

# GROWTH FOR THE FUTURE: CLIMATE RESILIENCE STORIES

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 **FARM AFRICA**

This publication  
is funded by Sida

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Photo by Medhanit G/Michael



# INTRODUCTION



Above: Amina Kedir, haricot bean seed multiplier. Photo by Medhanit G/Michael.

Climate and agriculture are interwoven; one affects the other in so many ways. The effects of climate change on food production are potentially dire. Yet, agriculture is also one of the main drivers of greenhouse gas emissions. Sustainable agricultural practices are a key ingredient in national climate adaptation and mitigation strategies.

Ethiopia is one of the most climate vulnerable countries on Earth and increasing climate uncertainty and variability threaten agricultural production across the country. The interplay between climate and farming will, undoubtedly, shape Ethiopia's future, making the stories and lessons contained in this report timely and important.

To date, Farm Africa's Growth for the Future programme has directly worked with 480,000 people – this figure is largely made up of farmers but includes development agents, business owners and people living and working in rural areas across five regions of Ethiopia.

This report summarises the objectives of the four projects that together form the Growth for the Future programme, and features stories of some of the communities, professionals and farmers

we have worked with.

The stories highlight the importance of issues such as access to finance, climate-smart agricultural practices, high-quality inputs, a business approach and community engagement to building climate resilience in rural Ethiopia.

These stories provide a snapshot of our achievements – poverty reduction, improved resilience to climate extremes and environmental regeneration – but also contribute to a blueprint for a climate-resilient green future.

We extend thanks to the Swedish International Development Cooperation Agency, who provided the financial, technical and moral support that made this project possible.

**Yasmin Abdulwassie**, Farm Africa's Director of Operations and Delivery, Addis Ababa, August 2019



# PROGRAMME OVERVIEW

With 90% of Ethiopia's agricultural output produced by smallholders and the majority of the population working in farming, the agricultural sector plays a vital role in the livelihoods of most Ethiopians. Increasing climate uncertainty and variability threaten farmers' livelihoods as well as Ethiopia's food security and economic growth.

A lack of market-orientated production systems and low-input, low-output agricultural systems exacerbate climate challenges and keep many farmers trapped in poverty. From climate change to market access, many of these issues disproportionately affect the most vulnerable members of communities: women.

Small changes to traditional farming practices can lessen the impact of climate shocks on farmers' yields, allowing them to adapt to a changing climate and reduce agriculture's environmental impact.

Strong, knowledgeable and dynamic governmental and non-governmental organisations are a prerequisite for successful implementation of climate

adapation and natural resource management projects. Efforts to climate proof and protect Ethiopia's natural assets have often been hampered by fragmented and uncoordinated approaches underpinned by limited technical knowledge as well as little to no monitoring and evaluation of projects.

Growth for the future programme (G4F), funded by SIDA (Swedish International Development Cooperation Agency), supports smallholders to build resilience to extreme weather events and lift themselves out of poverty by:

- Building agricultural systems' resilience to climate change and shocks.
- Integrating farmers within well-functioning markets.
- Improving smallholders ability to protect and manage their natural environments.
- Improving institutions' capacity to provide farmers with services.

The programme is made up of four distinct projects.

# PROGRESS TO DATE

- 126,124 people were taught about climate change's causes and effects, as well as how to reduce the release of greenhouse gases.
- 2,158 people were provided with training and grants to start new income generation activities.
- 2,038 energy efficient cooking stoves, 74 biogas plants and 70 solar panels have been installed.
- 538 hectares of degraded land, across 19 watersheds, were rehabilitated.
- 95 climate-smart agriculture demonstration plots, across 45 hectares of land, have been established.
- 1,595 smallholders were trained in climate-smart agricultural practices.
- Farmers improved their yields of relevant crops by between 12-213%, contributing to households increasing their income by, on average, 97%.
- 998 (549 female) farmers were trained in seed production and post-harvest handling techniques.
- 245 village-level saving and credit associations were established, providing 5,333 members (3,405 female) and saving 664,848 Birr in nine months.
- Using a cost-sharing approach, seven agro-dealerships were provided with financial support to start businesses or expand their operations.
- 548 households have gained access to irrigated water, enabling the establishment of 151.1 hectares of fruit and vegetable farmland.

