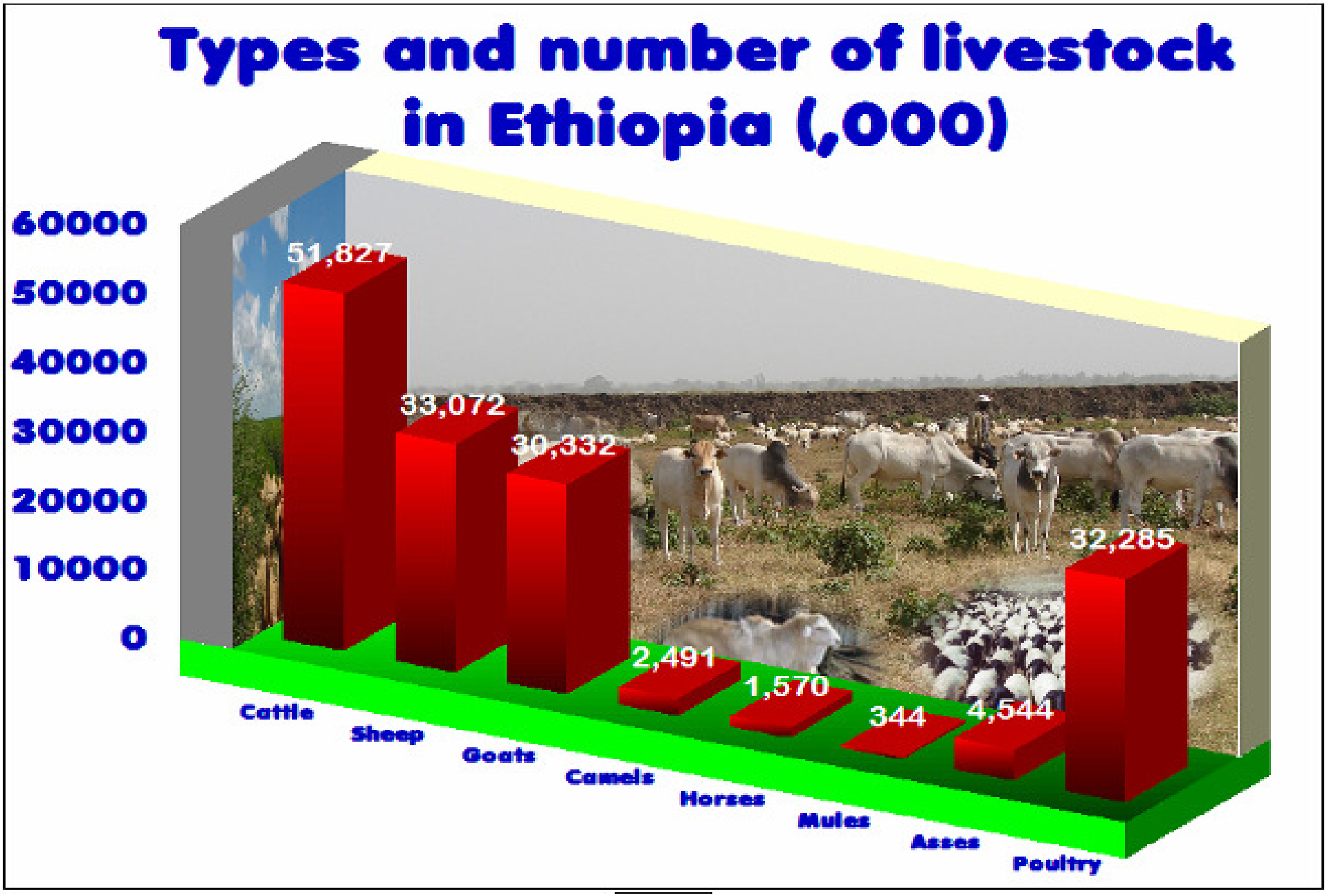
# An Overview of the Ethiopian Livestock sector's role in livelihood and food safety

By: Berhe Gebreegziabher
Animal and Plant health Directorate
Ministry of Agriculture and Rural Development of Ethiopia.

Presented on: Dialogue on Livestock, Food security & Sustainability A side event on the occasion of the 22nd Session of COAG, FAO, Rome on 16 June, 2010

# ANIMAL RESOURCE BASE



# ECONOMIC CONTRIBUTION OF THE SECTOR AND PER CAPITA CONSUMPTION

| Item No | Parameter | Unit | Level |
|---|---|---|---|
| 1 | Agric. GDP | Percentage | 30-40 |
| 2 | Contribu. to GDP | Percentage | 16-20 |
| 3 | Contribu. to foreign Exchange | Percentage | 14-16 |
| 4 | Beef per cap | Kg/per person /year | 4.6 |
| 5 | Mutton Per cap | Kg/per person /year | 2.8 |
| 6 | Milk per ca[ | Kg/per person /year | 16 |

# PRODUCTIVITY

**MILK PRODUCTION INDIGENOUS ANIMALS**

Milk Yield : 500 lt/ lactation
Days in milk: 200 days
Age at first calving: 4-5 years
Calving interval: 2 years
Overall calving rate:45-55%
Seasonal calving: ( rainfall, feed availability and cow nutritional status)
milk off take for human consumption
local: 1.3 kg
crossbred: 2.8 kg

