

### **Nutrition Sensitive Agriculture Strategy**

**Ministry of Agriculture and Natural Resource (MoANR)** 

And

Ministry of Livestock and Fisheries (MoLF)

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This document is a national strategy primarily designed for the agriculture sector and its affiliates and can be adapted by regional states and other development partners. The document is designed to serve for five years and will be updated based on the policy and strategy changes when necessary.

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**Ministry of Agriculture and Natural Resource** 

#### **ACRONYMS AND ABBREVIATIONS**

ADLI Agricultural Development Led Industrialization

ATVET Agriculture Technical and Vocational Training

BCC Behaviour Change Communication

CAADP Comprehensive Africa Agriculture Development Plan

DA Development Agent

EIAR Ethiopian Institute of Agricultural Research

FAO Food and Agriculture Organization of the United Nations

FTC Farmers Training Center

GDP Gross Domestic Product

GTP I Growth and Transformation Plan I

GTP II Growth and Transformation Plan II

HIV Human Immunodeficiency Virus

MOA Ministry of Agriculture

MoANR Ministry of Agriculture and Natural Resource

MoFED Ministry of Finance and Economic Development

MoLF Ministry of Livestock and Fisheries

NEPAD New Partnership for Africa's Development

NNP I National Nutrition Programme I

NNP II National Nutrition Programme II

NNS National Nutrition Strategy

NSA Nutrition Sensitive Agriculture

OFSP Orange Fleshed Sweet Potato

QPM Quality Protein Maize

SBCC Social and Behavioral Change Communication

SUN Scale Up of Nutrition Initiatives

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#### **CHAPTER ONE: INTRODUCTION**

1.1 The state of agriculture and food in Ethiopia: Ethiopia's agriculture sector accounts for about 39% of the country Gross Domestic Product (GDP) and around 75% of export earnings. It is the major employer of about 83% of the labour force. The sector has registered an average real agricultural GDP growth rate of 6.6% per annum. During the Growth and Transformation Plan (GTP) I implementation period; the average productivity of major crops by smallholder farmers for the main season has increased from 15.7 quintal per hectare to 21.5. Major crops production and productivity have reached 270.3 million quintal and 21.5quintal per hectare respectively. Area of land developed with modern small scale irrigation schemes has increased to 2.3 million hectares. Productivity of smallholder farmers has improved by introducing and disseminating of modern agricultural technologies. The extension service reach has increased from 5.1 million farmers to 13.95 million by 2014/15 and the food reserve to enhance disaster prevention capacity has reached 405 thousand tons. Overall, the per capita food production has passed the 2.16 quintal grain equivalent line (PIF MTR, 2015) and the average Kilocalorie intake is 2100. The agriculture sector has also made significant contribution to the poverty reduction in which the poverty head count index has decreased from 29% to 23%.

The above achievements have been registered as a result of government's national policies and strategies, plans and programmes. Agricultural Development Led Industrialization (ADLI) has been the central strategy of the government since the early 1900s that gave the highest priority to the transformation of agriculture from subsistence livelihood to market-oriented economic sector. This strategy has been a driving force for accelerating the country's economic growth and development. This strategy has been further elaborated through sector specific policies and strategies such as Rural Development Policy and Strategy (MoA 2003), the Food Security Strategy (2002) and its major programmes revolving around such as asset building, safety net, resettlement and community investment. These policies and strategies were also further refined by successive five year development plans such as, Sustainable Development and Poverty Reduction Programme (2001), A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005) and the Growth and Transformation Plan 1 and 2. In line with the policy, the agricultural objectives were set to increase productivity through increasing the capacity and extensive use of labour, proper utilization of agricultural land, linking specialization with diversification, integrating agricultural and rural development, and strengthening the agricultural marketing system (Chanyalew et al 2010).

Despite the tremendous achievements, the problem of food and nutrition security remains the main health and development issue for the country. The prevalence of stunting among children 6-59 months old is 40% and the prevalence of wasting and underweight is recorded to be 9% and 27% respectively. Micronutrients deficiency is also pervasive and severe in the country. About 44% of under five children, 30% of adolescents, 22% of pregnant women, 17% of women of reproductive age are anaemic. Consumption of minimum acceptable diet by children is only 4% which is very high when compared to other sub-Saharan countries (EDHS 2014). This puts Ethiopia among the countries with high malnutrition burdens.

Dependency on rain-fed agriculture and subsistent farming system, the low educational status of most farming households, land degradation, soil infertility, lack of gender sensitivity which is explained by low participation and benefit of women from agricultural technologies and interventions are among the factors contributing to the problem of under-nutrition. On average, female farm managers in Ethiopia produce 23% less per hectare than their male counterparts. Ethiopia's female farmers face multiple challenges such as access to land, extension, inputs, technologies and also competing household responsibilities that hinder their productivity. Differences in both the levels of productive factors used and the returns that these factors generate drive the country's gender gap to a substantial degree.

Though diversification was part of the policy framework, the agricultural sector focused primarily on increasing agricultural productivity, market oriented production of cash crops with minimum consideration of expansion of diverse food availability and overall nutrition security. Agriculture's contribution to nutrition so far has been limited as the dietary diversity of the population is very low (Goshu et al 2013). The FAO STAT 2011 also states that the food availability per-capita is limited specially regarding meat, fruits and vegetables based sources. The agriculture sector has already put in place programs and initiatives that directly and indirectly contribute to better nutrition. The agriculture sector is one of the signatories of the NNP II implementation that needs due attention and extra efforts to translate the planned activities in to actions with more emphasis on dietary diversification and proper utilization of foods from plant and animal sources.

Considering that about 84% of Ethiopians live in rural areas and are primarily engaged in agricultural activities, initiating and strengthening Nutrition Sensitive Agriculture (NSA) in the agriculture sector is critical. NSA aims to maximize the positive impact of the food system on nutrition outcomes while minimizing any unintended, negative consequences of agricultural policies and interventions for the population. It is a food and nutrition-based approach to agricultural development that focused on year-round availability, access and consumption of diverse, safe and nutritious foods and sustainable agricultural systems at the heart of overcoming malnutrition and its consequences.

