

# A GREENER FUTURE ON A GRAND SCALE

A summary report of the Bale Eco-region  
Phase II project

Ethiopia, June 2024



Funded by  
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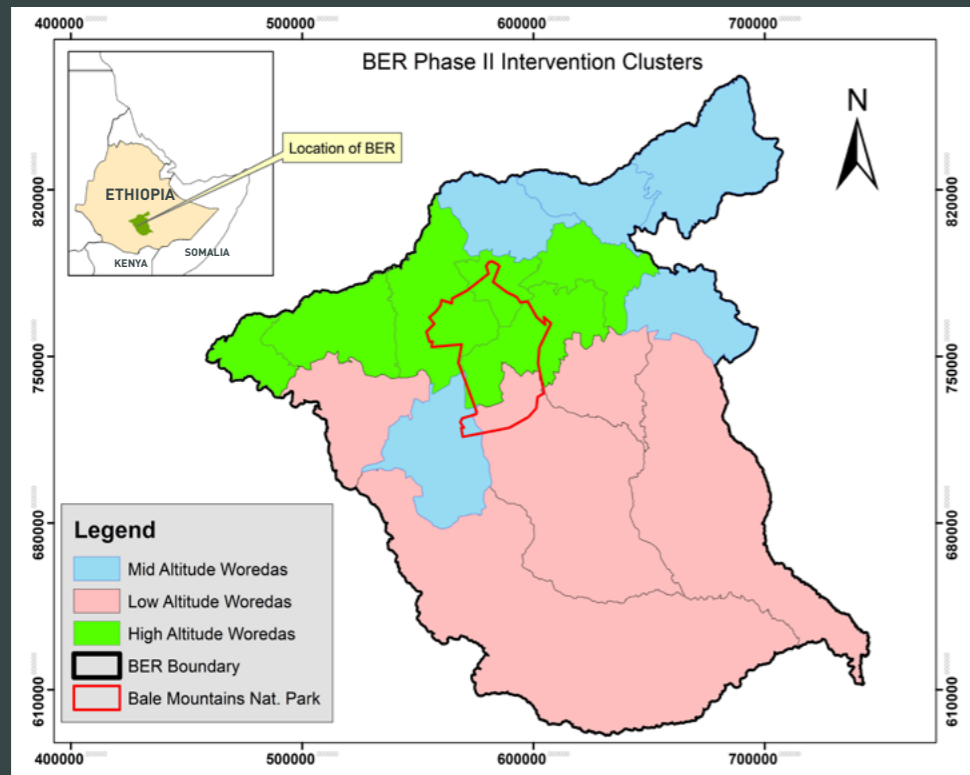




“You cannot conserve natural resources without thinking about the livelihoods of the community, and you cannot improve livelihoods of the community without thinking about conservation of the environment. The two go hand in hand. If that is jointly planned and jointly executed, any intervention will be successful and sustainable.”

**Shewit Emmanuel, Farm Africa  
Country Director, Ethiopia**

The topographic setting of the Bale Eco-region (BER) Phase II project



## CONTENTS

- 3 **Background**
- 4 **Sustainable natural resource management**
- 8 **Improved agriculture practices and livestock development programmes**
- 16 **Small and medium enterprise development**
- 18 **Population health and environment (PHE) interventions**
- 19 **Conclusion**



This project received additional funding from Jersey Overseas Aid.

Opposite: Bale Eco-region Phase II project participants gather to discuss landscape management planning with EU delegates, project consortium partners and local, regional and higher government officials (photo: Farm Africa).

Cover: women working at a community nursery established to increase local availability of quality fruit tree and coffee seedlings (photo: Farm Africa / Medhanit Gebremichael).

## BACKGROUND

The Bale Eco-region (BER) is one of Ethiopia’s critically important eco-regions, providing economic, social and ecological benefits for millions of people. The BER hosts a globally important area of biodiversity with extraordinary endemism, providing habitat for 26% of Ethiopia’s endemic animal species (including mountain nyala and Ethiopian wolf), 6% of endemic birds and 163 endemic plants.

The central part of the BER is occupied by the Senate plateau, the plateau with the largest Afro-alpine habitat in the African continent. More than 40 springs originate from this plateau and feed into five major rivers, which flow to the Indian Ocean. The Bale Eco-region is home to more than 1.6 million people and the water flow from the eco-region supports the livelihoods of an estimated 30 million people living in the south-eastern part of Ethiopia and northeast Kenya and Somalia.