# Cont...

## MEAT PRODUCTION

- Slow growth rates and poor condition at slaughter
- De-boned meat: 58 % of carcass weight
  28% of live weight
- Carcass weight: 167 kg
- Annual direct losses due to mortality for cattle: 8-10 percent of the national herd

# Cont...

**MUTTON AND GOAT MEAT**

Birth weight : 2.5 kg

Weaning weight : 15 kg

Yearling weight : 22 kg

Carcass weight : 40-45% of empty body weight

: 10-12 kg

Annual direct losses from mortality

Sheep: 14-16 %

Goat: 11-18 %

# Livestock Development Strategies

Late 60s:

Focus: genetic improvement ( cattle, small ruminant)

Mid 1980:

Focus: Research divisions ( Animal production, Animal feeds and Nutrition, Animal health)

Mid 1990:

Focus: National Research programs and projects

- Dairy and animal power
- Meat and poultry
- Feeds, nutrition and Apiculture
- Animal health
- Fishery

# Cont...

## Current status and directions

1. Today, Pastoral communities are represented at Parliament level. i.e. Pastoralist Standing Committee.
2. Ethiopia is among the very few countries in Africa to allocate more than 10% of the annual budget for Agriculture.
3. Ruminant livestock productivity improvement case team ( cattle, sheep, goat and camel)
4. Non ruminant livestock productivity improvement case team ( Aviary, pig etc).
5. Fishery case team.
6. Apiculture and siriculture case team

# MAJOR GAPS

1. Diseases
2. Poor nutrition
3. Un improved genetic base
4. Poor product handling and processing
5. Socio economics and market information
6. Technology transfer
7. Lack of understanding its impact even by donors, RED-FS and CAADP.

# Impacts of Livestock technology (Lessons from success stories)

**Use of crossbred dairy cows in small holder dairy**

- With average milk production of 10 lt/cow per day and average lactation of 300 days
- Production cost of 1 Birr/liter and selling price of 3-5 Birr per liter
- If 75 % of the produce is available for market

the net annual income shall be about 3750 Birr per cow per year

- Improvement in Health and nutritional status of the family is also an added benefit

NB. 1 USD = 13.5 Birr

# Livestock and Livelihood

- 83% of the population is livestock dependent.
- Livestock development projects have a clear potential to contribute to poverty alleviation amongst dairy farming households.

Particular achievements have been made in the field of women and gender.

- In Ethiopia like in any other developing country, a dairy cow for a small farmer, is an asset of considerable value.
- Animal husbandry forms part of many livelihood systems and is a considerable economic Factor.

# Areas where livestock plays a determining role in poverty reduction

- Increasing food consumption.
- Increasing employment opportunities.
- Sustainable improvements to the livelihood of the poor society.

# Small farming and livelihood improvement

- Small-farm agriculture provides a productive, efficient and ecological vision for the future.
- Small farms are 'multi-functional' – more productive, more efficient, and able to contribute more to economic development than large farms.
- Beyond food security, smaller farms produce far more per unit area than larger farms.
- Large farmers tend to plant monocultures because they are the simplest to manage with heavy machinery. Small farmers, on the other hand, are more likely to plant crop mixtures--'intercropping' .

# Some constraints impeding the success of small farming to improve livelihood.

- The inadequate supply of agricultural inputs.
- Lack of empowering women.
- Scarcity of land .
- Lack of education, training and extension services .
- Lack of adequate storage facilities.
- Inadequate workable legal frame works.

# Importance of livestock in developing countries

- Livestock as an important **food source**

  *-Trends in livestock as a food security commodity in developing countries*

  *- Livestock help to alleviate seasonal food variability.*
- Livestock as a **source of income**
- Livestock as a **generator of employment**
- Livestock as a **source of energy**

  *- Draught animal power*

  *- Dung for fuel*

  *- Biogas production.*
- Livestock as a source of **compost/fertilizer and soil conditioner**
- Livestock as a **weed control**
- Livestock for **investment and savings** .

# Livestock and Food Safety

- **Food Quality** and Safety are critical to consumers and form an integral part of any food industry programs.
- Food safety in Ethiopia is managed both by **MoARD and MoH.** Farm to Fork basis.
- **Consumer education** has a key role since consumers too must play a role in maintaining food safety throughout the food chain.

- **Unsafe food** causes many acute and life-long diseases, ranging from diarrhoeal diseases to various forms of cancer.
- WHO estimates that food borne and waterborne diarrhoeal diseases taken together kill about 2.2

# Where to focus on food safety?

- At home
- Outdoor
- Buying food

- The primary causes of food borne illness are naturally occurring pathogenic bacteria, viruses, toxins and poisons. Some of these microbes infect our bodies and grow, while others produce a toxin in food. The end result is illness and in very severe cases may even cause death.

# The key enteric pathogens are:


- Campylobacter
- Salmonella
- Shigella
- Typhoid
- Shiga toxin producing E.coli and
  - haemolytic uraemic syndrome
- Listeria
- Yersinia

**How can we avoid this Risk of Contamination?**

**Preventive measures**

**+**

**OIE, IPPC and CODEX SPS Standards!!!**

THANK you!!!!