



Photo: Mercy Corps, Ethiopia/Ezra Millstein, 2023

Enhancing incomes and resilience of pastoralists in Ethiopia through vertically integrated livestock supply chains

As droughts in the lowlands of Ethiopia increase in frequency and severity, a key resilience capacity for livestock producers is their ability to generate income and savings from their animals, which they can use to purchase feed and other inputs when droughts strike. A key constraint is that livestock demand in the lowlands is fragmented, highly seasonal and often evaporates during dry seasons and droughts..

This learning brief describes how the Mercy Corps-led RIPA-North program used a Market Systems Resilience (MSR) approach to transform the structure of livestock supply chains in the lowlands to benefit female pastoralists and agro-pastoralists, resulting in a 193% increase in livestock purchases and year-round demand that withstood even the recent severe drought.

KEY CHALLENGES

- Lowland producers use a low-input mode of production based on herd accumulation, selling animals nearing the end of their life, or only selling prime animals when they need cash—whether prices are good or not.
- Producers have to walk long distances to markets where they are often unable to find buyers and end up selling their animals for a low price.
- There are numerous export abattoirs in Modjo (close to Addis Ababa), but all are operating under-capacity and complain they can't get reliable supplies of quality, young goats (or sheep).
- Past Mercy Corps efforts to foster stronger linkages with Modjo buyers were successful in increasing transactions, but these relationships broke down due to drought and conflict and did not recover.

RIPA-NORTH INTERVENTION APPROACH

The vision of the RIPA-North team is to transform the structure of livestock supply chains through catalyzing vertical integration, with actors at each level investing in deeper relationships with their suppliers including new agent-based models. In doing so, the aim is to foster trust-based relationships that enable information flows and other embedded services between actors, reduce uncertainty and risk for regional traders and female pastoralists, and result in supply chains that are resilient to shocks such as drought and conflict.

National level buyers in Modjo invest in downstream supply chains in regions to build resilient and trust-based relationships



Prior to the RIPA-North intervention, livestock supply chains were heavily biased against regional traders. Regional traders had to buy animals for cash, transport their animals to the abattoir gate, bore the risk of animal losses during transportation, frequently suffered financial losses due to rejection of animals at abattoirs and exploitative pricing, and had their capital tied up for up to two weeks as they waited to receive payment.

RIPA-North partnered with two national level buyers (one export abattoir and one national trader) to develop a new model that aims to transform the structure of these relationships. These buyers now employ agents at regional level who provide training to regional traders on the quality of animals required and undertake point-of-sale checks of animals at regional level so substandard animals can be rejected and replaced without regional traders suffering a loss. The national buyers also send their own trucks to collect animals and provide point-of-sale payment or even advanced credit to regional traders. Overall, the aim is to reduce uncertainty in transactions and foster trust-based relationships that are less likely to break down in the face of shocks.

Regional-level traders (Goat Aggregation Enterprises – GAEs) develop and invest in last-mile aggregation networks



Regional-level traders are common in the lowlands, but many operate at small scale and sporadically to meet local and cross-border demand during religious holidays. RIPA-North partnered with thirteen regional traders and supported them to become professionalized Goat Aggregation Enterprises (GAEs), so-called because it is largely lowland goats that are considered premium quality and are in high demand from large buyers. RIPA-North provided a package of support to GAEs to help professionalize their business, including business training, cost-share grants to improve their holding ground capacities, Disaster Risk Management (DRM) planning support, and business-to-business meetings with large buyers to initiate new relationships.

Most importantly, all these partnerships required GAEs to introduce a new model of sourcing goats for aggregation through building and training a network of last-mile agents at village-level called 'mini-collectors'. GAEs each selected ten mini-collectors and trained them on the standard of goats demanded by large buyers and on weight-based purchasing including provision of scales. GAEs also provide credit to their mini-collectors to purchase goats, and an allowance for them to bring the animals to the GAE premises such as travel and food. The aim is to build trust and allow GAEs to be proactive and diversified in sourcing goats while also ensuring they get the quality of animals needed to supply large buyers.