However, deforestation and forest degradation, encroachment of protected areas, overgrazing, unsustainable agricultural practices and extensive soil erosion are major anthropogenic factors threatening the sustainability of the eco-region and its ecological functions and ecosystem services. Major underlying factors that trigger such environmental challenges are poverty, rapid population growth, weak market access and poor capacity to implement a coordinated and integrated multi-sectoral approach to planning.

With support from the European Union, Farm Africa is leading a consortium of

partners (SOS Sahel Ethiopia, Frankfurt Zoological Society (FZS), International Water Management Institute (IWMI) and Population, Health, Environment Ethiopia Consortium (PHEEC)) to improve the livelihoods of vulnerable people in the highland and lowland communities that depend on the Bale Eco-region, while ensuring the area’s critical ecosystem is protected.

The first phase of the project, which lasted four years from 2014 to 2018, created an eco-region development framework and the ten-year General Management Plan of the Bale Mountains National Park (BMNP) to help the government and local communities work together to sustainably manage forests, rangelands and water sources while helping to develop forest-friendly businesses and enhance the productivity of existing agricultural land to prevent communities cutting down forests further.

Phase II of the BER project has extended its reach to include 16 woredas and 1.6 million people in the eco-region over the period of 2019-2024. The work is also expected to benefit an estimated 30 million people living downstream, who depend on the region for their water supply.

This summary report outlines the project approach and results of the project to date.

The full report is available digitally from [ethinfo@farmafrica.org](mailto:ethinfo@farmafrica.org).



## SUSTAINABLE NATURAL RESOURCE MANAGEMENT

Participatory forest management, participatory rangeland management, integrated watershed management and management of the Bale Mountains National Park are major areas where the BER Phase II project is intervening to conserve biodiversity and build management systems that make provision for the sustainable use of natural resources by the communities of the Bale Eco-region.

### IMPROVED PARTICIPATORY NATURAL RESOURCE MANAGEMENT

Deforestation for farmland expansion is very high and poor management of rangeland resources is leading to a shortage of pasture. Participatory forest management (PFM) and participatory rangeland management (PRM) are systems Farm Africa has introduced to bring together local communities and local government to share responsibility for developing sustainable management systems for forests and rangelands.

The project has strengthened the institutional capacity of 115 participatory forest management cooperatives (PFMCs) and 20 participatory rangeland management cooperatives (PRMCs) in the Bale Eco-region. As a result, more than 500,000 hectares (ha) of forest are now under a sustainable natural resource management system. Land cover change analysis of time series satellite images shows that the average annual rate of conversion from forest to farmland has slowed by 25% (from a trending average of 2.0% per year at the start of the project to an average of 1.5% per year over the two-year period of 2021 and 2022).

In pastoral areas, a total of 403,299 ha of rangeland is now under the sustainable management of participatory rangeland management cooperatives and the annual rate of grassland conversion to farmland has slowed by 20% (from a trending average of 3% per year at the start of the project to an average of 2.4% per year over the two-year period of 2021 and 2022).

The ability of these organisations to operate effectively has been tracked using the Organisational Capacity Assessment (OCA) method. By December 2023, the average OCA score of the 115 participatory forest management cooperatives had increased from 45% (December 2019) to 68%, while the average OCA score for participatory rangeland management cooperatives increased from 40% (December 2019) to 69%.

### INTEGRATED WATERSHED MANAGEMENT

Integrated watershed management is an integral part of the BER II project, with 'watershed' being defined as an area of land that drains or 'sheds' water into a specific water body. The project has supported a sustainable land management programme, predominantly soil and water conservation activities, in model watersheds selected across the 16 project intervention woredas.

As part of this programme, soil and water conservation structures such as soil bunds, cut-off drains, artificial waterways, micro-basins and check dams have been constructed on 22 micro-watersheds that cover 17,810 ha of land.

To understand the impacts of these interventions, three model watersheds representing highland, midland and lowland clusters of the eco-regions were selected and hydro-sediment and weather monitoring stations were established. The hydro-sediment observatory stations provide a means of tracking water flow (run-off and base flow) and erosion trends by measuring the sediment yield that comes out from the watersheds. The automated weather stations used for each of the hydro-sediment observatory sites provide a means of investigating the spatial variability of the rainfall and substantiating the sediment yield and stream base flow data.

Although empirical analysis is still in process, notable changes are already observable in the intervention areas. For example, in Bekaye watershed, prior to the project interventions, stream flow rates were effectively zero, with stream flows stopping within an hour after rainfall. Now flow is being maintained for at least two weeks.

