



AICCRA

Accelerating Impacts of CGIAR
Climate Research for Africa



**Media Training Workshop on
Climate Smart Feed and Forage
Innovations**

**Setting the Scene:
Livestock Production and
Feed Resources in
Ethiopia**

Getnet Assefa|7-8 June 2022|Nexus hotel- Addis Ababa, Ethiopia

Objectives

- Provide an overview of the livestock production conditions and the major feed resources in Ethiopia
- Highlight the major challenges and the way forward to transform livestock productivity

The role of Livestock in the livelihood of most Ethiopian farmers and pastoralists

- **Provides food for the family**
- Plow the land for crop production
- **Provide manure**
- Source of fuel to cook
- **Is source of income and social prestige**
- **Transport goods and Human beings**
- Skin provide clothing, and shoes





The Role of Livestock to the National Economy

- **Contributes about 47% of the Agricultural GDP of the country**
- **Contributes to foreign currency earnings**
 - Exports live animals
 - Exports chilled meat
 - Exports skins, hides and leather products



Livestock Resources, (CSA 2019/2020)

Species	Population (Millions)
Cattle	65.35
Male	28.82
Female	36.53
Sheep	39.89
Goats	50.50
Equines	
Horses	2.11
Donkeys	9.99
Mules	0.36
Camels	7.70
Poultry	48.96
Beehives	6.96

- Local breeds
- Diversified uses
- Low productivity
- Poor feeding strategies
- High level of GHG emissions per unit of product

Current Scenarios of Livestock Production in Ethiopia

- Production of livestock products is very low, and the growth rate is behind the population growth rate
- High and increasing demand for livestock products
- Increasing human population
- Climate Change (drought, flood etc)

Major Challenges

1. Livestock feed scarcity
2. Genotype (Breed)
 - Low productivity of local breeds
 - Improved breeds of dairy and chickens are in short supply
3. Animal health
 - Inadequate prevention & control services
4. Traditional management practices
5. Marketing, etc



Feed Constraints

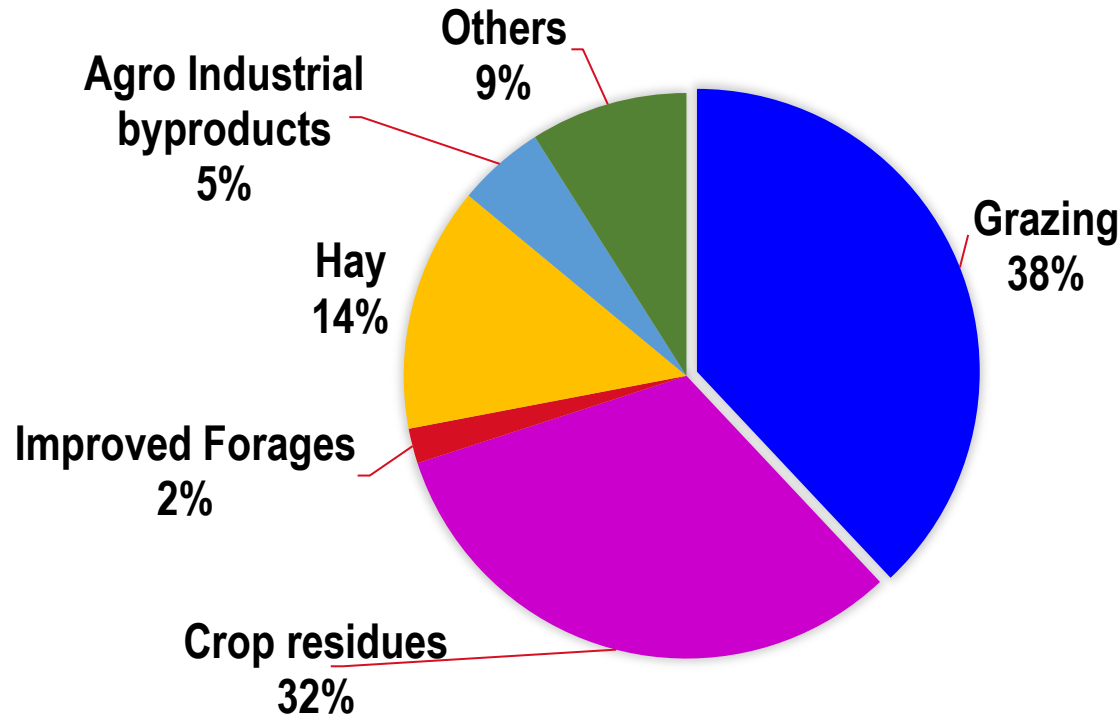
1. **Limited availability** (Production, management and utilization)
2. **Seasonality** Type, abundance
3. **Quality** Protein and energy



