

# Market Assessment Final Report

**RELIVES: RE**silient **LIV**elihoods and Sustainable **E**cosystems  
in the **Simien Mountains National Park (SMNP) Project**



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CARE

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## Executive summary

Large-scale food and livelihood assistance, as well as nutrition and WASH services in northern Ethiopia are urgently needed to mitigate the further loss of life and livelihoods. The Simien Mountains National Park (SMNP) is a protected area, located in North Gondar, Amhara regional state. The local communities rely on the park's natural resources and agriculture for their livelihoods. These communities face a multitude of challenges, including low agriculture and livestock productivity resulting from land degradation, droughts, unsustainable farming practices, overgrazing and deforestation. With the financial support from Austrian Development Agency (ADA) through CARE Austria, CARE Ethiopia and the implementing partner ORDA Ethiopia have planned to address these challenges by implementing RELIVES project in five Woredas, bordering the park.

The RELIVES project conducted a market assessment study to get an overview and detailed information of the market situation and trends in the project intervention area as well as to understand the behavior, needs, and preferences of the target population for sustainable economic enhancement. This market study also provides recommendations to the project team on how they can best monitor the performance and accessibility of market systems along with forms of support for their rehabilitation. The study was conducted in Debark, Beyeda and Janamora woredas of North Gondar Zone, Amhara Region, with the following specific objectives: 1) to identify income generating activities (IGA) that are particularly suitable to youth and women; 2) to look into income generating activities that have the potential to contribute to environmental protection; 3) to identify the potential opportunities, threats and expected obstacles to develop effective IGAs; 4) to assess cooperative's effectiveness, organizational and management structure; and 5) to assess ways to create and/or strengthened the market linkages.

The assessment team consulted with different government institutions and partners and performed a ranking exercise using specific criteria, including the market system's capacity in supporting the livelihood recovery of disaster-affected households, and rehabilitation and conservation of the Simien Mountains National Park. Hence, for Debark woreda, honey, sheep, and wheat market systems were identified; for Beyeda woreda, poultry, honey and shoat market systems were selected, while for Janamora woreda, barley, sheep and bean market systems were chosen. For each market system, the study was guided by the following key analytical questions: 1) How is the market system functioning and performing in a normal year (i.e. a production year without both natural and manmade disasters) 2) Who are the market actors? What are the key constraints and challenges of the target group (producers) in recovering/ sustaining their livelihoods and 3) what are the most appropriate, sustainable recommendations to diversify livelihood and fast recovery?

This study revealed that smallholder farmers in the wheat, bean and consumption barley market systems mainly produce to cover the household's food demand, while malt barley, shoat, poultry and apiculture market systems are a means for household income generation. Livestock production, is mainly used as a means of insurance in times of crop failure. Nonetheless, agricultural productivity remains very low which is mainly attributed to traditional husbandry practices and the poor supply of inputs and support services. Moreover, natural disasters like floods and other climatic conditions, such as frost and snow, resulted in the depletion of essential nutrients from cultivable land and in frequently recurring plant and

animal diseases which negatively impact agricultural productivity in the project areas. Supply problems, linked to the lack and increased prices of improved crops and forage seeds; limited market information and structures; poor market linkages; limited veterinary services; and the high cost of transport services are affecting market integration. The lack of information and skills about savings and loan utilization, worsened by the low capital available to the Rural Savings and Credit Cooperatives jeopardizes the capacities of market actors across value chains.

Besides on-farm income generation activities, there are also off-farm activities with good potential for livelihood diversification and generating additional income. Off-farm income generated activities such as weaving, petty trading, skilled and semi-skilled jobs (carpentry, masonry, barbering and beauty salon), and agro-dealership are currently being practiced in the project intervention woredas. These off-farm activities can help reduce pressure on SMNP land use but are hampered by lack of production/business management skills; strong marketing value chain integration; initial capital and access to credit services; and market information.

Based on the findings of the study further ranking was done, and the following key on and off-farm income generation activities were suggested for the project intervention: poultry, honey, vegetables and fruit production; forage production; and improvement in marketing systems; weaving, petty trade, skilled and semi-skilled jobs (carpentry, masonry, barbering and beauty salon), and agro-dealership.

# 1. Introduction

Ethiopia experiences the effects of climate change shocks, including recurring droughts and flooding. According to the Famine Early Warning Systems Network, drought conditions have persisted for over two years. Some regions received only 30 percent of their typical rainfall during the most recent rain season. These conditions have affected farming and livestock activities, with an estimated 2.5 million livestock who perished between late 2021 and mid-May 2022. Large-scale livelihood assistance, as well as nutrition and WASH services, intervention in northern Ethiopia need more support and funding to minimize further loss of natural resources and livelihoods in this country.

The conservation of biodiversity is crucial to the sustainability of energy, agriculture, forestry, fisheries, wildlife, industry, health, tourism, commerce, irrigation, and power sectors. Impoverished and natural resource-dependent populations are still increasing in Ethiopia, both within and adjacent to National Parks and other areas of highly significant biodiversity value. According to the Ethiopian Wildlife Conservation Authority, throughout the country, 97% of the original highland vegetation has already been lost in recent decades due to agricultural encroachment, grazing and settlements by agro-pastoral communities.

The SMNP is a protected area, located in North Gondar, Amhara regional state. The local communities rely on the park's natural resources and agriculture for their livelihoods. A multitude of challenges are facing these communities, including low agriculture and livestock productivity resulting from land degradation, droughts, unsustainable farming practices, overgrazing and deforestation. Through ADA, CARE and the implementing partner ORDA Ethiopia have planned to address these challenges by implementing the RELIVES project. The project includes outputs and activities that will respond to the three expected outcomes:

- Outcome 1: Natural resources, biodiversity and ecosystems are well protected through community involvement in restoration, rehabilitation, and conservation measures in the SMNP and surrounding kebeles. Output 1.1: Increased engagement and involvement of communities. Output 1.2: Increased engagement of local government and stakeholders. Key Activities will support watershed development and management, the implementation of sustainable land management interventions and promote stakeholders' engagement in conservation measures.
- Outcome 2: Livelihood options for women, youth and vulnerable groups are diversified and improved while at the same time, gender equality, climate-resilience and sustainable natural resource management are enhanced. Output 2.1: Increased income-generating activities, knowledge and skills for women, youth, and vulnerable persons. Output 2.2: Enhanced capacities of communities, local government, and stakeholders in management of climate-resilience and sustainable natural resources. Key Activities will increase the target groups' capacities to engage in alternative income generating activities and strengthen their resilience to the impact of climate change.
- Outcome 3: Capacities of EWCA/SMNP administration in inclusive participatory approaches are enhanced and coordination mechanisms at relevant regional, zonal, woreda and kebele level are improved. Output 3.1: Enhanced capacities in utilizing inclusive participatory approaches. Output 3.2: Strengthened coordination mechanisms at regional, zonal, woreda and kebele level. Key Activities will develop

the capacities of government and EWCA/SMNP staff in utilizing inclusive participatory approaches and strengthen their capacity to bolster coordination mechanisms.

## 2. Objectives of the assessment

The objectives of the market assessment are:

- To identify Income Generating Activities (IGA) that are particularly suitable to youth and women and have the greatest potential in diversifying the entrepreneurs' sources of income.
- To look into income generating activities that have the potential to contribute to environmental protection- especially income generating activities that can contribute to a green and circular economy-for instance by focusing on avoiding/reducing waste and pollution or by designing products that reuse or recycle raw materials or by creating products that can decompose and thereby contribute to soil regeneration.
- To identify the potential opportunities, threats and expected obstacles to developing effective IGAs.
- To assess ways to create and/or strengthen the market linkages.