This highlights the long-term benefits of adopting an integrated landscape conservation and development approach as a sustainable land management system. Central to the success of this approach is the sustained maintenance of soil and water conservation structures to ensure their long-term effectiveness.



**Soil and water conservation structures such as soil bunds, cut-off drains, artificial waterways, micro-basins and check dams have been constructed on 22 micro-watersheds that cover 17,810 ha of land.**



**FOREST TO FARMLAND CONVERSION RATE**



**GRASSLAND TO FARMLAND CONVERSION RATE**



**The Bale Eco-region is home to over 1.6 million people, who rely on its mountain streams for their water supply.**

### BIOGAS TECHNOLOGY PROMOTION

The local communities living in the BER rely almost entirely on the natural forest for fuel wood, lighting and construction materials. This dependence significantly contributes to the degradation of forest resources.

The use of wood for fuel also contributes to high indoor air pollution and associated health problems are common. Traditional fuels such as firewood, crop residues and dung cakes are known to contribute to respiratory diseases due to the amount of smoke they produce when burned.

Domestically, firewood collection and food preparation often fall to women. Because of the considerable time they spend in smoke-filled kitchens, women - and the children they care for - are more exposed to the negative health impacts of traditional fuel use. Firewood collection is also a labour-intensive and time-consuming task, which significantly increases the domestic workload for women.

To alleviate these environmental and domestic challenges, the BER Phase II project has supported the adoption of biogas technology as a sustainable and alternative energy source. As part of this initiative, 75 biogas plant installations have been supported for 75 households in the five project intervention woredas. The government facilitated this effort by supplying biogas equipment and offering training for the households. Project participants contributed labour, land and local construction materials and the project provided essential materials such as cement, sand and stone, while also organising demonstration events to showcase the technology's effectiveness.

The operational biogas systems offer numerous advantages to both users and the community. Households using biogas benefit from sustainable energy for cooking and lighting, leading to significantly improved

indoor air quality and reduced workloads for women and children.

Additionally, the biogas technology generates bio-slurry as a by-product, which enhances agricultural productivity more effectively than conventional methods. Users use this biogas slurry to produce organic fertiliser for their vegetable gardens, resulting in impressive yields. For instance, the participating households have successfully cultivated vegetables such as potatoes and cabbage on a combined total of 5.65 hectares of land, generating revenue of 3,965,000 birr, equivalent to 70,803.57 USD.

The wider community has benefitted from a reduction in the amount of fuelwood being extracted from the forest daily, easing pressure on natural resources. The positive experience of participating households has also introduced the wider community to a promising, new and sustainable method of meeting their household energy needs.



Sheikh Jeylan H/Faki and Meko Abdulgefar are one of 75 households trialling biogas as an alternative to forest-sourced wood fuel.

### A PARADIGM SHIFT IN THE MANAGEMENT OF CONTROLLED HUNTING AREAS

Prior to the project's involvement, revenue from trophy hunting in the Bale Eco-region area was being channelled to the Oromia Regional State (85%) and Ethiopia's federal government (15%) without including the local community in the revenue-sharing arrangement. The reasoning at that time was that local communities would benefit from the subsequent investment of revenue locally to develop physical infrastructure such as schools and roads.

Nevertheless, community members dedicated to the conservation of wild animals voiced their objections to this arrangement. They questioned the fairness of allowing individuals who hadn't contributed to local wildlife conservation efforts to enjoy equal benefits. This raised concerns about the incentive to support such endeavours. Consequently, dissatisfaction grew, leading to a decline in local interest in wildlife conservation, thereby exposing many wild animals to heightened risks.

In 2015, a paradigm shift began, with management strategies for controlled hunting areas (CHAs) evolving to be more inclusive of local communities at a management level. The Bale Eco-region project has been a driving force for this change, working collaboratively with the Oromia Forest and Wildlife Enterprise

through both phases of the project, to assist in the setting up of the Controlled Hunting Area Management Scheme.

Several participatory forest management cooperatives (PFMCs), representing local communities, established controlled hunting areas (CHAs), with designated PFMC members managing wild animals. The Oromia Forest and Wildlife Enterprise (OFWE) agreed to share revenue from these CHAs, as outlined in a joint management agreement.

Under this agreement, 15% of revenue goes to the federal government, with the remaining 85% split 60:40 between PFMCs and OFWE. Revenue is distributed among PFMCs based on performance (60%) and CHA size (40%).