1.2 Agriculture-Nutrition Linkage Framework: Agriculture and nutrition are intrinsically interlinked. Agricultural production is one important means for achieving food and nutrition security. Increasing agricultural productivity has the potential to improve household food security and nutrition of the population. In addition, healthier and well-nourished smallholder farmers are more productive, earn more income, and contribute to further economic growth and development. In order to come out with appropriate nutrition sensitive agricultural strategies, it is important to understand the linkage between agriculture and nutrition. Figure 1 below illustrates the linkages between agriculture and nutrition. The agriculture sector's approach to addressing nutrition problems embraces three approaches that are similar to what is depicted in the Figure below.



Figure 1: Conceptual Pathways between Agriculture and Nutrition

There are multiple links that connect agriculture production to nutritional status. As illustrated, improved production of diverse, safe and nutrient dense foods through a number of technologies is vital to ensure availability and access to foods. Improving income through on and off-farm agricultural activities is also one of the path ways to ensure food and nutrition security. The NNP describes that gender is the cause and consequence of hunger and malnutrition and gender inequality to be associated with higher levels of acute and chronic under-nutrition. The design and delivery of key nutrition sensitive agriculture messages to households using of evidence-based behaviour changes strategies can significantly impact on nutrition positively. Therefore the proposed nutrition sensitive interventions in this strategic document is trying to consider these three path ways as a means to improve production, income and food consumption at household level.

In light of these evidence by Herforth & Harris (2014) and others, the government will approach Nutrition Sensitive Agriculture with a focus on agriculture-nutrition linkage research, integrating nutrition education in agricultural extension service (outreach), food market development, demand creation for diverse safe nutritious food, and nutrition education focused on positive behavioural and dietary habit changes as catalysts to bring about positive changes in nutrition.

This strategy is developed to add value and create synergy between the agriculture sectors initiatives, with that of the National Nutrition Programme, 'Sekota declaration' and the Comprehensive Africa Agriculture Development Plan (CAADP) among others. The Strategy shall harness the full potential of agriculture sector to improve nutritionals status of Ethiopians especially those of mothers and children. The strategy serves as a tool to ensure policies, strategies; program, interventions and actors supporting the sector apply nutrition-sensitive food and agriculture-based approaches to agriculture sector to contribute in the improvement of nutritional status of the population in concern.

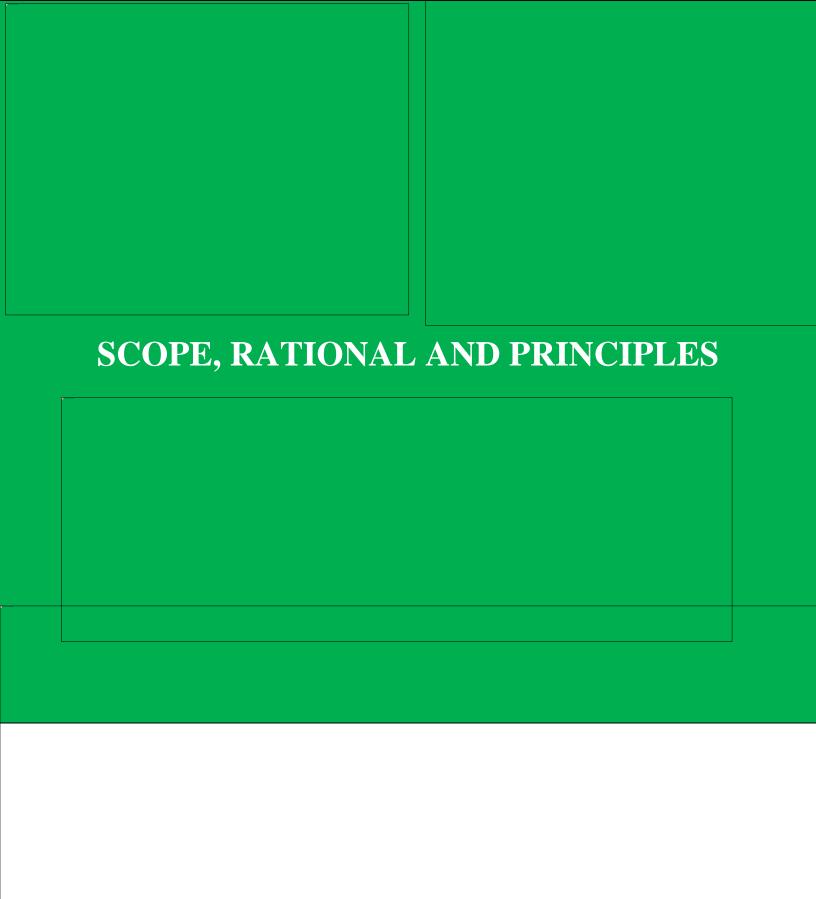
**1.3 Gaps in the agriculture sector in food and nutrition:** Agriculture has a big potential to impact on the underlying determinants of nutritional status of the population and the nutritional status is one of the independent determinates of agricultural productivity of farmers (Ruel, et.al, 2013). However; the Ethiopian agricultural system was not explicitly nutrition sensitive and this affected the agriculture sector's ability to impact fully on the nutritional situation of the country.

The main gaps in the agriculture sector are illustrated as follows:-

- 1. Most agriculture sector programs focus mainly on increased production, productivity and on high value crops for market and income. The farming system, in most cases, is cereal based practicing mono-cropping.
- 2. Food security programs have not adequately addressed nutrition issues
- 3. There is a lack of sufficient and appropriate technology development and dissemination for post-harvest handling
- 4. There is a lack of food safety standards and guidelines for the agriculture sector
- 5. Livestock investment is focused mainly on head counts neglecting productivity and quality.
- 6. The contribution of fisheries to nutrition security is very low.
- 7. Most agricultural strategies, programmes and investments lack the integration of nutrition objectives, indicators, targets into the strategies and work plans.
- 8. There is weak institutional set up and human resource capacity to fully integrate nutrition into the agriculture sector
- 9. Nutrition is not integrated into the curriculum of agricultural colleges and universities
- 10. Though collaboration frameworks exist (NNP II), there are critical challenges in coordination for nutrition activities within the directorates of the agriculture sector, its affiliates 1 and among the signatories of the NNP II
- 11. There is still low levels of women's participation and benefit from agriculture programming, investments and technologies
- 12. There is low levels of awareness in communities on optimal dietary practices, storage, food handling, processing, and consumption of nutritious foods from animal and plant sources
- 13. The country is still dependent on rain-fed agriculture, with low access and uptake of agricultural inputs and technologies

**<sup>1</sup>** Ethiopia Institute of Agricultural Research, ATVET, National Veterinary Institute, AGP II, Cooperatives and Unions, Rural Finance Intermediation Program, PSNP IV etc.