## 3. Assessment methods

The market assessment was conducted in the three woredas of the RELIVES project's operation; namely Debark, Beyeda, and Janamora. six focus group discussions (FGDs), nine key informant interviews (KIIs) and market observations were done in this market assessment. The assessment started with focused group discussion with suitable experts from project signatory sector offices and those working in relation with markets, agriculture and livestock offices, women affairs, trade office, and cooperative offices. Their discussions revolved around the main sources of employment of the community, livelihood strategies for different community segments, situational descriptions, opportunities, and challenges.

Moreover, the use of natural resources as a source of income were also discussed with each group. The groups listed the livelihood strategies from different agriculture and off-farm businesses and discussed critical markets that can be more productive to the community and diversify their livelihoods. The selected income generation activities were ranked based on the following predefined criteria:

- Most significant or urgent for protecting the life and livelihoods of women and men.
- Directly related to local natural resources and the degree of environmental sustainability.
- Government agencies or other large agencies are engaged in, or planning to engage in supporting income generating activities/livelihood activities in the area (to avoid duplication of resources and effort)?
- Market systems fit thematic areas/strategies of intervention the project is planning to implement.
- What are the critical issues in terms of responding time for urgent needs of the community in the area? Can the need be addressed in the project lifetime?
- Which market systems have scope for feasible response options?

The selection process led to five market systems (for income generating activities), then was further narrowed down to three final critical markets per woreda that were selected for a detailed assessment. Additional markets were included as per the additional information received from the respondents. After the selection of critical markets, a seasonal calendar and

information were collected through focus group discussions, key informant interviews, and personal observations.

#### **4. Brief description of project operation woredas**

In all operation woredas of the project (Debark, Beyeda, and Janamora), agriculture is rainfed, with only one season, “Meher<sup>1</sup>,” challenged by natural disasters like frost, flood, storm, drought, and animal diseases. The community fills their food gap through accessing food aid, selling animals, migrating for labor, and by consuming cheaper and more easily accessible food types like cabbage and potato.

##### **Debark Woreda**

Debark is the main town of the woreda, located in northern Ethiopia, 90 kilometers north-east of Gondar town on the highway between Gondar and Axum. The town is the seat of the Simien Gondar Zone Administration of Amhara Region. It has a latitude and longitude of 13°08'N 37°54'E and an elevation of 2,850 meters above sea level. Debark is located on the western foothills of the Simien Mountains, and nowadays serves as a starting point for hiking tours to the SMNP.

The RELIVES project works in four operation kebeles in Debark woreda, Miliegebsa, Adisgey, Abergina and Arginjona. The main livelihood strategy of the woreda is rainfed agriculture. The most commonly planted crops and plants are cereal, barley and wheat, as well as peas and beans, while sheep are the dominating livestock people keep. Bean and malt barley are used as cash crops in the area, the woreda's population further engages in petty trade and weaving as off-farm income generating activities. Honey production is also common in the area.

##### **Beyeda Woreda**

The woreda of Beyeda is located in the Amhara Region of Ethiopia, on the easternmost point of the Simien Gondar Zone. Beyeda is bordered on the south by the Wag Himra Zone, on the west by Janamora, on the north by Tselemt, and on the east by Tekezé River which separates it from the Tigray Region. The capital city of Beyeda is Dil Yibza.

The RELIVES project works in three operation kebeles within Beyeda woreda: Salawa, Medebay, and Guayint. The main livelihood strategy used in the woreda is subsistence-level agriculture; barley, wheat, beans, peas, sheep, and honey are some of the local communities' marketable productions. Off-farm activities like local cloth weaving, pottery, and petty trade are also used for income generation.

##### **Janamora Woreda**

Janamora is one of the woredas in the Amhara Region of Ethiopia. Part of the Simien Gondar Zone, Janamora is bordered on the south by east Belessa, on the southwest by Wegera, on the west by Debark, on the north by Addi Arkay and Tselemt, on the east by Beyeda, and on the southeast by Wag Hemra Zone. The woreda covers the Simien Mountains and a portion of their southern slopes, which makes access to this woreda difficult. 140 km rough road links Janamora and Debark, and the market system in the woreda has become difficult to access

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<sup>1</sup> Ethiopia's two grain growing seasons are belg and meher. Belg is the shorter season from February to April, and meher is the main season from May to September. Grain production (including mainly corn, wheat, sorghum, barley, and teff) greatly depends on rainfall patterns during the belg season.

due to the lack of road, most basic infrastructure for marketing.

## 5. Assessment findings

For each market system, the study was guided by the following key analytical questions:

- What are the main market systems that have the greatest contribution to supporting the livelihood of the community in an environmentally friendly manner, particularly for women and youth?
- What is these market systems' relation to households' income generation?
- What are the main enabling and disabling factors of the market systems?
- What are the available inputs, services, and infrastructure utilized in the critical market systems?
- Who are the key market actors and what are the opportunities and challenges they face?
- What are the most appropriate recommendations to support livelihood?

### 5.1. Main Income Generating Market Activities/Systems

In consultations with the implementing partners and ORDA Ethiopia teams in the operation woredas, the project team identified both on-and off-farm income generation activities and ranked them based on each income generating activities' potential in diversifying the livelihood of households. In the ranking process, representative staff from different woreda offices, such as the Office of Agriculture (including natural resources and livestock specialists); Trade and Market; and Cooperatives, participated.

#### 5.1.1. Wheat market system

Wheat is one of the most widely produced agricultural products in the area. It is produced once a year following the rainy season, "Meher". Wheat is important in the area for consumption and income generation. However, wheat production is characterized by a lack of improved seeds and fertilizer as well as the high price of artificial fertilizers<sup>2</sup> and pesticides; and its production is challenged by frost, snow, storm, and crop diseases.

The market system comprises producers, cooperatives, collectors, a wheat flour factory, and consumers of the flour as well as the grain. Agricultural producers use fertilizer, pesticides, and improved seed to improve production. The services utilized during the production of wheat are agricultural extension services (technical advice), a mill house, and credit services, while the market system's environment is characterized by trade licensing (legalization), quality control, bribery/corruption acts by some traders/collectors who are not legalized/licensed or didn't renew their trade licenses, weather conditions like frost, and crop diseases such as wheat rust.

#### Market actors

##### *Farmers/ producers*

Wheat production is used for consumption, income generation and for obtaining seeds for the next farming season. The producers sell their wheat products to cooperatives, village traders, individual and business consumers (hotels and restaurants). The agricultural cooperative in

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<sup>2</sup> Artificial fertilizers are plant nutrients produced through chemical processes to nurture soil and foster plant growth. Artificial fertilizers mainly consist of plant macronutrients such as Nitrogen, Potassium, Phosphorus and Sulphur, but lack other essential substances (micronutrients)



the woreda procures wheat and transfers it to Limalimo Wheat Flour Factory as well as to consumers in different localities.

### ***Village traders***

The village traders are unlicensed traders who buy wheat grain from community/kebele level small markets to sell the grains at the woreda market in Debarq town to individual consumers.

### ***Cooperatives***

The multipurpose farmers' cooperatives aggregate the wheat grain from farmers to sell to the Limalimo Wheat Flour Factory, while a limited amount goes to individual consumers.

### ***Processor***

Limalimo Wheat Flour Factory was established in 2020 with a processing capacity of 1,500 quintals per day. It serves as a multifaceted benefit for the local community and beyond. For example, the factory has created good market opportunities for wheat producers, through cooperatives aggregating the produce; it created jobs for about 60 permanent and casual/temporary laborers; it provides flour to local bakers and bakers in the Gojjam and Addis Ababa areas; and the factory sells wheat bran as fodder to local livestock farmers.

