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 benefitting 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.

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

- Artificial insemination
- Improved genetics & OSMAI
  - Boran semen introduced to improved genetic potential of local cattle for beef
  - OSMAI decentralized for better mobilization of resources and ownership
- Improved animal health management
- Stall feeding
- Fodder conservation (e.g. bag silage)
- Improved cattle housing
- Improved forage (alfalfa, Elephant grass and Panicum) and established by a women-headed household in Gamogofa

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.

Introduction of and rate interventions improved about 61% and AITVM Commodity prioritize cattle interventions Adoption study management zone is located 445 the (September 2016) improved OSMAI decentralized for major and by 1 feed 71% followed Capacity are input Cooperati cattle population for fattening training market zone knowledge/skill improvement. increased 3 development fattening identify study chain and of effective platforms cattle Boran semen introduced to of cattle population and experience of cattle fattening by criteria. From each PA, 7 intervention households were selected based on the same 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:

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