- **1.4 Opportunities to integrate nutrition in to the agriculture sector:** The following opportunities are believed to support the integration of nutrition issues into the agriculture sector.
- 1. The Government of Ethiopia's commitment to improve nutrition has been reflected by:
- 1. Renewed commitment to end hunger and under-nutrition by 2030 using the "Seqota declaration" as a movement campaign.
- 2. Placing a high priority to ensure food security at household level.
- 3. Creating an enabling policy environment namely GTP II, NNP II and currently, the government has already initiated the process of developing food & nutrition policy.
- 2. Existence of nutrition sensitive agriculture program that can provide evidence to document knowledge products for adoption and scale up
- 3. Ethiopia is party to international commitments and declarations to end hunger and extreme poverty and ensure nutrition security: The Comprehensive Africa Agriculture Development Programme (CAADP), New Partnership for Africa's Development (NEPAD), the New Alliance for Food and Nutrition Security in Ethiopia and Scale Up of Nutrition initiatives (SUN).
- 4. Availability of financial and technical support from development partners within and outside the country

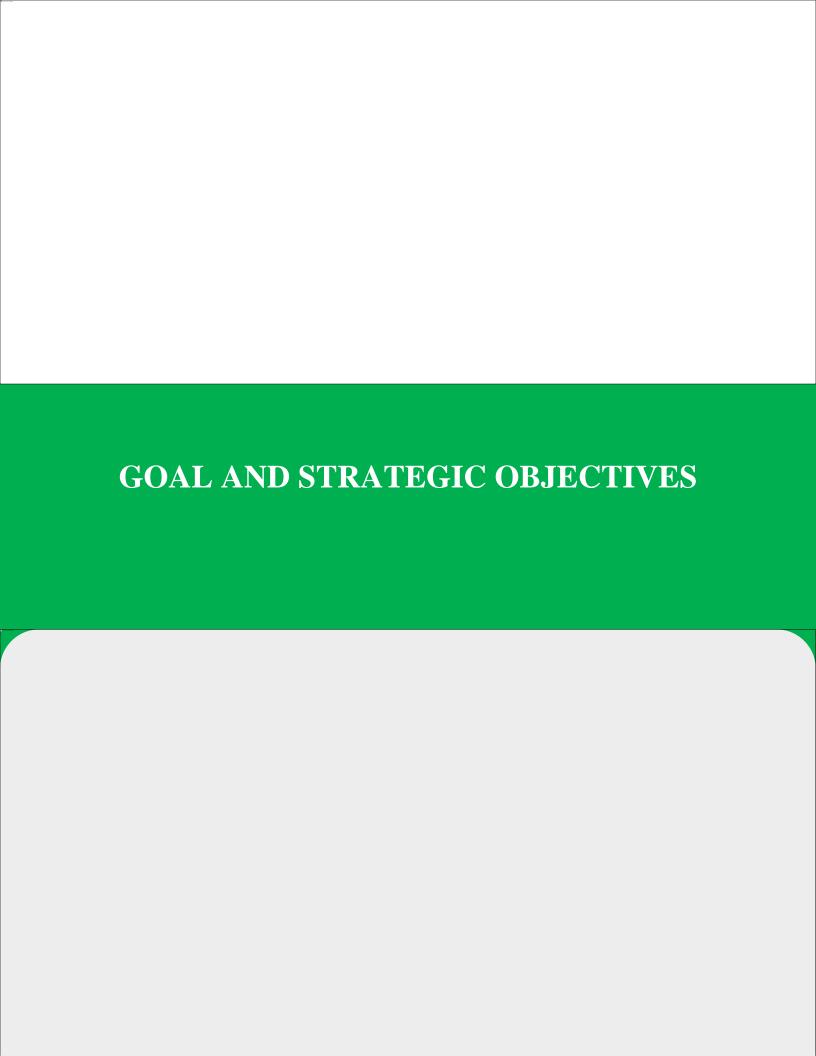


#### CHAPTER TWO: SCOPE, RATIONAL AND PRINCIPLES

- **2.1 Scope:** This document is a national strategy primarily designed for the agriculture sector and its affiliates and can be adapted by regional states and implementing partners. It is also expected to serve the urban and rural areas of the country for five years (2017 2021) and will be updated based on the policy and strategy changes when necessary.
- **2.2 Rationale:** Agriculture is one of the key sectors that can and should play a vital role in improving the nutritional status of the population contributing to the reduction of malnutrition in the country. Though the agriculture sector is committed to addressing malnutrition, the notion of nutrition sensitive agriculture is relatively new to the country and to the sector. There is no clear articulation of the approach and direction agriculture should take to meet its commitment to addressing malnutrition. Agriculture is also broad in terms of issues that the sector can and should address and therefore the need to articulate what each directorate and affiliate should focus on to integrate nutrition sensitivity. Integrating nutrition in the sector starts from maintaining the quality of land and soil (natural resource conservation), provision of improved inputs (seed and fertilizers technologies), agronomic practices (diversification, inter-cropping) and animal husbandry (livestock rearing, breeding), food storage and handling, post-harvest management, marketing, income and consumption. The strategic directions that should be taken requires clear structure, capacity and collaborations within and outside the agriculture sector and various institutions.

In the absence of such a strategy, it would be difficult to coordinate and implement nutrition sensitive agriculture in the sector. Therefore, this strategy is intended to provide guidance on how to integrate nutrition objectives and indicators into the existing agriculture policy, programming and investment and puts in place monitoring and evaluations systems and tools including periodic reporting and creating accountability at all levels.

