



World Organisation  
for Animal Health



**26<sup>th</sup> Conference of the Regional Commission for Africa**

**4-7 February 2025 Addis Ababa, Ethiopia**

**26ème Conférence de la Commission Régionale Pour  
l'Afrique 4-7 février 2025, Addis-Abeba, Éthiopie**

**ANIMAL HEALTH FOR FOOD AND NUTRITIONAL  
SECURITY AND PUBLIC HEALTH IN AFRICA**

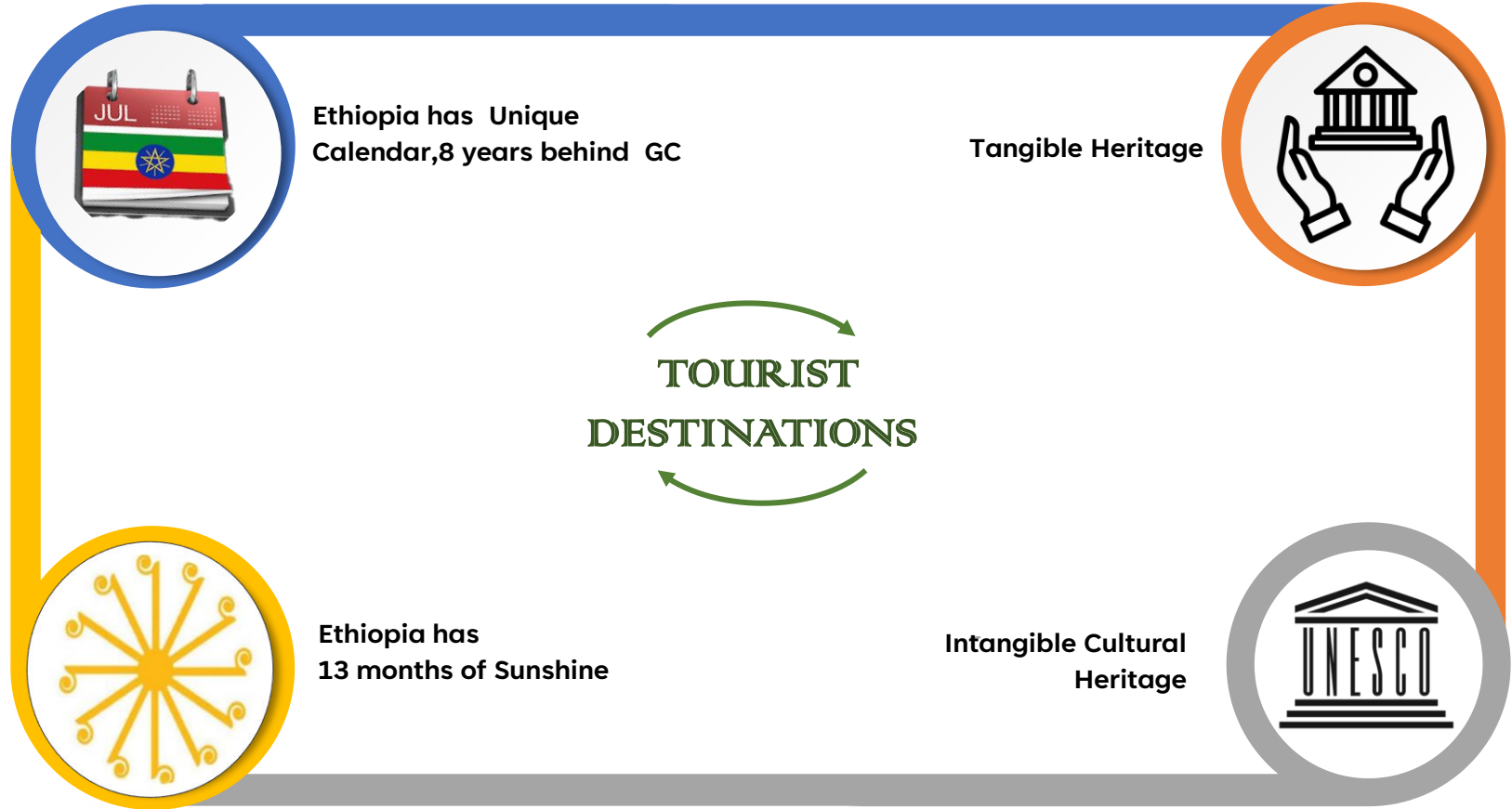
**Fikiru Regassa (PhD)  
State Minister, MoA**

## Outline

- 1 Ethiopia at Glance
- 2 Livestock Sector Investment Opportunities
- 3 Agriculture Sector Development Initiatives
- 4 Veterinary Services Delivery in Ethiopia
- 5 Control and Eradication of CBPP in Africa/Ethiopia
- 6 One Health
- 7 Food Safety
- 8 Conclusion

# ETHIOPIA AT A GLANCE

**ETHIOPIA BOASTS A RICH CULTURAL AND NATURAL HERITAGE, WITH SEVERAL SITES RECOGNIZED BY UNESCO AS BOTH TANGIBLE AND INTANGIBLE WORLD HERITAGE SITES**



Together these sites and traditions provide a profound glimpse into Ethiopia's past and present



**ETHIOPIA'S EXTRAORDINARY HISTORY, CULTURAL VALUES, AND DIVERSE GEOGRAPHY MAKE IT A UNIQUE COUNTRY  
IN THE WORLD, THE MOST REMARKABLE FEATURES**



**Aksum**

The ancient capital of the Aksumite Empire is known for its monumental obelisks,



**Rock-Hewn Churches  
of Lalibela**

These are 11 medieval churches constructed by King Lalibela in the 12th century and carved straight into the rock.



**Fasil Ghebbi, Gondar**

In the 17th and 18th centuries, the Ethiopian emperors used this fortress city as a political and ceremonial hub.



**Harar Jugol, the  
Fortified Historic Town**

This prominent archaeological site provides insight into early human evolution, including the discovery of Australopithecus fossils.

**ETHIOPIA BOASTS A RICH CULTURAL AND NATURAL HERITAGE, WITH SEVERAL SITES RECOGNIZED BY UNESCO AS BOTH TANGIBLE AND INTANGIBLE WORLD HERITAGE SITES.**