Implemented in 2019, the agreement has brought quick impact. Between 2019 and 2022, nyala habitat area has expanded from 38,529 ha to 93,650 ha under a controlled hunting concession area, with sustainable management and reduced illegal killing. In this same time period, revenues totalling 14.7 million birr (262,500 USD) were distributed to three CHA groups, benefiting member households and enhancing community livelihoods.



Mountain nyala habitat has expanded and improved under the management of local communities.



## IMPROVED AGRICULTURE PRACTICES AND LIVESTOCK DEVELOPMENT PROGRAMMES

The vast majority of people living in the BER rely on subsistence farming, pastoralism or agri-pastoralism for their livelihood, yet poverty, rapid population growth, increasing scarcity of water, weak market access and poor capacity to regulate resource usage have been driving unsustainable practices, resulting in deforestation and land degradation. Recognising the major threat these pressures pose to the region's ecosystem services, the BER II project has introduced a wide range of sustainable farming initiatives across the region.

### CLIMATE-SMART AGRICULTURE

Climate-smart agriculture (CSA) builds the adaptive capacity and climate resilience of food systems and livelihoods while boosting productivity and reducing emissions. CSA practices present opportunities for addressing climate change challenges while simultaneously supporting economic growth and development of the agriculture sector. The BER Phase II project has used CSA-related practices to build smallholder farmers' climate resilience and food security in the face of climate extremes, particularly droughts.

The project supported resource-poor smallholder farmers with climate-smart farming practices by providing a portfolio of training at the Farmers' Training Centre (FTC) located in the project demonstration kebeles. Topics included improved agronomic practices, conservation agriculture, integrated soil fertility management, compost making, forage development and crop disease and pest management.

The trained farmers were provided with improved crop seeds for maize, wheat, barley, teff, haricot bean and mung bean to enable them to implement climate-smart farming and validate the benefits, namely boosts in productivity, improved resilience and a lower environmental footprint. In total, the project has provided climate-smart training and technical backstopping for 5,316 farmers and 371 government experts and 1,593 ha of farmland has been covered with climate-smart farming practices.

Significant productivity increases have validated the benefits of implementing climate-smart practices, with the productivity of maize increasing by 50%, wheat by 25%, and barley by 49% as compared to baseline values [17 quintals (qt)/ha (maize), 35 qt/ha (wheat), and 22 qt/ha (barley); 1 quintal=100kg].

### VERMICOMPOSTING APPLICATION TO ENHANCE SOIL FERTILITY

The BER II project has promoted soil fertility management through vermicomposting among chosen model farmers. Vermicompost, derived from earthworms digesting organic waste, is nutrient-rich, enhances plant growth and fosters beneficial soil microorganisms. It's a safe, eco-friendly organic fertiliser that improves soil quality by enhancing its physical, chemical and biological properties.

The project placed the vermicompost technology at the Farmers' Training Centre demonstration sites and provided training for the selected model farmers. The project has supported more than 64 farmers (47 men and 17 women) in vermicompost production for soil fertility improvement and income generation across the project intervention districts, including providing starter packages that included modular training, a vermicompost production box and worms.

Subsequently, many farmers have begun to make vermicompost for sale or their own use with little assistance, increasing vermicompost production locally and supporting communities in soil fertility management. Currently, all the recipients of the training are engaged in producing vermicompost at their respective residences.

Since the start of the initiative, more than 223.5 m<sup>3</sup> or 134.1 tonnes of vermicompost have been produced by individual households and at Farmers' Training Centres, benefitting more than 64 (47 male led and 17 female led) households through soil fertility improvement and income generation opportunities.



Likke Gonfa, an agricultural extension worker from the Oromia region, has put her training in vermiculture to good use.

Since becoming an expert in this low-cost, fast way of producing high-quality natural fertiliser, she's gone on to teach other farmers in the local area – 400 and counting!

In Hora Soba and Ititu kebeles, people taking part in the vermicompost production initiative were able to earn additional incomes of 30,000 birr (535 USD) or more over a two year period (2022-2023) from selling vermi worms and compost to other local farmers. This suggests promising scale-up potential for vermicomposting and a means of enhancing the resilience capacity in the farming community.

**COMMUNITY-BASED SEED MULTIPLICATION**

The quality of seed, the fertility level of soil and key weather elements are the major determining factors of agricultural productivity. Successive crop failure, particularly in the lowland woredas of the Bale Eco-region, is mainly attributed to the lack of drought-tolerant improved crop seeds combined with extended dry seasons and erratic rainfall.