- **2.3 Principles:** The following are the key principles of the nutrition sensitive agriculture strategy:-
- 1. Community participation and ownership
- 2. Special consideration to women and children
- 3. Need and evidence based program planning and implementation
- 4. Innovative and indigenous knowledge based
- 5. Inclusive of relevant stakeholders and working at all levels
- 6. Multi-sectoral collaboration and coordination
- 7. Building competency based capacity of front-line service providers
- 8. Environmental friendliness and sustainability



#### CHAPTER THREE: GOAL & STRATEGIC OBJECTIVES

- **3.1 Goal:** The overall goal of the NSA strategy is to contribute to the NNP II goal of reducing child and women under-nutrition by increasing the quantity and quality of food available, accessible, and affordable and promoting utilization of diverse, nutritious and safe foods for all Ethiopians at all times.
- **3.2 Strategic Objectives (SOs):** The nutrition sensitive agriculture strategy has the following six strategic objectives:
- SO 1 To leverage nutrition in to agriculture sector policy, strategy, program and work plans at all levels
- SO 2 To establish/ strengthen institutional and organizational structures and capacity responsible for planning and implementing nutrition sensitive agriculture
- SO 3 To increase year-round availability, access and consumption of diverse, safe and nutritious foods
- SO 4 To enhance resilience of vulnerable communities and households prone to climate change and moisture stress
- SO 5 To ensure women's empowerment and gender equality
- SO 6 To establish/strengthen multi-sectorial coordination within the agriculture sectors and with signatories of NNP II and other development partners

Strategic Objective # 1: To leverage nutrition into agriculture sector policy, strategies, programs and work plans at all level

The current agricultural policy and most of the ministries' strategies and programs do not explicitly aim to improve the nutritional status of communities and households. Therefore incorporation of nutrition objectives into the agricultural policy, strategies, programs and investment documents is the first step in mainstreaming nutrition into agriculture sector and to ensure agricultural interventions are done with due consideration and with nutrition lens.

Result 1.1 Integrated nutrition into agriculture sector policy, strategies, program and work plans at all level

**Initiatives 1.1.1** Mainstream nutrition interventions into the agriculture policies, strategies program and investments

- 1. Review and revise existing agricultural policy/strategy and program documents to incorporate nutrition
- 2. Conduct advocacy and sensitization on revised policies and strategies at all level
- 3. Build implementation capacity of decision makers in the agriculture sector
- 4. Monitor the implementation of agricultural policies and strategies

Strategic Objective # 2: To establish/strengthen institutional and organizational structure and capacity responsible for implementing nutrition sensitive agriculture

MoANR has established a Food and Nutrition Case Team at federal level while MoLF has to establish it yet. Affiliates of the agriculture sector 2 are also expected to establish similar structures and staffing to integrate nutrition into their respective programming and annual work plans. Considering the magnitude of the work within the agriculture sector, appropriate and capacitated structures should be designed at all levels (Federal to kebele level).

Besides, there has to be clear roles and responsibilities including accountability system and capacity at all level. As evidence based approaches is the best customized way of dealing with issues in developing countries, planning, implementation and monitoring systems for nutrition has to be well organized and for this reason a well-structured nutrition system in the agricultural sector is crucial. Therefore, there is a need to strengthen the existing nutrition case team at federal level and establish nutrition structures at decentralized levels in the agriculture sector. In addition, it is also critical to establish nutrition information system and integrated into the existing agriculture information system. This will assist in monitoring the implementation of activities; evaluate the contribution of the agriculture sector to NNP II; and to build the capacity of human resource. More importantly financial and logistical inputs from federal level to kebele level should be leveraged to support established structures to implement nutrition sensitive interventions.

While strengthening structures within the ministries, human resource that comes out of learning institutions, should be built as a matter of priority, especially the agriculture training institutions should be well trained and equipped to support the implementation of NSA. It is, therefore, a key task to review and improve existing systems to meet with current demands of addressing nutrition issues. This strategic objective therefore deals with addressing structure issues, developing the right human resource needed to improve food and nutrition security at household level

Result 2.1: Established/strengthened food and nutrition structure within MoANR and MoLF and its affiliates at all level

**Initiatives 2.1.1** Establish and/or strengthened food and nutrition structure at national, regional, zonal, woreda and kebele level.

<sup>2</sup> Ministry of Agriculture & Natural Resources, Ministry of Livestock & Fisheries, Ministry of Forestry & Environmental Protection and their respective affiliates

#### Core Activities

- 1. Conduct assessment on organizational structure and human resource and capacity needs
- 2. Establish/strengthen food and nutrition structure with in the agriculture sector at all level
- 3. Establish/strengthen food and nutrition structure and supplies/equipment at Farmers Training Center

#### Result 2.2: Built capacity of implementers on nutrition sensitive agriculture at all level

**Initiatives 2.2.1.** Capacitate the agriculture sector to implement nutrition sensitive agriculture

#### Core Activities

- 1. Conduct capacity needs assessment to determine the existing gaps
- 2. Develop standard and harmonized training materials and tools in NSA for agriculture sector at all levels
- 3. Prepare nutrition sensitive agriculture implementation guideline to facilitate smooth implementation of the nutrition sensitive agriculture strategy
- 4. Develop SBCC strategy for nutrition sensitive agriculture programming
- 5. Develop standard operational manual for demonstration at FTCs
- 6. Revise and update these working documents on regular basis
- 7. Establish system for monitoring and evaluation of capacity related interventions

## Result 2.3: Revised curriculum of learning institutions and ATVET with nutrition sensitive agriculture competencies.

**Initiatives: 2.3.1.** Incorporate nutrition sensitive agriculture core competencies into curriculum of ATVET

#### **Core Activities**

- 1. Develop/ review nutrition sensitive agriculture core competencies
- 2. Incorporate identified core competencies into the curriculum
- 3. Review and update the course contents
- 4. Provide the necessary teaching aids for the course
- 5. Capacitate lecturers of ATVETs on nutrition sensitive agriculture
- 6. Support institutions to conduct operational research on nutrition sensitive agriculture

**Initiative 2.3.2** Support education sector to incorporate nutrition sensitive agriculture core competencies into curriculum of learning institutions

- 1. Dialogue and advocate to include nutrition education into curriculum of learning institutions
- 2. Assess, identify and provide nutrition issues to be incorporated
- 3. Provide technical support to learning institutions in nutrition sensitive agriculture

Strategic Objective # 3 : Increase year-round availability, access and consumption of diverse, safe and nutritious foods

Ethiopians, particularly rural households, use cereals as staple diets which are usually low in both macro and micronutrients and also low in dietary diversity. There is very low production and consumption of fruits, vegetables, and animal source foods among the farming community. The production of diversified foods and consumption of nutritious foods among the farming community is constrained by lack of knowledge on safe food groups and dietary diversity strategies; very limited access to farm land, agricultural inputs and relevant technologies, irrigation schemes, income, markets, sociocultural factors.

