

Empowering women in the dairy value chain in Ethiopia

SNV-EDGET
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The dairy sector offers one of the most reliable avenues for boosting food security and household income for smallholder farmers. Women play a key role in dairy production, including caring for dairy cows and calves, growing forage, and milking and processing dairy products. For most households, however, this only adds to women's heavy workload, without giving them access to, or control over dairy income. After initially making little headway in its goal of ensuring equal access to support for male and female farmers, SNV-EDGET took explicit steps to address a number of factors preventing women farmers from enjoying the full benefits from dairy farming. The Brief explores EDGET's experiences, with a focus on lessons learnt in three core areas: enhancing women's access to knowledge and extension services; introducing "women-friendly" technologies; and supporting women-owned dairy businesses.

What did EDGET do?

From the outset, SNV-EDGET aimed to ensure that women and men would benefit equally from the project.

In addition to the project's core objective of increasing household income from dairy, EDGET sought to promote women and youth entrepreneurship as a crosscutting issue. As the project progressed, EDGET put in place additional measures to address women's needs and strengthen their position at both household and value-chain level. These included:

Opening up women's access to knowledge and extension services

EDGET adjusted its selection criteria to encourage more women to access support from the project. For example, women owning at least one healthy local cow or calf that was ready for artificial insemination (rather than the minimum requirement of one crossbreed calf) were eligible for support. Once the Dairy Farmer Extension Groups – the main mechanism for providing extension services and peer-to-peer

learning among farmers – had been set up, EDGET-supported households were specifically requested to send female farmers to training sessions.



EDGET aimed to enhance gender equity in access to knowledge and dairy income.

Following a gender study conducted in 2016 (see box on page 4), the project took more proactive measures to ensure the equal representation of male and female household members at training sessions. Some of the steps taken included: adjusting the time and length of meetings to better fit in with women's dairy schedule; explicitly inviting women farmers to attend meetings; and introducing dual membership (recognising both male and female representatives from a household, rather than just heads of households) in Dairy Farmer Extension Groups, cooperatives, and other EDGET-supported structures. Extension staff were encouraged to pay special attention to women farmers during advisory and coaching sessions.

EDGET also developed a number of practical recommendations to empower women in the dairy sector, such as encouraging dairy cooperatives to revise their by-laws to increase the ratio of female staff and managers.

Table 1: Gendered division of roles in dairy activities

Responsibility for:	Looking after the cow	Purchasing dairy inputs	Milking and processing	Transporting and marketing milk	Transporting and marketing processed products
Women only	34.5%	27.0%	60.9%	59.3%	55.4%
Both men and women	56.1%	43.8%	30.5%	32.0%	36.3%
Man only	9.2%	29.1%	8.6%	8.5%	8.1%
Hired labour	0.2%	0.2%	-	0.2%	0.2%

Source: EDGET Evaluation, December 2017

Introducing “women-friendly” technologies, training and resources

EDGET promoted a number of technologies and extension services that not only aimed to enhance dairy productivity, but were also expected to reduce women’s workload and empower them as dairy producers.



Women play a key role in smallholder dairy farming

Backyard forage production

Sourcing and preparing feed for dairy cattle and calves is one of the most time-consuming and labour intensive dairy activities. By introducing improved forage varieties on backyard plots, women farmers could cut back on time spent in fetching and carrying animal feed. The EDGET project supported households to introduce

at least two forage seed varieties and provided practical training and follow up for male and female farmers to ensure proper implementation at household level.

Improved milk handling and processing technologies

In most smallholder dairy households, women are responsible for milking and milk processing activities. Through the introduction of Milking and Transportation System (MTS, or Mazzican) – hygienic multi-purpose milk containers, suitable for milk collection, storage and transportation – EDGET aimed to enhance hygienic milk production while also reducing the time spent in transferring milk and cleaning different containers.

All households supported by the project received one Mazzican, accompanied by a leaflet on how to use it correctly (see Practice Brief 8 in this series). Based on EDGET’s experience, the Agricultural Transformation Agency is exploring the option of disseminating MTS through its programmes.

Members of women’s groups in Southern Nations, Nationalities and Peoples’ Region (SNNPR) received two churners per group to help with milk processing (butter making).

