 1.1.3 NUTRITION: MDGS TO SDGS

In 2000, world leaders adopted the Millennium Declaration and agreed on a set of eight Millennium Development Goals (MDGs), which were not fully achieved by most countries. Lessons learnt from the MDG framework specific to nutrition include the realization that the focus on undernutrition was too narrow, and that synergies between nutrition and other sectors were underexploited (UN SCN, 2015).

The Sustainable Development Goals or SDGs, officially known as Transforming Our World: The 2030 Agenda for Sustainable Development, are an intergovernmental set of aspiration goals with 169 targets. Spearheaded by the United Nations, the goals are contained in paragraph 54 of United Nations Resolution A/RES/70/1 of September 25, 2015.

Sustainable development is a driver of malnutrition reduction; improved nutrition will propel sustainable development. Evidence indicates that the forces that prevent healthy growth and development in such a profound way—hunger, disease, poverty, disempowerment and unhealthy environments—are powerful and multisectoral. Therefore, these need to be counteracted by equally powerful multisectoral and multi-stakeholder forces combining actions that are nutrition-specific, nutrition-sensitive, and environmentally enabling at all levels (Global Nutrition Report, 2015; IFPRI, 2015). Hence, nutrition is placed at the heart of the SDGs—indeed, nutrition is vital for achieving 12 out of 17 SDGs (Table 1). The remaining 5 SDGs support improvements in nutrition.

## Table 1: Number of indicators in each SDG that are highly relevant for nutrition



## 1.1.4 GLOBAL AND REGIONAL MALNUTRITION TRENDS

An estimated 805 million people worldwide are chronically undernourished (FAO, 2014). One hundred fifty-nine million children under 5 are stunted and 41 million children under 5 are overweight and obese. In addition, at least 50 million are severely or moderately wasted (WHO/UNICEF/The World Bank, 2015). Furthermore, there are about 2 billion children and adults who are deficient in vitamins or minerals, which can lead to anemia, blindness, cognitive impairment, and greater susceptibility to many diseases that can result in higher mortality (UN SCN, 2015). Overweight prevalence has gone up slightly between 1990 and 2014, from 4.8% to 6.1%. There are 41 million overweight children in the world, about 10 million more than there were 2 decades ago (See Box A; WHO, 2014).

**Box A: Trends in the global nutritional status of children**

- The global trend in stunting prevalence and numbers of children affected is decreasing, but not fast enough to have reached the MDG target. Stunting rates are dropping, but 159 million children around the world are still affected. Between 1990 and 2014, stunting prevalence declined from 39.6% to 23.8% (-96 million).
- In 2014, the global wasting rate was 7.5%, still threatening the lives of 50 million children across the globe. Approximately 1 out of every 13 children in the world was wasted in 2014, with a global prevalence of 2.4% in 2014.
- Overweight prevalence has gone up slightly between 1990 and 2014, from 4.8% to 6.1%. There are 41 million overweight children in the world; about 10 million more than there were 2 decades ago.

## 1.1.5 NUTRITION TRENDS IN ETHIOPIA

The last four national level Demographic and Health Surveys (EDHS) show a decreasing trend in the proportion of children who are stunted and underweight. The prevalence of stunting decreased by 31% (from 58% to 40%) between 2000 and 2014 (Figure 1). The decline in the proportion of stunted Ethiopian children shows an improvement in chronic malnutrition over the past 15 years. The proportion of underweight children declined even more substantially, by 39% over the same period. Conversely, the prevalence of wasting has remained fairly static over the last 15 years. Anemia prevalence among under-five children remains high at 44%, even though it declined by 19% over the last 6 years (EDHS, 2011).

Regarding infant feeding practices, just over half (52%) of children under 6 months were exclusively breastfed, and, of even greater concern, only 4.3% of children aged older than 6 months consumed the recommended 4 food groups daily. Only 13% of children under 2 consumed iron rich foods (EDHS, 2011). While there have been recent improvements in the production of iodized salt, still only 23% of households are consuming quality iodized salt in accordance with the levels specified in the regulations. The 2011 EDHS also revealed that the level of chronic undernutrition among women (15–49 years old) in Ethiopia is relatively high, with 27% having a body mass index (BMI) of less than 18.5 kg/m$^2$ (Figure 2), with no significant progress over the last decade. Similarly, the prevalence of anemia among women in the reproductive age group (15–49) was found to be 17% (EDHS 2011).

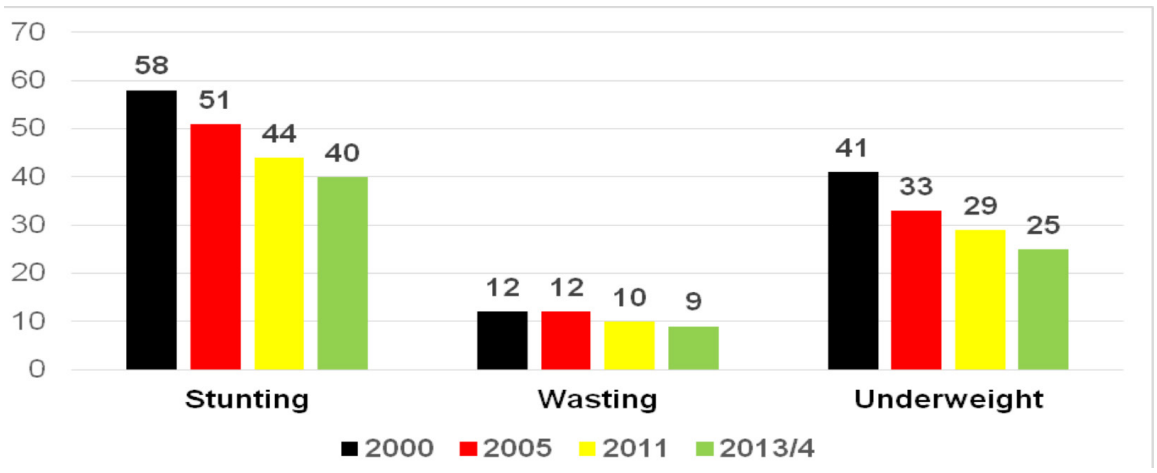



**Figure 1: Trends in nutritional status of children under 5 in Ethiopia, 2000–2014**

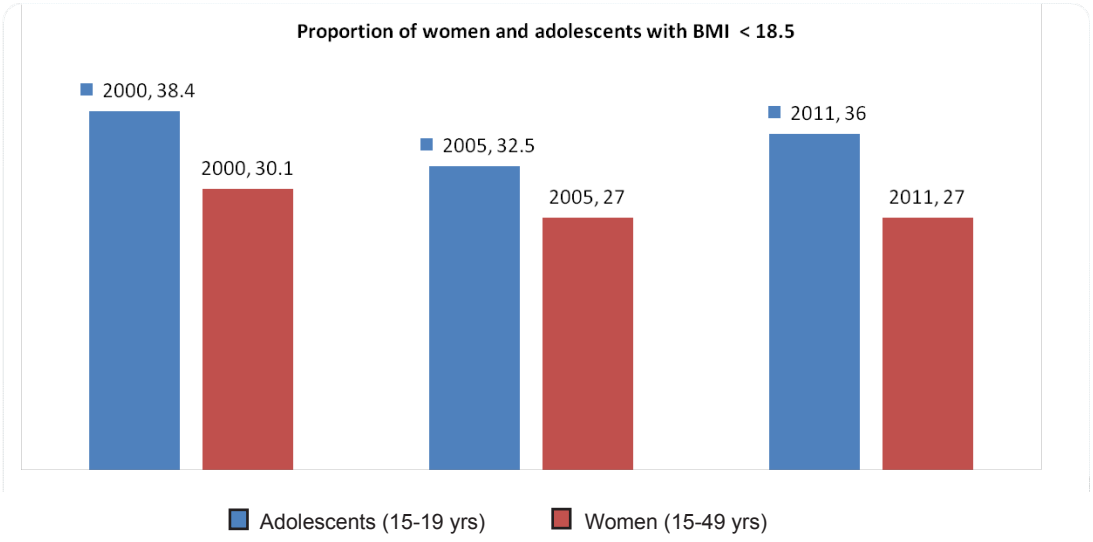



**Figure 2: Trends in nutritional status of adolescents and women of reproductive age 2000–2011 in Ethiopia**

Ethiopia is not different from other low income countries with respect to the nutritional status of adolescents. The EDHS 2011 revealed that the proportion of non-pregnant adolescents aged 15–19 years with chronic malnutrition (BMI <18.5) was 36% (Figure 2). It is well recognized that the size and body composition of the mother at the start of pregnancy is one of the strongest influences on fetal growth (Kramer, 1987). According to the 2011 EDHS, the median age for a first marriage is around 16.5. Twelve percent of adolescent girls (aged 15–19) are either already mothers or pregnant with their first child. Prevalence of anemia in adolescents aged 15–19 years was 13%. The Ethiopian mini-DHS (EMDHS) conducted in 2014 states that the fertility rate among adolescents aged 15–19 in Ethiopia is 65 births per 1,000 women. Although this shows clear improvement from 2011 (79 births per 1,000 women), efforts should be continued to promote preconception care, family planning, delayed age at first pregnancy, prolonging of inter-pregnancy interval and psychosocial care.

## 1.2 GLOBAL NUTRITION MOVEMENTS AND DECLARATIONS

**Scaling up Nutrition, or (SUN),** is a unique movement founded on the principle that all people have a right to food and good nutrition. It unites people, governments, civil society, the United Nations, donors, businesses and researchers in a collective effort to improve nutrition. SUN was launched in 2010 with the adoption of the SUN Framework and Road Map, and has grown rapidly. In December 2015 the country-driven SUN Movement comprised 57 SUN countries. It continues to expand, building on the progress achieved. Key facts about SUN are depicted in Box B (see page 15). Ethiopia joined the SUN movement in April 2012.

SUN stakeholders work together within each country to pursue the following four strategic objectives:

1. Create an enabling political environment, with strong in-country leadership and a shared space (multi-stakeholder platforms) where stakeholders align their activities and take joint responsibility for scaling up nutrition.

2. Establish best practices for scaling up proven interventions, including the adoption of effective laws and policies.

3. Align actions around high quality, well-costed country plans, with an agreed results framework and mutual accountability.

4. Increase resources directed towards coherent, aligned approaches.

Many nutrition declarations have been made globally, however. Among the most notable that relate to Ethiopia are the following:

- The July 2003 **Maputo Declaration,** which accepted the Comprehensive Africa Agriculture Development Program as the framework for addressing Africa's agricultural development, and food and nutrition security challenges in a coordinated fashion.

- The **Global Nutrition for Growth Compact,** made at the 2013 Nutrition for Growth summit in London.

- The African Union's **Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods** under the framework of the Comprehensive Africa Agriculture Development Program. This was a response to the United Nations Secretary General's **Zero Hunger Challenge (2012),** which followed on the success of hunger eradication programs in other parts of the world and the importance of multi-sector actions to achieve this objective.

- The **Rome Declaration on Nutrition,** on achieving food and nutrition security as well as commitment to achieving the Millennium Development Goals, made at the Second International Conference on Nutrition in November 2014.

- Ethiopia's 2015 **Seqota Declaration,** which reaffirmed the government's commitment to improving nutrition through a high level agenda to end child undernutrition by 2030.

### Box B: Key facts about the SUN movement

- **57 Countries** and 2 Indian States – Maharashtra and Uttar Pradesh – have committed to scaling up nutrition and working collectively, as a movement.
- SUN Country Networks are focused on the critical **1,000 day window of opportunity** to improve nutrition.
- SUN Countries work to achieve the **six World Health Assembly Goals** by 2025.
- There are **2,000+ organizations** committed to supporting national plans.
- SUN is **1 global movement** across 57 country-led movements to unleash the potential of millions of healthier, smarter and stronger children.

# 2

# LESSONS FROM NNP I AND FOCUS OF NNP II

## 2.1 LESSONS AND ACHIEVEMENTS FROM NNP I

Maternal, infant and child undernutrition are still national problems with important consequences for survival and for incidence of acute and chronic diseases, healthy development, and economic productivity, at both individual and societal levels. Over the past decade, since the National Nutrition Strategy was developed, the government, implementers and nutrition development partners have strived to create appropriate channels, capacity and resources through which the intergenerational cycle of malnutrition could be halted and through which policy landscapes and government commitment could be improved.

The first National Nutrition Program (NNP I, 2008–2015) focused on integration and coordination of nutrition-specific interventions that addressed the immediate causes of suboptimal growth and development and the potential effects of nutrition-sensitive interventions that address the underlying determinants of malnutrition. The program also aimed to create an enabling environment through which nutrition interventions were governed and supported by evidence-enhanced decision making. The passages below recount the main achievements and implementation challenges, and discuss focus areas for NNP II, the program's second phase.

Encouragingly, malnutrition has been decreasing over the last two decades. Focusing on food security and scaling up nutrition programs have a made tremendous contribution to reducing undernutrition. However, millions of Ethiopians still suffer from chronic and acute malnutrition. The country ranks at the top both in sub Saharan Africa and the world for malnutrition (Global Nutrition Report, 2015). Although the progress and achievements made so far are commendable, addressing the deep-rooted causes of malnutrition and ending hunger in Ethiopia call for high impact integrated and coordinated interventions.

The Government of Ethiopia demonstrated policy commitment to nutrition by developing a stand-alone National Nutrition Strategy (NNS) along with the 7-year NNP (2008–2013 and 2013–2015). Nutrition indicators were incorporated into the nation's 5-year Growth and Transformation Plan. Moreover, the government successfully established an implementation platform, the National Nutrition Coordinating Body (NNCB) and the National Nutrition Technical Committee (NNTC). Through these structures nutrition interventions were integrated, coordinated and mainstreamed into the various national development sectors. Sector based strategies and programs created a good opportunity to mainstream nutrition and develop legal frameworks to enforce key nutrition interventions such as the Nutrition-Sensitive Agriculture Strategy, National Food Security Strategy, National Health Sector Transformation Plan, National Food Fortification, and the National School Health and Nutrition Strategy.

However, multisectoral coordination and integration were not effective in bringing about sought changes to this long-lasting public health problem. This was mainly because of inadequate commitment and lack of strong, suitable governance structures.

## 2.1.1 PROGRAM IMPLEMENTATION

### Nutrition-Specific Interventions

Maternal undernutrition contributes to neonatal death, stunting, wasting and micronutrient deficiencies. Progress has been made; many interventions are being implemented at scale, and evidence for the effectiveness of nutrition interventions and strategies for their delivery has grown over the past decade. The fourth phase of the Federal Ministry of Health's Health Sector Development Plan (HSDP IV) has integrated nutrition into the Health Extension Program (HEP) to improve the nutritional status of mothers and children through scaled-up, nutrition-specific interventions: maternal, infant and young child nutrition promotions, micronutrient interventions, and community management of acute malnutrition (CMAM). These interventions are being carried out at health posts, in communities, at other health facilities and through health development armies. More than 10 million children are receiving Vitamin A supplementation and are dewormed twice a year.

Thanks to these efforts, the prevalence of maternal anemia has declined from 27% in 2005 to 17.1% in 2016 (CSA, 2011). Furthermore, more than 14,000 health facilities (about 95% of which are health posts) have the capacity to provide CMAM services. A national assessment has indicated that the impact of such interventions has resulted in reduced undernutrition among children. This in turn has contributed to an over 50% reduction in childhood deaths in Ethiopia.

The approach to nutrition screening, provision of Vitamin A supplementation and deworming will transition from campaign based activities (Community Health Day) and become enfolded into routine HEP activities, first in the four agrarian regions (Oromiya, Amhara, SNNPR, and Tigray) and then nationally. In the developing regional states of Afar, Benishangul-Gumuz, Gambella and Somali, the Enhanced Outreach Strategy (provision of Vitamin A, screening of children 6-59 months and deworming of children 24-59 months) is being transitioned into Community Health Day activities. Moreover, several guidelines are being revised to standardize the provision of nutrition-specific services at all levels.

The Community Based Nutrition program (CBN), one of the key components of the NNP, has made nutrition a priority agenda item for families and communities and is influencing sustainable behavioral changes in child care practices and health-seeking behaviors. The CBN

program also brought commendable changes in growth monitoring and promotion for all children under 2 years of age together with counseling for caregivers. The program uses regular community dialogue to engage community members to assess the overall nutritional status of children in their community, to understand the barriers and potential supports for improved nutrition, and to develop consensus on plans of action to make a difference.

### Nutrition-Sensitive Interventions

Acceleration of progress in nutrition will require nutrition-sensitive programming—effective, large-scale programs that address key underlying determinants of nutrition and enhance the coverage and effectiveness of nutrition-specific interventions (Ruel and Alderman, 2013). Evidence indicates that the forces that prevent healthy growth and development in such a profound way—hunger, disease, poverty, disempowerment, unhealthy environments—are powerful and multisectoral. Therefore, these need to be counteracted by equally powerful, multisectoral, multi-stakeholder forces that combine nutrition-specific, nutrition-sensitive and environment enabling actions at all levels across sectors (Global Nutrition Report, 2015; IFPRI, 2015; Black et al., 2008)

**Mainstreaming Nutrition into Agriculture**: In addition to developing a document in 2015 on nutrition-sensitive agriculture, the Ministry of Agriculture and Natural Resources has taken the initiative to mainstream nutrition into its overall sectoral plans and has established nutrition implementing structures. The government has also been implementing the Productive Safety Net Program (PSNP) since 2005. The PSNP began as a food "safety net" that would provide food or cash for food insecure households during the "hungry" seasons of the year in exchange for public works through the Ministry of Agriculture. Although it began as a household food security program it has, for all practical purposes, evolved into a broader package of social protection, now comprising four components: social protection, livelihoods, disaster risk management, and nutrition and climate resilience/green economy.

During its fourth stage (PSNP IV) the program was made more nutrition-sensitive through the incorporation of additional nutrition provisions, "soft conditionality" exemptions from physical labor for pregnant and lactating women with a child under 1 and for mothers with a severely malnourished child under 5. These mothers are provided with "temporary transition to direct support" (i.e., cash or food). Instead of participating in public works, they engage in community based nutrition activities, such as social and behavioral change communication and growth monitoring and promotion sessions. A process of "co-responsibility" helps ensure their participation in these activities. PSNP IV promotes links to social services and activities such as daycare; women's empowerment activities; and activities related to water, sanitation and hygiene (WASH). The PSNP IV monitoring framework includes indicators of participation in nutrition promotion activities at community level. The framework allows for the regular collection and reporting of information on household food security, dietary diversity and child feeding practices.

The Agricultural Growth Program (AGP), implemented in 96 woredas in the four agrarian national regional states since 2011, is a multi-donor financed program designed to raise productivity and increase market access for key crop and livestock products in targeted woredas, carried out with increased participation of women and youth. The approach of AGP is value-chain oriented, decentralized, participatory, integrated, and focuses on key rural and agricultural development constraints.

**School Feeding Program:** The Ministry of Education (MOE) designed the Ethiopian National School Feeding Program (NSFP) to (1) improve schoolchildren's health and nutrition status, (2) increase access to education (including enrollment, attendance, retention and completion), (3) reduce gender and social inequalities by targeting the most vulnerable groups, and (4) increase smallholder farmers' access to the school feeding market, thereby increasing their incomes.

Now in the 2016–2020 phase, the NSFP aims to address the needs of the most vulnerable population groups and areas, specifically targeting primary school children (Grades 0 through 8), in 50 prioritized zones across 6 regions and covering 3 million children. By year 5 (2020), the NSFP will cover more than 50% of primary students enrolled in Afar and Somali regions and 15% of students nationally. The 5-year NSFP funding requirements are estimated at between ETB 4.08bn and ETB 5.1bn.

**Food Fortification:** Food fortification will be one of the major focal areas for alleviating the nation's nutrition problem. Coverage of universal salt iodization has reached over 85%, although iodine levels are still limited because iodization facilities are inefficient. Until recently, food fortification was not given much attention, despite its being one of the most sustainable ways of dealing with micronutrient interventions. The Nutrition Program points to the fortification of oil and flour as one of the means for addressing micronutrient (vitamin and mineral) deficiencies. This process has already begun, while the standards for fortification are being developed.

### 2.1.2 MULTISECTORAL RESPONSE AND COORDINATION

During NNP I, the government revitalized the National Nutrition Coordinating Body (NNCB) and its technical committee, and established a Regional Nutrition Coordinating Body (RNCB) in almost all regions. Woreda-level coordination bodies have been formed in most of the agrarian regions. NNP-implementing sectors, working with development partners, strengthened their capacity to create a common understanding of nutritional issues and of how to manage a multisectoral nutrition program and further strengthen the coordination platforms.

### 2.1.3 NEW INITIATIVES

The Government of Ethiopia has continued its commitment to nutrition by developing the second phase of the National Nutrition Program (NNP II, 2016–2020). A component of NNP II is a high level commitment called The Seqota Declaration, which will be managed under NNP II and implemented by the sectors. The Seqota Declaration aims to transform the lives of Ethiopian children through integrated community development in agriculture, health, nutrition, education, water, sanitation and hygiene, as well as social protection. The goal is to end child undernutrition by 2030 (See Box C).

Innovation is central to achieving the goals of the Seqota Declaration and promoting nutrition security in some of the most food insecure areas of the country. This transformation agenda has child development at its center and nutrition within its core. Hence, it focuses on the development of human capital, with a particular focus on future generations.

**Box C: The Seqota Declaration: A GoE commitment to end child undernutrition in Ethiopia by 2030**

The momentum for nutrition improvement in Ethiopia is strong. The challenge is to lock in the current high level of commitment to reducing malnutrition in all its forms and convert this commitment into accelerated decline. Thus the Sequota Declaration, named for the town in which it was launched, was initiated in 2015.