#### Result 3.1. Increased production of diversified and nutrient dense foods

## **Initiative 3.1.1. Increase Production of fruit and vegetable** *Core Activities*

- 1. Promote the production of improved fruit and vegetable at household, community and in schools using SBCC materials and tools
- 2. Support the establishment of fruit and vegetable nursery and demonstration sites at FTCs and model farmers

## Initiative 3.1.2. Increase production of staple crops and pulses Core Activity

- 1. Promote production of improved varieties of nutrient dense pulses and cereals
- 2. Promote intercropping and mixed farming technologies and practices
- 3. Promote production of bio fortified crops [e.g. High Iron Beans, quality protein maize (QPM), orange fleshed sweet potato (QFSP) etc.] using SBCC materials and tools

#### **Initiative 3.1.3. Increase production of animal source foods**

#### Core Activities

- 1. Promote rearing of improved breeds of dairy cattle, small ruminants, fish and bees
- 2. Provide extension services to improve the production of meat, milk & milk products, egg, fish and honey
- 3. Support the establishment of milk collection and processing centers,
- 4. Promote confined/caged poultry production systems
- 5. Promote beekeeping and small ruminants by women and other vulnerable groups
- 6. Improve farmers' access to fodders and improved animal varieties

#### Initiative 3.1.4. Reduced post-harvest loss and improved food safety

- 1. Identify key behavior challenges on harvesting, handling and storage of foods of animal and plant sources
- 2. Identify key messages and disseminate to households and communities using SBCC materials and tools on food safety and post-harvest technologies and practices
- 3. Ensure the safety of foods from plant and animal sources by raising awareness and training of households/communities and service providers to ensure safety of foods
- **4.** Provide extension services on harvesting, threshing and storage of agricultural produce
- 5. Raise awareness and train communities and service providers on food handling, storage, processing and consumption of safe and nutrition dense foods

#### **Initiative 3.1.5 Increased capacity of farmer training centers**

#### **Core Activities**

- 1. Establish nutrition demonstration corner at FTCs
- 2. Establish/strengthen FTCs to promote diversified food crop production (agronomic practices) with due emphasis to female farmers
- 3. Strengthen FTCs to promote livestock husbandry and fishery
- 4. Strengthen DA's capacity to train model farmers (male /female) on NSA including organizing farmer field days
- 5. Develop and disseminate training materials for FTC on NSA mainstreaming
- 6. Organize cooking demonstration in FTCs, schools and public gatherings for both men and women
- 7. Strengthen FTC to promote and demonstrate technologies (irrigation, post-harvest, food processing, female friendly etc...) for year-round availability and access to nutritious foods

## Initiatives 3.1.6. Support Agricultural research institutions to promote nutrition sensitive agriculture

- 1. Support research centers in training and provision of vital equipment to build their capacity
- 2. Identify, test and disseminate improved variety of crops and animals including indigenous foods
- 3. Identify and scale up selected best practices on preservation, storage and /processing of fruit and vegetable and animal products at household and community levels
- 4. Support agriculture research institutions to conduct operational research works on improved and nutrition dense varieties e.g. bio-fortification
- 5. Promote women's labor and time saving technologies eg. energy saving stoves
- 6. Disseminate nutrition sensitive agricultural research findings
- 7. Establish/strengthen Academic Center of Excellence in nutrition sensitive agriculture

#### Initiative 3.1.7. Improve natural resource base to improve food availability

- 1. Increase access to small scale irrigation for home gardens
- 2. Protect and promote natural resource through activities like terracing, mulching, establishment of tree and fruit nurseries etc.
- 3. Identify and promote production of locally available underutilized nutrient dense foods, including proper management of wild fruits
- 4. Promote fodder production on soil and water conservations structures.
- 5. Promote zero grazing, cut and carry practices and protection of pasture land.
- 6. Afforestation, area closure, bee keeping, multi-purpose tree species planting etc.

## Initiative 3.1.8. Engage cooperatives and private sector to promote nutrition sensitive interventions

#### Core Activities

- 1. Provide farmers' access to livestock and crop inputs (seed, recommended fertilizer, etc)
- 2. Support cooperatives and private sector to take up and multiply improved varieties plants and animals from research centers
- 3. Support /establish agro business centers
- 4. Support the establishment of milk collection and marketing centers
- 5. Facilitate market linkage for animal and plant source foods
- 6. Create and enabling environment to facilitate cooperatives and private sectors' capacity to engage in storage, processing and transportation of foods
- 7. Promote the production and marketing of fortified flours through farmers' cooperatives and private sectors

## Result 3.2. Increased consumption of safe, diverse and nutrient dense foods at household levels

**Initiative 3.2.1.** Increase consumption of safe, diverse and nutrient dense foods at household levels with particular attention to women and children using evidence based SBCC materials and tools and appropriate channels.