Mini-collectors develop new buying relationships with village-level livestock producers



The new model of mini-collectors is intended to not only improve GAE operations, but also aims to transform the way that pastoralists and agro-pastoralists interact with supply chains. Firstly, by purchasing goats at village-level or in highly localized 'bush markets', the model removes the need for producers to walk long distances to market and enables them to make empowered sale decisions based on the price they are being offered. Secondly, because mini-collectors are located in the community they are able to develop trust-based relationships with producers that allows for effective flows of information, such as advance guidance on numbers of animals required and feedback on quality of livestock previously sold and reliable price information.

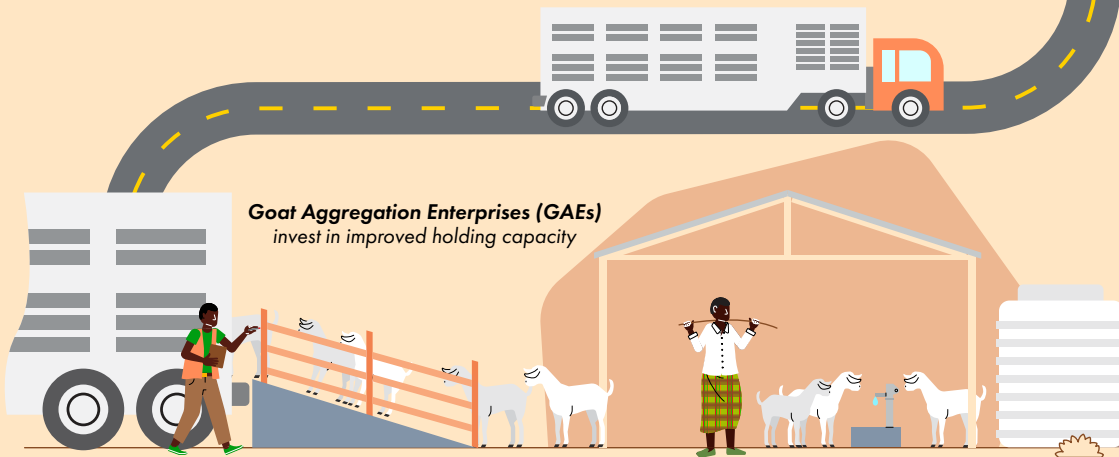
1. Large buyers invest in resilient and trust-based relationships with regional GAEs

- 1A Employ agents at regional level
- 1B Agents provide training and point-of-sale quality checks
- 1C Point-of-sale payment and advance credit to GAEs
- 1D Invest in loading ramp at GAE location

Modjo Town

EXPORT ABATTOIR

Large buyers invest in purpose-built transportation trucks to maintain quality



Goat Aggregation Enterprises (GAEs) invest in improved holding capacity

2. GAEs develop and invest in last-mile aggregation networks

- 2A Select and train last-mile agents (mini-collectors)
- 2B Provide credit to mini-collectors to purchase livestock
- 2C Provide scales and use weight-based purchasing
- 2D Provide allowances to build trust

Mini-collectors aggregate livestock and take animals to GAEs



3. Mini-collectors develop new buying relationships with village-level livestock producers

- 3A Planned and repeated purchases
- 3B Training on quality demanded
- 3C Weight-based purchasing

Livestock Producers sell goats to Mini-collectors in their village





193%
**AVERAGE INCREASE
IN NUMBERS OF
LIVESTOCK SOLD
BY PARTNER GAES**

107
**MINI-COLLECTORS
ARE STILL ACTIVE
AS GAE AGENTS
(82% SUCCESS RATE)**

5
**REGIONAL
TRADERS HAVE
INDEPENDENTLY
'CROWDED-IN'**

INTERVENTION IMPACT

EVIDENCE OF SUSTAINABLE MARKET SYSTEM CHANGE

There is strong evidence that the RIPA-North intervention has been highly successful in transforming livestock supply chains through sustainable systemic change. On average, the thirteen partner GAEs have increased the number of livestock purchased and sold by an impressive 193% compared with pre-partnership, reaching average sales of \$222,000 per GAE per quarter. The mini-collector model has been a key driver of this performance and has also proven remarkably sustainable, with 107 mini-collectors (82%) still active almost two years after being trained by the GAE.