**Irreecha Festival**



**Fichee-Chambalaalla**



**Ethiopian Epiphany  
(Timkat)**



**Meskel Festival**

**SOME  
INTANGIBLE  
WORLD  
HERITAGES**

# LIVESTOCK SECTOR INVESTMENT OPPORTUNITIES



## Home Grown Economic Reform (HGER1&2)

ETHIOPIA'S SECTORAL REFORMS EMPHASIZE DIVERSIFYING ITS ECONOMIC BASE,  
PRIMARILY FOCUSING ON



Agriculture



Mining



Manufacturing



Tourism



ICT/Digital Economy

## IN ETHIOPIA'S HOMEGROWN ECONOMIC REFORM AGENDA (HGER) PRIMARILY FOCUSING ON



### Economic Growth

Agriculture remains a vital component of the Ethiopian economy

### GDP

Accounting for over 36% of the country's output



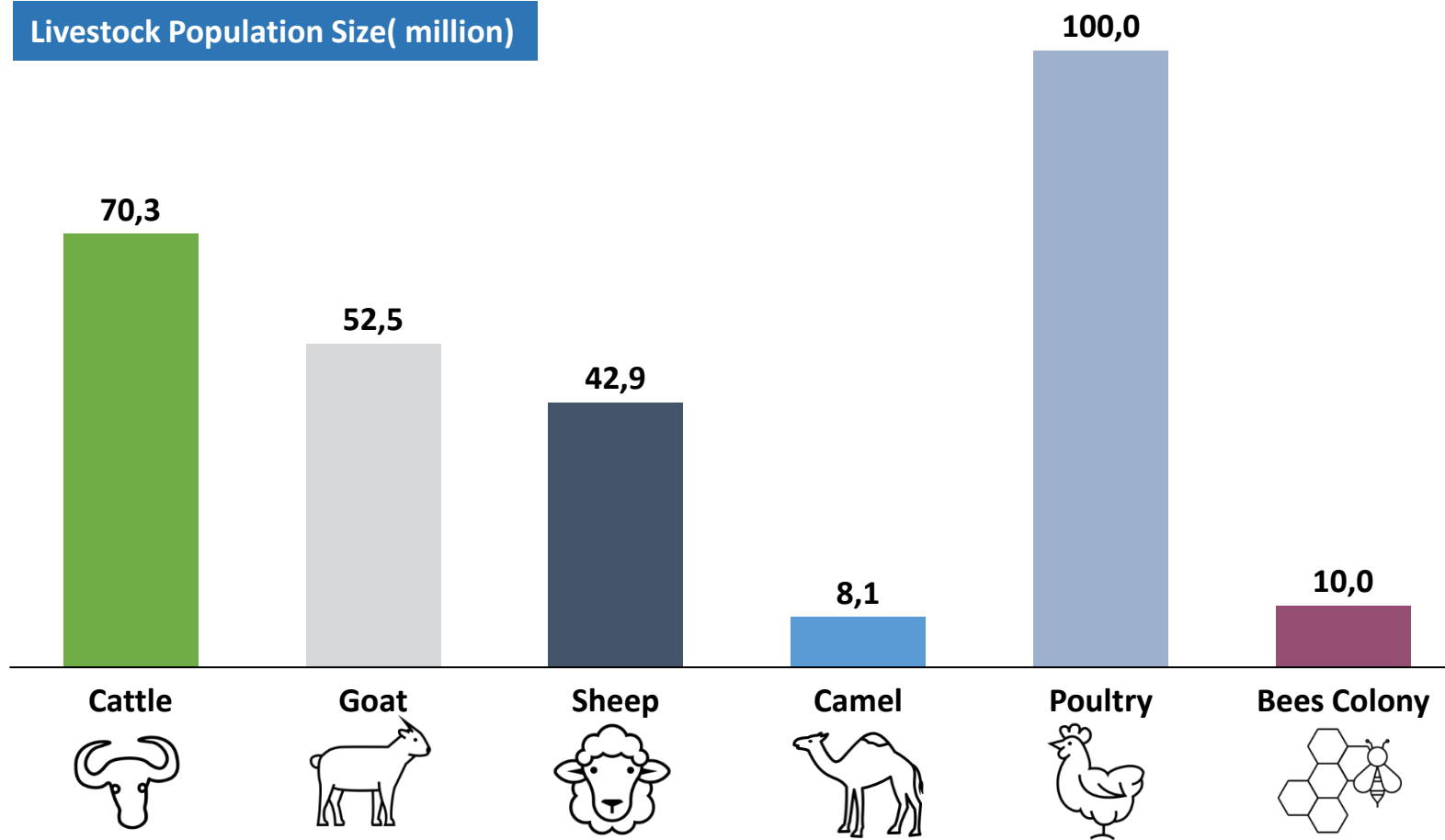
### Employment

Employing more than three-quarters of the population

**Agricultural Growth will Remain an Important Driver of Economic Growth and Poverty Reduction.**

## ETHIOPIA IS HOME TO THE LARGEST LIVESTOCK POPULATION IN AFRICA

### Livestock Population Size( million)



### Livestock is estimated to contribute

- ❑ 17%-19% to the national GDP and
- ❑ 45% to the agricultural GDP

### The Livestock Industry Face Productivity Challenges

- ❑ Limited adoption of modern technologies
- ❑ Climate related risks
- ❑ Inadequate value addition/processing
- ❑ Export infrastructures

## Agriculture and Rural Development Policy

Aims to Modernize the Agriculture Sector by

- Enhancing resource management,
- Increasing production and productivity, and
- Promoting sustainable practices

## Animal Health and Welfare Proclamation

- Strengthening disease surveillance system,
- Control and eradication of TADs
- Strengthen LITS
- Enhance Food Safety and
- Regulatory services

## TADs Prevention and Control Strategies

- Contagious Bovine Pleuropneumonia
- Foot and Mouth Disease
- Lumpy Skin Disease (LSD)
- (PPR)
- (CCPP)
- New Castle Disease

## Zoonosis Diseases Prevention and Control Strategies

- Rabies;
- Brucellosis;
- Anthrax.

## Dairy Development Strategies

- Aims to quadruple milk production by 2031
- Through targeted interventions that improve the productivity of dairy cows, camels, and goats

## Poultry Dev't Strategy

- Aims to increase productivity and the offtake rate

## Red Meat Dev't Strategy

Aims to increase productivity and the offtake rate

- To achieve a total red meat production of 1,759,000 metric tons by 2030.
- Raise domestic meat consumption from 7 to 10 kg per capita

## Apiculture Dev't Strategy

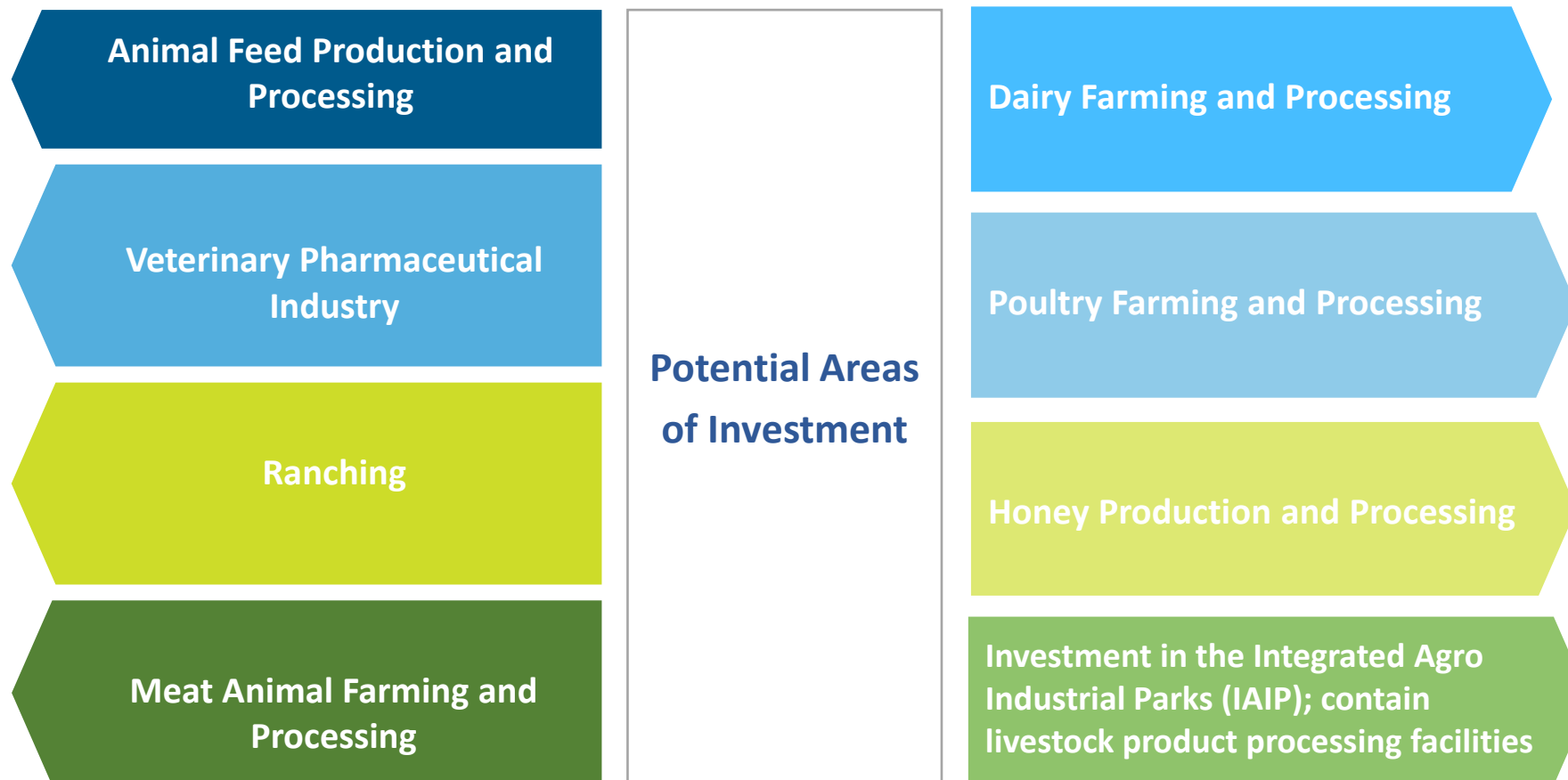
Aims to enhance the apiculture sector by