However, the local shortage of water and grain supply poses a challenge to the factory. As a coping mechanism, the factory's water supply comes from a water tanker, transported by truck, which further jeopardizes the cost of flour production and leads to increased prices. As mentioned above the local volume of wheat produced is very low. The supply gap of grains is complemented by collecting grains from Gojjam in Amhara region, and Arsi and Bale in Oromia regions. The current local unrest and the seasonal blockage of roads severely limits the input and output market of the factory. As a result, its processing capacity per day has declined by half, reducing the factory's operational hours from 24 to 12 per day.



*Figure 1: Limalimo Wheat Flour Factory; a potential market outlet for local wheat producers.*

### ***Bakery***

The bakeries in the project operation's towns have small production and selling capacity to businesses (hotels and restaurants) and individual consumers due mainly to shortage and/absence of wheat flour.

## Consumers

There are two types of consumers: namely individuals and businesses (hotels and restaurants). These consumers either buy wheat grains from the producers and/village traders and process it into flour at the flour mill grinders or they buy flour from Limalimo Wheat Flour Factory. With regard to already processed flour, they also buy bread from local bakers. Both individual residents of the woreda towns and rural households are encompassed in these two consumer types.

**Table 1:** Market actors interviewed in the wheat market system

Type of actor	Number of interviews
Producers	2
Cooperative	1
Village traders	2
Bakers	1
Processor	1
Individual consumers	1
<b>Total</b>	<b>8</b>

### 5.1.2. Sheep market system

The sheep market system is used to fill the food gap between the end of one production year and the beginning of the next one. Indigenous sheep breeds are the dominant species of livestock which provide farming households with cash income, meat, wool, manure, and other raw material (skin). They also add to their owners' social security in less productive crop years. Compared to cattle, sheep have shorter production cycles, faster growth rates, are easier to manage, can be cared for by all the family members, and require low capital investment to buy and maintain. However, the dominant sheep production system in the project operation area is traditional subsistence, the productivity of which is constrained by a shortage of feed during the dry season. The main resource base for fodder includes wasteland and stubble grazing, browsing, and sometimes straw. It is also challenged by animal disease and the sheep owners' poor access to veterinary and financial services.

The actors in this market system are producers, village collectors (individuals who buy sheep at the community/households), large traders/collectors who sell to restaurants and household consumers in Gondar, Bahir Dar, Mekelle and Addis Ababa. Agricultural extension advisory services are used to facilitate the input of production needs, such as feed and veterinary drugs, and required infrastructure like roads for transportation where temporary shade (shades made from plastic sheets). The market environment for the sheep market system consists of being a registered and licensed trader, paying tariffs and/or tax and price fluctuation, which influences the market system capabilities, efficiency, and equity.

## Market Actors

### Farmers/producers

Sheep rearing in these areas is used as a complementary livelihood strategy in combination with crop farming. Farmers interviewed during the assessment owned, on average, five sheep at the time of the assessment. Most of the time the farmers sell their sheep to three types of actors, often after having walked the sheep for several hours on foot to the nearest marketplaces: they sell to individual or business (hotels and restaurants) consumers, village

traders or farmers (for fattening). The price of the sheep follows the seasonal increase in demand during holidays, then reduces after holidays and further declines during the fasting season before Easter. For the festivities around Easter, fattened and large-sized sheep are put on the market, for a maximum price of 6,000 ETB, while for the Ethiopian New Year, mostly small-sized sheep were reported to be sold. The sheep's phenotypical color is also a factor for price variation: for the new year, red and black-colored sheep cost about 4,000 and 2,500 ETB, respectively. In male headed households, the male is responsible for the sheep's market sale, although the decision to sell sheep is taken by both men and women.

### ***Sheep village traders***

Village traders buy from producers on small marketplaces and sell on larger livestock markets, mostly to urban traders or restaurants and hotel owners, as well as some collectors. In between these sales, sheep are kept for a maximum of three days, fed on crop residue or concentrated feed and kept in sheds for temporary livestock keeping. Market actors buy and sell on a weekly basis, but the sheep-trading season usually peaks between September and January, and during holidays.

### ***Large traders/collectors***

Large traders and collectors collect sheep from village traders at the Debarke town marketplace and sell them to different traders at the next towns of Gondar and Bahir Dar. Collectors incur a variety of costs, including government taxes, commission for brokers, transport, loading and unloading costs, and temporary sheds.

### ***Sheep consumers***

The demand for the domestic sheep market is composed of local consumers (individuals, hotels, and restaurants) and large traders buying from large livestock markets to then sell sheep to Gondar, Bahir Dar, and Addis Ababa.

## **Sheep market environment**

### ***Trade and market office***

This office is responsible to develop and maintaining standardized marketing and trading systems, notably by providing legal certification or license to market actors and controlling illegal trade.

### ***Livestock development agency (department of agriculture)***

Even though the agency's services are limited due to lack and/or limited supply of vet drugs and necessary equipment in the vet clinic and high price of the drugs, attempts are made to provide veterinary services to herders, as well as training and advisory support through development agents who can be found in each kebele.

### ***Tariff collectors***

They collect tariffs from sheep buyers at the point of exit from the marketplaces. The bigger animal markets in the area are Ambaras and Debarke both operate on Saturdays.

## Market infrastructure, inputs and support services

### ***Market infrastructure***

The livestock marketplace is located around the border of Debark town, which has a gentle slope to avoid water lodging to protect livestock from waterborne diseases. However, the site is not fenced, and according to the woreda livestock health expert and the farmers we met at the market, with people and shoat moving freely in the marketplace might result in the spread of communicable diseases for humans and livestock, in case of with infected livestock and people during the market days/s.



*Livestock marketplace, Debark town*

### ***Inputs***

**Animal feed:** Farmers normally depend on a variety of food sources for their animals: grazing grass and bushes, crop residues, concentrated feed (wheat bran), and leftovers from household meals.

**Veterinary drugs and services:** the veterinary health structure starts at the woreda level and down to each kebele (health post). North Gondar Zone livestock and fishery department is trying to provide veterinary services through a full animal husbandry package (services and drugs). It provides a deworming body spray for animals, deworming tablets as prevention or cure, and the necessary injections (vaccinations). However, the interviewed sheep producers reported that the veterinary services at the kebele level are not fully functional; are not fully equipped with drugs and necessary equipment also the technicians are not living in their duty stations, instead they live in the woreda towns, which makes the service accessibility limited. Therefore, the services offered are inefficient and have resulted in livestock death.

## Opportunities, constraints and recommendations

### **Opportunities**

- The project implementation woredas include highlands suitable for sheep production and they are conducive to agro-ecology.
- The long tradition and practice of sheep production is based on indigenous knowledge.
- Sheep can be handled and taken care of by any member of the household, need little care.
- The sheep breed “Washera,” known for better productivity, is kept not far from the project area.

### **Constraints**

The level of production and productivity of sheep in the area is extremely low, due to several constraints, be they technical (related to feeding, housing, and animal health), related to the sheep breed, institutional, environmental, or infrastructural constraints which restrict sheep producers’ potential to raise their income. The major constraints observed were:

- The inaccessibility of essential veterinary services, because the clinics are ill-equipped, and the veterinary technicians are mostly living outside their duty stations in the kebeles

- The inaccessibility of inputs, for instance of concentrated feed needed as alternative fodder during the dry season to maintain the same level of productivity
- The lacking practice of treating crop and plant residue to increase their nutrition levels and palatability to animals
- The reduction of feed from grazing, which was the result of converting grazing land to crop land, as crop land is needed to meet the growing population's demand for food crops
- The chain of intermediaries in shoat marketing and the lack of market information about shoat value chain which reduces the profit margin farmers receive from shoat sale
- The lack of institutional support for farmers on improving breed productivity

## **Recommendations**

- Provide capacity development trainings to project participants to engage in green IGAs, such as the production of forage in an environmentally friendly way (from crops like legume, grass, cereal or tree-based) and concentrated feed production from locally available resources which will minimize expanding of grazing land into the national park.
- Provide capacity development trainings to government partners on animal husbandry improving breed productivity, so that they, in turn, can provide regular technical support to the community.
- Support existing or newly established input suppliers and agro-dealers with feed and veterinary services.
- Provide institutional support to government animal health sectors on strengthening veterinary service delivery; in form of capacity development for system strengthening.
- Support value chain actors to engage with the private sector to provide input (feed, veterinary services, and improved breed); by strengthening market linkages, creating linkages with financial institutions and providing start-up capital in-kind or in form of financial support.
- Strengthen accessible and appropriate market information systems to reach all actors operating in the sheep market value chain.
- Agricultural extension service support can be enhanced to support the producers with adopting new technologies. E.g., treating crop residual with Effective Microorganism (EM) for feed, breeding the local sheep with better breeds like "Washera".
- Together with the Job Creation, and Small and Micro Enterprise Office, support the establishment/strengthen existing businesspeople engaged in meat and wool processing.
- Integrate forage production with natural resource management efforts in the project sites.