The intervention also aimed to increase information flows and embedded services through the system. To understand this better, RIPA-North undertook a qualitative assessment involving interviews with actors at different levels. The large buyer partners have proven fully invested in their new regional relationships, for example the national

trader used their own resources to construct a loading ramp at three GAE premises to reduce injuries and stress on animals, and each quarter provides \$90,000 in advance credit to GAEs. Information flows between GAEs, mini-collectors and producers have also been a game-changer. The qualitative assessment revealed that there are now robust information flows about the age and size of animals required and advice and feedback to tackle the problem of misuse of veterinary drugs.

A positive sign that the intervention is having a knock-on effect on the wider system is that five regional traders have 'crowded-in' and independently replicated the GAE model. In addition, through the launch of a new digital livestock aggregation platform called Lersha, there is increasing interest from large buyers to also tap into the new professionalized network of traders in the lowlands.



Photo: Mercy Corps, Ethiopia/Olga Petryniak, 2023

Business Success Story

Muna Ismail started her livestock trading business near Kebribayah Town in Somali Region 15 years ago. Since then, she has gradually grown her business, but until recently the scale was still small with just 198 sheep and goats sold per month, and she often faced challenges in finding buyers, sourcing animals during lean seasons, and maintaining her operations during droughts when the cost of fodder was high.

Since her partnership with RIPA-North to become a GAE, Muna's business has been transformed. She has developed new sales channels with buyers in Modjo, she has 13 female agents sourcing

animals from rural communities, and as a result of training on DRM action planning, she is now growing and storing her own fodder so she can maintain her business during droughts. In just nine months, her sales have increased more than four-fold to 1,093 sheep and goats per month, and she has diversified her business to include dairy cows. Muna credits her mini-collector network as being instrumental to her success, and her choice of female collectors was strategic, as *"women are reliable, they don't chew khat, and I understand the challenges they go through so I'm able to support them"*.



\$2.3 MILLION
IN LIVESTOCK SALES
BY HHS TO GAES
EACH QUARTER

16% **VS** **6%**
OF HHS IN RIPA
AREAS PRACTICED
FATTENING
BEFORE SALE

6%
OF HHS IN NON-RIPA
AREAS PRACTICED
FATTENING
BEFORE SALE

INTERVENTION IMPACT EVIDENCE OF IMPACT ON TARGET GROUPS

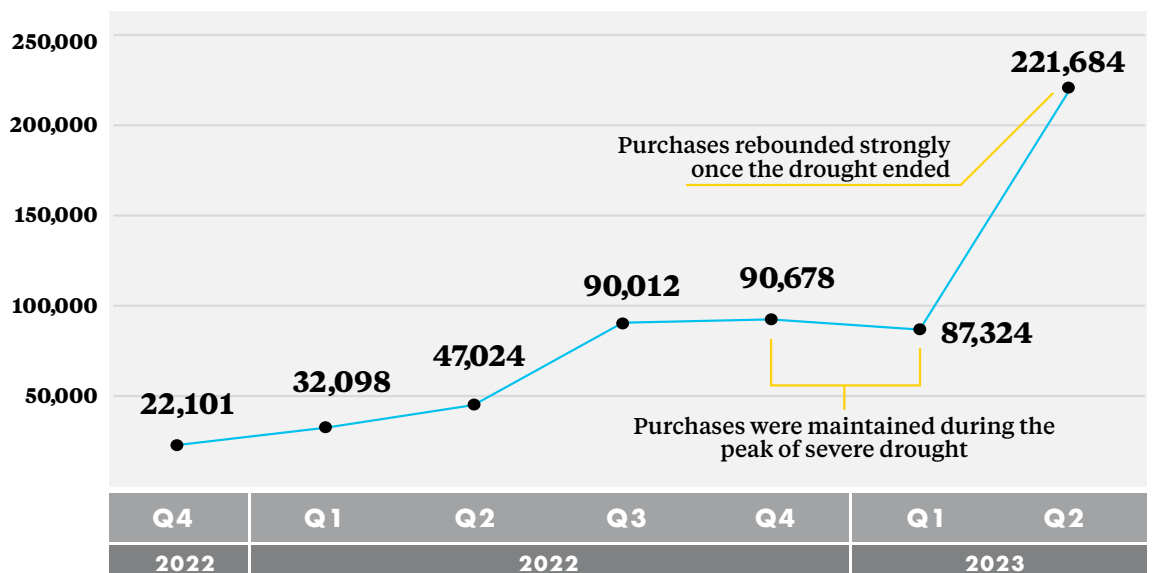
The most important measures of intervention success are whether the market system change has: i) resulted in target populations increasing sales of livestock into the new system; and ii) positively impacted their livelihood outcomes and resilience. Performance data from GAEs and national buyers shows there has been a dramatic increase in purchases of small ruminants from RIPA-North target areas as a result of the intervention, and the last-mile sourcing model means small-scale producers are participating actively in the new system. RIPA-North calculates that more than 11,000 households sell two to three animals into the GAE network each quarter, compared with less than 4,000 households per quarter before the intervention.