- Improving honey production,
- Ensuring sustainable beekeeping practices, and
- Boosting the income of smallholder beekeepers

Ethiopia is enacting policies to boost investment and transformation in livestock and fisheries.

# Enabling Livestock Policies and Strategies

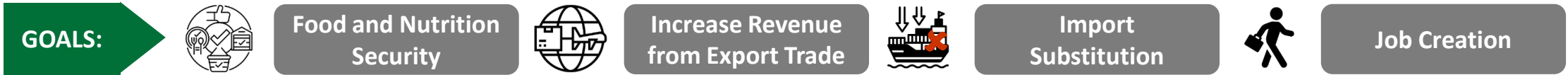
**THE LIVESTOCK INDUSTRY PROVIDES POTENTIAL INVESTMENT OPPORTUNITIES, PARTICULARLY IN AREAS SUCH AS**



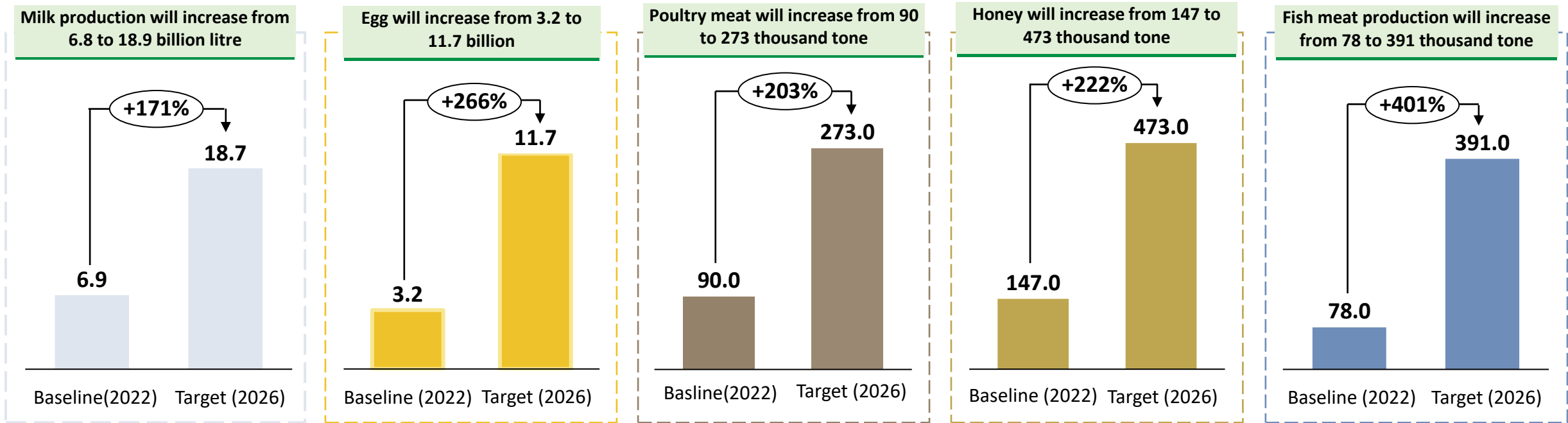
**These opportunities align with national initiatives to commercialize agriculture and the agricultural industry.**

# AGRICULTURE SECTOR DEVELOPMENT INITIATIVES IN ETHIOPIA

**YELEMAT TIRUFAT (OR BOUNTY OF BASKET) IS A 4-YEAR(2022-2026) INITIATIVE OF THE PRIME MINISTER OF THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA, H.E. DR. ABIY AHMED**



**Specific Objectives: Increase product from Milk, Poultry, Honey and Fishery**



**BOUNTY OF BASKET) IS A 4-YEAR(2022-2026) INITIATIVE OF THE PRIME MINISTER OF THE F. D. R. OF ETHIOPIA, H.E. DR. ABIY AHMED**



**Major Areas of Intervention**

Dairy	Poultry	Honey	Fishery
<ul style="list-style-type: none"> <li>• Breed improvement</li> <li>• Improving feed supply</li> <li>• <b>Animal health services</b></li> <li>• Improving husbandry practices</li> <li>• Camel feeding and husbandry practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved poultry breeds, feeding,</li> <li>• <b>Poultry health, Biosecurity</b></li> <li>• Expanding of hatcheries</li> <li>• Youth and women engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Improve the productivity of Bee hives for smallholder producers and commercial bee production operations.</li> <li>• Improving the productivity of modern and transitional bee hives</li> </ul>	<ul style="list-style-type: none"> <li>• Application of a modern production system;</li> <li>• Increasing the number of fishing gears;</li> <li>• Boost the number of fry/fingerlings;</li> <li>• Strengthening aquaculture</li> </ul>