Agro-pastoralists in the BER struggle to access quality seeds in sufficient quantities and at the right time due to unreliable distribution channels and limited availability of desired crop varieties. To address this, the BER II project proposed establishing a seed multiplier cooperative in Berbere Woreda. The project initiated a community-based seed multiplication effort, providing training and support to ensure adherence to quality standards. Beginning in 2020, 20 farmers in Sirima kebele formed the 'Hara Daye Community Seed Multipliers Cooperative', focusing on lowland cereals and pulse crops. The cooperative received initial support with machinery and packaging materials.

In the first season, a total of 220 quintals (1 quintal = 100kg) of improved Melkasa-II first cultivar seed was obtained by sorting and grading out of the 660 quintals of maize produced. The community seed multipliers cooperative has generated incomes between 55,000 - 110,000 birr (approximately 962 to 1,925 USD) for its members from the sale of improved maize seed. The cooperative has also replenished soil fertility while generating additional income by planting 25 hectares of land to mung bean. From this, members were able to earn an additional 30,000 to 50,000 birr (approximately 525 to 875 USD) each.

By 2022, the number of cooperative members had increased to 40 and the area of land to 40 ha. In this second production season

members produced improved maize seed (Melkasa-4) using a pre-basic seed for seed multiplication and with supervision at different development stages of the crop, including the land preparation process, by Oromia Agricultural Inputs and Product Regulatory Authority. By this season, there was a serious scarcity of improved seed supply in the region. The seed produced by the community seed multipliers cooperative supplied drought-tolerant Melkasa-4 maize seed to the farming community at Berbere Woreda and adjacent neighbouring woredas, generating over one million birr (17,500 USD) from the sale of the improved seed alone.

**SMALL-SCALE IRRIGATION DEVELOPMENT**

Small-scale irrigation development is a climate-smart agriculture practice that enables farmers to increase their incomes and improve their resilience. The project aimed to build the resilience of farmers to climate shocks and changing weather patterns by enabling them to switch from subsistence rain-fed farming to irrigated smallholder farming.

The project introduced small-scale irrigation systems, which allowed smallholder farmers to start producing crops year-round and to harvest two to three times a year. A total of 59 irrigation-water users' associations, consisting of 353 (285 men and 68 women) smallholder farmers, were organised in the project target woredas of Harena Bulluk, Delo Mena, Goro, Berbere, Meda Walabu, Adaba, Nensebo, Gololcha, Dinsho, Goba, and Sinana. The aim was to increase the productivity of high-value crops throughout the year and increase family food security through a series of interventions, including support for irrigated vegetable farming.

The project covered the initial investment costs of the irrigation schemes including provision of training for farmers and development agents (DAs) in irrigation techniques and agronomic practices and multi-cropping practices. It also offered continuous technical support for members of the irrigation-water users' associations. In total, these farmers irrigated 57.5 hectares of irrigated land to grow tomatoes, onions, potatoes, pepper, cabbages and sweet potatoes. A total of 105,100 kg of tomatoes, 391,400 kg of potatoes, 48,090 kg of onion, 57,817 kg of peppers and 2,500 kg of maize

were produced, generating a total income of 7,035,690 birr (123,124 USD).

The additional income has enabled smallholders to strengthen their asset base, build their resilience to climate shocks and invest in their children. By increasing incomes, creating employment opportunities and improving families' nutritional status, the introduction of small-scale irrigation schemes has contributed to poverty reduction. This supports the first and second Sustainable Development Goals (SDG 1 and SDG 2), focused on ending poverty and hunger respectively, which aim to move communities from reliance on emergency support to becoming food-secure.

**HIGH-VALUE FRUIT AND VEGETABLE CROP PRODUCTION**

Fruit production presents considerable opportunities for smallholder farmers in an area that primarily relies on subsistence agriculture and has become highly

vulnerable to risks including climate change (eg drought). Marketing fresh and processed fruit products generates substantial income, which can act as an economic buffer and seasonal safety net for low-income farm households.

However, despite the potential, the production of fruits for commercial purposes and home consumption has been very limited in the Bale Eco-region. Many high-value tropical fruits are borne on trees which, when propagated from seed, can take years to bear first fruit and often produce fruit of variable quality.

Recognising an opportunity, the Bale Eco-region Phase II project has recently started to promote the propagation of fruit trees (mainly avocado and mango) through grafting in four lowland woredas within its intervention area. The advantage of grafting (and other methods of asexual propagation) is that this method greatly reduces the time to the first bearing of fruit and enables the



**Over 8000 avocado and 1200 mango seedlings have been produced at three community nurseries**

Photo: Farm Africa / Medhanit Gebremichael

transfer of desirable traits so that high-quality fruit can be reliably produced in a short period.