The key goals of the Sequota Declaration include, among others, the following:

- Zero stunting in children under 2 years old
- 100% access to adequate food all year round
- Transformed smallholder productivity and income
- Zero post-harvest food loss through reduced post-harvest loss
- Innovation around the promotion of sustainable food systems (climate smart)
- Water, sanitation and hygiene
- Education
- Social protection

## 2.2 NNP I IMPLEMENTATION CHALLENGES

The challenges faced in the implementation of NNP I, which need to be addressed in the second National Nutrition Program, are as follows:

✓ Adolescent nutrition and lifestyle related malnutrition initiatives, including communicable and non-communicable diseases, were not implemented or monitored under NNP I.

✓ Although multisectoral nutrition coordination and integration had been advocated on every forum and seemed to have improved over the last 5 years, most line ministries have lagged in mainstreaming nutrition into their sectoral strategic plans. This was especially true of efforts to cascade nutrition down to the implementation level:

- Line ministries lack an effective organizational structure (directorates, departments, case teams, desks, focal persons) to effectively mainstream nutrition into their core mandated activities.
- Some implementing sectors did not sensitize their strategic plan with nutrition initiatives or allocate a budget.

✓ The existing structure is not strong enough to coordinate NNP implementation with clearly defined responsibilities and accountabilities for achievements and failures at levels above that of implementing line ministries.

✓ Food fortification (oil and flour) was not implemented because of delays in the development of mandatory fortification standards and directives.

✓ Mechanisms for triangulated nutrition information that capture data from all relevant sectors are not available.

## 2.3 RATIONALE FOR DEVELOPING NNP II

The NNP II was developed:

- ✓ To strategically address the aforementioned challenges in the implementation of NNP I and to maximize and sustain the achievements and changes brought so far through integrated and comprehensive nutrition service delivery.
- ✓ To brand the "1,000 Days" initiative (see Section 2.4) through intensive social and behavioral change communication and community mobilization.
- ✓ To strengthen those strategic objectives that were not well addressed in the first NNP, such as nutrition interventions among adolescents and individuals with communicable and non-communicable/ lifestyle related diseases.
- ✓ To strengthen multisectoral nutrition coordination and capacity building and implementation of nutrition-sensitive interventions across sectors.

## 2.4 NNP II FOCUS AND APPROACH

### 2.4.1 LIFECYCLE APPROACH

The government's efforts to address malnutrition will be strengthened through the lifecycle approach, with particular emphasis on the crucial period of pregnancy and the first 2 years of life—the 1,000 days from conception to a child's second birthday, during which good nutrition and healthy growth deliver lasting benefits throughout life. The first 1,000 days is the period when the need for nutritional and health care is elevated and when pregnant women and young children in Ethiopia in particular are most vulnerable to inadequate care, inadequate access to health services and sub-optimal feeding practices.

The next phase of the National Nutrition Program will thus focus on specific age groups and will call for greater national priority for integrating nutrition-specific and nutrition-sensitive programs; for enhanced inter-sectoral coordination; and for community, private, national and international collaboration to end malnutrition by 2030 (See Box C). Moreover, the program's design has taken into account the major indicators and contributing factors in the Sustainable Development Goals and in the country's Health Sector Transformation Plan.

### 2.4.2 MULTISECTORAL COORDINATION AND NUTRITION GOVERNANCE

The adoption of the National Nutrition Strategy in 2008 and the implementation of the National Nutrition Program (2008–2015) were highly commendable. The significant steps taken by the Ethiopian government to fight the scourge of malnutrition are duly acknowledged. However, the National Nutrition Coordinating Body—developed to institutionalize integration of nutrition into the various sectors to accelerate the reduction of malnutrition—has been ineffective. This is partly because the National Nutrition Technical Committee was hampered by lack of clarity, the absence of an implementation guideline, lack of dedicated implementation personnel at sector level, and lack of established reporting mechanisms using clear and measurable indicators. The committee was therefore not in a position to accelerate and engage the NNCB in implementing, monitoring and evaluating the progress of the program.

Several reviews have shown that a successful multisectoral coordination mechanism for nutrition requires a legitimate institutional arrangement with an authority mandated by country-level policy/decision-makers. To execute its mandate of coordinating the sectors and fulfilling

the aims of NNP II and the Seqota Declaration, the NNCB needs a revised institutional arrangement, along with the necessary authority, resources and accountability. It should be placed in a government institution above the implementing sectors and empowered to influence all relevant sectors. It is therefore proposed that NNCB be placed under the office of the deputy prime minister and invested with increased and appropriate executive power and accountability. Existing coordination mechanisms should be strengthened through strong reporting and feedback mechanisms, and concrete action plans must be developed.

Nutrition coordinating bodies and technical committees were established in most regions and in some woredas, and activities to build their capacity were undertaken. However, only a few of these bodies are functional. NNP II will address these issues by putting in place a clear structure of accountability along with reporting mechanisms to ensure that these entities are functional and accountable to the regional president. This structure would avoid sectoral bias in exercising the authority vested in the NNCB. Sectoral members will be held accountable, both institutionally and collectively, for the achievement of the nutrition goals and targets set by the government.

In addition to strategically classifying interventions and services, the smooth implementation of nutrition-sensitive programming will require the establishment of suitable governance structures in ministries and agencies. These structures should include new nutrition institutions/ counsels, directorates, case teams, units and dedicated focal personnel based on the demand and intensity of the interventions.

Moreover, at sectoral level, the development of strategic documents for mainstreaming nutrition into already existing sector programs, the cascading of structures to ease implementation, and the creation of sustainable financing and budget allocation might all be viewed as potential ways of measuring the commitment and level of implementation of the National Nutrition Program within specific sectors.

Integrated, multisectoral coordination at all levels must be strengthened along with community-level action. There must also be clear guidance and better alignment of programs and resources among partners, and programmatic decisions must be based on and supported by research and capable knowledge management. Mechanisms for monitoring and evaluation must be in place, and triangulated nutrition information that captures data from all relevant sectors must be adequately integrated.

# 3

# STRATEGIC OBJECTIVES AND INITIATIVES

## THE GOALS OF NNP II

The goal of the National Nutrition Program is to provide a framework for coordinated implementation of nutrition interventions in order to end hunger by 2030. The program was developed in step with the government's efforts to realize the Seqota Declaration through the integrated and coordinated implementation of high impact nutrition interventions to reduce malnutrition among children, women of reproductive age, adolescents and the general population. The main interventions under NNP II include optimal breastfeeding, optimal complementary feeding, mitigation and prevention of micronutrient deficiencies, WASH, deworming, food fortification and management of acute malnutrition.

## STRATEGIC OBJECTIVES OF NNP II

The Government of Ethiopia devised programs and initiatives with set targets that directly and indirectly contribute to the reduction of malnutrition and to ending hunger. These programs include increasing agricultural productivity, promoting girls' education, immunization, integrated management of neonatal and childhood illnesses (IMNCI), water, sanitation and hygiene (WASH), family planning, prevention of mother-to-child transmission of HIV (PMTCT), skilled delivery, delaying of first pregnancy, food fortification, and management of micronutrient deficiencies and acute malnutrition, among others.

The interventions that fall under the National Nutrition Program are grouped into two major categories: nutrition-specific and nutrition-sensitive. This grouping is based on the impact of the intervention on the immediate causes of malnutrition. The overall goal of this program implementation manual is to facilitate and ignite the accelerated reduction of malnutrition in order to achieve zero hunger by 2030 and meet Sustainable Development Goal targets. Below, the core targets, initiatives and expected results of the program are listed beneath each strategic objective. The performance indicators and targets for each strategic objective also appear in the accountability and results matrix at the end of the document (Annex).

# STRATEGIC OBJECTIVE 1

IMPROVE THE NUTRITIONAL STATUS OF WOMEN (15–49 YEARS) AND ADOLESCENT GIRLS (10–19 YEARS)

Globally, maternal undernutrition contributes to 800,000 neonatal deaths, and child undernutrition is estimated to underlie nearly 3.1 million child deaths annually (Zulfiqar, 2013). Maternal malnutrition, encompassing both undernutrition and overweight, are global problems with important consequences for survival, incidence of acute and chronic diseases, healthy development and economic productivity. Adolescent nutrition is important to the health of girls and is relevant to maternal nutrition. Especially, pregnancies in adolescence have a higher risk of complications and higher mortality for mothers, infants and children, as well as poorer overall birth outcomes than pregnancies in older women.

Prevalence of low BMI (<18.5 kg/m$^2$) in adult women has decreased in Africa and Asia since 1980, but remains higher than 10% in these two large developing regions. Anemia (hemoglobin <110 g/L), which might be attributable to low consumption and/or absorption of iron in the diet or to blood loss, such as from intestinal worms, is highly prevalent during pregnancy and has a significant impact on birth outcomes.

Under Strategic Objective 1, the NNP's interventions address the nutritional problems of adolescent girls and women of reproductive age, including pregnant and lactating women.

## 2020 TARGETS

- Reduce the prevalence of anemia in adolescent girls from 30% to 15%.
- Reduce the prevalence of anemia among women of reproductive age (15-49 years) from 19.3% to 12%.
- Reduce the prevalence of anemia among pregnant women from 22% to 14%.
- Reduce the proportion of women of reproductive age with BMI <18.5% from 27% to 16%.
- Reduce the proportion of newborns with low birth weight (less than 2.5kg at birth) from 11% to 5%.

## RESULT 1.1: NUTRITIONAL STATUS OF ADOLESCENTS IMPROVED

### INITIATIVES

1. Provide nutritional assessments and counseling services for adolescents at all contacts with health care providers.

    ✓ Conduct nutritional assessments and counseling services in health facilities when an adolescent comes for any kind of health service.

    ✓ Integrate adolescent nutrition services into youth centers and related community based programs.

    ✓ Conduct regular monitoring of the nutritional status of school-age children/adolescent girls.

2. Ensure adolescents' access to micronutrient services.

    ✓ Provide school based biannual deworming.

    ✓ Provide biannual deworming for out-of-school adolescents.

    ✓ Provide iron folic acid supplementation for adolescent girls at schools and health facilities.

3. Conduct social and behavioral change communication to prevent harmful traditional practices related to nutrition.

    ✓ Promote delaying early marriage until age 18 and delay of first pregnancy until age 19.

    ✓ Promote dietary diversity.

    ✓ Prevent food taboos, which contribute to intergenerational malnutrition.

    ✓ Promote diversified and nutritious foods for adolescents.

    ✓ Promote the use of iodized salt and strengthen enforcement of universal salt iodization (USI) regulations.

    ✓ Promote and support girls' education.

    ✓ Ensure that key influential groups and individuals are aware of the importance of adolescent nutrition and the consequences of malnutrition during adolescence.

    ✓ Provide life skills trainings (such as assertiveness, negotiation skills, and decision-making, leadership and bargaining skills) for girls and boys to prevent early pregnancy.

    ✓ Promote personal hygiene, environmental sanitation and infection prevention measures.

4. Ensure access to reproductive health information and services for boys and girls to:

    ✓ Delay first pregnancy until age 19.

    ✓ Promote the use of adolescent friendly reproductive health services.

    ✓ Integrate nutrition assessment and counseling into youth friendly reproductive health services.

5. Address the needs of adolescent girls in special situations (HIV/AIDS, emergency, obesity and eating disturbances).

## RESULT 1.2: NUTRITIONAL STATUS OF WOMEN OF REPRODUCTIVE AGE IMPROVED

### INITIATIVES

**I: Improve Nutrition of Pregnant and Lactating Women**

1. Provide comprehensive and routine nutritional assessments and counseling services.

   ✓ Conduct nutritional assessments and provide counseling services for pregnant women during antenatal care (ANC) visits and at any other health contact points.

   ✓ Conduct nutritional assessments and provide counseling services for lactating women during postnatal visits and at any other health contact points.

   ✓ Promote engagement of husbands, grandparents and other household members who play key roles in providing continuous care for pregnant and lactating women.

   ✓ Provide malnourished pregnant and lactating women (PLW) with targeted supplementary food.

   ✓ Provide PLW with blanket supplementary food support in special circumstances.

   ✓ Identify and treat severe and moderate acute malnutrition (SAM and MAM) in PLW.

   ✓ Identify and treat infections such as malaria and intestinal parasitosis.

   ✓ Provide PLW with routine iron and folic acid supplementation.

   ✓ Provide deworming during the second trimester of pregnancy.

2. Conduct social and behavioral change communication on maternal nutrition.

   ✓ Promote maternal nutrition, including adequate intake of diversified foods, daytime rest and additional meals during antenatal and postnatal periods.

   ✓ Identify and support champions to serve as role models to support the nutrition of women and children.

   ✓ Promote shifts in social norms on food taboos through religious leaders and influential community members to realize adequate nutrition for pregnant and lactating women.

   ✓ Promote the use of iodized salt and fortified foods.

   ✓ Promote personal hygiene, environmental sanitation and infection-prevention measures.

3. Strengthen mobile health and nutrition teams to improve access to nutrition services in pastoralist areas.

4. Ensure free distribution and utilization of insecticide-treated nets (ITNs) by PLW in all malaria-endemic woredas.

5. Create access to time and labor saving technologies.

6. Ensure access to reproductive health services.

   ✓ Ensure access to postnatal and family planning services.

   ✓ Ensure male involvement in reproductive health services.

7. Support women's empowerment.

   ✓ Strengthen women's economic control.

   ✓ Strengthen women's ability to have equitable decision-making power to improve their own nutritional status and that of their households.

**II: Improve the nutritional status of non-pregnant and non-lactating women**

✓ Promote the use of iodized salt.

✓ Promote adequate intake of diversified food.

✓ Ensure access to reproductive health services.

✓ Ensure the economic empowerment of women.

# STRATEGIC OBJECTIVE 2

IMPROVE THE NUTRITIONAL STATUS OF CHILDREN FROM BIRTH UP TO 10 YEARS

Maternal and child malnutrition, encompassing both undernutrition and overnutrition, are global problems with important consequences for survival, incidence of acute and chronic diseases, healthy development and the economic productivity of individuals and societies. Ethiopia is one of the top-ranked countries in terms of malnutrition in sub-Saharan Africa. Progress has been made with many interventions implemented at scale over the last decade. Strategic Objective 2 emphasizes the first 1,000 days after a child's birth, which is a critical period in human life.

## 2020 TARGETS

- Reduce stunting prevalence among under-five children from 40% to 26%.
- Reduce the prevalence of underweight among under-five children from 25% to 13%.
- Reduce the prevalence of wasting among under-five children from 9% to 4.9%.
- Reduce the prevalence of low birth weight (less than 2.5kg at birth) from 11% to 5%.
- Reduce the prevalence of anemia in under-five children from 39% to 24%.
- Increase the proportion of children 6-23 months with minimum dietary diversity score from 5% to 40%.

## RESULT 2.1: NUTRITIONAL STATUS OF INFANTS AND YOUNG CHILDREN 0–23 MONTHS IMPROVED

### INITIATIVES

1. Promote, support and protect optimal breastfeeding practices for infants 0–6 months at community and facility level through individual and group counseling.

    ✓ Counsel pregnant women, partners, family members and other influential community members on optimal breastfeeding practices.

    ✓ Promote initiation of breastfeeding within 1 hour of birth, use of colostrum and avoidance of pre-lacteal feeds.

    ✓ Promote and support exclusive breastfeeding for the first 6 months.

    ✓ Establish a baby friendly health facility initiative in all public and private health facilities.

    ✓ Enforce the International Code of Marketing for Breastmilk Substitutes.

    ✓ Promote enactment of maternity leave according to International Labour Organization Convention #183.

    ✓ Promote designated breastfeeding rooms in major service providing institutions.

    ✓ Support breastfeeding working mothers to exclusively breastfeed until the child is 6 months old.

2. Build the capacity of service providers on complementary feeding for children ages 6–23 months, emphasizing:

    ✓ Timely initiation of age-appropriate complementary foods at 6 months of age.

    ✓ Continued breastfeeding until age 2 and beyond.

    ✓ Active and responsive feeding for children 6–23 months old with the involvement of fathers and influential family members.

    ✓ Feeding during illness and recovery.

3. Develop and enforce minimum standards on nutritional services for young children in special situations.

    ✓ Refugee camps

    ✓ Orphanages

    ✓ Daycare centers

    ✓ PSNP public work sites, etc.

4. Support local production of enriched complementary food.

    ✓ Assess and identify recommended complementary feeding options for different communities (i.e., agrarian, pastoral, urban).

    ✓ Promote local production of complementary foods meeting acceptable standards and using a variety of mechanisms.

    ✓ Harmonize tested procedures for local production of complementary foods.

    ✓ Revise existing recipes for comple-

mentary foods, considering agrarian, urban and pastoral contexts.

- ✓ Promote and demonstrate the preparation and utilization of diversified complementary foods.

5. Promote key actions for diversification and utilization of complementary foods at household level.

   - ✓ Harmonize and standardize complementary feeding practices, social mobilization, and behavioral change communication materials to help ensure dietary diversity through the use of various varieties of food sources.

   - ✓ Train health workers and health extension workers on preparation of enriched complementary foods for cascading down to development armies and households.

   - ✓ Build the capacity of regional, zonal and woreda health offices and primary health care units on interventions to promote child growth.

6. Conduct monthly growth monitoring and promotion for children under 2.

7. Prevent and control micronutrient deficiencies.

   - ✓ Identify and treat anemia.

   - ✓ Provide Vitamin A supplementation for children 6–59 months of age biannually.

   - ✓ Promote the proper use of iodized salt at household level.

   - ✓ Improve the production of quality, iodized salt by enforcing the monitoring and quality control of salt iodization at production sites (including imported edible salt).

   - ✓ Provide zinc with oral rehydration salt (ORS) for diarrhea treatment.

   - ✓ Promote the use of fortified foods (edible oil and flour).

   - ✓ Promote the use of micronutrient powders in areas where iron deficiency is greater than 20% among children under five.

8. Detect and manage acute malnutrition and common childhood illnesses early.

   - ✓ Train HEWs on identification, treatment and timely referral of acutely malnourished (SAM/MAM) children.

   - ✓ Ensure HEWs conduct routine screening and referral of children with complicated acute malnutrition.

   - ✓ Ensure timely availability of appropriate nutrition products and commodities—anthropometric equipment, therapeutic food, supplementary food and essential drugs—as per the acute malnutrition management guideline in all health facilities.

   - ✓ Ensure the establishment of stabilization centers at health facilities (health centers and hospitals).

   - ✓ Ensure the establishment of outpatient treatment services at health posts and health centers.

   - ✓ Promote active case finding and management for malnutrition and childhood illness in the community.

   - ✓ Encourage local food processing factories to participate in fulfilling production requirements for ready-to-use therapeutic food (RUTF) and ready-to-use supplementary food (RUSF).

   - ✓ Ensure malnourished children are

exempted from treatment service charges.

- ✓ Ensure that caretakers are able to get food at stabilization centers.
- ✓ Ensure nutritional screening services for children who visit health posts and health centers for integrated management of neonatal and childhood illnesses (IMNCI).

9. Ensure universal access to WASH and utilization of WASH practices.
   - ✓ Ensure access to clean and safe water.
   - ✓ Promote the use of household water treatment practices.
   - ✓ Promote safe and hygienic preparation and handling of food.
   - ✓ Promote hand washing with soap.
   - ✓ Promote safe and clean household environments (in relation to poultry, small ruminants and household waste management).
   - ✓ Promote construction and use of household and community latrines.
10. Link food-insecure households with children under 2 to social protection services and nutrition-sensitive livelihood and economic opportunities.
11. Integrate Early Childhood Care and Development stimulation with existing community and facility based child nutrition programs.
    - ✓ Promote appropriate adult-child interaction.
    - ✓ Ensure the development and utilization of locally relevant early childhood development materials.
    - ✓ Integrate ECCD into nutrition capacity building efforts (blended integrated nutrition learning module).
    - ✓ Ensure inclusion of ECCD related topics in nutrition-blended training materials.

## RESULT 2.2: NUTRITIONAL STATUS OF CHILDREN 24–59 MONTHS IMPROVED

### INITIATIVES

1. Promote appropriate feeding and dietary practices.
   - ✓ Ensure that households with children under 5 and PLW are linked to initiatives that promote home/kitchen gardens and small-scale food production that support a diverse range of nutrient-enhancing foods.
2. Prevent and control micronutrient deficiencies.
   - ✓ Identify and treat anemia.
   - ✓ Provide Vitamin A supplementation for children 6-59 months of age biannually.
   - ✓ Deworm children 2-5 years old biannually.

- ✓ Promote the use of iodized salt at household level.
- ✓ Provide zinc with ORS for diarrhea treatment.

3. Detect and manage acute malnutrition and common childhood infections early.
   - ✓ Train health workers and health extension workers on identification and treatment of acute malnutrition.
   - ✓ Conduct routine screening of children for malnutrition.
   - ✓ Manage severe and moderate acute malnutrition.
   - ✓ Encourage local food processing factories to participate in fulfilling production requirements for RUTF and RUSF.
   - ✓ Ensure availability of appropriate supplies and commodities (supplements, anthropometric equipment, therapeutic food, supplementary food and routine drugs) in a sustainable manner in all health facilities.
   - ✓ Strengthen monitoring, evaluation and reporting of nutrition services through harmonized data collection tools.
4. Ensure universal access to WASH and utilization of WASH practices.
   - ✓ Ensure access to clean and safe water.
   - ✓ Promote the use of household water treatment practices.
   - ✓ Promote safe and hygienic preparation and handling of food.
   - ✓ Promote hand washing with soap.
   - ✓ Promote safe and clean household environments (in relation to poultry, small ruminants and household waste management).
   - ✓ Promote construction and use of household and community latrines.
5. Integrate Early Childhood Care and Development stimulation with existing community and facility based child nutrition programs.
   - ✓ Promote appropriate adult-child interaction.
   - ✓ Ensure the development and utilization of locally relevant early childhood development materials.
   - ✓ Integrate ECCD into nutrition capacity building efforts (blended integrated nutrition learning module).
   - ✓ Ensure inclusion of ECCD related topics in nutrition-blended training materials.
6. Improve nutritional services for young children in special circumstances.
   - ✓ Emergency situations
   - ✓ Refugee camps
   - ✓ Orphanages
   - ✓ Daycare centers
   - ✓ Chronic infections, etc.