## INITIATIVES OF THE PRIME MINISTER OF THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA, H.E. DR. ABIY AHMED

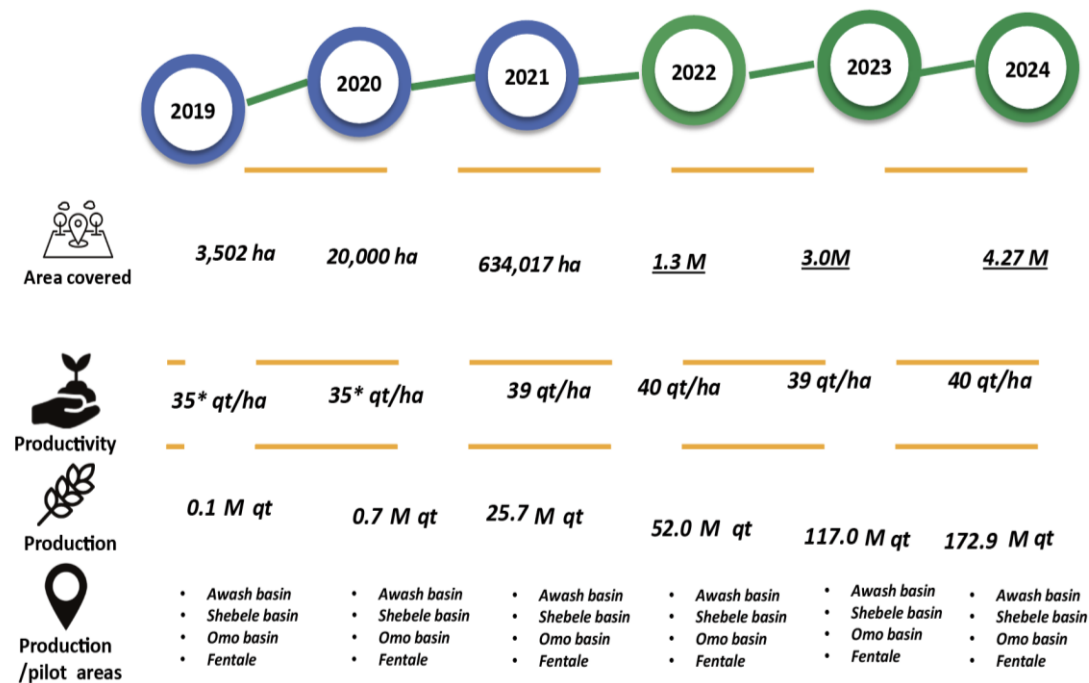
### Green Legacy

Green Legacy Seedling Program (General Information from 2019 through 2024)

	Planned	Achived
2019	4.0 billion seedlings	4.7 billion seedlings
2020	5.0 billion seedlings	5.9 billion seedlings
2021	6.0 billion seedlings	6.8 billion seedlings
2022	6.0 billion seedlings	7.2 billion seedlings
2023	6.5 billion seedlings	7.5 billion seedlings
2024	7.5 billion seedlings	7.52 billion seedlings

### Wheat Initiative

Irrigated Wheat Progress in Ethiopia from 2019 through 2024



# VETERINARY SERVICE DELIVERY IN ETHIOPIA

**THE VETERINARY SERVICE IN ETHIOPIA COMPRISES PUBLIC AND PRIVATE VETERINARY SERVICES; THE TWO TIERS OF GOVERNMENT PROVIDE THE OFFICIAL VETERINARY SERVICES: THE FEDERAL AND REGIONAL VETERINARY SERVICES.**

Modern veterinary service was introduced by a  
French Veterinary mission in 1908



## THE VETERINARY SERVICE IN ETHIOPIA

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School of Animal Health Assistants  
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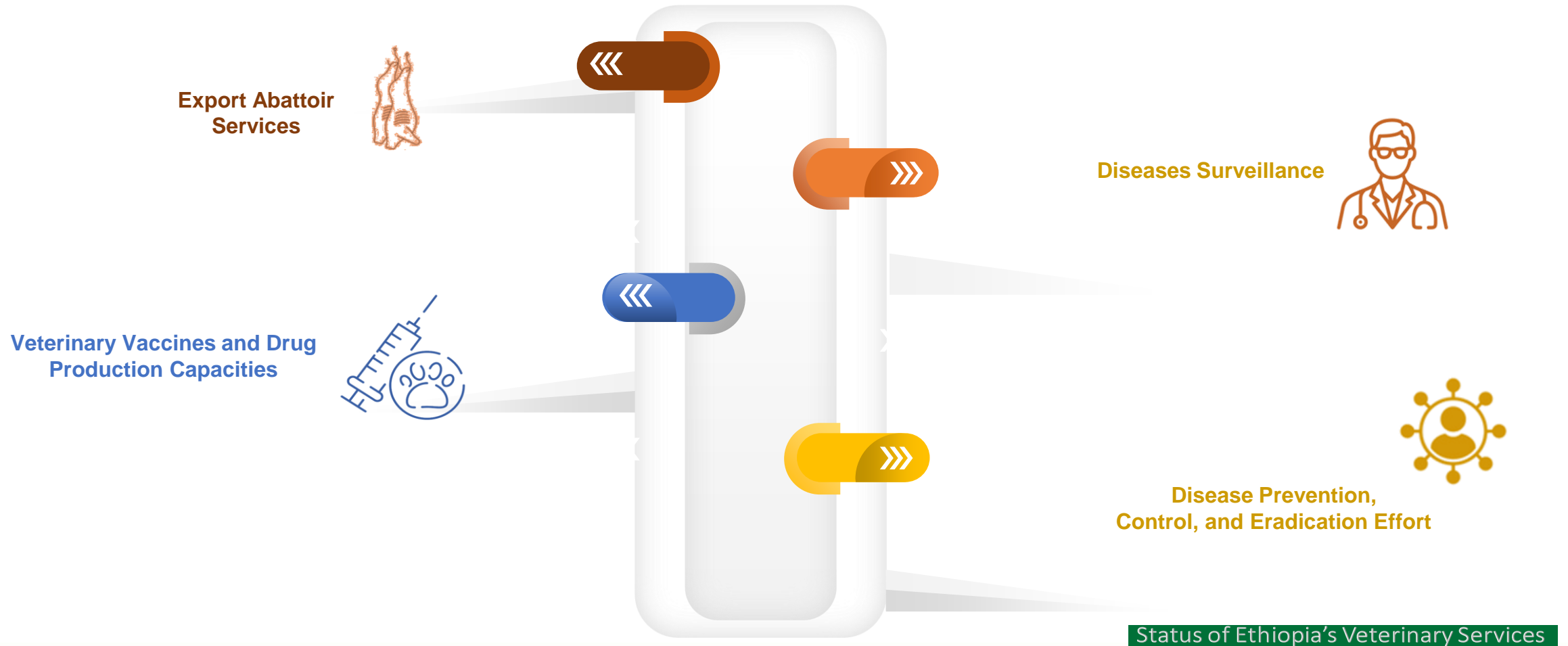
Establishment of the first Veterinary Faculty  
at AAU in 1976 and more than 20 veterinary  
teaching institutes after 2003

The first veterinary laboratory was established in  
Addis Ababa city following the rinderpest outbreak,

School of Animal Health Assistants  
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**ETHIOPIA'S LARGE LIVESTOCK POPULATION PRESENTS SIGNIFICANT OPPORTUNITIES TO INCREASE THE SUPPLY OF MEAT AND MEAT BY-PRODUCTS FOR BOTH DOMESTIC AND EXPORT MARKETS**

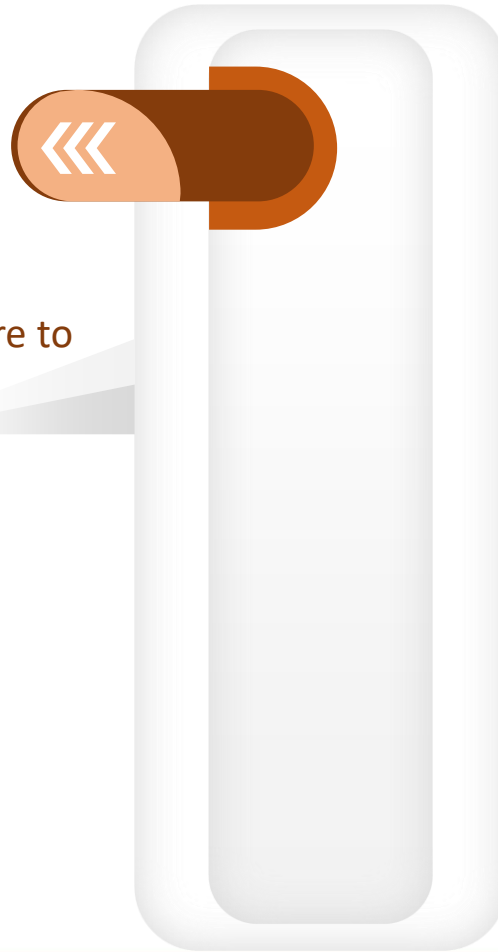




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**Export Abattoir Services**

- There are **11 operational export abattoirs** adhere to good manufacturing practices, hygienic practices
- Export abattoirs adhere to the Hazard Analysis Critical Control Point (HACCP) system within the meat supply chain.