#### **Core Activities**

- 1. Identify key consumption behavior challenges
- 2. Develop and disseminate SBCC materials to address key gaps
- 3. Promote consumption of nutrient dense foods from animal and plant sources
- 4. Promote the consumption of bio and commercially fortified crops (High Iron Beans, quality protein maize (QPM), orange fleshed sweet potato (OFSP) etc.
- 5. Demonstrate safe food preparation programs for communities at FTC's in collaboration with health extension workers
- 6. Promote increase in consumption of meat, milk, milk products, egg and fish
- 1. Promote small scale technologies for processing of perishable foods
- 2. Support preparation and consumption of complementary food for children under two using locally available resources

Strategic Objective # 4: Enhance resilience of vulnerable communities and households prone to climate change and moisture stress

The Ethiopian agriculture is mainly dependent on rain fed agriculture with little attention to the livestock sector which makes the country highly susceptible to climate change. This has affected chronic and transitory food and has created nutrition insecurity in the moisture stress areas of the country. Thus, concerted efforts need to be exerted to build the resilience of drought prone communities and vulnerable population groups to anticipate, cope with and recover from stress and shocks. The government has a clear Climate Resilient Green Economy policy, Climate Smart Agriculture strategy, and Disaster Risk Management Policy to mitigate the impact of climate change on food and nutrition security at national and household level. The agriculture sector will

continue to implement the Disaster Risk Management and Climate Smart Agriculture with quality and at scale, giving attention to improving nutrition and food security for vulnerable rural and urban households.

## Result 4.1 Strengthened resilience of food insecure and vulnerable households and communities by incorporating nutrition sensitive agriculture interventions and practices into the resource transfer programs/projects

**Initiatives 4.1.1.** Mainstream nutrition sensitive agricultural interventions and practices into resource transfer programs

#### Core Activities

- 1. Provide support on the use soft conditionality to households with children under two years, pregnant & lactating mothers, people living with HIV and people with disabilities
- 2. Provide extension services on off and on-farm activities
- 3. Promote the use of dry land farming and animal husbandry practices through moisture harvesting technologies, introduction of early maturing and drought tolerant crops and animals varieties
- 4. Promote the production and consumption of locally available nutrient dense foods
- 5. Support in collection & dissemination of early warning data from and to households and communities for early action and response of any potential hazard/disaster

**Initiatives 4.1.2.** Integrate nutrition issues in to the households and communities coping mechanisms

#### Core Activities

- 1. Conduct assessment and analysis on the existing coping strategies of the community
- 2. Promote and support the use of sustainable and nutrition-sensitive copping strategies among the households and communities.

#### Strategic Objective # 5: Ensure women's empowerment and gender equality

Gender is the cause and consequence of hunger and malnutrition and also associated with higher levels of acute and chronic under-nutrition. Women engage in a wide range on and off-farm activities and have been victims of some harmful traditional practices which influence household food distribution specifically affecting women access to adequate food with in the household. In the Ethiopian context, men decide on issues that will positively or negatively affect women's decision making ability on resources, expenditure of income and consumption.

Improvements in gender equality can significantly reduce child malnutrition rates (World Bank 2013). This has been evidenced by success in improved diet or nutritional status as a result of women's active involvement and critical role in projects (Herforth et al 2012). It is vital for women to be at the center of nutrition related interventions both in the rural and urban settings. Women in low-income households are typically fully occupied in a wide array of activities

including feeding and care giving to children, the sick, and the old; collecting water and fuel; preparing food; and performing household chores.

## Result 5.1 Empowered women and enhanced their role in nutrition sensitive agriculture Initiative 5.1.1 Increased access to resources and inputs for women

#### Core Activities

- 1. Promote and support women's involvement in on/off-farm income generating activities
- 2. Provide agriculture extension services and inputs for women (for both female heads and married women)
- 3. Increase female membership and leadership in cooperatives and farmers' groups
- 4. Organizing women farmers' groups in dairy, poultry and vegetable production and other income generating activities and facilitate market access
- 5. Strengthen awareness of female farmers on nutrition sensitive production & consumption

#### Initiative 5.1.2 Promote labor and energy saving technologies to reduce women's work load

#### Core Activities

- 1. Identify, test and demonstrate labor and time saving technologies.
- 2. Avail labor & time saving technologies at FTC's

#### Initiative 5.1.3 Promote gender sensitivity in nutrition sensitive agriculture at all levels

#### Core Activities

- 1. Develop and disseminate tools to assess women involvement and benefits from nutrition sensitive agriculture interventions.
- 2. Monitor and analyze women's empowerment and benefits from NSA interventions

#### Initiative 5.1.4 Address socio-cultural issue

#### **Core Activities**

- 1. Promote active male involvement in feeding and caring practices
- 2. Develop and disseminate SBCC material and tools to address socio cultural barriers to women's nutrition

Strategic Objective # 6: To establish/strengthen strong multi-sectorial coordination within the agriculture sectors and with signatories of NNP II and other development partners

Building strong linkages with different directorate / sections of the agriculture sector ministries and with other sector organizations would contribute in achieving the desired results (objectives and goal) reflected in the NNP. It improves exchange of information, quality of plans,

intervention and evaluation of outcomes. The nutrition sensitive agriculture strategic plan will be implemented with strong commitment and involvement of relevant stake holders from agriculture sectors. The agriculture sector ministries will exert efforts to closely working together at directorates/sectors office levels and also establish appropriate linkages with NNP II implementing partners working both in nutrition specific and nutrition sensitive interventions.

#### Result 6.1 Strengthened intra and inter-sectorial nutrition coordination at all level

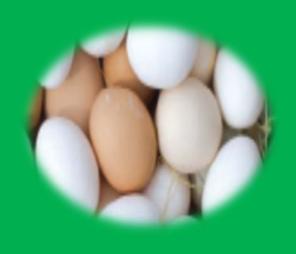
## **Initiative 6.1.1.** Ensure coordination for NSA with in the agriculture sectors *Core Activities*

- 1. Set up a strong nutrition entity in MoANR and MoLF and its affiliated institutions
- 2. Organize regular planning and review meetings with appropriate directorates and sectors of the agriculture ministries
- 3. Conduct regular monitoring and supportive supervision on nutrition sensitive agriculture interventions
- 4. Host bi-annual/annual learning events to exchange information, promising practices and knowledge products on NSA
- 5. Establish and strengthen nutrition linkages in various agriculture programs/projects (PSNP IV, AGP 2, drought resilience sustainable livelihood program etc.).
- 6. Establish and strengthen the linkage between ATVET and FTCs to use FTCs for practical demonstration sites for students learning & in-service trainings

## Initiative 6.1.2 Strengthen linkages with NNP actors and other relevant development partners

- 1. Establish nutrition sensitive agriculture forum/taskforce to establish/ strengthen strong linkage with Donors, UN, NGOs, academia, researchers and private sectors to jointly plan, implement and monitor NSA interventions
- Capacitate the agriculture sector to actively engaged in co-chairing the nutrition coordination body of the NNP to improve implementation and adequately address NSA issues
- 3. Actively engaged in strengthening the national and regional nutrition coordination bodies and technical committees.
- 4. Strengthen the institutional linkages at grassroots level, e.g. between health extension workers and development agents for improved nutrition practices at household level.