Promoting household biogas technology

EDGET facilitated the introduction of biogas to members of Dairy Farmer Extension Groups as part of the extension package on housing and manure management. Around 200 interested farmers, including some female farmers, received support to install biogas as a clean energy source.

Strengthening women’s position at higher levels of the dairy value chain

The EDGET project proactively sought to boost women’s position in higher levels of the value chain, through building their capacity to engage in dairy-related enterprises. In addition to supporting women and youth groups involved in forage seed multiplication and marketing, the programme reached out to women-owned agro-businesses as part of its efforts to create a network of agro-input dealers providing services to farmers (see box on page 6).



Members of a women’s group in Amhara region preparing urea molasses micronutrient blocks to sell as dairy feed

"Thanks to EDGET I can now produce biogas"

Tegitu Asefa is a widow and mother of eight living in Shebedeno woreda, Sidama zone, SNNPR region. She earns a living through a mix of crop production and livestock rearing.

Tegitu first heard about biogas technology when she attended a training organized by EDGET project. She learnt about the benefits of biogas in manure management, which could then be used to improve the fertility of the soil, while also providing a clean cooking solution. "I was highly interested to access the technology," she says.

In February 2017, after a needs assessment carried out by the project team, Tegitu invested ETB 9,000 (approximately US\$400) towards the installation costs, while the remaining ETB 6,000 was subsidised by the government. She is now the proud owner of a biogas digester.

"For the last eight months I have using the biogas by filling the digester continuously by animal dung." She explains that at the beginning it was difficult to feed sufficient dung, but she gradually managed to reach more than the halfway mark, which enabled her to start generating clean energy for cooking.

"Before I began to use biogas, I travelled for long distances to collect firewood, but now I can cook using the stove that I got with the biogas package," she says. Tegitu is also enjoying the clean air in her kitchen, which previously full of smoke and negatively affected her health. She plans to use the bio slurry to fertilise her backyard forage plot, as well as to grow vegetables for consumption and for sale. This will save money that she previously spent on chemical fertilisers.

Story prepared by Neima Guluma



Biogas digester installed at a smallholder dairy farm

Insights from the SNV-EDGET gender study

In September 2016, EDGET commissioned a case study on the project's approach to gender and women's empowerment in SNNPR region. The study revealed that much of the work done by women remains undervalued because it is unpaid and is confined to the domestic sphere. Women's work includes water and fuel collection, food preparation, household chores, childcare and dairy cattle management. According to the study, women in SNNPR spent four hours a day on average on dairy activities (not including the time spent on transporting the milk to the market or to the dairy cooperative).

The study found that women's household responsibilities also have an impact on their participation in dairy farmer groups, and limits their role in management positions at this and higher levels.

A similar pattern of female underrepresentation was found in the various occupations in the dairy value chain and in cooperatives. The study concluded that there was need for a sustained gender-sensitive approach, with targeted support to address women's needs, to help narrow the gender gap in access to knowledge and other forms of support.

The gender study led to a more proactive approach by the project to strengthen women's empowerment. The findings of the final evaluation in December 2017 (see box on page 5) suggest that some progress was made in the project's final two years.

Women's access to extension services

	Oromia		Amhara		SNNPR	
	2016	2017	2016	2017	2016	2017
Total number of households supported	21,219	29,617	18,429	17,473	15,033	15,000
Number of female headed households accessing extension services	3,163	5,637	1,487	1,431	1,796	2,460

Based on EDGET monitoring data

Key results

Enhanced support for women's enterprises and employment opportunities in the dairy sector

According to EDGET project monitoring data, 65% of women who owned a local cow at the start of the intervention said they received the same level of extension support as households with crossbred dairy stock, with the exception of the improved calf feed intervention for which they were not eligible.

The results of focus group discussions and household survey revealed that with the introduction of backyard forage plots, many female dairy producers were able to increase their milk yield through making local butter to sell on the local market, which is their primary source of income.

In 2016, three women's groups and six youth groups had embarked on forage seed multiplication and marketing activities, with support from EDGET. Since this was far short of the project's initial target, EDGET carried out an assessment of gender integration in the project that led to the development of a new gender and youth strategy, which was implemented from late 2016 onwards. According to the final EDGET evaluation conducted in December 2017, the project provided support to 43 women and youth enterprises (84% of the project's target).