### 5.1.3. Honey market system

Because of its climatic and vegetation diversity around the SMNP, there is a large potential for beekeeping in the area. At the household level, communities have been engaging in beekeeping for centuries. Beekeeping constitutes an important source of income. In North Gondar Zone woredas, the honey market system supports the livelihood of the farming community, as the production of honey and beeswax provides an alternative income source for smallholder farmers, who traditionally cultivate crops. Due to the biodiversity in the forest of the SMNP, there is a large potential for honey production in the surrounding kebeles. Honey at the market is mostly sold in its crude form (the honey and wax comb together) to different market actors.

#### Market actors

The market actors participating in the honey market system include producers; village collectors; large traders/collectors who are collecting from Debarq and selling at Debarq town, Gondar town, Bahir Dar, town and Addis Ababa city; traditional breweries (“Tej”); individual consumers, wax marketers, and wax users (churches; to make local candles and government office and projects that work on apiary development; to distribute through youth groups and farmers who are starting bee keeping with modern beehive).

#### *Honey producers*

Production is mostly based on traditional methods of cultivating traditional beehives. A farmer has an average of eight traditional hives and can harvest three times per year. Other interviewed farmers who own modern hives are only able to harvest twice per year, but the productivity of modern hives is much better than of traditional hives which is, on average, 20 kgs of honey is harvested in one season (40 kg per year for modern hives, where 5 Kg is harvested in one season (15 kg per year) for traditional hives. Adult men dominate the production and marketing of honey; while women clean the apiary and sometimes take part in the construction of traditional hives. Honey producing farmers are challenged by their limited access to credit services to buy a modern hive, along with its accessories including queen separator and honey extractor.



#### *Village traders*

Village traders have no trading license, they buy honey from producers on small marketplaces and homesteads and sell it on the woreda’s central livestock markets to large traders/collectors and individual consumers. No broker was observed in the honey market system.

#### *Large traders/collectors*

These honey traders are legally certified and licensed traders who pay 5,000 ETB taxes on average per year. The honey product is being sold in towns and cities like Gondar, Bahir Dar and Addis Ababa by large traders. Although, these large traders sometimes buy honey from village traders, honey producer farmers are the main suppliers because they rarely adulterate

their honey products and sell purer honey than that of village traders. The market supply is higher in June for white colored honey and in November for yellow colored honey. Outside of these months, supply is lower. The traders use their own capital to run their business and are not aware of the possibility to take a loan from microfinance institutes (MFI). There are no brokers mediating the honey market system. During the study period, the assessment team did not observe any supply gaps, but traders are challenged by scarceness of markets for their product, absence of market linkages and type description of the honey, and lack of market information for how much they can sell/buy honey. Other challenges include the lack of honey extractors to process and sell higher quality produce; the price inflation leading to consumer affordability issues; and the problem of adulteration and lack of quality guarantee which leads to a decline in the amount of honey sold on a market day.

### ***Traditional breweries***

Individuals as well as traditional business breweries distill honey into an alcoholic product called “Tej.” Individual distillers produce this alcohol drink during special occasions like holidays, religious and wedding ceremonies. During the current market assessment, the project team identified three commercial breweries in Debark town who produce the local alcoholic drink from pure honey and who then donate the leftover wax to churches for their local candle production. Although the price for a liter of “Tej” is cheap at 80 ETB, the interviewed businesswomen explained on the market constraints for the product related to the current overall price inflation and consumers’ limited buying power. Potential consumers for this product are residents at Debark towns and to some extent, inhabitants of Gondar town. During times of low demand, when the integration into the markets of bigger towns proves challenging and when consumers’ purchasing power is limited, producers temporarily stop the business.

### ***Individual consumers***

Individual consumers in the area mostly buy honey for family consumption and to produce the traditional drink called “Tej and Birz.”

## **Market input, service, and infrastructure**

### ***Inputs***

The major inputs required for the honey value chain are the bee colony, beehive, equipment (queen separator, smoker, glove, mask, and honey extractor), credit and practical training on apiary management to increase productivity. The farmers obtain the colony and the traditional hive from fellow farmers, while especially skilled farmers can make the traditional hive themselves and hunt for swarming bees to collect a colony. To some extent, the woreda’s Livestock Department also provides modern hives, wax, and associated trainings to smallholder farmers and youth. However, the level of support by the government is limited and farmers are constrained by their lack of access to the equipment.

### ***Extension services***

The public extension system is the major source of agricultural information and knowledge for farmers. The government is trying to provide coverage by assigning three extension agents to each farmers’ training center. However, the emphasis and efforts exerted for these services differ from place to place and some honey producers receive little advice and support, as a result.

### **Credit/loan services**

The market assessment team observed that the communities' lacked information and skills about savings, and limited awareness on access and utilization of loans. Hence, most interviewed honey market system actors reported the absence of requests for credit services.

### **The market environment**

The market environment for honey in the area consists of both an enabling and a disabling environment. The enabling environment is characterized by trade licenses to legalize market transactions whereas the main disabling factor are pesticides used for different purposes, which kill and repel bees from the area. Furthermore, traditional norms restrict women from participating in the honey market system.

**Table 2:** The seasonal calendar for the honey market system in Debark woreda

Honey market system (Debark woreda)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Honey production	Low	Low	Low	Low	Med	High	Low	Low	Low	High	High	Med
Honey supply on the market	Low	Low	Low	Low	Med	High	Low	Low	Low	High	High	Med
Market price of honey	High				Low	High	High	High	Low	Low	Med	Med

**Table 3:** The market actors interviewed in the honey market system of Debark woreda

Type of actor	Number of interviews
Producers	1
Local Traders	2
Large traders	1
Traditional breweries	1
Consumers	1
<b>Total</b>	<b>6</b>

## **Opportunities, constraints and recommendations**

### **Opportunities**

The RELIVES project operation woredas have a huge potential for beekeeping because of the presence of the SMNP's diversity in climate and vegetation offering favorable conditions for beekeeping. The communities themselves are knowledgeable and skilled in beehive management and honey harvesting.

### **Constraints**

The potential of the sub-sector is not yet efficiently utilized due to various constraints. Drought has resulted in the decline of the vegetation cover and subsequent changes in the natural environment. In addition, assessment respondents reported that pests, diseases, predators; and the shortage of bee forage declined honey production and productivity. On the other hand, resource and management gaps, like the shortage of apiary equipment, poor management practices, indiscriminate application of agro-chemicals, weak research and extension services, and poor infrastructure curb honey production in the project areas. Moreover, the marketing of honey in the study areas is restricted by linkage problem; lack of hygienic market



area and market infrastructure, market information price fluctuation, low awareness of post-harvest handling, the lack of technology, and the lack of basic business concepts.