# INDIVIDUAL PROJECTS



Above: Dessalegen Degene, a farmer based in Damot Galle Woreda. Photo by Medhanit G/Michael

## BUILDING INSTITUTIONAL CLIMATE ACTION CAPACITY

2017 – 2021, AMHARA, OROMIA, TIGRAY, SOUTHERN NATIONS, NATIONALITIES AND PEOPLES' AND BENISHANGUL REGIONS

### WHAT ARE WE DOING?

This project is working with institutions, from across society, to enable them to provide rural communities with the environmental, agricultural and market services they need to make climate-smart transformations on the ground.

Farm Africa has invested in growing its own expertise in monitoring and evaluation, financial management and leadership as a means to setting best practice and developing important lessons that will be shared with other organisations.

The Growth for the Future programme works across five regions of Ethiopia, partnering with a wide variety of CSOs, each with their own set of strengths and weaknesses. Farm Africa mapped out these organisations' technical, institutional and implementation capacity

gaps and developed bespoke training to address these needs and build a coherent approach to climate-smart agriculture (CSA). Training is being delivered through a mixture of classroom and workshop sessions, site visits and cross-organisational learning opportunities.

The Government of Ethiopia is integrating its green economy agenda across national and regional plans. There is a strong focus on making key sectors, like agriculture, resilient to climate shocks and trends. From the Finance and Economy Development Bureau to the Ministry of Agriculture, Farm Africa is working with several government bodies to build the technical capacity of agricultural extension agents, environmental and forest management staff and development agents, as well as other relevant staff members.

# BUILDING RESILIENCE THROUGH AGRIBUSINESSES

2017 – 2019, SOUTH WOLLO AND OROMO NATIONALITY ZONES

### WHAT ARE WE DOING?

Between 2010 and 2017, The Organization for Rehabilitation and Development in Amhara helped farmers improve their farming practices and triple their yields.

However, a shortage of rural enterprises that supply agricultural inputs and buy farmers' produce endangers these important gains.

This project is transforming the business environment small-scale farmers operate in, enabling them to increase their incomes and food security, and improve their ability to absorb climate shocks.

This project is improving the availability of agricultural goods and services by:

- Supporting businesses supplying agricultural inputs, such as seeds of drought-resistant crop varieties, irrigation systems and fertilisers, which farmers need to withstand extreme weather events and realise their potential.
- Training local agribusinesses in processing and marketing so that they can sell farmers' crops into new profitable markets.
- Helping farmers and agribusinesses produce and sell mung beans, a lucrative environmentally-friendly drought-tolerant crop.
- Running business-to-business events that connect farmers, suppliers and buyers.

Working closely with financial institutions and local enterprises, the project has developed a range of financial products that provide farmers and agribusinesses with the working and investment capital they need to expand operations and develop their business model. Activities include:

- Facilitating the development and marketing of sharia-compliant financial services products that meet the needs of the majority Muslim population.
- Strengthening existing Saving and Credit Cooperative Organisations (SACCOs).
- Building awareness about the importance of access to finance schemes.
- Introducing rural communities to mobile banking and microfinance products.
- Providing businesses with financial training so they can develop robust business plans and identify and apply for loans.

### WHO ARE WE WORKING WITH?

With funding from SIDA, Farm Africa is working with the NGOs Mercy Corps and The Organization for Rehabilitation and Development in Amhara (ORDA).



Left: Sied Mohamed Ahmed, a private agrodealer based in Hayik Town. Photo by Photo by Beniam Tilahun.

# FEMALE FARMERS FIGHTING CLIMATE CHANGE

2017 – 2021, AMHARA, OROMIA, TIGRAY, SOUTHERN NATIONS, NATIONALITIES AND PEOPLES' AND BENISHANGUL REGIONS

## WHAT ARE WE DOING?

Farm Africa is working with the Union of Ethiopian Women Charitable Associations (UEWCA) to help people living across Ethiopia adapt to and mitigate against climate change.

- Provide farmers with access to a range of small-scale irrigation and water harvesting technologies.
- Introduce drought-tolerant grasses that supply farmers with animal feed during dry spells.