Improvements to women's social status and decision making power

While some respondents to the EDGET household survey said their position at the household and community level had improved as a result of the project, available data shows that women's overall participation in dairy organisations remains low. However, measures taken by EDGET have helped raise the number of women in management positions in cooperatives.

In 2015, 13 dairy cooperatives had at least one female board member and at least 50% of employees hired for milk processing were women (see Practice Brief 6 in this series).

EDGET also encouraged women-owned agro-businesses to apply for support under the project's agro-input dealer network (see Practice Brief 7 in this series). By 2017, six out of 50 agro-input dealers supported by the project were women.

Anecdotal evidence further suggests that awareness is increasing among both men and women about the need to share dairy production tasks more equally.



An agro-input dealer visits a client at her farm to provide advice on dairy feed management

The EDGET Project

Enhancing Dairy Sector Growth in Ethiopia (EDGET) is a five-year dairy development project implemented in 51 woredas (districts) in the three regional states of Oromia, Amhara, and the Southern Nations, Nationalities and Peoples' Region (SNNPR). The overall goal of the project is to contribute to enhance the livelihood of 65,000 smallholder farmer households through improved dairy production and marketing. The specific goals of the project are to: (i) to double the income of smallholder households from dairy production, and (ii) improve the nutritional status of children, particularly in the first 1,000 days of their lives, through consumption of milk products.

EDGET also seeks to complement the significant investments made by the Government of Ethiopia to promote the contribution of the dairy sector to the country's economic development.

EDGET is implemented by SNV-Netherlands Development Organisation, Ethiopia, and funded by the Embassy of the Kingdom of the Netherlands. It builds on the work of previous Dutch-funded dairy sector programmes, including the Business Organisations and Access to Markets (BOAM) programme (2005-2011) and the Market-linked Innovation for Dairy Development (MIDD) programme (2011-2012).

For more information, please visit the project website at: www.snv.org/project/enhancing-dairy-sector-growth-ethiopia

Gender in the EDGET project: Insights from the 2017 evaluation

- Women are more involved in labour-intensive dairy activities associated with looking after the cows, milking them and processing dairy products. They are less involved in market-related activities such as buying inputs and marketing milk products.
- While far fewer women were reported to have participated in the dairy related trainings than men, an equal proportion of MHH and FHH received trainings, indicating that FHH were not disproportionately excluded.
- Statistically significant differences in the receipt of project inputs between male and female-headed households were only found for calf feed, with a higher proportion of FHH reporting receipt of calf feed than MHH.
- In terms of the adoption of practices, several key practices were reviewed. These pertained to the feeding system, preparation of improved feeds, varying feeding based on the stage of lactation, monitoring cows' milk production, producing forage, accessing artificial insemination services, performing regular growth measurement, using supplementary feed, use of the MTS for milking and transportation. The analysis revealed that adoption rates by male and female-headed households were not statistically significant, except in the case of accessing vaccination (somewhat higher for MHH).
- The figures for milk production are 1323 litres/year for FHH and 959 litres/year for MHH. However, the difference was not found to be statistically significant as a result of the large variance and the small sample size.
- Net income figures for FHH and MHH are 6486* Birr/year and 6304 Birr/year respectively. As with milk production the difference was not found to be statistically significant.
- In the majority of cases, the revenue from the sale of milk and dairy products is controlled by men and women jointly (56%), followed by women only (34%) and men only (10%).

EDGET Evaluation Report (December 2017) page 119

** In 2016, this was equivalent to around US\$300*



EDGET has helped women farmers to upgrade their dairy stock for increased milk production and income.

“The project helped us to turn our research proposal into action”

After graduating from Ethiopian Adventist College in 2014 with degrees in accounting, Zenebech and Gedam did something unusual. Instead of looking for office jobs, the two young women decided to open an agro-input shop in Arsi Negelle woreda of West Arsi Zone, Oromia region. When EDGET began building a network of woreda level agro-input dealers to provide inputs and services to farmers supported by the project, the two women were selected to become the distributors in their area.

