



UNIVERSITÄT HOHENHEIM



ROLE OF POLICY AND NUTRITION EDUCATION IN MITIGATION OF UNDER-NUTRITION IN ETHIOPIA

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PRESENTATION OUTLINE



- Short Country Profile
- Introduction
- Child Nutrition in Ethiopia
- Policy Issues
- Nutrition Education
 - International Collaborations
 - Research Projects
- Concluding Remarks



14.12.15

Name: Federal Democratic Republic of Ethiopia

Location: Horn of Africa

Size : 1,127,127 sq km

Population: 94.1 million

Growth rate:
2013/14 10.4 %

Agriculture: 40% GDP
60% exports
80% employment



Capital: Addis Ababa

Official Language: Amharic

Medium of Instruction in Universities: English

Currency: Birr
(1 Euro ~ 23.27 Birr)

INTRODUCTION

- Globally 2 billion people suffer from food insecurity, vitamin and mineral deficiencies compromising their health status
- Malnutrition cause the death of 2.6 million children globally
 - 159 million children are stunted
 - 50 million children are wasted
 - 99 million children are under weight
 - More than 90% of these cases were in Asia or Africa
- Undernutrition accounts for 11 percent of the global burden of disease and is considered the number one risk to health worldwide.

Source: (UNCIEF-WHO-WB: 2012, 2015, GAIN:2015)

INTRODUCTION

- Severe food and nutrition insecurity will continue to affect the lives of millions due to the growing complexity of global challenges such as:-
 - Population growth
 - High and volatile food prices
 - Poor infrastructure coverage in rural areas
 - Urbanization
 - Land grabbing
 - Poverty
 - The new competition between food and fuel
 - Climate change

CHILD NUTRITION IN ETHIOPIA

- Ethiopia is one of the developing countries where under-nutrition is recognized as a main public health problem
- 28 % of child mortality associated with undernutrition
- Child mortality associated with undernutrition has reduced Ethiopia's work force by 8%
- 16% all repetitions in primary school is associated with stunting
- 44 % of the health cost associated with under nutrition occur before the child turns 1 years old

Source: (COE, 2013)

CHILD NUTRITION IN ETHIOPIA

- Infant mortality rate is 59/1000 live births (39% decline from 2000)
- Neonatal mortality is 37/1000 live births (24% decline from 2000)
- Under-five mortality rate is 88/1000 live births (47% decline from 2000)
- 67% deaths in children <5 years occur before child's first birthday
- Micronutrient deficiency (Hidden Hunger)
 - Vitamin A deficiency in children =37.7%
 - Anaemia in children = 44%
- Currently, Ethiopia is suffering from draught that affect the lives of 15 Million people of which 6 millions are children

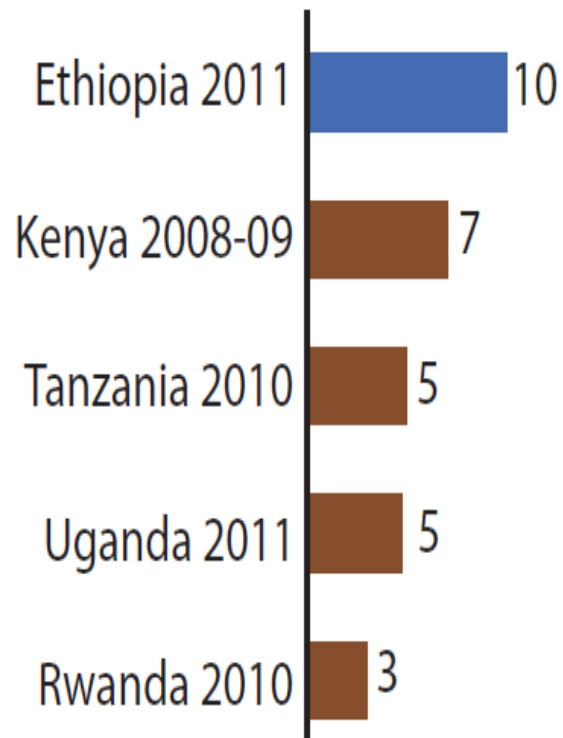
UNDER NUTRITION IN ETHIOPIA

- Major causes of malnutrition in Ethiopia are preventable. These are:
 - Poor maternal nutrition
 - Poor infant and young child feeding
 - Childhood illness
 - Poor WASH practices
 - Inadequate health care practices
 - Limited availability and access to diversified foods
 - Shortage of qualified manpower in nutrition discipline
- In addition, inadequate maternal economic access and control are the basic causes