## BUILDING AWARENESS

This project will raise awareness of climate change amongst 450,000 people:

- Running local media campaigns that inspire women to become champions for climate action.
- Holding workshops and inter-community conversations about climate change mitigation and adaptation.
- Setting up 120 village-level women's discussion groups that explore issues such as environmental protection, climate change, sanitation and access to finance.

## ADAPT TO A CHANGING CLIMATE

Climate-smart agriculture training sessions allow farmers to intensify crop production and improve yields while enhancing and protecting natural resources. We will:

- Work with government agencies to improve smallholders' access to drought-tolerant crops.
- Help farmers adopt productive and sustainable farming practices like row planting and mulching.

## NATURAL RESOURCE MANAGEMENT

We will help communities protect the environment by:

- Bringing farmers and governments together to develop sustainable forest, watershed and rangeland landscape management plans.
- Planting trees and managing soils to capture carbon dioxide and create thriving ecosystems.
- Promoting environmentally-friendly technologies such as fuel-efficient stoves, biogas and solar energy systems.
- Setting up land use systems and promoting conservation techniques, such as temporarily closing degraded grasslands, which allow farmers to turn degraded lands into fertile land.

## ACCESS TO FINANCE

Sixty Village Savings and Loan Associations (VSLAs) will be established so that farmers can unite to save and make funds available in times of need and to invest in each other's businesses. Farm Africa and UEWCA will train group members in financial literacy, record keeping and how to manage saving and loan schemes.

## WHO ARE WE WORKING WITH?

With funding from SIDA, Farm Africa is working with UEWCA, an organisation that strives to improve the living standard of poor and marginalised women and girls through socio-economic empowerment. Farm Africa is partnering with the UEWCA through twelve sub-grantee civil society organisations.

Left: Habiba Ebrahim, a member of a Village Saving and Loan Association in Ambsael Woreda. Photo by Beniam Tilahun.



Above: Milkyas Finta a chickpea farmer and demo plot owner living in Damot Galle Woreda. Photo by Beniam Tilahun.

# MARKET-DRIVEN CLIMATE-SMART AGRICULTURE

2017 – 2021, SOUTHERN NATIONS, NATIONALITIES AND PEOPLES' REGION

## WHAT ARE WE DOING?

This project is helping smallholder farmers make the step change from low-input, low-out agriculture to commercial agriculture while strengthening their resilience to an increasingly unpredictable climate.

Over 5,400 farmers are being provided with face-to-face training in the sustainable production of high-value cash crops. Farmers have been introduced to drought-tolerant varieties of crops, such as chickpeas and peppers, and taught climate-smart agricultural techniques, like the application of bio-fertilisers.

Farm Africa is developing the business environment farmers in this region operate in. We are training local cooperatives and agribusinesses in input provision, post-harvest handling and aggregation so that farmers can meet the demands

of high-value markets. We are improving local cooperatives' business management skills, to help them develop sustainable, profitable relationships with buyers.

The project is ensuring that women, who are more susceptible to the effects of extreme weather, are well represented within value chains, cooperatives and community organisations.

This project is economically empowering farmers by connecting them to financial institutions and establishing VSLAs, where farmers unite to save together to make funds available to start new businesses and address critical cash flow problems.

## WHO ARE WE WORKING WITH?

With funding from SIDA, Farm Africa is working with local government agencies, research centres, higher education institutions and the private sector.

# CASE STUDIES



Above: Zekay Haseen a farmer who benefited from the construction of a water pond near his farm in Dewachefa Woreda. Photo by Beniam Tilahun

## VILLAGERS UNITE TO KICK OUT HIGH-INTEREST LOANS

When his 11-year-old child fell ill, Detemo Enaro was forced to borrow 120 Birr from a local lender, who charged him 100% interest over the course of three months. The cash quickly ran out and his child's symptoms remained. Unable to get another loan to purchase more medicine, Detemo's son passed away.

"If Farm Africa started the Village Saving and Loan Association earlier I may not have lost my boy," reflected Detemo.

Like most people in his neighbourhood, Detemo's access to finance was limited to high-interest loans. A survey conducted in 2016 revealed that 69.5% of households in Hadero Tunto, where Detemo lives, had no access to local saving and credit services.