The partners received different types of support to establish their business. In addition to business skills training, they received basic materials such as shelves, staff uniforms, display tables and a signboard to promote their business. The project also provided follow-up technical support, such as refresher training and coaching in business skills, customer handling and record keeping.

“Thanks to the project we earned ETB 7,000 as commission for proper input distribution using the project voucher system.... We also have healthy relationship with our suppliers and customers because we deliver a quality product at an affordable price.”

The agro-input dealers also took part in a Business-to-Business (B2B) forum, which enabled them to network with other regions agro-input dealers and input processing firms and increase their skills and experience. Through the exposure generated through the project, the partners have been able to diversify their business. The dealership has been contracted as a reseller of beer by products from the St. George brewery in Hawassa. They have also been appointed as agents for Alema Kougijs, the largest manufacturer of animal concentrate feed in the area. This has enabled them to access the local market for livestock concentrate feed, which would have been difficult to achieve without the project's support.

The partners are also taking the opportunity to increase their knowledge by participating at national business-to-business forums organised by EDGET. “We were able to diversify our products by extending our network with different suppliers,” they say.

The partners started their agro-input business with an initial loan of ETB 75,000 that they have since repaid, while also taking on four employees. In addition to selling dairy inputs they provide extension services by providing their clients with information on how to use different products. They also conduct house-to-house follow up to smallholder farmers.

Arsi Negelle woreda is a leading producer of a local drink 'Areke,' which is one of the main means of livelihood for local women. The two entrepreneurs have a vision on how to continue to grow their business so they can provide alternative means of income for women who are forced to brew areke to survive. Expressing their concern, Zenebech and Gedam explain that areke producers have to fire up to 10 clay pots at a time, which leads to burns and other health impacts. “To sell the product they have to wait in long lines at selling stations and sometimes they are insulted by ill-mannered people,” they add. The two have been granted a plot of land by the municipality where they want to start a farm and introduce new technologies that will help improve the lives of women.

Story prepared by Neima Guluma

Taking stock of supplies at the agro-input shop

Lessons learnt

Building a gender-responsive programme requires integrated gender analysis

Even though the project initially set out to address gender as crosscutting issue, by the mid-term point it had become clear that there was need for a more proactive approach to meet the needs of women farmers. A practical illustration of this was the project's experience with introducing MTS (see Practice Brief 8 in this series). While men were more likely to collect the cans from the agro-input dealer, where they also received instructions on correct usage, it is women who were primarily responsible for milking. One extension agent told an anecdote about a woman who cut the top of the MTS because it was difficult to open the lid. Her husband had not passed the instructions to his wife. Based on such experiences, EDGET adjusted the extension package to include instructions on proper use of the cans.

One of the recommendations of the EDGET gender study was that EDGET should explore more integrated methods, such as SNV's 'Balancing Benefits' and the Social Analysis and Action (SAA) method developed by CARE USA in 2007 to address gender issues in a more integrated way. The SAA approach focuses on groups consisting of 25-30 community members, with group facilitators selected from the groups. The approach has

"If we had undertaken the gender analysis right at the start of the project we would have had a better idea of what interventions would most benefit women and invested sufficient resources towards this. We would also have taken women's engagement more seriously by starting to implement the measures that were taken later in the programme much earlier. One of these is access to credit for business plans of women's groups – including good business management support."

An EDGET Dairy Extension Promoter

been applied in Ethiopia by SOS Sahel and CARE Ethiopia and can be extended to other common challenges that women face in rural areas including unfavourable division of labour, uneven power relations and decision-making, poor access to and control over resources,

resource management and self-reliance or harmful traditional practices.

Explicit strategies are needed to enhance women's access to extension, capital, and other forms of support

While it is still too early to assess the impact of measures taken by EDGET to empower women in the dairy value chain, the experience of Oxfam GB offers a useful reference point.

By implementing dual membership in agricultural projects, the organisation has seen an increase in the proportion of women in membership and leadership positions of cooperatives in traditionally male-dominated commodity chains such as honey (Amhara region) and coffee (Oromia region).

However, it is important to bear in mind that such measures may well contribute to increasing the workload of women. When introducing new technologies and dairy practices it is therefore important that women are explicitly invited to attend training sessions along with their partners.