A key aim of this system change is to stimulate a shift in herd management and marketing strategies towards sales of younger and export-quality animals, including investing in quality. The huge increase in sales of young goats to GAEs is presumably beginning to drive this change. RIPA-North’s annual population-based

survey also provides evidence this shift is underway, for example 16% of households in RIPA-North target areas practiced animal fattening before sales compared with 6% in non-RIPA areas, 51% of HHs in RIPA areas use market information to decide where to sell livestock (36% in non-RIPA areas), and 13% of households in RIPA target areas de-stocked their animals before or during the recent severe drought (8% in non-RIPA areas).

The impact of this specific systems change on the livelihood outcomes and resilience of households is difficult to isolate, but the injection of more than \$2.3 million into the pockets of lowland households each quarter is strong evidence that the intervention is increasing incomes. Significantly, in the face of the worst drought in 40 years, lowland producers in RIPA-North areas were able to continue to sell livestock and generate income to maintain their herds and feed their families, as GAE purchases plateaued but did not fall significantly during the peak of the drought between October 2022 and March 2023.

AVERAGE VALUE OF LIVESTOCK SALES PER PARTNER GAE (USD)





Gender

Gender integration was a particular focus for this intervention, not least because of the dominant role that women play in rearing and selling small ruminants. The new model of last-mile mini-collectors was designed with female producers in mind. Qualitative assessments found it has been particularly beneficial for women, who no longer have to travel long distances to markets, have increased their access to information and have improved bargaining power when selling their animals. The RIPA-North team also set out to partner with female GAEs and encourage networks of female mini-collectors who can interact more

effectively with female livestock producers. While only two GAEs are female-owned, more than 50% of mini-collectors are female, and RIPA-North provided gender-sensitivity training for male GAEs to improve their practices of working with female agents. Female livestock producers report that they are now making the livestock trade a more consistent source of income, as they have an improved understanding of market demands, and that this has allowed them to become more financially independent, bringing home more money to support their families and reinvest in their livestock.

LESSONS LEARNED

1. Using a market systems resilience (MSR) approach was instrumental in shaping the RIPA-North vision and the systems change that the team ultimately catalyzed.
2. Fostering trust-based relationships had a profound impact in terms of reducing uncertainty and increasing information flows and embedded services between actors in the supply chain.
3. These information flows can play a key role in addressing misuse of veterinary drugs. For example, GAEs have hugely mitigated the problem of misuse of Oxytetracycline (an antibiotic used to reduce stress on animals before walking long distances), which previously was a major factor in rejection of animals by abattoirs.
4. More measurement is needed to assess the extent to which these supply chains are resilient to shocks, but the fact that livestock purchases did not fall during the peak of the recent drought (the worst in 40 years) is a positive sign.
5. Weight-based purchasing became common practice for some actors, but significant resistance remains at household and mini-collector level.
6. More 'crowding-in' of national buyers is needed to diversify demand and increase resilience of livestock supply chains, and this should now be a focus for RIPA-North.
7. Mercy Corps should consider undertaking research to better understand the extent to which this intervention is catalyzing a shift in pastoral production practices and marketing attitudes and practices.



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Resilience in Pastoral Areas – North (RIPA-North) is a five-year, \$38 million USAID-funded program operating in lowland areas of Somali, Oromia and Afar regions of Ethiopia (2020 – 2025). RIPA-North aims to improve the resilience capacities of households, markets, and governance institutions, collectively contributing to enhanced food security and inclusive economic growth.