Major Feed Sources

Major feed resources available (CSA, 2019/2020, sedentary areas)

Negative
Balance



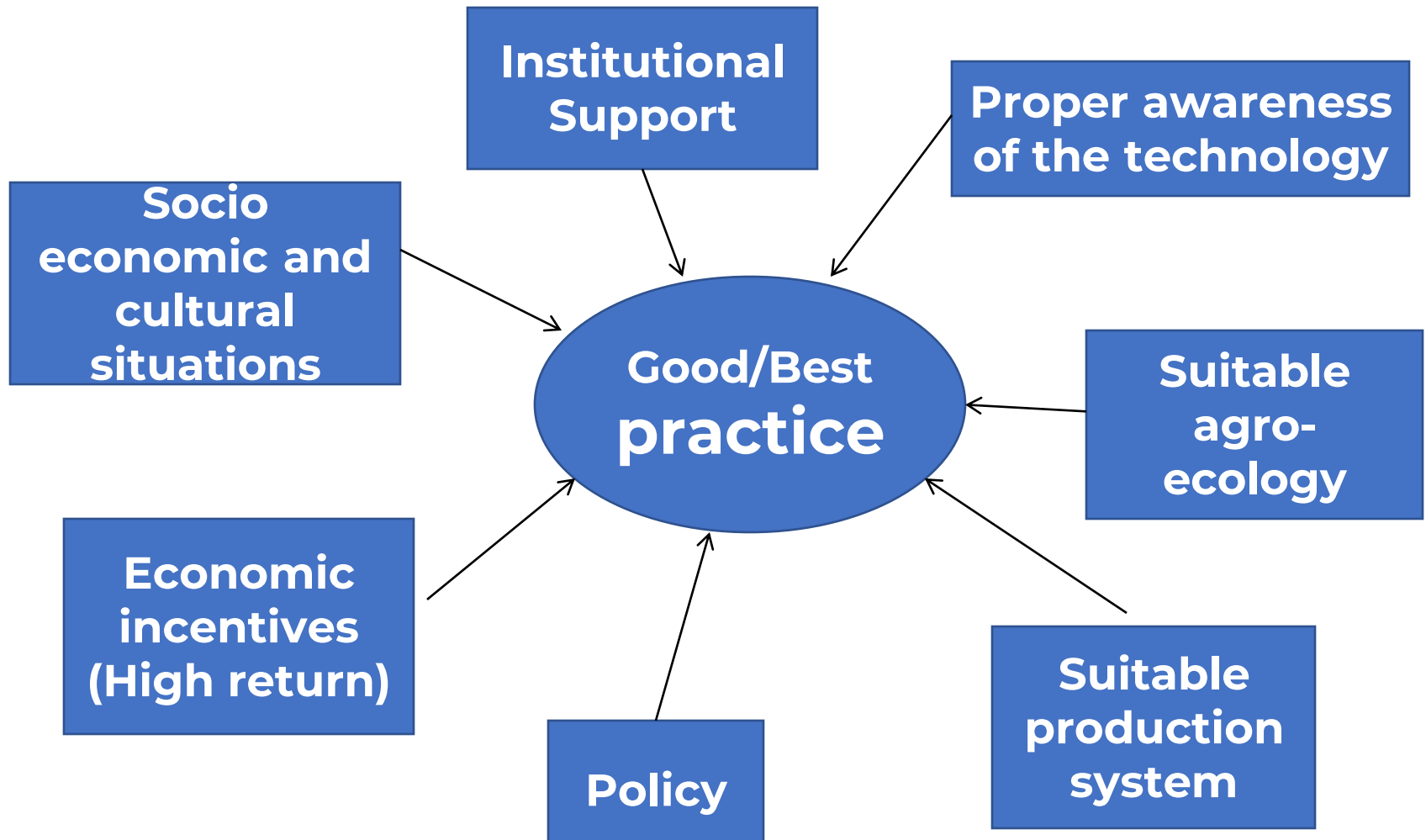
- Inadequate, the quality is poor & supply is variable over the seasons.
- Through better management, these feeds could be used more efficiently.
- But to transform livestock production - increasing feed supply is a key element

What are the possible strategies to alleviate feed problems?