With limited access to finance, families resorted to borrowing from local lenders who typically demand 100% interest every three to six months and that borrowers put their farms up as collateral. If a borrower defaults on their loan, the creditor is allowed to use their farm for several years.

Everything changed when Detemo and 22 of his neighbours set up a Village Saving and Loan Association (VSLA). Detemo VSLA's members work together to save and make funds available to invest in each other's businesses and meet urgent household needs, like medicine.

Taking a 2,000 Birr loan from the group, Detemo bought 1,000 Birr of coffee and sold it for 1,420 Birr in town, generating 420 Birr profit.

Detemo now regularly trades coffee. Detemo sets aside some of his profits for emergencies, he spends the rest on school materials for his children and land tax. He was able to pay back the loan plus a 10% service charge after three months.

By the end of 2018, Farm Africa had set up 245 VSLA groups as part of the project, with membership totalling 5,333 members, of which 3,405 are women. Across all VSLAs, an impressive 664,848 Birr has been saved.

Of VSLA members, 85% have taken out loans and invested in income-generating activities. In Detemo's VSLA, out of 22 members, 20 people took out a loan and successfully repaid the loan after three months.

By working together, the community has bypassed high-interest borrowers. VSLAs have provided them with a means to save and invest that does not require them to put their land and livelihood at risk.

By the end of 2018, 95% of targeted households in Hadero Tunto had accessed money and taken out a loan without having to provide collateral. Better access to finance contributed to target households' annual income increasing by 17.6% from 7,307 Birr to 8,589 Birr.



Detemo Enaro

# CLIMATE-SMART AGRICULTURE BOOSTS FARMERS' PRODUCTIVITY AND ANNUAL INCOME

The climate-smart agriculture (CSA) approach focuses on transforming farming systems to support development and ensure food security in a changing climate. CSA aims to tackle three main objectives:

- Sustainably increasing agricultural productivity and incomes
- Adapting and building resilience to climate change
- Reducing and/or eliminating greenhouse gas emissions, where possible (FAO, 2019).

Since 2017, the G4F programme has been supporting farmers living across Ethiopia to adopt climate-smart agriculture practices. Namely, the project is:

- Developing a climate-smart agriculture training manual
- Providing continuous training for partners and farmers
- Providing improved seed varieties and bio-fertilisers
- Establishing farmer-based demonstration plots
- Promoting new appropriate agricultural practices.

## FROM STRUGGLING SUBSISTENCE SMALLHOLDERS TO THRIVING COMMERCIAL FARMERS

Abreham Abema and Abaynesh Bundena used to struggle to get by producing haricot beans, teff, ginger and taro on their one-hectare farm. Small yields forced the family to regularly skip one or two meals a day.

Farm Africa's Market-driven climate-smart agriculture project supported Abreham and Abaynesh, as well as 2592 other farming households in SNNPR, to adopt CSA techniques. As of December 2018, a total of 895 hectares of farmland were managed using climate-smart agricultural practices.

"Previously, I produced a maximum of five quintals of haricot beans per harvest. I experienced so many challenges. Now that Farm Africa has shown me new techniques, the same plot produces 15 quintals," Abreham reports. Farmers are now able to both feed themselves and sell some of their yields on the market. The farmers are not only selling more but selling for more. The project has connected farmers to Ajora Multipurpose Cooperative, who aggregate members' produce and sell in bulk.

The cooperative buys haricot beans from local farmers during harvest season at above market price. The cooperative stores the beans for two to four months, allowing the market to improve, then they sell the beans for higher than the harvest price. The profits are distributed to member farmers through dividends aligning with cooperative members' share value. Abreham and other farmers participating in the project are shareholders in the cooperative.

## FEMALE FARMER DOUBLES YIELDS AND EYES COMMERCIAL EXPANSION

Twenty-eight-year-old Mestawut Sisay lives in Ethiopia's northwestern Amhara region and takes part in the Female farmers fighting climate change project. Before she started working with Farm Africa, she was forced to reduce the size and quality of her children's meals for months on end.

