

## Introduction

- Livestock production is an integral component of agriculture in Ethiopia.
- Livestock contributes to about 12-18% of the total GDP, 35-49% of agricultural GDP and 23.8% of export earnings of the country (Beruk, 2014; IGAD, 2011, 2013).
- In Gamogofa zone, southern Ethiopia, cattle fattening is important and is a major source of livelihood for many people.
- However, the fattening system is traditional low-input-low-output and producers are not benefiting much from the sector.
- This study evaluated the challenges and constraints, and cattle fattening innovations introduced through stakeholders participation.

## Materials and methods

### Study site:

- Three clustered districts (Arba Minch Zuria, Bonke and Mirab Abaya) (Figure 1).
- Gamogofa zone is located 445–505 km south of Addis Ababa.
- The area is semi-arid lowland with altitudes from 746-1450 masl and mean temperature ranges from 22-25°C.

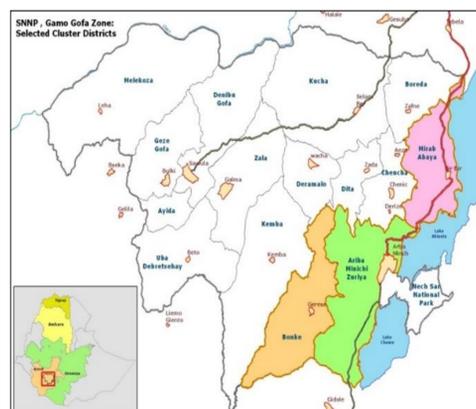


Figure 1. Map of the study site

### Sampling technique:

- The clustered districts were selected purposively based on the potential of cattle population and experience of cattle fattening by the Livestock & Irrigation Value Chains for Ethiopia Smallholders (LIVES) project and stakeholders.
- A total of 9 PAs (3 from each district) were identified based on the same criteria. From each PA, 7 intervention households were selected randomly.
- The total number of sampled households was 63.

### Data collection procedure:

- Used focus group discussion, key informants interviews, commodity platforms and semi-structured questionnaires for data collection.
- Moreover, pre and post knowledge/skill assessment was used against established criteria for identification of capacity gaps and knowledge/skill improvement.

## Results

### Livestock resources:

- The 3 sampled districts hold about 27% of the total livestock resources of the zone and 24% of cattle population.

### Challenges of improved cattle fattening

- Capacity related: lack of knowledge and skill on improved cattle fattening by producers, input providers and livestock extension staff.
- Feed and feeding related: lack of improved fodder and poor utilization, lack of fodder conservation practices, lack of access for concentrate feed.
- Cattle related: inappropriate cattle type for fattening.
- Production related: long cycle fattening (> 8 months), poor housing and poor cattle management;
- Market related: unorganized cattle marketing & lack of market linkage.

### Major interventions introduced:

#### a) Capacity development and knowledge management:

- Skill-based training and study tour followed by coaching & mentoring of producers and livestock extension staff on improved cattle fattening, improved reproductive management and artificial insemination.

#### b) Improved fattening interventions along the VC node



Fig 1. Improved forage (alfalfa, Elephant grass and Pigeon pea) established by a women headed household in Gamogofa

Concentrate supplying business	Year of establishment	Type of the business	No of customers	Volume of feed marketed so far
Fikre Shemachoch	2014	Cooperative	92	2471
Musa feed retaining business	2014	Sole	58	943
Meseret feed retailing	2014	Sole	38	450

Fig 2. Concentrate supplying/retailing business initiated by LIVES and its performance during 2015/15

#### Improved genetics & OSMAI:

- Boran semen introduced to improved genetic potential of local cattle for beef
- OSMAI decentralized for better mobilization of resources and ownership

Table 1. Adoption rate of major improved cattle fattening interventions in the study area

Interventions	Adoption rate (n=63; %)
Improved forage production	65%
Fodder chopping	87%
Fodder conservation (e.g. bag silage)	87%
Improved cattle housing	50%
Stall feeding	71%
Short cycle multiple fattening	72%
Improved animal health management (e.g. deworming)	71%
Farm recording	61%



Fig 2. Bag silage making



Fig 3. Improved housing & stall feeding



Fig 4. Establishment of marketing group & business linkage

## Conclusion

- Introduction of skill-based training and study tours followed by effective coaching and mentoring are instrumental for increased adoption of improved cattle fattening innovations.
- Facilitating access to input supply such as concentrate feed and improved genetics are essential for market-oriented cattle fattening.
- Commodity platforms are important to identify challenges, prioritize interventions and establish linkages among value chain actors and service providers.