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Livestock

*More meat milk and eggs by and for the poor*

# Genetics and reproductive innovations: Key lessons, scaling requirements and quick-win actions for Ethiopia sheep and goat value chains

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## Key lessons from the past 10+ years experience

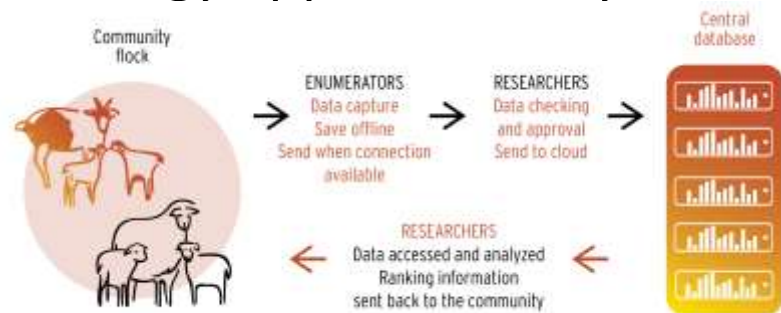
- Participating communities have been benefited from CBBPs
  - Increased demand for improved sires
- CBBPs can be considered as best alternatives of small ruminant genetic improvement
  - Relatively cheaper
  - Reduce time to reach community
  - less disease risk – high survival
  - Allow to do research and develop animals fitting farmer management
- Long-term commitment/investment pays





# Key lessons from the past 10+ years experience

- Sheep and goat becoming main activities (more focus by govt, NGOs and other partners)
- Establishment and increasing role of breeder cooperatives
- Success rely on the involvement of partners (e.g extension and cooperative office)
- CBBP villages serving as learning sites, model for another interventions/research
- Genetic resources identified and characterized
- Role of digital genetic platform appreciated
- Low cost and mobile field solution for AI developed and the technology appreciated by the community



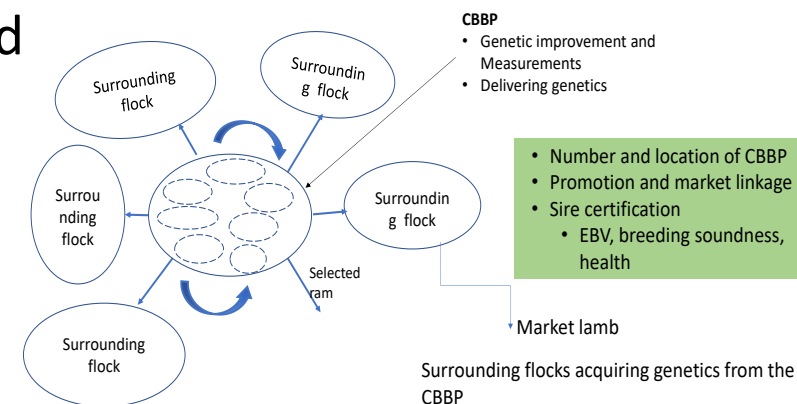
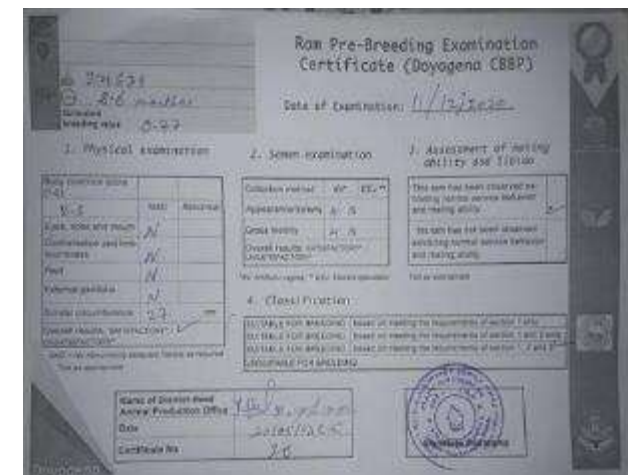
# What is still needed?



- Close follow-up and solving technical challenges (selling before selection time, mating ratio, sire service year, uncertain sires and so on) -
- Strengthen animal identification digital database system
  - Infrastructure for ICT
- Partners engagement and government focus
- Strengthen cooperatives in some of the sites/areas
- More work on use of ultrasound as management tool
- Input supply (feed, reproduction technology facilities and consumables, vaccines) and market linkage

# Quick wins

- Optimizing the breeding program
- Develop methodological framework for dissemination of improved genetics – upscaling strategy
- Develop national animal identification, recording and animal evaluation system
- Strengthen the digital database
  - Utility, ICT infrastructure development and capacity building
- Sire certification (policy support required)
- Integration of genomics
  - Allows early age selection
- Understanding genome composition and structure among breeds
- National institutions should take the leading role in implementation of the breeding program (NAGII, Extension, Research, Universities....)

The form is titled 'Ram Pre-Breeding Examination Certificate (Doyogena CBBP)'. It contains fields for 'Date of Examination' (11/12/2020), 'Breed' (Bakar), and 'Age' (1.5). The form is divided into four sections: 1. Physical examination, 2. Semen examination, 3. Assessment of mating ability, and 4. (Total) Evaluation. Each section has a table for recording data. The form is signed by 'Dr. Y. S. S. S.' and 'Dr. Y. S. S. S.' and has a stamp from the 'Doyogena CBBP'.

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