Mestawut used to grow traditional varieties of teff. The project introduced her to an early-maturing variety. This simple change has allowed her to increase the size of her one-hectare farm's harvest from four and a half to ten quintals of teff.



Above: Mestawut Sisay a teff farmer living in Gubalafto Woreda. Photo by Beniam Tilahun.

Few farmers in Mestawut's community produce the variety of teff she grows. Mestawut is capitalising upon this by selling her teff, which is a higher quality product than what's typically grown locally, and the high-performing seed variety for a premium to her neighbours. Mestawut no longer struggles to feed her children.

## PONDS

The River Borkena cuts across Dewa Chefa Woreda. The river floods regularly during the rainy season, washing away crops. Many farmers don't have access to water or irrigation, stopping them from planting during the dry season.

ORDA has worked with the local community to construct 14 water harvesting ponds to collect groundwater so that farmers can grow crops during the dry season. The cost of constructing the water ponds was split between the project and the local community: the project funded technical experts to design the pond and paid for construction materials, whilst the local community provided the much-needed labour.

Zekey tried his best to earn a living from agriculture but he often failed. His crops washed away during the rainy season or perished during the dry season. Zekey was forced to rely on casual labour to support his family. Zekey's small income meant that he couldn't afford to pay for his child's school books and uniforms, resulting in Zekey's child dropping out of school.

Today, Zekey uses the ponds to water his crops during the dry season. He currently grows chard, pepper, teff, mung bean, chickpea and cress. Growing crops enables Zekey to maintain a stable income.

"If one crop or vegetable fails or has a low market price, I can receive an income from the others", Zekey explains.

Zekey earned an impressive 92,800 Birr from just one harvest, with his newfound purchasing power he's investing in a water pump generator and oxen to further boost his farming profits. Zekey is now able to pay for his child's school materials, his child plans to return to school once the school year restarts.

"Thanks to ORDA I have enough food and money to feed my family for at least three years, I'm prepared for potential climate shocks," Zekey stated proudly.

# QUALITY SEEDS FOR SUSTAINABLE PRODUCTION

Halaba Woreda in south-western Ethiopia is well known for its peppers. Almost all farmers produce pepper, which accounts for around 30% of their total income.

Between 2016 and 2017, pepper production and productivity in the area almost halved<sup>1</sup>. Farm Africa research revealed that poor quality seed, inputs and agricultural practices were behind the drop.

Alongside pepper, haricot bean has emerged as a vital cash crop. Again, access to good seed is a major constraint to production and productivity.

In Halaba, 104 households were supported to start producing quality haricot and pepper seeds.

A cooperative assessment study discovered that weak cooperative-farmer and cooperative-union links were key constraints to farmers' access to seed. To address this problem, the project supported farmers to join the Mondene Seed Multiplication Cooperative.

Farmers and traders disagreed about the prices they were offered, whilst traders felt that the peppers and beans' quality was subpar. Certified quality seeds were not available in the local market, forcing farmers to plant low-quality seeds.

Now that farmers work with Mundene Cooperative, farmers produce high-quality produce and unite to sell their crops in bulk directly to wholesalers and pepper unions, earning them higher profits. Farmers can easily access certified high-quality seed through their cooperative, who receive seed through Horisinka Seed Multiplication and Marketing Union.

## YASIN

Bamud Yasin's (pictured right) one-acre farm in Choroko Kebele produces teff, maize, haricot beans and pepper. Peppers are a vital source of income for Bamud and his family but poor quality seeds have kept their pepper yields and, subsequently, income low.

From pre-planting to post-harvest handling, Bamud has received training in how to improve pepper production.

Farm Africa also provided him with 0.5 kg of quality seed, 50 kg of chemical fertiliser and a bag of bio-fertiliser. Yasin's productivity increased by 66.7%, he thinks the following practices are responsible:

- Good nursery management skills
- Introducing row planting
- Judicious use of inputs

Yasin previously used to sow 10 kg of seed on his one-acre plot. Since the project introduced him to seed transplanting and row planting he now only uses 1 kg.

"It is like travelling by foot and travelling by vehicle," said Bamud comparing his old agricultural methods with Farm Africa's climate-smart variety.