## **Recommendations**

Based on the current market system analysis, the following key recommendations are suggested:

- During the current study, the magnitude of the deleterious effect of pests, diseases and predators on honey production and their controlling mechanisms is not fully covered. Therefore, detailed research of and the adoption of effective controlling mechanisms on honeybee pests, diseases, and predators is of paramount importance.
- The introduction and expansion of a full extension service package and equipment for improved beekeeping technologies with adequate practical skills training is recommended, besides the traditional way of beekeeping systems employed by the community.
- Farmers should be supported in their apiculture business by increasing the availability of credits, improving the negotiation power of beekeepers, strengthening the linkages among different concerned government and private institutions, supporting them in forming cooperatives.
- Attention should be paid to strengthen the capacities of experts who can better support the farmers technically.
- Activities on awareness creation and law enforcement of the appropriate application of agro-chemicals are recommended to minimize the negative impact on bees.
- Capacity development on the adoption and planting of flowering plants together with an increasing supply of seeds and seedlings of these plants may improve the level of production and productivity per beehive. Therefore, expanding the coverage of flowering plants, especially economically important horticultural crops, is important.
- The market information system should be expanded to all market actors participating in the market system.

### **5.1.4. Poultry market system**

Poultry farming is one of the most widely used income generating activities in the area. Poultry is produced throughout the whole year, without a time limit, and the production is managed by women and landless youth. The two most important reasons for engaging in poultry production are income generation and to improve the family's nutrition. Poultry production is characterized by using local breeds and low levels of production, although its contribution is reflected in the food security as well as the financial wellbeing of the community.

#### **Market actors**

The market system is composed of producers, village traders, large traders, local and zonal/Debank consumers. Poultry producers mostly keep local breeds and make use of agricultural extension services (technical advice), financial and veterinary services. The infrastructure needed for the market system are roads and means for transportation. The market environment is characterized by a trade office for license and price regulation. Traditionally for the Ethiopian New Year, consumers display a preference for local chicken breeds and pay a higher price for red and white-colored chickens.

### Producers

Smallholder farmers who engage in poultry production have no specific time for the production and marketing of chicken and eggs as they sell them to cover daily cash needs and to purchase household consumables. As soon as producers gather enough eggs or chicken, they sell them on the market. Farmers sell chickens and eggs at the local market to consumer HHs in the village. During the holiday season, they sell at the woreda markets, where they can demand higher prices.



A chicken farm in Beyeda woreda hospitality

### Village traders

Village traders are the market actors who act as a bridge between the producer, urban traders, and business consumers in the industry. They collect chicken and eggs from village markets and transport them to the woreda's central markets.

### Urban large traders

Urban traders are legal traders who collect poultry and poultry products from village traders at woreda markets and from local producers to sell them at markets in Debarq and Gondar.

### Consumers

Consumers purchase poultry products both at the local level and in the woreda and zonal towns (Debarq and Gondar). The purchasing power of hotels and restaurants constitute a value addition within the poultry market.

**Table 4:** The seasonal calendar for the poultry market system in Beyeda woreda

Seasonal calendar-poultry market system	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Poultry market price	Med	Low	Low	High	Med	Low	Med	Med	High	Med	Low	High
Poultry demand & supply	Med	Low	Low	High	Med	Low	Med	Med	High	Med	Low	High
Concentrated feed availability	High	Med	Med	Med	Med	Med	Med	Med	High	High	High	High
Disease prevalence	Low	Low	Low	Low	Low	High	High	High	Low	Low	Low	Low

**Table 5:** Market actors interviewed in the honey market system of Beyeda woreda

Type of actor	Number of interviews
Producers	2
Village traders	1
Urban traders	2
Consumers	2
<b>Total</b>	<b>7</b>

## Opportunity, constraints and recommendations

### Opportunities

There is a conducive agro-ecology for poultry production in the project areas. Moreover, women are more engaged in all steps of production and marketing of both the chicken and egg, which is an efficient way to economically empower them. It is also environmentally friendly; it requires low investment costs and little space to run the business.

### Constraints

Most of the poultry farming system in the project woredas is observed to be extensive (with relatively lower inputs, i.e., capital and labor) and traditional. Not having a trend of providing supplementary feed for local breed chickens, poor housing and management systems result in low production. The most dominant breed types are local breeds whose level of egg productivity is limited to an average of sixty eggs per head per year. There are households who raise exotic breeds, but very few. The local breeds mortality rate is reported as high, possibly due to their poor housing and health management. Therefore, the lack of access to animal health services, supplementary feed, and improved poultry housing systems together with the skills gap of farmers in poultry production and management have reduced the benefit of poultry production to households' livelihoods in the project area.



*Discussions with farmers, Janamora woreda*

### Recommendations

- Capacity development training for farmers is recommended, on poultry house construction, local feed production, poultry health, and product marketing.
- The accessibility of exotic breeds that are compatible with the ecology of the area should be enhanced.
- Market linkages between farmers and pullet suppliers, day-old chick growers, feed suppliers, and veterinary service providers should be facilitated.
- Existing and new feed suppliers in the woreda should be supported through an innovation fund. This innovation fund could provide cost share options for capital assets.
- Provide institutional support to improve veterinary service provision.
- Creating linkages with MFI for producers, collectors, and input suppliers to finance their business. Village saving and loan associations (VSLAs) provide the basis for financial management and individuals can provide in their credit applications to MFIs the record of accomplishment for their enterprises and their business plans for future operations.

#### 5.1.5. Pullet grower

Improved poultry production is one of the income generation activities recommended for smallholder farmers. However, there is no reliable supply of pullets in the area. Therefore, establishing a pullet grower can be a solution to improve the supply of pullets and increase

poultry production of the area. Poultry production is a very profitable business that can be conducted on a small plot of land with small initial capital.

## **Constraints**

- High cost of inputs: the price of inputs like feed, vaccines, and equipment is costly. The price is increasing continuously, thus posing an obstacle to long-term planning.
- Limited access to credit: there is no adequate financial services like micro finance institutes to get easy access to loans and credits in the area. Even the existing microfinance institutions such as the Amhara credit and saving institutes (ACSI) and the current Tseday Bank are not willing to provide loans to youthd. The policy of the financial service institutes demands collateral to provide those services.
- Limited linkage to day-old chick: there is no established linkage between pullet growers and day-old chicks.
- Poor infrastructure: there is no reliable connection to the national grid due to the lack of roads and electric power.
- Lack of business management skills: the growers lack business management skill which limits their chances for economic success.

## **Recommendations**

- Strengthen linkages to day-old chick suppliers: Establishing good relationships between pullet growers and day-old chick suppliers will enhance the success of the pullet growing business.
- Technical support: The provision of technical support to improve the management of the pullets is important, as pullets need great care for feeding, healthcare, housing, and marketing.
- Improve access to inputs: Pullet growers need reliable suppliers of vaccines, feed, and medicine.
- Establish agent network: Pullet growers need to have agents who link them to farmers.
- Access to credit service: Creating linkages to microfinance services is important to provide loans to the growers.

### **5.1.6. Barley market system**

Barley is a major agricultural product with a strong contribution to people's livelihood in the area. It is produced once a year following the rainy season, primarily for consumption, followed by income generation. The production is characterized by the lack of improved seeds and fertilizer. Moreover, barley production is challenged by frost, storms and crop diseases prevalent in the area.

The market system's major actors are producers, cooperatives, local consumers, and the local beer factory (Dashen Brewery). The agricultural inputs utilized are improved malt barley seeds to supply the beer factory, and fertilizer. Producers make use of agricultural extension services (technical advice), credit services, and warehouses. The market environment contains a trade office for legal registration, and it is marked by various disabling environmental factors due to climate change.

