

The Nexus Between Nutrition, Food Safety and Food Security



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The Nexus between Nutrition/Food Safety and Food Security

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Definition of food security:

Food security exists when all people at all times have economic, physical and social access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”

Concept of Food Security

believed to stand on four pillars:

1. availability,
2. access,
3. use and utilization, and
4. stability.

'All people' signifies the human right to food.

'Right to food' does not imply 'the right to be fed' (except for vulnerable community members)

'At all times' signifies sustainable and stable security

Sufficient food is a function of availability

Safe and nutritious food signify use and utilization.

Dietary needs imply that diet should supply the required nutrients.

Food preferences imply that one eats what one prefers to eat –

- usually influenced by culture (taboos)

When standing on the feet:
access issues get prominence.

When it stands on its head:
'leading an active and healthy life
becomes prominent.

Why shift to Food and Nutrition Security?

- policy focus

Definition of food and nutrition security

Nutrition security exists when all people at all times **consume** food of sufficient quantity and quality in terms of diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care.”

Food safety deals with:

1. practices to avoid or eliminate mainly biological contamination (bacterial, viral, protozoan and helminth parasites)

Food safety deals with:

2. Implementation of safety measures during

- food handling (preparation and storage),
- personal hygiene,
- water and sanitation.

Knowledge in basic microbial safety issues are important

1. Sources of contaminating microorganism.
2. Contamination and cross-contamination
3. Bacterial multiplication (exponential growth)
4. Factors that affect microbial growth (nutrients, acidity, available moisture, etc)

Important at every component of the food chain (farm to fork)

Focus at consumer level

Two categories of food security indicators:

1. based on the concept of food consumption adequacy

a. Prevalence of Undernourishment

b. Food Consumption Score

c. Household Dietary Diversity Score etc.

2. characterized by experiences and behavioral responses

a. Household Food Security Survey Module

b. Household Food Insecurity Access Scale

c. Household Hunger Scale

d. Food Insecurity Experience Scale

I thank Dr. Aregash for giving me the opportunity to do this presentation

I thank you all for your attention



Ethiopian Food and Drug Authority

Food safety regulation in EFDA

Wendafrash Abera

Food safety and Nutrition TA @ EFDA

Introduction

- “**food safety**” means the **conditions and practices** that preserved **food** is fit for **human consumption** during manufacturing, handling, storage, or transport; **Proc.1112/2019 Art.2(4)**
- “**food safety**” refers to all those hazardous **weather chronic or acute** that may make food **injurious to health** of the consumer and *it is not negotiable*



Objectives of food safety

Eat it **safe**

Everyone has a right to safe,
healthy and nutritious food



- Guarantee a high level of *protection of human life and health* and the protection of consumers' interests.
- Guarantee *fair practices in food trade*,
- Facilitate *global trade of safe and wholesome food* by taking into account international standards and agreements,

Food safety a shared responsibility



Food safety is a shared responsibility of everybody involved with food,

Food safety cannot be achieved by government regulations and inspection, it can only be achieved by careful handling of foods at all points in the food chain, from production to consumption.

Current food safety regulation in EFDA

The Authority is responsible for ensuring the safety of food produced locally and imported

Major three principles that the authority implement for the ensuring of food safety