## RESULT 2.3: NUTRITIONAL STATUS OF CHILDREN AGES 5–10 IMPROVED

### INITIATIVES

1. Promote good nutrition behavior and improved nutritional status of children 5–10 years old.

    ✓ Conduct school based health and nutrition social and behavior change communication for young children.

    ✓ Train teachers and Parent-Teacher Association members in core child nutrition areas and raise awareness on child nutrition and health services in the community.

    ✓ Promote and demonstrate food diversification through school gardens and nutrition clubs.

    ✓ Promote healthy school environments through school health and nutrition programs.

    ✓ Initiate a homegrown school feeding program for school-aged children.

    ✓ Promote access to safe, potable water, and sanitation and hygiene in schools and at home.

    ✓ Promote proper disposal of human, animal and environmental waste.

    ✓ Provide school based deworming services.

    ✓ Promote the use of iodized salt at household level.

    ✓ Promote exercise for preventing childhood obesity.

# STRATEGIC OBJECTIVE 3

IMPROVE THE DELIVERY OF NUTRITION SERVICES FOR COMMUNICABLE AND NON-COMMUNICABLE/LIFESTYLE RELATED DISEASES

Nutrition is an important component of a healthy lifestyle and in the prevention and management of chronic communicable and non-communicable diseases. Malnutrition is a critical yet underestimated factor in susceptibility to infection, including HIV/AIDS, tuberculosis and malaria. Infection saps the individual of energy, which reduces productivity at the community level and perpetuates an alarming spiral of infection, disease and poverty. Hence, it is essential to address the nutritional requirements of individuals with infections.

In addition, because of changes in dietary and lifestyle patterns, non-communicable diseases like obesity, diabetes mellitus, cardiovascular disease, hypertension, stroke and some types of cancer are becoming increasingly significant causes of disability and premature death in both developing and developed countries, placing an additional burden on already overtaxed national health budgets. Undernutrition in utero and early childhood may predispose individuals to greater susceptibility to some chronic diseases (Alemu et al., 2014; Gebreyohannes et al., 2014; Tefalem et al., 2013).

Timely interventions will help prevent these diseases or reduce their severity and consequences. The health sector, the Ministry of Youth and Sport, and other concerned governmental bodies are responsible for implementing nutrition-sensitive interventions for those dealing with communicable, non-communicable and lifestyle related diseases.

## RESULT 3.1: NUTRITION SERVICE DELIVERY FOR COMMUNICABLE AND NON-COMMUNICABLE DISEASES IMPROVED

### INITIATIVES TARGETING COMMUNICABLE DISEASES

#### A. Nutrition and HIV/AIDS

1. Strengthen the capacity of facilities and health professionals to deliver quality standard nutrition services to people living with HIV (PLHIV).

    ✓ Integrate nutritional assessment, counseling and support (NACS) into comprehensive HIV/AIDS care and support training materials.

    ✓ Harmonize the HIV/AIDS care and treatment guidelines and/or training materials with the National Nutrition Program and National Nutrition Strategy.

    ✓ Equip facilities with nutrition assessment and counseling materials.

    ✓ Make nutrition communication and advocacy materials available to health service providers (in line with the National Health Communication Strategy).

- ✓ Train health workers on NACS based on acute malnutrition management guidelines.

- ✓ Incorporate NACS training in integrated refresher training (IRT) for HEWs on HIV/AIDS (creating awareness, follow up and linkage to the health facility).

2. Integrate nutritional assessment counseling and support into HIV treatment, care and support services.

   - ✓ Support facilities to integrate nutrition counseling and clinical nutrition services into existing HIV services.

   - ✓ Standardize clinical nutrition and HIV services as per national guidelines.

   - ✓ Provide NACS for all PLHIV.

   - ✓ Prioritize children under five, pregnant and lactating women in cases of supply shortage.

   - ✓ Ensure that nutritional assessment, care and support for women living with HIV is an integral part of antenatal, postnatal and prevention of mother-to-child transmission of HIV (PMTCT) services.

   - ✓ Health facilities should design a strategy to identify eligible mothers and provide necessary support.

   - ✓ Promote appropriate feeding options for infants born to HIV-infected mothers.

   - ✓ Counsel and support HIV-positive mothers on infant feeding as per the national recommendations and strategies for elimination of mother-to-child transmission (EMTCT).

   - ✓ Link HIV-infected patients who have graduated from NACS services to economic strengthening activities (income-generating activities, back-to-work initiatives, etc.).

3. Ensure sustainability of NACS services.

   - ✓ Encourage local food processing factories to participate in fulfilling production requirements for RUTF and RUSF.

   - ✓ Study/consider the possibility of other cost-effective food commodities for the management of acute malnutrition in PLHIV.

   - ✓ Ensure sustainable availability of appropriate supplies and commodities (supplements, anthropometric equipment, therapeutic food, supplementary food) in all health facilities.

   - ✓ Incorporate monitoring and evaluation of NACS services in the national Health Management Information System.

4. Coordinate facility based therapeutic and community based preventive food and nutrition interventions for PLHIV.

   - ✓ Coordinate and integrate food assistance and HIV programs at all levels.

   - ✓ Strengthen nutrition education, including knowledge of water purification, food hygiene, preparation and handling, and other complementary interventions.

   - ✓ Employ strategies for client graduation through linkages to other services.

   - ✓ Establish linkages between facility and community based nutrition interventions for PLHIV and livelihood support and food assistance interventions.

   - ✓ Strengthen community based nutrition care and support activities

for PLHIV through health extension workers, agriculture extension workers and health development armies.

### B. Nutrition and Tuberculosis

1. Strengthen the capacity of health facilities and health professionals working in TB clinics to deliver quality NACS for patients with TB.

   ✓ Integrate NACS into TB treatment and care programs.

   ✓ Harmonize TB detection and management guidelines and/or training materials with the National Nutrition Program.

   ✓ Equip TB clinics/centers with anthropometric equipment and counseling materials.

   ✓ Train health workers working in TB clinics/multi-drug resistant-TB (MDR-TB) centers on NACS.

   ✓ Incorporate NACS training into integrated refresher training for HEWs with focus on TB cases (creating awareness, follow up, linkage to the health facility).

2. Ensure nutritional assessment, counseling and support for patients with active and drug resistant TB.

   ✓ Conduct routine nutritional assessments for TB patients to determine their nutritional status and provide them with nutrition support when essential and available.

   ✓ Provide nutritional education and counseling on the importance and impact of good nutrition, symptom management and improved dietary intake during and after TB treatment.

   ✓ Provide nutritional assistance to TB patients or refer them for treatment when the support is available.

   ✓ Link TB patients with nutrition-sensitive interventions and livelihoods interventions to access nutritious foods where and when available, particularly MDR-TB and HIV co-infected patients.

   ✓ Link TB patients that graduated from NACS services to economic strengthening activities (income generating activities, back-to-work initiatives, etc.).

   ✓ Strengthen community TB prevention, care and support activities through health extension workers and health development armies.

   ✓ Develop and distribute harmonized social and behavioral change communication materials on nutrition and TB through community based service providers (health extension workers and health development armies).

3. Strengthen integration between TB and HIV programs and nutrition.

4. Review existing evidence on TB and nutrition to bridge knowledge gaps and identify operational research areas to fully integrate nutrition into TB treatment and control programs.

### C. Nutrition and Other Infections

Even though malnutrition is highly associated with chronic infectious diseases, other common infections like measles, diarrheal diseases, malaria, soil transmitted helminthiasis and pneumonia are also known to adversely affect the nutritional status of patients. Therefore, every effort should be made to:

1. Ensure that nutritional assessment and counseling are done while these infec-

tions are being treated in children under five.

2. Provide RUTF/TSF/RUSF support for children under five facing acute malnutrition.

3. Strengthen community based nutrition education through the Health Extension Program and through other community based interventions.

4. Provide counseling on proper feeding recommendations to prevent malnutrition during and after attacks of infection.

### INITIATIVES TARGETING CHRONIC NON-COMMUNICABLE/LIFESTYLE RELATED DISEASES

1. Strengthen national response through policy, governance and leadership.

    ✓ Organize and implement in-service training programs on leadership and program management focusing on chronic non-communicable disease prevention and control.

    ✓ Promote physical activity to be integrated into NNP implementing sectors.

    ✓ Advocate for reviewing existing policies in relevant NNP implementing sectors to ensure that they are consistent with best practices in population-wide approaches to increasing physical activity.

    ✓ Incorporate competency based nutrition into the existing curricula of health professionals.

    ✓ Develop national nutrition, dietetics and healthy life guidelines for prevention and management of non-communicable diseases and risk factors.

## RESULT 3.2: HEALTHY LIFESTYLES AND NUTRITION PROMOTED

### INITIATIVES

1. Promote public awareness on healthy dietary behaviors and physical activities.

    ✓ Develop standardized health and nutrition messages on healthy dietary behaviors.

    ✓ Disseminate national nutrition, dietetics and healthy life guidelines to promote healthy dietary lifestyles.

    ✓ Produce and disseminate IEC and behavior change communication (BCC) materials on healthy diet and physical activity.

    ✓ Disseminate IEC/BCC materials to promote increased consumption of fruits and vegetables, reduced consumption of soda beverages, saturated fats and trans-fatty acids.

    ✓ Promote healthy nutrition through media (TV, radio, newspapers, posters, social media, websites, etc.).

    ✓ Conduct school based health promotion to encourage healthy diet and avoid childhood obesity among schoolchildren.

- ✓ Train HEWs (both urban and rural) on diet, physical activity and NCDs.
- ✓ Implement the International Code of Marketing of Breastmilk Substitutes and subsequent WHO resolutions.
- ✓ Promote continuation of breastfeeding to age 2 and beyond.
- ✓ Develop regional based food guide pyramids for different cultural settings.

2. Provide nutrition assessment and counseling services (NACS) at the community and health facility level.
   - ✓ Support facilities to integrate NACS into pediatric services for children under five and into adult outpatient services to identify overweight and obesity.
   - ✓ Support facilities to integrate nutrition assessment into different non-communicable disease clinics (diabetics, hypertension, cancer, etc.)
   - ✓ Provide disease-specific dietary counseling.
   - ✓ Provide periodic nutritional screening and counseling of students for early identification of obesity and overweight at school.
   - ✓ Provide periodic nutritional screening and counseling to women at youth friendly reproductive health clinics for early identification of obesity and overweight.
   - ✓ Support community level facilities to provide nutritional screening and counseling for early identification of obesity and overweight.
3. Create/advocate for external environments that enhance physical activity in schools, at workplaces and in communities.
   - ✓ Conduct advocacy workshops for relevant decision-makers on the importance of physical activity in preventing non-communicable diseases.
   - ✓ Collaborate with sector line ministries and other concerned bodies.
   - ✓ Ensure that schools have safe and accessible facilities for active recreation, play and sports.
   - ✓ Encourage schools to provide students with daily physical education and to equip themselves with appropriate facilities and equipment.
4. Promote the establishment of physical activity and nutrition clubs in urban and rural settings.
   - ✓ Establish physical activity clubs within communities, schools and workplaces in collaboration with sector line ministries.
   - ✓ Collaborate with sector line ministries to establish physical activity committees in all workplaces.
   - ✓ Establish nutrition clubs within communities, schools and workplaces.
5. Promote engagement with professional organizations to generate evidence for policy guidance and standard setting.
   - ✓ Strengthen surveillance of non-communicable disease risk factors.
   - ✓ Promote health systems research or epidemiological studies on major

non-communicable disease risk factors, including physical inactivity and unhealthy diet.

- ✓ Ensure that national surveys on NCD risk factors address dietary intake, household expenditure, blood lipids, hypertension, and blood glucose in collaboration with the Ethiopian Public Health Institute.

6. Strengthen the diagnostic and clinical management capabilities of the country's health system to prevent and treat chronic non-communicable/lifestyle related diseases.

   - ✓ Equip health facilities with essential supplies, diagnostic equipment and other treatment inputs.
   - ✓ Organize and conduct sustainable in-service training programs on clinical diagnosis, treatment, counseling and comprehensive care of patients with non-communicable diseases.
   - ✓ Establish and foster networking and collaboration across higher education institutions to harmonize the training curriculum on chronic non-communicable diseases.

7. Formulate and enforce legislation and regulations that address unhealthy lifestyle and diet.

   - ✓ Produce and distribute regulatory guidelines on food products to ensure production and marketing of healthy foods.
   - ✓ Formulate and enforce legislation that promotes the local production and consumption of fruits and vegetables.
   - ✓ Enforce labeling of composition (ingredients) of commercially produced or imported foods and drinks.
   - ✓ Impose taxation on imported foods and drinks.
   - ✓ Develop the necessary regulations to provide incentives for the production and formulation of healthy foods.
   - ✓ Develop regulations to ensure that NCD prevention is an explicit priority in all stages of food systems, including product development, formulation, promotion and distribution.
   - ✓ Enforce regulations to minimize the impact of marketing on dietary patterns and prevent the exploitation of children, young people, and families via advertisements of unhealthy diets and beverages.

# STRATEGIC OBJECTIVE 4

STRENGTHEN THE IMPLEMENTATION OF NUTRITION-SENSITIVE INTERVENTIONS ACROSS SECTORS

Nutrition sensitivity describes 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, and water and sanitation. Acceleration of progress in nutrition will require effective, large-scale, multisectoral programs that address key underlying determinants of nutrition and enhance the coverage and effectiveness of nutrition-specific interventions (Ruel and Alderman, 2013). In other words, nutrition-sensitive programs can help scale up nutrition-specific interventions and foster a stimulating environment for ending hunger.

## 2020 TARGETS

- Increase mean number of days of consumption of meat from 1.2 days to 3 days per week.
- Increase national food consumption score from 26% to 40%.
- Increase proportion of households consuming diversified food by 40%.

## RESULT 4.1: IMPLEMENTATION OF NUTRITION-SENSITIVE INTERVENTIONS IN THE MINISTRY OF AGRICULTURE AND NATURAL RESOURCES AND MINISTRY OF LIVESTOCK AND FISHERIES STRENGTHENED

Ethiopia's economy, which mainly depends on agriculture, and its ecological system are fragile and vulnerable to climate change. The agricultural sectors have already put in place programs and initiatives that directly and indirectly contribute to the reduction of undernutrition. These include the Food Security Program, the Agricultural Growth Program, Disaster Prevention and Preparedness, the Livestock Master Plan, Agricultural Research Systems and the Agriculture Nutrition Sensitive Strategic Plan. The agriculture related ministries will continue to scale up these programs and initiatives with a nutrition lens. The nutrition-sensitive initiatives represent either new activities or a refocusing of existing activities to achieve nutritional outcomes. All of these programs have their own targets and contribute to reducing undernutrition; each needs to be scaled up with more emphasis on increasing the quality of food produced and on mainstreaming nutrition.

The following initiatives are to ensure that the agriculture related ministries operate in a manner that is nutrition-sensitive and aligned with the Agricultural Sector Strategic Objectives of Ethiopia's Growth and Transformation Plan (GTP II).

## INITIATIVES

**I: Strengthen the implementation of nutrition-sensitive interventions in the Ministry of Agriculture and Natural Resources**

1. Increase year-round availability, access to and consumption of fruits and vegetables, nutrient-dense cereals and pulses.

   ✓ Ensure access to fruit and vegetable seeds and other agricultural inputs.

   ✓ Support the establishment of community fruit and vegetable nursery sites and demonstration sites at farmer training centers.

   ✓ Promote homestead and school gardening.

   ✓ Promote and support urban agriculture.

   ✓ Promote and support community level production of fruits and vegetables.

   ✓ Promote production and consumption of bio-fortified pulses and vegetables (orange-fleshed sweet potato, iron rich beans, etc.)

   ✓ Distribute bio-fortified seeds from research entities and other higher institutions.

   ✓ Improve post-harvest handling and storage.

   ✓ Improve post-harvest food processing and ensure safety.

   ✓ Improve market linkages for fruit and vegetable produce.

   ✓ Promote production and consumption of nutrient-dense pulses.

   ✓ Promote local production of complementary foods.

2. Strengthen the capacity of the agriculture and livestock sectors to integrate nutrition-sensitive interventions into agriculture programs (PSNP, AGP, Master Plan, etc.).

   ✓ Ensure asset transfers or asset building interventions properly target women and vulnerable households.

   ✓ Ensure that vulnerable households with a malnourished child are adequately targeted in transfer and safety net initiatives.

   ✓ Improve the nutritional value of the food basket with the addition of pulses or the equivalent cash value.

   ✓ Enhance the implementation of nutrition-sensitive public works.

   ✓ Introduce soft conditionality related to attendance at behavior change communication events or uptake of other services in order to increase health-seeking behavior.

3. Promote technologies for post-harvest food processing, handling, preservation and preparation to help ensure that food is both nutritious and diverse.

   ✓ Identify and scale up best practices in the processing, preservation and preparation of fruits, vegetables and other crops.

   ✓ Improve food handling, storage and transportation of fruits, vegetables and other crops.

4. Enhance agricultural research and adoption of technology for increased household access to safe, nutritious food.

- ✓ Support the development of bio-fortified crops and vegetables and increase access to them by farmers.
- ✓ Establish bio-fortification capacity and and a bio-fortification center at the Ethiopian Institute of Agricultural Research.
- ✓ Identify and scale up selected best practices on preservation, storage and processing of fruit and vegetables at farm and household levels.
- ✓ Promote women's labor and time saving technologies.
- ✓ Support research and production of micronutrient enhanced fertilizers (e.g., zinc fortified fertilizer).

5. Improve natural resources base to improve food availability.
   - ✓ Rehabilitate/improve small-scale irrigation systems in priority areas for better nutrition outcomes.
6. Improve nutrition-sensitive agriculture (NSA) knowledge and practice among farmers.
   - ✓ Improve household level knowledge and practice about dietary diversity.
   - ✓ Establish nutrition behavior change communication strategies relevant for NSA.
   - ✓ Use local media to address food taboos and cultural constraints.
   - ✓ Integrate nutrition-sensitive, agriculture relevant social and behavioral change communications in all farmer and development army training manuals.
7. Update relevant agriculture and natural resource sector policies/strategies/guidelines and program implementation manuals with nutrition indicators.
   - ✓ Develop nutrition-sensitive agriculture strategy and implementation manual and disseminate to all levels.
   - ✓ Promote and monitor implementation of PSNP/Nutrition, AGP II/Nutrition, and drought resilience sustainable livelihood programs.
   - ✓ Develop a food and nutrition policy that guides food and nutrition systems in the country.
   - ✓ Strengthen advocacy and sensitization on nutrition-sensitive agriculture at all levels.
8. Develop regional and district level capacity to facilitate comprehensive integration of nutrition into planning and implementing initiatives in the environment and forestry sectors.
   - ✓ Provide awareness-creation training to federal, regional, district and kebele level civil servants working in environment and forestry.
   - ✓ Map and mobilize resources intended for coordination of nutrition-sensitive interventions in forested landscapes.
   - ✓ Establish a nutrition unit/focal person at the national and regional levels and if possible at district level as well.
9. Increase forest coverage nationally to 20% by the year 2020.
   - ✓ Identify, cluster and register 5 million hectares for potential manmade forest as planned in GTP II.

- ✓ Conduct research to identify suitable agroforestry technologies and appropriate tree species for specific areas of Ethiopia.

- ✓ Promote safeguarding and conservation of forest areas where wild foods are extracted for consumption.

- ✓ Establish a database for tracking forest plants that are directly used as food sources to understand and improve the contribution of the forest to improved nutritional outcomes.

- ✓ Integrate nutrition objectives and interventions into the management plan of forests and agroforests to the extent possible.

10. Improve the awareness of key stakeholders about the importance of forests and of environmental conservation to improved nutritional outcomes.

    - ✓ Promote wild foods, particularly vegetables and fruits, in national and local media, in schools, and among health extension workers to underline their nutritional value, to highlight cultural diversity and to foster appreciation of the traditional foods of various cultures and their relevance to health.

    - ✓ Incorporate food security, nutrition and agriculture modules in forestry training and education curricula to broaden the understanding of foresters and sensitize them to the potential role of forests in contributing to the wellbeing of local communities.

11. Integrate nutrition related goals, initiatives and activities into the forestry extension program for sustainable nutritional benefits.

    - ✓ Develop guidelines and provide training on using the forestry extension program to promote agroforests and conservation of forests harboring wild foods.

    - ✓ Promote provision and distribution of tree seedlings that will contribute to positive nutritional outcomes.

12. Develop laws and policies to codify fair, legal access to forests by local people for the sustainable harvesting of wild foods.

    - ✓ Develop a policy framework, law and legislation to prevent land-use challenges to subsistence or commercial farming.

    - ✓ Develop laws and policies to prevent forest clearing and deforestation without a full analysis, including an analysis of which wild foods might be lost, along with the nutritional implications of such loss.