UNDER NUTRITION IN ETHIOPIA

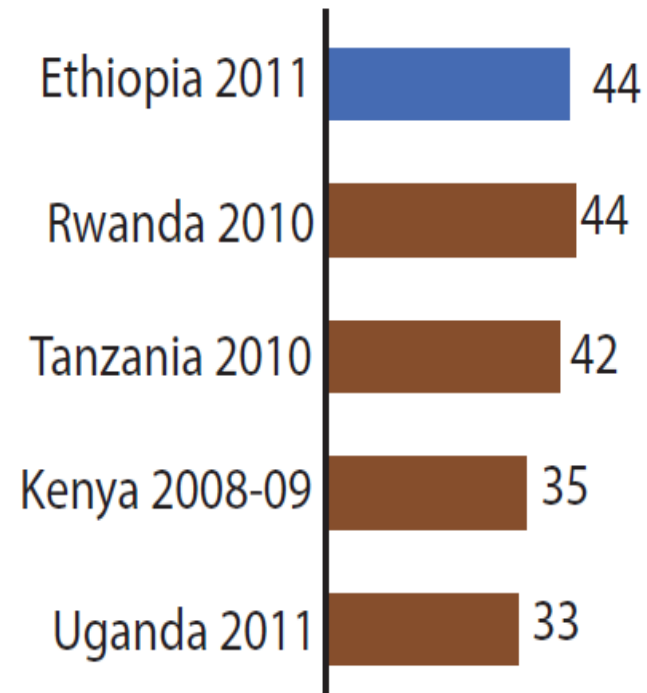
Wasting in East Africa

Percent of children under age 5 who are wasted



Stunting in East Africa

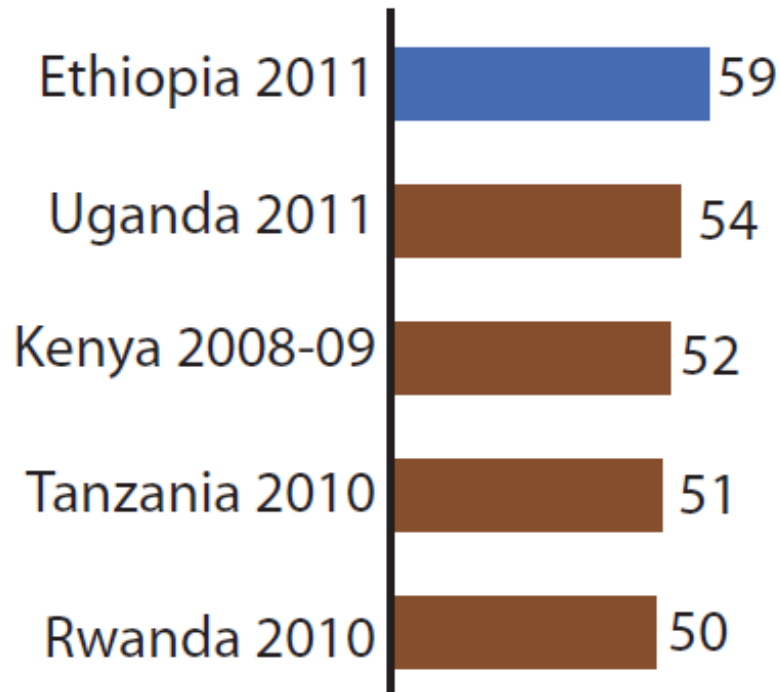
Percent of children under age 5 who are stunted