With regard to boosting women's income from dairy farming, it must be noted that most female farmers supported by the project did not have access to crossbred cows, which can produce up to 12 litres per day. For such households, cost is a major barrier, since a crossbred cow costs between ETB 20,000 and 30,000 (US\$850 to 1300 based on 2016 exchange rates). Other investments are also needed, such as the improved cowsheds, transportation equipment for milk and calf feed.

At higher levels of the dairy value chain, female entrepreneurs face similar financial constraints in establishing viable agro-businesses. This was particularly evident in the low representation of women in agro-input dealerships supported by the EDGET project. Of the 50 agro-input shops that were selected by the project, only six were women-owned (see box on page 6). Some strategies for enhancing women's access to capital include:

- Establishing women's savings and credit cooperatives and linking women to micro-finance institutions.
- Establishing revolving funds that provide women with loans, or expensive investments such as heifers to help them make the initial investments in dairy farming.
- Supporting female agro-input dealers through a credit facility for buying supplementary and concentrated feed.



Testing milk at a collection point. Many cooperatives have increased the number of female staff

There is need to build a convincing business case for women's involvement

Some business options within the dairy value chain are more feasible for smallholder women farmers because they require smaller investments. These include milk collection and distribution, basic processing (churning), livestock feed production, or seed multiplication. The EDGET gender study found, for example, that the commercial production of butter and improved forage are potentially very profitable business opportunities for women in parts of SNNPR. In order to build a solid business case for supporting such businesses, there is need to develop convincing cost-benefit analyses comparing potential profits from forage in comparison to cash crops such as coffee, chat or sugar cane.

In some areas, the local administration has allocated land to women's groups to grow livestock feed as a means of livelihood. In SNNPR, women's groups in several kebeles have been able to embark on seed multiplication or forage production. In the framework of the Agriculture Growth Programme, EDGET tried to replicate this approach in Wenago woreda by offering with women's forage seed producer groups with temporary access to land to produce forage. However, this approach did not bring about the expected results, primarily due to limited access to capital. Based on this experience, EDGET began to provide women's groups with technical and material support to enable them to develop a viable business model.



Milk collection and distribution offers a viable source of income for women

In conclusion, the experiences highlighted in this Practice Brief illustrated that while EDGET made deliberate and sustained efforts to ensure that women reap the benefits of dairy farming, women continue to be hampered by their "double burden": taking care of their families while also taking on more responsibilities for dairy production. Despite the project's objective of ensuring that women had an equal voice in farmers groups, cooperative management and other higher-level activities, it proved difficult to achieve. By the end of the project, women continued to be underrepresented in farmer group activities. Household surveys further revealed that women did not have an equal voice in decision-making related to economic matters such as the purchase of inputs and the marketing of milk products.

As highlighted in the end-of-project evaluation, finding ways to address gender dynamics at the household level is challenging. The report notes that while it is important to sensitise men, including male youth, about the need for a fairer division of dairy management tasks this could paradoxically undermine women's control over dairy income. Projects like EDGET may therefore have more opportunities to strengthen women's status within farmers' groups and higher levels. EDGET has had some success in reducing the gender gap among staff and management of dairy cooperatives and providing support to female agro-input dealers, which suggests that there may be further opportunities to contribute to increased women's empowerment in the dairy value chain in future.

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A set of longer farmer stories is also available.

Once published, all publications in this series will be available online via the following link: www.snv.org/project/enhancing-dairy-sector-growth-ethiopia/

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Authors: Neima Guluma (SNV-EDGET) and Wangu Mwangi (Learning for Development)

Contributors: Fitalew Adamu, Meseret Kebede and Misrak Bora (SNV-EDGET); Tseday Azeze (Southern Agricultural Research Institute)

Editing and coordination: Wangu Mwangi (Learning for Development)

Peer reviewers: Heinz Greijn (Learning for Development); Hans Meenink, Zelalem Atnaf and Mahlet Yohannes (SNV EDGET)

Photography: SNV-EDGET, Tewodros Beshah and Synergy Habesha

Graphic design and production: Stefanie van der Vlies (ZOUT design & communicatie) Meseret Kebede (SNV Ethiopia Communication)