**II: Strengthen the implementation of nutrition-sensitive interventions in the Ministry of Livestock and Fisheries**

1. Update relevant policies/strategies/guidelines and program implementation manuals with nutrition indicators to ensure that they contribute to nutrition and ensure its implementation.

    - ✓ Develop a nutrition-sensitive strategy and implementation manual and disseminate to all levels.

    - ✓ Strengthen advocacy and sensitization on nutrition-sensitive fishery and livestock at all levels.

2. Increase year-round availability, access to and consumption of animal-sourced foods.

    - ✓ Increase production and household consumption of meat, milk and eggs.

- ✓ Promote rearing of improved breeds of dairy cattle, small ruminants and poultry.
- ✓ Support the establishment of milk collection centers and improved milk processing technologies at household level.
- ✓ Promote confined/caged poultry production systems.
- ✓ Increase production and consumption of fish.
- ✓ Promote technologies that increase fish production and utilization and reduce post-harvest loss in fisheries and aquaculture.
- ✓ Promote small-scale beekeeping by women and other vulnerable groups.
- ✓ Improve farmers' access to safe fodders.
- ✓ Support or establish agrobusiness centers to promote production and consumption of poultry, fish, small ruminants and cattle.
- ✓ Strengthen linkages with local markets and ensure that smallholder farmers and pastoralists have consistent access to inputs and produce markets and income streams.

3. Strengthen the capacity of the livestock sectors to integrate nutrition-sensitive interventions into sector programs (AGP, Livestock Master Plan, etc.)
   - ✓ Ensure asset transfers or asset building interventions properly target women and vulnerable households.
   - ✓ Introduce soft conditionality related to attendance at BCC events or uptake of other services, in order to increase health-seeking behavior.
4. Promote technologies for post-harvest food processing, handling, preservation and preparation to help ensure that food is both nutritious and diverse.
   - ✓ Identify and scale up best practices in the processing, preservation and preparation of dairy products and fish.
   - ✓ Improve food handling, storage and transportation of dairy products and fish.
5. Enhance agricultural research and adoption of technology for increased household access to safe, nutritious food.
   - ✓ Support the development of improved breeds of dairy cattle, small ruminants and poultry, and increase farmers' access to these resources.
   - ✓ Identify and scale up selected best practices in the preservation, storage and processing of dairy products, fish and animal products at farm and household level.
   - ✓ Promote women's labor and time saving technologies.
6. Improve natural resource base to improve food availability.
   - ✓ Rehabilitate or improve small-scale livestock water points in priority areas for better nutrition outcomes.
7. Improve nutrition-sensitive livestock and fishery development knowledge and practice among farmers through behavior change communication.

- ✓ Improve household level knowledge and practice about dietary diversity.
- ✓ Establish nutrition behavior change communication strategies relevant to NSA.
- ✓ Use local media to address food taboos and cultural constraints.
- ✓ Integrate NSA-relevant social and behavioral change communications in all farmer and development army-training manuals.

## RESULT 4.2: IMPLEMENTATION OF NUTRITION-SENSITIVE INTERVENTIONS IN THE EDUCATION SECTOR STRENGTHENED

The education sector is responsible for improving access to quality pre-primary and primary education in order to make sure that all children, youth and adults acquire the competencies, skills and values that enable them to participate fully in the development of Ethiopia. Efforts will also be made to sustain equitable access to quality secondary and tertiary education services as the basis of and bridge to the demand of the economy for middle and higher level human resources. The sector will also contribute to the improvement of health and nutrition and to the reduction of undernutrition in schoolchildren through the provision of school health and nutrition interventions and through a school feeding program. Moreover, the sector is expected to improve workforce capacity in the nutrition sector by educating people to join the sector and thereby contribute to implementation of the overall NNP.

### 2020 TARGETS

- Increase the proportion of primary schools with a homegrown school feeding program from 0 to 25%.
- Increase the proportion of schools that provide biannual deworming to 60%.

### INITIATIVES

1. Promote and scale up school feeding programs.
   - ✓ Develop a school feeding implementation strategy.
   - ✓ Develop a training manual and build the capacity of education personnel (experts, leaders, teachers, PTAs, students and other school community members) at each level (region, zone, woreda and kebele).
   - ✓ Support and promote gender responsive school feeding in different modalities.
   - ✓ In collaboration with the agriculture sector, encourage schools to promote and transfer sustainable, replicable school gardening models at community level and link them with school feeding and WASH programs.
   - ✓ With community participation, provide school menus based on locally produced food.

2. Promote school health and nutrition (SHN) interventions through collaboration with other sectors.

    ✓ Establish SHN implementation structures at various levels.

    ✓ Establish and strengthen school health and nutrition clubs.

    ✓ Celebrate Nutrition Day in education institutions.

    ✓ Improve gender-sensitive water, hygiene and sanitation facilities in schools.

    ✓ Promote appropriate nutritional practices (e.g., use of iodized salt) through different media.

    ✓ Implement nutrition services (deworming, targeted micronutrient supplementation).

    ✓ Promote girls' education.

    ✓ Strengthen nutrition related community based services provided by higher institutions.

    ✓ Build the capacity of school mini-media to conduct social and behavioral change communication related to nutrition interventions and to engage in the promotion of optimal nutrition practices.

    ✓ Assess school curricula and ensure the mainstreaming of nutrition concepts and skills into curricula at all levels but with a focus on primary education.

3. Improve the capacity of the nutrition workforce.

    ✓ Incorporate gender-responsive nutrition curricula into primary and secondary schools, colleges, technical and vocational education and training (TVET) institutes, universities and non-formal education services (such as functional adult literacy programs).

    ✓ Encourage and support institutions of higher education to produce more nutrition professionals.

    ✓ Train members of the school health and nutrition organizational structure at different levels.

    ✓ Develop harmonized nutrition specialty programs in universities (e.g., applied nutrition, clinical nutrition, dietetics, public health nutrition, etc.)

    ✓ Strengthen university nutrition laboratories to perform operational research.

    ✓ Engage higher education in mega-research projects on nutrition.

    ✓ Support nutrition students for their commitment to community service.

    ✓ Establish and strengthen academic centers of excellence for nutrition.

## RESULT 4.3: IMPLEMENTATION OF NUTRITION - SENSITIVE INTERVENTIONS IN THE WATER, IRRIGATION AND ELECTRICITY SECTOR STRENGTHENED

The water, irrigation and electricity sector is responsible for increasing access to potable water and creating a healthy environment. The sector will reduce the burden of disease, save time spent fetching water and allow mothers more time to care for their children. In addition, the Ministry of Water, Irrigation and Electricity (MOWIE) added the promotion and expansion of medium and large irrigation schemes, which may help in increasing productivity and diversifying foods produced throughout the year.

### INITIATIVES

1. Increase access to safe and clean water.

    ✓ Increase access to safe water.

    ✓ Provide water supply for sewerage facilities.

    ✓ Increase irrigated farmland through the Irrigation Development Program.

    ✓ Develop water extension-system supporting programs at kebele level that deal with community drinking water and self-supply.

    ✓ Prepare and implement a sustainable rural/urban drinking water quality monitoring system (water safety plan).

    ✓ Strengthen the coordination of water, sanitation and hygiene activities through one WASH program.

    ✓ Reduce the proportion of the population at risk of problems related to fluoride, especially children and women (in Rift Valley):

        1. Provide alternative low fluoride water sources.

        2. Apply proven fluoride removal technologies.

        3. Strengthen integrated fluorosis mitigation activities through nutritional interventions at all levels.

2. Increase access to renewable energy.

    ✓ Increase access to and availability of stoves using renewable energy technology and solar energy saving technologies.

3. Increase access to small- and large-scale irrigation schemes.

## RESULT 4.4: IMPLEMENTATION OF NUTRITION-SENSITIVE INTERVENTIONS IN THE INDUSTRY SECTOR STRENGTHENED

The Ministry of Industry (MOI) is responsible for providing all around support to the food manufacturing industries and for accelerating technology transfers to contribute to the reduction of micronutrient deficiencies in Ethiopia. This is done through the fortification of wheat, salt, edible oil and other food vehicles, either domestic or imported.

### INITIATIVES

1. Strengthen the Ministry of Industry's capacity to support the production and distribution of fortified foods.
    - ✓ Train implementing staff on the national food fortification program.
    - ✓ Establish and equip quality control laboratories at the Food, Beverage and Pharmaceutical Industrial Development Institute.
    - ✓ Establish organizational structures for implementation and coordination of the national food fortification program.
    - ✓ Establish a dedicated food fortification directorate at the MOI's Food, Beverage and Pharmaceutical Industry Development Institute.
    - ✓ Strengthen the National Food Fortification Steering Committee and establish the necessary sub-working groups.
2. Build industry capacity to meet international standards for quality and safe fortified foods (edible oils, flour, salt, etc.).
    - ✓ Conduct industry mapping to identify and support small- and large-scale wheat flour and edible oil manufacturers to produce fortified food products.
    - ✓ Select appropriate food fortification technologies.
    - ✓ Develop social mobilization and marketing strategies for food fortification.
    - ✓ Assist in availing the industry of inputs (equipment, raw materials and premix).
    - ✓ Establish linkages with universities and vocational training centers for research and skills transfer.
    - ✓ Ensure quality and safety of locally produced food items.
3. Conduct awareness creation events for the private sector on nutrition related requirements and standards for locally manufactured food items.
    - ✓ Provide training on food fortification for food industries, including quality control/quality assurance.
    - ✓ Provide training for selected laboratories on standardized testing methodologies (private and public institution)
    - ✓ Strengthen the capacity of public and private food control laboratories.
    - ✓ Formulate strategies and action plans that assist food manufacturers to produce safe and nutritious food.

## RESULT 4.5: IMPLEMENTATION OF NUTRITION-SENSITIVE INTERVENTIONS IN THE TRADE SECTOR STRENGTHENED

The Ministry of Trade's responsibilities pertaining to nutrition includes regulating and enforcing compliance of locally produced and imported food items. The ministry issues a certificate of conformity at the country's ports of entry to ensure the quality and safety of food products.

### INITIATIVES

1. Strengthen the capacity of the Ministry of Trade to regulate imported food items.
    - ✓ Capacitate the Ministry of Trade's staff along with regional, zonal and woreda trade bureaus on the inspection of imported food items and the regulations concerning them.
    - ✓ Develop a guiding manual for the inspection and regulation of food items.
    - ✓ Capacitate the Trade Practice and Consumer Protection Authorities to promote the use of safe fortified foods.
2. Ensure the quality and safety of imported food items as per the national standard.
    - ✓ Conduct regular market surveillance to ensure the quality and safety of fortified products.
    - ✓ Conduct regular inspection and monitoring of food processing factories.
    - ✓ Strengthen the collaboration between MOI and regulatory sectors to support and facilitate the importation of products for food fortification.
    - ✓ Develop a marketing strategy for fortified foods.
3. Conduct awareness creation events for the private sector on nutrition related requirements and standards for imported food items.
4. Conduct awareness creation events for the public/consumers on the benefits of fortified food.
5. Support importation of fortified food (edible oil, salt, etc.).
6. Ensure access to and a supply chain for food and food items.

## RESULT 4.6: SOCIAL PROTECTION SERVICES FOR IMPROVED NUTRITION STRENGTHENED

The Ministry of Labor and Social Affairs (MOLSA) was established to realize the vision of ensuring that citizens have access to productive employment, a stable and decent work environment and secured social welfare, all of which help to ensure nutritional status. MOLSA strives to maintain employee health and safety in the workplace, promote efficient and equitable employment services and provide rehabilitation and capacity building services to vulnerable and affected members of society. Under Result 4.6 of the National Nutrition Program, MOLSA will carry out the following initiatives.

### INITIATIVES

1. Promote the implementation of gender-sensitive social safety net programs and other social protection instruments in urban settings to protect vulnerable groups from food insecurity and undernutrition.

    ✓ Ensure that vulnerable households affected by malnutrition and/or nutrition emergencies are adequately targeted by safety net initiatives.

    ✓ Ensure that pregnant and lactating women are eligible for conditional support – exemption from involvement in physical labor (cash for work).

    ✓ Ensure that PSNP beneficiaries with children under 2 also receive messaging pertaining to adolescent, maternal, infant and young child nutrition (AMIYCN) and engage both males and females in complementary food cooking demonstrations for skills transfer at household level.

    ✓ Integrate nutrition practices with social safety net programs to improve the nutritional status of women and children.

2. Promote the provision of credits, grants, microfinance services and other income generating initiatives to support increased access to nutritious foods among vulnerable groups, with primary focus on unemployed women and female headed households.

    ✓ Improve the access of women's self-help groups to grants and credits.

    ✓ Promote nutrition and AMIYCN practices through women's self-help groups.

3. Increase access to basic nutrition services for all vulnerable groups.

    ✓ Employ fee-waiver schemes for the management of acute malnutrition.

    ✓ Expand basic preventative and curative nutrition services to pastoralist and other vulnerable areas.

    ✓ Improve nutritional services for the poor, the elderly and persons with disabilities.

## RESULT 4.7: NUTRITION-SENSITIVE INTERVENTIONS IN DISASTER RISK MANAGEMENT COORDINATION COMMISSION STRENGTHENED

The National Disaster Risk Management Coordination Commission provides a framework for coping with the impact of hazards and related disasters and contributes to reducing malnutrition related risks caused by disaster. The food security directorate within Disaster Risk Management is responsible for supporting food insecure households in chronically food insecure woredas in a way that prevents asset depletion at household level. The directorate also facilitates access to credit for farm and off-farm activities that contribute to maximizing productivity, and thus creates opportunities to build assets.

### INITIATIVES

1. Strengthen and scale early warning systems for food and nutrition information from the community level up to the national level.

    ✓ Support the monitoring and evaluation system's capacity to ensure credible and timely data collection and analysis.

2. Facilitate participatory risk assessments and preparedness planning within communities to support nutrition emergency response and recovery programs.

    ✓ Develop, promote and implement in a timely fashion a comprehensive package of nutrition services and food items for emergencies and recovery periods.

    ✓ Ensure early detection and management of acute malnutrition (severe and moderate).

    ✓ Integrate the management of infant and young child feeding in emergency response interventions.

    ✓ Undertake Vitamin A supplementation and measles vaccination.

    ✓ Establish and strengthen supplementary and therapeutic feeding based on assessments.

    ✓ Ensure provision of adequate and appropriate information during emergencies.

    ✓ Ensure access to safe water, sanitation and hygiene during emergencies.

3. Ensure the capacity for coordinated emergency preparedness and response.

    ✓ Facilitate the collection of timely, reliable, quality emergency data.

    ✓ Ensure the capacity for mapping affected areas.

    ✓ Develop evidence based emergency preparedness and response plans.

    ✓ Strengthen the capacity for coordinating an emergency nutrition response.

4. Improve knowledge and practice of nutrition-sensitive disaster risk management among farmers, using behavior change communication.

    ✓ Improve household level knowledge and practice about dietary diversity.

- ✓ Establish behavior change communication strategies relevant for nutrition-sensitive disaster risk management.
- ✓ Use local media to address food taboos and cultural constraints.
- ✓ Use social and behavioral change communication strategies to impart information about resilience to nutrition related shocks in all farmer and agricultural extension worker training manuals.

## RESULT 4.8: QUALITY AND SAFETY OF NUTRITION SERVICES AND SUPPLIES ENSURED

The Food, Medicine and Healthcare Administration and Control Authority (FMHACA) is mandated to promote and protect public health by ensuring the safety and quality of health related products and services through registration, licensing and inspection of health professionals. In the implementation of the National Nutrition Program, FMHACA may have a significant role in setting standards and legislation and in developing guidelines/manuals. The authority also provides certificates of competency for manufacturers, importers and exporters, and ensures the quality and safety of food products.

### INITIATIVES

1. Develop/revise directives, standards, legislation and manuals to control the quality and safety of food products.
2. Issue a certificate of competence for manufacturers, importers, exporters, distributors and quality control laboratories.
3. Enforce and regulate the activities of manufactures, importers and distributors of products and supplies.
4. Ensure the quality and safety of the following by conducting laboratory analysis:
   - ✓ Infant formula, special nutritional products and food supplements.
   - ✓ Complementary foods, therapeutic and supplementary foods and special food products for vulnerable groups.
   - ✓ Fortified foods, food fortificants/premix.
5. Register and issue market authorization for nutritious food products.
6. Ensure that the quality and safety of the public water supply is up to standard.
7. Ensure that the quality and safety of food products used in school feeding programs is up to standard.
8. Conduct regular capacity needs assessments and build the capacity of experts in inspection and regulatory activities.
9. Strengthen and equip regulatory laboratories at federal, branch and regional levels.

## RESULT 4.9: NUTRITION SUPPLY MANAGEMENT IMPROVED

The Pharmaceuticals Fund and Supply Agency (PFSA) enables public health institutions to supply quality assured, essential nutrition products at affordable prices in a sustainable manner. It plays a complementary role in efforts to expand and strengthen health services by ensuring an enhanced and sustainable supply of nutrition products.

### INITIATIVES

1. Ensure timely access to nutrition supplies.

    ✓ Conduct timely forecasting and procurement by involving all stakeholders.

    ✓ Conduct proper warehousing and distribution.

    ✓ Conduct periodic follow-up and monitoring of consumption of supplies in order to take appropriate and timely action.

2. Build the capacity of regional, zonal and woreda health offices and health facilities in the management of nutrition supplies.

3. Coordinate partners in procuring, distributing and using nutrition supplies through an integrated logistics management information system.

    ✓ Put in place a coordinated information sharing mechanism showing stock on hand, quantities distributed, and stock on pipeline (in transit).

    ✓ The FMOH will develop a distribution plan on a quarterly basis (or at minimum every 6 months) and share it with all stakeholders.

    ✓ All stakeholders should follow up on the stock status of nutrition supplies at all levels.

    ✓ Nutrition commodity security issues should be an agenda item in nutrition technical working group meetings.

## RESULT 4.10: NUTRITION COMMUNICATION IMPROVED

Nutrition communication is recognized as a primary form of intervention in national food and nutrition programs. It is an integral component of nutrition intervention approaches, such as food production, food assistance, food formulation and fortification, supplementary feeding, promotion of breastfeeding, nutrition related health services and provision of a potable water supply. The ultimate goal of nutrition communication is to produce nutritionally literate decision makers who are motivated, knowledgeable, skilled and willing to choose proper nutrition alternatives.

Nutrition communication is a two-way process, where participants can freely exchange knowledge, values and practices on nutrition, food, and related areas. It ensures the active involvement of those who could and should take part in decision-making, and in motivating and providing users with easy access to nutrition related information, resources, and services. The Government Communication Affairs is responsible for coordinating and supporting all nutrition communication activities.

## INITIATIVES

1. Develop advocacy programs on nutrition related policies, strategies, legislations and guidelines.
2. Utilize available media outlets to promote optimal nutrition behavior.
3. Engage private and public media to take nutrition as a priority social responsibility agenda item.
4. Provide media coverage for multisectoral nutrition related best practices.
5. Own the nutrition agenda and cooperate with nutrition implementing sectors in nutrition advocacy.
6. Allocate airtime to promote healthy diets, lifestyles and optimal nutrition.
7. Engage stakeholders through dialogue to promote policy awareness and strong implementation and in order to influence nutrition actions.
8. Develop a nutrition communication strategy.
9. Conduct media monitoring for coverage, quality and impact.
10. Create public awareness on healthy dietary practices, healthy lifestyles, and lifestyle related non-communicable diseases.

## RESULT 4.11: GENDER-SENSITIVE NUTRITION IMPLEMENTATION IMPROVED

Ethiopia is bringing into being remarkable achievements, especially with respect to gender parity in primary school education and in the number of governmental seats held by women, including in Parliament. More educated mothers have the skills to compete for high skilled, well paid jobs and will therefore be in a better position to feed, care for and educate their children. To promote the empowerment of women, nutrition interventions implemented across sectors should be gender sensitive.

Gender and nutrition are inextricable parts of the vicious cycle of poverty. Gender inequality can be a cause as well as an effect of hunger and malnutrition. Gender equality and women's empowerment is an essential part of human development. Along with unequal, gender based resource distribution at the household level, a number of harmful traditional practices, such as food taboos for women and girls (especially pregnant and lactating women), early marriage, and violence against women, have contributed to the poor nutritional status of the majority of infants, young children and women in Ethiopia.

In order to address this multifaceted problem, the government has put in place several efforts. Nutrition interventions have principally tended to address factors that directly contribute to nutrient intake and health, missing other underlying and basic factors, such as the decision-making capacity of women in households, access to education, and economic resources, to name a few. The Ministry of Women and Children has been mandated to ensure and strengthen gender-sensitive nutrition interventions across sectors.

## INITIATIVES

1. Incorporate a gender analysis as part of the regular nutrition situation analysis, analyzing the needs, priorities and roles of men and women.
2. Ensure gender responsive nutrition implementation.
3. Mainstream gender equality within all nutrition training programs.
4. Give due attention to gender sensitive monitoring and evaluation; use sex disaggregated indicators.
5. Ensure the integration of gender into sectoral nutrition implementation programs, strategies and guidelines.
6. Engage and mobilize women's groups in nutrition advocacy and skills transfer.

# STRATEGIC OBJECTIVE 5

IMPROVE MULTISECTORAL COORDINATION AND CAPACITY TO IMPLEMENT THE NATIONAL NUTRITION PROGRAM

In order to realize food and nutrition security at national and household levels and to accelerate the reduction of malnutrition, the Government of Ethiopia opted for an approach that would see nutrition integrated into various sectors through a well strengthened and integrated multisectoral approach. Several reviews have shown that in order for a multisectoral coordination mechanism to succeed, it should have a strong institutional arrangement within the NNP implementing sectors. To execute its mandate of coordinating the sectors and fulfilling the aims of NNP II and the Seqota Declaration, the National Nutrition Coordinating Body (NNCB) needs to be well strengthened and functional up to the kebele levels, along with the necessary resources and accountability. Sectoral members would therefore be held accountable, both institutionally and collectively, for the achievement of the nutrition goals and targets set by the National Nutrition Program.