**Ethiopia exports meat and meat products to countries in the Middle East and North Africa.**

Status of Ethiopia's Veterinary Services

## ETHIOPIA'S LARGE LIVESTOCK POPULATION PRESENTS SIGNIFICANT OPPORTUNITIES TO INCREASE THE SUPPLY OF MEAT AND MEAT BY-PRODUCTS FOR BOTH DOMESTIC AND EXPORT MARKETS,

### Diseases Surveillance

- MOA is implementing the National Animal Disease Surveillance System (NADSS)
- Currently, NADSS comprises two complementary systems called ADNIS and DOVAR-II
- **ADNIS** is an android-based system used for timely notification of the occurrence of cases for the priority 22 diseases
- **DOVAR-II** is a web-based system designed for the collection and management of disease outbreaks and vaccination data

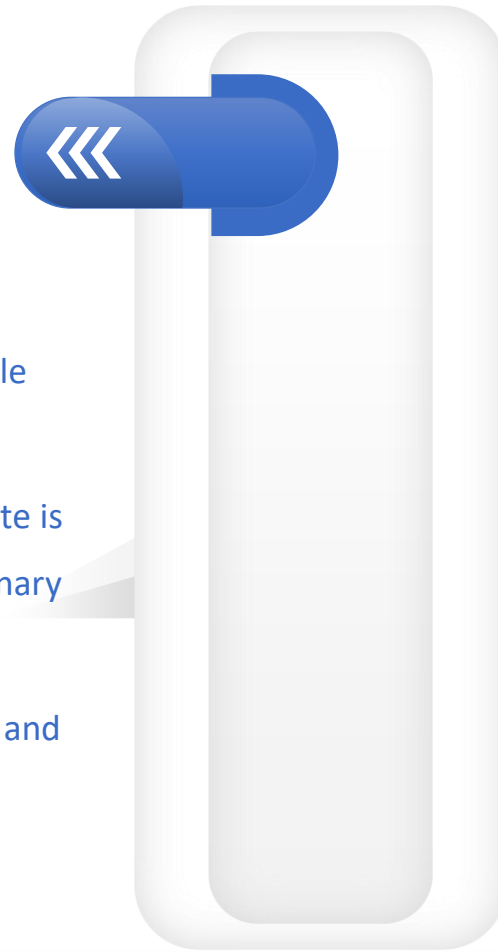
Status of Ethiopia's Veterinary Services

**NADSS** which consists of two key components platform for managing data on disease outbreaks: **ADNIS** and **DOVAR**

## Vaccines and vet drugs

### Veterinary Vaccines and Drug Production Capacities

- The National Veterinary Institute, produces more than **23** different conventional and Thermos-stable vaccines for the veterinary industry
- The quality of the vaccine produced at the institute is controlled and certified by the Pan African Veterinary Vaccine Centre (**PANVAC**)
- NVI also produce and export vaccines to African and Middle East countries.



**The NVI produces over 23 conventional and thermos-stable vaccines, which are quality-controlled by PANVAC, and exports**

Status of Ethiopia's Veterinary Services

## Disease Prevention, Control, and Eradication Effort



Key strategies are implemented for controlling diseases like FMD, PPR, SGP, CCPP, LSD, CBPP, trypanosomiasis, Newcastle disease, and diseases including Brucellosis, Anthrax, and Rabies.

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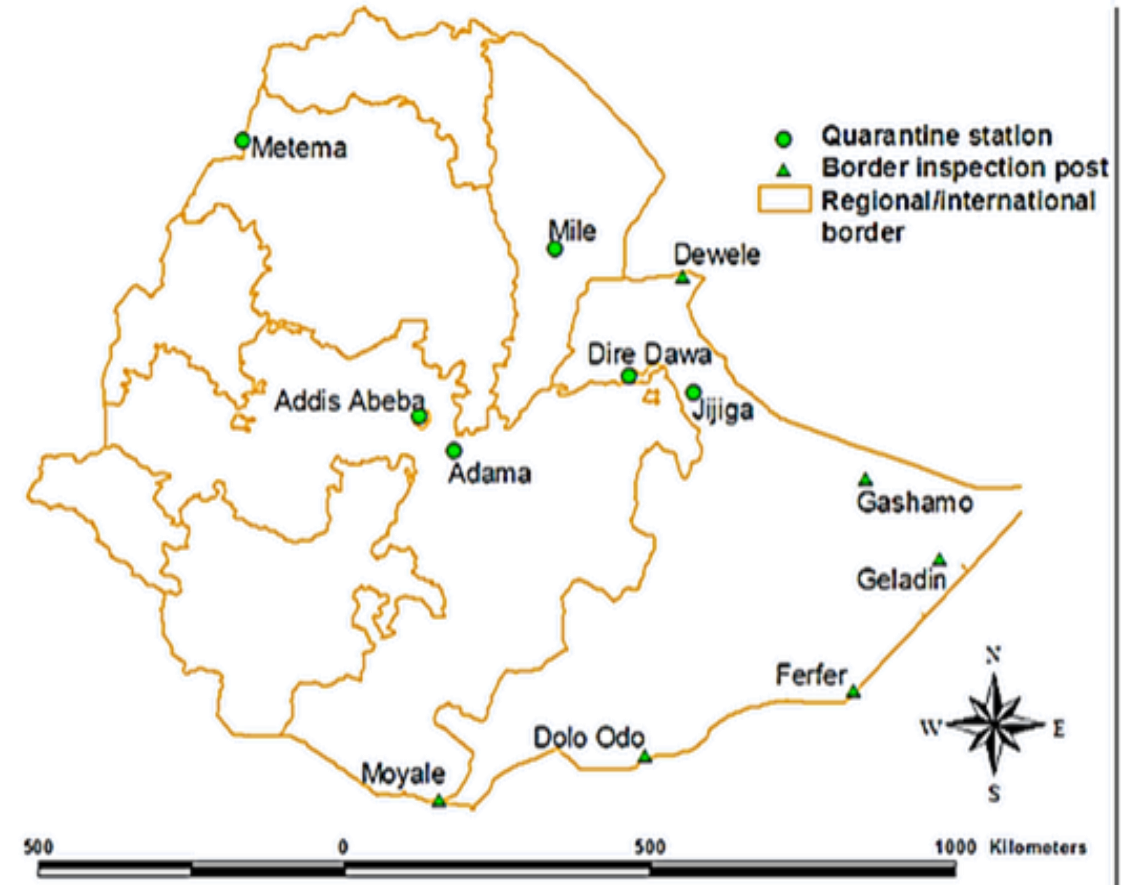
### Disease Prevention, Control, and Eradication Effort

- The key strategies are for Foot and Mouth Disease
  - Peste des Petits Ruminants (PPR),
  - Sheep and Goat Pox (SGP),
  - Contagious Caprine Pleuropneumonia (CCPP),
  - Lumpy Skin Disease (LSD),
  - Contagious Bovine Pleuropneumonia (CBPP)
- trypanosomiasis, Newcastle Diseases.
- prevention and control strategies for priority zoonotic animal diseases; , Brucellosis, Anthrax, and Rabies.