# MONITORING AND EVALUATION



#### **CHAPTER FOUR: MONITORING AND EVALUATION**

Monitoring and evaluation of nutrition sensitive agriculture interventions will be part of the agriculture sector's framework and is going to be integrated in to the performance evaluation accountability and reporting framework of the agriculture sector. A reporting structure will be established which includes key nutrition sensitive agriculture indicators to monitor progress against target.

The monitoring and evaluation aspect of the nutrition sensitive agriculture strategy include:-

- 1. Provide the necessary support to establishing comprehensive monitoring and implementation systems, tools and capacities for nutrition within the agriculture sector.
- 2. Review the implementation of NNP II on regular basis (e.g. bi-annually and annually).
- 3. Ensure the incorporation of appropriate nutrition sensitive agriculture indicators and targets in the agriculture sectors' work plans at federal, regional, zonal, woreda and kebele level
- 4. Develop key nutrition sensitive agriculture indicators and integrate into the agriculture sector's joint supportive supervision checklists to monitor progress
- 5. Integrate the recording, analysis and reporting of nutrition data, if possible, disaggregated by sex and age category within the existing agriculture sector information systems.
- 6. Build the capacity of staff for the agriculture sector in data management at all levels to collect and analyze data to see progress, trends and changes over time and use the information for planning and decision making.
- 7. Conduct or engaged in a number of surveys/ assessments, research and evaluation to measure progress and document knowledge products for designing and implementation of nutrition sensitive agriculture



#### Nutrition Sensitive Agriculture Five Years Strategic Plan

Result	Initiatives	Indicator				Tai	get	Means of	Responsible	
			line	2016	2017	2018	2019	2020	Verification	Unit
Strategic objective 1: To leverage nutrition into agriculture sector policy/strategies and program documents at all level										
into agriculture sector	Initiatives 1.1.1 Mainstream nutrition interventions into the agriculture policies, strategies, programs & investment and action plans	# of policy, strategy, and programs documents with incorporated nutrition objectives, indicators and targets	NA	-	3	<u>5</u>	-	-	Review of documents	Food and nutrition case team (MoANR), MoLF & MoFEP
Strategic objective 2:	To establish/strengther	n institutional and organization	al struc	cture a	and cap	acity r	esponsil	ole for in	plementation o	f nutrition
sensitive agriculture										
Result 2.1: Established / strengthened food & nutrition structure within MoANR and MoLF and its affiliates at all level	Initiatives 2.1.1 Establish/ strengthened food & nutrition structure at national, regional, zonal, woreda & kebele level	# of agriculture sector ministries and institutions established/strengthen nutrition structures	1	-	3	8	-	-	Progress report Assessment report	Food and nutrition case team (MoANR), MoLF& MoFEP
<b>Result 2.2:</b> Built capacity of implementers on nutrition		# of capacity need assessment conducted	1	-	-	1	-	1	Progress report Assessment report	Food and nutrition case team
sensitive agriculture at all level	<b>Initiatives 2.2.1</b> Capacitate the	# of standard training material on NSA developed & disseminated	NA	-	1	1	-	-		(MoANR), MoLF& MoFEP
	agriculture sector to implement nutrition sensitive agriculture	# ToT facilitated based on standard training packages	NA	-	4	4	8	8		
	_	# of NSA implementation manual developed & disseminated	NA	-	-	1	1	-		
		# of SBCC strategy for NSA developed and disseminated	NA	-	1	-	-	-		
Result 2.3: Revised curriculum of higher	Initiatives 2.3.1 Incorporate nutrition sensitive agriculture core competencies into	# number of core competencies developed/reviewed	NA	-	1	-	-	-	Review of documents	Food and nutrition case team
education institutions and ATVET with nutrition		# number of curricula incorporated nutrition core competencies	NA	-	1	-	-	-	Progress report Assessment report	(MoANR), MoLF& MoFEP
sensitive agriculture	curriculum of agriculture	# of teaching aids developed	NA	-	1	-	-	-		
competencies.	ATVET	# of trainings conducted for ATVET instructors	NA	-	1	-	1	-		

	<b>Initiative 2.3.2</b> Support education sector to develop and	# number of core competencies developed/reviewed	NA	-	1	-	-	-	Review of documents	Food and nutrition case team (MoANR),
	incorporate nutrition sensitive agriculture core competencies	# number of curricula incorporated nutrition core competencies	NA	-	1	-	-	-	Assessment report	MoLF& MoFEP
	into curriculum of learning institutions	# of teaching aids developed & disseminate	NA	-	1	-	-	-	•	
		# of trainings conducted for learning institutions	NA	-	1	-	1	-		
Strategic objective 3.	Increase year-round av	ailability, access, and consump	otion of d	livers	e, safe, a	and nutr	itious fo	ods		
<b>Result 3.1</b> . Increased production of diversified and		Thousands of tons of fruits and vegetables produced	3866.3	-	5000	5438	5915.3	5915	.3 Report from the ministry	Food and nutrition case team (MoANR)
nutrient dense foods	<b>Initiative 3.1.1</b> Increase	# of fruits and vegetable nurseries sites established	NA	-	11	14	17	20	Report from zonal capital	
	Production of fruit and vegetable	Proportion of HHs with backyard gardening	NA	-	25	30	35	40		
		Proportion of urban HH in zonal capitals with urban gardening	NA	-	10	15	20	25		
		Nutrient dense staple crops & pulses							Report from	Food and nutrition case
	Initiative 3.1.2 Increase production of staple crops and	produced in million quintals (15% of the total produce)	270.0	-	345.7	374.7	406.3	406.3	extension directorate	team (MoANR)
	pulses	# of bio-fortified crops promoted	2	-	5	5	8	10		
		Thousands of tons of meat produced	1,321	-	1,652	1,805	1,966	2,103	Report from extension directorate	Report from MoANR & MoLF
		Liter of milk in million	5,304	-	5,938	6,610	7,051	9,418		
		# of eggs in millions	163	-	1581	2382	3148	3938		
	<b>Initiative 3.1.3</b> Increase production of animal source	# of poultry reproduction centers established	NA	-	8	12	16	20		
	foods	Proportion of urban/rural HHs with caged poultry production	l NA	-	2	3	4	5		
		Proportion of woredas with at least one milk collection center	NA	-	2	3	4	5		
		Proportion of potential lakes with fish producing groups supported	NA	-	10	20	30	50		
		# of community ponds established	1500	-	1700	1800	1900	2000		