- Risk based inspection
- Preventive based
- Trust based inspection



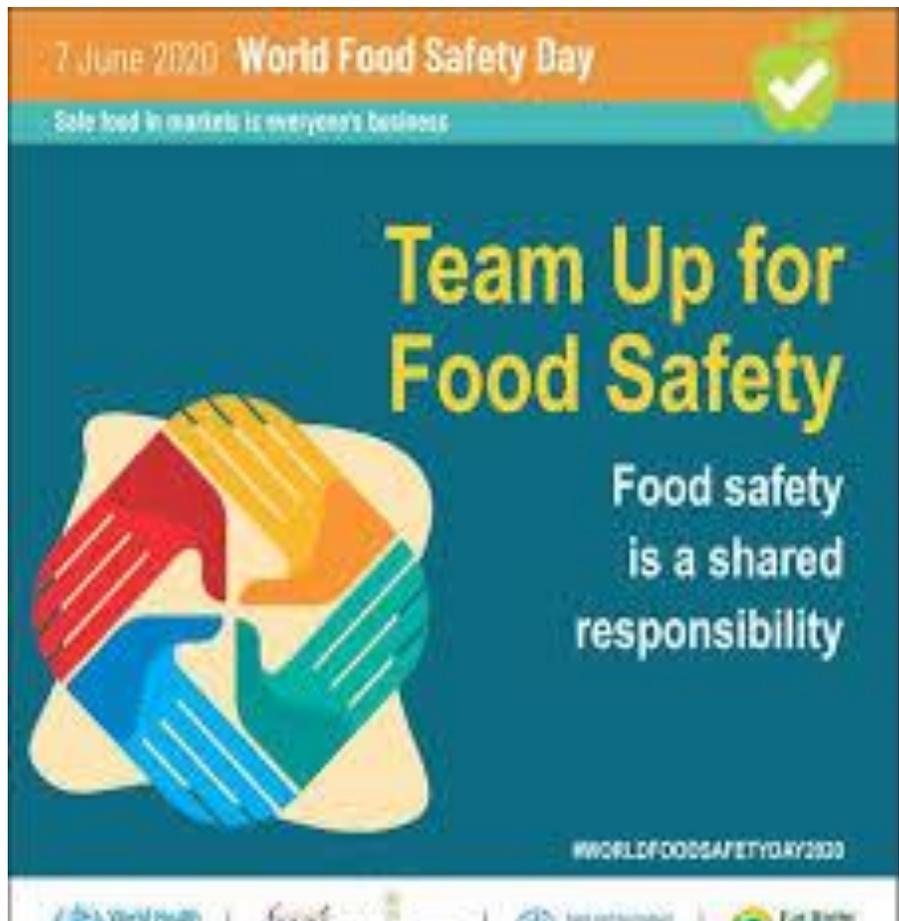
Current way of regulation

- Ways to ensure food safety control by the authority and regions
 - Food registration
 - Food facility institutions inspection (Manufacturer, Importer, exporter and wholesaler)
 - Food quality control laboratory
 - Import control at the port of entry
 - Post marketing surveillance and Market survey.
- Regional Health regulatory bodies
 - Different organizational structure



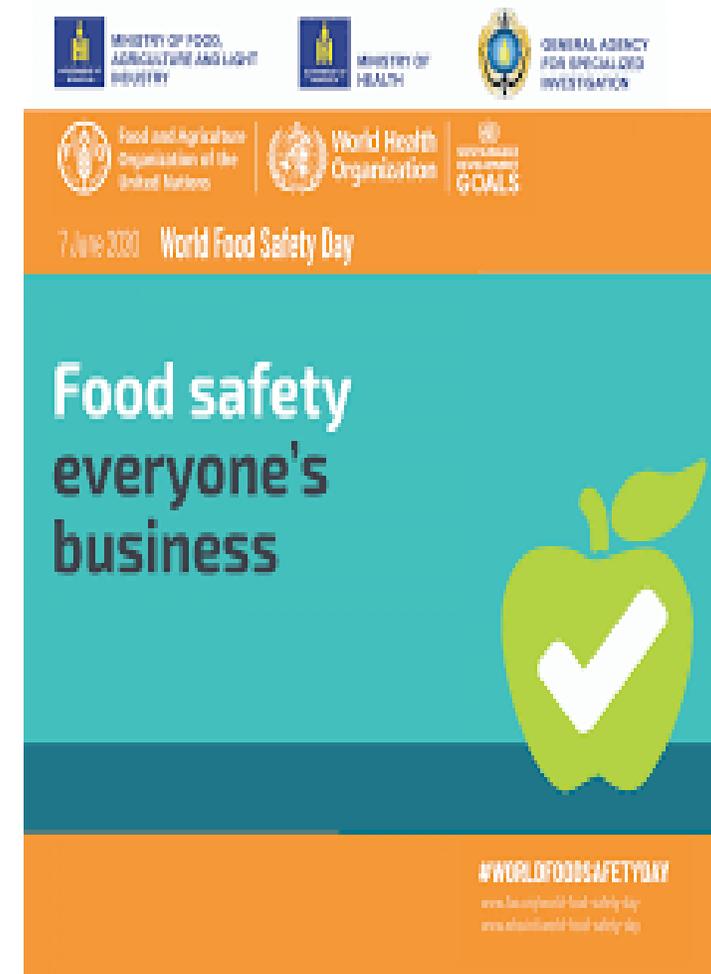
Resources

- Food and nutrition **policy**
- Food and nutrition **strategy**
- **Proclamation 1112/2019,**
- Regulation
- Directives
- Guidelines



Achievements

- Coordination and collaboration with regional Health regulatory bodies
- Issuance of **COC** for food institutions since 2010
- Food registration started in 2016 and **registered more than 5,500 food products;**
- Inspection coverage more than **75%;**
- Intelligent lead market survey
- Post market surveillance