Status of Ethiopia's Veterinary Services

**IN ORDER TO CONTROL THE TRANSPORT OF ANIMALS IN INTERNAL AND EXTERNAL TRANSIT, THE GOVERNMENT ESTABLISHED AND MAINTAINED QUARANTINE STATIONS AND BORDER INSPECTION POSTS THROUGHOUT THE COUNTRY,**

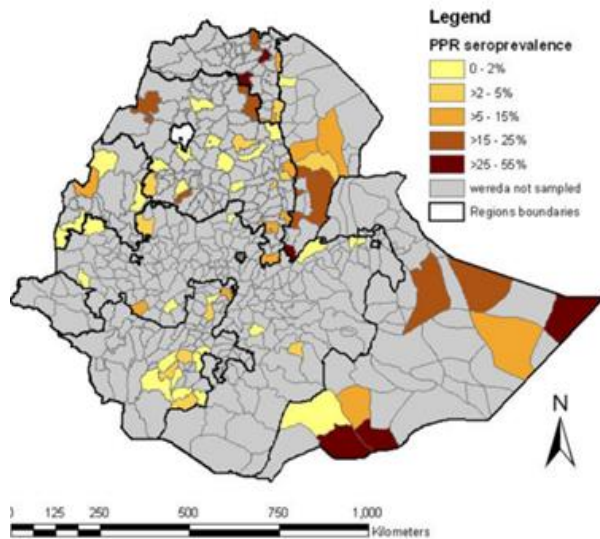
- The government established and maintains quarantine stations and border inspection posts to control the transport of animals both internally and externally.



## CONTROL AND ERADICATION OF PPR IN ETHIOPIA

### Clinical History

- PPR was clinically suspected for the first time in Ethiopia in 1977
- Clinical and serological evidence of its presence was reported



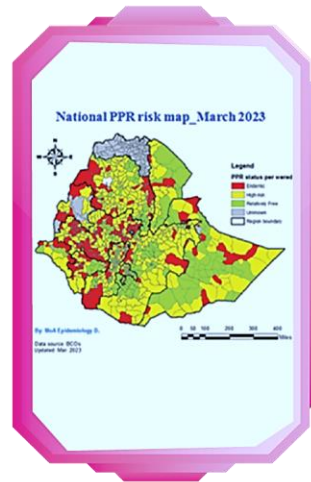
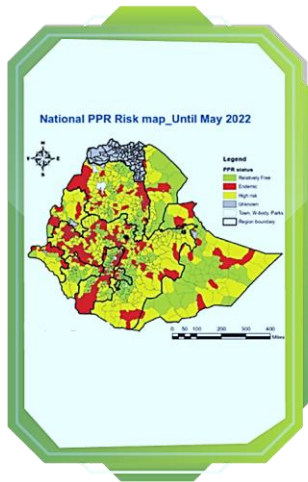
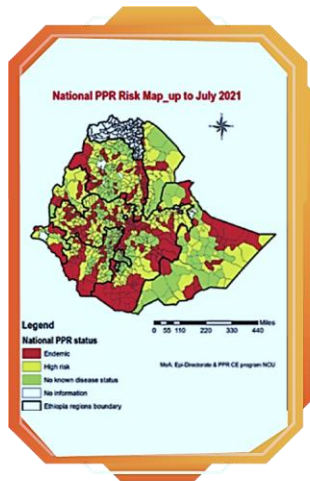
### Control and Eradication Program

- Ethiopia is implementing the National PPR Control and Eradication Program
- **The 1st phase** was implemented from **2016 to 2019** in the lowland and highland-lowland interface areas.
- Nationwide control and eradication program was launched in 2019 after the endorsement of the first PPR Control and Eradication National Strategic Plan (**1st NSP: 2019-2023**).
- The second national strategic plan NSP (**2024-2028**) and communication strategy is being developed.
- The program is managed by the **National Coordination Unit**

### Achievement

Ethiopia achieved stage 3 progress PPR control pathway based on the PMAT self-assessment conducted in 2023.

**RISK MAPPED REGULARLY DEVELOPED AND DISSEMINATED THE RISK MAPS SHOWS THAT NUMBER OF ENDEMIC DISTRICTS  
DECREASED FROM 2021 TO 2023**



PPR SURVEILLANCE DOCUMENTS SUCH AS THE SYNDROMIC SURVEILLANCE MANUAL, PDS MANUAL, AND TRAINERS' GUIDELINES HAS BEEN DEVELOPED.



# CONTROL AND ERADICATION OF CBPP IN AFRICA/ETHIOPIA



## EFFECTIVE STRATEGIES FOR ERADICATION INCLUDE VACCINATION, SURVEILLANCE, AND REGIONAL COOPERATION AMONG COUNTRIES

CBPP is a big problem for most  
cattle-producing sub-Saharan  
African countries.

CBPP has a more significant impact  
in areas where cattle are housed  
together in crowded conditions

### Impact of CBPP



It is a major barrier to trade and restricts  
cattle exports from regions.

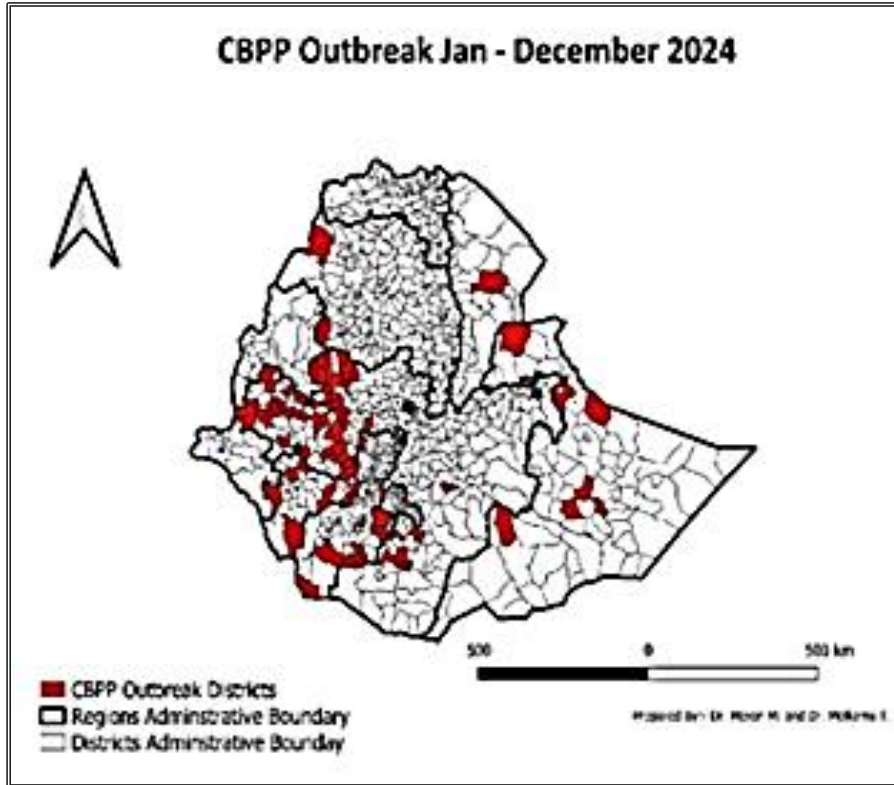
These restrictions hinder economic growth by  
reducing income from cattle sales and disrupting  
the movement of livestock products across borders