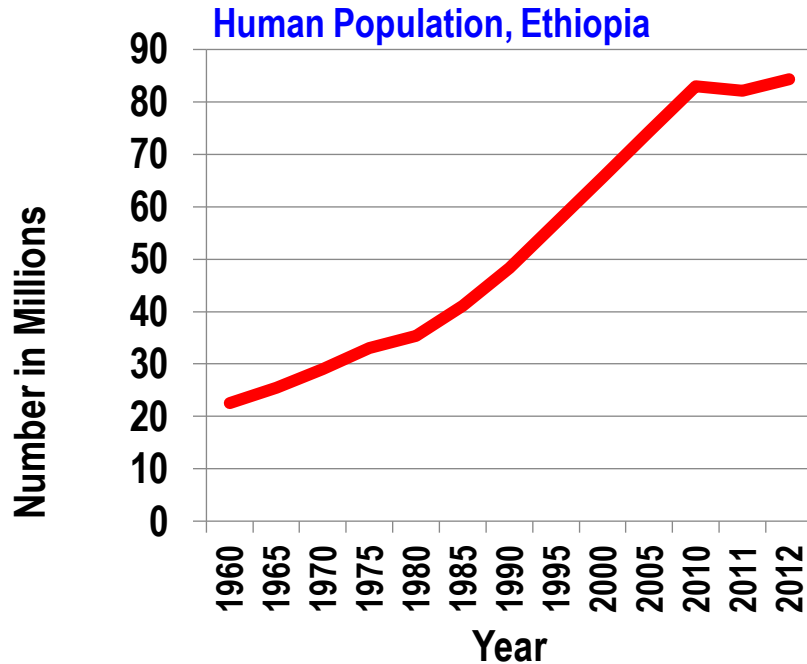
- Increase efficient use of available feed resources
- Develop or adopt successful practice
- Production, Management, Utilization, marketing etc
- Demonstrate and scaling up/out of good practices



What makes a technology or any practice to be best or successful?

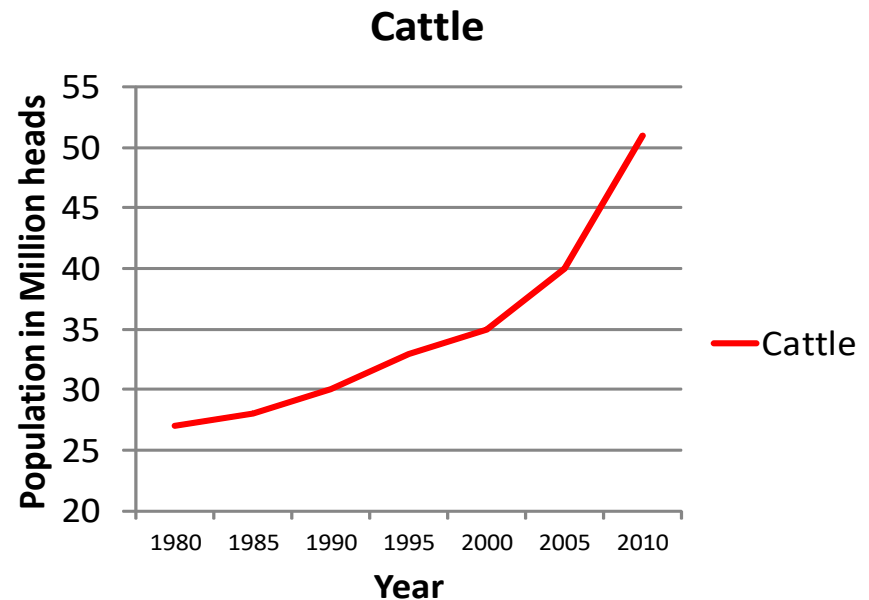


Natural Pasture and Crop Residues



- Grazing lands are shrinking over the years
- Crop residues supply increased

- Increasingly difficult for livestock to satisfactorily perform the various functions