Current and Future challenges related to food safety nationally

Modern agricultural and animal farms

- Food of animal origin
- Food of plant origin

Industrialization

Standard of living

Growing Food borne diseases out breaks

Globalization

Climate change

Bioterrorism

Illegal food trade and contraband

Adulteration



Way forward

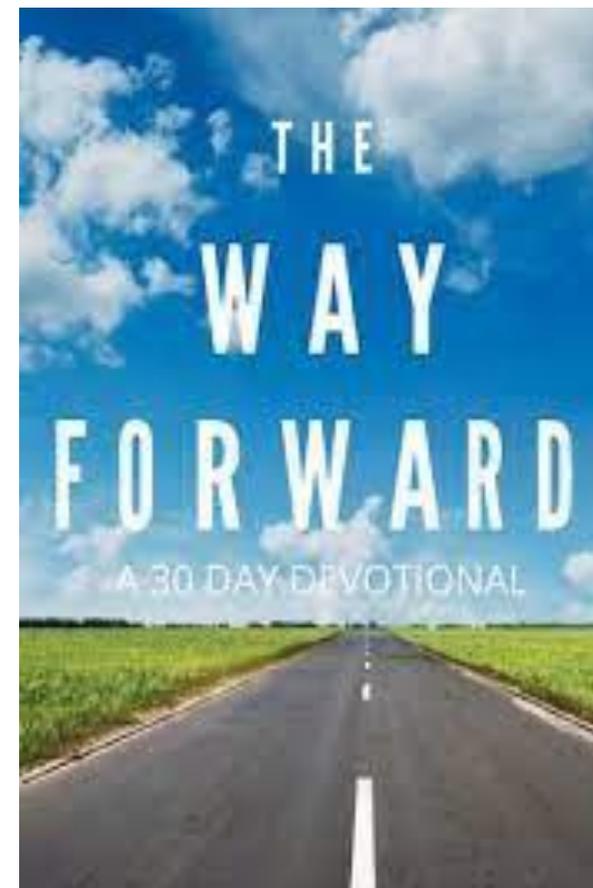
Sectoral collaboration and public participation

Strengthen food safety regulation system

SAFE FOOD IN THE MARKET

Expansion and Strengthen infrastructures

Working extensively with the public and the media



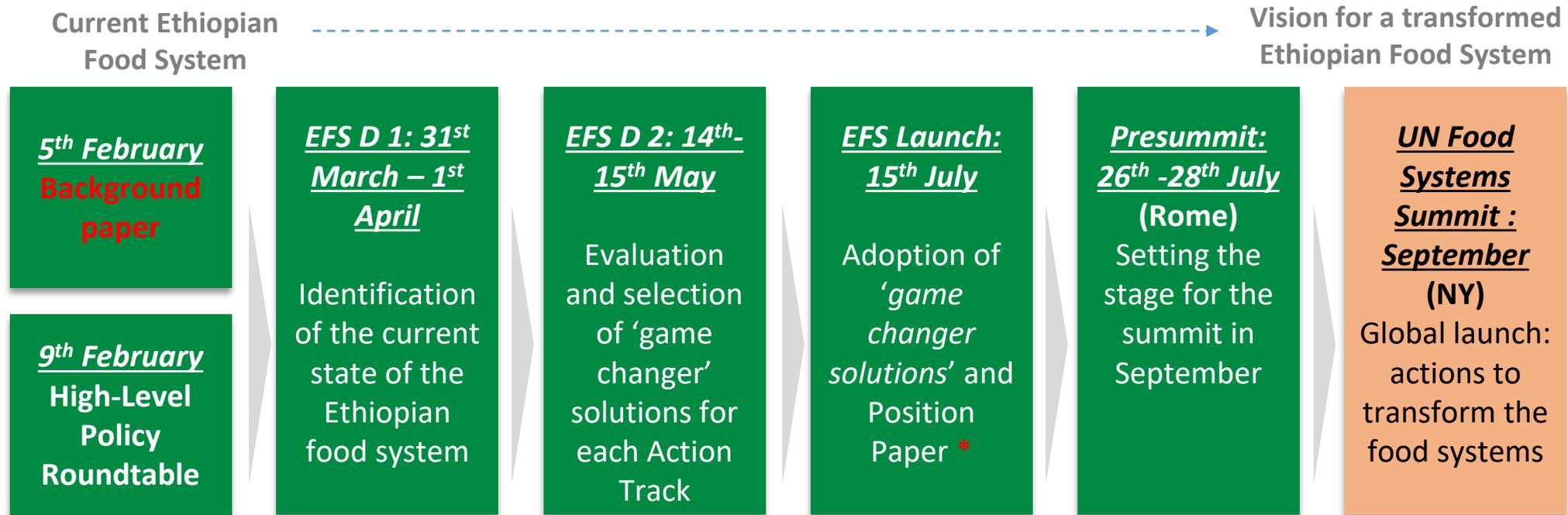


Ethiopian Food System(EFS): The Nexus Between Nutrition, Food Safety and Food Security

Co-Organized: NIPN, EPHI and IFPRI

October 2021, Addis Ababa

The EFS process is approaching the UN Food Systems Summit in New York in September 2021