EFFECTIVE STRATEGIES FOR ERADICATION INCLUDE VACCINATION, SURVEILLANCE, AND REGIONAL COOPERATION

AMONG COUNTRIES

Ethiopia is one of the African countries where CBPP is endemically maintained

With a **morbidity rate of 25%** and a **mortality rate of more than 10%.**



Source: MoA, DOVAR II 2023 and 2024 report



Status of CBPP in Ethiopia

The seroprevalence of CBPP was recorded as **8% and 16 %** before and after 2016,

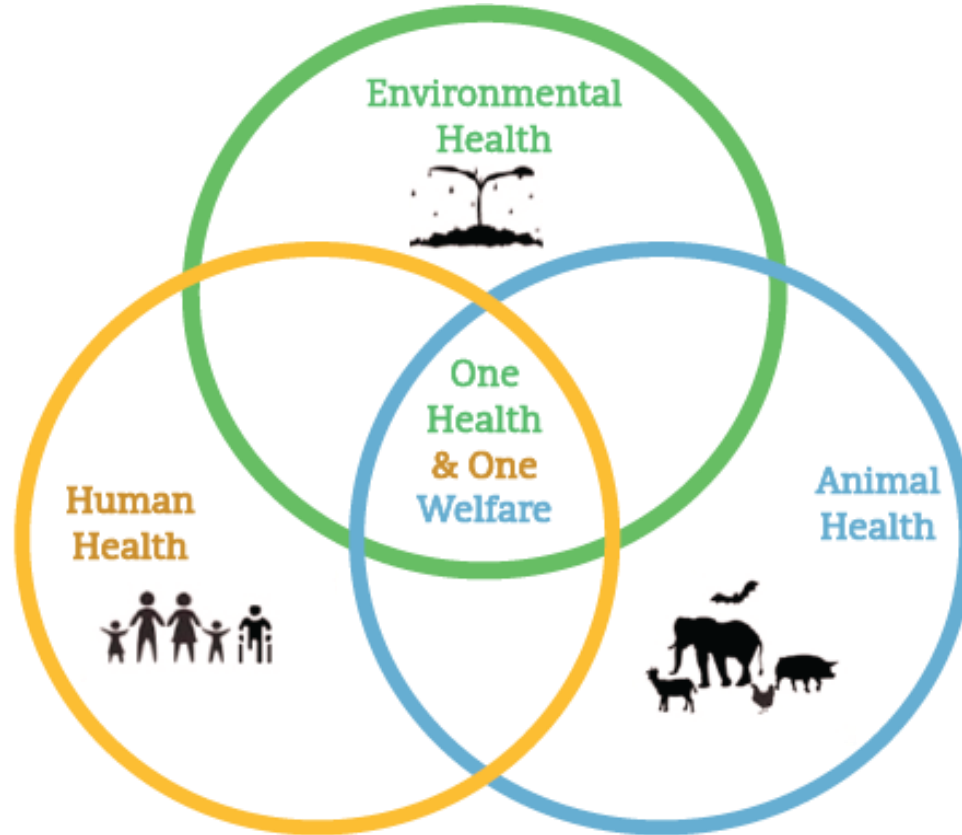
The increase in CBPP prevalence highlights a **growing risk** for the cattle population in Ethiopia,

## DIAGNOSTIC CAPACITIES, CHALLENGES AND STRATEGIES (ETHIOPIA)

<p><b>Serological and Molecular Testing for CBPP</b></p>	<p><b>1</b></p> <p>Complement Fixation Test (CFT),</p>	<p><b>2</b></p> <p>Competitive Enzyme-Linked Immunosorbent Assay (c-ELISA),</p>	<p><b>3</b></p> <p>PCR (Polymerase Chain Reaction), are utilized for the diagnosis of CBPP.</p>	<p><b>4</b></p> <p>DNA fragments are analyzed using Restriction Fragment Length Polymorphism analysis.<sup>13</sup></p>
<p><b>Challenges in CBPP Control and Eradication</b></p>	<p><b>1</b></p> <p>Inadequate public awareness about the disease's economic importance</p>	<p><b>2</b></p> <p>Lack of adequate financial support remains challenges</p>	<p><b>3</b></p> <p>Livestock movement within and between countries .</p>	<p><b>4</b></p>
<p><b>Strategies for Achieving a CBPP-Free Africa</b></p>	<p><b>1</b></p> <p>Strengthening Veterinary Infrastructure and raising funds</p>	<p><b>2</b></p> <p>Vaccination Strategy</p>	<p><b>3</b></p> <p>Enhancing Surveillance and Monitoring Systems</p>	<p><b>4</b></p> <p>Raising Awareness and Engaging Farmers</p>

# ONE HEALTH

**Globally, One Health One Welfare includes key elements including:**



*One Health and One Welfare Triad*

- I. Human Health
- II. Animal Health
- III. Environmental Health
- IV. Food Safety
- V. Antimicrobial Resistance (AMR)
- VI. Zoonotic and Vector-borne Diseases
- VII. Global Health Security

THE ONE HEALTH APPROACH IS FOUNDED ON SEVERAL FUNDAMENTAL PRINCIPLES THAT EMPHASIZE THE INTERCONNECTEDNESS OF HUMAN, ANIMAL, AND ENVIRONMENTAL HEALTH.

## Principles of One Health

### Collaboration

- Working across sectors and disciplines to achieve common health goals



### Coordination

- Ensuring that efforts are harmonized and aligned.



### Communication

- Sharing information and knowledge to improve health outcomes



### Integration

- Combining efforts from different sectors to address health challenges comprehensively



Quadrupartite Memorandum of Understanding (MoU) signed in 2022 among FAO,WOAH;WHO and UNEP

## ADVANCING HEALTH SECURITY THROUGH A TRANSDISCIPLINARY ONE HEALTH APPROACH: INSIGHTS FROM THE G20 HEALTH SUMMIT AND INITIATIVES ACROSS AFRICA

### Other global OH initiatives include

- G20 Health Summit Declaration,
- The G7 Health Ministers' Communiqués
- Global Health Security Agenda (GHSA),

### Initiatives in Africa

- Africa CDC embraces a transdisciplinary One Health approach
- ILRI established the One Health Research, Education and Outreach Centre in Africa (OHRECA)
- Africa One Health Network (AFOHNET) was formed to improve coordination and communication
- The AU also formed the Africa Union Taskforce on Antimicrobial Resistance -IBAR),

### Status of One Health in Ethiopia

- The Ethiopian National OH Strategic Plan (2019-2023) developed
- National One Health Steering Committee (NOHSC) was formed to facilitate multisectoral collaboration among government ministries and stakeholders
- Zoonotic Disease Technical Working
- National One Health Secretariat was established by the Council of Ministers (Regulation Number 529/2023).