The project provided training for 46 technical experts and nursery foremen on asexual fruit propagation techniques at the Melkasa research centre and at woreda level. It also equipped woreda agriculture offices with fruit grafting materials and shade nets for greenhouse construction and established five fruit propagation nursery sites. Avocado and mango seedlings were produced on these sites for use as rootstock for grafting with varieties including 'Hass' and 'Etinger' for avocado and 'Apple' for mango, selected for their high productivity and quality nutritive content, appealing to both domestic and export markets.

So far, with the support of the project, a total of 8,100 avocado ('Hass' and 'Etinger') and 1,200 mango ('Apple') seedlings have been grafted at three nursery sites to enhance fruit production and productivity in the target areas.

Building local capacity for fruit tree propagation has dramatically increased availability of high-quality plants at favourable costs, promoting uptake of fruit production in the eco-region.

### COFFEE DEVELOPMENT OUTSIDE THE NATURAL FOREST

For several decades, coffee has been widely cultivated inside the Harena Forest, which is a native habitat for *Coffea arabica*.

Historically, Arabica coffee was foraged from wild-growing plants in the forest understory. However, as time has gone on, intensive coffee expansion inside the high forest has increased through the cutting of non-coffee understory trees and planting of coffee seedlings obtained from government-

managed nurseries and from the forest. Improper management of coffee cultivation in the forest is causing destruction of the natural forest undergrowth and loss of biodiversity. Today, a forest with coffee plants in it is most likely a dying forest with an uncertain future.

Phase I of the Bale Eco-region (BER) project identified the need for gradual changes in coffee production practices within the high forest to ensure long-term sustainability. Consequently, BER Phase II introduced an environmentally friendly coffee development programme for both homestead and farmland cultivation.

The initiative provided nursery materials and management support to coffee producers and forest management cooperatives, along with training and technical assistance for homestead coffee garden management. Between 2020 and 2023, over 800,000 coffee seedlings have been propagated and planted across 507 hectares by 2459 households in the five coffee-producing woredas (Dello Mena, Berbere, Harena Bulluk, Medda Wolabu, and Nensebo) of the eco-region.

The coffee planted in 2020 has already begun bearing fruit, yielding promising results compared to forest coffee productivity. Furthermore, producers cultivated multi-purpose trees and fruit seedlings for coffee shade and hence they are promoting agroforestry practices.

A second significant advantage for the producers has been that they are able to look after their coffee close to home with no fear of theft and wild animal damage. Thus, the producers are able to allow their coffee beans to ripen fully before picking, optimally managing their coffee garden, which has contributed to enhanced coffee quality and increased productivity.



Left: Establishment of community nurseries has increased local availability of quality fruit tree and coffee seedlings, encouraging farmers to diversify with high-value, tree-grown crops.

Photos: Farm Africa

**Homestead coffee cultivation is taking pressure off the forest while delivering increased productivity and quality for farmers.**

### CATTLE BREED IMPROVEMENT PROGRAMME

The cattle breeding programme is intended to improve the breed quality and productivity of the local cattle breed. The local breed in the eco-region is predominantly the Arsi breed, characterised by a small physical appearance, short length and low milk productivity with average milk production of 1.5 litres per day (Bale Zone Agriculture Development Office). The project has opted to undertake the breed improvement programme by supporting the implementation of an artificial insemination (AI) programme.

While AI has been long practised in highland woredas, its introduction to lowland areas began in the first phase of the BER project. Phase II included refresher training for 20 AI technicians across lowland and highland woredas. Semen for breeding was supplied by the government, with Borana used for lowlands and Holstein Friesian for highlands and midlands.

By the end of 2022, 3,827 cows had been inseminated. Pregnancy detection rates ranged from 35-80% in the lowlands and 30-50% in highlands, surpassing regional

averages. Overall, 1,388 calves have been born, achieving a 36.26% success rate.

### IMPROVING ACCESS TO WATER

Access to water for human and livestock use is a major challenge in the semi-arid areas of the eco-region where pastoral and agro-pastoral communities are residing. In some areas of the pastoral kebeles, people are forced to travel an average of six hours a day to get water. The household labour and time spent on water fetching have a negative impact on the household economy. School-age children are made to drop their school during the dry season as they are engaged in water fetching and taking cattle to distant places for watering. Likewise, the productivity of cattle in the lowland parts of the eco-region is much reduced, since they must expend many calories walking long distances to get water.