UNDER NUTRITION IN ETHIOPIA

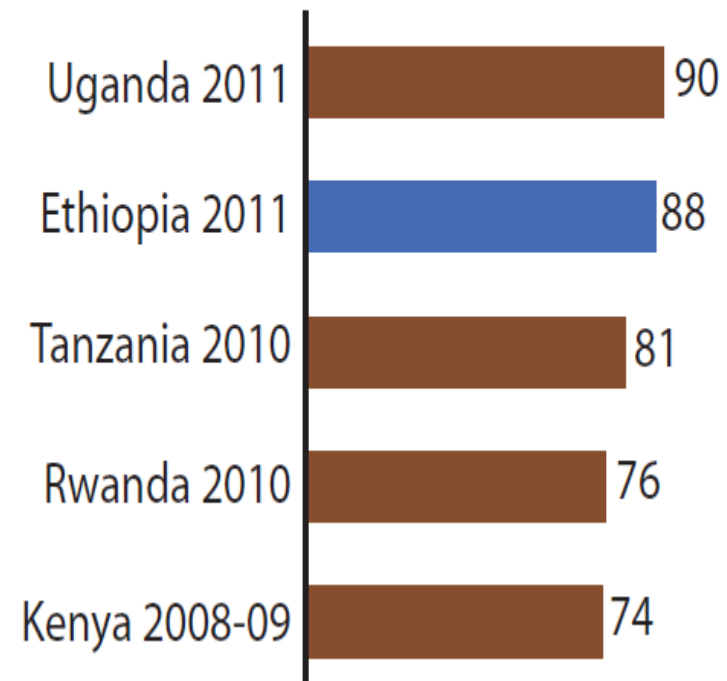
Infant Mortality in East Africa

*Deaths per 1,000 live births
for the 5 years before the survey*

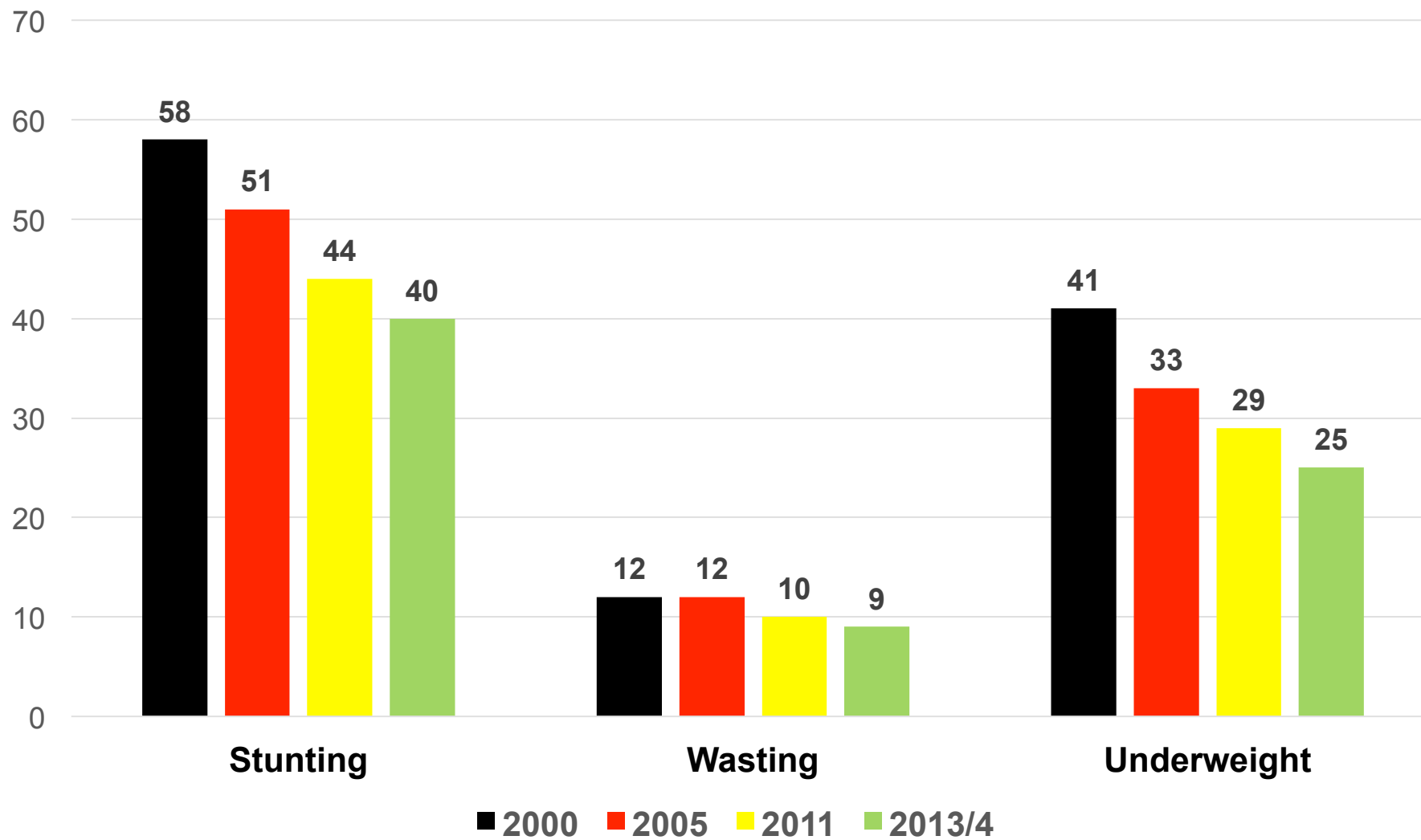


Under-Five Mortality in East Africa

*Deaths per 1,000 live births
for the 5 years before the survey*



TRENDS IN NUTRITIONAL STATUS OF CHILDREN UNDER 5 IN ETHIOPIA (EDHS 2000 – 2014)



TOTAL COSTS OF CHILD UNDER-NUTRITION TO ETHIOPIA (COST OF HUNGER STUDY REPORT 2013)

	Episodes	Cost in ETB	Percentage of GDP
Health Costs			
LBW and Underweight	3,139,682	1,256	
Increased Morbidity	1,270,996	566	
Total for Health	4,410,678	1,822	0.54%
Education Cost			
Increased Repetition - Primary	152,488	93	
Increased Repetition - Secondary	-----	-----	
Total for Education	152,488	93	0.03%
Productivity Costs			
Lower Productivity - Non-Manual Activities	1,938,632	625	
Lower Productivity - Manual Activities	24,273,274	12,857	
Lower Productivity - Mortality	3,230,218	40,070	
Total for Productivity	29,442,124	53,552	15.97%
TOTAL COSTS FOR ETHIOPIA in 2009		55,468	16.54%

**ETB 55.5 Billion/
USD 4.7 B**

POLICY ISSUES: NUTRITION SPECIFIC AND SENSITIVE POLICIES, STRATEGIES AND PROGRAMMES

- The Growth and Transformation Plan
- NNP implementing sectors Development / Transformation Plan
- National Nutrition Strategy (NNS)
- National Nutrition Programme (NNP)