## 2020 TARGETS

- Eighty percent of the health development army will be trained in the preparation of diverse complementary food and follow up support through home visits.
- All NNP implementing sectors will establish an appropriate structure that can carry out nutrition activities within that sector.

- National research capacity will be strengthened in the areas of food and nutrition.
- The National Nutrition and Food Policy will be developed and disseminated.
- Regional nutrition coordinating bodies and technical committees will be established and/or strengthened in all regions.
- Zonal and woreda nutrition coordinating bodies and technical committees will be established and strengthened in all zones and woredas.
- All woredas will establish and strengthen kebele level nutrition coordination platforms.
- The reporting and accountability mechanism between national, regional, zonal and woreda coordinating bodies will be strengthened.

## RESULT 5.1: COMMUNITY LEVEL NUTRITION IMPLEMENTATION CAPACITY IMPROVED

### INITIATIVES

1. Improve the capacity of primary health care units (PHCU) and health development armies (HDA) to implement the NNP.

   ✓ Provide nutrition trainings with practical sessions on complementary feeding for health extension workers who are directly supporting the HDA.

   ✓ Ensure delivery of quality integrated refresher trainings to HEWs based on identified gaps.

   ✓ Harmonize and make available social and behavioral change communication materials on optimal infant, young child, child, adolescent and maternal feeding practices for use by HEWs and the health development army.

   ✓ Strengthen HEWs nutrition monitoring support to the HDAs.

   ✓ Strengthen PHCU linkages.

   ✓ Mainstream gender issues in all nutrition related trainings, for instance through male involvement and community awareness activities.

   ✓ Link local media with community organizations, such as women's associations, faith based organizations, community WASH and community schools, for wider uptake of optimal nutrition practices.

2. Strengthen the community level linkage between HEWs, teachers, agriculture-extension workers, WASH committees and health and agriculture development armies.

   ✓ Equip community level centers (health posts, farmer training centers and schools) with basic nutrition materials (IEC, demonstration materials, etc.).

   ✓ Establish/strengthen and capacitate a community level, multisectoral nutrition program coordination platform.

   ✓ Ensure regular reporting and feedback mechanisms for multisectoral nutrition implementation.

## RESULT 5.2: NUTRITION WORKFORCE CAPACITY IMPROVED

### INITIATIVES

1. Integrate nutrition into higher institutions, regional colleges and TVETs to provide nutrition-specific and nutrition-sensitive pre-service training for students of health, agriculture, water engineering, food science and technology, and education.

2. Support training institutions with curriculum development and revision, provision of educational materials and technical assistance to build needed critical skills (e.g., clinical nutrition, public health nutrition and dietetics).

3. Provide competency based in-service trainings to health workers, health extension workers, agriculture extension workers, teachers and staff working in other NNP sectors.

    ✓ Conduct a national quantification/ audit on the needs and gaps in the nutrition workforce.

    ✓ Prepare a blended, multisectoral nutrition learning module for in-service nutrition training.

    ✓ Provide in-service training using the blended, integrated nutrition learning module for health workers.

4. Strengthen the capacity of women based structures and associations at all levels to promote optimal adolescent, maternal, infant and young child nutrition (AMIYCN) and caring practices.

    ✓ Provide training on optimal AMIYCN and caring practices for members of the Ministry of Women and Children Affairs and for the staff of gender directorates from all NNP implementing sectors at federal level.

    ✓ Provide training for members of regional, zonal and woreda Women and Children Affairs offices on optimal AMIYCN and caring practices.

    ✓ Provide training on optimal AMIYCN feeding practices for members of women based structures and associations at all levels.

## RESULT 5.3: NNP INSTITUTIONAL IMPLEMENTATION CAPACITY AND MULTISECTORAL COORDINATION IMPROVED

### INITIATIVES

1. Strengthen multisectoral nutrition coordination at all levels.

   ✓ Strengthen the National Nutrition Coordinating Body.

   ✓ Establish and/or strengthen the Regional Nutrition Coordinating Body in all regions.

   ✓ Strengthen the national and regional nutrition technical committees (NNTC and RNTC).

   ✓ Establish and strengthen zonal, woreda level nutrition coordination platforms and ensure that kebele level nutrition coordination is integrated into the existing kebele committee.

   ✓ Ensure regular reporting and feedback mechanisms for multisectoral nutrition implementation and coordination at all levels.

2. Establish an appropriate structure for nutrition with dedicated staff at all levels that can carry out nutrition activities based on the various roles and responsibilities of NNP implementing sectors.

3. Improve the capacity of all NNP implementing sectors.

   ✓ Strengthen the capacity of the nutrition coordination body and nutrition technical committees at all levels.

   ✓ Provide pre-service nutrition training for health, water engineering, agriculture, education, and food technology graduates.

   ✓ Provide comprehensive in-service nutrition training for staff of NNP implementing sectors.

4. Ensure the involvement of women's entities in NNP implementation and coordination at different levels.

## RESULT 5.4: SYSTEM CAPACITY STRENGTHENED FOR IMPROVED NNP IMPLEMENTATION

### INITIATIVES

1. Formulate nutrition workforce standards based on the level of competency required for different roles.

2. Create nutrition posts and nutrition career paths.

3. Prepare and enact relevant nutrition policies, strategies, directives and guidelines.

4. Establish and strengthen an appropriate structure for nutrition with dedicated staff in all sectors at different levels.

5. Strengthen institutions providing nutrition and food science trainings (short-, medium- and long-term trainings).

## RESULT 5.5: CAPACITY TO CONDUCT NUTRITION MONITORING, EVALUATION AND RESEARCH IMPROVED

### INITIATIVES

1. Strengthen national research capacity in the areas of food and nutrition.
2. Strengthen the capacity of clinical nutrition and food analysis laboratories.
3. Provide training on nutrition monitoring and evaluation for staff across sectors.
4. Establish an appropriate platform to organize and utilize nutrition related information across sectors.
5. Strengthen the capacity of NNP implementing sectors in nutrition monitoring and evaluation.
6. Strengthen the capacity of sectors, training and research institutions to undertake operational research on nutrition.
7. Establish annual national nutrition forums to disseminate research findings and documentation on best practices.

## RESULT 5.6: REGULATORY CAPACITY IMPROVED

### INITIATIVES

1. Strengthen the regulatory system throughout the country.
   - ✓ Provide training for technical food inspectors on quality and safety of nutrition supplies.
   - ✓ Establish and equip quality control laboratories at national and regional levels.
   - ✓ Capacitate regional regulatory bodies and strengthen coordination among them.

## RESULT 5.7: CAPACITY OF MEDIA IMPROVED

### INITIATIVES

1. Build the capacity of national and regional media personnel.
   - ✓ Provide nutrition training for media personnel, including local and school mini-medias.
   - ✓ Update and harmonize age appropriate SBCC materials to ensure effective use of all available mass media channels.
   - ✓ Equip media with nutrition related SBCC materials to promote positive nutrition practices.
2. Protect the public from media based commercial pressures (advertisements) that are against optimal nutrition practices.
3. Provide media based opportunities for open dialog between the general public and nutrition professionals.

# 4

# NUTRITION IMPLEMENTATION AND GOVERNANCE

Nutrition has a multidimensional and multisectoral nature in terms of both effect and outcomes. Thus, in order to accelerate progress on NNP implementation, strong governance and program implementation arrangements are vital. This issue will be addressed by pursuing the following set of objectives and their sub-components.

## OBJECTIVES

1. Develop and enforce nutrition related policies and legislations.

2. Sustain political will and commitment on nutrition; mainstream nutrition as a priority agenda item in all NNP implementing sectors and beyond.

3. Strengthen multisectoral nutrition coordination for a harmonized, multisectoral response and for efficient resource mobilization and utilization.

4. Define feasible, locally accepted Communication for Development activities to bring about the behavioral changes required for improved nutrition.

5. Continue providing leadership to regions on cascading and executing the NNP implementation plan.

## NUTRITION GOVERNANCE

Currently, there is no generally accepted framework or set of terminology for conceptualizing nutrition governance. Nonetheless, five key building blocks of effective nutrition governance are apparent in the literature. These are political commitment, consensus building and coordination, financing, service delivery capacity, and transparency and accountability.

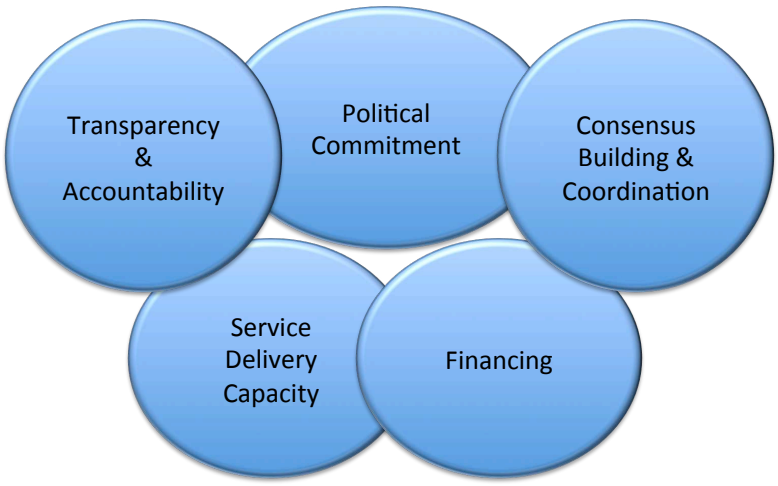



**Figure 3: Building blocks of effective nutrition governance**

This chapter will describe all of these components in the Ethiopian context with the exception of financing, which is dealt with in Chapter 5.

## 4.1 POLITICAL COMMITMENT AND POLICY FRAMEWORK

The Government of Ethiopia demonstrated its political commitment to nutrition by developing the National Nutrition Strategy and National Nutrition Program in 2008, along with various other policies, strategies and programs. The government also incorporated nutrition, with particular attention to the reduction of stunting, into its 5-year Growth and Transformation Plan. Most of the main policies, strategies and programs developed to mainstream nutrition into NNP implementing sectors are summarized in "Nutrition-specific and nutrition-sensitive strategies/ programs/guidelines in Ethiopia," the first table in this document's annex.

## 4.2 MULTISECTORAL NUTRITION COORDINATION

The National Nutrition Program is a long-term national program that requires the involvement of all responsible sectors and partners. Timely and effective implementation requires an efficient operational framework as well as appropriate leadership and implementation capacity. The NNP will continue to use existing government structures to ensure sustainability and long-term achievement of objectives. The following sub-sections describe the institutional arrangements required to improve multisectoral coordination, along with human and institutional capacity building strategies to guide implementation.

### 4.2.1 MULTISECTORAL COORDINATION AND LINKAGES FOR NUTRITION

This component of the program is designed to strengthen coordination and linkages across all sectors that deal with the underlying and basic causes of malnutrition. The purpose is to enhance the nutritional impact of programmatic activity in these sectors. To improve existing multisectoral coordination and strengthen linkages based on lessons learned over the last 7 years of NNP implementation, this revised NNP has included the role of responsible sectors as shown in Strategic Objective 4 as well as in the Accountability and Results Matrix located at the end of this document. Ethiopia has well defined policies, strategies and implementation guidelines in those sectors with the potential to affect better nutrition. These will be the basis for nutrition related cross-sectoral linkages.

To ensure viable linkages and harmonization among sectors, the Federal Ministry of Health houses and manages the organizational and management structure of the National Nutrition Program. The National Nutrition Coordinating Body and the National Nutrition Technical Committee were established in 2008 and 2009, respectively, to ensure effective coordination and linkages. The current program, NNP II, outlines human resource capacity building activities, with emphasis on all relevant sectors. These adjustments will ensure that implementation of the NNP is harmonized across all sectors and levels, particularly at regional, woreda and community levels.

### 4.2.2 INSTITUTIONAL ARRANGEMENTS FOR MULTISECTORAL NUTRITION COORDINATION AND LINKAGES

The National Nutrition Coordinating Body will remain the main mechanism for leadership, policy decisions and coordination of the National Nutrition Program. The NNCB consists of 13 government sectors and a range of nutrition development partners, including civil society organizations, academia, and the private sector.

Over the last 3 years, almost all regions established a Regional Nutrition Coordinating Body (RNCB) and a Regional Nutrition Technical Committee (RNTC). In a few regions, sub-regional level coordination platforms at zonal and woreda level were also established. The current program implementation phase, 2016–2020, will focus on further cascading multisectoral coordination frameworks and program implementation arrangements down to remaining zones, woredas and kebeles using the decentralized government structure.

The terms of reference for NNCB and NNTC, along with information on membership, frequency of meetings and the roles and responsibilities of NNP implementing sectors, will be detailed in a multisectoral nutrition coordination implementation guideline.

In order to enhance accountability and maximize ownership, NNCB and NNTC need to regularly meet and discuss the progress of NNP implementation. Moreover, all NNP implementing sectors will regularly report on the progress of nutrition-sensitive and specific interventions and on the coordination and implementation of NNP to the NNCB chair. All RNCBs will regularly report on progress and performance of regional NNP implementation to the NNCB.

Similarly, all regional NNP implementing sector bureaus will regularly report on progress and performance to the RNCB and to their respective federal NNP implementing sectors. Woreda nutrition coordinating body chairs will report to zonal nutrition coordinating body chairs and these in turn will report to their respective regional nutrition coordinating body chairs.

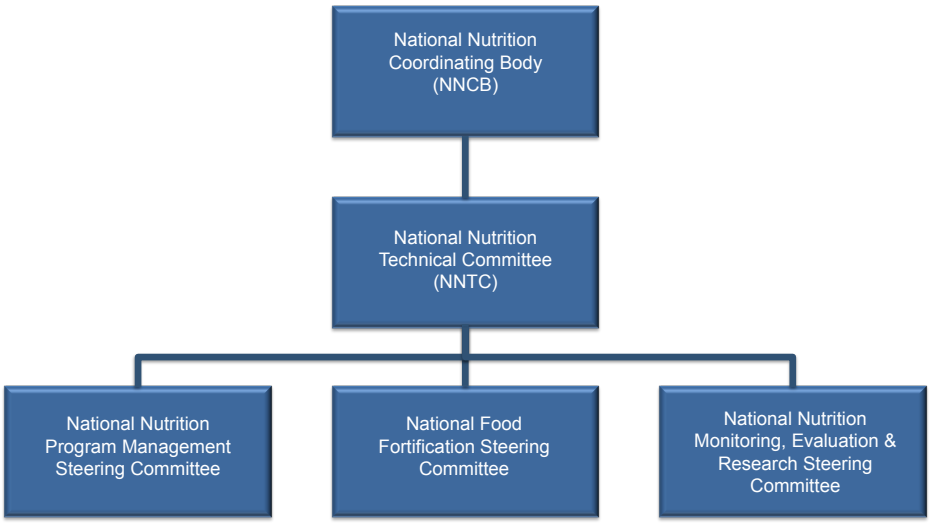



**Figure 4: National nutrition technical committees**

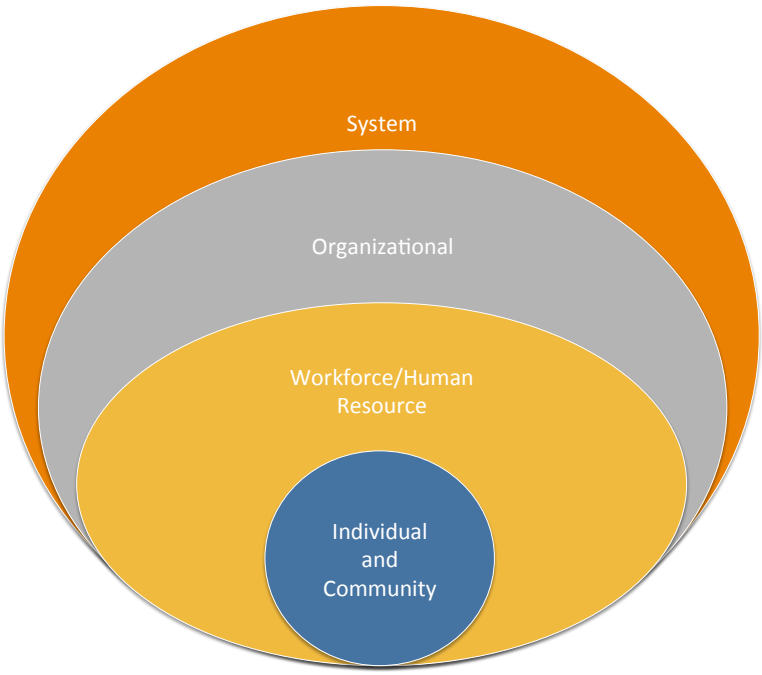



**Figure 5: Dimensions of nutrition capacity building**

The director of the Maternal and Child Health - Nutrition directorate will serve as secretary for the NNCB and as chair for the National Nutrition Technical Committee. All nutrition technical committees should regularly report on their plans and performance to the appropriate chairperson in the nutrition coordination body.

**National Nutrition Steering Committees**
The National Nutrition Coordinating Body created several steering committees to promote efficient and effective implementation and coordination of the National Nutrition Program. These committees include the National Nutrition Program Management Steering Committee, led by the Ministry of Health; the National Food Fortification Steering Committee, led by the Ministry of Industry; and the National Nutrition Monitoring, Evaluation and Research Steering Committee, led by the Ethiopian Public Health Institute. The overall objective of the steering committees is to support coordination among program implementers and partners for successful implementation of the National Nutrition Program.

The terms of reference, membership, frequency of meetings and roles and responsibilities of each of the steering committees will be detailed in a multisectoral nutrition coordination and implementation guideline.

## 4.3 CAPACITY BUILDING FOR NUTRITION

For effective implementation of sustained nutritional impact, capacity building for nutrition should address four dimensions. These are system capacity, organizational capacity, workforce/human resource capacity and individual and community capacity (Figure 5).

### 4.3.1 SYSTEM CAPACITY BUILDING FOR NUTRITION

Although nutrition is being coordinated and implemented by various implementing sectors in the country, there is no career structure for the nutrition workforce. Nevertheless, meeting NNP objectives calls for the various ministries to devote special attention to the cultivation of a career path for the nutrition workforce.

System capacity for nutrition includes the following:

- ✓ Strengthening leadership and governance in nutrition programming.
- ✓ Creating career paths and posts for the nutrition workforce.
- ✓ Strengthening management capacity in the nutrition workforce.
- ✓ Improving capacity to mobilize and manage resources.
- ✓ Strengthening supply chain management for nutrition.
- ✓ Improving the nutrition information system.

### Table 2: Nutrition workforce requirements at various levels

| Level/organization | Required profession | Description | Remark |
|---|---|---|---|
| Federal ministries and regional level sector bureaus | Nutritionist, public health nutritionists, food technologists, other professionals with adequate nutrition training | Knowledge and skill of nutrition science and disease, nutrition advocacy, management, | Health and other sectors |
| Woreda level sector offices | Basic nutritional sciences, others professionals with adequate nutrition training | Basic knowledge on food and nutrition | |
| Hospitals | Nutritionists and dieticians | Knowledge and skill of nutrition science and disease | |
| Health centres, health posts | Nutritionists | Health professionals with training on nutrition | |
| Schools | Nutritionists, teachers trained on nutrition counselling | Teachers with adequate nutrition knowledge | Health and education sectors |
| Community | Development army trained on nutrition counselling | Teachers, health and agriculture professionals with adequate nutrition knowledge | |
| Universities, health and agriculture colleges, TVETs | Nutritionists, food technologists, dieticians and public health nutritionists | Basic knowledge, skills and practice in nutritional sciences and research | Based on the type of the training |

## 4.3.2 ORGANIZATIONAL CAPACITY FOR NUTRITION

**Coordination capacity**

To fulfill the mandate to coordinate and implement National Nutrition Program, sector ministries will establish and capacitate appropriate implementing bodies in their structures.

**Supply and logistics capacity**

Supply and logistics are key inputs for effective implementation of nutrition-sensitive and nutrition-specific interventions. Sector ministries will conduct needs assessments and develop supply and logistics plans. Each ministry will review the plan and take measures to improve and put the plan into effect. Supplies and logistics needed to deliver the National Nutrition Program include but are not limited to:

- ✓ Supplements and therapeutic products
- ✓ Training manuals
- ✓ Print and electronic materials for social and behavioral change communication
- ✓ Agricultural inputs
- ✓ Food processing materials and inputs
- ✓ Food safety and quality control laboratory materials
- ✓ Supplies for hygiene and sanitation, water purifiers, etc.

**Nutrition information system capacity development**

Developing the capacity of nutrition data collection, analysis, interpretation and utilization involves strengthening organizations that conduct nutrition program monitoring, evaluation and research related activities. A multisectoral nutrition information platform will be established at national level to monitor the implementation of NNP across sectors. Moreover, all NNP implementing sectors will ensure that nutrition related information is regularly monitored, used and shared.

### 4.3.3 NUTRITION WORKFORCE CAPACITY BUILDING

All NNP implementing sectors should have an adequate number and mix of competent nutrition cadres or technical persons placed at all levels of service delivery and management. The major strategies for availing human resources are pre-service and in-service trainings.