To address this water access problem, the project worked collaboratively with Bale Zone Water and Energy offices to construct three community ponds in Gura Damole (Yedi kebele), Berbere (Hambella kebele), and Dello Mena (Berak kebele) woredas. Each community pond was designed to store 10,000 cubic metres of water, which

can serve 300 households (~1,500 people) and 3,500 to 5,000 livestock for six to nine months. Since the source of water for the ponds is runoff water, the upper catchment and the whole area of the ponds have been enclosed and protected from human and livestock interference to maintain the sanitation of the ponds. The water from the pond is discharged for use through a pipe by gravity.

Moreover, the project supported water users in developing their bylaws, together with woreda water and energy offices and the respective rangeland management cooperatives, for the sustainable management of water use. The water management bylaws have set penalties for those who violate the water use rules agreed by the water users.

The benefits the community pond has brought to the agro-pastoral community are:

- pastoralists and agro-pastoralists now have local access to water for household use and their cattle
- livestock productivity, particularly cows' milk, has improved
- the mobility of cattle into the high forest in search of water during the dry season has reduced, which has made a significant contribution towards reducing forest degradation due to cattle grazing
- women have increased time to prepare food for the household and care for their children
- school dropouts have reduced



**Opposite: By using artificial insemination techniques and growing fodder, Gizaw Beyene has increased his herd's productivity while reducing his reliance on open grazing.**

Photos: Farm Africa





## SMALL AND MEDIUM ENTERPRISE DEVELOPMENT

Under the umbrella of the BER-II project, implementing partners have organised women into different livelihood support groups and provided them with technical and financial support to improve their living conditions. The women are engaged in goat husbandry, village savings and loan associations, milk processing groups and soap producing groups.

### ACCESS TO FINANCE FOR RURAL WOMEN

The majority of women in the BER heavily rely on their husbands for basic needs and household income, while others are compelled to engage in unsustainable activities like selling firewood and producing charcoal because they lack access to sustainable income-generating jobs.

The majority of rural women in the region also do not have access to finance through formal financial institutions due to low literacy levels, prohibitive collateral requirements, high transaction costs and a lack of knowledge of business development.

To enhance rural women's access to credit, 162 village savings and loans (VSLAs) were established, comprising 3,893 members. In this model, rural women pool money for savings and borrowing for small businesses. Savings vary, averaging 30 birr weekly for loans and 10 birr for social security. The project provided training, coaching and saving kits, and aided in rule creation and business plan development.

Over 2.5 years, the VSLAs saved a total of 5,672,793.00 birr (101,300 USD) with 1,073,169 birr (19,164 USD) as a social security fund. Loans, ranging from 1000 to 6000 birr (18 - 107 USD), were accessed transparently by 2,279 members, totaling 3,032,270.00 birr (53,974 USD). This increased income and independence for rural women, who previously relied solely on spouses.

VSLA roles like chairperson and cashier foster decision-making skills. Membership is growing, benefiting local cooperatives. Besides economic gains, the model fosters

community bonding and social security through shared funds.

### GOAT HUSBANDRY

Women and young people living in the pastoral and agro-pastoral areas mostly lack the investment capital and business knowledge needed to initiate their businesses.

In Phase I of the project, a goat husbandry initiative proved to be an ideal strategy to improve the wellbeing of economically disadvantaged rural women. The enterprise enabled them to build assets and earn quick economic returns, use the goats as a liquid asset to meet household needs, improve household nutrition, particularly for children, and save money that would have been spent on the purchase of milk.

Building on that success, the BER Phase II project rolled out the initiative widely across the eco-region. In total, 42 women's goat husbandry groups were formed across nine woredas (14 kebeles) comprising 1,212 members in total. The project provided a total of 1,864 female goats with each recipient transferring the first two goat kids born to another woman in her group.

### ALOE VERA SOAP PRODUCTION

Aloe vera is found in abundance in many areas of the Bale Eco-region. It was locally regarded as a rather invasive plant of no recognised value other than a few traditional uses, until the project introduced Aloe vera soap making as a business opportunity for rural women.

The project organised 84 women into six Aloe vera soap-producing women's groups in Dodola, Dello Mena, Goro, Gura Damole, Berbere and Meda Walabu woredas. Each group was provided with casting moulds, ingredients and training on how to produce the soap using simple and locally available materials with few industrial ingredients.

Together the groups have produced a total of 8,925 Aloe vera soaps and 2,650 litres

of multi-purpose liquid soaps, generating 430,000 birr (7,654 USD). Of this revenue, the groups set aside 69,000 birr (1,228 USD) to establish a credit service for their members.