- Food Security Strategy, Agriculture Growth Programme and Productive Safety net Programme
- School Health and Nutrition Strategy
- National School Feeding / Meal Programme
- WASH Strategy
- Social Protection Policy

POLICY ISSUE: NATIONAL NUTRITION PROGRAM



Started in 2008 and revised in 2013

Chaired by First Lady

Signed by nine ministers for multi-sector coordination and implementation

1. Ministry of Education (MOE)
2. Ministry of Health (MOH)
3. Ministry of Agriculture (MOA)
4. Ministry of Trade (MOT)
5. Ministry of Industry (MOI)
6. Ministry of Labour and Social Affairs (MOLSA)
7. Ministry of Water and Energy (MOWE)
8. Ministry of Women, Youth and Children Affairs (MOWYCA)
9. Ministry of Finance and Economic Development (MOFED)



**Government of the Federal Democratic Republic of Ethiopia
National Nutrition Programme
2008-2015**


**National Nutrition Programme Implementing Sectors
Declaration**

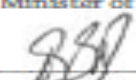
We the undersigned, representing the Government of the Federal Democratic Republic of Ethiopia, National Nutrition Coordination Body, fully recognize each Ministry's mandate and pledge our commitment to support the achievement of the targets laid out in this revised National Nutrition Program document and will strive towards equitable and sustainable multisectoral actions towards the realization of optimal nutritional status for all Ethiopian citizens.