## **Market actors**

### ***Farmers/producers***

Locally, the farmers produce both malt and food barley for income generation to sell it to the Dashen Brewery Factory through cooperatives, and for consumption, respectively. Food barley, however, is produced for both income generation and HH consumption. Barley farmers receive improved malt barley seeds and fertilizer from Dashen Brewery Factory through cooperatives and reimburse the factory and the cooperatives after production. Moreover, the factory provides trainings to the producers. The producers do not sign a contract with the factory in advance of production, rather the factory sets price for malt barley at the time of harvesting. For example, in the assessment year, the price for a quintal of barley was 4,500 ETB, which is much lower than the average price of wheat (7,000 ETB) in the same physical year.

Seeds of improved variety of food barley and fertilizer are rarely accessed through the North Gondar Zone Agricultural Department and Agriculture Woreda Office. Moreover, government-sourced fertilizer is available only in limited numbers and its price is unaffordable for most farmers. Hence, the farmers are forced to repeatedly plant the same variety and use compost to fertilize the land. As a result, the productivity of the variety of food barley used is declining over time.

### ***Cooperatives***

Denkelako Multipurpose Farmers' Cooperative, in which farmers are members, is located in Janamora woreda. During the time of harvest for malt barley, the Dashen Brewery Factory set the purchasing price and signs a contract with the cooperatives about the volume and price of purchase. Then, the factory transfers money to the cooperative to collect the barley on time. The cooperative is further responsible for buying the products from farmers and transporting it to the factory. However, the cooperatives faced multiple challenges, such as the question of purity of the barley at the time of collection and quality problems that happen because of harvesting before it is fully dry. Other hindrances concern the impurity of the seeds provided to farmers, contamination with the bordering local variety of cereal crops; and farmers' lack of interest to sell due to the negative image the cooperatives have by farmers whose product is rejected.

## Consumers

Residents in Mekaneberhan town and/or local rural households buy food barley directly from producers from the nearby kebele level primary market or at the terminal market of the Janamora woreda main town, Mekaneberhan. Neither market information, nor brokers are facilitating the barley market system in the woreda.

**Table 6:** The seasonal calendar of the barley market system in Janamora woreda

Barley market system (Janamora woreda)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Barley production potential	High	High	Med	Low	Low	Low	Low	Low	Low	Low	Low	Med
Barley supply in the market	Hugh	High	Med	Low	Low	Low	Low	Low	Low	Low	Low	Med
Price of barley	Low	Low	Med	High	High	High	High	High	High	High	High	Med
Weather challenge (frost)									High	High	High	Med

**Table 7:** Market actors interviewed in the barley market system in Janamora woreda

Type of actor	Number of interviews
Producers	20
Cooperative	1
Consumers	2
<b>Total</b>	<b>23</b>

### 5.1.7. Bean market system

Beans are produced for consumption, as well as for income generation. Value chains are applied to this product as it is sold both in raw and grinded forms.

#### Market actors

The actors participating in the bean market system include producers, village traders, collectors at Janamora, traders at Debarq, Gondar and Bahir Dar, millers for grinding, and consumers in these towns.

#### Market infrastructure, input, and services

##### Inputs

To understand the types of farming systems, opportunities and challenges in bean farming, the project team conducted focused group discussion with bean farmers from rural kebeles, including elder farmers, youth, and women. The farmers mentioned that the inputs for bean farming include improved seeds, agro-chemicals to protect the crops from pests and weeds, and artificial (organic) fertilizers. The farmers also emphasized the challenges of accessing these inputs, as artificial fertilizer and improved varieties are not accessible in a timely manner and are unaffordable. To combat these issues, farmers are trying to use compost from livestock manure instead.



Bean producers and their product on the market, Janamora woreda

### **Extension services**

The public extension system is the major source of agricultural information and technical knowledge for farmers. Of the three government development agents assigned to each kebele, one of them is a crop specialist assisting the farmers with the day-to-day activities.

### **Credit services**

Credit service utilization for bean farming and trading was not reported, possibly because of an awareness gap about the credit and saving system and loan utilization. Hence, most interviewed bean market actors reported the absence of requests for credit services.

### **The market environment**

The market environment for beans in the area is characterized by both enabling and disabling factors. The main disabling factors are natural hazards like snow, draught and frost, whereas enabling factors include the legalization of some local and large traders and facilitating the business environment at different points of the market chain.

**Table 8:** Seasonal calendar of the bean market system in Janamora woreda

<b>Seasonal Calendar-Bean market system (Janamora)</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
Bean production	High	Med	Med	Low	Low	Low	Low	Low	Low	Low	Low	High
Price	Low	Med	Med	High	High	High	High	High	High	High	High	Low
Supply	High	Med	Low	Low	Low	Low	Low	Low	Low	Low	Low	High
Weather challenges (frost)	Low	Low	Low	Low	Low	Low	Low	Low	High	High	High	High

**Table 9:** Market actors interviewed in the bean market system in Janamora woreda

<b>Type of actor</b>	<b>Number of interviews</b>
Producers	20
Local traders	2
Large traders	0
Consumers	2
<b>Total</b>	<b>24</b>

## **Opportunity, constraints and recommendations for the wheat, bean and barley value chain**

Bean, wheat, and barley are important crops produced in the area. Bean is rich in protein (about 33% of the total grain) and is consumed widely as a source of protein. Beans are crucial as a low-cost food crop rich in carbohydrates and the plant's ability to fix nitrogen plays an essential role in crop rotation with other cereal crops like wheat and barley. Wheat and Barley are also staple foods and main products in the area.

### **Opportunities**

The RELIVES project implementation woredas are ecologically suitable for growing bean, wheat, and barley widely and they are considered cash crops in the area.

### **Constraints**

The production is characterized by a lack of improved seeds and fertilizer. High population growth results in a shortage of land availability per capita. Natural disasters like snow, flooding, frost and other climatic conditions result in the depletion of macronutrients from cultivable land and the unavailability of essential nutrients, while crop diseases and improper agronomic practices reduce the level of production and productivity in the project areas. These factors have a great impact on the level of HH income of the local communities who lead a challenging life.

### **Recommendations**

- Improve research and extension coordination and linkages, and develop highly adaptive, productive and disease-resistant crop varieties fitting the highland areas. Moreover, develop/ strengthen the seed multiplication centers in the area. In this regard, the project can work with Debank University, Ethiopian Institute of Agricultural Research (EIAR)<sup>3</sup>, etc.
- Strengthen the agricultural extension services to provide a full support package, technical support, improved seeds, and to improve fertilizer accessibility.
- Work closely with the woreda's early warning and disaster prevention office to provide timely meteorological information and to capacitate the target farmers to take remedial actions on time.
- Improve the market and value chain of these crops for better producer outcomes; support establishment of value chain actors, support to improve access to market information, promote access to loan/credit from MFIs, etc.
- Create and enhance market integration with market chain actors to optimize the benefits from the agricultural crop products through creating market linkages with actors in different areas where the producer gets better benefit.

#### **5.1.8. Vegetable and fruit production**

Vegetable and fruit production is found suitable income generating activity for smallholder farmers who have small plots/backyards of land with limited capital. It can be beneficial both

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<sup>3</sup> EIAR's mission is to conduct research that will provide market competitive agricultural technologies that will contribute to increased agricultural productivity and nutrition quality, sustainable food security, economic development, and conservation of natural resource and the environment



as a source of income and for nutritional enhancement. Vegetable and fruit production improves the availability of vegetables rich in micronutrients for residents in the area to diversify the family diet by including vegetables and fruits, including kale, tomato, onion, beet root, carrot, cabbage, and potato.

Growing vegetables and fruits are considered supplementary to the production and cultivation of the main local crops. Only limited labor and working time is needed to manage fruit and vegetable production business, which provides a good opportunity to diversify the livelihoods of women and girls especially since the production can be managed at the backyard garden (not far from their homes), they can also sell it at the local market easily, and for pregnant or lactating moms, it would be accessible to have in the village market for a good source of micronutrient. Vegetables and fruits can also be produced year-round without waiting for the rainy season or irrigations using water harvesting.