Group records showed that 43 women accessed this credit service and were involved in small trading such as crops and vegetables and were able to cover the school fees for their children.

It was observed that women involved in the Aloe vera business did not only manage

decisions within the business, but also took on leadership roles in their groups. This suggests that a small business could serve beyond job creation in realising women's empowerment in terms of economy and decision-making power.



## POPULATION HEALTH AND ENVIRONMENT (PHE) INTERVENTIONS

Family planning and sexual and reproductive health rights (SRHR) interventions are being integrated into natural resource management and livelihood improvement initiatives. The first phase of the project pilot-tested an approach that integrates family planning as a key element for sustainable environmental management, drought resilience and food and nutrition security for vulnerable populations in southern Ethiopia.

In phase two, social and behavioural change communication (SBCC) related to family planning, health, nutrition, sanitation, gender and climate change was delivered to community members and groups in 32 intervention kebeles. Integrated PHE messages were disseminated using interpersonal communication, print materials and local radio programmes.

About 200,102 (122,879 men and 77,223 women) community members were reached through 2,023 SBCC sessions including small group dialogues facilitated by trained Village PHE Committees, religious leaders and norm holders forums, peer-to-peer education among youth and school PHE clubs. The SBCC was delivered to households and community members engaged in natural resource management and livelihood improvement initiatives.

In addition, different capacity-building training was provided to health extension workers, development agents and school teachers for better collaboration and coordination of the PHE SBCC at the village level. Health facilities were strengthened through the provision of basic family planning supplies and equipment for improved quality of family planning services at local health facilities.

### ACHIEVEMENTS AND KEY LEARNING

The project mid-term evaluation in May 2022 found the contraceptive prevalence rate in the project intervention kebeles increased from 36.6% at baseline to 67.3%. Improved adoption rates were also found for the more

effective long-acting contraceptive methods compared to the baseline (ie: IUD from 4% at baseline to 7.2% at midterm, and implants from 7% at baseline to 11.6% at midterm).

Tailoring the SBCC interventions to every member of the community in the project intervention kebeles enabled the project to contest the deep-rooted socio-cultural barriers related to the usage of family planning services.

The engagement of key community members including model women, religious leaders and village leaders as Village PHE committee members enabled the project to build trust, and community engagement and acceptability of family planning by rural women and their husbands improved.

The integrated PHE approach, which combines SBCC with a variety of environmental conservation, women's economic empowerment and livelihood interventions, strengthens the three key elements of Universal Health Coverage (UHC), including coverage of basic health services, the range of health services provided and out-of-pocket expenditure for health services.

Improved access to basic health services was achieved for rural women and their children through the provision of supplies, equipment and technical support to boost the capacity of local health institutions. This was achieved through closely working with the zonal health bureaus to train local health cadres and by assisting district health offices and primary health care units with regular supportive supervision of local health facilities.

## CONCLUSION

Using an eco-regional approach, the BER project takes into account the interconnectedness of the region's different ecosystems. This has given better understanding of how actions in different areas of the region impact one another. The approach also takes into account how population dynamics, health and gender issues affect resource use.

Because of that strong interconnectedness, natural resource conservation in the Bale Eco-region can only succeed if communities and the government work together, taking joint responsibility.

Farm Africa's consortium partners are using their expertise to address unsustainable practices from multiple angles, working with stakeholders to become active participants in the sustainable management of forests and water supplies while increasing livelihood opportunities for communities living in the region.

Our experience demonstrates that a community-based approach to landscape management works, with the BER II project providing clear evidence of impact at both household and landscape level.

By applying this multi-sector, farmer-led, eco-regional approach, it is possible to protect and restore crucial habitats that are under enormous pressure while at the same time sustainably improving livelihoods.



Sixty-year-old Surer Adem remembers a time when wood could easily be sourced from the forest, but those days are in the past.

He's observed the increasing shortage of wood over the years, especially for construction. That's why, when the BER II project began encouraging people to reduce their reliance on forest-sourced wood by turning their unproductive farmland into fast-growing woodlots, he could see the potential.

In 2020, with support from the project, Surer converted 0.45 hectares of unproductive land into a woodlot of *Eucalyptus camaldulensis*.

From this woodlot, he has already sourced enough construction wood to build two houses, saving him an estimated 50,000 birr (875 USD) in building costs. Currently the value of his woodlot is estimated at 200,000 birr (3,501 USD).








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**Photo:** A farmer shows the high-quality natural fertiliser he is now producing using vermiculture.