During NNP implementation, the capacity of the nutrition workforce will be enhanced as follows:

- ✓ At national level, NNP implementing sectors will build a workforce that will be responsible for coordinating nutrition within their respective sector. Specific ministries, based on the scope of work, will determine the number of staff members needed.
- ✓ Sectors will work with the Ministry of Education and with regional governments to integrate nutrition into universities and regional colleges/ TVET institutes to provide nutrition pre-service trainings.
- ✓ Training institutions will be supported with curriculum development and revision, with provision of educational materials and with technical assistance to build critical skills that are not yet adequately available.
- ✓ Competency based in-service trainings will be provided. These will enable workers to plan, implement and monitor multisectoral nutrition interventions.
- ✓ Health facilities at various levels will be staffed with appropriate nutrition professionals.
- ✓ Job aids, training materials and community teaching materials will be prepared in local languages.
- ✓ Media professionals will be provided with continuous nutrition training.

### 4.3.4 CAPACITY DEVELOPMENT OF INDIVIDUALS AND COMMUNITIES IN NUTRITION

Nutrition programs aim to achieve optimal nutrition knowledge, behavior and practices among target communities and individuals. In order to achieve this objective, developing the nutrition capacity of communities is of paramount importance. The ways in which communities respond to challenges affecting their nutritional status will be improved, and the ability of communities to participate in and manage community resources to achieve better nutritional outcomes will be enhanced.

Capacity building at the individual and community level will focus on the following:

- ✓ Community level development groups (health and agricultural development armies, etc.) will be the key entry points for community level nutrition work. They will receive ongoing support from health and agricultural extension workers.
- ✓ Existing community/social structures, such as "idir," women's and youth associations, and faith based organizations, will serve as additional channels for delivering community and individual nutrition capacity development activities.
- ✓ Community structures will be provided with nutrition information and will be motivated to deliver key preventative nutrition messages and practices and to facilitate nutrition-sensitive community development interventions.
- ✓ Improving community access to labor and resource saving technologies.
- ✓ Community level centers of excellence for wider experience sharing will be established.
- ✓ Community level structures and centers, such as farmers training centers, schools and health posts will be equipped with nutrition learning materials.

## 4.4 GENDER DIMENSIONS OF NUTRITION

Gender and nutrition are inextricable parts of the vicious cycle of poverty. Gender and undernutrition are highly correlated and interconnected with livelihood security at household and community levels throughout the entire lifecycle. Gender inequality can be a cause as well as an effect of hunger and malnutrition. While chronic food insecurity takes a severe toll on the health of all household members, research shows that women and girls suffer most. A mother's ability to make decisions within the household and in her community is an important factor not only for her own nutritional outcomes but also for those of her children. At the family/household level, the heavy workload resulting from the many household responsibilities that women shoulder usually leaves women with little or no time to properly care for their children and themselves. Along with unequal, gender based resource distribution at the household level, a number of harmful traditional practices, such as food taboos for women and girls (especially pregnant and lactating women), early marriage, and violence against women have contributed to the poor nutritional status of the majority of infants, young children and women in Ethiopia.

Gender is considered a cross-cutting issue and has remained a crucial concern that has prompted the setting of clear objectives for gender mainstreaming at all levels of the various sectoral programs. Most nutrition programs target women and children but neglect the adolescent stage, an important period of development. The key role that men play in achieving nutrition security has also been overlooked. Nutrition interventions have principally tended to address factors that directly contribute to nutrient intake and health, missing other underlying, basic factors, such as the decision-making capacity of women in households and access to education and economic resources, to name a few.

The National Nutrition Program has affirmed the reciprocal relationship between gender and nutrition and articulated a way to mainstream gender into various components of the program. Some of the major recommended strategies are as follows:

- ✓ Incorporate a gender analysis as part of the regular nutrition situation analysis, focusing on the needs, priorities and roles of men and women.
- ✓ Promote meaningful male involvement in nutrition interventions. Women and girls may be targeted in view of their special vulnerabilities, but men and boys should also be reached to help address their needs as well.
- ✓ All human-capacity building interventions planned by NNP will consider mainstreaming gender equality within training programs and will engage an equal number of male and female participants.
- ✓ Give due attention to gender sensitive monitoring and evaluation. Relevant indicators should be disaggregated by sex, and data collection and analysis formats should facilitate gender-sensitive data collection and analysis.
- ✓ Ensure the integration of gender into sectoral nutrition implementation guidelines.
- ✓ Engage women's groups in nutrition advocacy and in engaging citizens about the effects of malnutrition on the socioeconomic status of the nation (education, health and productivity).

## 4.5 NUTRITION COMMUNICATION

The National Nutrition Coordination Board will implement the following objectives and key activities for nutrition communication.

### 4.5.1 POLICY ADVOCACY AND PUBLIC DIALOGUE

### OBJECTIVES

1. Implementation of nutrition related policy and legislation enforced.
2. Multisectoral nutrition coordinating bodies and technical communities are engaged in policy dialogues and dissemination.
3. NNP implementers understand nutrition related policy and legislation.
4. Ensure that nutrition is an agenda item for the media.

### KEY ACTIVITIES

- ✓ Conduct advocacy and public dialogues for nutrition related policy, strategies, programs and legislation, including the International Code of Marketing of Breastmilk Substitutes and extension of maternity leave to 6 months.
- ✓ Engage the media to promote nutrition policy and practice among the public and among policymakers.
- ✓ Identify and engage nutrition champions for nutrition related policy message delivery and implementation.
- ✓ Engage stakeholders for policy awareness, implementation and influence through dialogues.

- ✓ Promote utilization of nutrition evidence for policy input and dialogue.
- ✓ Promote healthy feeding and lifestyles.
- ✓ Identify appropriate channels and influential actors to reach, inform, influence, capacitate and motivate decision makers.
- ✓ Engage policymakers to enforce policies around prevention of non-communicable and lifestyle related diseases.
- ✓ Sensitize and involve the private sector in implementing NNP objectives.
- ✓ Develop a nutrition communication strategy.
- ✓ Develop a nutrition communication toolkit to help policy implementation and public dialogue.
- ✓ Conduct media monitoring to gauge the quality and impact of nutrition coverage.

### 4.5.2 SOCIAL AND BEHAVIORAL CHANGE COMMUNICATION

### OBJECTIVES

1. Capacity of nutrition actors strengthened at community and institutional levels on social and behavioral change communication.
2. Healthy feeding and prevention of lifestyle related non-communicable diseases among the general public promoted.
3. Optimal AMIYCN promoted through traditional and innovative behavior change methods and channels.
4. Nutrition messages and materials standardized and culturally acceptable.
5. Community participation and engagement in the promotion and uptake of optimal nutrition and child caring practices increased.

### KEY ACTIVITIES

- ✓ Promote social and behavioral change communication across the country and strengthen community participation for improved nutrition.
- ✓ Generate evidence to identify barriers, facilitators and behavioral determinants, social norms and traditions for optimal nutrition practices.
- ✓ Map and harmonize existing nutrition communication multimedia materials to support both media and interpersonal communication in various languages.
- ✓ Identify appropriate channels and influential actors to reach, inform, influence, capacitate and motivate the public.
- ✓ Create public awareness on healthy dietary practices, healthy lifestyle, and lifestyle related non-communicable diseases.
- ✓ Build the capacity of community level implementers (HEWs, AEWs, DAs, farmer groups, women's and youth forums, teachers and students) to promote positive behavior change in the community.
- ✓ Build the capacity of the media, including school mini-media, to own SBCC nutrition interventions and engage in the promotion of optimal nutrition practices.

- ✓ Develop innovative nutrition communication and social mobilization guidelines.
- ✓ Engage the media to promote good nutrition practices among the public and to foster dialogue on nutrition among experts and the public.
- ✓ Identify and engage nutrition champions and influential actors for dissemination of nutrition messages and policy-influencing activities.
- ✓ Build the capacities of nutrition champions and influential actors in effective interpersonal communication.
- ✓ Document and share best practices of AMIYCN activities at all levels, especially focusing on the model family.
- ✓ Monitor and evaluate the impact of nutrition communication and social mobilization activities for program improvement.
- ✓ Conduct media monitoring to gauge the quality and impact of nutrition coverage.
- ✓ Develop a nutrition communication toolkit to support rollout of nutrition related SBCC interventions.

# 5

# SUSTAINABLE NUTRITION FINANCING

The Government of Ethiopia is committed to accelerating the implementation of a multisectoral, harmonized National Nutrition Program to make a strong impact on nutrition and on the overall wellbeing of the nation. This NNP is designed to address both long-term and short-term nutrition goals in Ethiopia. The strategic plan outlines a package of proven, cost-effective nutrition interventions that will break the cycle of malnutrition and ensure child survival.

So far, inadequate budget allocation, resource shortages, weak financial mobilization and low utilization have been the main challenges to implementing the National Nutrition Program. Implementation challenges therefore should be addressed in order to scale up and accelerate implementation of nutrition strategies already in place.

Costing for the NNP was conducted using one health tool for the nutrition-specific interventions to be implemented by health sectors, and using activity based costing approaches for nutrition-sensitive interventions to be implemented by nutrition-sensitive implementing sectors. The total budget required for implementing the NNP over the next 5 years is estimated to be 1.1billion USD. Out of this budget the Government of Ethiopia's contribution is 515,690,757.00 (45%), the donor contribution is 198,116,469.00 (17%) and the budget gap is 430,280,689.00 (38%).

Nearly 88.6% of the total budget is planned for nutrition-specific interventions while 11.4% will be used for nutrition-sensitive interventions (Table 3). In the last 3 years, the FDRE/ MOH have consolidated new partnerships to raise more funds for NNP implementation. Hence, successful implementation of the NNP requires timely mobilization of resources and minimizing of uncertainties in the planning of nutrition interventions.

## Table 3: NNP estimated intervention budget, 2016–2020

| Summary Budget to Implement Nutrition Interventions across Sectors | Summary Budget Estimated in USD | | | | | Total Budget in USD |
|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2019 | 2020 | |
| Budget for nutrition-specific interventions | 123,549,793.25 | 160,607,069.33 | 207,070,394.89 | 244,213,694.81 | 278,384,505.76 | 1,013,825,458.04 |
| Budget for nutrition-sensitive interventions across sectors | 23,615,708.17 | 25,692,611.44 | 27,724,167.21 | 25,254,639.08 | 27,975,331.63 | 130,262,457.53 |
| Total budget to implement both nutrition-specific and nutrition-sensitive interventions | 147,165,501.42 | 186,299,680.76 | 234,794,562.10 | 269,468,333.89 | 306,359,837.39 | 1,144,087,915.57 |

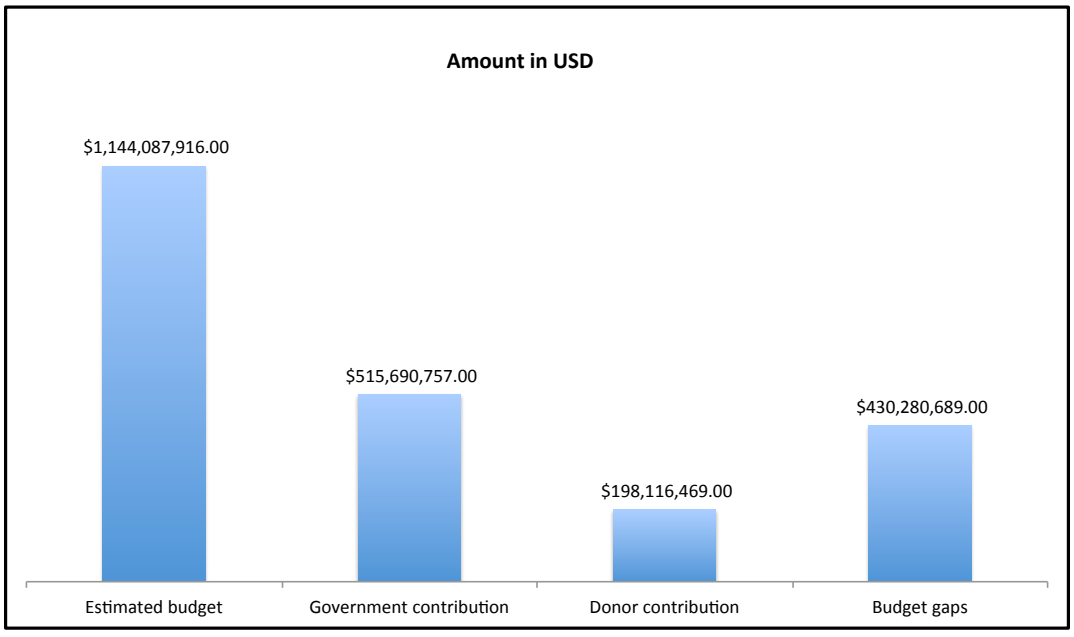



**Figure 6: NNP budget gap**

# 6

# MONITORING, EVALUATION AND RESEARCH

## 6.1 MONITORING AND EVALUATION

The National Nutrition Program is built on the assumption that there will be a strong national partnership among nutrition development partners, multilateral and bilateral donors, academia, the private sector and NNP implementing sector ministries at all levels. This NNP document will be the source document for a harmonized plan of action with a clear monitoring and evaluation framework. The accountability and results matrix at the end of the document outlines the core results, targets and their indicators as well as the sectors accountable and the measuring period for these indicators.

The NNP accountability and results framework was developed to enable effective management and optimal mobilization, allocation, use of resources, and the making of timely decisions to resolve constraints or problems of implementation (see Annex). Routine service and administrative records compiled through the sectoral information systems will provide the information source for timely monitoring. To enrich the data, supervisory visits and review meetings will be conducted using multi-sectoral score cards as per the multisector monitoring and evaluation guideline, and terms of reference will be developed for each sector. The program implementation, monitoring and evaluation components of the plan are designed to support each other (Figure 7). The Ethiopian Public Health Institute and the Ethiopian Institute of Agricultural Research will, in collaboration with nutrition implementing sectors, undertake periodic assessments, operational research and surveys to help identify program strengths, weaknesses and key challenges.

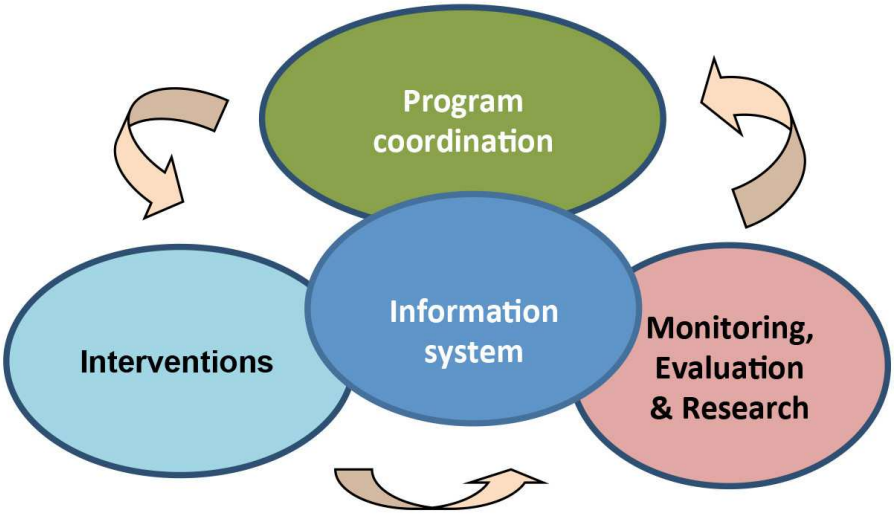



**Figure 7: Strong program implementation system**

To strengthen the monitoring and evaluation component of the NNP, implementing sectors will do the following:

- ✓ Integrate the recording and reporting of sex and age disaggregated nutrition data within existing sectoral information systems.
- ✓ Ensure appropriate integration of nutrition-sensitive and nutrition-specific indicators in sector-specific woreda based plans.
- ✓ Ensure appropriate use of nutrition-sensitive and nutrition-specific results in sector-specific woreda based planning.
- ✓ Strengthen joint operational research planning in the areas of food and nutrition among sectors and institutions.
- ✓ Develop an appropriate platform to organize and utilize multisectoral nutrition related information.
- ✓ Strengthen HMIS to incorporate appropriate nutrition-specific indicators that can be collected at facility and community levels, including nutrition surveys and assessments.
- ✓ Ensure incorporation of nutrition indicators in plans for each sector.
- ✓ Build the capacity of nutrition program implementing line ministries, agencies and institutes at all levels to collect and use nutrition data for planning and decision making.
- ✓ Ensure regular integrated supportive supervision (ISS), multisectoral and sectoral review meetings at all levels.
- ✓ Conduct midterm and end-line evaluation, impact assessments and surveys.

- ✓ Develop central food and nutrition information platform/databases for research and surveys.
- ✓ Conduct systematic review and publication of existing nutrition data for programming and decision making.

**Dissemination of M&E Results**

To inform decisions across the implementation system as well as the public at large, NNP implementing sectors will disseminate information through the following mechanisms:

- ✓ Monitoring reports, which will be disseminated quarterly, biannually and annually.
- ✓ Evaluation and research findings, which will be disseminated through publications, reports, workshop proceedings and policy briefs.

## 6.2 OPERATIONAL RESEARCH

Operational research is designed to test alternative intervention modalities and to answer key operational questions as they arise during NNP implementation. The Ethiopian Public Health Institute, as the lead nutrition research institute in the country, leads operational research as part of its mandate. In the course of implementing the previous NNP (2008–2015), EPHI held a workshop with NNP stakeholders and partners to specify and prioritize studies.

Building on lessons learned, the focal areas of operational research will be as follows:

- ✓ Strengthen the capacity of EPHI to coordinate, carry out and supervise operational research and to sub-contract to other organizations/institutions.
- ✓ Carry out a mapping exercise of all nutrition related operational research to avoid duplication.
- ✓ Identify priority research areas based on the revised NNP following consultation with all nutrition stakeholders. EPHI will facilitate the decision as to whether a given research topic will be handled in-house or outsourced.
- ✓ All organizations carrying out operational research should liaise with EPHI during the entire process, including sharing topics and methods, requesting ethical clearance, sharing results and providing reports and data. A method of collecting, compiling and storing operational research (data, reports) needs to be set up and housed within EPHI as the country's premier nutrition research institute. This will serve to avoid duplication of research efforts and facilitate the identification of key outstanding operational research areas.
- ✓ Ensure that nutritional impact is measured in all social protection and development programs.
- ✓ Support university based researchers with grants to undertake nutrition research of national priority through the engagement of graduate students.

## Table 4: Operational research priorities (2016–2020)

| | |
|---|---|
| **National nutrition research database and documentation** | Establish a multisectoral national nutrition research database |
| | Conduct systematic reviews and produce policy briefs on nutrition-specific and nutrition-sensitive interventions |
| | Expand and update existing Ethiopian food composition table |
| | Document, develop recipes for and promote indigenous and underutilized foods for food and nutrition security |
| | Develop food guide pyramid and daily recommended allowance for Ethiopians |
| | Conduct surveillance of food safety and quality (fortified foods and selected food items) |
| | Nutritionally characterize/classify released and improved Ethiopian crop varieties and livestock products (including bio-fortified products) |
| **Health and nutrition interaction** | Lifestyle and dietary related non-communicable diseases |
| | The role of nutrition in infectious diseases (TB, HIV, malaria and intestinal parasites) |
| | ICYF (infant and young child feeding) practice for better health and nutrition outcomes<br>▪ Identify cultural and social barriers of child feeding practices in Ethiopia<br>▪ Establish a national breastmilk bank (pilot study) |
| | Develop dietary menus for various entities (hospital patients, military, schools, refugees, prisons, rehabilitation centers and athletes)<br>▪ Optimize and popularize bean based recipes |
| | Conduct an impact evaluation of health and agriculture sector linkages to implement nutrition-specific and nutrition-sensitive activities |
| **Food processing technology and product development** | Appropriate food processing technology identification, assessment, adoption and transfer to the community |
| | Study on the linkages between nutrition security, health, agriculture and climate change |
| | Develop region based complementary food products for under 5 children and for pregnant and lactating mothers |
| | Develop supplementary food from locally grown crops for treatment of children with moderately acute malnutrition |
| | Enhance food processing technologies through development of alternative enzymes, starter cultures and other biotechnological products<br>▪ Evaluation of soybean products (milk and cheese) improved with locally available herbal materials<br>▪ Development and popularization of fruit flavored yogurt<br>▪ Optimizing nutritive value of traditional foods and beverages by using whey<br>▪ Optimizing bread making quality of teff, finger millet, cassava and soybean flours by incorporating with wheat flour<br>▪ Processing technique evaluation of three commercially important fish species in Ethiopia<br>▪ Nutritional and sensory evaluation of soybean fortified kocho |

*Table 4 continued on next page*

## Table 4: Operational research priorities (2016–2020)

| | |
|---|---|
| **Food safety and quality** | Study food shelf life and food and water safety and quality in Ethiopia<br><br>▪ Edible oil study (lipid profile and safety of commonly consumed oils)<br>▪ Quality and safety of butter: Traditional preservation and adulterant characterization<br>▪ Effect of agro-ecology and varieties of teff on nutritional, sensory and shelf life stability of injera<br>▪ Food safety (heavy metals, pesticides, herbicides, persistent organic pollutants, microbials, drug residue, including hormones and radioactive materials) |
| **Micronutrient research** | Operational research on micronutrient interventions (food fortification) |
| | Multiple micronutrient powder supplementation feasibility study (including packaging) |
| | National micronutrient survey and end-line survey |
| | Stable isotope techniques to determine nutrient body pool size |
| | Study on safety, stability and bio-availability of fortificants (premixes) |
| | Study on the effect of zinc enriched fertilizer on the micronutrient status of young children and women of reproductive age |
| **Program performance and impact evaluation** | Evaluation of the impact on health and nutrition of school nutrition in pilot program implementation areas |
| | Evaluation of community based nutrition (CBN) programs |
| | Systematic reviews and policy briefs |
| | Nutrition research output dissemination |
| **Education and gender related research** | Public education on nutrition and health |
| | Assessment of nutrition issues in primary school syllabi |
| | Capacity and needs assessment of women development groups in nutrition promotion |
| | Behavioral change and communication studies |