Poor local markets impeded farmers from realising a good price for peppers and seeds. According to Bamud, traders who work on commission on behalf of wholesalers regularly cheated farmers by using inaccurate weighing scales. With limited bargaining power, farmers struggled to negotiate fair and accurate prices with buyers.

To minimise these challenges, the project connected farmers with Mundene Seed Cooperative who have signed a contract agreeing to purchase seeds from farmers.

Working together through the cooperative, farmers are able to push for better prices.

<sup>1</sup> Halaba Woreda Agricultural Office Data noted that production in 2016 stood at 665.2 tonnes and productivity was two tonnes per hectare. In 2017, total production and productivity decreased by 49.46% and 48.33% respectively.



Above: Bamud Yasin a pepper and pepper seed producer living in Halaba Woreda. Photo by Beniam Tilahun.

Below: Kelem Niguse a private agrodealer living in Kemise Town.



## AGRIBUSINESSES UNLEASH FARMERS' POTENTIAL

Tomatoes, onions and mung beans are major cash crops in Tehuledere, Dewachefa and Ambasel woredas in Ethiopia's northeast. Onion and tomato production is low compared to other fruit and vegetable growing areas in Ethiopia, and productivity levels are falling.

Focus group discussions revealed that poor performance is driven by limited access to quality seeds, agrochemicals and fertilisers<sup>1</sup>. The scarcity of quality goods, rather than access to capital, stops farmers from investing in the inputs they need to increase production<sup>2</sup>.

Farm Africa is providing three agro-dealerships and four cooperatives with the financial support and training they need to revolutionise the business environment farmers operate in.

Farm Africa supported the organisations to write detailed business plans and set goals, with an eye to developing more profitable and sustainable trading relationships between input suppliers and farmers. We covered 60% of the cost of actualising these plans with the businesses covering the rest. Farm Africa invested a total of 2,845,000 Birr across the three woredas.

Alongside the injections of capital, project staff provided the cooperatives and dealerships with training in agro-chemical use and handling as well as important financial and management concepts. The project set up experience sharing visits between agro-dealerships, providing businesses with the opportunity to learn from each other.

Plant science graduate Kelem Niguse (left) worked in local government for three years before setting up his own agro-dealership in Kemise Town, Dewachefa Woreda.

Kelem used to sell six varieties of agrochemicals and inputs. He now sells 11 varieties of agro-chemicals, a range of certified seeds as well as a variety of farmyard equipment.

Previously, Kelem used to purchase stock from local vendors. The project connected him with importers and wholesalers in the capital, Addis Ababa. Kelem's new contacts provide him with more affordable goods, allowing him to reduce the price of the equipment he sells to farmers.

What's more, Kelem now provides farmers with information on how to use and dispose of the agrichemicals and packaging he sells them.

Farm Africa is also working with large agri-input companies, who came to the area to show farmers how their products can help them boost their yields. Demonstrations introduced farmers and agri-businesses to a range of new products, many of the companies' products will be sold in agro-dealers shops.

At the beginning of 2018, only 38.6% of target farmers living in Kelem's neighbourhood of Kachur Kebele reported having timely and reliable access to sufficient quantities of agricultural inputs. By the end of 2018, this number had risen to 89.5%.

It's a win-win: farmers have access to a wider range of agrochemicals, seeds and fertilisers, whilst agro-dealers have adopted an improved, more profitable business model.

<sup>1</sup> Farm Africa focus group discussion in Kchur Kebela, March 2018.

<sup>2</sup> Farm Africa focus group discussion in Kchur Kebela, March 2018

# BRINGING TISHMANE'S WATER RESOURCES BACK TO LIFE

Tishmane Kebele's residents are struggling to manage the rivers and watersheds that the community relies upon.

Just a few years ago, upland watersheds were degraded, creating gullies that robbed the community of precious land. Lowland communities were regularly hit by floods, washing away crops and leading to a death in the community. Springs, the community's main water source, dried up, forcing women to travel long distances to fetch water for their families.

Kabura is one of Tishmane's four watersheds. The fifteen-hectare area was so degraded that the local community believed that it was a lost cause.



"We never thought that we could plant trees in Kabura or that the area could be rehabilitated," reported Kebele Leader Geresu Deygane (left).