We, as a government, found the high malnutrition rates reported in EDHS and various surveys over the years completely unacceptable. We shall work through enhanced strategic partnerships to prioritize the elimination of malnutrition from Ethiopia as one of the most viable strategies for achieving the Growth and Transformation Plan and the Millennium Development Goals. Attainment of positive nutrition outcomes will be achieved through evidence based programming and responsiveness and the promotion of accountability towards these results by each Ministry here undersigned.



H.E. Dr. Kebede Worku
State Minister of Health



H.E. Ato Fuad Ibrahim
State Minister of Education


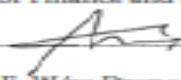
H.E. Ato Tadese Hatle
State Minister of Industry


H.E. Ato Kebede Gerba
State Minister of Water and Energy


H.E. Ato Alt Straj
State Minister of Trade


H.E. Ato Mitiku Kassa
State Minister of Agriculture


H.E. Ato Remedan Ashenafi
State Minister of Labour and Social Affairs


H.E. Ato Alemayehu Gujo
State Minister of Finance and Economic Development


H.E. W/ro Pireneshe Mekuria
State Minister of Women, Children and Youth Affairs


POLICY ...



OBJECTIVES OF THE NATIONAL NUTRITION PROGRAM

1. Improve the nutritional status of women (15–49 years) and adolescents (10–19 years)
2. Improve the nutritional status of infants, young children and children under five
3. Improve the delivery of nutrition services for communicable and non-communicable/lifestyle related diseases (all age groups)
4. Strengthen implementation of nutrition sensitive interventions across sectors
5. Improve multi-sectoral coordination and capacity to ensure NNP implementation

POLICY ...



- The strategy has outline how nutrition could be mainstreamed in the:
 - Agricultural, education, health ,water, trade, & industrial sectors.
 - It also envisaged that the program must address equity by dealing with gender sensitive nutritional programs
- The agricultural sector is given an additional mandate to increase the quality (micro-nutrient content) of foods

POLICY ...



- Increasing the consumption of a diversified diet
 - Improving access to and utilization of animal source foods such as dairy, poultry, meat and fish
 - Establishing nutrition unit within MoA to mainstream nutrition within agricultural interventions
 - This nutrition unit works on strengthening Link between Health Extension Worker and Development Agent

- This shows that there exist a better commitment to increase the linkage between agriculture and nutrition

POLICY ...



- Universal Salt Iodization established when mandatory legislation was passed in February 2011.
- Country wide awareness creation on Family Planning and Child Nutrition
- The Ethiopian government is working to make food fortification mandatory for wheat flour and oil
- New National guidelines for the prevention and control of micronutrient deficiencies in Ethiopia in pipe line

NUTRITION EDUCATION ...



- Hawassa University has began nutrition training in Ethiopia in 2007
- School of Nutrition, Food Science and Technology is one of schools in College of Agriculture
- The school runs bachelor and masters program in:
 - Human Nutrition (HuNu)
 - Food Science and Postharvest Technology (FSPT)
- The under graduate and graduate program in **Applied Human Nutrition** was started in 2009 and 2007, respectively

NUTRITION EDUCATION...



- Currently, the school has 4 PhD holders
- 18 lecturers, 6 Technical Assistants, 3 Laboratory Attendants
- Guest lecturers coming
 - In-country: Four
 - Visiting professors from foreign universities: Five (Oklohama State University, University of Saskatchewan, Ottago University)
- Staff on study leave :
 - Abroad : 6 PhD candidates and 2 MSc
 - In country: 3 PhD candidate and 4 MSc

NUTRITION EDUCATION...



- Seven Ethiopian Universities are offering Nutritional Science both in undergraduate and graduate level:-
 - Jimma University (JU)
 - Mekelle University (MU)
 - Gondar University (GU)
 - Bahirdar University (BU)
 - Addis Ababa University (AAU)
 - Addis Ababa Science and Technology University (AASTU)
 - Wolaita Sodo University (WSU)

NUTRITION EDUCATION...