## ETHIOPIA HAS PRIORITIZED THE TOP 5 ZONOTIC DISEASES OF MOST SIGNIFICANT CONCERN

### RABIES.

#### Globally

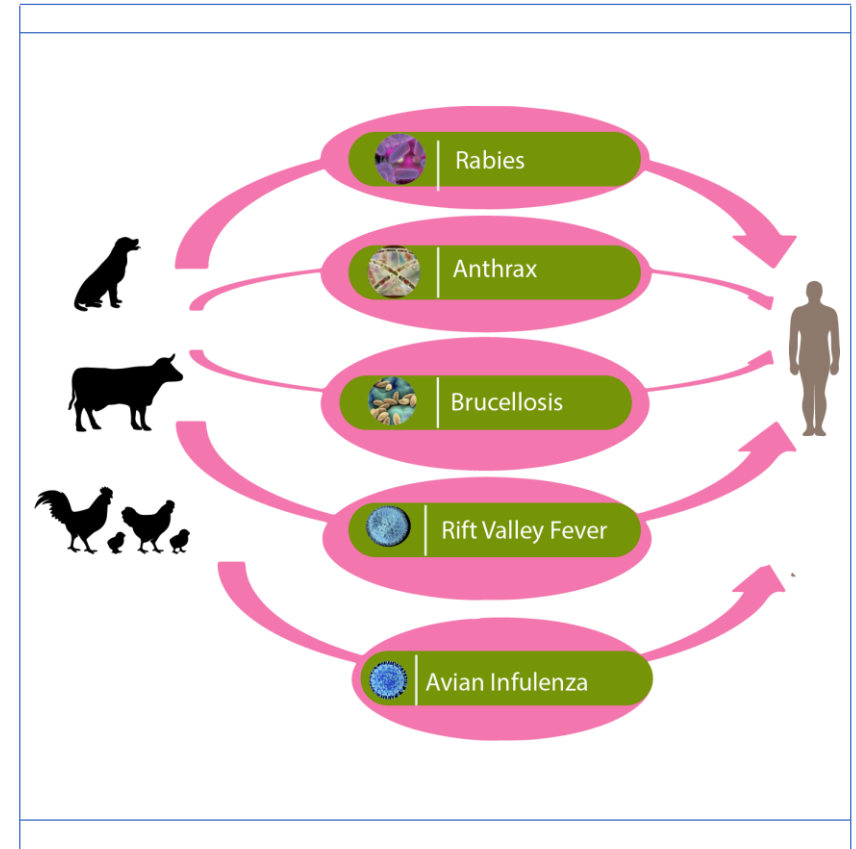
- WHO, FAO, OIE, and GARC's "Zero by 30" strategy aims to eliminate dog-mediated human rabies by 2030

#### Africa

- The AU\_IBAR supports the global goal of eliminating human-dog-mediated rabies deaths by 2030.
- It contributes to the United Against Rabies Forum, which adopts a One Health approach, fostering multi-sectoral collaboration among governments, vaccine producers, researchers, NGOs, and development partners.

#### Ethiopia

- launched the 'zero by 2030' program starting in 2021
- The second SARE evaluation was conducted in August 2023 in collaboration with and technically supported by FAO and GARC





**ANTIMICROBIALS HAVE SAVED MILLIONS OF LIVES, REDUCED THE BURDEN OF PREVIOUSLY FATAL DISEASES,  
IMPROVED QUALITY OF LIFE, AND INCREASED LIFE EXPECTANCY**



- In 2011, Ethiopia established the National Antimicrobial Resistance Advisory Committee
- Developed and approved the National Antimicrobial Resistance Surveillance Plan in 2017.



**AMR Activities in Ethiopia**

# FOOD SAFETY

IN ETHIOPIA, ENSURING FOOD SAFETY AND QUALITY IS CRITICAL FOR ADDRESSING FOODBORNE DISEASES, ENHANCING INTERNATIONAL TRADE COMPETITIVENESS, AND MEETING THE GROWING DEMAND FOR SAFE, NUTRITIOUS FOOD AMONG A RAPIDLY URBANIZING POPULATION

- Food and water-borne diarrheal diseases are among the leading causes of illness and death, especially in countries like Ethiopia.



### The Food Safety and Quality Landscape in Ethiopia

- **Community-Based Interventions**
- **International Collaboration**



### Lessons

### Regulatory Framework



- The **2018 Food and Nutrition Policy** highlights food safety as essential for improving nutrition and public health.

### DESCRIPTION

**ANIMAL HEALTH CONTRIBUTES SIGNIFICANTLY TO FOOD SECURITY,  
A VITAL SOURCE OF PROTEIN AND NUTRIENTS, REMAINS HEALTHY AND PRODUCTIVE**

**Animal Health for Food and Nutrition Security**

- ASF supply approximately contribute about **15.4%** of the global daily calories consumed per capita
- In high-income countries, **22.9% of daily calories per capita** are from ASFs.
- **In low-income countries, the figure falls to 5.7%.**
- ASF provide bioavailable micronutrients that are critical for early childhood growth and development, maternal health,
- Demand for animal-source foods is projected to **surge in the coming decades**, especially in low and middle-income countries

**Contribution of Animal Health to Food Security and Nutrition**

- **Animal health plays a critical role in enhancing nutrition by ensuring the quality and safety of ASF**

**ANIMAL HEALTH CONTRIBUTES SIGNIFICANTLY TO FOOD SECURITY BY ENSURING LIVESTOCK, WHICH IS A VITAL SOURCE OF PROTEIN AND NUTRIENTS, REMAINS HEALTHY AND PRODUCTIVE**



## Benefits of Healthy Animals

- Nutritional Quality of Animal Products
- Disease Resistance
- Economic Stability
- Sustainable Farming Practices
- Enhanced Food Safety

## CONCLUSION

**VETERINARY SERVICES PLAY A PIVOTAL ROLE IN OPTIMIZING GLOBAL ASF SYSTEMS THROUGH THE FOUR PILLARS THAT ARE RECOGNIZED AS FORMING THE BASIS OF FOOD SECURITY, SUCH AS FOOD AVAILABILITY AND ACCESS, STABILITY AND UTILIZATION.**

## **Conclusion**

- Ethiopia possesses a rich cultural and natural Heritages, some of the recognized by UNESCO. Government effort to fully tap the existing potential is commendable.
- The huge livestock population of Ethiopia provides untapped investment opportunities along key value chains
- The new government initiative that aimed at transforming the livestock sector is making remarkable progress
- Improved animal health services significantly contributes to improved food and nutrition security, through optimizing access to ASF
- Ethiopia is making compelling effort to modernize delivery of veterinary services.
- TAD Control efforts through improved policy, investment and infrastructure is encouraging
- Ethiopia is committed to advancing implementation of ONE HEALTH Approach
- Food safety actions are critical in achieving food systems transformation targets

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## **WAYS FORWARD**

- **Enhancing private sector participation in the livestock investment along the value chain.**
- **WOAH need to make continued support and coordination aimed at harmonizing standard approach and protocol for veterinary service system and control of TADs globally.**
- **Enhanced regional/continental coordination and collaboration aimed at harmonizing policies and approaches for control and eradication of TADs is required.**
- **Intensifying implementation of one health approach**
- **improving food safety is critical for realizing food system transformation**



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Thank You



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MINISTRY OF AGRICULTURE

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**26<sup>th</sup> Conference of the Regional Commission for Africa**

4-7 February 2025 Addis Ababa, Ethiopia