In 2017, Farm Africa launched the Female farmers fighting climate change project. In Tishmane, project staff worked closely with the community to rehabilitate the watershed and stem the tide of

water-related problems. Farm Africa started by building the watershed management capacity of local NGO Meseret Humanitarian Organization (MHO). Equipped with relevant knowledge, MHO raised communities' knowledge of the effects and causes of climate change. Project staff worked with the community to introduce vital water, land and soil conservation interventions. Land was temporarily closed off so that the area could regenerate.

In total, 904 community members and 403 students participated in conservation activities. According to local Government Development Agent Beyene Kuse, the market value of the voluntary labour the community provided stands at 452,000 Birr; 904 households charging 500 Birr for five days work.

Two years into the project, the degraded ecosystems have been rehabilitated. Springs that stood dry for ten years are running once again. The Torah River's water flow has been improved. Gullies have transformed into usable land.

Every day, Kunsusa Guyalo (pictured below) used to travel 160 minutes to collect water. Now, it takes her 40 minutes to travel to the recently regenerated Kitana spring. Kunsusa dedicates her new-found time to developing her drinks business.

The Kebele's Women's Representative Kochana Kanata noted that improved access to water has had a positive influence on the whole community but especially women, who no longer have to travel long distances to collect water. Improved access to water has allowed the area's children to maintain better sanitation and hygiene standards.

Right: Kunsusa Guyalo, fetching water from Kitana spring. Photo by Beniam Tilahun.

Today, 15 hectares of grass and trees sprout from land that was previously degraded and unusable. The Kebele Administration is providing unemployed young people with access to the regreened area to start animal fodder and fattening, and timber businesses.

Tesfaye Negash, the woreda's forest expert, believes that Kabura watershed (pictured below) is the fastest rehabilitated watershed in the area and that the improvements have a high likelihood of being sustained long into the future. Tesfaye attributes the community's improved awareness of the causes, impact and mitigation of climate change, as well as soil and water conservation activities, as the principal driver for this change.

A recent Farm Africa survey supports Tesfaye's conclusion. The data shows that:

- 94.73% of beneficiary community members know about climate change's causes, effects and mitigation mechanisms. Before the intervention, only 36.28% recognised the causes of climate change.
- The percentage of the target community who can identify five manifestations of climate change increased from 39% to 76.3%.
- The average number of climate-smart agriculture techniques practised by households increased from 5 to 8.6.
- Target communities' average annual household income increased by 15.3 %, from 12,480 to 14,395 Birr.

## KEY WATERSHED MANAGEMENT LESSONS

The following lessons about implementing a successful watershed management project were generated:

### 1. Climate awareness

It is important to increase community awareness on the cause, impact and

mitigation mechanisms of climate change. When the community understands the causes and effects of climate change, it becomes easy to implement mitigation interventions.

### 2. Community consensus and commitment

Before starting work, all community members in the area should be consulted. Consensus should be created to temporarily close areas and start watershed management activities. In Tishmane, community leaders discussed the issue with all the community members and created widespread support for the activities.

### 3. Community-led interventions

In Tishmane, all community members, including students, in the Kebele participated in all interventions.

### 4. Focus on the short-term benefits

Successful integrated watershed management projects have short-, medium- and long-term benefits for the local community. Focusing on the short-term returns of watershed management projects helps ensure that the activities are continued in the long term.

In Tishmane, the watershed committee leaders focused on the regeneration of springs and rehabilitation of gully areas. These goals motivated the community to protect and manage the watershed.

### 5. Distribute land access after the land has been regenerated

Access to regenerated land should be distributed once the area has been fully rehabilitated.

Kebele leaders decided to hand over the land to unemployed youths after the land had been successfully restored. This dynamic incentivised Tishmane residents to regenerate areas.



Photo: Kabur Watershed. Photo by Beniam Tilahun.

# WE DRIVE AGRICULTURAL AND ENVIRONMENTAL CHANGE TO IMPROVE LIVES.

## Our strategy has three pillars:



Agricultural expertise



Management and preservation of ecosystems



The power of business to drive prosperity

DR Congo  
Ethiopia  
Kenya  
Tanzania  
Uganda  
United Kingdom



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