- The school has finalized to launch two programs this year:-
 - PhD in Human Nutrition
 - MSc in Dietetics
- New program in pipe-line to be launched
 - PhD in Food Science
- Hawassa University was chosen as an Academic Center of Excellence for Nutrition
- The Center of Excellence is the first in Ethiopia and second in Africa

NUTRITION EDUCATION...



GOALS OF THE CENTER

- To be center of excellence for education, research and community service in the field of Human Nutrition
- To produce competent professionals in the field of Human Nutrition
- To be a center for training and consultancy in the field of Human Nutrition
- To disseminate scientific research findings to the community through extension services
- To provide laboratory services and collaborate with other related or sister institutions

NUTRITION EDUCATION...



- The center serve as a hub for a high standard teaching-learning, research, consultancy and community services
- Consultancy services in areas of:
 - Food and Nutrition Security
 - Maternal, Infant and Child Nutrition
 - Program Monitoring and Evaluation
 - Post-Harvest Technology
 - Food Product Development and Value Addition
- Laboratory services
 - Proximate Composition Analysis
 - Dietary Evaluation
 - Micronutrient Analysis

NUTRITION EDUCATION...

- Agriculture-Nutrition linkage to promote pulse production
- Training on nutritional importance of pulses crop for local woman
- Nutrition education and training on adoption of new and enhanced varieties of pulses



NUTRITION EDUCATION...

- Participatory preparation of complementary foods to the local mothers
- Infant and young child feeding practices to mothers
- Empowering mothers on their role of ensuring household food and nutrition security



NUTRITION EDUCATION...

- Integration of orange fleshed sweet potato (OFSP) in school feeding program
- Orange fleshed sweet potato food recipe preparation and nutritional:-
 - ENJA LE ENJA
 - MUMS FOR MUMS
- OFSP used to mitigate Vitamin A Deficiency (VAD)



NUTRITION EDUCATION...

- University Industry Linkages (UIL): Agro- processing of food products
Ex. Guts Agro. Industry
- e-Learning on Food and Nutrition Security
- Organization of review workshop/forum on nutritional science



NUTRITION EDUCATION...

- Training on nutritional assesment and enriching Ethiopian staple food for health professional
- Healthy diet, child nutrition eduaction to the community through University FM Radio
- Provision of community service through nutrition clubs



NUTRITION EDUCATION...

- Delivering short term trainings in nutritional subject
- Training of primary school teacher on the importance of nutrition and hygiene
- Hands on training on Small Scale Mushroom production and Small Scale Poultry Production



RESEARCH PROJECTS

- Some of research nutrition sensitive projects which the center runs:-
 - Quality Protein Maize project
 - Bio-innovative project
 - eLEFANS project
 - ENGINE project
 - SMIL project
 - IDRC project
 - Orange Fleshed Sweet Potato project (OFSP) Project
 - Hawassa University funded Projects
 - World Bank Project
 - Etc

INTERNATIONAL COLLABORATIONS



- The center has collaboration with different international universities:-
 - Nairobi University
 - University of Saskatchewan
 - Ulm University
 - Oklahoma State University
 - Otago University
 - University of Wisconsin
 - Edgerton University
 - Jomo Kenyatta University
 - Makerare University
 - Nebraska University

CONCLUDING REMARK



- Strong commitment and follow up the policy designer and decision makers are vital for the implementation of all strategies and policy
- Strengthening the multi-sectoral coordination among the different sectors and collaborating partner is critical to solve the problem under nutrition sustainably
- Capacity building in Human Nutrition discipline who implement the policies and strategies at different level is important

CONCLUDING REMARK

- Reduction of child under-nutrition can impact positively educational investments, reduce the burden of the health system and increase labour productivity, and at large the human capital
- Much more effort is required to address and mitigate undernutrition problem through nutrition sensitive agriculture and industry linkage
- Finally, *“lets us invest for eradicating undernutrition instead of paying for paying for the consequence of under-nutrition”* (Francisco Espejo)



THANK YOU