*Table 4 continued from previous page*

# ANNEX

## NUTRITION-SPECIFIC AND NUTRITION-SENSITIVE STRATEGIES/PROGRAMS/GUIDELINES IN ETHIOPIA

| **Nutrition-specific guidelines** | | |
|---|---|---|
| **Document title** | **Organization** | **Date** |
| Micronutrient Deficiencies Prevention and Control Guideline | FMOH | 2015 |
| Adolescent, Maternal, Infant and Young Child Nutrition Guideline | FMOH | 2015 |
| Acute Malnutrition Management Guideline | FMOH | 2015 |
| Multi-sectoral nutrition implementation and coordination guideline | FDRE | 2016 |
| National Nutrition Strategy | FDRE | 2008 |
| National Nutrition Program II | FDRE | 2015 |
| Seqota 15 years strategic plan | FDRE | 2016 |
| **Nutrition-sensitive strategies/programs/guidelines** | | |
| **Document** | **Body** | **Year** |
| **Poverty reduction and development** | | |
| Growth and Transformation Plan II | MOFEC | 2015 |
| **Agriculture and food security** | | |
| Agriculture Growth Program II | MOANR | 2015 |
| PSNP IV | MOANR | 2015 |
| Nutrition Sensitive Agriculture Strategic Plan | MOANR | 2016 |
| **Public health** | | |
| Health Policy | FDRE | 2015 |
| Health Sector Transformation Plan | FMOH | 2015 |
| Reproductive Health Strategy | FMOH | 2011 |
| National Strategy for Child Survival | FMOH | 2015 |
| **Education** | | |
| School Health and Nutrition Strategy | MOE | 2016 |
| National School Feeding Program | MOE | 2016 |
| **Social protection** | | |
| National Social Protection Policy | MOLSA | 2015 |
| **Nutrition relevant regulations/standards/proclamations** | | |
| Fortified flour manufacturer, importer, exporter and wholesaler directive | FMHACA | 2015 |
| Fortified oil manufacturer, importer, exporter and wholesaler directive | FMHACA | 2015 |
| Fortified oil standard | ESA | Draft |
| Fortified flour standard | ESA | Draft |
| Infant formula directive | FMHACA | 2015 |
| Food supplement directive | FMHACA | 2015 |
| Directives for Advertising | FMHACA | 2012 |
| Iodized salt controlling directive | FMHACA | Ratified |
| Food manufacturing licensing criteria | FMHACA | Ratified |
| Food export import & wholesalers directive | FMHACA | Ratified 2014 |
| Food retailer licensing criteria | FMHACA | Ratified |

# ACCOUNTABILITY AND RESULTS MATRIX FOR NNP IMPLEMENTATION

| Impact Objectives: Improve Nutritional Status of Women and Children | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Impact Indicators** | **2011/2014 (Baseline)** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of under 5 children with height-for-age Z-score below -2 SD (prevalence of stunting) | 40 | 37.2 | 34.4 | 31.6 | 28.8 | 26 | by 2019/20 | National | EDHS, 2014 |
| Proportion of under 5 children with weight-for-age Z-score below -2 SD (prevalence of underweight) | 25 | 22.6 | 20.2 | 17.8 | 15.4 | 13 | by 2019/20 | National | EDHS, 2014 |
| Proportion of under 5 children with weight-for-height Z-score below -2 SD (prevalence of wasting) | 9 | 8.2 | 7.4 | 6.5 | 5.7 | 4.9 | by 2019/20 | National | EDHS, 2014 |
| Proportion of women of reproductive age (15-49 years) with BMI <18.5 | 27 | 24.8 | 22.6 | 20.4 | 18.2 | 16 | by 2019/20 | National | EDHS, 2014 |
| Proportion of newborns who weighed less than 2.5 kg at birth | 11 | 9.8 | 8.6 | 7.4 | 6.2 | 5 | by 2019/20 | National | EDHS, 2014 |
| Prevalence of overweight among women of reproductive age | 9 | 8 | 7.5 | 7 | 6.5 | 6 | by 2019/20 | National | EPHI, 2015 |

| Strategic Objective 1: Improve the nutritional status of women (15-49 years) and adolescents (10-19 years) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of adolescent girls aged 10-19 years supplemented with IFA | Output | NA* | 10 | 20 | 30 | 40 | 50 | Annual / Biannual | RHB, WorHO and HFs | Reports |
| Prevalence of anemia in adolescents aged 10-19 years | Outcome | 28% | 25 | 22 | 19 | 16 | 13 | - | Community | Survey |
| Proportion of adolescents received deworming tablets | Output | NA | 15 | 30 | 45 | 60 | 75 | Annual / Biannual | RHB,WorHO and HFs | Reports |
| Proportion of adolescent girls married below 18 years | Outcome | 8% | 6.8 | 5.6 | 4.4 | 3.2 | 2 | - | National | Survey |
| Prevalence of teenage (15-19 years) pregnancy | Outcome | 12% | 10.6 | 9.2 | 7.8 | 6.4 | 5 | - | National | Survey |
| Prevalence of anemia among women of reproductive age (15-49 years) | Outcome | 19.30% | 15.6 | 14.8 | 13.9 | 13 | 12 | - | National | Survey |
| Prevalence of anemia among adolescent girls | Outcome | 30% | 27 | 24 | 21 | 18 | 15 | - | National | Survey |
| Prevalence of anemia among pregnant women | Outcome | 22% | 20.4 | 18.8 | 17.2 | 15.6 | 14 | HP/HC | National/ HP/HC | Survey & Report |
| Proportion of PLW provided acute malnutrition treatment or support in targeted woredas | Output | NA | 5 | 16.3 | 27.5 | 38.8. | 50 | HP | HC/community | Report |
| Percentage of women consuming diversified meal (≥ 5 food groups) during pregnancy | Output | 20.3 | 23 | 25 | 27 | 29 | 31 | - | National | Survey |
| Percentage of pregnant women consuming additional meal during pregnancy | Output | 16 | 19 | 22 | 25 | 27 | 30 | - | National | Survey |
| Proportion of pregnant women receiving IFA supplements for at least 90 days | Outcome | 17% | 25 | 30 | 34 | 37 | 40 | - | National | Survey |
| Proportion of women who received deworming drugs during recent pregnancy | Output | 6% | 19 | 31 | 44 | 57 | 70 | - | National | Survey |
| Percentage of HH using adequately iodized salt (>15 ppm) | Output | 33.9 | 45 | 56 | 67 | 78 | 90 | - | National | Survey |

*NA = not available*

| Strategic Objective 2: Improve the nutritional status of infants (0-6 months), young children (6-24 months), children under 5 years and school age children (6-10 years) with emphasis on the first 2 years of life | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of infants 0-6 months exclusively breastfed (%) | Output | 52% | 58 | 64 | 72 | 76 | 80 | - | National | Survey |
| Percentage of newborns who started breastfeeding within 1 hour of birth | Output | 52% | 58 | 64 | 72 | 76 | 80 | - | National | Survey |
| Number of health facilities implementing 10 steps of BFHI | Output | NA | 6 | 12 | 18 | 24 | 30 | Annual / biannual | FMHO/EPHI/ RHB | Reports |
| Maternity leave proclamation revised to align with ILO/global recommendations | Output | No | - | - | - | - | Yes | - | Once | Ratified document |
| Proportion of children age 6-23 months with minimum dietary diversity score | Output | 9.80% | 15.8 | 21.8 | 27.8 | 33.8 | 40 | - | National | Survey |
| Proportion of children age 6-23 months who received minimum meal frequency | Output | 67.10% | 68 | 69 | 71 | 73 | 75 | - | National | Survey |
| Proportion of children age 6-23 months who received minimum acceptable diet | Output | 4% | 11 | 17 | 23 | 29 | 35 | - | National | Survey |
| Proportion of school age children 6-14 years with median urinary iodine > 100 ppb | Output | 49% | 57 | 65 | 73 | 81 | 90 | - | National | Survey |
| Proportion of infants 6–8 months of age who receive solid, semi-solid or soft foods | Output | 50 | 55 | 60 | 65 | 70 | 75 | - | National | Survey |
| Proportion of GM participation among children under 2 | Output | 49 | 55 | 61 | 67 | 73 | 80 | - | National | Survey |
| Prevalence of anemia in children 6-59 months (sex disaggregated) | Output | 39 | 40.2 | 36.4 | 32.6 | 28.8 | 24 | - | National | Survey |
| Targeted coverage of VAS in children (6-59 months) | Output | 56.9 | 64 | 71 | 77 | 83 | 90 | Monthly/ biannual | HFs | Reports |
| Proportion of children 0 to 59 months receiving zinc for acute diarrhea treatment | Output | 5 | 15 | 25 | 35 | 45 | 50 | Monthly/ biannual | HFs | Report |
| Proportion of children 24 to 59 months dewormed | Output | 91 | 84 | 94 | 95 | 96 | 97 | biannual | HFs | Report |
| Proportion of children 0 to 59 months with SAM treated | Output | NA | 100 | 100 | 100 | 100 | 100 | biannual | HFs | Report |
| Proportion of health facilities providing SAM (OTP& SC) services | Output | NA | 100 | 100 | 100 | 100 | 100 | biannual | HFs | Report |
| Prevalence of overweight for women of reproductive age | Outcome | 9 | 8 | 7.5 | 7 | 6.5 | 6 | - | National | Survey |

| Strategic Objective 3: Improve nutrition service delivery for communicable and non-communicable lifestyle related diseases affecting all age groups | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Number of health facilities providing nutrition counseling for at least two non-communicable diseases/lifestyle related diseases (diabetes, hypertension, cancer, obesity, CHD/CVD, etc.) | Output | NA | | 4 | 4 | | | Biannual | National/ regional | Media messages broadcasted |
| Number of health facilities providing NACS for HIV and TB cases | Output | 413 | | 87 | 100 | | | Biannual | HFs | Report |
| # of PLHIV received nutrition counseling through NACS | Output | NA | | | | | | Biannual | HFs | Report |
| # of HIV clients who received nutrition assessment | Output | NA | | | | | | Biannual | HFs | Report |
| # of HIV clients who are identified as malnourished | Output | NA | | | | | | Biannual | HFs | Report |
| # of HIV clients who received nutrition counseling | Output | NA | | | | | | Biannual | HFs | Report |
| # of HIV clients who have got nutrition support | Output | NA | | | | | | Biannual | HFs | Report |
| # of TB clients who received nutrition assessment | Output | NA | | | | | | Biannual | HFs | Report |
| # of TB clients who are identified as malnourished | Output | NA | | | | | | Biannual | HFs | Report |
| Number of TB clients who received nutrition counseling | Output | NA | | | | | | Biannual | HFs | Report |
| Number of TB clients who have got nutrition support | Output | NA | | | | | | Biannual | HFs | Report |
| Number of health workers in TB clinics/multi-drug resistance (MDR) TB trained on NACS | Output | NA | | | | | | Biannual/Annual | HFs | Report |

## Strategic Objective 4: Strengthen implementation of nutrition-sensitive interventions in various sectors

***Result 4.1 Strengthened implementation of nutrition-sensitive interventions in agriculture (Ministry of Agriculture and Natural Resources, Ministry of Livestock and Fishery, Ministry of Environment, Forestry and Climate Change)***

| Indicators | Type | Baseline 2014/15 | Target | | | | | Periodicity | Level of Data Collection | Source |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2016 | 2017 | 2018 | 2019 | 2020 | | | |
| Proportion of households consumed fruits and vegetables | Output | 17.5 | 22 | 25 | 28 | 31 | 35 | - | National | Survey |
| Proportion of households consumed animal source foods | Output | 21.2 | 25 | 29 | 33 | 37 | 40 | - | National | Survey |
| Proportion of households with homestead gardening | Output | NA | 20 | 25 | 30 | 35 | 40 | Annual | National | CSA report |
| Number of groups engaged in community horticulture production | Output | NA | 20 | 40 | 60 | 80 | 100 | Annual | National | CSA report |
| Number of fruit nursery sites established/supported at national level | Output | 5 | 8 | 11 | 14 | 17 | 20 | Annually | National | MOA report |
| Proportion of urban households in zonal capitals with urban gardening | Output | NA | 5 | 10 | 15 | 20 | 25 | Annually | National | MOA report |
| Proportion of urban areas with mushroom producing groups | Output | NA | 3 | 6 | 9 | 12 | 15 | Annually | National | MOI/MOA report |
| Proportion of rural/urban households practicing caged/fenced poultry | Output | NA | 1 | 2 | 3 | 4 | 5 | Annually | National | MOA report |
| Number of poultry multiplication centers (both private and gov.) in each region | Input | NA | 1 | 2 | 3 | 4 | 5 | Annually | Multiplication centers | MOA report |
| Proportion of woredas with at least one milk collection center supported | Output | NA | 1 | 2 | 3 | 4 | 5 | Annually | Household | MOA report |
| Proportion of potential lakes withfish producing groups supported | Output | NA | 5 | 10 | 20 | 30 | 50 | Annual | Woreda | MOA report |
| Fish hatching center established/supported | Output | 1 | 2 | 3 | 4 | 5 | 6 | Annual | Center | MOA report |
| Number of community ponds established | Output | 1,500 | 1600 | 1700 | 1800 | 1900 | 2000 | | Woreda | MOA report |
| Number of food processing technologies/practices identified and introduced | Output | NA | 1 | 2 | 3 | 4 | 5 | Annually | | |
| Number of fruit and vegetable preservation technologies/practices identified and introduced | Input | NA | 1 | 2 | 3 | 4 | 5 | Annually | National | MOA report |
| Number of fish preservation technologies identified and introduced | Input | NA | 0 | 0 | 1 | 1 | 3 | Annually | National | MOA report |
| Number of nutritionally improved varieties of seeds released/adopted and disseminated | Input | NA | 1 | 2 | 3 | 4 | 5 | Annually | National | MOA report |
| % of FTCs with nutrition corner | Input | NA | 10 | 20 | 30 | 40 | 50 | Annually | Kebele | MOA report |
| Number of woreda with women group engaged in local production of complementary food | Output | 20 | 30 | 40 | 50 | 60 | 70 | National | National | MOA report |
| Number of women's groups engaged in agricultural income generating activities | Output | NA | 600 | 1200 | 1800 | 2400 | 3000 | National | National | MOA report |
| Number of nutritionally improved seed varieties released by agricultural research centers | Input | NA | 2 | 1 | 1 | 1 | 6 | National | Center | Centers report |

| *Result 4.2: Strengthened implementation of nutrition interventions in the education sector* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of schools promoting selected nutrition actions through health and nutrition school clubs | Input | NA | 10 | 20 | 40 | 60 | 80 | Annual | REB, WoEO | Reports |
| Proportion of schools that have model school gardening | Output | NA | 10 | 20 | 30 | 40 | 50 | Annual | REB, WoEO | Reports |
| Proportion of primary schools (5-10) conducting biannual deworming | Output | NA | 60 | 0.7 | 0.7 | 75 | 80 | Biannual | Kebele | Report |
| Proportion of primary schools (10-19) conducting biannual deworming | Output | NA | 20 | 25 | 30 | 35 | 40 | Biannual | | |
| Proportion of primary schools with school feeding program | Output | NA | 50 | 60 | 70 | 80 | 90 | Annual | Woreda | Reports |
| Proportion of schools with homestead grown gardening school feeding | Output | NA | 1 | 5 | 10 | 15 | 20 | Annual | Woreda | Reports |
| Number of students graduated with nutritional sciences disaggregated by level, type and sex | Output | 150 | 300 | 450 | 600 | 750 | 900? | Annual | University/College | Reports |
| Number of health, agriculture and technology institutions that have incorporated nutrition courses into their curriculum | Output | NA | 10 | 15 | 20 | 25 | 30 | Annual | University/College | Reports |
| Gender parity index in primary and secondary education(F/M)<br>(Note: P1: primary 1st ; P2: primary 2nd ; S1: secondary 1st ; and S2: secondary 2nd) | Output | P1 = 0.93<br>P2 = 0.97<br>S1 = 0.80<br>S2 = 0.46 | P1=0.94<br>P2=0.97<br>S1 =1.0<br>S2 =0.83 | P1 = 1.0<br>P2 = 1.0<br>S1 = 1.0<br>S2 = 1.0 | P1 = 1.0<br>P2 = 1.0<br>S1 = 1.0<br>S2 = 1.0 | P1 = 1.0<br>P2 = 1.0<br>S1 = 1.0<br>S2 = 1.0 | P1 = 1.0<br>P2 = 1.0<br>S1 = 1.0<br>S2 = 1.0 | Annual | School/University/College | Reports |
| Adult literacy program curriculum included nutrition | Output | NA | | | | | | Annual | National | Reports |
| Proportion of universities with nutrition training programs providing community nutrition services | Output | NA | 20 | 40 | 60 | 80 | 100 | Annual | National | Reports |

| *Result 4.3: Strengthened nutrition-sensitive interventions in the water, irrigation and electricity sector* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| % of HH with clean and safe drinking water supply | Output | 58 | 64 | 70 | 76 | 82 | 90 | Annual | Community | NWI/DHS survey |
| Proportion of households benefited from small scale irrigation (SSI) schemes with multiple use of water | Output | NA | 1 | 2 | 3 | 4 | 5 | Annual | National | Report |
| Proportion of schools with water supply | Output | 33 | 47 | 60 | 73 | 87 | 90 | Annual | School | Report |
| Hectares of farmlands cultivated through irrigation (ha X 1000) | Output | 140 | 168 | 196 | 224 | 252 | 280 | Annual | MoWE | Report |
| Proportion of HH with hand washing facilities | Output | NA | 10 | 25 | 39 | 54 | 68 | | Community | Survey report |

| *Result 4.4: Strengthened nutrition-sensitive interventions in the industry sector* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of flour producing industries fortifying wheat flour, blended foods | Output | NA | 10 | 20 | 40 | 60 | 80 | Annual | National | Report |
| Proportion of oil processing industries fortifying edible oil with Vitamin A | Output | NA | 10 | 20 | 40 | 60 | 80 | Annual | National | Report |
| Number of awareness creation events conducted in the private sectors related to requirements and standards of locally manufactured food items | Output | NA | 1 | 3 | 5 | 10 | 20 | Annual | Federal level | Report |

| *Result 4.6: Strengthened social protection services for improved nutrition* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of HHs graduated from PSNP | Output | | | | | | | Annual | National | Report |
| Proportion of women's self-help groups received grants and credits | Output | NA | 5 | 10 | 20 | 30 | 40 | Annual | National | Reports |
| Proportion of women's self-help groups trained on key nutrition practices | Output | NA | 5 | 20 | 40 | 60 | 80 | Annual | National | Reports |
| Number of woredas providing nutritional services for elderly poor | Output | NA | 5 | 10 | 15 | 20 | 25 | Annual | National | Reports |
| Number of primary schools in food-insecure woredas with school feeding program | Output | 1187 | 1246 | 1305 | 1364 | - | - | Annual | Schools | Reports |
| Proportion of declared nutrition emergencies responded to within 72 hours | Output | 100 | 100 | 100 | 100 | 100 | 100 | Annual | Community | Reports |

| *Result 4.8. Ensured quality and safety of nutrition services and supplies (FMHACA)* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Proportion of imported food items inspected for compliance with food safety and quality standards | Output | NA | 100 | 100 | 100 | 100 | 100 | Annual | Federal and regional | Report |
| Number of standards developed for food and food items | Output | 58 | 60 | 62 | 64 | 66 | 68 | Annual | National | Reports |
| Number of regulations developed for food and food items | | 5 | 6 | 7 | 8 | 9 | 10 | Annual | National | Reports |
| Number of companies certified for competency on food items production and trade | Output | NA | 20 | 85 | 100 | | | Annual | National | Reports |
| Number of fully tested nutrition products (infant formula, premix, nutrition supplements, micronutrients…) | Output | NA | 15 | 45 | 100 | | | Annual | National | Reports |
| Number of registered food and nutrition products | Output | NA | 100 | 100 | 100 | | | Annual | National | Reports |
| Percent of public water supply ensured for quality and safety as per the standard | Output | NA | 10 | 20 | 30 | 40 | 50 | Annual | National | Reports |
| Number of promotions/ policy dialogue made on enforcement of regulation on advertisement of unhealthy diet / beverages | | NA | 1 | 2 | 3 | 4 | 5 | Annual | National | Reports |

| *Result 4.9. Improved nutrition supply management (PFSA)* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2019** | **2020** | | | |
| Proportion of health facilities with IFA stocked out. | Output | NA | 0 | 0 | 0 | 0 | Annual | All levels | Survey reports |
| No. of nutrition supply stock status reports shared | Output | NA | 4 | 4 | 4 | 4 | Annual | National | Reports |

| *Strategic objective 5: Improve multisectoral coordination and capacity to ensure implementation of the NNP* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Indicators** | **Type** | **Baseline 2014/15** | **Target** | | | | | **Periodicity** | **Level of Data Collection** | **Source** |
| | | | **2016** | **2017** | **2018** | **2019** | **2020** | | | |
| Number of sectors that have established appropriate structures for nutrition with dedicated staff | Output | NA | 1 | 4 | 4 | 4 | 4 | Annual | National | Admin report |
| National nutrition and food policy developed | Output | NA | 0 | 1 | 1 | 1 | 1 | Annual | National | Admin report |
| Proportion of NNP implementing regional bureaus with appropriate structures and dedicated nutrition staff | Output | NA | 11 | 33 | 56 | 79 | 100 | Annual | Regional | Admin report |
| Proportion of woredas reporting multisectoral nutrition coordination activity to the higher level | Output | NA | 15 | 36 | 58 | 79 | 100 | Annual | Regional | Admin report |
| Proportion of woredas with nutrition coordination platform | Output | NA | 15 | 36 | 58 | 79 | 100 | Annual | Regional | Admin report |
| Proportion of woredas with kebele level nutrition coordination platform | Output | NA | 10 | 32 | 55 | 77 | 100 | Annual | Regional | Admin report |
| Proportion of woreda offices with nutrition coordinator/dedicated focal points | Output | NA | 11 | 33 | 56 | 79 | 100 | Annual | Regional | Admin report |
| Proportion of health development army (HDA) trained in the preparation of complementary food | Output | NA | 10 | 28 | 45 | 63 | 80 | Survey | Community | Survey |

# TERMS OF REFERENCE: NATIONAL NUTRITION COORDINATING BODY

## 1. BACKGROUND

Nutrition has a multidimensional and multisectoral nature both in terms of effect and outcomes. The Government of Ethiopia has demonstrated its policy commitment to nutrition by developing a stand-alone National Nutrition Strategy (NNS) and National Nutrition Program (NNP) in 2008, along with relevant guidelines, and incorporated nutrition - especially stunting - into its 5-year Growth and Transformation Plan (GTP). Sectoral strategies and programs create a good opportunity to mainstream nutrition into responsible sectors and put legislation or legal frameworks in place to enforce some key nutrition interventions.