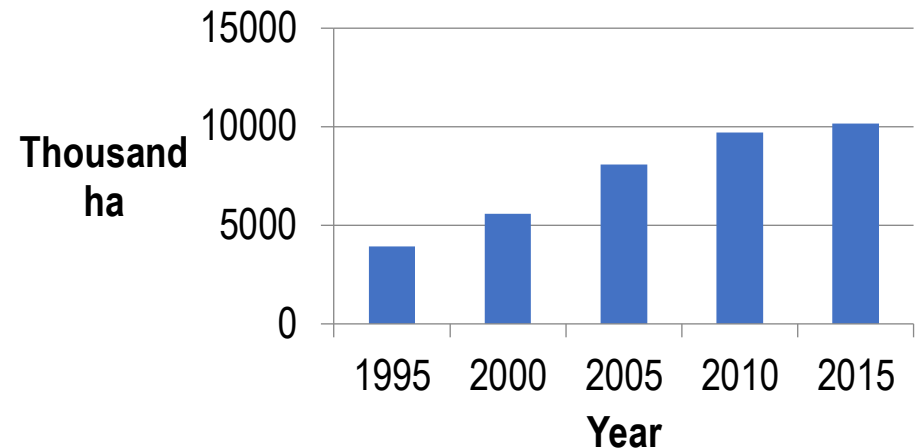
Crop Residues

Increased in acreage mainly at the expense of grazing land

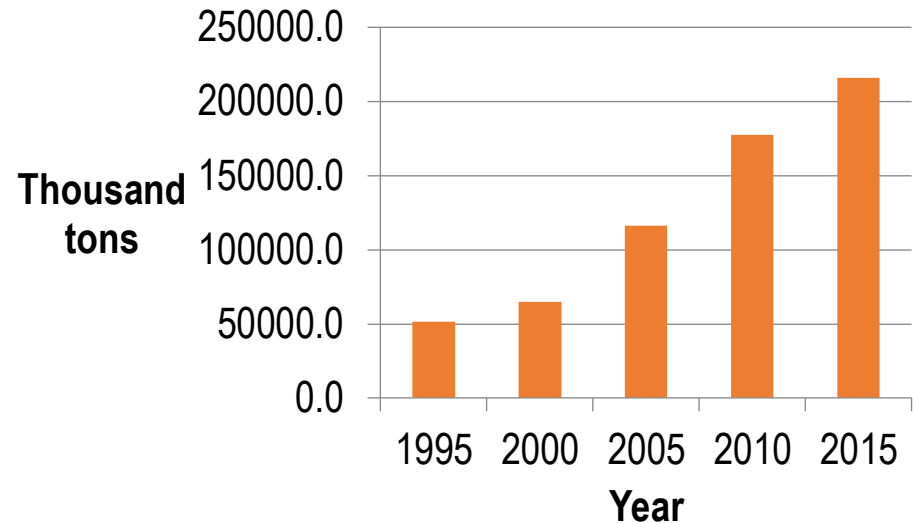
Straw and stover yield increased tremendously

- **Poor quality**
- Efficient collection and conservation
- Improve quality through treatment

Cereals cultivated – Area, CSA 2014/15



Cereals grain yield



Improved practice under demonstration

- Use of molasses to facilitate intake and digestibility
- Effective microbes treatment
- Urea treatment of straw
- Different physical treatments like, chopping, watering, etc



Concentrate Feeds

- Very low in availability and supply
- Very high in price
- Not accessible to most livestock producers

Cultivated Forage Crops

- Improved feeding is very crucial to transform livestock productivity
- The major issue is availing adequate and quality feed
- Forage crops are the most appropriate in most parts of the farming system in Ethiopia

Comparative Advantages of Forage Crops

- Farmers can produce around their vicinity
- Productive and high in quality
- Could be integrated with NRM and many other options - **multiple functions**
- Diversified species and means of production
- Relatively cheaper
- Positive contribution to climate change - carbon sequestration



Available forage production packages

- Many varieties / species are registered and recommended
 - Suitable to different agro-ecologies and production systems
- Productive and profitable agronomic practices are available
- Integration methods developed
- Conservation practices
- Major quality parameters known
- Feeding strategies are available



Forage Crops Adoption

- Intensification is a must to increase productivity due to the rapid changes of population, production practices, investment, etc,
- Demand for improved forage crops is
- increasing



But still adoption is very low

- The dominant livestock production practice is still subsistence -- not market oriented
- Scarcity of land
- Scarcity of seed and planting materials
- Traditional production practices
 - cattle kept mainly for traction, free grazing



Recommended Forage Promotion Approaches

1. Linking forage production to market oriented livestock systems
2. Linking forage production to the current farming practice, NRM, marginal lands, etc.
3. Strong extension system, support and promotion
 - Training,
 - Strong follow up
 - Create market linkage
4. Establish efficient input / output supply and marketing systems
 - Specially forage seeds

Thank you



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