- Completed to date*
- EFS transformation pathway Convened* by Minister Oumer Hussein and Co-Convened by Minister Dr. Lia Tadesse.
 - The Conveners were supported by technical Curators (Dr. Mandefro Nigussie and Dr. Dereje Duguma) and by a core national team consisting of senior professionals from MOA, MOH and ATA
 - The EFS process has brought together over 120 participants from more than 40 government departments, donors, multilateral organizations, NGOs, CSO & private sector

*** EFS Launch Side event – FNG Report launch**

Foodborne disease (FBD) due to poor food safety needs some attention:-

Diarrheal diseases represent **93% of the total cases of FBD**, **73% of the deaths** and 70% of the FBD DALY burden

(Havelaar et al., 2010)

A study focusing on **infants from 0 to 59 months** found that out of pocket **direct medical expenses for outpatient** treatment of diarrhea were **\$5**, mostly on medication

Severe diarrhea accounted for 9.1% of the diarrhea cases and the mean **in-patient cost for this was \$79** (mostly on medicines, supplies and bed-charge).

The mean associated direct non-medical costs (mainly transport costs) were **\$2 for outpatient care** and **\$20 for inpatient care**.

Animal source foods and vegetables, the most nutritious and recommended foods, are responsible for most of the FBD burden. The extensive FBD described is an important reason why transforming food systems must have a food safety perspective.

Based on the feedback obtained during the Pre-Summit, changes are proposed to some of the Cluster definitions

Ethiopian Food Systems game changing solution clusters:

Abc Changes highlighted

X Number of GCs per Cluster

Cluster 1: Nutrient dense food production; food safety , fortification and rural electrification and appropriate climate smart technologies*	4
Cluster 2: Supply and value chain development, national food based dietary guidelines , and nutrition literacy and awareness creation*	6
Cluster 3: Integrated policy-making, land reform, and improved government finance provision for agricultural (including crops, livestock, aquaculture, fisheries and forestry) and rural transformation	4
Cluster 4: Agricultural (including crops, livestock, aquaculture, fisheries and forestry) technologies, innovation and agricultural input supplies	2
Cluster 5 Access to markets, market Information, infrastructure and specialization	2
Cluster 6 Managing and Mainstreaming Risk and Protecting the Poor	4

* Currently being refined to better present nutrition and health

The EFS plan is built around 22 game changers (1/3)



Cluster 1: Nutrient dense food production; food safety, fortification and rural electrification & appropriate climate smart technologies

EFS GC 1: Strengthening the **national food safety** management and control system of Ethiopia

EFS GC 2: Support **diversified nutrient-dense foods production** by promoting smallholder, greenhouse and garden level production

EFS GC 3: Promote and enhance the production and consumption of **fortified nutrient dense** staple foods

EFS GC 4: Rural electrification to promote environmentally friendly and climate smart technologies



Cluster 2: Supply and value chain development, national food based dietary guidelines and nutrition literacy and awareness creation

EFS GC 5: Improve young children's, adolescents' and mothers' **nutrition and dietary diversity**

EFS GC 6: Strengthen **climate smart livestock** value chains

EFS GC 7: Promote innovations, government commitment and local ownership, as expressed in the **Seqota Declaration**

EFS GC 8: Strengthen innovative strategies/ mechanisms of **supply chain management** and handling systems

EFS GC 9: Sustained awareness creation and **food and nutrition literacy** to promote nutrient-dense and safe food through **women empowerment and leadership** in food systems

EFS GC 10: **National Food based Dietary Guidelines** to provide dietary recommendations for increased diet quality

The EFS plan is built around 22 game changers (3/3)



Cluster 5: Access to markets, market information, infrastructure and specialization

EFS GC 17: Upgrading and strengthening **national market information systems** and related digital approaches

EFS GC 18: Promote and facilitate the implementation of the **agricultural commercialization** for nutrient-dense commodities



Cluster 6: Managing and Mainstreaming Risk and Protecting the Poor

EFS GC 19: Modernize and upscale **indigenous food production** and processing including linkage with the school feeding program

EFS GC 20: Index based **crop and livestock insurance** as disaster risk mitigation measures

EFS GC 21: **Inclusive and sustainable social protection transfer** including the use of **digital fresh food vouchers**

EFS GC 22: **System for timely and effective shock response** including the **prevention and treatment of wasting and micronutrient deficiencies**

Partnership for positive food environment

Strengthening food safety requires efforts on various fronts:

- (i) Generate credible country-specific evidence on FBD and its impact in the country,
- (ii) Develop risk-based country-specific strategies to address food safety challenges,
- (iii) Support private and public food industry with training and technology,
- (iv) Promote a supportive policy environment that puts healthy foods and food safety at the forefront of food systems development.
- (v) Need for **One Health Approach**: plant, animal, human, ecosystems and environment, climate.



Thank you!

The Nexus Between Nutrition, Food Safety and Food Security



[NIPN: www.nipn.ephi.gov.et](http://www.nipn.ephi.gov.et)



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