### **Constraints**

- Lack of improved seeds: there is a shortage of improved vegetable seeds and fruit seedlings in the area, reducing the production of vegetables and fruits and discouraging households from sustainably planting the aforementioned vegetables and fruits.
- High post-harvest losses: many vegetables and fruits perish quickly and are lost after harvesting. Most vegetables and fruits have a very short shelf life and require technical knowledge and tools to take care of the produce to extend their shelf life.
- Poor market value chain: the market linkage is not developed. Producers are forced to sell their produce at the nearest market for village traders and consumers which decreases their share of the profit.
- Lack of financial support: households have no access to financial linkage to get loans and credits, limiting the initial capital that is needed to invest on vegetable and fruit production.
- Consumption practices: the consumption culture and practices in the area do not encourage and put emphasis/attention on vegetable and fruit consumption, causing a subdued demand for vegetables and fruits.

### **Recommendations**

- Increase access to improved vegetable and fruit seed to increase production and improve quality.
- Introduce new innovations to save energy, time and resources in growing vegetables and fruits. E.g., homestead gardening, perma gardening, keyhole gardening, etc.
- Provide capacity building training/support on production utilization, post-harvest handling, and value addition for perishable products for stakeholders.
- Support in developing a system to provide market information to allow the farmers to generate a larger benefit from their products.
- Increase access to financial services: Create linkages to microfinance institutions to increase farmers' access to loans.
- Encourage the establishment of farmer groups and cooperatives for farmers increased bargaining power when they sell their produce collectively.
- Support the establishments of agro-dealers to improve sustainable and continuous access to seeds, seedlings, and different agricultural inputs for the community.

### **5.1.9. Forage development and marketing**

Forage development and marketing is a business that can benefit both forage developers and livestock producers as well as serve as a benefit to the larger environment by improving access to animal feed rather than using the park area for grazing. Considering the shortage of forage in the assessment areas and increasing of grazing lands, especially in the dry season with only crop residue and dry grass available, there is large potential for forage development in the assessment areas. Improving the production of different forage varieties can support intensifying livestock production and fattening activities, using a cut and carry system.

#### **Constraints**

- Limited awareness on management skills for forage development: smallholder farmers in the area do not have the skill and experiences of developing improved varieties of forage.
- Limited access to financial services: farmers has no access to loan services they could use for the initial capital needed for forage development.
- Lack of improved forage seeds: currently there are no agro-dealers who provide improved forage seeds to the farmers, probably due to lack of demand.

#### **Recommendations**

- Training and extension services: provide capacity building training to farmers, development agents and livestock production office experts on improved forage development mechanisms.
- Promoting the benefits of forage development business to communities.
- Create access to improved forage seeds: Increase the availability of improved forage seeds by establishing an agro-dealer.
- Market linkage: create input and output market linkages in collaboration with concerned government partners.
- Access to financial resources: create linkages with microfinance institutions to provide loans to smallholder farmers planning to engage in forage development.

### **5.2. Potential Off-Farm Income Generation Activities**

Besides farm-based income generation activities, off-farm income generating activities with good potential for livelihood diversification and generating additional incomes were also identified by participants of focus group discussions, key informant interviews and through direct observations in markets visited. These off-farm income generating activities can be adopted especially by households without access to land or limited land, which can help reduce pressure on SMNP. Below are some of the recommended/suggested off-farm income generated activities in the project intervention woredas.

### 5.2.1. Weaving (“Shimena”)<sup>4</sup>

In the rural and semi-urban areas of the assessment areas, hand weaving is still a common technique for creating seasonal, specialized fabrics and casual clothes. Hand weaving is a significant source of income, especially for rural families of the intervention woredas (Debank, Janamora and Beyeda). The most well-known example is a group of typically gauzy white garments that are used as shawls or wraps for daily use and religious events in most areas.



*Weaving and products*

While spinning cotton is typically done by women, handloom weaving is primarily carried out by men who learn the practice from their family and neighbors. The traditional clothing types “gabi,” “netela,” “kuta,” and “Qemis” are all hand-woven and worn in the area.

Necessary inputs for weaving include cotton, hand spinning material, a hand weaving machine, and dyes, bought from the nearby city/town market. With the growing demand for domestically made local clothes, if business owners are supported with trainings and market linkages, weaving could be a highly profitable livelihood alternative.

#### Constraints

- Currently weaving is practiced in traditional ways. This results in low production and profit, which is a challenge for smallholder hand weaving individuals. The business is conducted with small capital and produces little profit, impacting negatively the sustainability of business operations. However, if the production method is improved (automated, mechanized, and high-tech), capacity development training on improved weaving skills (including design) is provided, and market linkages developed, the business has a high potential for profitability.
- The lack of strong marketing in value chains and market integration causes minimum benefits for the producers, who sell most of their products locally and cannot sell in big cities for a better price. The current market value chain is not strengthened, the traders collect from the producers and sell at the woreda towns. Since there is no strong competition and market information the traders are the ones who set the price to buy from the producers that is often below the amount that would make that trade profitable for producers.
- The lack of initial capital and access to loan and credit services is also a challenge for weavers in terms of producing quality products and meeting the demands of the clients/buyer.
- Due to the labor intensiveness and ergonomic structure of waving rafts, and the fact that weaving is carried out mainly by men, women cannot profit for the sale of weaving products. Women are participating only in spinning cotton, a marginal activity with limited profit and social recognition.

<sup>4</sup> The weaving is a specialized craft, spinning of the white cotton is done by all classes of women and continues to contribute to the family income. Weavers traditionally weave four different types of fabric; **K'emis**, cloth used to make women's dresses; **net'ela**, the muslin cloth used to make the women's shawls worn to church, etc; **gabi**, a thicker weave made into a blanket worn to protect from cold or on the beds and **boluko**, the thickest weave used for blankets

- The producers do not have information access to different updates around the market demands, which hinders them from adapting to the changing market environment and remaining competitive.
- Exploitation and child labor is occurring in some areas as observed by the assessment team.
- Producers suffer from ergonomic problems and physical pain due to the working position and the physical structure of the traditional weaving system.

## **Recommendations**

- Improve the market system: analyze market value chains for traditional weaving and create linkages between producers and wholesalers in big cities like Gondar, Bahir Dar and Addis Ababa to increase the market share and profit for the producers.
- Training and skills development: provide capacity development training to the weavers. The training might include skill developments to enable the weavers to adapt to changing market demands including design, quality, etc.
- Awareness raising: the cultural and economic use of traditional weaving business could be promoted and encouraged to be a livelihood alternative for poor smallholder farmers.
- Ergonomic improvement: improvements to the traditional weaving machine (automated, mechanized, and high-tech) will decrease/minimize the labor insensitivity and physical strain weavers are facing during sitting and weaving for a long time.
- Address social norms and barriers: conduct different dialogues and discussions on gender related social norms and barriers using social analysis and action (SAA) tool could encourage women's participation in traditional weaving business.
- Access to loan: promote and support in linking producers with microfinance institutions can support producers to access loans.

### **5.2.2. Petty trading**

Petty trading refers an economic activity that involves selling (and buying) goods and services in small scale, ranging from agricultural produce to imported consumer goods, mostly run by women. It is a common economic activity around rural areas, small towns and cities of the assessment area and only requires low initial capital and small working premises. Many economically vulnerable households in the implementation area engage in petty trading and use it as their main source of income and livelihood. Petty traders improve the accessibility of consumption goods in their area, especially when the area is located far from the central market and goods are not accessible other than on market days.

## **Constraints**

- Lack of initial capital: households with low economic status in rural areas have a shortage of initial capital to engage in petty trade activities.
- Improper working premises: petty trading is practiced informally, with no suitable marketplace or working premises available.
- Limited marketing opportunities as the input and output markets are very limited.
- Low business skills: the households lack the skills needed to manage their businesses.