Initiative 3.1.4: Reduced	Type and number of SBCC materials on safety and post-harvest technology developed	NA	-	2	-	-	-	Report from cooperatives Report from	Food and nutrition case team (MoANR) MoLF
postharvest loss and improved food safety	# of awareness creation events on food safety conducted	NA	-	2	1	2	1	extension directorate	
	Types of postharvest handling and processing technologies introduced	NA	-	2	2	2	2		
	Proportion of FTCs with food and nutrition demonstration corner	NA	-	20	30	40	50	Report from extension	Food and nutrition case team (MoANR)
<b>Initiative 3.1.5</b> Increased capacity of farmer training	# of standardized training materials and job aids developed	NA	-	-	2	-	-	directorate	MoLF
centers	Proportion of FTC supported with appropriate technologies for demonstration	NA	-	15	20	25	30		
Initiatives 3.1.6 Support	Proportion of research institutions supported to establish/strengthen to promote NSA	NA	-	20	30	40	50	Progress report	Food and nutrition case team (MoANR), MoLF& MoFEP
	s # of nutrient dense improved varieties developed and disseminated	2	-	5	5	8	10		
agriculture	# of appropriate post-harvest handling & processing technologies identified and disseminated	NA	-	2	3	4	5		
Initiative 3.1.7 Improve natural	Proportion of farmers using small scale irrigation	2	-	5	10	15	20	Report from extension	Food and nutrition case team (MoANR)
resource base to improve food availability	Hectare of land covered with multipurpose trees (fruits) through water shed mgmt.	NA	-	15	20	25	30	directorate	
Initiative 3.1.8 Engage Cooperatives and private sector to promote nutrition sensitive interventions	Proportion of cooperatives/ private sectors engaged in supply of nutrition sensitive inputs and food products	NA	-	10	15	20	25	Report from extension directorate	Food and nutrition case team (MoANR) MoLF
Initiative 3.2.1 Increase consumption of safe, diverse and	Percentage of women consuming diversified meal (> 4 food groups)	20.3	-	25	27	29	31	Survey Report	Food and nutrition case team (MoANR)
nutrient dense foods at household	Minimum dietary diversity score of children under two years	9.8	-	21.8	27.8	33.8	40	Report	MoLF

consumption of safe, diverse and nutrient dense foods at household levels

Result 3.2 Increased

Strategic objective 4.	Enhance resilience of v	rulnerable community and house	eholds	prone to	clim	ate chan	nge and n	noistu	re stress.	
Result 4.1 Strengthened resilience of food insecure and vulnerable households and communities by incorporating key NSA messages and	nutrition sensitive agricultural	Type and number of NSA key messages and practices integrated in to resource transfer programs	NA	-	5	5	-	-	Progress report Assessment report	Food and nutrition case team (MoANR), MoLF& MoFEP
	interventions and practices into resource transfer programs	# of NSA indicators integrated into the early warning information system	NA	-	2	-	-	-		
practices into the resource transfer programs/projects	<b>Initiatives 4.1.2</b> Integrate nutrition issues in to the	# of assessments conducted on existing coping strategies	NA	-	-	1	-	-	Assessment report	Food and nutrition case team (MoANR),
	households and communities coping mechanisms	# of sustainable coping strategies documented and disseminated	NA	-	-	1	-	1	Review of documented strategies	MoLF& MoFEP
Strategic Objective 5	Increased women's em	powerment and gender equality	y							
Result 5.1 Empowered womer and enhanced their role in nutrition sensitive agriculture	Initiative 5.1.1 Increased access to resources and inputs for women	Proportion of women engaged in income generating activities	NA	-	10	15	20	25	extension	Food and nutrition case team (MoANR), MoLF& MoFEP
	<b>Initiative 5.1.2</b> Promote labor and energy saving technologies	Types of energy and time saving technologies promoted	NA	-	4	6	8	10	Report from extension	Food and nutrition case team(MoANR)
	to reduce women's work load	Proportion of women with access to labor and time saving technologies	NA	-	15	20	30	40	directorate	
		Number of assessments conducted to ensure gender sensitivity of NSA interventions	NA	-	1	-	1	-	Report from extension directorate	Food and nutrition case team(MoANR), MoLF& MoFEP
	<b>Initiative 5.1.4</b> Address sociocultural issue	Number of awareness creation campaigns conducted on socio cultural issues	NA	-	1	1	1	1	Report from extension directorate	Food and nutrition case team (MoANR), MoLF& MoFEP
Strategic objective 6: development partners		strong multi-sectorial coordina	ition w	ithin the	agric	ulture s	ector an	d with	signatories o	of NNP II & other
Result 6.1 Strengthen intra and inter sectoral nutrition coordination at all level	<b>Initiative 6.1.1</b> Ensure coordination for nutrition sensitive agriculture with in the agriculture sector	# of knowledge sharing events organized	NA	-	2	2	4	4	Report from extension directorate	Food and nutrition case team (MoANR), MoLF& MoFEP
	Initiative 6.1.2 Strengthen	# of NBC meetings attended	NA	-	2	2	2	2	Report from	Food and nutrition case
	linkages with NNP actors and	# NTC meetings attended	NA	-	4	4	4	4	extension	team (MoANR)
	other relevant national	# of NSA working groups established	2	-	2	-	-	-	directorate	
	development partners	# of NSA task force established	NA	-	1	-	-	-		

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