Among these, the most notable ones are the GTP, the National Food Security Strategy, the National Health Sector Policy and its Health Sector Transformation Plan, and the National School Health and Nutrition strategy and its transformation plan. Thus, it is the responsibility of the line ministries or sectors to effectively mainstream the National Nutrition Strategy and National Nutrition Program into sectoral policy and programs and implement the nutrition interventions/programs that they are mandated to implement.

The Federal Ministry of Health, as indicated in the NNS, will house and manage the organizational and management structure of the NNP. However, in order to have viable linkages and harmonization with the relevant sectors, the NNP implementation and coordination framework has multisectoral implementation and coordination arrangements at the policy and implementation level in all the decentralized administration and service delivery levels of the country. Thus, the NNP proposes a five-tired (federal, regional, zonal, woreda and kebele level) coordination mechanism that is in line with the decentralized administration structure of the government and requires considerable support of partners, the private sector and academia.

A National Nutrition Coordinating Body (NNCB) and National Nutrition Technical Committee (NNTC) were established at the federal level to ensure effective coordination and linkages at the national level. There is a similar arrangement at the regional level with some adaptation based on the current situation of the regions. As the existing zonal, woreda and kebele level administration arrangement is multisectoral in nature, nutrition will be addressed with the leadership of zonal, woreda and kebele administrative offices.

## 2. NATIONAL MULTISECTORAL NUTRITION COORDINATION

### 2.1 THE NATIONAL NUTRITION COORDINATING BODY

The National Nutrition Coordinating Body (NNCB) is the highest governing body that is responsible for leadership, policy decisions and coordination of the National Nutrition Program among government sectors, nutrition development partners, academia and the private sector. To strengthen accountability and maximize ownership of the multisectoral coordination mechanism, members of the NNCB need to regularly meet and discuss the progress of NNP implementation. Moreover, all NNP implementing sectors will regularly report on the

progress of nutrition-sensitive and nutrition-specific interventions and on the coordination and implementation of the NNP to the NNCB chair. All Regional Nutrition Coordinating Bodies will regularly report on progress and performance of regional NNP implementation to the NNCB.

## 2.2 NNCB COMPOSITION

The National Nutrition Coordinating Body is composed of high level officials from the NNP implementing sectors, representatives from donors, United Nations agencies, civil society organizations, the private sector and academia.

They are:

- ✓ State Minister of Health – Chair
- ✓ State Minister of Agriculture and Natural Resource – Co-chair
- ✓ State Minister of Education – Co-chair
- ✓ FMOH, Maternal and Child Health Directorate Director – Secretary
- ✓ State Minister of Livestock and Fisheries
- ✓ State Minister of Water, Irrigation and Electricity
- ✓ State Minister of Finance and Economic Cooperation
- ✓ State Minister of Women and Children's Affairs
- ✓ State Minister of Labor and Social Affairs
- ✓ State Minister of Trade
- ✓ State Minister of Industry
- ✓ State Minister of Youth and Sport
- ✓ Commissioner of the Disaster Risk Management Coordination Commission
- ✓ State Minister of the Government Communication Affairs Office
- ✓ Director General of the Ethiopian Public Health Institute
- ✓ Director General of the Food, Medicine and Health Care Administration and Control Authority
- ✓ Director General of the Ethiopian Institute of Agriculture Research (EIAR)
- ✓ Dean, School of Postgraduate Studies, Jimma University – representing academia
- ✓ Save the Children Country Director – representing CSO, the Ethiopian Civil Society Coalition for Scaling up Nutrition (ECSC-SUN)
- ✓ Manager of the Chamber of Commerce – representing the private sector
- ✓ USAID Mission Director and DFID Head of Office – representing nutrition donors
- ✓ UNICEF Country Representative – representing UN agencies

## 3. ROLES AND RESPONSIBILITIES OF NNCB

- ✓ Serve as an advisory body to the government on national nutrition issues.
- ✓ Provide vision and general leadership to nutrition in the country and at international forums/agendas.
- ✓ Act as an advocate on national nutrition matters and build partnership among different stakeholders.
- ✓ Lead and facilitate the coordination of multisectoral stakeholders, including relevant government sectors, donors and nutrition development partners, academia and the private sector at national level for effective implementation of the National Nutrition Strategy and Program.
- ✓ Regularly review the effectiveness of multisectoral coordination for nutrition and update accordingly.
- ✓ Facilitate policy and guideline development that is relevant for NNP implementation.
- ✓ Develop a strategy for mainstreaming the National Nutrition Strategy and Program into government policies, strategies and national plans; and into relevant sectoral plans and programs.
- ✓ Mobilize resources and track resource utilization to support the National Nutrition Program.
- ✓ Facilitate and support the development of the implementation capacities of the sectors.
- ✓ Update the National Nutrition Program based on Ethiopia's changing needs.
- ✓ Review performance of the National Nutrition Program and give feedback.
- ✓ Review and approve the annual national multisectoral nutrition plan.
- ✓ Prepare biannual and annual reports.
- ✓ The members of the NNCB shall expect to meet on biannual basis.

*Note: Based on the above outlined responsibilities and membership list, the NNCB is expected to expand or modify its ToR and develop detailed working procedures as per demand.*

# TERMS OF REFERENCE: NATIONAL NUTRITION TECHNICAL COMMITTEE

## 1. BACKGROUND

Nutrition has a multidimensional and multisectoral nature both in terms of effect and outcomes. The Government of Ethiopia has demonstrated its policy commitment to nutrition by developing a stand-alone National Nutrition Strategy (NNS) and National Nutrition Program (NNP) in 2008, along with relevant guidelines, and incorporated nutrition - especially stunting - into its 5-year Growth and Transformation Plan (GTP). Sectoral strategies and programs create a good opportunity to mainstream nutrition into responsible sectors and put legislation or legal frameworks in place to enforce some key nutrition interventions.

Among these, the most notable ones are the GTP, the National Food Security Strategy, the National Health Sector Policy and its Health Sector Transformation Plan, and the National School Health and Nutrition strategy and its transformation plan. Thus, it is the responsibility of the line ministries or sectors to effectively mainstream the National Nutrition Strategy and National Nutrition Program into sectoral policy and programs and implement the nutrition interventions/programs that they are mandated to implement.

The Federal Ministry of Health, as indicated in the NNS, will house and manage the organizational and management structure of the NNP. However, in order to have viable linkages and harmonization with the relevant sectors, the NNP implementation and coordination framework has multisectoral implementation and coordination arrangements at the policy and implementation level in all the decentralized administration and service delivery levels of the country. Thus, the NNP proposes a five-tired (federal, regional, zonal, woreda and kebele level) coordination mechanism that is in line with the decentralized administration structure of the government and requires considerable support of partners, the private sector and academia.

A National Nutrition Coordinating Body (NNCB) and National Nutrition Technical Committee (NNTC) were established at the federal level to ensure effective coordination and linkages at the national level. There is a similar arrangement at the regional level with some adaptation based on the current situation of the regions. As the existing zonal, woreda and kebele level administration arrangement is multisectoral in nature, nutrition will be addressed with the leadership of zonal, woreda and kebele administrative offices.

## 2. NATIONAL MULTISECTORAL NUTRITION COORDINATION

### 2.1 THE NATIONAL NUTRITION COORDINATING BODY

The National Nutrition Coordinating Body NNCB) is the highest governing body that is responsible for leadership, policy decisions and coordination of the National Nutrition Program among government sectors, nutrition development partners, academia and the private sector. The composition of the NNCB includes state ministers of NNP implementing sectors, representatives from donors, UN agencies, the Ethiopian Civil Society Coalition for Scaling up Nutrition, the private sector and academia.

## 2.2 NATIONAL NUTRITION TECHNICAL COMMITTEE

In addition to the NNCB, which mainly deals with policy issues, there is a National Nutrition Technical Committee (NNTC) that operates under the auspices of the NNCB. Its responsibility is provision of technical advice focusing on the multisectoral integration of nutrition programs and responses in the country.

## 2.3 - NNTC COMPOSITION

The composition of this technical committee includes directors of relevant directorates within ministries that are members of the NNCB and directors of directorates in other pertinent authorities/agencies. It also includes representatives from donors, nutrition development partners, the private sector and academia. The technical committee is accountable to the NNCB. Any other nutrition technical working group or steering committee will be accountable to the NNTC. The main responsibility of the committee is handling the overall technical work related to federal level NNP coordination.

The NNTC consists of the following:

- ✓ Director, Minister of Health – Maternal and Child Health Directorate – Chair
- ✓ Director, Minister of Agriculture and Natural Resources – Co-chair
- ✓ Director, Minister of Education – Co-chair
- ✓ Director, Minister of Livestock and Fisheries
- ✓ Director, Minister of Water, Irrigation and Electricity
- ✓ Director, Minister of Finance and Economic Cooperation
- ✓ Director, Minister of Women and Children's Affairs
- ✓ Director, Minister of Labor and Social Affairs
- ✓ Director, Minister of Trade
- ✓ Director, Minister of Industry
- ✓ Director, Minister of Youth and Sport
- ✓ Director, Disaster Risk Management Coordination Commission
- ✓ Director, Government Communication Affairs Office
- ✓ Director, Ethiopian Public Health Institute
- ✓ Director, Food, Medicine and Health Care Administration and Control Authority
- ✓ Director, Ethiopian Institute of Agriculture Research
- ✓ Head Department of Nutrition and Dietetics, Institute of Health, Jimma University – representing academia
- ✓ Head of Nutrition Sector, Save the Children – representing CSO (ECSC-SUN)
- ✓ Manager, Chamber of Commerce – representing the private sector
- ✓ Nutrition Advisor from USAID and Nutrition Advisor from DFID – representing donors
- ✓ Head of Nutrition Section, UNICEF – representing UN agencies
- ✓ National Nutrition Case Team Coordinator, Maternal and Child Health Directorate, FMOH – Secretary

## 3. ROLES AND RESPONSIBILITIES OF THE NNTC

- ✓ Provide technical advisory support to the NNCB.
- ✓ Facilitate inter and multisectoral coordination of nutrition.
- ✓ Facilitate the implementation of the National Nutrition Strategy and Program.
- ✓ Facilitate the coordination of multisectoral stakeholders, including relevant government sectors, partners, academia and the private sector at national level for effective implementation of the National Nutrition Program.
- ✓ Coordinate, supervise, monitor and evaluate the implementation of NNP in the different sectors, with development partners, and NGOs.
- ✓ Develop Ethiopian Food and Nutrition Policy relevant for NNP implementation.
- ✓ Develop and finalize a multisectoral nutrition coordination and implementation guideline and detailed plan of action to put the NNP II into practice.
- ✓ Support development of nutrition-sensitive strategies for mainstreaming the National Nutrition Strategy and Program into government policies, strategies, and national plans; and into relevant sectoral plan and programs.
- ✓ Identify intra and inter country experiences, lessons and best practices for effective implementation of NNP II.
- ✓
- ✓ Monitor, evaluate and regularly review the effectiveness of multisectoral coordination for nutrition, and update NNCB accordingly.
- ✓ Facilitate resource mobilization and track resource utilization to support NNP II implementation.
- ✓ Strengthen the three multisectoral nutrition coordination steering committees (National Nutrition Program Management, National Food fortification, National Nutrition Research, Monitoring and Evaluation Steering Committee) or any other existing nutrition technical working groups to address specific issues on nutrition and establish nutrition sub-groups as need arises.
- ✓ Report to NNCB on progress and bottlenecks in the regular NNTC meetings and report on progress on nutrition priorities, emerging concerns and recommendations suggested for high level decisions/actions.
- ✓ Prepare quarterly, biannual and annual multisectoral nutrition coordination plan and report to be submitted to the NNCB.
- ✓ Identify resource gaps and mobilize funding for nutrition.
- ✓ Prepare quarterly, biannual and annual reports.

*Note: Based on the above outlined responsibilities and membership list, the NNTC is expected to expand or modify its ToR and develop detailed working procedures as per demand.*

# REFERENCES


Alemu, E., Atnafu, A., Yitayal, M., & Yimam, K. (2014). Prevalence of overweight and/or obesity and associated factors among high school adolescents in Arada sub city, Addis Ababa, Ethiopia. J Nutr Food Sci 4: 261.

Barker, D. J., Bergmann, R. L., & Ogra, P. L. (2008). *Concluding remarks. The window of opportunity: Pre-pregnancy to 24 months of age.* Nestle Nutr Workshop SerPediatr Program, 255–60.

Barker, D. J. P., Eriksson, J. G., Forsén, T., & Osmond, G., Fetal origins of adult disease: Strength of effects and biological basis. *International Journal of Epidemiology, 31*(6): 1235–39.

Behrman, J. R., Alderman, H., & Hoddinott, J. (2004). Nutrition and hunger. In B. Lomborg (Ed.), *Global crises, global solutions.* Cambridge, UK: Cambridge University Press.

Behrman, J. R., & Rosenzweig, M. R. (2001). *The returns to increasing body weight.* Philadelphia: Penn Institute for Economic Research.

Benson, T., & Shekar, M. (2006). Trends and issues in child undernutrition. In D.T. Jamisen et al (Eds.), *Disease and mortality in sub-Saharan Africa* Washington, DC: The World Bank.

Black, R., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., De Onis, M., Ezzati, M., Mathers, C., and Rivera, J., Maternal and child undernutrition: Global and regional exposures and health consequences. *The Lancet.*Published online Jan 17 2008. DOI:10.1016/S0140-6736(07)61690-0

Central Statistical Agency, Ethiopia. (CSA, 2007) Central Statistical Agency, Population and Housing Census Report-Country.

CSA. (2014). *Ethiopian mini demographic and health survey.* Addis Ababa.

CSA-ICF International. (2011). *Ethiopian demographic and health survey.* Addis Ababa.

Copenhagen Consensus. (May 14, 2012). *Top economists identify the smartest investments for policymakers and philanthropists.*

Copenhagen Consensus Center. (2012). *Expert panel findings, 2012.*

Ethiopian Environmental Protection Authority. 2012. *National report of Ethiopia at the United Nations Conference on Sustainable Development (Rio+20).* Addis Ababa.

Ethiopian Health and Nutrition Research Institute. (2010). *A five-year balanced scorecard based strategic plan (2010–2015 G.C.)*.

Ethiopian Public Health Institute. (EPHI, 2014). *National salt iodization coverage survey.* Available online at: http://www.ephi.gov.et/images/pictures/USI%20presentation_Forum_October_25_2014.pdf.

EPHI-African Union. (2013). *The Cost of hunger in Ethiopia: Implications for the growth and transformation of Ethiopia. The social and economic impact of child undernutrition in Ethiopia. Summary report*.

EPHI. (2016). *Ethiopian national micronutrient survey. Technical report.*

Food and Agriculture Organization, International Fund for Agricultural Development, & World Food Programme. (2014). *The state of food insecurity in the world*

*2014: Strengthening the enabling environment for food security and nutrition.* Rome.
Gareth, J., Richard, W. S., Robert E. B., et al. (2003). How many child deaths can we prevent this year? Lancet child survival series, *The Lancet*. *362*(9377): 65–71.
Global Nutrition report, (2015), Actions and Accountability to Advance Nutrition and Sustainable Development
Golden, M. (2009). Proposed nutrient requirements of moderately malnourished populations of children. *Food and Nutrition Bulletin, 30*(3): S267–S343.
Horton, S., & Ross, J. (2003). The economics of iron deficiency. *Food Policy, 28*(1): 51–75.
Horton, S., et al. (2009). *Scaling up nutrition: What will it cost?* Washington, DC: World Bank.
*https://sustainabledevelopment.un.org/content/documents/973ethiopia.pdf*
Hunt, J. M. (2005). The potential impact of reducing global malnutrition on poverty reduction and economic development. *Asia Pacific Journal of Clinical Nutrition, 14*(S): 10–38.
International Food Policy Research Institute. (2015) *Global Nutrition Report: Actions and accountability to advance nutrition and sustainable development.*
Kramer, M. S. 1987. Determinants of low birth weight: Methodological assessment and meta-analysis*. Bulletin of the World Health Organization, 65*(5): 663–737.
Martorell, R., Kettel Khan, L. K., & Schroeder, D. G. (1994). Reversibility of stunting: Epidemiological findings in children from developing countries. *European Journal of Clinical Nutrition, 48*: S45–S57.
Ministry of Education, Ethiopia. (2012). *School health and nutrition strategy.* Addis Ababa.
Ministry of Finance and Economic Development, Ethiopia. (2013). *Growth and transformation plan: Annual progress report for F.Y. 2011/12.* Addis Ababa.
Ministry of Health, Ethiopia. (MOH, 2003). *Child survival strategy*.
MOH. (2008). *Program implementation manual of the national nutrition program.* Addis Ababa.
MOH. (2010). *Scale up strategy for health extension package.* Addis Ababa.
MOH. (2015). *Sector transformation Plan (2016-2020),* Addis Ababa.
MOH. *Coverage of Vitamin A supplementation,* administrative data for 2011/12. Addis Ababa.
Must, A, & Strauss, R. S. (1999, March). Risks and consequences of childhood and adolescent obesity. Int J Obes Relat Metab Disord 1999;23 Suppl 2:S2-11.
Oniango, R., & Mukudi, E. (2002). Nutrition and gender. In *Nutrition: A foundation for development,* UN ACC/SCN: Geneva.
Ruel, M.T., & Alderman, H. (2013) Nutrition-sensitive interventions and programmes: How can they help to accelerate progress in improving maternal and child nutrition? *The Lancet,10,* 382(9891):536–51
Scholl, T. O., Hediger, M. L., Bendich, A., Schall, J. I., Smith, W. K., & Krueger, P. M. (1997). Use of multivitamin/mineral prenatal supplements: Influence on the outcome of pregnancy. *American Journal of Epidemiology, 146*:134–41.
Shrimpton, R., Victoria, C. G., de Onis, M., Lima, R. C., Blossner, M., & Clugston, G. (2001). Worldwide timing of growth faltering: Implications for nutritional inter-

ventions. *Pediatrics, 107*, E75.
Smith, L. C., & Haddad, L. (2000). Overcoming child malnutrition in developing countries: Past achievements and future choices. In *Research report 111.* Washington, DC: International Food Policy Research Institute.
Smith, L. C., et al. (2003). *The importance of women's status for child nutrition in developing countries.* International Food Policy Research Institute: Washington, DC.
Strauss, J., Thomas, D. (1998). Health, nutrition and economic development. *Journal of Economic Literature, 36*(2): 766–817.
Tesfalem, T., Singh, P., & Debebe, M. Prevalence and associated factors of overweight and obesity among high school adolescents in urban communities of Hawassa, Southern Ethiopia. *Curr Res Nutr Food Sci, 1,* 23–36.
United Nations System Standing Committee on Nutrition (UNSCN, 2015). *Sixth report on the world nutrition situation.* Available online: http://www.unscn.org/files/Publications/RWNS6/report/SCN_report.pdf
UNSSCN. (2015). *Nutriton targets and indicators for the post-2015 Sustainable Development Goals: A technical note.* http://www.unscn.org/files/Publications/Post_2015_Nutrition_Targets_and_Indicators_final_March_2015_website_.pdf
UNICEF/WHO/World Bank. (2015). *Joint child malnutrition estimates - Levels and trends.* Available online: http://www.who.int/nutgrowthdb/estimates/en/
WHO. (2014). *World Health Assembly Global Nutrition Targets: Low Birth Weight Policy Brief.*
World Health Organization (1993). *Report of a joint WHO/UNICEF/ICCIDD consultation. Indicators for assessing iodine deficiency disorders and their control Programs. Review version.* WHO/NUT/93.1: Geneva.
Gebreyohannes, Y., Shiferaw, S., Demtsu, B., & Bugssa, G. (2014). Nutritional status of adolescents in selected government and private secondary schools of Addis Ababa, Ethiopia. *International Journal of Nutrition and Food Sciences, 3,* 504–514.
Zulfiqar, A., Bhutta, Das, J. K., Rizvi, A., Gaffey, M., Walker, N., Horton, S., Webb, P., et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition: What can be done and at what cost?, *The Lancet 382*(9890):452-77