More meat, milk and fish by and for the poor

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Community-based sheep improvement—research helps breed strong rural communities in Ethiopia

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Ethiopia is known for having the largest livestock population of Africa. Across the country, millions of cattle, donkeys, camels, chickens, sheep and goats live and work alongside people. The relationships between people and animals are long-standing, close and deeply embedded in culture and traditions.

Animals are power for transport and ploughing, they are food and nutrition, their skins and wool can be turned into useful products, their dung fertilizes fields and fuels cooking fires, and their sale pays for education and other necessities.

Yet millions of rural people remain locked in poverty. They work long hours to feed themselves, they battle harsh natural environments, often far from roads, clinics and markets and they and their animals lead far less productive lives than their urban cousins.

The picture is not all bleak. Public services and infrastructure are fast expanding, markets are growing, fueled by urban and export demands for food, and agricultural growth and transformation is a driving goal of government.

Communities are also taking power into their own hands, transforming local resources into assets that benefit them all. Animals are often at the heart of this transformation.

Empowering a rural community

Molale is a rural community in Menz – a well-known sheep region north east of Addis Ababa. It's a community of 2700 households growing crops and raising sheep in the high hills. Their sheep are widely known for their good and tasty meat and they are well-adapted to life above 3000 metres.

In the past five years many of the households have moved from being struggling food aid recipients to being productive farmers with cash to feed and educate their families. Much of this was achieved through a novel community based sheep breeding and marketing initiative.



In 2009, a research for development project started in Molale involving the community, local extension agents, the government's Debre Birhan agricultural research centre and international scientists from the International Center for Agricultural Research in the Dry Areas (ICARDA), the International Livestock Research Institute (ILRI), and the University of Natural Resources and Life Sciences (BOKU, Austria). When the research team started to discuss ways to improve the sheep breeds the farmers had heard about a government scheme to distribute a more productive type of sheep known as Awassi. They wanted to try it out. Fortunately, as it turns out, there weren't enough Awassi rams for Molale.

The community and the research team came up with a different approach. Recognizing the potential of the local Menz sheep, they decided to join forces to improve the local breed rather than count on an imported Awassi type. The result was a 5-year community based breeding program that trained farmers to improve their animals and keep proper records, helped them develop a breeding and marketing cooperative, changed selling priorities and empowered the community to express their own needs.

Later, when the government returned with Awassi rams, the community said 'no.' They instead asked for help setting up their cooperative.

Community-based animal breeding

In situations where high-investment centralized animal breeding and genetic improvement is not feasible, community-based breeding is a good alternative. Instead of building central breeding facilities, it takes the genetic choices to the farms. This approach explicitly takes account of farmers' needs, views, decisions, and active participation. Success comes from proper consideration of farmers' breeding objectives, infrastructure, participation, and ownership.

This is the approach the Molale community decided on. What happened? What has changed?

With support from the scientists, we have seen promising progress with more than seven rounds of animal selection completed. The important issue of a data collection and recording system is in place with 'community animal breeding workers' acting as enumerators and recordkeepers supported by the research centre. All animals are tagged and tracked. A sheep breeding cooperative has been established to run the program, including a revolving fund as well as ram sharing.

- Most of the participating households graduated from the government-run safety net program that meets short-term food needs through emergency relief. They use income from sheep sales to buy food.
- The community established the 'Menz sheep production and fattening cooperative', with 58 members, as a vehicle to collectively manage the breeding and other tasks.
- Sheep production is now a main line of business for many community members. From being a sideline, it is a reliable livelihood that farmers invest in. Cooperative members collectively sell about a hundred animals each quarter.

- Where previously the 'best' fast growing ram lambs were sold and slaughtered, they are now kept to improve the breeding stock. The 'negative selection' has been reversed and the best genes are retained in the community.
- Through better husbandry, systematic health interventions and improved feeding, the community produces and sells more lambs that grow fast and are healthy. These fetch better prices in the market because buyers know that the tagged sheep are well managed and disease free.
- There is a huge demand for breeding rams from neighbouring communities as well as other government and NGO.

What next?

From our research perspective, the breeding program has taken off. The community-based approach that combines community participation with research backstopping and guidance has produced positive results. Research data is being captured at the community level. The unique local breed is being improved and there's growing demand for it by consumers. The community has organized itself and members are earning money and have more reliable livelihoods than before. With reliable high quality production, cooperative members are working on ways to improve their market linkages, getting higher prices for themselves. This is an approach that can be scaled out in other locations through partnership with government and other partners.

Most important perhaps, the community has been able to recognize, and build on, its own resources and assets. When the Awassi breed was offered, the farmers said no. They had discovered the value of their own Menz breed. They instead asked for help registering their cooperative. Now, through their cooperative, they look for more distant markets and larger traders where they can negotiate better prices for their products.









CGIAR is a global partnership that unites organizations engaged in research for a food secure future. The CGIAR Research Program on Livestock and Fish aims to increase the productivity of small-scale livestock and fish systems in sustainable ways, making meat, milk and fish more available and affordable across the developing world. The Program brings together four CGIAR centres: the International Livestock Research Institute (ILRI) with a mandate on livestock; WorldFish with a mandate on aquaculture; the International Center for Tropical Agriculture (CIAT), which works on forages; and the International Center for Research in the Dry Areas (ICARDA), which works on small ruminants. http://livestockfish.cgiar.org

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