## **Recommendations**

- Access to marketplace or work premises: advocate and facilitate provision of safe and

accessible marketplaces or working premises for petty trading.

- Access to finance: promote, support and create linkages with microfinance institutions for petty traders.
- Business skills training: provide capacity development training for the petty traders in business skills and financial management, Income Generating Activities-Selection, Planning and Management (IGA/SPM) to engage in IGAs and link to micro-finance.
- Market linkage: Facilitate market linkages between wholesalers and petty traders for the latter's consistent access to goods and items.

### **5.2.3. Forage development and marketing**

Forage development and marketing is a business that can benefit both forage developers and livestock producers as well as serve as a benefit to the larger environment by improving access to animal feed rather than using the park area for grazing. Considering the shortage of forage in the assessment areas and increasing of grazing lands, especially in the dry season with only crop residue and dry grass available, there is large potential for forage development in the assessment areas. Improving the production of different forage varieties can support intensifying livestock production and fattening activities, using a cut and carry system.

### **Constraints**

- Limited awareness on management skills for forage development: smallholder farmers in the area do not have the skill and experiences of developing improved varieties of forage.
- Limited access to financial services: farmers has no access to loan services they could use for the initial capital needed for forage development.
- Lack of improved forage seeds: currently there are no agro-dealers who provide improved forage seeds to the farmers, probably due to lack of demand.

### **Recommendations**

- Training and extension services: provide capacity development training to farmers, development agents and livestock production office experts on improved forage development mechanisms.
- Promoting the benefits of forage development business to communities.
- Create access to improved forage seeds: Increase the availability of improved forage seeds by establishing an agro-dealer.
- Market linkage: create input and output market linkages in collaboration with concerned government partners.
- Access to financial resources: create linkages with microfinance institutions to provide loans to smallholder farmers planning to engage in forage development.

### **5.2.4. Skilled and semi-skilled jobs (carpentry, masonry, barbering and beauty salon)**

Skilled and semi-skilled jobs are important for youth, mainly unemployed youth, in rural, urban and semi-urban areas as they increase their employability. The project implementation area shows a high demand for skilled and semi-skilled labor due to the continuous growth of towns. Providing in-service training and supporting unemployed youths in different professions such as carpentry, masonry, barber, and beauty salon can give them the opportunity to participate in off-farm activities/business (group and/or individual) and earn an income.

## Constraints

- Limited access to skill training: unemployed youths from rural, urban and semi urban areas have no access to skills training to work on different semi-skilled and skilled jobs.
- Credit constraints: microfinance institutes do not provide loans to unemployed youths unless they form a collateral group, or the unemployed youth have an asset to keep as collateral.
- Gender based constraints: most of the semi-skilled and skilled professions/jobs are traditionally assigned to men which decreases women and girls' chances to engage in these professions/jobs.

## Recommendations

- Provision of vocational and skill training: training youth in different skilled and semi-skilled professions will increase their skills and employability.
- Provide financial support: the project could link young people to different income generating sources and enable them to get loans.
- Promote gender equality: address gender-based discrimination and organize awareness-raising workshops for the community.
- Promote entrepreneurship: encourage youth to be innovative and search for opportunities for self-employment.
- Coaching and mentoring of youth: young skilled and semi-skilled people need consistent coaching and mentoring to strengthen their resilience to different shocks.
- Internship program: the project can provide an internship opportunity for fresh graduates, mainly female graduates. The internship opportunity is a professional learning experience that offers meaningful, practical work related to fresh graduate student's career interest. The internship opportunity also gives fresh graduate students the opportunity for career exploration and development, and to learn new skills.

### 5.2.5. Agro-dealership

Access to quality agricultural inputs is a common challenge smallholder farmers face in all their agricultural endeavors including in crop production, vegetable and fruit production, livestock production, beekeeping and even in off-farm activities. The establishment of agro-dealers can thus be an important and sustainable solution and opportunity. Agricultural input delivery services barely exist in the area, hence, facilitating the establishment of agro-dealers might be of a two-way benefit for youth and farmers alike.

## Constraints

- The lack of reliable wholesalers: there are no traders and processors that can sustainably supply inputs to agro-dealers.
- Limited financial linkage: microfinance institutes are not ready to provide loans to youth who participate in off-farm activities.
- Lack of awareness on improved input usage: smallholder farmers have no proper knowledge on the importance of improved agricultural inputs.
- Lack of business management skills: the agro-dealers have no business management skills, and this hampers the success of the business and reduces the chance of its sustainability. The agro-dealers who initiated to work in the areas stopped since they lost their businesses and profit due to lack of business management skills

## Recommendations

- Set up a village agent: setting up and training youth volunteers to be village agents who can link smallholder farmers to agro-dealers. Village agents help to promote market linkages and provide information to producers.
- Capacity development: provide training and technical assistance to agro-dealers and support them to improve their business management skills.
- Linkage creation: organize different events that can promote agro-dealers services and invite agro-dealers to farm workshops and meetings to promote their services.
- Market activation: organize market activation events at the farthest rural areas to introduce the agro-dealing service and inputs to the farmers.
- Train farmers on improved agricultural input usage: raise the awareness of farmers on the benefits of improved agricultural inputs increases their demand and enhance the sustainability of agro-dealing businesses.
- Coaching and mentoring: new agro-dealers need continuous supervision and coaching. They will face different shocks in their business and need encouragement and advice to develop resilience.

## 6. Recommendations

### 6.1. Recommendations

Based on the current market system analysis the following key recommendations have been prioritized:

#### 6.1.1. Farm-based income generating activities

- **Strengthen honey market system:** the project should help the communities to build effective honey production, processing, and marketing management mechanisms, notably by supporting them to improve beekeeping technologies and to receive adequate practical skills training. Moreover, supporting producers by creating access to credit service providers, institutionalizing data collection and dissemination of market information should be encouraged by the project.
- **Strengthen poultry market system:** provide training to farmers on poultry house construction, local feed production, poultry health management, and product marketing. The primary focus of addressing livelihood issues in target woredas must be on poultry productivity enhancement and marketable skill development coupled with affordable access to finance matched with youth and women friendly loan products. Establishing and/strengthening pullet growers and agro-dealers and linking the producers to improved breeds and quality feed respectively are other important areas of intervention.
- **Support vegetable and fruit market systems:** the project should focus on enhancing household nutrition through home gardening and crop diversification. To achieve this, strengthening and/or developing local agro-dealers who can sustainably supply vegetable seed/seedlings and different agro-chemicals to producers; and creating linkages with financial institutions and market information are important. Encouraging the establishment and/or strengthening of producer and marketing groups together with skill training is also recommended.
- **Support forage development and marketing systems:** introduce and promote improved forage seed production and management businesses by creating market

linkage, access to finance, and providing capacity development training for both forage producers and traders, and livestock raisers.

### 6.1.2. Off-farm income generating activities

- **Strengthen weaving practices:** Hand weaving is a significant source of income, especially for rural families of the intervention woredas. The project should: support the local community to access labor-saving weaving equipment, provide skill training in business management coupled with access to finance and markets- with a focus on females, youth and those who are disabled.
- **Support petty trading:** the planned project can assist the community in strengthening their skills in market linkages and in getting affordable access to finance, matched with youth and women friendly loan products.
- **Strengthen skilled and semi-skilled jobs:** the project should support skilled and semi-skilled professionals to run their businesses or access jobs by creating access to finance and strengthening market linkages. Moreover, undertaking community dialogue for awareness creation and addressing social taboos linked to the gender division of some of those skilled and semi-skilled jobs should be undertaken.
- **Strengthen agro-dealership:** support local community, mainly women and youth, to be engaged/strengthened in agro-dealership by providing business skills and creating linkages with micro-finance service providers.